Undergraduate Programs, Courses and University Regulations

Programs, Courses and University Regulations
2024-2025

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## Note: Throughout this publication, 'you" refers to students newly admitted, readmitted or returning to McGill.

## Publication Information

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## 1 University Regulations and Resources

### 1.1 General Policies and Information

You must inform yourself of University rules and regulations and keep abreast of any changes that may occur. The General Policies and Information section of this document contains important details needed by you during your studies at McGill and should be periodically consulted, along with other sections and related publications.

### 1.1.1 Authorization, Acknowledgement, and Consent

When applying for admission to the University, you are bound by and agree to observe all statutes, rules, regulations, and policies at McGill University and the faculty or faculties to which you may be accepted and registered in, including policies contained in the University calendars and related fee documents. Your obligation as a student begins with your registration and ends in accordance with the University's statutes, rules, regulations, and policies.

You should verify all information or statements provided with your application. Incorrect or false information may jeopardize your admission. The University reserves the right to revoke an admission that is granted based on incorrect or false information in an application or supporting documents.

### 1.1.2 Student Rights and Responsibilities

Student Rights and Responsibilities is produced jointly by the Office of the Dean of Students and the Secretariat. It contains regulations and policies governing your rights and responsibilities as a student at McGill, and is available at mcgill.ca/students/srr.

Further details regarding your rights and responsibilities are also available at mcgill.ca/secretariat/policies-and-regulations.

### 1.1.3 Language Policy

The main language of instruction at McGill is English. You have the right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course.

If you need to improve your English skills, you should take an intensive course in English as a second language before or at the start of your studies. Information concerning second language course offerings can be found through the School of Continuing Studies at mcgill.ca/continuingstudies/area-of-study/languages and the French Language Centre at mcgill.ca/flc, and in Summer Studies and Continuing Studies.


Note for the Faculty of Education: There are special language requirements for Faculty of Education students; see Faculty of Education.

Note for Continuing Studies: For English language programs, refer to the School of Continuing Studies' Global and Strategic Communications section.

Note for the Faculty of Law: Due to the bilingual nature of the Law program, examinations, term papers, and essays may be written in either English or French. Participation in Moot Courts may also be in either language. While examination questions are set in the language in which a course is given, they may contain materials in either English or French.

Note for Graduate and Postdoctoral Studies: You should refer to Courses Taken as Extra to a Program in the Graduate Regulations and Resources.

Note for Health Sciences: Students studying in the Faculties of Dental Medicine and Oral Health Sciences or Medicine and Health Sciences or in the Schools of Human Nutrition, Nursing, or Physical and Occupational Therapy should consult the Health Sciences language requirements and any language policies pertaining to their specific program. Programs with a clinical component require that students have a working knowledge of both English and French. For French language proficiency guidelines, refer to mcgill.ca/undergraduate-admissions/french-proficiency.

### 1.1.4 Academic Integrity

Before submitting work in your courses, you must understand the meaning and consequences of plagiarism and cheating, which are serious academic offences. Inform yourself about what might be considered plagiarism in an essay or term paper by consulting the course instructor to obtain appropriate referencing guidelines. You should also consult Fair Play, the student guide to academic integrity available at $\mathrm{mcgill} . c a / s t u d e n t s / s r r / h o n e s t / s t u d e n t s$. There you will also find links to instructional tutorials and strategies to prevent cheating. The Code of Student Conduct and Disciplinary Procedures includes sections on plagiarism and cheating. The possession or use of unauthorized materials in any test or examination constitutes cheating. You can find the Code at mcgill.ca/students/srr/publications.

Responses on multiple-choice exams are normally checked by the Exam Security Computer Monitoring program. The program detects pairs of students with unusually similar answer patterns on multiple-choice exams. Data generated by this program can be used as admissible evidence in an investigation of cheating under Article 17 of the Code of Student Conduct and Disciplinary Procedures.

The Office of the Dean of Students administers the academic integrity process as described in the Student Rights and Responsibilities.
Note: All newly-admitted undergraduate and graduate students must complete a mandatory online academic integrity tutorial in their first semester, accessed through Minerva > Student Menu > Academic Integrity Tutorial or a registration "hold" will be placed on their record. Prior to Fall 2018, undergraduate students completed the tutorial in myCourses via the course AAAA 100, but as of Fall 2018 the tutorial must be completed in Minerva. For more information, see mcgill.ca/students/srr/honest/students/test.

### 1.1.5 University Student Assessment Policy

The University Student Assessment Policy includes all disparate policies with regard to all types of student assessments. This policy is meant to protect students from excessive workloads, and to ensure that all students are treated equally.

This policy applies to undergraduate and graduate courses offered by the University that are evaluated by any form of assessment. Except where otherwise indicated, this policy applies to all faculties, including those which administer their own examinations.

You can consult the policy on the Secretariat website.

### 1.1.6 Policy Concerning Access to Records

The University sends statements of account and all other correspondence directly to students. You retain full control over who has access to your records or accounts; however, officers and members of the University staff also have access to relevant parts of your records for recognized and legitimate use. The University does not send progress reports or any other information to your parents and/or sponsors unless you specifically request it in writing.
Personal information is protected in the Province of Quebec by the Act Respecting Access to Documents Held by Public Bodies and the Protection of Personal Information (the "Access Act"). The Access Act provides that McGill University can only release personal information contained in your file with your authorization or if specifically authorized by law.

For the purpose of consent and acknowledgement at the time of application, personal information includes, but is not limited to: name, address, telephone number, email address, date of birth, citizenship, McGill ID, program, student status, and academic record information.
Registered students may oppose the release of certain personal information by completing an Opposition Form.
After having reviewed the information relating to access to personal information at the time of application, you will be asked to agree that the University may collect, use, disclose, or otherwise manage your personal information as described below, as necessary and as the case may be.
At the time of application, you will be asked to consent to the release of personal information contained in your admissions or student records file to the following persons or bodies, as necessary to each body, in the exercise of their mission:

- student associations recognized by McGill University for the categories of student to which you belong (limited to your contact and program information);
- schools or colleges that you have attended;
- a professional body or corporation, where relevant;
- the Ministère de l'Immigration, de la Francisation et de l'Intégration and/or the Régie de l'assurance maladie du Québec; Immigration, Refugees, and Citizenship Canada; and/or the Ministère de l'Éducation et de l'Enseignement supérieur;
- Universities Canada, the Association of Registrars of the Universities and Colleges of Canada, and the BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ), or the member institutions of these organizations, for the purpose of admissions operations and the production of statistics;
- libraries of other Quebec universities with which McGill has established reciprocal borrowing agreements;
- the appropriate authorities involved with external or internal funding of your fees (financial records may also be disclosed to such authorities);
- students and alumni of the University who have volunteered to speak with students for the purpose of facilitating their integration into the University;
- other universities and colleges, at the discretion of the University, if any information connected to your application is determined to be false and misleading, concealed or withheld, or contains evidence of academic dishonesty or inappropriate conduct;
- regulatory authorities, law enforcement or other persons, as authorized or required by law; and
- McGill Network and Communications Services for the purpose of listing your McGill email address in an online email directory.

In addition to the above, if you are a candidate for admission to Graduate and Postdoctoral Studies, you will be asked to authorize the University to request letters of reference on your behalf from referees you have identified, with the understanding that each referee would be provided with information indicating that you have applied to be admitted to McGill University, including your name, the McGill program you have applied to, the academic term when you wish to begin your studies at McGill, and your statement describing how the referee knows you.

In addition to the above, if you are a candidate for admission to the Faculty of Law, you will be asked to consent to the release of personal information to the Committee for Law Admissions Statistics Services and Innovations (CLASSI) and the Native Law Centre Summer Program at the Native Law Centre, University of Saskatchewan.
In addition to the above, if you are a candidate for admission to the Faculty of Medicine and Health Sciences or to the Faculty of Dental Medicine and Oral Health Sciences in undergraduate, graduate, or postgraduate studies, you will be asked to consent to the release of personal information to other schools of medicine; to Employment and Social Development Canada; to the Ministère du Travail, de L'Emploi et de la Solidarité sociale of Quebec;
to a McGill professor, researcher or graduate student, strictly for research or teaching purposes; and to a University teaching/affiliated hospital or health centre to which you apply/or join for residency or rotations.

In addition to the above, if you are a candidate for admission to the Schulich School of Music, you will be asked to consent to the use of your name and images in public recognition of academic achievement and in the advertising and audio and video recording of student ensemble concerts for distribution using different media and formats.
At the time of application, you will be asked to authorize the University to:

- collect and maintain your personal information for the purpose of administering your University admissions and student record files;
- obtain copies of your transcripts from the Ministère de l'Éducation et de l'Enseignement supérieur; the Ontario Universities' Application Centre; and/or the British Columbia Ministry of Education;
- make inquiries to and obtain personal information from the Ministère de l'Immigration, de la Francisation et de l'Intégration; Immigration, Refugees and Citizenship Canada; and/or the Régie de l'assurance maladie du Québec to verify the validity of your immigration or health insurance status;
- validate with the Ministère de l'Éducation et de l'Enseignement supérieur information regarding your citizenship and previous institution attended, if necessary and as required in order to manage the admissions process and to determine your tuition fees;
- verify any information or statement provided as part of your application; and
- contact you through the McGill Alumni Association and University offices that maintain contact with McGill students, alumni, and friends for the purpose of providing University updates and opportunities for direct support to the University, including fundraising and making available special offers such groups may benefit from.

At the time of application, you will be asked to acknowledge that:

- an admission granted based on incomplete, incorrect, or false information contained in your application or supporting documents may be revoked at the sole discretion of the University. The University reserves the right to revoke admission at any time; and
- if admitted to McGill University, you will be bound by the statutes, rules, regulations, and policies in place from time to time at McGill University and at the faculty or faculties in which you will be registered, including those policies contained in the University calendars and related fee documents. You will undertake to observe all such statutes, rules, regulations, and policies. Your obligations would commence with your registration and terminate in accordance with the University's statutes, regulations, and policies.


### 1.1.7 Undergraduate Leave of Absence Policy

A leave of absence may be granted to undergraduate students for reasons related to:

- maternity or parenting
- personal or family health
- professional development
- required military service

Such leave must be requested on a term-by-term basis and may be granted for a period of up to 52 weeks. A leave of absence request should be submitted to your faculty Advising or Student Affairs Office along with appropriate documentation. Refer to specific instructions on your faculty website.

Students who are granted such a leave will have "leave of absence" recorded on their transcript.
No tuition fees will be charged for the duration of the authorized leave. During a leave of absence, you maintain an active student ID card and have access to McGill mail and use of the libraries. You are not permitted to register for courses or to participate in student internships or undergraduate research. You may not normally attend another academic institution; exceptions may be requested for professional development. Faculties may request documentation of a student's readiness to resume studies; they will apply "withdrawn" status after one year of approved leave of absence if the student has not returned to the University.

## Notes:

- Personal objectives, such as travel or time off, and financial matters are not grounds for a leave of absence.
- Normally, a student shall be in Satisfactory Standing when requesting a leave of absence; exceptions may apply and will be determined by the faculty and, if applicable, the professional program.
- Services are only available to students currently enrolled in a program of study. Services for students who are not currently enrolled, including students on authorized leaves of absence, are limited to certain services mandated by government regulation and services that help a student transition back into or out of their studies (examples include connecting a student with services off-campus and government financial aid or immigration advising for students leaving or preparing for re-entry).
- A Leave of Absence may have an impact on a student's fee status once they re-enrol after their approved leave. For more information, refer to the Break in Enrolment section on the Student Accounts webpage.
- Students who are eligible for scholarship renewal will not have scholarship monies transferred to their account while they are on leave of absence but will maintain eligibility for renewal upon registration in subsequent terms.
- Terms and conditions vary among loan and bursary providers; student consultation with an advisor in Scholarships and Student Aid is recommended.
- Professional programs may impose constraints on the application of the undergraduate leave of absence policy due to accreditation requirements or placement limitations.
- International students are advised to contact International Student Services (ISS) regarding individual circumstances.

Note: The Leave of Absence Policy is applicable only to currently registered students who have not withdrawn from all their courses. If a student is considering a University Withdrawal due to personal or family health, they should consult their faculty's Student Affairs officer about the possibility of taking a leave of absence.

Note: When on a leave of absence, if you wish to be covered by the undergraduate supplemental health insurance and/or international health insurance, you must contact your respective campus-wide student association (e.g., Students' Society of McGill University, Macdonald Campus Students' Society) and International Student Services to make arrangements. Note that there will be additional student society fees to be paid in order to be considered a member eligible for the insurance plans. For information about the student societies' supplemental health and dental coverage, click here. For information about international health insurance, click here.

Note: Once a leave of absence is granted, you must consult Scholarships and Student Aid in order to assess the impact of the leave on student aid (e.g., government loans and bursaries, etc.).

Note for M.D.,C.M. students: Refer to the Absences \& Leaves Policy of the M.D.,C.M. Program.

Note for School of Continuing Studies Students: Undergraduate leaves of absence are not possible. Students enrolled in a program at the School of Continuing Studies are allowed to miss two consecutive terms during their studies, provided their legal status in Canada allows them to do so. Students who remain inactive for a year or more must reapply to the program of their choice.

If you need to take a leave of absence because of pregnancy or because you need to care for dependants, please consult section 1.1.9.5: Academic Accommodation of Pregnant Students and Students Caring for Dependants.

### 1.1.8 Information Technology (IT) Policies and Regulations

McGill University students, faculty, staff, and other members of the McGill community benefit from a variety of Information Technology resources, which are used in accordance with University policies and directives. Visit the IT policies site for further details.
Here are some key references for students :

- section 1.1.8.1: Responsible Use of McGill Information Technology Resources
- section 1.1.8.2: Report Security Incidents
- section 1.1.8.3: Use of Cloud Services
- section 1.1.8.4: Two-Factor Authentication (2FA)
- section 1.1.8.5: Email Communication
- section 1.1.8.6: Secure your Journey


### 1.1.8.1 Responsible Use of McGill Information Technology Resources

Each of us has responsibilities when using McGill's IT resources. The Policy on the Responsible Use of McGill Information Technology Resources is a code of conduct that identifies what is acceptable when working with McGill technology resources.

For more information, view the Policy on the Responsible Use of McGill Information Technology Resources, available on the Secretariat website.
Note for M.D.,C.M., and D.M.D. Programs: For guidelines regarding the use of social media by M.D.,C.M., and D.M.D. students, see mcgill.ca/ugme/policies-procedures/guidelines-social-media and mcgill.ca/thewelloffice.

### 1.1.8.2 Report Security Incidents

Please inform IT Services immediately if you experience or are aware of an IT security incident!

- Contact IT through the IT Service Desk;
- Or by telephone at 514-398-3398 for immediate help;
- For additional information, please see Reporting IT security incidents.

If the incident involves bullying, harassment or other potential risks to the health and safety of individuals, please contact McGill Security Services at 514-398-3000 in the Downtown Campus or 514-398-7777 at the Macdonald Campus immediately.

### 1.1.8.3 Use of Cloud Services

McGill's Cloud Directive governs your usage of cloud services_programs and apps delivered over the Internet. McGill has approved cloud apps and solutions that are available for your use while at McGill. However, you will need to choose your apps wisely as not all apps are safe, and they will not all adequately protect sensitive data (either your own or McGill's).
To learn how to safely use cloud apps and solutions, please refer to the Cloud Services Page.

### 1.1.8.4 Two-Factor Authentication (2FA)

All student, faculty, and staff accounts are protected with two-factor authentication (2FA), an additional security measure that requires a secondary method of authentication (e.g., acknowledging a prompt or entering a code sent to your mobile device via a mobile app) when signing into many McGill systems.
2FA makes it much harder for cybercriminals to access your account and your personal information, even if they obtain your password. 2FA is required for all higher education institutions in Canada.

Find out more about 2FA at mcgill.ca/2fa.

### 1.1.8.5 Email Communication

All students are assigned a McGill email address (usually in the form of firstname.lastname@mail.mcgill.ca) and are given a McGill email mailbox. It is your responsibility to monitor your McGill email regularly because this is the official means of communication between McGill University and its students. Ensure that you read and act upon the emails in a timely fashion.

To access your McGill email, go to the Microsoft Office website and sign in with your McGill username and password.

> Note: Confirm your McGill email address or set your McGill password on Minerva, under the Personal Menu. You can also change or reset your McGill password by following the instructions on the McGill Password Reset Checklist.
> If you have another email account using an external service provider (such as Gmail, Hotmail, Yahoo, etc.), please review the "Options for dealing with multiple email services" article on the IT Knowledge Base.
> For more information, visit the Policy on E-mail Communication with Students, available on the Secretariat website.

### 1.1.8.6 Secure your Journey

IT policies and directives identify measures required to ensure the security and integrity of data and systems you use throughout your student journey. Find out about best practices and cybersecurity steps you can take at mcgill.ca/cybersafe.

### 1.1.9 Student Health \& Insurance

Learn more about health insurance, your requirements as a student, and services offered for special medical needs in the following sections.

### 1.1.9.1 Health Professions - Immunization Requirement

A compulsory immunization program exists at McGill for students in the health science fields (including Dietetics), as well as in the School of Social Work. If you are a new student in those programs, you must complete the immunization program well before classes begin. You can find further information at mcgill.ca/wellness-hub/get-support/physical-health/immunization or by calling the Student Wellness Hub at 514-398-6017.

### 1.1.9.2 Health Insurance - International Students

## International Students (Non-Canadians or Non-Permanent Residents of Canada)

By Senate regulation, all international students (full-time, part-time, half-time, Additional Session, Thesis Evaluation, Non-Thesis Extension, Special, Exchange, and Visiting) and their accompanying dependants must participate in the University's compulsory International Student Health Insurance Plan (IHI). The University, the Quebec Ministry of Education, and the Canadian Immigration Authorities require a copy of your proof of health insurance on file. Take note, that minors (less than 18 years of age) are now eligible to apply for the provincial coverage in Quebec, Régie de l'assurance maladie du Québec (RAMQ).

For details on the IHI plan and information concerning rates, consult the ISS website.
Students covered by private health insurance are not exempt from the McGill plan. However, you may be eligible for an exemption by meeting certain criteria. Exemption requests must be made on Minerva under the International Student Health Insurance Coverage Form. Supporting documents for your exemption request should be scanned and emailed to ISS by certain deadlines, indicating in the body of the email your name, McGill ID number, and exemption request.

## Exemptions are valid for one year only and must be renewed each subsequent academic year.

All inquiries related to McGill's International Health Insurance Plan must be directed to International Student Services:

## International Health Insurance

Telephone: 514-398-4349
Email: international.health@mcgill.ca
Website: mcgill.ca/internationalstudents/health
Note for School of Continuing Studies: International students who are enrolled in credit courses at School of Continuing Studies are also billed IHI and should also refer to the office of International Student Services website for information on health insurance.

### 1.1.9.3 Health Insurance - Canadian Citizens and Permanent Residents

## Canadians residing in Canada

All undergraduate and graduate (classed as Canadian full-time or Additional Session, Thesis Evaluation, Non-Thesis Extension, as well as Postdoctoral candidates) students beginning in the Fall term will be automatically enrolled in the applicable Students' Society's (SSMU, MCSS, or PGSS) supplemental Health and Dental Plans. Your supplemental health plan is only valid if you have provincial healthcare or have opted-in to the International Health Insurance Plan. For details on fees, change of coverage dates, and what is covered by the plans, refer to www.studentcare.ca, or contact:

Studentcare/Alliance pour la santé étudiante au Québec (ASEQ)
Telephone: 514-789-8775 or 1-866-795-4435 (Monday to Friday, 9 a.m. to 5 p.m.)
Website: www.studentcare.ca
If you are a Canadian student from outside Quebec, you should check with your provincial medicare office to ensure that you have valid provincial health coverage while studying at McGill.

## Canadians who have been residing outside of Canada

If you are a Canadian student who has been living abroad, you may not be eligible for provincial health insurance coverage.
Important: If you are not eligible, in order to ensure adequate health insurance coverage you may enrol in the group plan offered through International Student Services for international students. Please note that this option is available only during the first month of each new semester at McGill.

Note for School of Continuing Studies: Continuing Studies students also have access to a health and dental plan offered by MACES; please refer to http://studentcare.ca/rte/en/IHaveAPlan_MACES_Home for eligibility and other information.

Note for Graduate and Postdoctoral Studies: Graduate students classed as Canadian full-time or Additional Session, Thesis Evaluation, Non-Thesis Extension, as well as postdoctoral candidates are automatically covered by their society's extended Health and Dental Plan (PGSS). Eligible students not charged automatically for insurance fees can choose to enrol themselves during the appropriate Change-of-Coverage period. For more information on what this plan covers, as well as enrolment, opt-out procedures, and deadlines, please refer to the latest information at
studentcare.ca/rte/en/McGillUniversitygraduatestudentsPGSS_Home. Students without valid Canadian medicare, please see section 1.1.9.2: Health Insurance - International Students, or the Canadians who have been residing outside of Canada section above.

### 1.1.9.4 Special Medical Needs

If you have special medical needs, please book an appointment with the Student Wellness Hub to discuss how to manage your health while at McGill.
If you anticipate encountering ongoing barriers in the academic or physical environment due to disability, injury, or illness, please consult with the Student Accessibility \& Achievement to determine an appropriate individualized accommodation plan. Appropriate medical documentation may be required, and can be discussed with an Access Advisor. Academic accommodation planning and support is available to students at the Downtown Campus as well as the Macdonald Campus, and to students in Continuing Studies. Please refer to mcgill.ca/access-achieve/for more information, or to book an appointment.

Note for Medicine and Health Sciences: See the WELL Office at $m c g i l l . c a / t h e w e l l o f f i c e . ~$

### 1.1.9.5 Academic Accommodation of Pregnant Students and Students Caring for Dependants

McGill acknowledges the particular challenges facing you as a pregnant student and/or as a student caring for a dependant.
McGill supports you in your desire to further your education while meeting your family obligations.
Wishing to provide an environment in which you may be able to continue in your program of study and fulfil your university commitments, these guidelines aim to set out how, and in what exceptional circumstances, you may request academic accommodation.

### 1.1.10 Non-Smoking Policy

Quebec law prohibits smoking in public buildings. Smoking on University property is permitted only within outdoor designated smoking areas. Smoking is prohibited outside any designated smoking area on University property. For more information, see
mcgill.ca/ehs/policies-and-safety-committees/policies/mcgill-smoking-policy and mcgill.ca/secretariat/policies-and-regulations
For the purposes of the Tobacco Control Act, "smoking" also covers the use of an electronic cigarette or of any other device of that nature; "tobacco" also includes the following accessories: cigarette tubes, rolling paper and filters, pipes, including their components, and cigarette holders. Please consult Chapter L-6.2-Tobacco Control Act, for further information.

### 1.1.11 Policy Concerning Cannabis

McGill University has adopted a Policy Concerning Alcohol, Cannabis and Other Drugs. This policy applies to all McGill students, faculty, staff and visitors on the Downtown and Macdonald campuses, the Gault Nature Reserve, and spaces leased by the University. The policy only permits the consumption of cannabis for medical reasons, accompanied by a valid medical certificate, under certain conditions. However, all consumption of cannabis for recreational use is prohibited on University property.

For further details on this policy please refer to the Policy Concerning Alcohol, Cannabis and Other Drugs.

### 1.2 Personal Information

You must inform yourself of University rules and regulations and keep abreast of any changes that may occur. The Personal Information section of this publication contains important details pertaining to nominative information, legal documents, and ID cards, as well as other topics, and should be consulted periodically.

### 1.2.1 Updating Personal Information

It is important to keep your McGill record up to date with your personal information, especially a mailing or billing address, as these are used by the University year-round. Upon initial registration, students are prompted to provide this information. Every six months thereafter, students are prompted to update this information as needed.

You must update your address(es) and/or telephone number(s) and emergency contact information on Minerva under the Personal Menu.
If you need to change important personal information that requires the University to verify official documents-such as a name change, gender, or a correction of your birth date-refer to the instructions at mcgill.ca/student-records/personal-information/name-gender. Macdonald Campus students can request changes in person at the Macdonald Campus Student Affairs Office, Laird Hall, Room 106.

Note for Continuing Studies: If you need to change important personal information that requires the University to verify official documents, such as a change to your name, gender, citizenship, or a correction of your birth date, you must go in person (as soon as possible) to the School of Continuing Studies Client Services Office. Such changes can only be made in person at the School of Continuing Studies, Client Services Office, 688 Sherbrooke Street West, Room 1199.

Note for Nursing: A Quebec address and telephone number are required for Nursing students on Minerva to meet OIIQ registration requirements.

### 1.2.2 Online (Distance) Programs

Students registered in exclusively online (sometimes referred to as 'distance') programs are required to declare where they are geographically located while studying for every term they are registered in the online program. For students pursuing an online program, location while studying is considered - along with the fee residency status (i.e. Quebec Resident, Canadian or International) - when determining what fees are charged.

The following programs are designed to be offered exclusively online and, with some exceptions, are not offered on one of McGill's campuses:

## Undergraduate Programs

Bachelor of Nursing (B.N.I.) - Integrated Nursing (65 credits) ${ }^{* *}$

```
Graduate Programs
    Graduate Certificate (Gr. Cert.) Advanced Public Administration and Governance (15 credits)
    Graduate Certificate (Gr. Cert.) Chronic Pain Management (15 credits)
    Graduate Certificate (Gr. Cert.) Cybersecurity (15 credits)
    Graduate Certificate (Gr. Cert.) Data Analysis for Complex Systems (15 credits)
    Graduate Certificate (Gr. Cert.) Data-Driven Decision Making (15 credits)
    Graduate Certificate (Gr. Cert.) Educational Leadership 1 (15 credits)**
    Graduate Certificate (Gr. Cert.) Educational Leadership 2 (15 credits) **
    Graduate Certificate (Gr. Cert.) Educational Leadership 3 (15 credits)**
    Graduate Certificate (Gr. Cert.) Healthcare Management (15 credits) *
    Graduate Certificate (Gr. Cert.) International Leadership in Educational and Administrative Development (15 credits) *
    Graduate Certificate (Gr. Cert.) Public Administration and Governance (15 credits)
    Certificat d'études supérieures (Cert.ed.sup.) Pédagogie de l'immersion française (15 crs)
    Graduate Certificate (Gr. Cert.) Public Relations and Communication Management Practice (15 credits)
    Graduate Certificate (Gr. Cert.) Teaching English as a Second Language (15 credits)Graduate Certificate (Gr. Cert.) Strategic Public Relations and
    Communications Management (15 credits)
    Graduate Certificate (Gr. Cert.) Teaching English as a Second Language (15 credits) **
    Master of Management (M.M.) Analytics (Non-Thesis) (45 credits)
    Master of Management (M.M.) IMHL (Non-Thesis) (45 credits)
    : Master of Science, Applied (M.Sc.A.) Multilingual Digital Communication -N (45 credits) *
    Master of Science, Applied (M.Sc.A.) Occupational Health (Non-Thesis) (45 credits)
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## Continuing Studies Programs (Undergraduate and Graduate Levels)

```
Certificate (Cert.) Applied Cybersecurity (30 credits)
Certificate (Cert.) Computers and Information Technology (30 credits)
Certificate (Cert.) Indigenous Business Management (30 credits)
Certificate (Cert.) Public Administration and Governance (30 credits)
Graduate Diploma (Gr. Dip.) Legal Translation (30 credits)
```

    *: This program is self-funded
    **: This program may also have an on-campus equivalent. Only students in the online version of the program must use Minerva to submit a declaration
    of location for a registered term.
    Students in the online version of any program listed above, except those that are self-funded, will pay tuition as follows:

1. Students studying within the province of Quebec will be subject to the rates established by the government for in-province students, according to their proven fee residency status.
2. Students who are located outside Quebec while studying will be subject to deregulated tuition rates.

Most regular university charges will apply to all students in all online programs, but certain fees may be reduced or eliminated for students located outside the province while studying. For example, the Athletics \& Recreation Fee is not charged to students located outside Quebec, and International students located outside Quebec but within Canada may request to opt-in to the International Health Insurance through mcgill.ca/internationalstudents/health.

Online program students must self-declare their location while studying for every term they are registered in the online program via Minerva under Student Menu > Location of Study - Online (distance) program. Students are notified by email that the Minerva form for the upcoming term is open and can be accessed. The form opens to all registered students in the above programs on:

Fall term: July 16
Winter term: November 16
Summer term: March 16
Once a student has declared their location for a given term, they cannot use Minerva to update the information for that term if it should change. To make a change to the declaration:

- Students in a Continuing Studies program should call 514 398-6200 or email info.conted@mcgill.ca.
- All other students should contact Service Point at mcgill.ca/servicepoint/contact.

Students will be asked to support their application for a change in location with appropriate documentation which can include, for example, Quebec Medicare Card, Quebec Driver's License, rental agreement, mail addressed to them at a Quebec address, etc. If the change of location occurs by the last day of classes in the Fall/Winter terms, and August 15th for the Spring/Summer terms, then the change will affect that term. After these dates, a student must wait for the opening of the new term to make the new self-declaration for the new term. If the proof cannot be provided by the last day of classes for the term of the requested change, then Enrolment Services reserves the right to refuse the application.

Where it is determined that a student has falsely declared themselves to be in Quebec, then the University reserves the right to re-assess tuition at the deregulated rates for their program and-in addition-the student would be subject to the rules contained in the Code of Student Conduct and Disciplinary Procedures.

### 1.2.3 Submitting Legal Documents

McGill requires documentation from you to confirm your legal status. The following sections describe the documents needed for your specific situation and how you should proceed.

### 1.2.3.1 Why Does McGill Collect Legal Documents from You?

Your tuition status at McGill will vary depending on your legal status in Canada. In order to determine your appropriate rate of tuition (Quebec, Canadian out-of-province, or international), we require documentation confirming your current status. We also require these documents to confirm your valid citizenship/immigration status. To find out which documents you must provide and when they are required, refer to section 1.2.3.2: What Documents Does McGill Need from You?

Some of the documents McGill requests of you help us obtain your Permanent Code from the Government of Quebec. This unique 12-character code is created by the Quebec Ministry of Education and is obligatory for all students registered in a Quebec institution. If you have previously attended school in Quebec, you should already possess a Permanent Code; it can be found on your school report card or your CEGEP and/or university transcripts. If you do not already have a Permanent Code, we will request to have it created for you. Once it has been created, it will reflect on your unofficial transcript.

You can consult your tuition and legal status (including your Permanent Code) on Minerva. Select Student Menu >Student Accounts Menu >View your Tuition and Legal Status.

Note for Medicine and Health Sciences: Once admitted to the Faculty, you will be required to provide additional documentation for the purposes of admission and registration. Details are provided in the application instructions. For more information, see mcgill.ca/medadmissions/applying/elements.

### 1.2.3.2 What Documents Does McGill Need from You?

Follow the instructions in the first row of this table that apply to you. Send clear, legible copies of documents (not originals).

## Quebec and Canadian Out-of-Province Students

You have applied to McGill directly from CEGEP or you already have a student record at McGill

- Usually no documents are required to prove your Canadian and/or Quebec status. In most cases, your status is confirmed to us by the Government of Quebec or is already in your McGill record. Check your Minerva account to verify that your status is updated correctly (Select Student Menu > Student Accounts Menu > View your Tuition and Legal Status)

You have applied to McGill from another Quebec university

You were born in Quebec

You were born in (or are a Landed Immigrant from) a Canadian province other than Quebec

- Proof of Canadian status is required: Canadian birth certificate; or Canadian citizenship card or certificate (both sides); or Certificate of Indian status card; or Makivik Society card; or valid Canadian Confirmation of Permanent Residence document (Note 2); or valid Canadian Permanent Resident card (both sides of the card)
- Additionally, for Quebec residency status, usually no documents are required, unless McGill cannot confirm this from the Government of Quebec. Check your Minerva account to verify that your status is correct
- Quebec birth certificate (Note 4)
- Canadian birth certificate; or Canadian citizenship card or certificate (both sides); or Certificate of Indian status card; or Makivik Society card; or valid Canadian Confirmation of Permanent Residence document (Note 2); or valid Canadian Permanent Resident card (both sides of the card)
- Permanent Code Data Form (Notes 1 and 5)
- Canadian birth certificate; or Canadian citizenship card or certificate (both sides); or Certificate of Indian status card; or Makivik Society card; or valid Canadian Confirmation of Permanent Residence document (Note 2); or valid Canadian Permanent Resident card (both sides of the card)
- Permanent Code Data Form (Notes 1 and 5)
- Attestation of Residency in Quebec Form (Note 5)
- Other supporting documents, depending on which situation you checked on the above Attestation of Residency Form


## International Students

You will be studying at McGill for less than six months (i.e., for only one academic semester) as a non-degree student (e.g., Exchange, Special, Visiting)

- You may need a Visitor's Permit or Electronic Travel Authorization (eTA) issued by Immigration, Refugees, and Citizenship Canada at your port of entry into Canada. To determine if you are required to have a visa, please refer to the Immigration and Citizenship website
- Photo page of your passport
- Permanent Code Data Form (Notes 1 and 5)
- Certificate of Acceptance of Quebec (CAQ)
- Study Permit issued by Immigration Canada (Note 3)

You will be in Canada for more than six months (i.e., you are enrolled in a degree, certificate, or diploma program, usually for two or more consecutive academic semesters)

- Permanent Code Data Form (Notes 1 and 5)

Note 3: If you are a refugee, your Convention Refugee Status document is required instead of a Study Permit.

Note 4: Usually McGill needs your birth certificate to prove your place of birth in Quebec. If you already have a valid Quebec Permanent Code, McGill will accept a copy of your valid Canadian passport that indicates your birthplace as being within the province of Quebec as proof that you are eligible for Quebec residency.

Note 5: You can find links to download and print the Permanent Code Data and Attestation of Quebec Residency forms at mcgill.ca/legaldocuments/forms.

### 1.2.3.2.1 Fee Exemptions

Exemption from the out-of-province or international supplement tuition fees is possible for students in any of the following three categories, as authorized by the Government of Quebec:

1. French Course Fee Exemptions - Full-time international students are charged fees at the Quebec tuition rate by default for certain eligible French courses (note exclusions as listed at mcgill.ca/student-accounts/tuition-fees/general-tuition-and-fees-information/tuition-fee-exemptions).
2. Out-of-Province Tuition Supplement Exemptions - Non-Quebec Canadian students in the following categories are exempted from out-of-province tuition supplements (details at mcgill.ca/student-accounts/tuition-fees/general-tuition-and-fees-information/tuition-fee-exemptions):

- Students in a Ph.D. program
- Students in a Postgraduate Medical Education program: Medical Residents, Clinical Fellows, Clinical Research Fellows, Research Fellows
- Students registered full-time in the Master's in French (Maîtrise en français). The exemption begins at the moment the student registers in the program, without retroactive effect

3. International Students Eligible for Fee Exemptions Based on Legal Status in Canada - Students with one of the following statuses may be exempt from International Supplements (certain categories may be assessed at the Canadian tuition rate; full details regarding eligibility criteria are listed at mcgill.ca/legaldocuments/exemption):

- Citizens of France
- Citizens of certain countries with an agreement with the Government of Quebec
- Diplomatic, consular, or other representatives of international organizations
- Convention refugees
- Students awaiting permanent residency in Canada and holding an eligible CSQ
- Students whose spouse holds, or unmarried students whose parent holds a Temporary Work Permit in Canada
- Students funded by the FRSQ (Fonds de la recherche en santé du Québec)

Note that this information may be subject to change.

### 1.2.3.3 Has McGill Received Your Documents?

### 1.2.3.3.1 Quebec/Canadian/International Fees and Immigration Status

Once McGill has received your documents, it usually takes 5-10 business days to process them and update your status accordingly.

- Check your tuition fee and legal status on the Minerva Student Accounts menu: Student Menu > Student Accounts Menu > View Tuition Fee and Legal Status. Ensure that you select the correct term when viewing your status.
- Check the phrase: Fees currently calculated according to rules for.... This will tell you if your tuition status is currently being billed at the international rate, the Canadian rate, or at the Quebec rate. For information on fees, see mcgill.ca/student-accounts.

If you do not agree with your tuition status, notify McGill right away. Documentation provided to modify your legal and tuition status must be received within the given semester for changes to be applied for that semester. Retroactive tuition status updates are not permitted; requests and documents submitted after the semester has ended will be processed, with changes applied to the following semester.

### 1.2.3.3.2 Permanent Code

Your Permanent Code will be created and/or validated by Quebec's Ministry of Education normally within the first six to eight weeks of your first registered semester at McGill.

- Check your Permanent Code on Minerva: Personal Menu > Name Change or alternately via Student Menu > Student Accounts Menu > View Tuition Fee and Legal Status. If your 12-character Permanent Code appears there, your documents are in order. If not, you have not yet provided McGill with your documents listed in section 1.2.3.2: What Documents Does McGill Need from You? or the Government of Quebec has not yet confirmed that your documents are sufficient to create a Permanent Code.


### 1.2.3.4 What Are the Consequences of Not Providing Your Documents?

The deadline to submit documents in support of a change to your tuition status effective for that semester is the last day of classes for that semester (e.g., December 1 for changes to be made to your tuition status for the Fall term, or April 1 for changes to be made for the Winter term).
If documents are still missing from your file after the start of the semester, a hold will be added to your record preventing you from registering or dropping any courses, and in some cases, from obtaining your official transcript.

## International students who have not provided their valid immigration documents to McGill may be de-registered from their courses.

### 1.2.3.5 Where and How Do I Send My Documents?

You must send in all your documents after you have accepted your offer of admission but before the start of classes. Do not send originals. Email clear and legible copies of your documents. Write your McGill student ID in the filename of each document so that McGill can match them to your record. The sooner you submit your documents, the sooner the University can update your status and ensure that your record is in order.

Please refer to mcgill.ca/legaldocuments/how for detailed instructions on where/how to submit your documents.
If there is a problem with your documents, contact Service Point at:
Telephone: 514-398-7878
Website: mcgill.ca/servicepoint/contact

### 1.2.3.5.1 For the School of Continuing Studies

By email: legaldocuments.conted@mcgill.ca
In person (appointment required) or by mail/courier:

```
McGill University
School of Continuing Studies
6 8 0 \text { Sherbrooke Street West, Suite } 1 1 9 9
Montreal QC H3A 3R1
```

If there is a problem with your documents, contact Client Services at:
Telephone: 514-398-6200
Email: info.conted@mcgill.ca; legaldocuments.conted@mcgill.ca

### 1.2.4 Identification (ID) Cards

As a student registered at McGill, you are required to present an ID card to:

- write examinations;
- use libraries and student services, including certain laboratories;
- access residence buildings;
- access meal plans; and
- access the inter-campus shuttle bus.

The Student Identification card is the property of the University, for use by the cardholder only, and is not transferable. If you withdraw from all of your courses, you must return it to Enrolment Services (or the Faculty of Agricultural and Environmental Sciences, Student Affairs Office, Macdonald Campus).

- New students must be registered for at least one course to obtain an ID card.
- You must allow for at least 24 hours after you have registered for your first course before requesting an ID card.
- If you do not register for consecutive terms, you should retain your ID card to avoid having to replace it when you re-register.
- If your card has expired, there is no charge for a replacement if you hand in the ID card.
- If you change programs or faculties, there is no charge to issue a new card if you hand in the ID card.
- If your card has been lost, stolen, or damaged, there is a replacement fee; please see the Student Records website for an exact fee amount.
- If you need security access to labs or other facilities, please contact the Area Access Manager (AAM) of the building in which the room is located. To find out who the AAM is, consult the Find the AAM list on the Security Services website.

Note for Continuing Studies: You must allow at least one day after you have registered before applying for your ID card. An ID card will not be issued to you if you have any outstanding fees. You may obtain your ID card at the Client Services office of the School of Continuing Studies. If you withdraw from all of your courses, you must attach your ID card to the withdrawal form or return it to the Client Services Office of the School of Continuing Studies.

### 1.2.4.1 ID Card Schedule for the Downtown Campus

The locations and opening hours of ID card centres can be found on the Student Information website at mcgill.ca/student-records/personal-information/id.

- New students can obtain their ID card 24 hours after registering for their first course. Registration dates for new students can be found here.
- Returning students must be registered for at least one course and may present themselves at an ID card centre during their operational hours at any time in order to obtain a replacement card. Please refer to the following site for information on the Downtown Campus ID Centre: mcgill.ca/student-records/personal-information/id.


### 1.2.4.2 ID Card Schedule for the Macdonald Campus

New students can obtain their ID card 24 hours after registering for their first course. Registration dates for new students can be found here.
The Macdonald Campus ID Centre is in the Student Affairs Office, Laird Hall, Room 106.
Information on when the ID Centre is open can be found here.

### 1.2.5 Legal Name and Legal Sex Designation

### 1.2.5.1 Legal Name

Your legal name is the name that will appear on your degree, diploma, or certificate upon graduation, and on your e-bills, tax receipts, and official transcript. It is also used by the Government of Quebec to create a Permanent Code.
After confirming your offer of admission and registering at McGill, the name provided on your admission application is validated and, in the event of a variation, updated to match the legal name appearing on one of the following documents:
Canadian or Permanent Resident Students:

1. Canadian birth certificate, copy of an act of birth, or citizenship card or certificate
(Note: A Canadian passport is not acceptable)
2. Canadian Immigration Record of Landing (IMM 1000 or IMM 5292 or IMM 5688 and Permanent Residence card)
3. Marriage certificate issued outside of Quebec-translated into English or French by a sworn officer if in another language
(Note: Quebec marriage certificates are only acceptable if issued prior to 1984)
4. Certificate of Name Change or Certificate of Change of Sex Designation and Name issued by the Quebec Directeur de l'état civil or applicable force in any Canadian province
(Important: must be submitted along with a driver's license or health card indicating the name change)
International Students:
5. Canadian Immigration Study or Work Permit
6. Certificate of Acceptance of Quebec (CAQ)
7. International passport (Note: For students in non-degree programs or programs that are less than 6 months; for name changes acceptable if submitted with a Certificate of Name Change)
8. International birth certificate (with an official translation in English or French)
9. Letter from international student's consulate or embassy in Canada
10. Marriage certificate issued outside of Quebec-translated into English or French by a sworn officer if in another language (Note: Quebec marriage certificates are only acceptable if issued prior to 1984)
11. Certificate of Name Change or Certificate of Change of Sex Designation and Name issued by an official government authority outside of Canada
(Important: must be submitted along with an international passport or driver's license indicating the name change)
In the case of a variation in the spelling of the name among these documents, the University will use the name on the document that appears first on the above list.

Should McGill require a copy of one of the documents listed above, both or all sides of the document must be copied and presented.
In order to update the legal name on your student record you must:

1. Complete a Personal Data Change Form
2. Provide us with a copy of the appropriate legal document with the updated legal name (if we don't already have a copy); the list of acceptable documents is listed above
3. Submit the completed form and copy of the legal document by email attachment (PDF or TIFF format) to permcode@mcgill.ca

### 1.2.5.2 Legal Sex Designation

To update your legal sex designation, you need to:

1. Complete a Personal Data Change Form
2. Provide us with a copy of the appropriate legal document with the updated legal sex designation (if we don't already have a copy); the list of acceptable documents is listed in the section 1.2.5.1: Legal Name section above
3. Submit the completed form and copy of the legal document by email attachment (PDF or TIFF format) to permcode@mcgill.ca

### 1.2.5.3 Preferred First Name

At McGill University, a student is registered under their legal name as it appears on their legal documents,—such as a birth certificate or study permit-that have been provided to the University. This name will be used on documents such as an official transcript and diploma.

Your preferred first name is a name by which you are normally addressed and is different from your legal first name. The Preferred First Name Procedure enables students to use an alternate preferred first name for certain purposes while studying at McGill.

Students who wish to use a preferred first name should enter this information into Minerva as soon as possible in order to ensure that their preferred first name is used as widely as possible.

The preferred first name is displayed on all unofficial university documents and tools, such as:

- McGill ID cards
- Class lists
- Student advising transcripts
- For a complete list of examples, please refer to Student Records

The student's legal name must appear on official university documents, such as:

- Official university transcripts
- Reports to government
- Letters of attestation
- Diplomas and certificates
- Tuition fee e-bills
- For a complete list of examples, please refer to Student Records

It is important to note that making a request to use a preferred first name at McGill does not change a student's legal name in the McGill student record or records with government authorities.

You can provide a preferred first name on your application for admission or, once admitted, on Minerva, under the Personal Menu. From the Personal Menu, select Name and Pronoun Change and then add your preferred first name in the preferred first name field.

You can also request that your preferred first name be part of your McGill email address by submitting an Email Alias form in IT's Service Now. For further details, see Student Records, which includes the Preferred First Name FAQ.

### 1.2.5.4 Verification of Name

You should verify the accuracy of your name on McGill's student records via Minerva (mcgill.ca/minerva). To do this, go to Personal Menu > Name and Pronoun Change, where you can make minor corrections such as changing case (upper/lower), adding accents, and spacing. You can also add a preferred first name that is different from your legal first name, and it will be used internally at McGill. For more information on the Preferred First Name Procedure, see mcgill.ca/student-records/personal-information/name-gender.

You cannot change your legal name via Minerva. To change your legal name, please refer to Student Records. A legal name change request must be submitted along with official documents (see Legal Name and Legal Sex Designation). To add a preferred first name, see Preferred First Name.

Note for Continuing Studies: Requests for such changes must be made by presenting official documents (see Legal Name and Legal Sex Designation) in person at the Client Services Office, School of Continuing Studies.

### 1.3 Registration

Once you have confirmed your intention to attend McGill in Minerva, you must register by adding courses to your record during the registration periods listed on the Important Dates website. You must register on Minerva and can continue to do so throughout the registration period by adding and dropping courses until you have finalized your schedule.
All course descriptions are available in Class Schedule and on the eCalendar. If you are a new student, you should refer to section 1.3.2: Course Information and Regulations to familiarize yourself with McGill's course numbering system ( section 1.3.2.1: Course Numbering), multi-term course rules ( section 1.3.2.2: Multi-Term Courses), and course terminology ( section 1.3.2.3: Course Terminology).

For fee policies related to registration and withdrawal from courses or withdrawal from the University, please refer to section 1.4: Fees.
Note for the Faculties of Arts and Science (including B.A. \& Sc.): For detailed information on registration, you can also refer to:

- Arts: mcgill.ca/oasis
- Science and B.A. \& Sc.: mcgill.ca/science/undergraduate


## Note for the Faculty of Engineering:

- If you are a returning student, it is mandatory that you see a departmental/school academic advisor to review your course selection at the beginning of the Fall and Winter terms.
- If you are a new student, it is mandatory that you see a departmental/school academic advisor during the advising period. For advising days, times and locations for new students, see the Faculty of Engineering website.

Note for the Faculty of Law: For information regarding the registration periods for new and returning students in the Faculty of Law, please refer to the Law Student Affars Office website.

Returning Students - During the month of June, students in upper years are required to register on Minerva indicating their course selections for the next academic year.

Students in the Faculty of Law should consult registration materials available at mcgill.ca/law-studies/courses.
Note for Medicine and Health Sciences: All M.D.,C.M. and D.M.D. students must complete registration online, as per section 1.3.1: Registration Periods, by adding the prescribed courses on Minerva in the Fall term. Medical students should refer to information provided by Medical Admissions (Med-1 students) or the UGME office (Med-2 to 4) for registration deadlines.

### 1.3.1 Registration Periods

The dates given below were accurate when this publication was finalized. Although changes are not anticipated, you should confirm the dates in the Important Dates Search Tool.

### 1.3.1.1 Returning Students

Registration for undergraduates will take place between May 29 and August 14, 2024.
Registration will open in the following order:

## Opening Registration Dates

Year 3 and Year 4 students: May 29
Year 2 students: May 30
All other returning students: May 31
On each of these days, registration is phased in over the morning beginning at 8:00 a.m. Please see When to Register for details.

Some faculties and departments set their own schedules for advising and registration as of these dates. Further information is available at faculty student affairs offices and websites. For more information, see the Advisor Directory.
To successfully complete registration, you must have an acceptable Academic Standing from the previous session and have paid any outstanding fees and/or fines. You can verify your registration eligibility in Minerva > Student Menu > Registration Menu > Step 1: Check Your Registration Eligibility and Verify Your Curriculum.

Note for the Faculty of Law: In order to facilitate access to small enrolment courses and ensure equity among students, registration priorities are programmed in Minerva. These priorities, established after consultation between the Faculty and the Law Students' Association, are made on a rolling basis by class year (i.e., fourth-year students register first). Priority registration dates are established by the Student Affairs Office and posted on the Law SAO website.

Note for Health Sciences: The information contained in this section applies to the University in general; students are advised to consult the appropriate faculty or school section for academic policies and regulations specific to their programs.

Note for Medicine \& Health Sciences: Students must register on Minerva for all courses within the registration period. Please refer to information provided by Medical Admissions (Med-1 students) or the UGME office (Med 2 to 4) for registration deadlines. U2 medical and dental students must register prior to the first day of August.

Note for Medicine \& Health Sciences, and Dentistry: U2 medical and dental students need to have registered prior to August 14.

### 1.3.1.2 Newly Admitted Students Entering in September 2024

Registration will take place between June 12 and August 14, 2024.
Registration will open in the following order:
Wednesday, June 12: registration opens for students admitted from Quebec CEGEPs.

Monday, June 17: registration opens for students whose highest level of education prior to registering at McGill is a French Baccalaureate, International Baccalaureate, or at least one year of university, or who were admitted on the basis of Advanced Levels, CAPE, or other academic qualifications, which provides for Advanced Standing credit, and who therefore have a classification of Year 1 (U1) or higher.

Tuesday, June 18: registration opens for students whose highest level of education prior to registering at McGill is high school, and who have been admitted to a classification of Year 0 (U0) to the following faculties/schools/degrees: Arts (including Schools of Religious Studies and Social Work), B.A.\&Sc., Education, Management, and Music.

Wednesday, June 19: registration opens for students whose highest level of education prior to registering at McGill is high school, and who have been admitted to a classification of Year 0 (U0) to the following faculties/schools: Agricultural and Environmental Sciences, Engineering (including Architecture), Nursing, Occupational Therapy, Physical Therapy, and Science.
If you are a newly admitted student in the Fall term and you want to register for courses in the Summer prior to beginning your studies, you can do so on Minerva. Please refer to Summer Studies for further information, or see mcgill.ca/summer.

Note for the Faculty of Law: Tuesday, July 9, 2024: registration opens for newly admitted students. You can find instructions on how to use Minerva in your orientation package; for more information, see the Law Student Affairs website.

Note for Medicine and Health Sciences: You must register in all courses no later than August 14 and attend the Faculty of Medicine and Health Sciences and Faculty of Dental Medicine and Oral Health Sciences mandatory orientation \& registration session, where your course registration can be confirmed. Information on the mandatory orientation \& registration session is available on the Faculty of Medicine and Health Sciences Office of Admissions website.

### 1.3.1.3 Newly Admitted Students Entering in January 2025

Registration will take place between December 3, 2024 and January 6, 2025 without penalty. See section 1.3.1.4: Late Registration for more info.
Some faculties and departments require that you meet with an advisor before registration and set specific dates for advising and registration within these dates. Please refer to the faculty sections of this publication, as well as the Welcome to McGill publication or website, or the Essential Guide for New Students, Macdonald Campus, which are included with your acceptance package.

Note for Dentistry: Students accepted into the DMD Advanced Standing for Foreign Trained Dentists Pathway will begin classes the first week of December 2024.

Note for the Faculty of Law: There is no Winter term admission to the Faculty of Law.

Note for the Faculty of Nursing: There is no Winter term admission to the Faculty of Nursing.

### 1.3.1.4 Late Registration

If you fail to register during the normal registration period, you can register within the period designated by the University for late registration with the payment of a late registration fee. For late registration fees, see Late Registration and Course Change Charges on the Student Accounts website.
Returning Students: You may register late via Minerva from August 15 until and including September 10, 2024.
New and Readmitted Students (Fall): You may register late via Minerva from August 15 until and including September 10, 2024.
New and Readmitted Students (Winter): You may register late via Minerva from January 7 until and including January 14, 2025.
Special Late Registration: If you cannot register online during the late registration period, usually due to late admission, you may receive special permission to register in person. This information is included with your letter of acceptance.

### 1.3.2 Course Information and Regulations

The University reserves the right to make changes without prior notice to the information contained in this publication, including the revision or cancellation of particular courses or programs.

At the time this publication was finalized, new courses and modifications to some existing courses were under consideration. Students preparing to register are advised to consult Class Schedule and refer to mcgill.ca/students/courses for the most up-to-date information on courses to be offered.

Not all courses listed are offered every year.
Note for Graduate Studies: You are advised to also refer to Registration and Student Records.

Note for Health Sciences: For information, you should refer to your Faculty/School section in this publication.

Note for Summer Studies: Refer to Student Types and Registration Procedures and Student Records.

### 1.3.2.1 Course Numbering

Each McGill course is assigned a unique seven-character course "number".
The first four characters (subject code) refer to the unit offering the course.
These codes were implemented in September 2002, replacing the three-number teaching unit codes previously used. A complete list of teaching unit codes and their subject code equivalents can be found at mcgill.ca/student-records/transcripts/key in the section Cross-walk of current subject codes to pre-2002 course numbers.

The three numbers following the subject code refer to the course itself, with the first of these indicating the level of the course.

- Courses numbered at the $100,200,300$, and 400 levels are intended for undergraduate students. In most programs, courses at the 300 and 400 levels are normally taken in your last two years.
- Courses at the 500 level are intended for qualified senior undergraduate students but are also open to graduate students.
- Courses at the 600 and 700 levels are intended for graduate students only.

Two additional characters (D1, D2, N1, N2, J1, J2, J3) at the end of the seven-character course number identify multi-term courses.

### 1.3.2.2 Multi-Term Courses

Most courses at McGill are single term (Fall or Winter or Summer) courses with final grades issued and any credits earned recorded at the end of that term. Single term courses are identified by a seven-character course number.

A unit may, however, decide that the material to be presented cannot be divided into single term courses, or that it is preferable that the work to be done is carried out over two or three terms. Under such circumstances, courses are identified by a two-character extension of the course number.

In some cases, the same course may be offered in various ways: as a single term and/or in one or more multi-term versions. The course content and credit weight are equivalent in all modes; the only difference is the scheduling. You cannot obtain credit for more than one version of the same course.

Courses with numbers ending in D1 and D2 are taught in two consecutive terms (most commonly Fall and Winter). You must register for the same section of both the D1 and D2 components. When registering for a Fall term D1 course on Minerva, you will automatically be registered in the same section of the Winter term D2 portion. No credit will be given unless the same section of both components (D1 and D2) are successfully completed in consecutive terms.
Courses with numbers ending in $\mathbf{N} 1$ and $\mathbf{N} 2$ are taught in two non-consecutive terms (Winter and Fall). You must register for the same section of both the N1 and N2 components. No credit will be given unless the same section of both components ( N 1 and N 2 ) are successfully completed within a twelve (12) month period.
Courses with numbers ending in $\mathbf{J 1}, \mathbf{J} 2$, and $\mathbf{J 3}$ are taught over three consecutive terms. You must register for the same section of all three components ( $J 1, J 2, J 3$ ). No credit will be given unless the same section of all three components are successfully completed in consecutive terms.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): If you select a multi-term course, you are making a commitment to that course for its entirety. You must register in the same section in all terms of a multi-term course. Credit will be jeopardized if you deliberately register in different sections of a multi-term course. In the case of Fall/Winter D1/D2 courses, attempting to change section in Winter may result in an inadvertent withdrawal (W) from the D1 course, and reinstatement in the D1/D2 course will result in you being charged administrative fees.

## Important Conditions for Multi-Term Courses

1. You must be registered for each component of the multi-term course. You must ensure that you are registered in the same section number in each term of the multi-term course.
2. You must successfully complete each component in sequence as set out in the multi-term course. Credit is granted only at the end of the multi-term course; no partial credit is given, i.e., for completing only one component of a D1/D2 or N1/N2 course, or one to two components of a $\mathrm{J} 1 / \mathrm{J} 2 / \mathrm{J} 3$ course.

### 1.3.2.3 Course Terminology

Prerequisite: Course A is prerequisite to course B if a satisfactory pass in course A is required for admission to course B.
Corequisite: Course A is corequisite to course B if course A must be taken concurrently with (or may have been taken prior to) course B.
Credits: The credit weight of each course is indicated in parentheses beside the course title. For D1 and D2 courses, the credit weight is indicated after the course number. For further information, refer to the Credit System page from the Undergraduate Regulations and Resources.

### 1.3.2.3.1 Course Nomenclature in Program Descriptions

Required Courses: Mandatory courses that must be completed to fulfil the requirements of a program (e.g., major, minor, etc. at the undergraduate level or specific courses at the graduate level), unless the student receives exemptions. Students have no choices among required courses.
Complementary Courses: Courses selected from a restricted list, a particular subject area, or a discipline. In some programs, students must include a number of these to meet program requirements. Complementary courses are not electives.

Elective Courses: Courses, in some cases, taken outside of a student's program of study that do not count toward the fulfilment of the specific program requirements. Some restrictions may apply, but students have the most choice in selecting elective courses. Some faculties also permit students to take elective
courses using the Satisfactory/Unsatisfactory (S/U) Option. Undergraduate students should consult their faculty regulations concerning electives; graduate students require the approval of their Program Director and Enrolment Services.

### 1.3.2.4 Course Load

It is your responsibility to follow the faculty regulations listed below. When registering on Minerva, you must not exceed the maximum credits permitted by your faculty. For information on course load requirements for entrance scholarships' renewal and in-course awards, see section 1.8.1: Entrance Awards for McGill Students.

### 1.3.2.4.1 Normal Course Load

The normal course load in most undergraduate faculties is 15 credits per term. If you carry fewer than 12 credits per term, you are considered to be a part-time student in that term.

## Note for the Faculty of Agricultural and Environmental Sciences:

- The normal course load is 15 to 18 credits per term


## Note for the Faculties of Arts and Science (including B.A. \& Sc.):

- Newly admitted students may take up to 17 credits per term.
- Continuing students in Satisfactory Standing may take up to 17 credits per term.
- Continuing students whose CGPA is above 3.50 may take more than 17 credits per term. Requests to exceed 17 credits per term are made to Enrolment Services via Minerva, mcgill.ca/student-records/exceedcredits; it is important that you also see a faculty advisor in Dawson Hall to talk about your options, and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising/advisordirectory.


## Note for the Faculties of Education and Management and the School of Religious Studies:

- Newly admitted students may take up to 17 credits per term.
- Continuing students in Satisfactory Standing may take up to 17 credits per term.


## Note for the Faculty of Engineering:

- The normal course load is 15 to 18 credits per term
- If you want to register for more than 18 credits in a term, you must obtain permission from your departmental/school advisor
- If you have deferred exams (grade of $L$ on your unofficial transcript), you cannot register for more than 18 credits or write more than six exams per term, whichever is greater.
- You must register for enough credits to satisfy visa, financial aid, and/or scholarship requirements
- The average number of hours per week of course activities is indicated in the course listing in a note underneath the course description. For example, (3-1-5) indicates a course consisting of three lecture hours per week, one hour of tutorial or labs, and five hours of personal study per week.


## Note for the Faculty of Law:

- The normal course load is 15 to 18 credits per term.

Note for Health Sciences: For information, you should refer to your Faculty/School section in this publication.

Note for Medicine: M.D.,C.M. students, please refer to mcgill.ca/ugme.

## Note for the Schulich School of Music:

- The normal course load is 15 to 18 credits per term.
- Continuing students in Satisfactory Standing who wish to register for more than 18 credits must obtain permission from the academic advisor or area coordinator.


### 1.3.2.4.2 Course Load for Students in Probationary Standing

Students in Probationary Standing may take up to 12 credits per term, with the following exceptions:

- Agricultural and Environmental Sciences: 14 credits
- Arts: up to 14 credits
- Engineering: 13 credits maximum, including repeated courses
- Management: 12 credits maximum of new material
- Music: 14 credits
- Science: up to 14 credits
- Nursing: up to 14 credits

In some cases, a student in Probationary Standing may add a repeated course in which a grade of D or F was obtained.

### 1.3.2.5 Courses Taken under the Satisfactory/Unsatisfactory (S/U) Option

The principle of the Satisfactory/Unsatisfactory (S/U) option is to encourage you to take courses outside the area of your specialization with the view of enabling you to acquire knowledge and skills in a variety of fields.
Where permitted by faculty and program regulations, you may take one elective course per term to be graded under the Satisfactory/Unsatisfactory (S/U) option, to a maximum of $10 \%$ of your credits taken at McGill to fulfil the degree requirements. You are responsible for selecting the $\mathbf{S} / \mathbf{U}$ option on the correct course amongst all courses you are registered for, and that the course is eligible for the option per faculty and program regulations. For more information, refer to the appropriate faculty note below.
If you decide to have an elective course graded as Satisfactory/Unsatisfactory (S/U), you must do so before the course change deadline on Minerva as part of the Student Menu > Registration Menu > Quick Add or Drop Course Sections Menu.
Once the option is selected, and the course change deadline has passed, you may still remove the option up until the "withdrawal without refund" deadline.
When adding or removing the $\mathrm{S} / \mathrm{U}$ option to a course, you are encouraged to return to the "course grade mode" drop down menu to ensure that the $\mathrm{S} / \mathrm{U}$ option has been selected or removed appropriately. You are responsible for confirming that the $\mathrm{S} / \mathrm{U}$ option has been applied or removed.

Note for multi-term courses: You must select the $\mathrm{S} / \mathrm{U}$ option by the course change deadline of the first part of the course. Once selected, you may remove the $\mathrm{S} / \mathrm{U}$ option until the "withdrawal without refund" deadline for the course in question. For multi-term courses, the "withdrawal without refund" deadline normally coincides with the add/drop deadline of the term in which the second part of the course is held.

The instructor will report grades in the normal fashion.

- Grades of A through C are converted to "Satisfactory" (S)
- Grades of D, F, and J are converted to "Unsatisfactory" (U)

The courses taken under the S/U option will be excluded from the grade point average (GPA) calculations, but they will be included in the attempted credits total. Credits for courses with a final grade of S will also be included in the number of credits earned.

Note: To be considered for in-course awards, including Dean's Honour List designations, and/or the renewal of entrance scholarships, you must complete at least 27 graded credits in the regular academic session (unless otherwise stated by your faculty), not including courses completed under the $\mathrm{S} / \mathrm{U}$ option.

Note: The S/U option is not available via Minerva to Visiting, Exchange, or Quebec Inter-University Transfer Agreement (IUT) students. These students must first contact their home university to ensure that a course taken under the $\mathrm{S} / \mathrm{U}$ option is acceptable to their home university and that the credits are transferable. After receiving approval from their home university and before McGill's course change deadline, they must then consult their McGill Faculty Student Affairs Office for approval.

Note: Special Students are not eligible to select the S/U option.

Note for Agricultural \& Environmental Sciences, Arts, B.A. \& Sc. and Science: Freshman/foundation year (U0) students are not eligible to select the S/U option.

## Note for Engineering:

- B.Eng. students may use the S/U option for Complementary Studies courses (i.e., Group A Impact of Technology on Society and Group B Humanities and Social Sciences, Management Studies and Law), Natural Science Complementary Courses (for Computer Engineering students from CEGEP and all Software Engineering students), and Elective Courses (for Mechanical Engineering students from CEGEP). You cannot use the $\mathrm{S} / \mathrm{U}$ option for courses in any other category of the Engineering programs. If you choose not to use the $\mathrm{S} / \mathrm{U}$ option, a grade of D is acceptable as a pass for these Complementary Studies courses.
- B.Sc.(Arch.) students may use the $\mathrm{S} / \mathrm{U}$ option for elective courses taken outside the School of Architecture. You cannot use the $\mathrm{S} / \mathrm{U}$ option for courses in any other category of the Architecture program. If you choose not to use the $S / U$ option, a grade of $D$ is acceptable as a pass for these elective courses.
- You cannot use the $\mathrm{S} / \mathrm{U}$ option for courses that are taken to satisfy a minor.


## Note for Law:

- The $\mathrm{S} / \mathrm{U}$ option is available for Law and non-Law electives and Law complementary courses within the BCL/JD. program.
- The $\mathrm{S} / \mathrm{U}$ option is limited to one course in the BCL/JD. program for a maximum of 4 credits.
- Students are not permitted to choose the $\mathrm{S} / \mathrm{U}$ option for required courses.
- The $\mathrm{S} / \mathrm{U}$ option is not permitted for courses that are taken to satisfy a minor.

Note for Management: The $\mathrm{S} / \mathrm{U}$ option is not available on Minerva for Management students. Requests for the $\mathrm{S} / \mathrm{U}$ option can only be made during the official add/drop period. Please contact the BCom Office (mcgill.ca/desautels/programs/bcom/contact-us) for details on the conditions that apply.

Note for the M.D.,C.M. program: The M.D.,C.M. program functions on a pass/fail system. Your final grade for each course is recorded on your university transcript as S satisfactory (pass) or U unsatisfactory (fail). Refer to The Faculty of Medicine's Assessment System for further details.

Note for Schulich School of Music: Music students may use the S/U option for elective courses taken outside the Schulich School of Music (non-music courses). Please note that the $\mathrm{S} / \mathrm{U}$ option is not permitted for courses that are taken to satisfy a major or a minor.

Note for Nursing: The S/U option is not available to B.N.I. and B.Sc.(N.) students for required courses.

Note for Physical and Occupational Therapy: The S/U option is not available to Physical and Occupational Therapy students.

For further information, contact your departmental advisor or Student Affairs Office, as appropriate.

### 1.3.2.6 First-Year Seminars

First-Year Seminars (FYS) are limited-enrolment credit courses offered by the Faculties of Arts and Science to students in their first year of undergraduate study at McGill; i.e., newly admitted students in U0 or U1. Students in any faculty can enrol in an FYS, subject to the conditions and/or restrictions of the program in which they are registered. Students may take only one FYS.
FYS classes are limited to a maximum of 25 students and are designed to provide closer interaction with the professor, and better working relations with peers than are available in large introductory courses. The seminars endeavour to teach the latest academic developments and expose participants to advanced research methods. Registration is on a first-come, first-served basis.

For a listing of First-Year Seminars, see Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.1: First-Year Seminars and Faculty of Science > Undergraduate $>$ Faculty Degree Requirements $>$ Course Requirements $>$ section 11.5.5.5: First-Year Seminars: Registration.

### 1.3.2.7 Auditing of Courses

McGill does not permit auditing of courses.
Note for Continuing Studies: You can register for a Continuing Studies course and opt to have it "non-evaluated".

### 1.3.3 Course Change Period

You may make changes to your course registrations (add or drop courses), subject to the requirements and restrictions of your program and individual courses from the opening date of registration until the end of the course change period. The course change deadline coincides with the deadline for late registration. See mcgill.ca/importantdates.

If you drop all Fall courses before the end of August (or drop all Winter courses before the end of December), you will not be registered in that term. If you are a newly admitted student, you may be able to defer your admission (see section 1.3.9: Deferred Admission), or you may have to apply for a later term. If you are a returning student and want to register in a later term, you must follow the procedures for readmission (see section 1.3.10: Readmission).
If you drop all Fall courses after the end of August (or drop all Winter courses after the end of December) you are considered University Withdrawn and your transcript will display a notation in that term. Whether you are a newly admitted or returning student, you must follow the procedures for readmission. For more information see section 1.3.10: Readmission.

If you are registered in the Fall term, you may add and drop Winter term courses throughout the Fall term until the Winter term deadline for course change/late registration.

After the course change deadline, you may add courses only with written permission of the instructor, and the Associate Dean or Director of your faculty. A fee will be charged for each course you add.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests made after the course change deadline must be made through Service Point. However, it is important that you also consult a Faculty advisor to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

Note for Health Sciences: For information on readmission procedures, you should refer to your Faculty/School section in this publication.

### 1.3.3.1 Course Withdrawal

After the course change deadline in the Fall and Winter terms, there is a period of a few days during which you may withdraw, with a grade of W, and receive a full refund of course fees.

After the Withdrawal (with refund) deadline, there is a period during which withdrawal from a course will also result in a grade of W but no course fees will be refunded.

### 1.3.3.1.1 Courses that Begin in the Fall Term

Deadline for withdrawal (grade of W) with refund:

- Tuesday, September 17, 2024

Deadlines for withdrawal (grade of W) without refund:

- Single-term courses: Tuesday, October 29, 2024
- Multi-term courses that begin in Fall term (refund for the Winter portion of the course only): Tuesday, January 14, 2025


### 1.3.3.1.2 Courses that Begin in the Winter Term

Deadline for withdrawal (grade of W) with refund:

- Tuesday, January 23, 2024

Deadline for withdrawal (grade of W) without refund:

- Single-term courses: Tuesday, February 27, 2024
- Multi-term courses that begin in Winter term (refund for the Summer or later portion of the course only): May 15, 2024*
* If you are in multi-term courses with course numbers ending in N1 and N2 (course begins in the Winter term, skips the Summer term, and is completed in the subsequent Fall term) you may withdraw after May 15 and until the end of the Fall term course change period by contacting your faculty Student Affairs Office.
After the withdrawal (without refund) deadline but before the end of term, and only under exceptional circumstances, you may be granted permission to withdraw from a course. Permission will not be granted merely because you are doing unsatisfactory work. A grade of W or WF, as appropriate, will appear on your transcript but will not be calculated in your GPA. For further information, consult your faculty Student Affairs Office.


## Note:

1. To withdraw from required or complementary courses after the withdrawal (without refund) deadline, you may need to obtain permission from your advisor, and you must fill out and submit a course withdrawal form, available from your faculty Student Affairs Office. Additional restrictions for Music courses are indicated on the Schulich School of Music page.
2. It is solely your responsibility to initiate a course withdrawal on Minerva. Neither notification of the course instructor nor discontinuing class attendance is sufficient. The date on which you withdraw on Minerva is the official date of withdrawal, even if you had stopped attending lectures earlier.
3. You may still withdraw from a course after the course change deadline without academic penalty provided that you do so within the appropriate withdrawal deadlines for the term. Otherwise, after this time, your name will continue to appear on the class list and grade reports and, in the event that you do not take the exam, you will be given a $\mathbf{J}$ grade.
4. Fee refunds, if any, will be in accordance with section 1.4.7: Fees and Withdrawal from the University.
5. Withdrawing from one or more courses during the semester may—where applicable—affect your government aid and/or McGill's Work Study Program eligibility. For international students, it may also impact your immigration status and/or permission to work in Canada. Please ensure that you are aware of any consequences related to the course withdrawal request; consult with the Scholarships \& Student Aid Office, International Student Services, and/or your faculty Student Affairs Office, where relevant.

Note for the School of Human Nutrition: Intensive internship courses, like Professional Practice (Stage) in Dietetics, may have different start dates and withdrawal dates than other courses. You should consult the course outline.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made through Service Point. However, it is important that you also consult a Faculty advisor to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

Note for the Faculty of Law: You are encouraged to meet with a student advisor before withdrawing from a course (no refund).

Note for Graduate and Postdoctoral Studies: To add/drop/withdraw a course after the deadline has passed, you must submit a course change Request form, available at Student Records Forms, to your department. If the department supports the request, the department will forward the request to the Student Records Office, Enrolment Services, along with the recommendation from the department Graduate Program Director (GPD).

Graduate students who wish to withdraw from McGill should consult section 1.3.8: University Withdrawal, and submit a "Request for a University Withdrawal" form, available at Student Records Forms. Please note that this form is sent to the Student Records Office, Enrolment Services.

Note for Health Sciences: Withdrawal (W) deadline dates are listed at mcgill.ca/importantdates. The health profession programs described in this eCalendar are highly structured and students should consult their advisor or Student Affairs Office to determine what course changes, if any, are allowed.

1. To withdraw from required or complementary courses after the withdrawal (without refund) deadline, you may need to obtain permission from your advisor, and you must fill out and submit a course withdrawal form, available from your faculty Student Affairs Office. (Note 1 is not applicable to Medicine, Dentistry, and Nursing. For information, you should refer to your Faculty/School section in this publication).
2. It is solely your responsibility to initiate a course withdrawal on Minerva. Neither notification of the course instructor nor discontinuing class attendance is sufficient. The date on which you withdraw on Minerva is the official date of withdrawal, even if you had stopped attending lectures earlier.
3. You may still withdraw from a course after the course change deadline without academic penalty, provided that you do so within the appropriate withdrawal deadlines for the term (see deadlines above). Otherwise, after this time, your name will continue to appear on the class list and grade reports and, in the event that you do not take the exam, you will be given a J grade.
4. Fee refunds, if any, will be in accordance with section 1.4.7: Fees and Withdrawal from the University.

Note for Ingram School of Nursing: To withdraw from any courses after the withdrawal (without refund) deadline, you need to obtain permission from your Program Director. To do so, submit a formal request by email to the Ingram School of Nursing Student Affairs Office along with proper documentation to support this request.

Note for School of Physical and Occupational Therapy: The Physical Therapy and Occupational Therapy programs are highly structured and you must receive the approval of the Program Director to determine what course changes, if any, are allowed. You can consult the Student Affairs Office for information on policies and procedures.

If you are blocked from withdrawing from a required course on Minerva, and have permission to do so, you must contact the Student Affairs Office, who will provide you with the proper forms.

Note for M.D.,C.M. program: Course changes are not permitted and withdrawals are only permitted when the student is on an approved leave of absence from the program.

The class schedule for the upcoming Fall and Winter terms normally becomes available in April prior to the opening of advising. The Summer term schedule is normally published in early February. The class schedule includes the days and times when courses are offered, class locations, names of instructors, and related information. You can also access the details of scheduled courses by clicking the course reference number (CRN) that appears with each course section shown in the class schedule.

You should make a note of any preregistration requirements for a course, such as placement tests or departmental approval/permission required.
Class schedule information is subject to change and is updated as courses are added, cancelled, rescheduled, or relocated. It is your responsibility to consult the class schedule at the time of registration, and again before classes begin, to ensure that changes in the schedule have not caused conflicts in your schedule.
Once you have selected some courses from the class schedule, try Visual Schedule Builder (VSB) to view your possible class schedules in an easy-to-read weekly schedule format. Please note that you cannot use Visual Schedule Builder to register but you can copy your choice of course reference numbers (CRNs) from VSB to have handy for registration in Minerva.

Please note that the last day of classes in a term varies according to a course's schedule pattern (e.g., Mon-Wed-Fri, Tues-Thurs, Monday only, etc.). You may verify these details at mcgill.ca/importantdates/key-dates.

## Note for Health Sciences: For information, you should refer to your Faculty/School section in this publication.

Note for Medicine: This section is not applicable to M.D.,C.M. students; see mcgill.ca/ugme.

### 1.3.5 Changing Programs within Selected Faculties

If you are registered in a program in one of the following faculties/units, you may add or change programs within your faculty using Minerva (mcgill.ca/minerva) under the Student Records Menu:

- Arts
- Bachelor of Arts \& Science
- Kinesiology (minor program selection only)
- Management
- Science

Certain restrictions apply. In all cases, you should consult the appropriate advisor for approval before making any changes and for faculty-specific regulations concerning program changes. Further information is also available on the Changing Programs web page.

You are not permitted to use Minerva to change your degree or to select a program in another faculty or school.
Note for Arts, Science, or B.A. \& Sc. freshman/foundation year programs ( 97 or more credits): You cannot change your freshman/foundation year program on Minerva, but may change options within your program where options are available. Once you have been promoted from the freshman/foundation year, you will be able to change departmental programs using Minerva as outlined in the note below.

Note for Arts, Science*, or B.A. \& Sc. degree (96 or fewer credits): You may change major/major concentrations, minor/minor concentrations or faculty programs using Minerva. You may also change into, or out of, an honours program. Some restrictions apply.

* Science students are limited to choosing majors or honours programs within the Science group to which they were admitted, but may continue to choose freely from all available minor programs. To change to a major or honours program in another Science group, students must submit an Intra-Faculty Transfer application; see mcgill.ca/students/transfer-readmission.

Note for Desautels Faculty of Management: You may add or change certain programs using Minerva. Please verify restrictions with the BCom Office (mcgill.ca/desautels/programs/bcom/contact-us).

Note for Faculty of Education (B.Ed. Secondary program): You may add, drop, or change majors using Minerva.

Note for Faculty of Law: The addition of a major or minor must be approved by the Student Affairs Office; you will be blocked from making any program changes on Minerva.

Note for Schulich School of Music: To change or to add a music major, students must submit an Intra-Faculty Transfer application on Minerva before the assigned deadlines. For specific program details, refer to the School's Program Transfer and Readmission web page. B.Mus. students who wish to add a major in another faculty can refer to the School's Double Majors and Double Degrees web page. B.Mus. students can also pursue a music or a non-music minor alongside their degree. A few music minors are open to students from other faculties. Visit the Music Minor Programs website for more information: mcgill.ca/music/programs/minor.

### 1.3.6 Interfaculty Transfer

If you are a McGill student, have not graduated, and wish to transfer into another undergraduate faculty, you may apply using the Minerva Faculty Transfer/Readmission Menu (mcgill.ca/minerva), unless otherwise indicated in mcgill.ca/student-records/transfer-readmission.

You must also refer to your faculty's website for faculty-specific rules and to determine what supporting documents must be submitted for your application. To access the faculty websites, and for more information on how to apply and deadlines for faculty transfers, please see mcgill.ca/student-records/transfer-readmission.

Note for International and Canadian non-Quebec resident students: Please note that International and Canadian non-Quebec resident students who transfer to a different degree will be charged the tuition rate in effect for newly admitted students in their new degree in their term of transfer. Please refer to the Student Accounts website for details.

### 1.3.7 Quebec Inter-University Transfer Agreement

### 1.3.7.1 Quebec Inter-University Transfer Agreement: McGill Students

The Quebec Inter-University Transfer (IUT) agreement permits concurrent registration at McGill and another Quebec institution.
If you are a regular McGill undergraduate or graduate degree, diploma, or certificate student, you may register, with your faculty's permission, at any Quebec university for 3-or in some cases 6-credits per term in addition to your registration at McGill. You may also obtain permission to complete a full term (i.e., 12 to 15 credits) at another Quebec university. Your combined registration may not, however, exceed the total number of credits you are permitted to complete in a given term. These courses, subject to faculty regulations, will be recognized by McGill for the degree that you are registered for, up to the limit imposed by the residency requirements of the program. Normally, you must complete a minimum residency requirement of 60 credits at McGill to qualify for a McGill degree (please check with your faculty). This privilege will be granted if there are valid academic reasons.

If you want to take advantage of this agreement, consult your Student Affairs Office for details. Note that this agreement is subject to the following conditions:

- The Quebec universities concerned may, at their discretion, refuse the registration of a student for any of their courses.
- You must complete your faculty and program requirements.
- You are responsible for ensuring that the McGill Class Schedule permits you to take these courses without conflict.
- The Quebec universities concerned are not responsible for special arrangements in cases of examination or class schedule conflicts.
- Grades earned at the host university will not be included in your McGill grade point averages (GPA) or show on your McGill transcripts.
- If you are attending McGill as an Exchange student from outside Quebec, you are not eligible to take courses at another Quebec institution through the IUT agreement.
- Any grades received late from host universities may delay your graduation.

If you are a scholarship holder, you should consult with your Student Affairs Office and the scholarships coordinator concerning your eligibility for continuation or renewal of your award(s).

You must initiate an online Quebec Inter-University Transfer (IUT) application to request the required authorizations at mcgill.ca/students/iut. You may find additional information posted on your faculty website.

Note: Once the Quebec Inter-University Transfer (IUT) application is approved by both the home and host universities, you must register in the approved course. The method of registration of the host university will vary (e.g., web, in-person, phone, etc.). You must allow sufficient time to complete and submit your electronic application, because you are responsible for adhering to all of the host university's registration deadlines. If you decide later to drop or withdraw from the approved course(s), you will need to drop or withdraw from the course using the host university's registration method and submit this change on the online Quebec Inter-University Transfer (IUT) application.

The host institution will automatically submit your grades to McGill for any completed courses.
Note for the Faculties of Arts and Science (including B.A. \& Sc.): If you participate in any type of study away or exchange (including Quebec Inter-University Transfer) during your final (U3) term—even if you are taking only one course outside of McGill—you will not be able to graduate by the end of this final term and must change your graduation to the following term.

Note for Engineering: For most programs, courses that can be taken through the IUT agreement are restricted to specific course categories. For details, please see mcgill.ca/engineering/students/exchanges-study-away/study-away.

Note for Nursing: The final grades earned at the host university must meet the minimum requirements as set by the Ingram School of Nursing, i.e., a letter grade of ' C '.

Note for Physical and Occupational Therapy: The final grades earned at the host university must meet the minimum requirements as set by the Physical Therapy or Occupational Therapy programs.

### 1.3.7.2 Quebec Inter-University Transfer Agreement: Visiting IUT Students

Note for Health Sciences: This section applies only to the Ingram School of Nursing.

If you are a student at another Quebec university and wish to take courses at McGill using the Quebec Inter-University Transfer (IUT) agreement, you must initiate an online application to request the required authorizations at mcgill.ca/students/iut. You should also refer to your home university's website for regulations on the number of credits allowed, as well as the policies for transferring the credits.

Note: Once the Quebec Inter-University Transfer (IUT) application is approved by both the home and host universities, you remain responsible for registering in the approved course. At McGill, you must register on Minerva (mcgill.ca/minerva). Once your application has been approved, you will be informed via email of the necessary registration steps. You must allow sufficient time to complete and submit your electronic application, as you are responsible for adhering to all of McGill's registration deadlines. If you later decide to drop or withdraw from the approved course(s), you will need to drop or withdraw from the course on Minerva and submit this change to the online Quebec Inter-University Transfer (IUT) application.

Note for Engineering: Summer courses administered by the Faculty of Engineering are open to McGill students only.

Note for Continuing Studies: If you are a Visiting IUT student and your application has been approved, you must register in-person, by appointment only (see University Regulations \& Resources > Continuing Studies > Registration for Continuing Studies Students > Other Ways to Register > : In-Person Registration.

McGill will automatically submit your grades for any completed courses to your home university.

### 1.3.8 University Withdrawal

If you are considering withdrawing from the University, you are strongly encouraged to consult with your advisor and Student Affairs Office (mcgill.ca/students/advising/advisordirectory) before making a final decision.

### 1.3.8.1 Student's Responsibility

It is solely your responsibility to initiate University withdrawal by submitting a form or writing to your Student Affairs Office. Neither notification of the course instructor nor discontinuing class attendance is sufficient. The date on which you dropped or withdrew from all courses is entered on Minerva and is the official date of withdrawal, even if you had stopped attending lectures earlier.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made through Service Point. However, it is important that you also consult a Faculty advisor to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

Note for Graduate and Postdoctoral Studies: If you are considering withdrawing from the University, you are strongly encouraged to consult with your academic unit before making a final decision. The date the request for withdrawal is submitted is the official date of withdrawal. Students who do not register in a given term are subject to University withdrawal. If you wish to return to complete your program in a later term, you must submit a Request for Readmission.

Note for Physical and Occupational Therapy: If you are blocked from withdrawing from course(s) in Minerva, you must contact the Student Affairs Office, who will provide you with the proper forms.

### 1.3.8.2 Deadlines for University Withdrawal

If you decide not to attend the term(s) you are registered in, you must officially withdraw from the University within the deadlines indicated. See Withdrawal (W) deadline dates at mcgill.ca/importantdates. If you drop all of your courses between September 1 and the Fall add/drop deadline, or between January 1 and the Winter add/drop deadline, you are withdrawn from the University. If you withdraw from all of your courses by the Fall or Winter withdrawal deadlines you are withdrawn from the University.
To withdraw from the University by the deadlines indicated below, you must drop or withdraw from all courses on Minerva. If you are blocked from dropping or withdrawing from your last course on Minerva, you are required to contact your Student Affairs Office, which will supply any forms necessary to complete the university withdrawal as long as you have not missed the deadline for university withdrawal.

To return to your studies, you must follow the procedures for readmission. For more information, refer to the Readmission page of the Undergraduate Regulations and Resources.

### 1.3.8.2.1 Fall Term

From September 1 to September 10, 2024 a drop of all courses constitutes a university withdrawal with refund (minus $\$ 200$ for returning students and the registration deposit for new students). After September 10 and until the deadlines indicated below, you may withdraw from all courses to effect a university withdrawal.

- Deadline for university withdrawal with refund (minus $\$ 200$ for returning students and the registration deposit for new students): Tuesday, September 17, 2024
- Deadline for university withdrawal without refund: Tuesday, October 29, 2024


### 1.3.8.2.2 Winter Term

From January 1 to January 14, 2025, a drop of all courses constitutes a university withdrawal with refund (minus $\$ 200$ for returning students and the registration deposit for new students). After January 14 and until the deadlines indicated below, you may withdraw from all courses to effect a university withdrawal.

- Deadline for university withdrawal with refund (minus $\$ 200$ for returning students and the registration deposit for new students): Tuesday, January 21, 2025
- Deadline for university withdrawal without refund: Tuesday, February 25, 2025
$\qquad$ Note: The deadline to withdraw from a multi-term (spanned; D1/D2) course with partial refund is the Winter add/drop deadline.

Note for the Faculty of Agricultural and Environmental Sciences: If you wish to withdraw after the deadlines indicated above, please contact the Faculty Advisor in the Student Affairs Office for further information.

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Note for the Faculties of Arts and Science (including B.A. \& Sc.): If you want to withdraw after the deadlines indicated above, under exceptional circumstances you may be granted permission for university withdrawal. Requests are made through Service Point. However, it is important that you also consult a Faculty advisor to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.


Note for the Faculties of Education, Management, and Music: If you want to withdraw after the deadlines indicated above, under exceptional circumstances you may be granted permission for university withdrawal. You should contact your Student Affairs Office (mcgill.ca/students/advising/advisordirectory) for further information.


Note for the Faculty of Law: In addition to the above procedures, it is important that you contact the Student Affairs Office to discuss your options and the effects that your request may have on your studies.

Note for Graduate and Postdoctoral Studies: A university withdrawal Request form is required by the withdrawal deadlines and is available at mcgill.ca/student-records/forms. Students who do not register in a given term will be withdrawn as of September 1 (Fall term), January 1 (Winter term), or May 1 (Summer Term).

Note for Health Sciences: For information on readmission procedures, you should refer to your Faculty/School section in this publication.

### 1.3.8.3 Consequences of University Withdrawal

Any applicable fee refunds for the term of withdrawal will be according to section 1.4.7: Fees and Withdrawal from the University.
Once you withdraw, you must return your ID card to the University as stated in section 1.2.4: Identification (ID) Cards.
If you withdraw from the University in the Fall term, you are withdrawn from the entire academic year; i.e., Fall and Winter terms. If you plan on returning for the Winter term, you must follow the procedures for readmission.

Note: If you withdraw from the University and want to re-register in a later term, you must follow the procedures for readmission, except if you are in the following faculties (in which case you must contact your Student Affairs Office): Music, and Agricultural and Environmental Sciences. See the Readmission page.

Note for the Faculty of Law: You must reapply for admission via the McGill online application process. For more information, see mcgill.ca/law/bcl-jd.

### 1.3.9 Deferred Admission

To defer your offer of admission to McGill you must submit the Deferral Request Form no later than August $\mathbf{3 1}$ for the Fall term and December $\mathbf{3 1}$ for the Winter term. For further information, contact the Deferral Coordinator.
Detailed information regarding deferrals of admission at McGill, and any conditions that may apply, can be found on the Deferral Request Form webpage. You are required pay your confirmation deposit before you may request an admission deferral.
If you have accepted your offer of admission and registered for courses and now want to defer your admission, you must drop all courses via Minerva by the above deadlines and before submitting a deferral request. If the University grants your request for deferral, your confirmation deposit will be placed in your account for when you begin your studies.

If you do not request a deferral by the above deadlines, you will have to reapply for the next available admission term. If you are a registered student and you withdraw after the course add/drop deadline, you must request readmission through your faculty. For more details, see section 1.3.10: Readmission.

Note for Music: Applicants to the Schulich School of Music are not eligible to apply for deferred admission.

Note for Law: The Faculty of Law does not normally accept requests for deferred entry. You will be expected to start your course on the date and term you applied for and as indicated on your admission offer letter. If you still wish to seek an admission deferral, you must first accept the offer of admission and pay the deposit. Once the offer of admission has been accepted, you must submit, in writing, a request for deferral. The request should be addressed to the Assistant Dean (Admissions and Recruitment) and should set out the reason(s) for the request. You are encouraged to submit your request as early as possible in consideration of other candidates.

Note for M.D.,C.M. program: Requests for deferral must be submitted to the Undergraduate Medical Admissions Office no later than July 1st of the year in which the deferral is sought. For information, consult the Office's website.

### 1.3.10 Readmission

To return to McGill after a university withdrawal from a Fall and/or Winter term of an academic year, you must apply for readmission using Minerva's Faculty Transfer/Readmission Menu. Readmission is not automatic or guaranteed. In your application, state the reasons for your absence from the University and give a summary of your activities during that period.

Newly admitted students are only eligible for readmission if they withdrew from the University after the withdrawal with refund deadline.
If you withdrew because of illness, you must provide your faculty Student Affairs Office with a medical note to support your application for readmission, stating that you are ready to resume studies.
We encourage students to complete their degrees, particularly those who are close to completion. Students who are readmitted after a period of absence are normally subject to the program and degree requirements in effect at the time of readmission. In such cases, determining the degree requirements for completion is at the discretion of the readmitting faculty.

To return to a different faculty after an absence, apply for a faculty transfer using Minerva's Faculty Transfer/Readmission Menu. For more details on the faculty transfer or readmission process and deadlines, see mcgill.ca/student-records/transfer-readmission.

Note for International and Canadian non-Quebec resident students: Certain rules apply to student fees upon readmission after a break in enrolment. Please refer to the Student Accounts website for details.

Note for Graduate and Postdoctoral Studies: Students who have been withdrawn from the University must submit a Request for Readmission to be considered for readmission into their program. For more information, refer to mcgill.ca/gps/students/progress/admission-former-students.

Note for Music students: If you need more information about the reaudition regulations, contact the Music Student Affairs Office at studentaffairs.music@mcgill.ca.

Note for Law students: If you need more information about readmission, contact the Law Admissions Office at admissions.law@mcgill.ca.

Note for Medicine and Health Sciences: Students returning from medical leave must provide documentation from the treating physician/professional counsellor attesting to the student's readiness to resume studies. Consult the Absences and Leaves Policy for details.

### 1.3.11 Faculty/School Specific Information

All students must comply with the regulations and requirements contained in their Faculty section of this publication.

### 1.3.11.1 Agricultural and Environmental Sciences

Students should note that there are no supplemental examinations for Agricultural and Environmental Sciences courses.

### 1.3.11.2 Arts

For Faculty of Arts specific program and course information, refer to:

```
mcgill.ca/oasis
```

Term(s) offered (Fall, Winter, Summer) may appear after the course credit weight to indicate when a course would normally be taught.
All courses have limited enrolment. You may register for and take any course for credit, unless otherwise indicated, in the sections of this publication applicable to the Faculties of Arts and of Science, subject to the course restrictions listed in this section.

Since the registration system is unable to verify whether or not Faculty regulations are respected, it is technically possible to register for courses that may not be credited toward your program. When your record is manually verified, however, any courses taken that break the Faculty or degree regulations will be flagged after the end of course change period as "not for credit". As a result, your expected date of graduation may be delayed.
Some courses may require special permission. You should consult this publication and/or the Class Schedule well in advance of the course change period to determine if permission is required of the instructor, the department, or the Faculty for any course you want to take.
If you believe that you have valid reasons for taking a course that may not be credited toward your program, you must obtain the permission of the Associate Dean or Director.

### 1.3.11.3 Education

Some courses will be available in the evenings only, or will be offered during the Summer term.
Students should give particular notice to prerequisite and corequisite courses and registration for Field Experience courses.

### 1.3.11.4 Engineering

Most courses offered by the Faculty of Engineering, including the School of Architecture, are restricted to Engineering students. Non-Engineering students should obtain permission from a Faculty advisor in the Student Affairs Office, Engineering Student Centre, to register for Engineering courses.

A limited number of School of Architecture (ARCH) courses are open to students not registered in the School. Please refer to individual course descriptions.
The average number of hours per week of course activities is indicated in the course listing in a note underneath the course description. For example, (3-1-5) indicates a course consisting of three lecture hours per week, one hour of tutorial or labs, and five hours of personal study per week.

### 1.3.11.4.1 Extra Courses

Courses that you choose to take outside your program may be classified as "extra", provided that you choose this option at the time of registration. The course will be designated as "extra" ("RX" at the time of registration, and "E" once the course is graded) on your transcript, and the grade earned in that course will not be included in your grade point average (GPA) calculation. This option will not be added to your record after the course change (add/drop) deadline. Courses that are taken to satisfy your engineering program requirements or minor requirements cannot be designated as "extra".

### 1.3.11.4.2 Prerequisites and Corequisites

You must ensure that you have completed any course prerequisite(s) and/or corequisite(s) before course registration. If you have registered for a course and did not satisfy the prerequisite(s) and/or corequisite(s), the course may be dropped from your record automatically by Minerva.
If you received advanced credit(s)/exemption(s) or passed a placement exam for a course and are blocked from registration because of a prerequisite or corequisite error, you must go to your department/school in order to receive the appropriate permit override.

### 1.3.11.5 Management

Management students should give particular notice to the following sections under Desautels Faculty of Management > Undergraduate:

- section 9.5: Grading and Credit
- Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.1: BCom Program Credit Structure: General Management Program (Concentrations)
- Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.2: BCom Program Credit Structure: Major or Honours Programs
- Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.4: Management Core


### 1.3.11.6 Science

For Faculty of Science specific program and course information, refer to:
mcgill.ca/science/undergraduate
Term(s) offered (Fall, Winter, Summer) may appear after the course credit weight to indicate when a course would normally be taught.
All courses have limited enrolment. You may register for and take for credit any course, unless otherwise indicated, in the sections of this publication applicable to the Faculties of Arts and of Science, subject to the course restrictions listed in this section.

Since the registration system is unable to verify whether or not Faculty regulations are respected, it is technically possible to register for courses that may not be credited toward your program. When your record is manually verified, however, any courses taken that break the Faculty or degree regulations will be flagged after the end of the course change period as "not for credit". As a result, your expected date of graduation may be delayed.

Some courses may require special permission. You should consult this publication and/or the Class Schedule well in advance of the course change period to determine if permission is required of the instructor, the department, or the Faculty for any course you want to take.

If you believe that you have valid reasons for taking a course that may not be credited toward your program, you must obtain the permission of the Associate Dean or Director.

### 1.3.12 Summer Term/Summer Studies

McGill Summer Studies offers over 300 credit courses in various disciplines. Courses begin in either May, June, or July, and are usually one-month intensive These courses may be accepted for transfer credit by other universities. For more details, see Summer Studies or contact the Summer Studies Office at summer.studies@mcgill.ca.

If you take a McGill summer course to complete your graduation requirements, you will receive your degree at the Fall convocation (normally held in November).

It is your responsibility to follow the University and faculty regulations. When registering, you must not exceed the maximum credits permitted by your faculty.

You cannot register for more than 12 credits (Music students, 18 credits) during the summer, at McGill or at other universities, except by special permission of your Associate Dean or Director.

The maximum number of credits you may take in the Summer term (May, June, and July combined) as a McGill, Visiting, or Special Student is 12 credits.
You may take a maximum of two courses in Arts, Education, Engineering, Management, or Science, in any one Summer session (May, June, or July session).
Please note that the schedule of lectures in Summer courses is very intensive and that two courses in one session is considered a very heavy workload. For students from all faculties (other than Arts) seeking to register for more than two courses in a single session:

- Current McGill students must obtain written permission from their faculty;
- Visiting students must obtain written permission from both their home university and the faculty in which they are registered;
- Special students must obtain written permission from the faculty in which they are registered.

Quebec Inter-University Transfer (IUT) students may take, in one summer term, a maximum of one course regardless of credit weight. Permission to register for more than one course per term must be obtained from the McGill faculty in which the student is registering by using the BCI's (Bureau de coopération interuniversitaire, previously known as CREPUQ) IUT website at www.bci-qc.ca/(see section 1.3.7.2: Quebec Inter-University Transfer Agreement: Visiting IUT Students).

### 1.4 Fees

The information in this publication was updated in January 2024. The University reserves the right to make changes without notice in the published scale of fees.

Further information regarding fees can be found on the Student Accounts website: mcgill.ca/student-accounts/tuition-fees/tuition-and-fees-tables-and-rates. For information on financial support, see Scholarships and Student Aid.

Note for Graduate and Postdoctoral Studies: For information on financial support, see mcgill.ca/gps/funding.

### 1.4.1 Access to Fee Information

You can view your Account Summary by Term on Minerva. The Fall term fees will be accessible in mid-July.

### 1.4.2 Billing and Due Dates

The following sections contain information regarding billing and due dates.

### 1.4.2.1 Confirmation of Acceptance Deposit

When you are admitted to the University, you are required to confirm your acceptance of the offer of admission on Minerva under the Applicant Menu at mcgill.ca/minerva and you must pay the required deposit (may vary by program) by credit card (AMEX, Visa, or MasterCard) at that time.

### 1.4.2.2 Invoicing of Fees

Fees are assessed on a term-by-term basis.
Electronic billing is the official means of delivering fee statements to all McGill students. Your e-bill includes all charges to your account, including tuition, fees, health insurance, and miscellaneous charges. The University generally produces e-bills at the beginning of the month and sends an email notification to your official McGill email address stating that your e-bill is available for viewing on Minerva. Charges or payments that occur after the statement date appear on the next month's statement, but you can view them immediately on the Account Summary by Term under the Student Accounts Menu on Minerva (this is the online dynamic account balance view).

Failure to check your McGill email on a regular basis in no way warrants the cancellation of interest charges and/or late payment fees. Refer to the Student Accounts website for information on payment due dates.

Term

## Payment Due Date

Fall Term
Returning and new students
August 30, 2024
Winter Term
Returning and new students
January 6, 2025

Late Payment Fees: If you have an outstanding balance greater than $\$ 100$ at the end of October (or the end of February for the Winter term), you are charged a late payment fee as per the fee schedule found at section 1.4.6: Other Fees. When a student has a student aid deferral, government aid deferral, or graduate funding deferral that has ended, their next e-bill will show that there is no longer a deferral in effect. Should the balance not be paid in full by the payment due date on this bill, the late penalty fee will be charged in addition to interest.

### 1.4.2.3 Guest Access on Minerva

You may choose to give access privileges to a guest on Minerva. These privileges include viewing e-bills/account summaries, tax receipts, and e-payment.
The mcgill.ca/student-accounts/parents-and-sponsors/guest-access web page describes how to set up this access. You must provide certain information about the individual to whom you wish to grant access to your fee-related information. The guest will be contacted by email and provided with a link to use within a designated time period.

You can revoke guest access privileges at any time.
Note that Service Point staff may respond to questions from your authorized guest regarding the information to which they have been given access.
If you do not want to give a guest access privileges to Minerva, you can enter an "Alternate Student Billing" email address on Minerva to which Student Accounts will send a copy of the monthly e-bill notification, which includes the balance due on the account.

You should not share your PIN (personal identification number) with anyone, including a guest on Minerva. Guest Access allows your guest to view your account information without knowing your PIN.

### 1.4.2.4 Payment Procedures

Please see the Student Accounts website at mcgill.ca/student-accounts/your-account/payment for the various methods of payment available to students and their guests.

### 1.4.3 Tuition Fees

Tuition rates are subject to change each academic year. Please access Tuition and fees at mcgill.ca/student-accounts/tuition-fees. The annual rates of tuition and fees are updated as soon as they are known.

Note: Students who are required to submit documentation and who do not do so by the stipulated deadlines (December 1 - Fall; April 1 - Winter; August 1 -Summer) are billed at the non-Quebec Canadian or the international rate, depending on the documentation submitted. Students who are not automatically granted a fee deferral based on the University's evaluation of their personal information at admission, and who expect their fee residency status to change within the term-contingent on appropriate supporting documentation-must contact either Service Point or SCS Client Services (School of Continuing Studies students only) to discuss what documentation is still outstanding to support their situation. These offices will decide if a fee deferral is warranted. No prior interest charges or late payment fines will be reversed; therefore, you should ensure your request is submitted before the first fee payment for the term is due.

Students in on-line programs must self-declare for each registered term, where they will be located during that term, on Minerva under the Student Menu > Location of Study - Online (distance) program. Students in one of these online programs will be notified by email that the Minerva form for the upcoming term is open and can be accessed for completion. Students studying within the province will be subject to the rates established by the government for in-province students. Students who are located outside Quebec while studying, will be subject to deregulated tuition rates.

### 1.4.3.1 Quebec Students and Non-Quebec (Canadian or Permanent Resident) Students

In accordance with provincial government requirements, students must provide proof that they qualify for assessment of fees at the Quebec or non-Quebec Canadian rates; see mcgill.ca/legaldocuments for details. In certain cases, non-Quebec Canadian students pay the same rate of tuition as Quebec students-for further information about these exceptions, see the Student Accounts website at
mcgill.ca/student-accounts/tuition-fees/general-tuition-and-fees-information/tuition-fee-exemptions.

### 1.4.3.2 International Students

Exemption from international tuition fees may be claimed by students in certain categories. Such students, if eligible, are then assessed at the Quebec student rate (certain categories may be assessed at the Canadian tuition rate). These categories and the required documentation for each of them may be viewed at mcgill.ca/legaldocuments. Further information regarding these reductions of international tuition fees by the Quebec government is available on the Student Accounts website under Tuition \& Fees $>$ General Tuition and Fees Information.

For more information concerning fee exemptions, visit mcgill.ca/student-accounts/tuition-fees/general-tuition-and-fees-information/tuition-fee-exemptions or contact Service Point.

### 1.4.3.3 Tuition Assistance for McGill Staff

McGill staff may be entitled to a tuition waiver equivalent to $100 \%$ of the portion of eligible tuition fees. For complete details, refer to the policies and procedures found at mcgill.ca/hr/benefits/tuition. Should you not successfully complete the courses as detailed in the policy, the fee exemption will be cancelled and you will be required to pay these fees according to regular payment deadlines.

### 1.4.3.4 Staff Dependent Waivers

Students who are dependents of staff members or pensioners may qualify for a fee reduction. You may find further information, including instructions on how to complete and submit the application form, at mcgill.ca/hr/employee-relations/policies-procedures.

The fee reduction will be credited to your McGill fee account once eligibility has been confirmed. This fee reduction will be reflected in a T4A slip issued to the student in February by the University.

For more information, refer to the MUNACA Collective Agreement, or the Staff Dependent Policy at mcgill.ca/hr/employee-relations/policies-procedures.

### 1.4.4 Compulsory Fees

Rates are updated and available on the Student Accounts website, mcgill.ca/student-accounts/tuition-fees, as soon as they become available.

### 1.4.4.1 Student Services Fees

Student Services fees are governed by the Senate Committee on the Coordination of Student Services, a parity committee composed equally of students and University staff. Through the Office of the Executive Director, Services for Students, services, promoting student success and well-being, are available on the Downtown and Macdonald campuses to help students achieve greater academic, physical, and social well-being.

These fees are complemented by revenue from the Quebec government, the University, and the generosity of donors. They support: the Student Wellness Hub, Counselling and Tutorial Services; the Office of Religious and Spiritual Life; Career Planning Service (CaPS); Scholarships and Student Aid; International Student Services; the Office for Student Accessibility \& Achievement; Campus Life \& Engagement (including assistance for francophone students); and the First Peoples' House. Please refer to section 1.13.3: Student Services - Downtown Campus and section 1.13.4: Student Services - Macdonald Campus for details on these services.

### 1.4.4.2 Athletics and Recreation Fee

The Athletics and Recreation fee supports programs offered on the Downtown and Macdonald campuses. The fee provides access to most athletics facilities; however, registration to fitness and recreation courses, intramural sports, pay-as-you-go programs, and/or the Fitness Centre carries a supplemental charge. Please consult the Athletics and Recreation website at mcgillathletics.ca for further information.

### 1.4.4.3 Student Society Fees

Student Society fees are collected on behalf of student organizations and are compulsory. These fees must be approved by the student body through fee referenda according to the constitutional rules of the association or society.
Students may vote on changes to Student Society fees during either the Spring or Fall referendum periods.
For Canadian students, the Student Society fees include health and dental insurance. For international students, the Student Society fees include a dental insurance plan. International students are required to participate in the University's compulsory International Health Insurance (IHI) plan. For more information, please refer to International Student Services' International Health Insurance page.
Rates for the current year may be found on the Student Accounts Non-tuition charges page.

### 1.4.5 Administrative Charges

The University assesses a number of administrative charges to students, which include:
Registration Charge - All students in courses and programs are assessed a registration charge.
Information Technology Charge - The purpose of the information technology charge is to enhance certain technological services provided to students as well as to provide training and support to students in the use of new technologies.

Transcripts and Diploma Charge - The University assesses a transcripts and diploma charge to all students. This entitles currently enrolled students to order transcripts free of charge and covers the costs of producing diplomas and some of the costs associated with convocation ceremonies. Students who attend their convocation may be responsible for some additional costs. A fee per official transcript is applicable if you have not been registered at McGill in the last 12 months. Please see mcgill.ca/student-records/transcripts for further information.

Copyright Fee - All students in courses and programs are charged a copyright compliance fee. This fee covers the cost of using material protected by copyright. It is levied to comply with all Quebec and Canadian copyright laws.
General Administrative Charge - This fee originated from increases in ancillary fees that were allowed by the Quebec Government. The University complies with the Quebec government's regulation on administrative fee increases by applying the same indexation factor that the government applies to tuition to this charge. A portion of the amount continues to be directed to Athletics (except in the School of Continuing Studies).

For further information about administrative charges, see mcgill.ca/student-accounts/tuition-fees/non-tuition-charges/society-services-and-administrative-fees.

### 1.4.6 Other Fees

For the current year's non-tuition charges, please refer to mcgill.ca/student-accounts/tuition-fees/non-tuition-charges.

### 1.4.6.1 Other Fees: Health Sciences

Fees specific to Health Sciences students are listed in each Health Sciences faculty or school section:

- Dentistry
- Medicine
- Nursing
- Physical \& Occupational Therapy
under Undergraduate or Professional > Health Sciences: General Information > Fees: Health Sciences.


### 1.4.7 Fees and Withdrawal from the University

If you decide not to attend the term(s) in which you are registered, you must officially withdraw from the University in accordance with section 1.3.8: University Withdrawal. Otherwise, you are liable for all applicable tuition and other fees.
If you use Minerva to drop your last course between September 1 (January 1 for the Winter term) and the end of the withdrawal period with full refund, you will be deemed withdrawn from the University. You are automatically charged a registration cancellation fee of $\$ 200$ to cover administrative costs of registration.
Newly admitted students: If you've dropped all your courses and got a full refund:

- If you haven't paid an admission deposit, you will be charged a Registration Cancellation Fee of \$200.
- If you did pay an admission deposit when accepting your admission offer on Minerva, you will be charged a forfeiture fee equal to that deposit amount.

If you stop attending classes without dropping your courses, you are liable for all applicable tuition and other fees. See section 1.3.8: University Withdrawal.
If you are considering withdrawal from the University, please review the information found on the following Student Accounts web page for further details of the financial repercussions of withdrawal: mcgill.ca/student-accounts/your-account/withdrawals.

### 1.4.7.1 Fee Refund Deadlines

The deadline dates for course refunds are independent of the deadline dates given for withdrawal from courses.
Note for Graduate and Postdoctoral Studies: Generally, there are no refunds for tuition and fees charged for a Summer term course from which you have withdrawn. For newly admitted graduate students who have withdrawn from a Summer Term of Residence, see Summer Registration for information about a potential fee refund.

### 1.4.7.1.1 Fall Term - up to and including September 17

Returning students $-100 \%$ * refund (less registration cancellation fee of $\$ 200$ in the case of complete withdrawal).
New students $-100 \%$ * refund (less registration cancellation fee or $\$ 200$ ).

### 1.4.7.1.2 Fall Term - after September 17

No refund.

### 1.4.7.1.3 Winter Term - up to and including January 21

Returning students $-100 \%$ * refund (less registration cancellation fee of $\$ 200$ in the case of complete withdrawal).
New students $-100 \%$ * refund (less registration cancellation fee or $\$ 200$ ).

### 1.4.7.1.4 Winter Term - after January 21

No refund.

* Includes tuition and compulsory student fees.

To discuss the refund policy applicable to a special case, undergraduate students should contact their faculty Student Affairs Office (Associate Dean or Director; see Contact Information for Faculty and School Student Affairs Offices) and graduate students should contact their departmental Graduate Program Director or Graduate Program Coordinator (see mcgill.ca/gps/contact for contact information).

### 1.4.7.2 Refund Procedures

You are not automatically refunded your credit balance as many students choose to keep the balance on account for use for a future term. You may request a refund if you have a credit balance of over $\$ 2.00$. Students with awards may be subject to a waiting period for their refund until the end of course add/drop, as most awards require full-time registration. For directions on requesting your refund online in Minerva, see mcgill.ca/student-accounts/your-account/requesting-refund.

Note: We strongly recommend that you supply direct deposit banking information via Minerva (Canadian banks only); otherwise, a refund charge will apply.

### 1.4.8 Other Policies Related to Fees

The following sections describe other fee-related policies that may apply to your account.

### 1.4.8.1 Overdue Accounts

All tuition and fees assessed by the University must be paid in full or arrangements must be made to settle the debt.
Students' accounts are considered delinquent if they are not paid in full within 60 days after the bill is issued. McGill places a financial hold on these accounts, preventing students from obtaining official academic transcripts and from accessing Minerva for any registration functions. In the event that a student's account has a hold preventing registration or the release of transcripts, the University may require a guaranteed form of payment, for instance, a certified cheque or money order. Certain financial holds prevent the release of diplomas. Other financial holds can affect access to non-registration functions, for example Meal Plan Top-Ups.

Interest: Interest is charged on overdue balances at the monthly rate of $1.24 \%$ ( $14.88 \%$ annually), multiplied by the balance outstanding after the due date (within $2-3$ days). The rate is evaluated each Spring, and then it is set for the following academic year. See mcgill.ca/student-accounts/your-account/deadlines-and-penalties/overdue for more information.

## Note: You should regularly verify your account balance on Minerva.

The University has no obligation to issue any transcript of record, award any diploma, or re-register you as a student if you do not pay your tuition fees, library fees, residence fees, or loans by their due date.

### 1.4.8.1.1 Information for Registered Students

If you register for a term but still owe amounts from previous terms, you must either pay your previous term account balance or make payment arrangements with the Student Accounts Office before the end of the course add/drop period. If you have financial difficulty, first contact the Student Aid Office to discuss the possibility of obtaining financial aid:

```
Brown Student Services Building
3600 rue McTavish, Room }320
Montreal QC H3A 0G3
Telephone: 514-398-6013
Email: student.aid@mcgill.ca
Website: mcgill.ca/studentaid
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If you fail to pay the previous term's fees or to make arrangements to settle your debt prior to the add/drop deadline, the University will cancel your registration in the current and subsequent terms.

### 1.4.8.1.2 Information for Students Who Are No Longer Registered

When students fail to settle their debt or reach a suitable payment arrangement, or fail to provide the Student Accounts Office with up-to-date contact information, the University refers these delinquent accounts to a collection agency. If neither the University nor the collection agency is able to collect
on the account, the University reserves the right to have the student reported to a credit bureau. You should be aware that the University is entitled to use all legal means to obtain payment and that students are responsible for all costs associated with such actions.

### 1.4.8.1.3 Cancelling Registration for Non-Payment of Previous Term(s)

In accordance with the fee policies stated in section 1.4.8.1: Overdue Accounts and section 1.4.8.1.1: Information for Registered Students, before the University cancels your current and subsequent term registration(s), the Student Accounts Office will make all reasonable efforts to notify you if your account is delinquent, or if you owe more than $\$ 100$ from the previous term. The cancellation is effective the last day of the add/drop period unless you settle the account or make payment arrangements with the University by then. If you pay or make payment arrangements with the Student Accounts Office after the add/drop deadline and you want the University to reinstate your registration for the current or subsequent term(s), you must complete the Request for Reinstatement form (mcgill.ca/student-accounts/forms) and submit it to the Student Accounts Office, which will forward it to Enrolment Services for approval and processing. Your fee account will be charged a Reinstatement Penalty for the processing of the re-enrolment; exact fee amounts and further details are available on the Student Accounts website.

### 1.4.8.2 Acceptance of Fees vs. Academic Standing

Acceptance of fees by the University in no way guarantees that students will receive academic permission to pursue their studies. If it is subsequently determined that your academic standing does not permit you to continue, all fees paid in advance will be refunded.
For directions on requesting your refund online in Minerva, see mcgill.ca/student-accounts/your-account/requesting-refund.

### 1.4.8.3 Deferred Admission, Degree Transfers, Break in Enrolment

Deferred Admission: Students who defer their admission to the University will be subject to the tuition rates that are in effect for the term in which they are starting, and not the term in which they were originally admitted. This is of interest to International and Canadian non-Quebec resident students in particular programs where tuition rates have been guaranteed for the duration of their program as long as there is no break in enrolment or degree transfer.

Degree Transfers: International undergraduate students and students in non-research graduate programs who transfer degrees will be charged the tuition rate in effect for newly admitted students in the new degree in their term of transfer. Canadian non-Quebec resident students will be charged the tuition rate in effect for newly admitted students in their term of transfer.
Break in Enrolment: Quebec Residents may need to reprove their fee status if they have been absent (i.e., not enrolled) for more than two terms (not counting the Summer term). Students may verify their legal status in Minerva (select the appropriate term) to confirm that the QC residency status is still active. Terms for which students are recorded as being away on an officially approved leave of absence are not counted.

Canadian non-Quebec resident students who are absent (i.e., not enrolled) for more than three terms (including the summer term), will be charged the tuition rate in effect for newly admitted students in the term in which they resume their studies.

International students in undergraduate or graduate level non-research programs who are absent (i.e., not enrolled) for more than three terms (including the summer), will be charged the tuition rate in effect for newly admitted students in the term in which they resume their studies. A term of withdrawal from the University is included in the calculation of the break in enrolment when students are not charged tuition for that term. Terms for which students are registered on an officially approved leave of absence, exchange or study away program are not calculated as part of a break in enrolment. This policy is not applicable to Visiting and Special students as international students in these categories always pay the fees of the new academic year.

### 1.4.8.4 Fees for Students in Two Programs

Students in two programs are normally billed additional fees for their second program. Depending on the level of the two programs (e.g., one at the undergraduate level versus one at the graduate level), you may incur both society and faculty fees and/or additional tuition fees. Consult the Student Accounts website at mcgill.ca/student-accounts/tuition-fees/general-tuition-and-fees-information/exchange-senior-citizens-part-time-and-double-program for further details.
You should consult the Student Accounts Office at student.accounts@mcgill.ca for information on tuition fees. Adjustments to bills are made throughout the term in cases where fees cannot be automatically calculated.

### 1.4.8.5 Quebec Inter-University Transfer Agreements

If you are taking courses as part of the Quebec Inter-University Transfer (IUT) agreement, you are required to pay the fees at your home university; see section 1.3.7: Quebec Inter-University Transfer Agreement. The agreement covers only the transfer of academic credits.

IUT students taking courses at McGill are required to pay additional course charges that are compulsory upon registration, such as special activity charges or course material costs.

The University reserves the right to refuse course registrations in non-government-funded activities.

### 1.4.8.6 Senior Citizens

Financial aid is available for students in need who are aged 65 or over and who are enrolled in full-time degree programs. Contact the Scholarships and Student Aid Office for more information at 514-398-6013.

### 1.4.9 Sponsorships/Awards/Fee Deferrals

### 1.4.9.1 Students with Sponsors

If your fees will be paid by an external organization or agency (e.g., Department of Veterans Affairs, Saudi Bureau, foreign government), you must have your sponsor confirm the conditions of their sponsorship (sometimes called a financial guarantee) in writing on their corporate letterhead and send this letter to the University. Once received by the University and if registration has occurred, your account will be adjusted. Sponsors must confirm annually the list of eligible students by August 1st of each year or one month prior to the start of the term. For more information, please refer to mcgill.ca/student-accounts/parents-and-sponsors/third-party-sponsorship.

If the sponsor does not pay the promised fees within 90 days of invoicing, you are responsible for paying the fees plus the late payment fee and accrued interest.

### 1.4.9.2 Students Receiving McGill Awards

Student awards may be paid directly to your student fee account or direct deposited to your bank. Please verify the payment schedule and the method of payment on Minerva's Financial Aid/Awards menu if you are expecting a scholarship or award. Students who are expecting awards to be paid in early January prior to the fee deadline may reduce their payment amount by the total amount of their awards. This will avoid unnecessary credit balances to be refunded.

Please note that credit balances in student fee accounts that result from payment from scholarships and awards are refundable only after the official "course withdrawal with full refund" deadline for each term.

### 1.4.9.3 External Scholarships

You may also receive external scholarships from other organizations, outside agencies, parents' employers, or community groups. These awards are typically sent directly to the University. You should provide the Student Accounts Office with a letter from the external body indicating the details and requirements of how the scholarship funds should be distributed, including any conditions for the award. If such information is not specified, the amount of the scholarship will be split into two terms and will be credited to your account as soon as you have registered, with the second instalment credited the first working day in January, which will be prior to the fee payment deadline. As such, you may reduce your payment amount by the total amount of your awards. This will avoid unnecessary credit balances to be refunded. If you do not meet the requirements of the scholarship, the funds will be returned to the external body.

You may need an anticipated scholarship to reduce your balance owing for a given term. If so, email student.accounts@mcgill.ca, with "External Scholarships" in the subject line, at least one week before the fee deadline as stated on the e-bill, and indicate the amount, currency (Canadian or US dollars) and agency or company issuing the scholarship. A fee deferral for the expected amount will reduce the amount owed. The deferral will expire by the end of September for the Fall term or January for the Winter term. Interest will be assessed at the prevailing rate on outstanding amounts beyond the deferral deadline.

Please note that credit balances in student fee accounts that result from payment from scholarships and awards are refundable only after the official "course withdrawal with full refund" deadline for each term.

### 1.4.9.4 Tuition \& Fees - Payment Deferral

Students with no prior outstanding tuition/fees may request that payment(s) of tuition and fees be deferred based on self-reported demonstrated sources of funding from the University, government or other external agencies. Such requests will be granted on a term by term basis during which time no interest or late payment charges will be applied on the fees covered by the deferral while the deferral is effective. Once the deferral has ended, notification will be sent and fees will be due in full by the next payment deadline, otherwise interest and late payment fees will apply. The length of time that a fee deferral is in effect will depend on the nature of the fee deferral. For the list of deferrals and their duration, please refer to the Student Accounts website.

Students may apply for a fee deferral via "Defer Payment of Tuition and Fees" through the Financial Aid/Awards menu on Minerva, selecting the category applicable to their situation. All applicants will be verified to ensure they have self-reported their situation accurately.

The Minerva application for deferral of tuition fees form is available in mid-July for the Fall term (mid-December for the Winter, and early April for the Summer). Students who apply up to the fee deadline can be assured that the deferral will be in effect prior to interest being charged on their account. Note that students who apply late may not request cancellation of interest.

A fee deferral generally covers the amount of the Fall (Winter or Summer) term charges, which include tuition, administrative, and certain academic fees, as well as health and dental insurance. Charges not covered by the tuition deferral include-but are not limited to-housing charges, meal plans, printing charges, or any other amounts owing that are not considered registration charges. Interest on outstanding already-billed amounts will continue to be charged on a monthly basis excluding amounts covered by the student aid tuition deferral.

Students are reminded that tuition and student housing fees have first call upon financial aid received from any source.

### 1.4.10 Tax Slips/Receipts

T4A, Relevé 1, T2202, and Relevé 8 slips are issued on Minerva under the Student Accounts Menu by the end of February each year. Note that a Quebec permanent code, a social insurance number, and a valid mailing address are required to be transmitted to Revenu Québec by the University as part of its tax reporting for both the Relevé 1 and the Relevé 8 slips; therefore, it is highly recommended that if you expect to be completing a Quebec income tax return, you provide this information to the University upon registration. More information on these slips is available at mcgill.ca/student-accounts/your-account/tax-information.

### 1.4.11 Yearly Fees and Charges by Faculty

Tuition fees at the undergraduate level are based on the number of credits you take.
Please consult the Tuition and fees tables and rates page on the Student Accounts website.

### 1.5 Student Records

Students must inform themselves of University rules and regulations and keep abreast of any changes that may occur. The Student Records section of this publication contains important details pertaining to academic standing, grading and grade point averages (GPA), and transcripts, as well as other topics, and should be periodically consulted.

### 1.5.1 Academic Standing

When you first start your program, and in your first term, you are deemed to be in Satisfactory Standing. At the end of each term, after final grades have been submitted, your academic standing in your program is determined based on your grade point average (GPA) calculations in the current and previous terms and your faculty's regulations.

Academic Standing codes are generated in January for the Fall term, in May for the Winter term, and in September for the Summer term, and are displayed on your McGill official and unofficial transcripts. If you receive Unsatisfactory Standing, you may not continue in your program, register for any future terms and must apply for readmission to your faculty. Note that readmission is not automatic or guaranteed. Consult the appropriate section of this publication for the regulations on Academic Standing for your faculty.

- section 1.5.1.1: Academic Standing: Desautels Faculty of Management
- section 1.5.1.2: Academic Standing: Faculty of Agricultural and Environmental Sciences
- section 1.5.1.3: Academic Standing: Faculties of Arts and Science (including B.A. \& Sc.)
- section 1.5.1.4: Academic Standing: Faculty of Education
- section 1.5.1.5: Academic Standing: Faculty of Engineering
- section 1.5.1.6: Academic Standing: Faculty of Law
- section 1.5.1.7: Academic Standing: School of Continuing Studies
- section 1.5.1.8: Academic Standing: Schulich School of Music


### 1.5.1.1 Academic Standing: Desautels Faculty of Management

B.Com. students, see Academic Standing in the Faculty of Management.

### 1.5.1.2 Academic Standing: Faculty of Agricultural and Environmental Sciences

Agricultural and Environmental Sciences students, see Academic Standing in the Faculty of Agricultural and Environmental Sciences.
Farm Management and Technology students, see Academic Rules and Information - FMT.

### 1.5.1.3 Academic Standing: Faculties of Arts and Science (including B.A. \& Sc.)

Your Academic Standing is based primarily on your cumulative grade point average (CGPA) but may also be affected by your term grade point average (TGPA). The Standing in each term determines if you are allowed to continue your studies in the next term, and if any conditions will be attached to your registration.

Decisions about Academic Standing in the Fall term are based only on grades that are available in January, i.e., if you have deferred examinations or Fall/Winter spanned courses, grades for those courses don't affect your Fall Academic Standing-they will only affect your Fall TGPA. Therefore, Academic Standings for the Fall term are designated as Interim. Note that Interim Standings do not appear on your official transcript. Consult the appropriate section of this publication for the regulations on Interim Standing decisions.

### 1.5.1.3.1 Satisfactory/Interim Satisfactory Standing: Faculties of Arts and Science (including B.A. \& Sc.)

If you are in Interim Satisfactory or Satisfactory Standing:

- you may continue in your program;
- you have a CGPA of 2.00 or greater.


### 1.5.1.3.2 Probationary/Interim Probationary Standing: Faculties of Arts and Science (including B.A. \& Sc.)

If you are in Interim Probationary Standing (at the end of the Fall term):

- you may continue in your program;
- you must carry a reduced load (maximum 14 credits per term);
- you are strongly advised to consult a departmental advisor before withdrawal deadlines about your course selection for the Winter term;
- you should see your Faculty advisor to discuss degree planning.

If you are in Probationary Standing:

- you may continue in your program;
- you must carry a reduced load (maximum 14 credits per term);
- you must raise your CGPA to return to Satisfactory Standing;
- you should see your departmental advisor about your course selection;
- you should see your Faculty advisor to discuss degree planning.

You will be placed in Probationary Standing:

- if your CGPA falls between 1.50 and 1.99 and if you were previously in Satisfactory Standing;
- if your CGPA falls between 1.50 and 1.99 and your TGPA in Fall or Winter is 2.50 or higher, and if you were previously in probationary or Interim Unsatisfactory Standing;
- if you were previously in Unsatisfactory Readmitted Standing and have satisfied the relevant conditions specified in your letter of readmission, but your CGPA is still less than 2.00.


### 1.5.1.3.3 Unsatisfactory Readmitted Standing: Faculties of Arts and Science (including B.A. \& Sc.)

## If you are in Unsatisfactory Readmitted Standing:

- you were previously in Unsatisfactory Standing and were readmitted by your Faculty or the Committee on Student Standing;
- you must meet the conditions specified in your letter of readmission to be allowed to continue in your program;
- you must carry a reduced load (maximum 14 credits per term) - a lower limit may be specified in your conditions of readmission;
- you should see your departmental advisor to discuss your course selection;
- you should see your Faculty advisor to discuss degree planning.


### 1.5.1.3.4 Unsatisfactory/Interim Unsatisfactory Standing: Faculties of Arts and Science (including B.A. \& Sc.)

If you are in Interim Unsatisfactory Standing (at the end of the Fall term):

- you may continue in your program;
- you must carry a reduced load (maximum 14 credits per term);
- you are strongly advised to consult an academic advisor, before withdrawal deadlines, about your course selection;
- you should see your Faculty advisor to discuss degree planning.

If you are in Unsatisfactory Standing:

- you have failed to meet the minimum standards set by the faculties;
- you may not continue in your program, and your registration will be cancelled.

You will be placed in Unsatisfactory Standing:

- if your CGPA falls or remains below 1.50;
- if your TGPA in the Fall or Winter falls below 2.50 and your CGPA is below 2.00 and if you were previously in Probationary, Unsatisfactory Readmitted, or Interim Unsatisfactory Standing;
- if you were previously in Unsatisfactory Standing and were readmitted by the Faculty or the Committee on Student Standing but have not satisfied the conditions specified in the letter of readmission.

Appeals for readmission by students in Unsatisfactory Standing must be received in their respective Faculties no later than the deadlines stated on their readmission websites. For Arts, see mcgill.ca/oasis/students/seeking-readmission. For Science (including B.A. \& Sc.) see mcgill.ca/science/student/general/readmission. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (e.g., medical or other documentation). If you are in Unsatisfactory Standing for the second time, you must withdraw permanently.
Normally, supplemental examinations are not permitted; however, if you are in Unsatisfactory Standing, you may appeal for permission to write a supplemental examination, clearly stating the reasons for special consideration and providing proof as appropriate.
Appeals for readmission or permission for supplemental examinations must be submitted to:

- Arts: Associate Dean (Student Affairs)
- Science and B.A. \& Sc.: Associate Dean, Student Affairs, Science


### 1.5.1.3.5 Incomplete Standings: Faculties of Arts and Science (including B.A. \& Sc.)

- Standing awaits deferred exam.
- Must clear Ks, Ls, or Supplementals.
- Standing Incomplete.

If you are a student with an Incomplete Standing (in the Winter or Summer term):

- you may register for the Fall term, but your Standing must be resolved by the end of the course change period for that term;
- you may continue in the program if Incomplete Standing changes to Satisfactory, Probationary, or Interim Unsatisfactory Standing;
- you may not continue in your program and your registration will be cancelled if your Standing changes to Unsatisfactory Standing.

If your Standing changes to Unsatisfactory:

- you may ask for permission to continue in your program;
- you must make a request for readmission as soon as you are placed in Unsatisfactory Standing;
- you must provide proof of extenuating circumstances that affected your academic performance (e.g., medical or other documentation).

Requests for readmission following an Unsatisfactory Standing must be submitted to:

- Arts: Associate Dean (Student Affairs)
- Science and B.A. \& Sc.: Associate Dean, Student Affairs, Science

If your Standing is still incomplete by the end of course change period, you should immediately consult with your faculty Student Affairs Office.
At the end of the Winter term, if you have a mark of K or L , you will be placed in the appropriate Standing in June, if the outstanding mark in the course will not affect your Standing. Otherwise, Standing decisions will be made only once incomplete marks have been cleared. For more information about incomplete grades, please refer to Incomplete Courses.

Note: Requests are made at Service Point ( 3415 McTavish Street). However, it is important that you also see a Faculty advisor in Dawson Hall to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

### 1.5.1.4 Academic Standing: Faculty of Education

Education students, see Academic Standing in the Faculty of Education.

### 1.5.1.5 Academic Standing: Faculty of Engineering

In the Faculty of Engineering, a decision on your Academic Standing is determined on the basis of your cumulative grade point average (CGPA) according to the criteria listed below.

Note: The Faculty determines Academic Standing decisions after the completion of each term (Fall, Winter, Summer) based on grades obtained up to that point. If you have been granted permission to defer one or more examinations, the Academic Standing decision will be made disregarding the deferred exam grade.

### 1.5.1.5.1 Satisfactory Standing: Faculty of Engineering

You are in Satisfactory Standing if you have a CGPA of 2.00 or greater.
You may continue with your studies under the following conditions:

- If you obtained a grade of D or F in a core course, you must repeat the course successfully (grade of C or better) or replace it with an alternative approved course and successfully complete the course.
- If you obtained a grade of F in any other course, you must either repeat the course successfully before graduation or replace it with an alternative approved course and successfully complete the course before graduation.


### 1.5.1.5.2 Probationary Standing: Faculty of Engineering

You are in Probationary Standing if you have either:
a CGPA that is less than 2.00 and equal to or greater than 1.20
or
a TGPA that is equal to or greater than 2.50 and a CGPA that is less than 2.00 .
You may continue with your studies under the following conditions:

- You must reduce your credit load to a maximum of 13 credits per term and must obtain, at the end of the term, either a CGPA of 2.00 or greater or a TGPA of 2.50 or greater.
- If you have a TGPA of 2.50 or greater, but you have a CGPA that is less than 2.00 , you may continue with your studies but you will remain in Probationary Standing until you obtain a CGPA of 2.0 or greater.
- If you do not obtain either the TGPA or CGPA noted above, you will be placed in Unsatisfactory Standing.
- You must consult a faculty or departmental advisor before withdrawal deadlines concerning your course selection.


### 1.5.1.5.3 Unsatisfactory Standing: Faculty of Engineering

You are in Unsatisfactory Standing if you have either:
a CGPA that is less than 1.20
or
a TGPA that is less than 2.50 and a CGPA that is less than 2.00 .
If at any time, you were placed in Unsatisfactory Standing and were readmitted to the Faculty of Engineering after one term away, and you are placed in Unsatisfactory Standing again at the end of any subsequent term, you may not continue in your program. You will be asked to withdraw from the Faculty of Engineering for a minimum of one term or permanently, based on the conditions of your last letter of readmission.

If you are in Unsatisfactory Standing for the first time, the regulations below apply.

## Students in Interim Unsatisfactory Standing after the Fall term:

You may continue with your studies under the following conditions:

- You must reduce your credit load to a maximum of 13 credits per term and must obtain, at the end of the term, either a CGPA of 2.00 or greater or a TGPA of 2.50 or greater
- If you have a TGPA of 2.50 or greater, but your CGPA is less than 2.00 , you may continue with your studies but will remain in Probationary Standing until you obtain a CGPA of 2.00 or greater.
- If you do not obtain either the TGPA or CGPA noted above, you will be placed in Unsatisfactory Standing.
- You must consult a faculty or departmental advisor before withdrawal deadlines concerning your course selection.


## Students in Unsatisfactory Standing after the Winter term:

- You must withdraw from the Faculty of Engineering for a minimum of one term.

For more information about Academic Standing, see mcgill.ca/engineering/students/undergraduate/advising-programs/academic-standing.

### 1.5.1.6 Academic Standing: Faculty of Law

If you do not obtain a sessional grade point average (GPA at the end of Fall and Winter terms combined) of at least 1.50 , you will be required to withdraw from the Faculty. If your sessional GPA is between 1.50 and 1.99 , you will be permitted to continue with your program, but you must obtain a subsequent sessional GPA of 2.50 or a Cumulative GPA (CGPA) of 2.00 . You must have a CGPA of 2.00 to be considered for graduation. Students who are required to withdraw from the Faculty may be authorized to continue in their program by the Faculty Admissions Committee if there are exceptional reasons for the required withdrawal.

### 1.5.1.7 Academic Standing: School of Continuing Studies

If you are in Unsatisfactory Standing, you must apply to the Appeals Committee of your academic area.

### 1.5.1.8 Academic Standing: Schulich School of Music

Music students, see Academic Standing in the Schulich School of Music.

### 1.5.2 Credit System

The faculties listed in this publication use the credit system, where each course is assigned a credit rating reflecting the number of weekly contact hours. In general, a three-credit course indicates three hours of lectures per week for one term, but this does not apply to all faculties. Laboratory contact hours usually count for fewer credits. Credits also reflect the amount of effort required of you and generally assume two hours of personal study for each contact hour.
The credit weight of each course is indicated in parentheses beside the course title.
Note: One credit equals about 45 hours of work. This may be a combination of lecture, laboratory, tutorial, and conference time plus personal study hours. Personal study hours may include required activities, group activities, time spent doing assignments, and preparing and reviewing for a course. All synchronous activities should be held within the time the course is scheduled per the Minerva Class Schedule. Credit hours normally do not require a set number of synchronous hours, allowing for flexibility in course design and scheduling options. However, some programs, such as those with accreditation requirements, may require a minimum of synchronous contact hours.

Note: Credit for multi-term courses (courses with the suffixes: D1, D2; N1, N2; J1, J2, J3) is granted only after successful completion of all components in the specified time frame. For example, a student would have to take D1 and D2 components in consecutive terms and successfully complete them both in order to obtain credit.

Note for Agricultural and Environmental Sciences, and Science: As a guideline, a one-credit course would represent approximately 45 hours of total work per course. This is, in general, a combination of lecture hours and other contact hours such as laboratory periods, tutorials, and problem periods as well as personal study hours.

Note for Engineering: One credit normally represents three hours total work per week. This is, in general, a combination of lecture hours and other contact hours such as laboratory periods, tutorials, and problem periods as well as personal study hours. As a guide, the average number of hours per week of course activities is indicated in the course listing underneath the course description. For example, (3-1-5) indicates a course consisting of three lecture hours per week, one hour of tutorial or lab, and five hours of personal study per week.

Note for Summer Studies: For Summer courses, a three-credit course usually indicates ten hours of lectures per week starting in either the May, June, or July session and spanning a maximum period of five weeks.

### 1.5.3 Grading and Grade Point Averages (GPA)

Note for Physical and Occupational Therapy: A grade of $\mathrm{C}+$ is the minimum required passing grade for courses with the subject codes of OCC1, PHTH, and POTH. A grade of C is the minimum required passing grade for all other courses. For complete details, refer to the Rules and Regulations, available at mcgill.ca/spot/programs.

Instructors may submit final grades as either letter grades or in percentages, but the official grade in each course, which is displayed on the transcript is the letter grade. Where appropriate, a class average appears on transcripts expressed as the letter grade most representative of the class performance. In such cases, the class average is calculated for courses, where the total number of grades in all its course sections is 25 or more, and the grades have a grade point (e.g. grades of $\mathrm{S}, \mathrm{U}$, or P do not have grade points).

Since Fall 2002, the University has only used letter grades on transcripts and verification forms.
Grades A through C represent satisfactory passes, D a conditional (non-continuation) pass, and F a failure. Certain courses have been approved for Pass/Fail (P/F) grading. Students may also designate elective courses to be graded under the S/U option. See Courses Taken under the Satisfactory/Unsatisfactory (S/U) Option.

## Policy on Pass/Fail Grading:

For a course to be graded P/F, a proposal must be approved by the Program Director, approved by the Faculty Curriculum Committee, and approved by the Subcommittee on Courses and Teaching Programs (SCTP). Courses that are approved to be graded P/F must indicate this in the course syllabus. Pass/Fail grading applies to all students in a course section and cannot be selectively added to individual students.

Grades of Pass are not included in the GPA calculation and as such are not normally applied to required courses. Grades of F are included in GPA calculations. However, both grades of P and F are included in the count of completed credits for determining eligibility for scholarships and awards.

Please refer to the Satisfactory/Unsatisfactory option for information on that grading option for students.

You must obtain a grade of C or better in courses that you take to fulfil program requirements. You may not register in a course unless you have passed all the prerequisite courses with a grade of C or better, except by written permission of the appropriate department chair.

| Grades | Grade Points | Numerical Scale of Grades |
| :--- | :--- | :--- |
| A | 4.0 | $85-100 \%$ |
| A- | 3.7 | $80-84 \%$ |
| B+ | 3.3 | $75-79 \%$ |
| B | 3.0 | $70-74 \%$ |
| B- | 2.7 | $65-69 \%$ |
| C+ | 2.3 | $60-64 \%$ |
| C | 2.0 | $55-59 \%$ |
| D | 1.0 | $50-54 \%$ |
| F (Fail) | 0 | $0-49 \%$ |

Note for Engineering: The Faculty of Engineering does not use this numeric scale. See Note for Engineering below.

Note for Law: Faculty of Law does not use this numeric scale.

The University assigns grade points to letter grades according to the above table. Your Academic Standing (e.g., satisfactory, probationary), which is your academic status at the end of each term, is determined by a grade point average (GPA), which is calculated by multiplying the course credit by the grade points and dividing the sum by the total GPA course credits. The GPA result is truncated by two decimal points and not rounded up to the nearest decimal point. For example, a GPA of 3.596 will display on the transcript as 3.59 and is NOT rounded up to 3.60.

GPA course credits are the credits of courses with final grades that are assigned grade points according to the table above (e.g, a 3-credit course with a final grade of A has 3 GPA course credits, but a 3-credit course with a final grade of P has no GPA course credits because a grade of P does not have a grade point value).

## GPA $=\frac{\sum \text { (course credit } \mathrm{x} \text { grade points) }}{\sum \text { (GPA course credits) }}$

The term grade point average (TGPA) is the GPA for a given term calculated using all the applicable courses at the same level in that term. The cumulative grade point average (CGPA) is the GPA calculated using your entire record of applicable courses at McGill at the same level; if you change levels, e.g., from undergraduate to graduate, the CGPA starts again.

This policy took effect in January 2003. Prior to January 2003, if your degree program had changed-e.g., from B.Sc. to B.A.-the CGPA calculation restarted again. For students with academic information prior to Fall 2002, who are registered in a different program or in a different level post-Fall 2002, the transcript displays a special message regarding the CGPA restarting.

If you repeat courses, all final grades are included in the GPA calculation. Therefore, grades of D or F continue to be used in the CGPA calculation even after you repeat the course or if you take a supplemental examination. Note that credits are only granted once for a repeated course regardless of the passing grade.

You must obtain a minimum CGPA of 2.00 to be considered for graduation with a McGill degree.
Note: During the first week of lectures, each instructor will provide you with a written course outline. This information should include, where appropriate:

- whether there will be a final examination in the course;
- how term work will affect the final grade in the course;
- how term work will be distributed through the term;
- whether there will be a supplemental examination in the course, and if so, whether the supplemental exam will be worth $100 \%$ of the supplemental grade, or whether term work will be included in the supplemental grade (courses with formal final examinations must have supplementals);
- whether students with grades of D, F, J, or U will have the option of submitting additional work, and, if so, how the supplemental grade will be calculated with the extra work (applicable only to students in Science and B.A. \& Sc.).

Note for Engineering: In the Faculty of Engineering, letter grades are assigned according to the grading scheme adopted by the professor in charge of a particular course. This may not correspond to grades indicated in the "Numerical Scale of Grades" column in Grading and Grade Point Averages. A grade of D indicates marginal performance which is acceptable only for Complementary Studies courses (i.e., Group A Impact of Technology on Society; and Group B Humanities and Social Sciences, Management Studies and Law), Natural Science Complementary Courses (for Computer Engineering and Software Engineering students from CEGEP), and Elective Courses (for Mechanical Engineering students from CEGEP and for Architecture students). A grade of D is not acceptable for required (core) courses (including Year 0 (Freshman/Foundation Year) math and science courses), technical complementary courses, laboratory complementary courses, or courses in any other category of Engineering programs. Individual departments/schools will decide if a student with a $D$ in a prerequisite course(s) may take the subsequent course.

## Grades have the following designations:

| A, A- | Very Good |
| :--- | :--- |
| B+, B, B- | Good |
| C,+ C | Satisfactory |
| D | Conditional Pass |
| F | Fail |

### 1.5.3.1 Grading and Grade Point Averages (GPA): Other Grades

Note: Not all grades listed below apply to every faculty, school, or level. Faculty policy prevails when determining if a student may be eligible to receive one of these grades.
Other Grades
J
KE or K*
unexcused absence (failed); the student is registered for a course but does not write the final examination or
complete other required work; calculated as a failure in the TGPA and CGPA

| Other Grades |  |
| :--- | :--- | :--- |
| KF | failed to meet the extended deadline for submission of work in a course; calculated as a failure in TGPA and <br> KK |
| LE or L* |  |

Note for Physical and Occupational Therapy: Grades of S/U are not applicable.

Note for Medicine: Refer to mcgill.ca/ugme/policies-procedures/ugme-student-assessment-policy and mcgill.ca/ugme/policies-procedures/medical-student-performance-record.

### 1.5.3.2 Unexcused Absences

All students who miss a final exam or do not complete other required work in a course are given a $\mathbf{J}$ grade. You then have the following options:

1. Ask to be assigned a grade based only on the grades earned for your work submitted up to, but not including, the final exam or other required course work.

The grade earned is calculated by adding the grades obtained on the individual pieces of work and a grade of 0 for the portion of the final grade allocated to the final exam or other required course work. This option is not available if the professor stipulated in the course outline that the final exam or other course work is a required part of the evaluation.
2. Request a deferred exam if you have the appropriate reasons and documentation.
3. Apply for a supplemental exam if permitted by your faculty.

Note for Engineering: Option 1 is not available to students in the Faculty of Engineering.

Note for Law: Option 1 is not available to students in the Faculty of Law. Option 3 is by approval of the Associate Dean (Academic) or the Director (Student Life \& Learning) only.

Note for Music: Option 1 is not available to students in the Schulich School of Music.

You must request option 1 no later than four months after the end of the examination period of the original course.
You must request option 2 by the faculty deadlines as indicated in Final Examinations: Deferred Exams.
You must request option 3 by the faculty deadlines as indicated at mcgill.ca/exams.
If you wish to appeal a J grade, you should write to your Associate Dean or Director.
Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made at Service Point ( 3415 McTavish Street). However, it is important that you also meet with a Faculty advisor in Arts OASIS or SOUSA to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

Note for Graduate and Postdoctoral Studies: Only options 2 and 3 above are applicable to graduate students. Students wishing to appeal a J grade should write to the Associate Dean of Graduate and Postdoctoral Studies.

### 1.5.4 Transcript of Academic Record

The proceeding sections contain information on transcripts and other details regarding academic records.

### 1.5.4.1 Transcript of Academic Record: General Information

A McGill transcript includes all attempted work and final grades obtained in all programs. The University does not issue partial transcripts under any circumstances.

The University issues official transcripts in electronic or paper format. Requests for both electronic official (eTranscripts) and paper transcripts are submitted in Minerva.
eTranscript PDFs are sent the same-day in as little as 15 minutes (providing there are no holds on your student account and no attachments to review) via the National Student Clearing House, a US-based non-profit organization and leading provider of trusted, educational data exchange and verification services. A minimal service fee applies.

Paper official transcripts are normally processed in 3 to 5 working days ( 5 to 7 during peak periods) and mailed by regular Canada Post mail to the address(es) indicated on the request. Paper transcripts are free of charge for currently registered students. Transcript fees apply for alumni and former students. Requests for archived transcripts (pre-1972) have a longer processing time.

Paper official transcripts are printed on secure paper that cannot be copied. eTranscripts are digitally signed and certified PDF documents that cannot be copied.

For more information on requesting official transcripts, refer to Official Transcripts.
Note: The University may not be held responsible for the loss or delay of transcripts in the mail.
Note: You cannot submit a transcript request in Minerva if you have holds on your record (e.g., accounting, registrar, library, etc.). Please verify the top of your unofficial transcript in Minerva for any holds.

### 1.5.4.2 Unofficial Transcripts

If you require a copy of your student record, access Minerva (mcgill.ca/minerva) to view and print an unofficial transcript. This applies to records from 1976 to the present. For pre-1976 records, your transcript is archived, and you must order an official transcript. See section 1.5.4.3: Official Transcripts.

### 1.5.4.2.1 Verification of Student Records: Unofficial Transcripts

Subject to section 1.5.8: Changes to Student Records after Normal Deadlines, you are responsible for verifying your academic record on Minerva using the unofficial transcript to ensure that you are registered in the proper courses, and that the correct program information and expected term of graduation appear on your record.

If you are graduating, verify your record on Minerva before the end of your final term to ensure that the correct expected graduation term appears on your unofficial transcript; if not, you may be overlooked for graduation. You should direct any questions or problems with your record to your Student Affairs Office.

A student's academic record is deemed final once the record has been approved for graduation and the 'Degree Granted' notation displays. No further record changes may be requested at this point (e.g. grade changes).

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made at Service Point ( 3415 McTavish Street). However, it is important that you also meet with a Faculty advisor in Arts OASIS or SOUSA to talk about your options and the effects that your request may have on your studies. For more information, refer to Academic Advising.

Note for Graduate and Postdoctoral Studies: You should direct any questions or problems with your record to your Graduate Program/Director.

### 1.5.4.3 Official Transcripts

For more information on transcripts, applicable costs, delivery method, and processing time, see mcgill.ca/student-records/transcripts.
Currently Registered Students: Use Minerva to order an official transcript at Student Menu >Student Records Menu > Request/Official Transcript.
Alumni or former students who were registered or graduated as of 1972 or later: You must submit your request in Minerva at Student Menu >Student Records Menu > Request/Official Transcript and will require login credentials. Please contact the IT Service Desk (mcgill.ca/it) to obtain your McGill ID \& Minerva PIN.

Alumni or former students who were registered or graduated prior to 1972 (archived records): You must submit an online Request for Archived Official Transcript located at: mcgill.ca/student-records/transcripts/printed-transcripts and will be required to provide a copy of a government-issued Photo ID.

Note: Proxy requests will be accepted only with written authorization.

### 1.5.4.4 Course Numbering on the Transcript

Prior to September 2002, course numbers had seven-character designations beginning with a three-number code indicating the teaching unit/department. The next three digits specified the course, with the first of these indicating its level. The final character was a letter indicating the term, or terms, during which the course was offered. For example:

```
107-200A = Philosophy (107) course (200) in Fall term (A);
301-202B = Architecture (301) course (202) in Winter term (B);
154-230D = Economics (154) course (230) extending for two terms, Fall and Winter (D).
```

A list of the former teaching unit codes and their subject code equivalents is available at mcgill.ca/student-records/transcripts/key.
For information on our current course numbering, see University Regulations \& Resources $>$ Undergraduate $>$ Registration $>$ Course Information and Regulations > section 1.3.2.1: Course Numbering.

| Note for Continuing Studies: Examples of course numbers displaying on transcripts |
| :--- |
| $280-211 \mathrm{X}$ |$=$ Intro. to Financial Accounting in Fall term (X); $\quad$| $629-202 \mathrm{Y}$ | $=$ Microeconomics in Winter term (Y); |
| ---: | :--- |
| $660-221 \mathrm{Z}$ | $=$ Project Management extending for two terms, Fall and Winter (Z). |

### 1.5.5 Incomplete Courses

If the instructor decides there is sufficient reason to permit a delay in the submission of required term work, they may extend the deadline for your work until after the end of the course. In this case, the instructor will submit a grade of K (incomplete).

Note: If the instructor submits a grade of K, they will also indicate the date by which you must complete the work. Consult the faculty sections for maximum extensions.

Note: If the instructor submits a new grade within the deadline, both the new grade and the grade of K will appear on your verification forms and unofficial and advising transcript. However, the new grade will replace the K on your official transcript.

Note: If you do not complete the required work before the deadline, a grade of KF will be updated on your record. A KF denotes a failed course and is calculated in the TGPA and CGPA as an F.

Note: In exceptional circumstances, and with the approval of the Associate Dean or Director, the deadline may be extended further, in which case the grade of KE (further extension granted) appears. If you do not meet the extended deadline, a grade of KF will replace the KE.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): An instructor who believes that there is justification for a student to delay submitting term work may extend the deadline until after the end of the course. In this case, the instructor will submit a grade of K (incomplete), indicating the date by which the work is to be completed. The maximum extensions for the submission of grades are as follows:

## Students graduating in June

Fall, Winter, and multi-term courses
April 30

## Non-graduating students

Fall courses
April 30

## Non-graduating students

Winter and multi-term courses
July 30
Summer courses
November 30

Students' deadlines for submitting their work must be scheduled appropriately before these dates to ensure that the work can be assessed and the grade submitted on time.

It is important to note that instructors may impose earlier deadlines than those listed above.
If grades to clear Ks have not been submitted by the above deadlines, the K is automatically changed to a KF and counts as an Fin the GPA.
Students with a grade of K who have serious extenuating circumstances may request an extension of the K deadline (KE) from the Associate Dean or Director of their faculty.
For more information, see section 1.5.3: Grading and Grade Point Averages (GPA).
Requests must be made to the instructor for consideration. If your request is approved, the instructor will inform you of the extension deadline, and submit a grade of K (incomplete). However, it is important that you also meet with a Faculty advisor in Dawson Hall to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.
If the required work has not been submitted by the deadline, a grade of KF will be updated on the student's record. A KF denotes a failed course and is calculated in the student's TGPA and CGPA as an F. This in turn may impact the student's academic standing, changing this to either Probationary or Unsatisfactory and requiring that they immediately follow the outlined conditions.

Note for the Faculty of Agricultural and Environmental Sciences: The maximum extensions for the submission of grades to the Student Affairs Office are as follows:

## Students graduating in June

Fall courses
January 15
Winter courses, and courses spanning Fall/Winter

## Non-graduating students

Fall courses
January 15
Winter courses, and courses spanning Fall/Winter

Students' deadlines for submitting their work must be sufficiently in advance of these dates to ensure that the work can be graded and the mark submitted on time. It is important to note that instructors may impose earlier deadlines than those listed above.

If instructors have not submitted grades to clear Ks to the Student Affairs Office by the above dates, the K is automatically changed to a KF and counts as an F in the GPA.

Students with a grade of $K$ who have serious extenuating circumstances may request an extension of the $K$ deadline (KE) from the Associate Dean (Student Affairs). More information about grading and credit is found under University Regulations and Resources > Undergraduate > Student Records $>$ section 1.5.3: Grading and Grade Point Averages (GPA).

Note 1 for Law students: In the Faculty of Law, permission to delay submission of required term work must be obtained from the Director (Student Life \& Learning). It cannot be granted by the instructor. If, in the opinion of the Director (Student Life \& Learning), there is sufficient reason to permit a delay in the submission of required term work, the Director may grant you an extension of the deadline after the end of the course. In this case, the instructor will submit a grade of K (incomplete). If an extension of the deadline is granted, the Director (Student Life \& Learning) will indicate the date by which you must complete the work. If the instructor submits a new grade within the new deadline, both the new grade and the grade of K will appear on your faculty reports and verification forms. However, on your official transcript the new grade will replace the K. If the required work is not completed before the deadline, a grade of KF will be updated on your record. A KF denotes a failed course and is calculated in the TGPA and CGPA the same as an F. In exceptional circumstances, and with the approval of the Director (Student Life \& Learning), the deadline may be extended further, in which case the grade of KE (further extension granted) will appear. If the extended deadline is not met, a grade of KF will replace the KE.

Note 2 for Law students: If, without a valid excuse, you do not participate in or write a final examination or submit required term work for any courses you were registered in, you will receive a final grade of $\mathbf{J}$ (unexcused absence).

### 1.5.6 Transfer Credits

Students who have been approved to transfer credits from another university and students who participate in a formal university exchange could be eligible to transfer earned credits to McGill if the grade earned in the host university course(s) is equal to or higher than the grade/CGPA required to graduate from the host university. The policy will apply to both elective and required courses and, to be counted, courses must be taken at the host institution for the same purpose (i.e., major, minor, elective, etc.) than they would have at McGill. Please note that grade/GPA requirements may differ across programs and that your Student Affairs Office will determine the category to which credits are transferred to your program.

You need to obtain approval from your Student Affairs Office for courses taken at other universities. In some faculties, you will need approval from your Student Affairs Office and your academic advisor before taking the course, especially if they are part of your program requirements. Please note that credits that have not been preapproved might not be transferred. Admissions, Faculties, and Departments vet the courses they approve for credit and thus have the right to refuse certain courses that do not satisfy program requirements.

You may be granted credit for courses meeting the requirements described above at other universities if you are within the number of credits imposed by McGill's residency and program requirements for some faculties. In general, a minimum of 60 credits completed at McGill is needed to qualify for a McGill degree. You must be in Satisfactory Standing to be granted the transfer credits.

Grades for transfer courses earned at the host university are not entered on your McGill transcript and are not part of the TGPA or CGPA calculation. Courses at a host university which you fail or from which you withdraw will appear on your McGill transcript with zero credit granted.
For universities outside Quebec, it is your responsibility to ensure that the host institution sends an official transcript to the Student Affairs Office. You must submit all documents required for approval of your transfer credits with your faculty at McGill within four months of completing your exchange program or study away. If you are studying at another Quebec university on an Inter-University Transfer (IUT) agreement, the host university sends your grade(s) to McGill automatically. For additional information, see section 1.3.7: Quebec Inter-University Transfer Agreement.

Transcripts for transfer courses must be received by the following deadlines:

| Graduation Term | Convocation |
| :--- | :--- |
| April 1, if your term of graduation is Winter | Convocation in Spring |
| August 15, if your term of graduation is Summer | Convocation in Fall |
| December 15, if your term of graduation is Fall | Degree granted February, Convocation in Spring |

Transcripts not received by the appropriate date are considered for the next graduation period only.
Note for the Faculty of Arts: The Arts Office of Advising and Student Information Services (OASIS) does not encourage you to participate in any type of study away or exchange in the last term of your final year (U3), as this will delay your graduation to the next graduation period.

Note for the Faculty of Engineering: If you are completing a B.Eng. degree, half of your program must be completed at McGill. The number of transfer credits granted for courses taken outside McGill cannot exceed $50 \%$ of the total credits for your program. Note that the total of credits for your program includes those associated with the Required Year 0 (Freshman/Foundation Year) courses. If you are completing the B.Sc.(Arch.) degree, the number of transfer credits granted will be limited to ensure that you complete a minimum of 60 credits of courses at McGill taken to satisfy your degree requirements, excluding those taken to satisfy the Required Year 0 (Freshman/Foundation Year) courses listed in your program.

Note for the Faculty of Law: A limited number of the credits required for the BCL/JD degree program may be obtained in appropriate courses offered by other McGill faculties or other universities, with the approval of the Director (Student Life \& Learning) before registration. The total number of credits allowed under this regulation must not exceed six non-law credits and six non-McGill law credits.

Note for the Faculty of Science (including B.A. \& Sc.): The Science Office for Undergraduate Student Advising (SOUSA) does not encourage you to participate in any type of study away or exchange in the last term of your final year (U3), as this will delay your graduation to the next graduation period.

### 1.5.6.1 Advanced Standing Transfer Credits

Students who have successfully completed their high school studies, including courses or programs that may result in the awarding of Advanced Standing and exemptions, such as the International Baccalaureate, Advanced Placement examinations, GCE A-Levels, French Baccalaureate, and other qualifications, must declare these studies upon applying for admission to McGill University. Advanced Standing and exemptions will be given for these completed studies.

Students who have been granted advanced standing for the International Baccalaureate, Advanced Placement examinations, GCE A-Levels, French Baccalaureate, and other qualifications, but who wish to complete a four-year undergraduate program at McGill, will be permitted to do so, with the appropriate limitations on the repetition of courses for which they have received exemptions. This gives students with Advanced Standing the option of completing 120 McGill credits.

Interested students should contact their Faculty or School advisors.

### 1.5.7 Tracking Student Progress

### 1.5.7.1 myProgress

myProgress is a web-based degree audit tool that allows students to track their progress towards completion of their degree. The tool offers an overview of your degree requirements and what still need to be completed before graduation. It is currently open to select faculties only; please refer to the following websites for more information.

- Undergraduate students: please refer to the Undergraduate myProgress website.
- Graduate students: please refer to the Graduate myProgress website.


### 1.5.7.2 Degree Evaluation Tool

Note: The Degree Evaluation tool is currently available only to students in certain faculties admitted prior to Fall 2019.

Degree Evaluation is a Minerva tool to help students and advisors compare the student's academic record with the requirements of a specific program. If you have access to Degree Evaluation on Minerva under the Student Records Menu, you can review your progress within your current program. Also, if you are considering a program change, you can generate a "what-if" comparison of your academic record with the requirements of another program.

The presentation in the Degree Evaluation Report may have a different appearance than the requirements listed in this publication. For example, a long listing of courses may be grouped into one course "attribute" on the Minerva report.

Degree Evaluation also provides a central record of advisor/faculty-approved adjustments to your program of study (e.g., the replacement of one specified course with another or acceptance of a non-McGill course for credit).

Degree Evaluation is an advising tool only. A Degree Evaluation Report that indicates program requirements have been satisfied does not constitute approval to graduate.

Note for Medicine, Dentistry, and Nursing: The Degree Evaluation tool is not used in the Faculties of Medicine and Health Sciences, Dental Medicine and Oral Health Sciences, and the Ingram School of Nursing.

### 1.5.8 Changes to Student Records after Normal Deadlines

### 1.5.8.1 Student Record Changes

Student record changes include the following: course add or course drop, course withdrawal, university withdrawal, program change (including changing majors or concentrations), or status change (i.e., leave of absence, exchange, or term away). They also include changes to tuition status based on the submission of legal documents.

### 1.5.8.2 Registrar Deadlines

Fall term - January 31
Winter term - June 1
Summer term - October 1

### 1.5.8.3 Before Registrar Deadlines

For record changes after the normal deadlines published in this publication, but before the section 1.5.8.2: Registrar Deadlines, you must make a request in writing to your Associate Dean or Director, clearly explaining why you could not request the change before these dates. The Associate Dean or Director will review your request and decide. If your request is approved, the change is processed according to existing faculty and Enrolment Services student record procedures.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made at Service Point (3415 McTavish). However, it is important that you also meet with a faculty advisor in Arts OASIS or SOUSA to talk about your options and the effects that your request may have on your studies. For more information, refer to Academic Advising.

### 1.5.8.4 After Registrar Deadlines

The University does not normally consider a change requested after the section 1.5.8.2: Registrar Deadlines have passed. In situations where there are extraordinary personal or extraordinary academic circumstances that could not have been foreseen prior to these deadlines, you may formally request a student record change from your Associate Dean or Director. If your Associate Dean or Director approves the request, the change will be processed according to faculty and Enrolment Services student record procedures. You may be assessed a fee for a change requested after Registrar deadlines. For all changes other than grade changes, the faculty will file full documentation that supports the extraordinary circumstances with Enrolment Services.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made at Service Point (3415 McTavish). However, it is important that you also meet with a Faculty advisor in Arts OASIS or SOUSA to talk about your options and the effects that your request may have on your studies. For more information, refer to Academic Advising.

### 1.5.8.5 Fee Assessment Consequences

When a change to your student record is made, the revised fee assessment appears on your next fee statement.
If you wish to contest the fee assessment, you must submit a written request to Enrolment Services. Enrolment Services will review the extraordinary circumstances described in the supporting documentation provided by your faculty and, if necessary, consult with the Student Accounts Office to decide whether to consider your request. Then, Enrolment Services will communicate with you explaining the decision.

### 1.5.8.6 Student's Citizenship and/or Immigration or Fee Exemption Status

Note that your faculty/school or Graduate and Postdoctoral Studies does not handle changes related to your citizenship and/or immigration or fee exemption status; see section 1.2.3.1: Why Does McGill Collect Legal Documents from You? You may be assessed a fee for a change requested after the submission deadline.

## 1.6

## Examinations: General Information

Note: The University Exam Regulations governed by the University Student Assessment Policy are available at mcgill.ca/exams/regulations.

In addition to the University Student Assessment Policy (available on the Secretariat website) and the general examination regulations listed at mcgill.ca/exams/regulations, you should also consult the faculty sections of this publication for particular regulations. You will be informed of the evaluation method used in each course by the end of the Course add/drop period.
As per the section 1.1.3: McGill Language policy, every student has a right to write papers, examinations and theses in English or in French, except in courses where knowledge of a language is one of the objectives of the course.

You are not permitted to write an in person or online examination in any course unless you have fulfilled the requirements of the course to the satisfaction of the instructor and your Associate Dean or Director. For an in person examination or test, you must submit all written work to the invigilator or instructor before leaving.
As per the exam regulations, you must have your valid McGill student ID card with you to write an in person examination. If you have lost your McGill ID, please provide a government issued ID with your full name written on it. Verification of your ID will be made at the time of your exam.
As per the Code of Conduct and Disciplinary Procedures, Article 17, cheating in any examination is considered a serious offence that could lead to expulsion from the University. Students are not permitted to have in their possession, or to use, any unauthorized materials during an examination. This includes electronic devices such as cell phones, iPods, MP3 players, PDAs, smart watches, and other web-access devices. Unauthorized items used during an exam will be reported to the Disciplinary Officer.
Responses on multiple-choice examinations are normally checked by the Exam Security Computer Monitoring Program. The program detects pairs of students with unusually similar answer patterns on multiple-choice examinations. Data generated by the program can be used as admissible evidence either to initiate or corroborate an investigation or a charge of cheating under Section 17 of the Code of Student Conduct and Disciplinary Procedures.

All students are responsible for familiarizing themselves with the University Student Assessment Policy (available on the Secretariat website) and the Code of Student Conduct and Disciplinary Procedures (available at mcgill.ca/exams/regulations).

You can find information about issues related to academic integrity at mcgill.ca/students/srr/honest.
Note for Engineering Students: You should also refer to the Engineering website for more information at
mcgill.ca/engineering/students/undergraduate/courses-registration/exams-assessment.
Note for Law Students: You should also refer to the Law website for more information at mcgill.ca/law-studies/courses/exams.

Note for Medicine: Refer to UGME's Assessment and Promotion Policy.

Note for Continuing Studies Students: You should consult the academic sections of this publication for particular regulations.

### 1.6.1 Examination Accommodations for Students registered with the Office for Student Accessibility \& Achievement

Students registered with the Office for Student Accessibility \& Achievement with an active accommodation plan may register for accommodations for all tests, quizzes, exams, and finals. For more information see: mcgill.ca/osd/student-resources/forms/exam-sign.

### 1.6.2 Credit by Examination

In certain exceptional cases and in certain faculties, you can apply to the Associate Dean or Director to write a final examination in order to obtain credit in a course that you were not registered in. This is possible only in those courses where there is no other assessment except the final examination.

### 1.6.3 Final Examinations

Final examinations in regularly scheduled courses are held during the final examination period at the end of the term. The format of the final exams can be either online or in person, depending on the situation. The dates of the final examination periods are listed at mcgill.ca/exams.

Important Note: You are advised not to make travel plans prior to the release of the Final Exam Schedule. Vacation plans do not constitute grounds for the deferral or re-scheduling of final exams.

Note for Summer Studies: All information pertaining to final exam conflicts can be found at mcgill.ca/summer/finalexams.

In some courses there is no final examination; your final grade in these courses is determined by different forms of assessment(s) indicated in the course outline. During the first week of class, students will be provided with a course outline, which along with other details, will include the types of assessment to be used in the course and the weight accorded to each assessment.

### 1.6.3.1 Final Examinations: University Regulations Concerning Final Examinations 1.6.3.1.1 Preamble

The objectives of these regulations are as follows:

1. to protect students from excessive workloads;
2. to use the entire term to maximum advantage.

### 1.6.3.1.2 Regulations

1. These regulations shall apply to undergraduate courses up to and including the 500 level that are evaluated by the use of written examinations. They shall not apply to clinical, field, laboratory, performance, and seminar courses, or to other courses that are evaluated solely by means of a design, paper, program, or project.
2. Written examinations (including take-home examinations) shall not be held during the last two weeks of scheduled classes during the Fall and Winter terms, except where a pattern of continuous evaluation has been established, in which case the total value of examinations given in this period shall comprise no more than $10 \%$ of the final grade.
3. If the written examinations in a course constitute $50 \%$ or more of the final grade, one of these shall be given as a final written examination, and it shall take place during the examination period after the last day of scheduled lectures in December or April. Final examinations can be administered as either in person or online assessments.
4. A final examination given during the examination period shall be worth at least $25 \%$ of the final grade.
5. Students shall be informed of all course requirements by the end of the course add/drop period. All term work shall be assigned early enough in the term for students to complete the assignment(s) by the last day of class.
6. The due date for term work in courses to which these regulations apply shall be no later than the last day of classes.
7. In courses that span the Fall and Winter terms (course pairs with numbers ending D1 and D2), instructors who wish to give a mid-year examination in December must schedule it in the formal examination period.
8. The principles enunciated in these regulations shall be applied, appropriately modified, to courses given during the summer, to other courses of less than a 13-week duration, and to courses in the Faculties of Law, Medicine and Health Sciences, Dental Medicine and Oral Health Sciences, and Education that do not follow the normal University Timetable.
9. Individual faculties may propose variations in these regulations to the Academic Policy and Planning Committee to meet their special needs.
10. These regulations, and any variations to them, shall be made known to students by each faculty.

Instructors are not permitted to grant any special treatment regarding examinations to any student. Students who believe there are circumstances which might justify making special examination arrangements for them or which might legitimately be taken into account in evaluating their performance should apply to the Associate Dean or Director of their faculty.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made at Service Point (3415 McTavish Street). However, it is important that you also see a faculty advisor in Arts OASIS or Science SOUSA to talk about your options and the effects that your request may have on your studies. For more information, refer to Academic Advising.

It is the responsibility of the student to confirm the date, time, format for online or location of an in person examination by checking examination schedules posted on mcgill.ca/exams. No student will be allowed to enter an in person examination later than one hour after it has started.

[^0]Note for Dental Medicine and Oral Health Sciences: Refer to mcgill.ca/dentistry/academicaffairs/examschedule.

### 1.6.3.2 Final Examinations: Deferred Examinations

## Step 1: Understanding your options and the consequences

Deciding whether or not to defer a final exam can be difficult. While there are obviously times when taking that step is necessary, there are usually more cons involved than pros. If you're contemplating applying for a deferred exam, consider the following first:

- Exams during the regular period are scheduled shortly after the end of the course. Deferred exams are held much later after the end of a term, meaning course material will not be as fresh.
- Applying for a deferred exam does not guarantee approval. Deferred exam requests are not automatically granted, even with supporting documentation. Consult the "Eligibility" section for more information.
- Deferrals are meant to help students who are severely ill or dealing with unforeseeable, significant extenuating circumstances. Requests due to minor illnesses (cold), minor personal matters, or scheduling conflicts (travel plans) will not be approved.
- Do not use deferral requests to manage your exam schedule or to reduce your exam load. If you request to defer one exam due to illness, then write another exam the same day or the next, your request will likely be refused. It is your responsibility to plan how you will meet the academic requirements of your program.
- Deferred exam requests will not be approved if you attend your exam and partway through decide that you were not well enough to perform at full capacity.
- In cases of incidental illness (e.g., a cold, cramps, nausea, etc.) that affected your study time leading up to the exam, but where you recovered on the day of your exam, you are expected to write your exam, and a deferral will not be granted.
- If you have requested a deferred exam in the past, any future requests will be reviewed more stringently, and requests with similar reasons or circumstances as previous requests will not likely be approved.
- If you have made requests due to disability or chronic illness in the past, it is your responsibility to take measures to manage your condition and your course schedule to avoid relying on deferred exams in subsequent exam periods. Please refer to resources available (listed in final bullet for Step 1) and consult with your academic advisor to assist you in this process.
- You cannot defer a deferred exam. If you fall ill right before your deferred exam, you will not have the option to defer it again.
- You will have to provide supporting documentation for your request if this is not your first deferral.
- A deferred exam may have an impact on future plans, such as exchanges, studying abroad, internships, etc.
- Deferring an exam merely pushes it to the future, to a time when you may have a full course load of other exams to prepare for. You are strongly advised not to defer more than two exams in an exam period, as this could make for an unmanageable deferred exam period and workload for the following semester.
- The course with a deferred final exam will show a grade of "L" on your transcript until the deferred exam is written and graded. Both the grade of 'L" and your final grade will display on your advising/unofficial transcript.
- McGill offers many resources to help you avoid having to defer, including McGill Tutoring Services, McGill Counselling Workshops, faculty-specific resources, and other academic resources. If you have a disability or a chronic illness, register with the Student Accessibility \& Achievement to help you manage your accommodation needs
- Your academic advisor can help point you toward valuable resources and support services, as well as outline how a deferral might affect your career and timeline.


## Step 2: Find out if you are eligible for a deferred exam

The following are the eligibility requirements for a deferred exam:

- Requests are submitted according to your Faculty Guidelines (see "Submitting a request").
- You must cite a valid reason for requesting a deferred exam, even if this is your first-time request. Valid reasons are:
- Serious medical illness;
- Serious personal issues/circumstances;
- Serious unforeseeable or extenuating circumstances.

Note: Travel plans are not a valid reason.

- If this is not your first deferred exam request, you must also provide supporting documentation (such as a medical note) which confirms your inability to write the exam on the original date. Documents should be submitted as soon as you submit your deferral request in Minerva. Incomplete requests will be cancelled, and late documents will not be accepted. See "Submitting a request" for details on accepted supporting documents and how and when to submit supporting documents.
- First-time requests: Students in eligible faculties (listed below) who request a first-time exam deferral due to illness or other serious extenuating circumstance may be granted the deferral without the need for supporting documentation (such as a medical note). Students requesting a first-time deferral are nonetheless required to have a valid reason, and all other requirements and deadlines for submitting a request for a deferred exam will apply.


## Eligible faculties:

- Science (including the Bachelor of Arts \& Science)
- Management
- Law
- Engineering (including School of Architecture)
- Education
- Arts (including Schools of Social Work and Religious Studies)
- Agricultural and Environmental Sciences


## Ineligible faculties/schools:

- Continuing Studies
- Nursing
- Information Studies
- Physical and Occupational Therapy
- Dentistry
- Medicine and Health Sciences
- Music
- Graduate and Postdoctoral Studies
- For ineligible faculties/schools, the guidelines for your home faculty or school are applicable.


## Step 3: Submit your request

1. Read Step 1: Options and consequences, and Step 2: Eligibility.
2. Check the deadlines for submitting a request applicable to you. Visit My Exams to view deferred exams application deadlines.
3. Submit your request. You must do this by the posted deadline in your faculty guidelines.

| Faculty | How/Where do I submit an exam deferral | Where do I submit supporting | Where can I seek academic |
| :--- | :--- | :--- | :--- |
| request? | Mocuments (e.g., medical note)? | advising? |  |


| Faculty | How/Where do I submit an exam deferral request? | Where do I submit supporting documents (e.g., medical note)? | Where can I seek academic advising? |
| :---: | :---: | :---: | :---: |
| Management | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | Student Affairs at Desaultels Faculty of Management | Student Affairs at Desaultels Faculty of Management |
| Medicine and Health Sciences | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | Medicine The WELL Office (3708 Peel Street) | Medicine Student Affairs (680 Sherbrooke West) |
| Music | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | Student Affairs at Music - Elizabeth Wirth <br> Music Building (527 Sherbrooke St W., 7th floor) | Student Affairs at Music - <br> Elizabeth Wirth Music <br> Building (527 Sherbrooke St <br> W., 7th floor) |
| Nursing | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | Student Affairs (680 Sherbrooke Ouest, 19th floor, room 1944) | Student Affairs (680 <br> Sherbrooke Ouest, 19th floor, room 1944) |
| Physical and Occupational Therapy | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | In person at Student Affairs (3630 Sir William Osler) | In person at Student Affairs (3630 Sir William Osler) |
| Religious Studies | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | In person at Service Point or by email (BA in Religious Studies) | Religious studies (Birks <br> Building, 3520 University) |
| Science (including B.A. and Sc.) | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | Current student Contact Form | SOUSA at Dawson Hall |
| Summer Studies - Special Students | Minerva (Student Menu>Student Records Menu>Deferred Exam Application) | In person at Service Point or by email | N/A |

## 4. Submit supporting documents.

## What do you need to provide?

Supporting documents must substantiate your claim of incapacity or inability to attend your exam(s) on the given date(s).
Medical notes must be from a health practitioner who has observed and diagnosed your condition directly and in-person (telephone or remote diagnoses are not permitted). The following is a list of registered and licensed health practitioners deemed acceptable:

- A Dental Surgeon or Dentist
- A Psychologist, Psychotherapist, or Social Worker
- A Physician, Psychiatrist, or Surgeon
- A Nurse or Nurse Practitioner
- A health professional from any of the McGill health services (i.e., Student Wellness Hub)

All supporting documents must be clear, complete, and include the following:
a. Your full name, and where applicable McGill ID\#
b. Information about your health practitioner:

- their name, address, and license \#
- their signature
- the date you met with them
c. Information about your circumstances:
- a statement of capacity, indicating that you weren't/aren't able to attend your exam and why;
- the date(s) that you were/are incapable of doing so;
- the date on which you'll be able to resume your studies/exams.


## When do you need to provide it?

Supporting documents must be sent as soon as you have submitted your Minerva request. Note that incomplete requests will be cancelled.

- Arts and Science students:
- Submit PDF copies of your documents to Service Point by completing the Current student Contact form mcgill.ca/servicepoint/current-student-contact-form and selecting the option "Final Exams".
- Students from all other Faculties must submit documents directly to their Faculty Student Affairs Office.


## Step 4: Understanding your decision (approved or refused)

## If your deferred exam request is approved

- It is your responsibility to verify the Deferred Exam schedule for the exact date, time, and location of your exam. The schedule will be posted at mcgill.ca/exams approximately two weeks prior to your deferred exam period.
- Exams deferred from the December exam period (i.e., from the Fall term) are scheduled in the Winter term Reading Break.
- Exams deferred from the April exam period (i.e., from the Winter term) are scheduled in the $3^{\text {rd }}$ week of August.
- You are expected to be available during a deferred exam period to write your exam.
- You can only defer your final exam once. If you request a late course withdrawal (late-W) from a course with an approved exam deferral and the reasons for the late-W are similar to those for your deferred exam request, then your request will not be granted.
- If you requested a deferred exam and then ended up writing the original final exam, you will no longer be eligible to write the deferred exam, even if your request was approved. It is your responsibility to inform your Student Affairs office (or Service Point, for Arts and Science students) that you wrote the final exam at the originally scheduled time. Failure to meet this obligation may place you in violation of the Code of Student Conduct and may involve disciplinary measures.
- Take measures to avoid similar issues arising in your next exam period. If you have a chronic condition or disability, register with the Student Accessibility \& Achievement. If you are experiencing anxiety or other mental health issues, see a counsellor or therapist and talk to your faculty advisor regarding ways you can better manage your course load. McGill offers many resources to help you avoid having to defer, including McGill Tutoring Services, McGill Wellness and Life Skills Workshops, Counselling resources through the Student Wellness Hub, and other academic resources.


## If your deferred exam request is refused

- The refusal could be for any number of reasons, including but not limited to:
- You did not provide a valid reason for your request;
- Your medical documentation was non-specific, inadequate, or missing;
- You have made previous requests for similar or the same reasons and there is no evidence that you have taken measures to address the challenges you are facing during exam periods.
- You must write the final exam at its originally scheduled date and time. If you do not or did not write your final exam, you will receive a grade of $\mathbf{J}$, which counts as a failure in your TGPA and CGPA. If you receive a $\mathbf{J}$, a supplemental exam may be an option for you if you meet the eligibility requirements. See Supplemental Exams.
- If you are an Arts or Science student, you may make a written request to have the decision reviewed; there must be new information or documentation relevant to your initial request that you did not originally submit.

If you believe that your situation warrants a decision review, submit your written request no later than 5 business days after the refusal of your initial request.

- How to submit a request:
- Write a concise (max 500 words) statement explaining why you are requesting a decision review, and what new and relevant information you are sharing to support your request.
- Email your statement - including PDF-formatted supporting documents - to servicepoint@mcgill.ca from your McGill email account, ensuring that the subject line reads "Decision Review: Deferred Exam".
- Decisions are reviewed by a committee consisting of the following individuals: Director, Service Point; Registrar and Executive Director of Enrolment Services; and either the Associate Dean (Arts OASIS) or the Director of Advising (Science SOUSA), depending on your Faculty.
- Decisions made by this committee are final.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): Submit your supporting documents to Service Point (3415 McTavish Street). However, it is important that you also see a faculty advisor in Arts OASIS or Science SOUSA to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

Note for the Faculty of Agricultural and Environmental Sciences: The Faculty offers deferred exams for medical reasons and exceptional circumstances (to be approved by the Associate Dean (Student Affairs)) for the Fall and Winter periods. Verify dates on the Important Dates website at mcgill.ca/importantdates, apply on Minerva, and provide medical documentation to the Student Affairs Office.

Note for the Faculty of Engineering: You should refer to section 1.6.3.2.1: Deferred Examinations: Faculty of Engineering for more information on the Faculty of Engineering policies on deferred exams.

Note for the Faculty of Law: You should refer to mcgill.ca/law-studies/courses/exams for more information on the Faculty of Law policies on deferred exams.

Note for the Schulich School of Music: A Music student who has not cleared a grade of L by mid-May is ineligible for scholarships.

### 1.6.3.2.1 Deferred Examinations: Faculty of Engineering

For information regarding deferred examinations in the Faculty of Engineering, please see mcgill.ca/engineering/students/undergraduate/courses-registration/exams-assessment/deferred-exams.

### 1.6.3.3 Final Examinations: Reassessments and Rereads

In accordance with the Charter of Students' Rights, and subject to its stated conditions, students have the right to consult any written submission for which a grade has been received and the right to discuss the submission with the examiner. If a formal final examination reread is sought, an application must be submitted in writing. A reread fee is applicable, which is charged to the student's fee account and reimbursed only if the reread results in an increase in the final grade.

- Students in undergraduate faculties, except in the Faculty of Arts or the Faculty of Science, must contact their Student Affairs Office to determine the process to request a formal reread; see section 1.11.3: Contact Information for Faculty \& School Student Affairs Offices;


## OR

- Students in the Faculty of Arts or the Faculty of Science must submit a Final Exam Reread Request.

Students must consult their faculty Student Affairs Office or their faculty/school website for the most up-to-date information on exam rereads in their specific faculty/school.

The deadlines to submit a formal reread for undergraduate courses are:

- March 31 for courses in the Fall term
- September 30 for courses in the Winter and Summer terms


### 1.6.3.3.1 Reassessments and Rereads: Faculties of Arts and Science (including B.A. \& Sc.)

There are two recognized types of impartial reviews: reassessments and rereads:

- reassessment of coursework completed during the term (term papers, mid-terms, assignments, quizzes, etc.)
- reread of a final exam

In both cases, rather than correct and grade the work again, reviewers assess the appropriateness of the original grade based, for example, on the application of the grading key to the student's work. If a grade is deemed unfair, it is changed, whether the new grade is higher or lower than the original, i.e., the reviewer's grade takes precedence over the original grade.

### 1.6.3.3.1.1 Reassessment of Coursework

These reassessments are administered and conducted solely by the units involved according to procedures specified by the units and made available to staff and students. Requests for such reassessments must be made within 10 working days after the graded material(s) has been made available for students to view. Reassessments should normally be completed within 20 working days of the request.

### 1.6.3.3.1.2 Rereads of Final Examinations

Deadlines to request final exam rereads:

- March 31 for courses in the Fall term
- September 30 for courses in the Winter and Summer terms

Exam reread fees apply; refer to the Student Accounts website for fee amounts and information.
For students pursuing a Bachelor of Arts, Bachelor of Science, or Bachelor of Arts \& Science:

- Requests for a final exam reread must be made via Service Point;
- It is strongly recommended, but not required, that you consult with the instructor of the course before requesting a reread of a final exam.

Students from outsside the Faculties of Arts or Science taking a course administered by them must submit final exam reread requests directly to the Student Affairs Office of their Faculty for Approval.

Reassessments and rereads in courses not in the Faculties of Arts and Science are subject to the deadlines, rules, and regulations of their relevant faculties.

### 1.6.3.3.2 Reassessments and Rereads: Faculty of Agricultural and Environmental Sciences

Two forms of formal re-evaluation of graded work are possible: reassessments of term work (midterm exams, quizzes, assignments, etc.) and rereads of final exams.

In both cases the first step is to discuss your grades with your instructor, for explanation and possible adjustment. If a satisfactory conclusion cannot be reached, a formal re-evaluation by a qualified and impartial evaluator can be requested.

For term work, you must apply for a reassessment in writing to the chair of the department that administers the course. An email request is sufficient. If in doubt about whom to contact, ask your Academic Advisor. The request for reassessment of term work must be made within 10 working days after the graded material has been made available to you.

For formal final examinations, you must apply for a reread in writing to the Associate Dean (Student Affairs). Application for rereads must be made by March 31 for Fall term courses and by September 30 for Winter term and Summer term courses.

You should be aware that, in either case:

- grades may be raised, stay the same, or be lowered as the result of a re-evaluation;
- the final course grade will be determined using the new grade, whether it is higher or lower;
- re-evaluations in courses outside the Faculty of Agricultural and Environmental Sciences are subject to the deadlines, rules, and regulations of the relevant faculty.


### 1.6.3.3.3 Reassessments and Rereads: Faculty of Law

For information on the Faculty of Law's grade review regulations (rereads of failed examinations, rereads of failing assignments, and review of final evaluations) refer to: mcgill.ca/law-studies/courses.

### 1.6.3.3.4 Rereads: Faculty of Engineering

You can request a formal reread of a final examination once you have discussed it with your instructor. You must complete a Reassessment of a Grade and Reread webform and submit it to the Student Affairs Office, Engineering Student Centre.

The following regulations apply:

- Grades may be either raised or lowered as the result of a reread.


## Reread application deadlines:

- Fall courses: last working day of March
- Winter courses: last working day of July
- Summer courses: last working day of September

Non-Engineering courses: Rereads in courses not in the Faculty of Engineering are subject to the deadlines, rules, and regulations of the relevant faculty.

### 1.6.3.4 Supplemental Examinations

If you are in section 1.5.1: satisfactory or probationary standing and received a grade of $\mathrm{D}, \mathrm{F}, \mathrm{J}$, or U , you may be eligible to write a supplemental exam, which will count for a substantial percentage of your final grade. Your initial grade will still appear on your transcript, and both will be calculated into your CGPA.

To apply for a supplemental examination for a course, you must submit a request on Minerva (mcgill.ca/minerva) by going to Student Menu $>$ Student Records Menu > Supplemental Exam Application.

The following rules and conditions apply:

- You must be in Satisfactory or Probationary Standing;
- You must have received a final grade of D, F, J, or U in the course;
- A non-refundable fee for each supplemental exam application is assessed at the time of application and charged directly to your McGill account; consult the Student Accounts website for the fee at mcgill.ca/student-accounts/tuition-fees/non-tuition-charges/other;
- Only one supplemental examination is allowed in a course;
- Supplemental examinations are available for most courses given in the Faculties of Arts, Science, Education, Religious Studies, and the School of Social Work;
- Supplemental examinations are not available for courses administered by Agricultural and Environmental Sciences, Engineering, Management or Music;
- Special permission is required if you want to write supplemental exams totalling more than 8 credits;
- The format of the supplemental examination (e.g., multiple-choice or essay questions) will not necessarily be the same as the final examination, so you should consult the instructor before you write the supplemental examination;
- The supplemental result may or may not include the same proportion of class work as did the original grade; the instructor will announce the arrangements to be used for the course by the end of the Course add/drop Period;
- The supplemental grade will not replace the grade originally obtained, which is used in calculating the GPA; both the original grade and the supplemental result will be calculated in the CGPA;
- For courses in which both a supplemental examination and additional work are available, you may choose the additional work, or the examination, or both; where both are written, only one supplemental grade will be submitted, reflecting grades for both the supplemental examination and the additional work;
- There are no supplemental examinations for Summer Studies courses;
- Additional credit will not be given for a supplemental exam where the original grade for the course was a D and you already received credit for the course;
- No supplemental examinations are available if you fail to achieve a satisfactory grade in a course where you have written a deferred examination;
- Supplemental examinations in courses outside your faculty are subject to the deadlines, rules, and regulations of the relevant faculty.

You must frequently verify the status of your supplemental exam application on Minerva for any additional information required by your Student Affairs Office or Service Point. Once your application has been approved, you will receive a confirmation email at your McGill email address.

If you register for a supplemental examination but find yourself unprepared for it, you should not take the exam; except for the loss of the application fee, there is no penalty for missing a supplemental examination. You should consult your Student Affairs Office for further information. It is important that you also see a Faculty advisor to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.
You must verify the date and time of the supplemental examination and make yourself available to write the exam. Supplemental examinations for courses taken in the Fall term will be written during Reading Break the following Winter term. Supplemental examinations for courses taken in the Winter term will be written in August of that year. Dates can be found at mcgill.ca/exams/dates.

Note for Continuing Studies: Availability of supplemental exams and the conditions under which you will be permitted to take them are different in each academic area.

Note for the Faculties of Arts and Science (including B.A. \& Sc.): It is important that you also see a Faculty Advisor in Arts OASIS or SOUSA to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

Note for the Faculty of Engineering: Supplemental examinations are available for the following courses: CHEM 110, CHEM 120, CHEM 212, CHEM 234, COMP 202, MATH 133, MATH 140, MATH 141, PHYS 131, PHYS 142, and other courses administered by the Faculty of Science as well as courses administered by the Faculty of Arts (e.g., some Complementary Studies courses from Group A Impact of Technology on Society and from Group B Humanities and Social Sciences, Management Studies and Law).
Supplemental examinations are not available for the following Engineering courses: CHEM 233, EPSC 221, MATH 262, MATH 263, MATH 264, MATH 271, MATH 363, and PHYS 271. These courses are offered by the Faculty of Science, but they are administered by the Faculty of Engineering. If you are not sure which courses offer supplemental examinations, please contact the Engineering Student Centre.

Note for the Faculty of Law: Regular supplemental examinations are available to a student who has failed a course, but who is not required to withdraw from the Faculty. Regular supplemental examinations may be written in up to two courses that do not exceed a total of seven credits together, or in any one course even if it exceeds seven credits. Supplemental examinations are written at the Law Faculty in the month of August. For more information, see Supplemental Examinations at mcgill.ca/law-studies/courses/exams.

### 1.6.3.5 Additional Work: Faculty of Science (including B.A. \& Sc.)

Instructors of courses that include graded, written term work may choose to provide the option of additional work to eligible students. The following conditions apply:

- if there is an option for additional work, it must be announced in the course outline at the beginning of the course;
- additional work involves revising one or more previously submitted papers or submitting new written work to replace the original work;
- you must be in Satisfactory or Probationary Standing;
- you must have received a final grade of D, J, F, or U in the course;
- the weight of the additional work will be equal to the weight given to the work that was revised or replaced when the original grade was submitted;
- the grade resulting from the revised or additional work will be recorded as a supplemental grade;
- the supplemental result will not replace the grade originally obtained, which is used in calculating the GPA; both the original grade and the supplemental grade will count in calculating the CGPA;
- in courses in which both a supplemental examination and additional work are available, you may choose the additional work or the examination or both; where both are written, only one supplemental grade will be submitted, reflecting grades for both the supplemental examination and the additional work;
- additional work in courses outside the Faculty of Science (including B.A. \& Sc.) is subject to the deadlines, rules, and regulations of the relevant faculty.

Note for the Faculty of Science (including B.A. \& Sc.): Requests are made at section 1.12: Service Point. However, it is important that you also see a Faculty advisor in Arts OASIS or SOUSA to talk about your options and the effects that your request may have on your studies. For more information, see mcgill.ca/students/advising.

### 1.6.4 Examinations: External Exam Proctors

Upon request, McGill will act as proctor for paper-based and online exams from universities or professional accreditation associations and organizations.

For complete information on scheduling, fees, payment and all other details please consult the Exams website.

### 1.6.4.1 Contact Information

Email: proctor.es@mcgill.ca
Website: mcgill.ca/exams/dates/proctor

### 1.6.5 Faculty of Engineering Policy on Use of Calculators in Faculty Tests and Examinations

The use of calculators during tests and examinations is at the discretion of the course instructor. If a calculator is permitted in the examination, you are required to use one of the following calculators:

- CASIO fx-100MS
- CASIO fx-115MS
- CASIO fx-260
- CASIO fx-300MSPlus
- CASIO fx-570MS
- CASIO fx-991MS
- CASIO fx-992S
- SHARP EL-510
- SHARP EL-520
- SHARP EL-531
- SHARP EL-546 (all extensions are acceptable for SHARP calculators)
- TI-30XIIS

No other calculators will be permitted, regardless of their level of sophistication, unless otherwise stated by the examiner. Non-regulation calculators will be removed and no replacement calculator will be provided. You are expected to own one of the above-listed Faculty of Engineering Standard Calculators.

For more information, see mcgill.ca/engineering/students/current-students/undergraduate/courses-registration/exams-assessment/faculty-standard-calculators.

### 1.6.6 Laptop Examination Policy for the Faculty of Law

All students wishing to write one or more final examinations on their laptop must:

1. ensure laptop compatibility with Faculty-approved software;
2. complete the Faculty of Law Laptop Examination Agreement;
3. download the Faculty-approved software;
4. run a test prior to the start of the examination period;
5. if necessary, sign an IST Customer Services-Computer Repair Waiver.

The Student Affairs Office will provide term-specific deadlines. You will not be permitted to use a laptop unless you have fulfilled the above requirements. You must ensure that the laptop you are using meets the minimum requirements for the software as specified by the Student Affairs Office, as posted on the SAO website and myCourses. Students using laptops will not be placed in separate examination rooms. You may opt out of using your laptop at any point, even once the examination has started, and revert to handwriting.

First-year students are required to attend the examination information session and software download session during the Fall term; dates will be provided by the SAO.

Students considering updating their laptop's operating system should consult the Student Affairs office in advance, to ensure that the new version of the operating system is compatible with the examination software.

### 1.6.6.1 Laptop Examination Agreement

The Examination Agreement is designed to confirm that students agree to the terms of the laptop policy. The following are the components of the Examination Agreement:

1. I elect to write one or more of my law examinations using a laptop with the approved McGill University software during the examination period. I recognize that this is a third-party application, and that neither McGill University nor the Faculty of Law is responsible for its proper functioning.
2. I confirm that my personal laptop meets the minimum requirements (as stipulated in the Faculty of Law - Laptop Exam Student section of the myCourses course Law-Law-Student Affairs-Examinations) for the laptop exam pilot project. My laptop has access to the McGill wireless network. Once I have completed this agreement, I will download and install the University-approved software on my laptop. I will follow the tutorial and test the software on my laptop within the stated deadlines.
3. If my laptop fails during the exam (e.g., a computer crash), I agree to continue and finish the exam by handwriting it. I understand that I will not be granted additional time to resolve the computer problems during the exam. If the incomplete examination cannot be retrieved from my computer within two working days, the Associate Dean (Academic) will determine remedial options.
4. I understand that, if necessary, ICS staff may be available to troubleshoot any difficulties encountered with the approved software (a third-party application). I will be asked to sign an IST Customer Services-Computer Repair Waiver acknowledging that ICS staff will not be held responsible for any theft, loss, or damage (to hardware or software) occurring during the diagnosis or repair of my laptop, or for any loss of data, regardless of when it was lost.

For more information on this agreement, see: mcgill.ca/law-studies/courses.

### 1.7 Internships, Exchanges, and Co-op Programs

### 1.7.1 Internships and Co-op Programs

Several faculties at McGill offer undergraduate students the opportunity to participate in an internship or co-op program.

- Faculty of Agricultural and Environmental Sciences students: Refer to Faculty of Agricultural and Environmental Sciences > Undergraduate > Overview of Programs Offered by the Faculty of Agricultural and Environmental Sciences > section 2.4.1: Internship Opportunities.
- Faculty of Arts students: See the Arts Internships website at mcgill.calarts-internships.
- Faculty of Education students: For information on B.Ed. Field Experiences (student teaching), please refer to the Internships \& Student Affairs website; for information on B.Sc. Kinesiology internships, please contact your KPE Student Advisor.
- Faculty of Engineering students: Refer to Faculty of Engineering > Undergraduate > section 6.8: Engineering Internship Program. The Department of Mining and Materials Engineering also offers co-op programs in Mining Engineering and Materials Engineering.
- Faculty of Law students: For information on Human Rights internships, see: mcgill.ca/humanrights/clinical/internships.
- Desautels Faculty of Management BCom students: Refer to mcgill.ca/desautels/career/students/bcom/internships.
- Faculty of Science students: Information regarding internships for Science students can be found at mcgill.ca/science/undergraduate/internships-field/internships.


### 1.7.2 Exchange Programs

For information on Exchange Programs, refer to Study Abroad \& Field Studies > Undergraduate > section 12.4: Exchange Programs.


Note for Arts students: Further information on exchanges and studying away may be obtained from the Arts OASIS website at mcgill.ca/oasis.

Note for Engineering students: For further information, contact the Faculty of Engineering Student Affairs Office in the Engineering Student Centre, and see mcgill.ca/engineering/students/undergraduate/exchanges-study-away.

Note for Law students: Students should consult mcgill.ca/law-studies/bcljd-studies/exchange for the eligibility criteria.

Note for Management students: See also Desautels Faculty of Management > Undergraduate > Desautels Faculty of Management Studies > section 9.2.6: International Student Exchange Program.

Note for Science and B.A. \& Sc. students: Further information may be obtained from the SOUSA website at mcgill.ca/science/student/undergraduate/undergraduate/handbook\#contents_exchange.

Note for Music students: For further information, contact the Schulich School of Music Student Affairs Office and see mcgill.ca/music/student-resources/undergraduates/learning-abroad.

### 1.7.3 Field Studies

For information on Field Studies, refer to Study Abroad \& Field Studies.
Note for Science and B.A. \& Sc. students: Please refer to mcgill.ca/science/undergraduatefinternships-field/field.

### 1.7.4 Mobility Award

The purpose of the Mobility Award is to encourage students to study abroad as part of their McGill degree program by defraying part of the cost of this experience. Complete information on this award is available on the McGill Abroad website.

### 1.7.5 Study Abroad Opportunities

For information on Study Abroad, refer to Study Abroad \& Field Studies > Undergraduate > section 12.1: Opportunities for Field Study and Study Abroad, or see mcgill.ca/mcgillabroad.

### 1.8 Scholarships and Student Aid

The Scholarships and Student Aid Office offers a complete range of merit and need-based awards for entering and in-course undergraduate students. As well, the office administers all federal, provincial, and U.S. government student aid programs. For information and links to government websites as well as comprehensive information concerning all undergraduate awards appearing in the Undergraduate Scholarships and Awards Calendar, see Scholarships and Student Aid.

### 1.8.1 Entrance Awards for McGill Students

Undergraduate Entrance Scholarships are available to students entering McGill University for the first time in a full-time undergraduate degree program.
You should consult mcgill.ca/studentaid/scholarships-aid/future-undergrads/entrance-scholarships for details. Highlights include:

- Entrance Scholarships are entirely merit-based; financial need is not considered.
- Value ranges from $\$ 3,000$ to $\$ 12,000$.
- There are two types: the One-Year, where eligibility is based solely on academic achievement; and the renewable Major, based on academic achievement as well as leadership qualities in school and/or community activities.


### 1.8.1.1 Application Procedures

- One-Year Scholarships: by applying to McGill, all eligible applicants who meet the minimum academic requirements are automatically considered. No separate application is required. For more information, see mcgill.ca/studentaid/scholarships-aid/future-undergrads/entrance-scholarships/criteria.
- Major (renewable) Scholarships: candidates can apply on the web by the scholarship deadline dates after their application for admission has been submitted and they have received an email acknowledgment.
- You must ensure that you send in all required supporting documentation; please refer to mcgill.ca/studentaid/scholarships-aid/future-undergrads/entrance-scholarships/application-instructions.
- The Faculties of Dentistry, Law, Medicine and Health Sciences, and Music administer their own entrance award programs. Applicants should inquire at their respective faculty's admissions office regarding availability and procedures.
- If you hold a renewable scholarship from the Committee on Enrolment and Student Affairs, the scholarship is renewed only if you meet the McGill standards for renewal. See mcgill.ca/studentaid/scholarships-aid/regulations-responsibilities/regulations.


### 1.8.1.2 Need-Based Entrance Financial Aid

This program offers financial aid to students from families of modest means who require assistance to attend McGill. Upon acceptance to the University, first-year, undergraduate degree students can apply for an entrance bursary on Minerva. Entrance bursaries range in value and are determined by the level of need demonstrated by the student/family and the tuition fee rate charged based on student residency and program of study. Since financial need is the primary factor in the selection of aid recipients, applicants for this program are expected to apply for government student aid programs where eligible. For more information, see mcgill.ca/studentaid.

### 1.8.2 In-Course Awards for McGill Students

Faculty scholarships and awards are decided by the faculty scholarships committees. You should consult the appropriate section of the Undergraduate Scholarships and Awards Calendar for regulations and information concerning these awards at mcgill.ca/studentaid/scholarships-aid/current-undergrads.

- Most undergraduate scholarships and awards are granted on the basis of the combined GPA for the Fall and Winter terms (i.e., your sessional GPA), or a ranking in the top 1 to $5 \%$ of the faculty, subject to the faculty's budget. Applications are not required unless specifically indicated in the terms of an award.
- To be considered for in-course awards, you must complete at least 27 graded credits in the regular academic year unless otherwise stated by your Faculty. Courses completed under the Satisfactory/Unsatisfactory (S/U) option, and Summer courses, are not considered. Program content and number of credits may also be considered.
- Up to a maximum of 6 credits from courses taken at other Quebec universities through the Inter-University Transfer (IUT) agreement can be counted toward the requirements for scholarship renewal or for consideration for other academic awards. Eligibility is based on all courses taken during the regular academic year, on both the McGill GPA and the global GPA, which includes the IUT credits. Please consult mcgill.ca/students/iut.
- You should review all regulations regarding in-course awards by consulting mcgill.ca/studentaid/scholarships-aid/regulations-responsibilities/regulations.
- A maximum of the top $10 \%$ of students in each faculty are named to the Dean's Honour List. This designation is based on the combined GPA for the Fall and Winter terms (i.e., your sessional GPA) and the minimum required combined GPA is determined by each faculty. It is an official University recognition of your achievements and appears on your transcript. There is no monetary reward.
- All awards, with the exception of convocation prizes, are credited to students' tuition fee accounts for the following academic year. Students must be registered on a full-time basis to receive the funds.
- If you hold a renewable scholarship from the Committee on Enrolment and Student Affairs, it will only be renewed if you meet the McGill standards for renewal. See mcgill.ca/studentaid/scholarships-aid/regulations-responsibilities/regulations.


### 1.8.2.1 In-Course Financial Aid

The University offers an In-Course Financial Aid program to full-time undergraduate degree students on the basis of demonstrated financial need. This aid includes bursaries, short- and long-term loans, and a Work Study Program. To be considered for McGill financial aid, the University recommends that applicants apply for the maximum government student assistance for which they are eligible. The Scholarships and Student Aid Office oversees all provincial, federal, and U.S. student aid programs and disburses government funds.

Student Aid Counsellors are available for consultation on an individual basis to provide advice on budgeting and debt management, and to award financial assistance to needy and deserving students. For more information, see mcgill.ca/studentaid.

### 1.8.3 Work Study Program

The Work Study Program provides students with financial assistance through part-time employment on campus. Students are accepted into the program based primarily on financial need, though Academic Standing is also considered. There are a variety of Work Study positions available, ranging from clerical work in an administrative office to research with a professor. In addition to helping you cope with your financial obligations, Work Study also provides practical work experience that may enhance future employment opportunities.
Further information is available on McGill's Work Study website at mcgill.ca/studentaid/work-study and at the Scholarships and Student Aid Office:
William \& Mary Brown Student Services Building
3600 McTavish Street, Suite 3200
Montreal QC H3A 0G3
Canada
Email: work.study@mcgill.ca
Website: mcgill.ca/studentaid/work-study

### 1.8.3.1 Student Aid

Telephone: 514-398-6013
Email: student.aid@mcgill.ca
Website: mcgill.ca/studentaid

### 1.8.3.2 Scholarships

Telephone: 514-398-6013
Email: scholarships@mcgill.ca
Website: mcgill.ca/studentaid/scholarships-aid

### 1.9 Graduation

To graduate, you must complete faculty and program requirements in the program you were admitted to and registered in. It is your responsibility to meet all faculty and program requirements before graduation.
At the time of graduation from an undergraduate degree, you must be in Satisfactory Standing with a minimum CGPA of 2.00. Certain faculties may require a higher CGPA for graduation.
You should contact your advisor (graduate students should contact their department) early in the graduating year to make sure you will meet your program requirements by graduation time. For contact information on advisors, see mcgill.ca/students/advising/advisordirectory.
Once your record has been approved for graduation, your unofficial and official transcripts will indicate the notation "Degree Granted" after approval by the University Senate. At this point, your academic record is deemed as final and no further record changes may be requested at this time (e.g. grade changes).

- Fall term graduation (courses completed by the end of December; transcript will indicate "Degree Granted" in February after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of November.
- Winter term graduation (courses completed by the end of April; transcript will indicate "Degree Granted" in May after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of February.
- Summer term graduation (courses completed by the end of August; transcript will indicate "Degree Granted" in October after approval by the University Senate; diploma will be conferred at Fall convocation): You must apply on Minerva by mid-May.

For more information on applying to graduate, refer to the Apply to Graduate.

## Minimum Residency Requirement

The total number of McGill credits required to graduate is known as the minimum residency requirement. You must successfully complete a minimum of 60 McGill credits to obtain a McGill undergraduate degree. Some programs have specific requirements on the type of credits that must be completed at McGill. For example, two-thirds of all program requirements must be completed at McGill. For specific information refer to your faculty's section of this publication.

Students completing a second undergraduate degree at McGill must successfully complete a minimum of 60 McGill credits to obtain their degree. You should check with your Faculty advisor for any conditions applicable to the McGill credits required toward your degree.

Graduate students should refer to their faculty under Faculties \& Schools $>$ Graduate >Program Requirements for information on minimum residency requirements for graduate programs. This information is listed for each faculty, and you can also access it through the faculty's graduate pages.

## Note for Continuing Studies: Minimum Residency Requirement (Continuing Studies)

- You must successfully complete a minimum of 21 McGill credits (excluding prerequisites and corequisites) to obtain a McGill undergraduate certificate. For specific information refer to your department section of this publication.
- Students completing a second undergraduate certificate at McGill must successfully complete a minimum of 21 McGill credits (excluding prerequisites and corequisites) to obtain their certificate. You should check with your advisor for any conditions applicable to the McGill credits required toward your certificate.


### 1.9.1 Apply to Graduate

Most undergraduate students and non-thesis graduate students (master's, certificates, diplomas) must use Minerva to apply to graduate (go to Student Records > Apply for Graduation for Your Primary Curriculum). It is your responsibility to inform the University of your intention to graduate. You need a minimum residency requirement of 60 credits at McGill to qualify for a McGill undergraduate degree. For more information, see section 1.9: Graduation. The minimum CGPA required to graduate is 2.00 , and you must be in Satisfactory Standing.

The Application for Graduation is available on Minerva when you register for your final year (e.g., U3 or U4), except if you are in the Faculty of Medicine and Health Sciences or Faculty of Dental Medicine and Oral Health Sciences, where you are automatically flagged for graduation in your final year. For more information on how to apply on Minerva, go to mcgill.ca/graduation/applying.

Once you apply to graduate, you are authorizing the University to:

1. include your name and image in the McGill Convocation programs, web streamed convocation broadcast, and other convocation-related communications.
2. to have your ID, name, degree and ceremony provided to the academic regalia provider for the purposes of Convocation preparation.
3. to have your ID, name, email, degree and ceremony provided to the convocation photographer for the purposes of Convocation preparation.
4. to have your name, email, degree and confirmation of graduation sent to your professional order, if you are in a professional program (e.g. Engineering OIQ, Nursing OIIQ), for licensing or accreditation purposes.

If you want to opt out of your information being sent to any of the above (1, 2, 3, or 4), you must complete an Opposition Form by March 15 for Spring convocation, and September 15 for Fall convocation.

### 1.9.1.1 Deadlines

- Fall term graduation (courses completed by the end of December; transcript will indicate "Degree Granted" in February after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of November
- Winter term graduation (courses completed by the end of April; transcript will indicate "Degree Granted" in May after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of February.
- Summer term graduation (courses completed by the end of August; transcript will indicate "Degree Granted" in October after approval by the University Senate; diploma will be conferred at Fall convocation): You must apply on Minerva by mid-May

If you miss one of these deadlines, contact your faculty's Student Affairs Office immediately.
Note for the Faculties of Arts and Science (including B.A. \& Sc.): Requests are made at Service Point (3415 McTavish Street). However, it is important that you also meet with a Faculty advisor Arts OASIS or SOUSA to talk about your options and the effect that your request may have on your studies. For more information, see mcgill.ca/students/advising.

Note for Continuing Studies: The minimum residency requirement of 60 credits does not apply to the School of Continuing Studies certificates and diplomas.

Note for Graduate and Postdoctoral Studies: If you miss one of these deadlines, you must follow the procedures at mcgill.ca/gps/students/registration/graduating. The Application for Graduation is available on Minerva for students in non-thesis programs who have registered for their final year. To ensure that you have met the requirements for graduation, you should refer to Program Requirements > Master's Degrees, found under each faculty's Graduate section in the McGill eCalendar. Students in a doctoral program should refer to Regulations Concerning Theses.

Note for Physical and Occupational Therapy: You must be in Satisfactory Standing with a minimum CGPA of 2.30 to graduate.

### 1.9.2 Graduation Approval Query

As a graduating student, you can view the status of your graduation record on Minerva during the Faculty review and approval process (go to Student Records > Graduation Approval Query). The Graduation Approval Query form becomes available to graduating students in early January for Fall term graduation, in early April for Winter term graduation and in early September for Summer term graduation.
If you meet all requirements for graduation, your graduation record will indicate Faculty Approved on the Graduation Approval Query, and your transcript on Minerva will display the Degree Granted notation after the approval of degrees by University Senate and according to this schedule:

- Late February, for Fall term graduation (Courses completed by the end of December, Convocation in Spring)
- Late May, for Winter term graduation (Courses completed by the end of April, Convocation in Spring)
- Late October, for Summer term graduation (Courses completed by the end of August, Convocation in Fall)

See mcgill.ca/graduation/convocation for information regarding convocation ceremonies.
Note for Medicine and Dentistry: The Application for Graduation is available on Minerva when you register for your final year (e.g., U3 or U4), except if you are in the Faculty of Medicine and Health Sciences or Faculty of Dental Medicine and Oral Health Sciences, where you are automatically flagged for graduation in your final year.

### 1.9.3 Graduation Honours

The following sections describe honours that may be conferred at graduation.

### 1.9.3.1 Dean's Honour List

If you are graduating with an undergraduate degree, you may be awarded the designation Dean's Honour List under the following conditions:

1. you have completed a minimum of 60 McGill credits toward your degree; and
2. you are in the top $10 \%$ of your faculty's graduating class; this calculation is based on the CGPA.

Note for transfer students: This designation may be withdrawn if your CGPA at another university or in another faculty at McGill is not comparable to the CGPA earned in your graduating faculty.

### 1.9.3.2 Distinction

If you are graduating with an undergraduate degree, you may be awarded the designation Distinction under the following conditions:

1. you have completed a minimum of 60 McGill credits toward your degree; and
2. you are in the top $25 \%$, but below the top $10 \%$, of your faculty's graduating class; this calculation is based on the CGPA.

Note for transfer students: This designation may be withdrawn if your CGPA at another university or in another faculty at McGill is not comparable to the CGPA earned in your graduating faculty.

Note: The Faculties of Education, Dental Medicine and Oral Health Sciences, Law, Medicine and Health Sciences, and the School of Continuing Studies do not assign the designation of Distinction to graduating students.

Note: The designation of Great Distinction is no longer awarded at graduation. Prior to September 2009, Distinction and Great Distinction were awarded at graduation according to faculty-specific regulations. You can find these rules in the faculty chapters of the 2008-2009 Undergraduate Programs Calendar or any earlier version at mcgill.ca/students/courses/calendars.

### 1.9.3.3 Faculty of Science Dean's Multidisciplinary Undergraduate Research List

The Faculty of Science Dean's Multidisciplinary Undergraduate Research List recognizes Bachelor of Science (B.Sc.) and Bachelor of Arts and Science (B.A. \& Sc.) students who have participated in substantial and broad undergraduate science research. To be placed on the Faculty of Science Dean's Multidisciplinary Undergraduate Research List at graduation time, you must have completed at least 9 credits of research-based courses, taken for a letter grade; where qualifying courses are either specified in the list of approved science research courses (see
mcgill.ca/science/research/undergraduate-research/researchcourses) or are pre-approved by the Faculty of Science, for other undergraduate science research courses.

Furthermore, considering all qualifying science research-based courses on your transcript at graduation time:

- at least one course, worth at least 3 credits, must be from a different unit than the other research-based courses; and
- every qualifying course must have been completed with a grade of C or above; and
- the average GPA over all qualifying courses must be 3.0 or above.

NOTE: Exceptionally, courses taken in Winter 2020, Summer 2020, Fall 2020, and Winter 2021 with grade of S (Satisfactory) will count as qualifying courses, and will count toward the 9 -credit requirement, even though they will not be counted in GPA calculations.

If these requirements are met, the mention "Dean's Multidisciplinary Undergraduate Research List" will be recorded on your transcript at graduation time.

## Application

No application is necessary if you have taken courses from the approved list; all B.Sc. and B.A. \& Sc. graduating students' records are considered by the Faculty of Science.
In exceptional circumstances, if you have taken a science research course not already on the approved list and wish for this course to be counted toward the Dean's Multidisciplinary Undergraduate Research List, you must apply. A qualifying course involves a science research project as its primary focus, culminating in a substantive written report. Ineligible courses include reading courses; BASC 396 and BASC 449; and courses offered by the Faculty of Arts. For information on how to apply, please contact your advisor in the Science Office for Undergraduate Science Advising at least four months prior to graduation (e.g., February 1, for June graduation; July 1, for November graduation; August 1, for February graduation).

### 1.9.3.4 Honours and First-Class Honours for Faculties of Arts and Science (including B.A. \& Sc.)

As a graduating student registered in an Honours program, you may be recommended for Honours or First-Class Honours by your department(s) to the Faculty, under the following conditions only:

- you must complete all requirements imposed by the department
- for Honours, the CGPA at graduation must be at least 3.00
- for First-Class Honours, the CGPA at graduation must be 3.50 or better
- students in a Joint Honours program must satisfy the above criteria for both Joint Honours components
- some departments have additional requirements which must be met before you are recommended for Honours or First-Class Honours (please consult the relevant department)

Students in an Honours program whose program GPA or CGPA is below 3.00, or who did not satisfy certain additional program requirements, must consult their advisor to determine if they are eligible to graduate in a program other than Honours.

### 1.9.3.5 Honours and First Class Honours for Faculty of Agricultural and Environmental Sciences

Departments may recommend to the Faculty that graduating students registered in an honours program be awarded Honours or First-Class Honours under the following conditions:

- you must complete all honours program requirements; for Honours, the CGPA at graduation must be at least 3.00;
- for First-Class Honours, the CGPA at graduation must be at least 3.50;
- some programs may impose additional requirements, which must be met before you are recommended for Honours or First-Class Honours.

Students in an honours program whose CGPA is below 3.00, or who did not satisfy certain program requirements, must consult their academic advisor to determine their eligibility to graduate in a program other than Honours.

### 1.9.4 Replacing a Diploma

### 1.9.4.1 Required Documents

Diplomas are normally distributed to new graduates at their Convocation ceremony, in either May or October/November. Diplomas are not available prior to the Convocation date.

## Replacing a lost diploma

To replace a lost diploma, you must submit an order and pay for its replacement and delivery by courier using the ES Services eStore.

## Requesting a diploma following your Convocation ceremony

If you did not attend your Convocation ceremony and need your diploma, you can submit an order and pay for its delivery by courier using the ES Services eStore or contact Service Point for an appointment to pick up your diploma.

## Modifying the name on your diploma

If you have changed your name after graduation and need to obtain a replacement diploma with your new name, first follow the steps to request a name change by completing and signing a Personal Data Change Form and submitting the section 1.2.5: required supporting documentation. Once you have
received confirmation that your McGill record reflects the updated name, submit a request for a replacement diploma and pay the fee for replacement and delivery via courier using the ES Services eStore.

### 1.9.4.2 Submitting Your Request

You can submit a request and pay for a replacement diploma and delivery via the ES Services eStore.

### 1.9.4.3 Certified Copies

Enrolment Services will certify copies of your diploma in the original language or issue certified translations in English (from the original Latin) or French (from the original English or Latin).

## Submitting your request for a certified copy

You can submit your request and pay the requisite fee via the ES Services eStore.

### 1.9.5 Aegrotat Standing and Degree at McGill University

In rare cases where a student, based on serious medical or similar evidence, is unable to complete their program requirements within a reasonable time, or at all, they may be awarded their degree with Aegrotat Standing.
At McGill, this designation may be considered if a student has completed $75 \%$ or more of their degree program requirements and based on a serious medical situation or other extenuating circumstance is unable to complete their program. If approved, this could result in the awarding of an aegrotat degree. An aegrotat indicator of " Y " at graduation signifies that a student was awarded such a degree. An aegrotat degree is awarded only to students in Satisfactory Standing who have been unable to complete their degree due to special circumstances toward the end of their program. Information on this degree designation is only included in the convocation program, and not on the transcript.

A degree with Aegrotat standing is rarely granted at McGill University. A formal request must be submitted to the Dean of the student's faculty and the Deputy Provost, Student Life and Learning, to approve granting such a degree.

### 1.10 Admission to Professional and Graduate Studies

If you intend to proceed into Dentistry, Law, or Medicine, consult the faculties concerned about their prerequisites for admission.

### 1.10.1 Language Requirements for Professions

Quebec law requires that candidates seeking admission to provincially recognized professional corporations* must be able to communicate verbally and in writing in French. To demonstrate a working knowledge of French, the professional corporation requires one of the following:

- Evidence that you have completed three years of full-time instruction in a French post-primary school
- A certificate that shows you completed your secondary education in Quebec in 1986 or later
- Successful completion of a written examination set by Quebec's Office québécois de la langue française (OQLF). See below for more information.

If you are a registered student and are within two years of graduating with a degree that will give you access to a professional corporation, you can write the OQLF examination. You should contact Enrolment Services for an application form. Examinations take place every three months and may be attempted an unlimited number of times. Priority is given to students closest to graduation.
More information may be obtained from the Office québécois de la langue française, 125 Sherbrooke Street West, Montreal, Quebec, H2X 1X4. Telephone: 514-873-6565. Website: www.oqlf.gouv.qc.ca.
If you need to acquire a functional level of proficiency in French, you can take courses from either the French Language Centre (Faculty of Arts mcgill.ca/flc) or the School of Continuing Studies, 688 Sherbrooke Street West, telephone: 514-398-6200 (mcgill.ca/continuingstudies/oqlf-french-exam-preparation-course).
If you are already strong in French and want to maintain or improve your proficiency, you may consider taking courses in the Department of French Language and Literature, Faculty of Arts, or the School of Continuing Studies.

Note: You cannot apply non-credit language courses, and certain credit language courses, completed at the School of Continuing Studies to program/degree requirements. Consult your faculty for clarification.

* McGill degrees and diplomas currently give access to corporations regulating the activities of the following professional groups:


## Professional Groups

| Agrologists | Lawyers |
| :--- | :--- |
| Architects | Licensed General Accountants |
| Chartered Accountants | Nurse Clinicians |
| Chartered Appraisers | Occupational Therapists |

## Professional Groups

Chemists

## Physicians

Dentists
Dietitians
Physiotherapists
Psychologists
Social Workers
Speech Therapists and Audiologists
Urbanists
Vocational Guidance Counsellors

### 1.10.2 Graduate Programs

McGill University offers over 250 Doctoral and Master's degree programs in more than 85 fields of study. We award degrees in a full range of academic disciplines, and are committed to providing you with an excellent graduate education and a rewarding student experience.

Please see mcgill.ca/gradapplicants to learn about graduate programs, research, admission requirements, and funding opportunities. You can also view the Graduate sections of a faculty or school at Faculties \& Schools $>$ Graduate .

### 1.11 Undergraduate Advising

McGill offers students access to a variety of advisors, mentors, and counsellors with different skills, expertise, and levels of authority. To help determine whether you need to speak to a faculty advisor, departmental/school advisor, professor/lecturer, or peer advisor, see section 1.11.1.6: The Role of Student Advising and section 1.11.2: Types of Advising and Advisors.

### 1.11.1 Your Academic Career at McGill

### 1.11.1.1 University-Wide Regulations

This publication contains the regulations about your undergraduate academic career at McGill. It includes regulations concerning when to register, when to add, drop, or withdraw from courses, the consequences of missing deadlines, how grading appears on your transcript, and other important information.

### 1.11.1.2 Faculty-Specific Regulations

McGill has 12 faculties, and every student belongs to one of them. When you are admitted to McGill, your offer letter indicates the faculty, degree, and program to which you have been accepted, and the number of credits you need to complete for your degree.
You should consult the appropriate faculty section in this publication for information pertinent to your degree and program, and for faculty-specific regulations.

### 1.11.1.3 Your Academic Program

You are registered in a degree, but for many degrees there are associated programs (a major, minor, major concentration, etc.). For some degrees, such as Bachelor of Engineering, you will typically follow one program (such as Computer Engineering). For others, such as Bachelor of Arts, you will typically follow more than one program (such as a major concentration in English, with a minor concentration in History).
A typical undergraduate degree at McGill is 120-140 credits (four years of full-time study).

- Quebec CEGEP students typically receive 30 credits of Advanced Standing, so they will usually only have a further 90-110 credits (three years of full-time study) to complete. This varies by faculty, so consult your faculty section. In your first year, you will be placed in U1 (undergraduate year 1).
- Most other students typically have 120-140 credits to complete. This varies by faculty, so consult your faculty section. In your first year, you will be placed in U0 (undergraduate year 0), which is often referred to as your Freshman /Foundation year.
- Many students at McGill come with other forms of Advanced Standing (International Baccalaureate, French Baccalaureate, advanced placement exams, or students admitted from other universities as transfer students). If this is your case, you will receive information during the admissions process.

Note: Students given Advanced Standing who nevertheless wish to complete 120 McGill credits may be allowed to do so; for full details, see section 1.5.6.1: Advanced Standing Transfer Credits.

You will find program requirements in your faculty section or in departmental sections within a faculty. In some cases, you may pursue one of your programs in a department outside your faculty. For example, if you are enrolled in a Bachelor of Commerce, but are pursuing a minor concentration in Italian Civilization, you would consult the Desautels Faculty of Management section for the B.Com. requirements, and the Italian Studies department section, under the Faculty of Arts, for the Italian Civilization program requirements.

### 1.11.1.4 Important things to know about your academic program:

- The number of credits needed to complete your academic program or programs and, ultimately, your degree. Typically, three credits correspond to a one-term course, but there are many variations; for more information, see section 1.5.2: Credit System.
- For information about required, complementary, and elective courses, see section 1.3.2.3: Course Terminology and section 1.3.2.5: Courses Taken under the Satisfactory/Unsatisfactory (S/U) Option.
- Some departments or programs may provide you with a recommended list of courses (or streams), so that you know the typical term-by-term course pattern. There may also be a program guide or handbook available; you can ask your departmental or program advisor about this.

For more assistance in understanding program requirements, and for a list of advisors on both Downtown and Macdonald campuses, see section
1.11: Undergraduate Advising.

### 1.11.1.5 Advising and the University Mission

The Mission Statement of the University expresses the commitment to offer students the best education available. An essential component of this is the advising process. Academic advising takes place in many ways and locations at McGill, so it is important that you learn about the different section 1.11.2: Types of Advising and Advisors and how they can help you reach your goals. You should also consult the advising information provided on your Faculty's website ( section 1.11.3: Contact Information for Faculty \& School Student Affairs Offices) and on the Academic Advising website.

### 1.11.1.6 The Role of Student Advising

Your active participation in the advising process is essential for accessing the full range of academic opportunities during your studies. You must be proactive in seeking meetings with various academic advisors, professors, and related administrative units to ensure that you receive the advice you need to formulate a personal plan of study and to meet your academic goals. While advisors are there to provide you with guidance, you are ultimately responsible for meeting your degree or diploma requirements. It is your responsibility to learn the rules and regulations of the University, your faculty, and your program. With your collaboration, your academic advisors can assist you throughout your undergraduate studies.

### 1.11.2 Types of Advising and Advisors

While at McGill, you have access to academic advisors who have different skills, expertise, and levels of authority. Your academic advisors can help you succeed academically by providing timely, accurate, and coherent information about University regulations and program requirements and by working, as appropriate, with other University services and resources to help support you throughout your degree. All conversations with your academic advisors are confidential. The main types of advisors are described below. You should refer to your faculty's section of this publication for additional advising information specific to your degree program and to the Advising website for more general information. Note that some academic matters require approval of more than one advisor, e.g., the faculty advisor and the department/school academic advisor.

Faculty Advisors are normally located in the Student Affairs Office of each faculty and are available throughout the calendar year (section 1.11.3: Contact Information for Faculty \& School Student Affairs Offices).
Faculty advisors:

- are experts in the rules, regulations, and requirements pertaining to specific degree programs;
- provide ongoing advice and guidance on program selection, course registration, credit load, deadlines, and majors and minors;
- communicate with other advisors within the University and, with your permission, serve as a direct link to other University resources;
- may assist you in planning for, and applying to, university exchange programs and may also provide, or direct you to, information about scholarships, awards, research fellowships, and opportunities within a given field;
- are a valuable source of information about the various resources available at McGill;
- offer support, guidance, and appropriate referrals to help you manage academic situations during periods of personal, financial, or medical difficulties, and work with you to identify various possibilities and strategies for making informed decisions.

Department/School Academic Advisors are normally located close to the offices of professors in your program and may only be available during specific times of the year (e.g., prior to registration for the next session or during the add/drop period) or during regularly scheduled office hours. If you are completing a major or minor in more than one unit, you will likely have an advisor in each unit. The departmental academic advisor may be either a professor or a member of the administrative staff. You should contact your department's administrative office to determine the identity and availability of your academic advisor. You should check your progress with your departmental academic advisor from time to time-and certainly before your final year.
Departmental academic advisors:

- guide you through course selection to meet the subject matter requirements of the major or minor;
- consider requests for course equivalencies, recommend prior approval for inter-university transfer credits, or explain the rationale for the design of a department/school program;
- may assist you in planning for, and applying to, university exchange programs, and may also provide, or direct you to, information about scholarships, awards, research fellowships, and opportunities within a given field;
- are a valuable source of information about the various resources available at McGill;
- can provide support, guidance, and appropriate referrals if you experience academic or personal difficulties while studying at McGill;
- are often responsible for confirming that you have met major or minor program requirements for graduation.

Professors/Lecturers may act in a voluntary capacity to mentor you as you progress through your program. The faculty advisor or department/school academic advisor may be able to help you identify a good resource person in your program.

Professors/lecturers:

- may provide advice on the latest trends in a specific field of study and make recommendations on related advanced readings;
- may discuss opportunities for a student research experience and help you connect with a professor or lecturer who best suits your interests or learning style;
- refer you back to the faculty advisor or departmental academic advisor for signatures and permission related to program requirements.

Peer Advisors are students who have been trained by faculty advisors or department/school academic advisors. They normally offer drop-in hours for advice on University life and will help you find the information you need in this publication or through other University resources. Peer advisors are only available in some faculties or departments.

### 1.11.2.1 Related Resources

For a full list of services available to undergraduate students, please refer to section 1.13.3: Student Services - Downtown Campus and section 1.13.4: Student Services - Macdonald Campus.
Ask an Advisor (mcgill.ca/students/advising) is an advising and referral resource for undergraduate students in all faculties. If you don't know who to contact with your advising questions or what your next step should be, Ask an Advisor can help by sending you to the right person or place the first time.
Campus Life \& Engagement (CL\&E) (Brown Student Services Building; mcgill.ca/cle) can help new students navigate their way through this publication and the information provided to new students; see mcgill.ca/accepted and mcgill.ca/getready. The CL\&E staff are always available to provide advice and referrals to the many support mechanisms at McGill.

The Student Wellness Hub (Brown Student Services Building; mcgill.ca/wellness-hub) has professional counsellors, social workers, and psychologists who are available to discuss personal, academic, and career goals or problems. They provide individual counselling, therapy, psychoeducational workshops, and crisis intervention. Drop-in services are available. Additionally, Local Wellness Advisors can be accessed throughout faculties and services across campus, and they offer support, information, and resources tailored to each faculty and/or student population. Visit mcgill.ca/wellness-hub/about-hub/clinicians/local-wellness-advisors to find the right advisor for you.
Career Planning Service (CaPS) (Brown Student Services Building; mcgill.ca/caps) provides career education, guidance, and individual advising to help you in your search for permanent, part-time, or summer jobs and internships.
Service Point (3415 McTavish Street, Montreal QC H3A 0C8; 514-398-7878; mcgill.ca/servicepoint) is the student-facing customer-service arm of Enrolment Services, which provides administrative services and assistance related to official documents, student records, tuition and fees, and student exchanges.

On the Macdonald Campus, information is provided by the Student Affairs Office, Laird Hall, Room 106; mcgill.ca/macdonald.
Note for Medicine: The Faculty of Medicine and Health Sciences' WELL Office also provides services to M.D.,C.M. students, including career planning advising offered by the Faculty's Undergraduate Career Planning Office.

### 1.11.3 Contact Information for Faculty \& School Student Affairs Offices

The following contact information is for faculty-level student affairs offices. For student affairs/advising information for a specific department within a faculty, please refer to mcgill.ca/faculties.

## Faculty of Agricultural and Environmental Sciences, incl. School of Human Nutrition

Telephone: 514-398-7925
Email: studentinfo.macdonald@mcgill.ca
Website: mcgill.ca/macdonald/studentinfo/sao

## Faculty of Arts, incl. Schools of Information Studies, Public Policy, Religious Studies, and Social Work

Office of Advising and Student Information Services (OASIS)
Dawson Hall, Room 110
To book an appointment, to submit an enquiry, or for office hours: mcgill.ca/oasis
Students in U1 or above should also see the contact information for departmental academic advisors at mcgill.ca/oasis/advising/departmental-advising-information.

## Faculty of Dental Medicine and Oral Health Sciences

2001 McGill College Avenue
Telephone: 514-398-7203

## Faculty of Dental Medicine and Oral Health Sciences

Email: undergrad.dentistry@mcgill.ca
Website: mcgill.ca/dentistry

## Faculty of Education

Internships \& Student Affairs Office (ISA)
Telephone: 514-398-7042 (for student affairs)
Telephone: 514-398-7046 (for internships)
Email: isa.education@mcgill.ca
Website: mcgill.ca/isa

## Faculty of Engineering, incl. Schools of Architecture and Urban Planning

McGill Engineering Student Centre (Student Affairs Office, Career Centre, and Peer Tutoring Service):Telephone: 514-398-7257
Email: advisor.engineering@mcgill.ca
Website: mcgill.ca/engineering/students/undergraduate/mesc/sao
Note: You are required to meet with an academic advisor before the start of classes. If you are admitted to Year 0 and you are seeking transfer credits, you are initially advised by the Student Affairs Office, Engineering Student Centre, followed by advising in your department. If you are admitted to Year 0 and you are not seeking transfer credits, or if you are admitted to Year 1 , you should contact the department/school directly.

## Bieler School of Environment

Telephone: 514-398-4306
Email: kathryn.roulet@mcgill.ca
Website: mcgill.ca/environment/contact

## Faculty of Law

Telephone: 514-398-6608
Email: sao.law@mcgill.ca
Website: mcgill.ca/law-studies/law-student-affairs-office

## Desautels Faculty of Management

Telephone: 514-398-4068
Email: bcom.mgmt@mcgill.ca
Website: mcgill.ca/desautels/programs/bcom

## Faculty of Medicine and Health Sciences

For academic inquiries:
Telephone: 514-398-5557
Email: undergrad.med@mcgill.ca
Website: mcgill.ca/ugme/people
For personal inquiries:
The WELL Office
Telephone: 514-398-5836
Email: thewelloffice@mcgill.ca
Website: mcgill.ca/thewelloffice

## Ingram School of Nursing

Undergraduate Nursing Student Affairs Office (UG-NSAO)
Telephone: 514-398-4159 or 514-398-3784
Email: undergraduate.nursing@mcgill.ca or student-affairs-officer.nursing@mcgill.ca
Website: mcgill.ca/nursing/students

## School of Physical \& Occupational Therapy

Telephone: 514-398-4500
Email: undergrad.spot@mcgill.ca
Website: mcgill.ca/spot/about/contact-us

## Schulich School of Music

Telephone: 514-398-4541
Email: studentaffairs.music@mcgill.ca
Website: mcgill.ca/music/resources/undergraduate

## Faculty of Science, incl. School of Computer Science

Science Office for Undergraduate Student Advising (SOUSA)
Telephone: 514-398-5442
Email: newstudentadvising.science@mcgill.ca for newly admitted students only
Email: advisor.science@mcgill.ca
Website: mcgill.ca/science/undergraduate
Students in U1 or above should also see the contact information for departmental academic advisors at mcgill.ca/science/undergraduate/advice/program-advisors.

### 1.11.4 Contact Information for Departments, Schools, and Programs

Please refer to mcgill.ca/faculties to view websites and contact information for a faculty's specific department, school, or program representatives.

### 1.11.5 Prospective Students

For information about opportunities for undergraduates at McGill, please visit the Undergraduate Admissions website.

### 1.11.5.1 Student-for-a-Day Program

If you visit our Downtown Campus in October/November (Fall term) or February/March (Winter term), you can choose to sit in on a class that is open to visitors and experience McGill from a student's perspective.

For details and a list of available courses, please contact the Welcome Centre (514-398-6555; welcome@mcgill.ca). Tours of the Downtown Campus can be booked through mcgill.ca/undergraduate-admissions/visits/campus-tours.

If you visit our Macdonald Campus, you can participate in Student-for-a-Day to have the Macdonald experience. For further information, please contact the Macdonald Campus Student Affairs Office (514-398-7925; studentinfo.macdonald@mcgill.ca). Tours can be booked directly at future.mcgill.ca/portal/mac_visits and include campus tours, meeting academic advisors, and visiting residences.

### 1.12 <br> Service Point

Service Point has brought together newly integrated, front-line undergraduate and graduate student administrative services. Located on the ground floor of the McLennan Library Building in the heart of the Downtown Campus, Service Point will address a wide variety of students' needs.

Some of the many services offered at Service Point for undergraduate and graduate students:

- certified or translated copies of diplomas
- degree verification
- help with admissions
- help with Minerva
- international health insurance cards and exemptions
- McGill ID cards
- official transcript pick-up
- replacement diplomas
- student exchanges/study abroad
- submitting legal documents
- tuition and fees information
- pick-up of alternative U.S. Loans

Arts or Science students will also be able to inquire about:

- course and program registration
- exams (including deferred and supplemental)

For a complete list of student services and resources at McGill, see mcgill.ca/studentservices/.
For more information about Service Point, see mcgill.ca/servicepoint.

### 1.12.1 Location

3415 McTavish Street (at Sherbrooke)
Montreal QC H3A 0C8
Telephone: 514-398-7878
Opening hours: please refer to mcgill.ca/servicepoint
Email: please refer to mcgill.ca/servicepoint/contact

### 1.13 <br> Student Services

McGill offers a full range of student services and resources that support your life, learning, personal, and academic achievements.

### 1.13.1 Office of the Executive Director, Services for Students

William and Mary Brown Student Services Building
3600 McTavish Street, Suite 4100
Montreal QC H3A 0G3
For information, contact:
Telephone: 514-398-8238
Website: mcgill.ca/studentservices
The Executive Director, Services for Students (EDSS), coordinates all student services at McGill to help promote student success and well-being. The EDSS is available to provide assistance and/or information on almost all aspects of non-academic student life. Concerns of an academic nature are directed to the proper individual, office, or department.

### 1.13.2 Support for Students: Office of the Dean of Students

The Dean and the Associate Dean of Students coordinate and promote initiatives concerned with important aspects of the student experience, such as advising, academic integrity, student discipline, student recognition programs, and outreach to families, the McGill community, and the broader local community.

William and Mary Brown Student Services Building
3600 McTavish Street, Suite 2100
Montreal QC H3A 0G3
For information, contact (Dean/Associate Dean):
Telephone: 514-398-4990

Email: deanofstudents@mcgill.ca
Website: mcgill.ca/deanofstudents

### 1.13.3 Student Services - Downtown Campus

Unless otherwise indicated, all Student Services on the Downtown Campus are located in the William and Mary Brown Student Services Building:
Brown Student Services Building, Suite 4100
3600 McTavish Street
Montreal QC H3A 0G3
Email: student.services@mcgill.ca
General Information: 514-398-8238
Website: mcgill.ca/studentservices

A list of services available is given below. For further information, see the Student Services website. This list also includes services offered by McGill offices external to the Student Services office.

- section 1.13.3.1: Campus Life \& Engagement (CL\&E)
- section 1.13.3.2: Career Planning Service (CaPS)
- section 1.13.3.3: First Peoples' House
- section 1.13.3.4: International Student Services (ISS)
- section 1.13.3.5: Office of Religious and Spiritual Life (MORSL)
- section 1.13.3.6: Office for Sexual Violence Response, Support, and Education
- section 1.13.3.7: Student Accessibility \& Achievement
- section 1.13.3.8: Office of Sustainability
- section 1.13.3.9: Scholarships and Student Aid Office
- section 1.13.3.10: Student Wellness Hub


### 1.13.3.1 Campus Life \& Engagement (CL\&E)

Supports all students, new and returning, and connects them to resources and opportunities that will enhance their student experience.
Brown Student Services Building
3600 McTavish Street, Suite 4100
Telephone: 514-398-6913
Email: cle@mcgill.ca
Website: mcgill.ca/cle

## Incoming first-year students:

Email: firstyear@mcgill.ca
Website: mcgill.ca/getready

### 1.13.3.2 Career Planning Service (CaPS)

Provides career education, industry events, advising, mentoring, workshops and a comprehensive job posting system (myFuture) to help you find permanent/part-time/summer jobs and internships, explore your career or graduate education options, and build your network.

> Brown Student Services Building, East Wing, Suite 2200
> Service also available at Macdonald Campus, in Centennial Centre, Room 124. Please mention campus location when booking your appointment.
> Telephone: 514-398-3304
> Email: careers.caps@mcgill.ca
> Website: mcgill.ca/caps
> myFuture: caps.myfuture.mcgill.ca

### 1.13.3.3 First Peoples' House

McGill's First Peoples' House provides a sense of community and a voice to Indigenous students who have left their home communities in order to pursue higher education. Services and supports address academic, cultural and community needs. All Indigenous students including Métis, the Inuit, \& First Nations (both "status" \& "non-status"), Maori and Aborigines are welcome.

A McGill ID card is not required for access to services.

First Peoples' House at McGill
3505 Peel Street
Telephone: 514-398-3217
Email: firstpeopleshouse@mcgill.ca
Website: mcgill.calfph

### 1.13.3.4 International Student Services (ISS)

Offers support to international students; orientation and transition programs; and immigration and health insurance information.
Brown Student Services Building, East Wing, Suite 5100
Service also available at Macdonald Campus, in Centennial Centre, Room 124. Please mention campus location when booking your appointment.
Telephone: 514-398-4349
myISS Request for Information Form can be submitted at mcgill.ca/internationalstudents/myiss
International Health Insurance email: international.health@mcgill.ca
Website: mcgill.ca/internationalstudents

### 1.13.3.5 Office of Religious and Spiritual Life (MORSL)

Connects students from various religious backgrounds with their on-campus communities and faith liaisons. Provides students with space and resources to explore spirituality, and educates students on how to thrive in a pluralistic society.

```
3610 McTavish Street, 3 }\mp@subsup{}{}{\mathrm{ rd floor, Room 36-2}
Telephone: 514-398-4104
Email:morsl@mcgill.ca
Website: mcgill.ca/morsl
```


### 1.13.3.6 Office for Sexual Violence Response, Support, and Education

Confidential, non-judgmental, and non-directional support for students, faculty, and staff of all genders impacted by sexual and gender-based violence. Services offered in both French and English.

```
550 Sherbrooke W., Suite 585 (West Tower)
Telephone: 514-398-3786; 514-398-4486
Email: svoffice@mcgill.ca
Website: mcgill.ca/osvrse
```


### 1.13.3.7 Student Accessibility \& Achievement

Student Accessibility \& Achievement provides learning assessment, support services, and reasonable accommodations to undergraduate, graduate, and postdoctoral students with documented disabilities, mental health issues, chronic illnesses, or other impairments, whether they be temporary, permanent, or episodic.

Main Office - Downtown
1010 Sherbrooke St. West Suite 410
Service also available at Macdonald Campus, in Centennial Centre, Room 124. Please mention campus location when booking your appointment.
Telephone: 514-398-6009
Email: access.achieve@mcgill.ca
Website: mcgill.ca/access-achieve/contact-us
Exam Centre
Redpath Library Building,
3459 McTavish St., Suite RS-56
Telephone: 514-398-2480
Email: access.exams@mcgill.ca
Website: mcgill.ca/access-achieve
Macdonald Campus
Centennial Centre, Room 124
Telephone: 514-398-7992
Website: mcgill.ca/osd

### 1.13.3.8 Office of Sustainability

Supports McGill's goal to become an institutional model of sustainability for society. Whether you have a project in mind, or just a lot of questions, there are many ways for you to get involved with sustainability at McGill.

Sherbrooke 1010 Building, Suite 1200
Telephone: 514-398-2268
Email: sustainability@mcgill.ca
Website: mcgill.ca/sustainability

### 1.13.3.9 Scholarships and Student Aid Office

Provides assistance in the form of bursaries, loans, and Work Study programs to students requiring financial aid; administers government aid programs; and promotes financial wellness through tools and workshops.

```
Brown Student Services Building, East Wing, Suite 3200
Service also available at Macdonald Campus, in Centennial Centre, Room 124. Please mention campus location when booking your appointment.
Telephone: 514-398-6013
Student Aid email: student.aid@mcgill.ca
Scholarships email: scholarships@mcgill.ca
Website: mcgill.ca/studentaid
```


### 1.13.3.10 Student Wellness Hub

The Student Wellness Hub provides physical and mental health and wellness resources in one space to all McGill students who pay the Student Services fee. Access doctors, nurses, counsellors, access advisors, dietitians, psychiatrists (by referral only), sexologists, and lab technicians; as well as information, support, and programming through the Healthy Living Annex.
Downtown Campus
Brown Student Services Building, 3rd floor
Service also available at Macdonald Campus, in Centennial Centre, Room 124. Please mention campus location when booking your appointment.
Telephone: 514-398-6017
Email: hub.clinic@mcgill.ca
Website: mcgill.ca/wellness-hub
Macdonald Campus
Centennial Centre, Room 124
Telephone: 514-398-7992
Website: mcgill.ca/macdonald-studentservices/health-wellness

### 1.13.4 Student Services - Macdonald Campus

Students who study on the Macdonald campus may make full use of all Student Services on both campuses. A complete list of Student Services can be found at mcgill.ca/studentservices/services. All Student Services at Macdonald Campus are located in the Centennial Centre, unless otherwise noted:

```
Centennial Centre, Room 124
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Telephone: 514-398-7992
Email: stuserv.macdonald@mcgill.ca
Website: mcgill.ca/macdonald-studentservices
```

A list of services available is given below. For detailed information, please visit our website and the main Student Services website.

- section 1.13.4.1: Career Planning Service (CaPS)
- section 1.13.4.2: International Student Services (ISS)
- section 1.13.4.3: Student Accessibility \& Achievement
- section 1.13.4.4: Student Wellness Hub
- section 1.13.4.5: Scholarships and Student Aid
- section 1.13.4.6: Other Services


### 1.13.4.1 Career Planning Service (CaPS)

Provides career education, industry events, advising, mentoring, workshops, and a comprehensive job posting system (myFuture) to help you find permanent/part-time/summer jobs and internships, explore your career or graduate education options, and build your network.

Telephone: 514-398-3304
Email: careers.caps@mcgill.ca
Website: mcgill.ca/caps
myFuture: caps.myfuture.mcgill.ca

### 1.13.4.2 International Student Services (ISS)

Offers support to international students; orientation and transition programs, and immigration and health insurance information.
Telephone: 514-398-4349
Website: mcgill.ca/internationalstudents

### 1.13.4.3 Student Accessibility \& Achievement

Student Accessibility \& Achievement provides learning assessment, support services and programs, and reasonable accommodations to undergraduate, graduate, and postdoctoral students with documented disabilities, mental health issues, chronic illnesses, or other impairments, whether they be temporary, permanent, or episodic.
Appointments can be arranged with an Access Services Advisor at Macdonald Campus.
Macdonald Campus
Telephone: 514-398-7992 (Mac)
Website: mcgill.ca/access-achieve/
Main Office - Downtown
1010 Sherbrooke St. W., Suite 410
Telephone: 514-398-6009
Email: access.achieve@mcgill.ca

### 1.13.4.4 Student Wellness Hub

The Student Wellness Hub provides physical and mental health and wellness resources to all McGill students who pay the Student Services fee. Access doctors, nurses, counsellors, access advisors, local wellness advisors, dietitians, psychiatrists (by referral only), sexologists, and lab technicians. In addition, information, support, and programming are available through the Student Wellness Hub's Healthy Living Annex.

```
Macdonald Campus Clinic
Centennial Centre, room 124
Telephone: 514-398-6017
Website: mcgill.ca/wellness-hub
Downtown Campus
Brown Student Services Building, 3rd floor
Telephone: 514-398-6017
Email: hub.clinic@mcgill.ca
Website: mcgill.ca/wellness-hub/
```


### 1.13.4.5 Scholarships and Student Aid

Provides assistance in the form of bursaries, loans, and Work Study programs to students requiring financial aid; administers government aid programs; and promotes financial wellness through tools and workshops.

Telephone: 514-398-6013
Website: mcgill.ca/studentaid

### 1.13.4.6 Other Services

The following resources available to students are external to the Student Services office.
Office of Sustainability

McGill's Office of Sustainability, located in the Downtown campus, sends representatives to Macdonald campus every month to support McGill's goal to become an institutional model of sustainability for society. Whether you have a project in mind, or just a lot of questions, there are many ways for you to get involved with sustainability at McGill.

Telephone: 514-398-2268
Email: sustainability@mcgill.ca
Website: mcgill.ca/sustainability

### 1.13.5 Ombudsperson for Students

The Office of the Ombudsperson for Students offers confidential, informal, independent, and impartial dispute resolution services to all members of the student community by providing information, advice, intervention, and referrals.
The mandate of the Office is to intervene at any point and attempt to resolve issues informally before proceeding to more formal processes. Please refer to the website to determine when you should contact the Ombudsperson.

Office of the Ombudsperson
3610 McTavish Street, Room 14 (main floor)
Telephone: 514-398-7059
Email: ombudsperson@mcgill.ca
Website: mcgill.ca/ombudsperson

### 1.13.6 Extra-Curricular and Co-Curricular Activities

Student associations and University units at McGill host over $\mathbf{3 0 0}$ activities, clubs, and services that students may join. These include:

- Athletics and recreation sports clubs
- Charity and environmental clubs
- Community outreach and volunteering clubs
- Fine art, dance, and performance clubs
- Health and wellness clubs
- Languages and publications clubs
- Leisure activity and hobby clubs
- Networking and leadership development clubs
- Political and social activism clubs
- Religion and cultural clubs

An overview of extra-curricular activities at McGill is available on Campus Life \& Engagement's site. myInvolvement is an online tool managed by Career Planning Services for McGill students to find current involvement opportunities on campus. Students can then record their involvement in eligible activities, workshops, volunteer opportunities, and leadership positions on their Co-Curricular Record (CCR).

### 1.13.6.1 University Centre, Thomson House, and Centennial Centre

The University Centre, 3480 McTavish Street, provides clubrooms for many extra-curricular activities in a four-storey building with dining options, a ballroom, lounges, and a black box theatre. Activities for graduate students are centred in Thomson House at 3650 McTavish Street.

On the Macdonald Campus, facilities are located in the Centennial Centre; please consult the Student Services website for services and activities on the Macdonald Campus.

Note: Space and room availability on campus varies seasonally and depending on university and public health guidelines; please refer to each building's website for more information.

### 1.13.7 Bookstore

### 1.13.7.1 Downtown Campus

The Le James - McGill Bookstore sells a full range of books for the academic and professional community, stationery supplies, McGill clothing, and gift items. Visit the Le James website to sign up for the newsletter so you are the first to know about services, promotions, store hours, and so much more. The Le James online store is open year-round, and you can shop 24/7 from the comfort of your home.

Main Store:
680 Sherbrooke Street West

Website: lejames.ca

### 1.13.7.2 Macdonald Campus

Located on the main floor of the Centennial Centre, the Macdonald Campus Bookstore carries textbooks and course materials for Macdonald Campus classes. McGill and Macdonald clothing and insignia items are also available. Shop online 24/7 at lejames.ca.

Macdonald Campus Bookstore<br>Macdonald Campus Centennial Centre<br>21111 Lakeshore Road, Sainte-Anne-de-Bellevue<br>Website: lejames.ca/category/macdonald-campus

### 1.13.7.3 Institutional Sales Department

The Institutional Sales Department (formerly the McGill Computer Store; MCS) is dedicated to the support and success of the McGill community. We are committed to the mission of Ancillary Services to provide efficient and quality assistance to McGill staff and departments, as well as the affiliated teaching hospitals of the MUHC.

Contact the sales team at is.bookstore@mcgill.ca with your enquiry or list of products.

## Institutional Sales

Website: lejames.ca/institutional

### 1.13.8 Day Care

The McGill Childcare Centre (CPE McGill) is an independently run centre that can accommodate 110 children, ranging in age from four months to five years. Applications are to be submitted at www.laplace0-5.com; early application is required as placement is limited.
The Centre is located at:
3491 Peel Street
Montreal QC H3A 1W7
Telephone: 514-398-6943
Website: mcgill.ca/daycare
A Campus Day Care Centre, located adjacent to the Macdonald Campus, is an independently run centre that can accommodate approximately 60 children, ranging in age from four months to five years. Preference is given to the Macdonald Campus community. Early application is recommended.

The Centre is located at:

1 Maple Avenue
Ste.-Anne-de-Bellevue QC H9X 2E3
Telephone: 514-398-7951

### 1.14 Residential Facilities

McGill residences offer you a variety of accommodations that reflect the diversity of our student population on both the Downtown and Macdonald campuses.

## Mission statement

To continuously develop a safe home and nurturing community for our students through the following means:

- Keeping the value of respect for ourselves, others, and the physical environment as our cornerstone
- Making environmentally and economically sustainable choices
- Being responsive to student needs and supporting student initiatives
- Maintaining open lines of communication and collaborative decision-making
- Working together to provide a comfortable, clean, and secure environment
- Keeping current with developing technology, practices, and professional development
- Maintaining integrity and accountability
- Thinking critically about what we do and having the courage to change
- Honouring our rich history and strong residence tradition


### 1.14.1 University Residences - Downtown

Move-in weekend is scheduled for August 17-18, 2024. Leases run from August 15 to May 4.
McGill residences house approximately 3,000 undergraduate students in dormitories, apartments, and shared-facilities houses. McGill's dormitories are primarily for first-year students and feature full meal service. McGill's apartment-style residences and shared-facilities houses are mainly for first-year students who desire a more independent residence experience. Residence Life Managers provide 24-hour oversight of the residences. An elected Residence Council serves as the voice of students. All McGill residences are connected to the McGill wireless network.

```
McGill Student Housing and Dining Service Centre
University Hall
3 4 7 3 \text { University Street}
Montreal QC H3A 2A8
Phone: 514-398-6368
Email: housing inquiries: housing.residences@mcgill.ca; meal plan and food services inquiries: food.fds@mcgill.ca
Website: mcgill.ca/shhs
```


### 1.14.1.1 Traditional and Hotel-Style Residences

McGill has nine dormitory residences:

- The four co-ed traditional-style Bishop Mountain Residences (Gardner, McConnell, Molson, and Douglas halls) are located on the slope of Mount Royal and overlook the campus.
- The Royal Victoria College (RVC) West Wing, is a traditional-style, all-women's residence located just one block away from the McGill gates.
- The co-ed hotel-style New Residence Hall is located five short blocks from the campus.
- University Hall is for exchange students.
- Carrefour Sherbrooke is a co-ed hotel-style residence located two blocks from campus.
- La Citadelle is the newest fully renovated hotel-style residence building, located two blocks east of McGill Campus.

Residents of traditional or hotel-style residences have compulsory All You Care to Eat meal plan and access to multiple cafeterias.
Rooms in the traditional-style residences-the Upper Residences and RVC—are primarily single occupancy. The hotel-style residences-La Citadelle, Carrefour Sherbrooke, and the New Residence Hall—primarily have double rooms. Regardless of the residence style, each student gets a bed, desk, desk lamp, chair, dresser, closet, and small fridge (one fridge per double room).

No matter the hall, residents are responsible for the cleanliness of their rooms. Common bathrooms and showers are located on each floor of the traditional-style residences. Hotel-style residences feature a private en suite bathroom in each room. Each hall has laundry rooms, washers and dryers, and ironing facilities. The use of washers and dryers in the residence buildings are available $24 / 7$ at no additional charge. All halls have a TV and recreation room. Storage for items such as suitcases, ski equipment, etc. are present in each building.

New for Fall 2024: Upper year undergraduate students will have the opportunity to live in RVC Tower, which was previously for undergraduate students only. These students will continue to enjoy the benefits of proximity to campus and the downtown Montreal core, private bedrooms, and easy access to various dining halls. Students who choose RVC Tower will be placed on the mandatory All You Care to Eat meal plan.

### 1.14.1.2 Apartment-Style Residences

- The Greenbriar Apartments residence is located one block from the campus. It houses both upper-year undergraduate and graduate students in self-contained studio and double-occupancy, one-bedroom apartments. Apartment kitchens have a stove, fridge, and sink, and bedrooms have a bed, desk, table, chairs, dresser, and blinds.
- Similar to Greenbriar, Hutchison Apartments are also available for upper-year undergraduate and graduate students. Located on Hutchison Street, the building is a short walk from campus and offers studios and one-bedroom single occupancy units.

Although these residences do not require full meal plans, residents may purchase one from Food and Dining Services for use at the residence cafeterias or elsewhere on campus. For more information, see mcgill.calfoodservices/mealplans.

### 1.14.1.3 Shared-Facilities Houses

McGill Residences maintains a number of beautifully renovated older buildings, each housing between 15 and 30 first-year students. These shared-facilities houses are located a few blocks from the campus and have both single- and double-occupancy bedrooms with large shared kitchens, bathrooms, and common areas. Each bedroom has a desk, chair, bed (some are loft beds), dresser, closet, and blinds. Common areas are also fully furnished.

Although these residences do not require meal plans, residents are free to purchase one from Food and Dining Services for use at the residence cafeterias or elsewhere on campus. For more information, see mcgill.calfoodservices/mealplans.

### 1.14.1.4 Residence Fees

The full list of housing options and prices is available on the Student Housing website at mcgill.ca/students/housing/fees-applying.

### 1.14.1.5 Meal Plans

Residence students assigned to Carrefour Sherbrooke, La Citadelle, Douglas Hall, Gardner Hall, Molson Hall, McConnell Hall, New Residence Hall, and Royal Victoria College are on the new All You Care to Eat (AYCTE) mandatory meal plan. This plan offers students the opportunity to swipe their card at the entrance of any of the dining halls and enjoy as much as they care to eat while at the locations.

This new plan enhances community building by focusing on communal dining; it offers unlimited dine-in meals, giving students the opportunity to connect with friends.
While all the hotel or traditional-style residences offer small kitchens or kitchenettes for the convenience of students, these are NOT fully equipped. La Citadelle is the only residence which has a fully equipped communal kitchen, where residents can prepare snacks or full meals at any time.
The apartments and houses have fully-equipped kitchens where students can prepare their own meals.
For more information, see mcgill.ca/foodservices/mealplans.
The full list of housing options and prices is available on the Student Housing website at mcgill.ca/students/housing/fees-applying.

### 1.14.1.6 oneCard

oneCard is a taxable account that is already added to all undergraduate resident students' McGill ID cards, allowing them to make purchases and easily access multiple services on campus (including dining at some off-campus restaurants in the downtown area) without the hassle of carrying cash and debit cards. Downtown residence students will have $\$ 500$ on their oneCard account and Macdonald Campus residence students will have $\$ 400$, due at the end of September.

### 1.14.1.7 Student Government

Each hall has a Residence Council, elected at the start of the academic year. It is the job of the council to gather hall opinions, supervise financial affairs, and organize recreational and social activities within the residences. McGill's residences are run for the convenience and advantage of the students living in them. Residence Councils play a significant role in deciding and administering their community standards.

Note: Residence fees include an activity fee of $\$ 25$ collected by the University on behalf of the Residence Council of each hall and the Inter-Residence Council. These funds comprise each Council's budget with which to plan activities for the hall and across residences.

### 1.14.2 University Residences - Macdonald Campus

```
Residence Admissions Office
Laird Hall / EcoResidence
P.O. Box 188
Macdonald Campus of McGill University
21111 Lakeshore, Room 107
Sainte-Anne-de-Bellevue QC H9X 3V9
Telephone: 514-398-7716
Email: residences.macdonald@mcgill.ca
Website: mcgill.ca/students/housing/residence-options/macdonald
```

Residence life is an integral part of Macdonald Campus activities.

- Laird Hall, with a capacity of 250 students, is a co-ed residence that provides accommodation for all incoming students. Residents enjoy comfortable rooms, modern kitchens, cozy lounge facilities, and other amenities that help make their residence life a complete and meaningful part of their university experience. Included in the room rent is high-speed Internet service.
- The EcoResidence accommodates 100 students. This residence will appeal to students who enjoy independent living in self-contained fully furnished apartments of two or six single-bedroom units. Units are split-level with large, airy, common living areas. EcoResidence is for upper-year and graduate students only for 2024-2025 academic year.


### 1.14.2.1 Residence Fees - Macdonald Campus

Residence fees are paid separately from tuition, in accordance with regulations of the Fee Payment Option selected at the time of signing a residence lease.
At the time of publishing, all fees for the new academic year were not available. We recommend consulting the fee sheet which will be available on the Macdonald residence website at mcgill.ca/students/housing/fees-applying/mac-fees for the most up-to-date pricing.
There is no meal plan offered on the Macdonald Campus. Students may, however, load their oneCard to purchase meals; refer to mcgill.ca/onecard for more information. Meals are also available on a cash basis from the Café Twigs, located on the ground floor between the Macdonald-Stewart Building and Barton Library. For budgeting purposes, the cost of meals for the academic year is approximately $\$ 3,500$.

### 1.14.2.1.1 Laird Hall

Laird Hall is a co-ed residence that provides accommodation for undergraduate, graduate, and Farm Management Technology students.

## View the Laird Hall annual fees.

### 1.14.2.1.2 EcoResidence

Each EcoResidence unit is a self-contained, fully furnished apartment with two or six single bedrooms, and large open common living areas.
View the EcoResidence annual fees.

### 1.14.2.2 Residence Occupancy - Macdonald Campus

The residence fees cover the period from August 15, 2024 to May 4, 2025. You must vacate your room at the end of the lease term. Only under exceptional circumstances will you be granted permission to arrive prior to the beginning date of the lease or remain in residence during the summer months. In these cases, you must apply to the Campus Housing Office; an additional fee will be charged if permission is granted.

You can request permission to extend your stay in residence (at the normal weekly charge) if you are taking extended courses after the regular session, employed on campus, or registered for summer courses.

In exceptional circumstances, international students or students coming from a distance may be admitted early. Permission from the Campus Housing Office must be obtained prior to arrival. Floor Fellows may be admitted before the opening date of courses, if permission is granted by the Campus Housing Office.

### 1.14.2.3 Facilities for Non-Resident Students - Macdonald Campus

The Centennial Centre features common lounging areas such as the Eco-Niche CC Lobby, and when available, the Ceilidh. Lockers are available in the Macdonald-Stewart Building. You can rent them at the Students' Society Office in Centennial Centre. Twigs Café is located on the ground floor between the Macdonald-Stewart Building and Barton Library.

Note: Non-resident students cannot stay overnight in any residence without permission from the Campus Housing Office.

### 1.14.2.4 Student Parking - Macdonald Campus

Parking permits are available from Macdonald Campus's Security Services office, Laird Hall, room 101. You can also download the Macdonald application form and email it to macdonald.security@mcgill.ca ahead of time. Please note that parking permits are only available to Macdonald Campus staff and students due to the limited parking space. A confirmation email will be sent once a request is processed. Payment must only be made in person. Permits are sold on a first come, first served basis.

Users have the option of purchasing an annual or a half-year parking permit at the following rates:

- Annual permit costs $\$ 204$ and is valid from September 1, 2024 to August 31, 2025.
- Half-year permit costs $\$ 122$ and is valid from January 1, 2024 to June 30, 2024, or from July 1, 2024 to December 31, 2024. Both types of half-year permits include the summer period of June 1 to August 31.
- Daily parking users may pay for parking by the day or half day by purchasing tickets at the Horticulture Lot machine. The rates are $\$ 8$ for the day and $\$ 4$ for the half day. The vehicle must remain parked at the Horticulture Lot.

For more information, see mcgill.ca/transport/parking/mac.

### 1.15 Athletics \& Recreation

### 1.15.1 Downtown Campus Athletics \& Recreation

Offers a wide range of facilities, activities, and equipment. Facilities include:

- gymnasium
- fully-equipped fitness centre
- varsity weight room
- pool
- arena
- fieldhouse
- stadium
- indoor and outdoor running tracks and tennis courts
- squash and racquetball courts
- spinning, fitness, and martial arts studios
- various playing fields
- small groups and one-on-one training spaces
- gender-neutral changing spaces and bathrooms

McGill students can participate in instructional, recreational, intramural, and intercollegiate activities, as well as sports clubs. There are nominal fees for instructional courses, intramurals, sports equipment rentals, and membership to the Fitness Centre. Sporting equipment (x-country skis, snowshoes, racquets, balls, etc.) is available for loan or rent.

```
McGill Sports Complex
475 Pine Avenue West
Telephone: 514-398-7000
Email: perry.karnofsky@mcgill.ca (recreational sports) or lisen.moore@mcgill.ca (varsity sports)
Website: mcgillathletics.ca
Facebook: www.facebook.com/mcgillathleticsandrecreation
Twitter: www.twitter.com/McGillAthletics
```


### 1.15.2 Macdonald Campus Athletics \& Recreation

Offers a wide range of facilities, activities, and equipment, free of charge. Facilities include:

- gym
- fitness centre
- smart studios
- arena
- multi-courts
- playing fields
- outdoor Trekfit gym
- outdoor volleyball court
- large expanses of green space
- Paddle Mac

Students can participate in instructional, recreational, intramural, and intercollegiate activities. There are nominal fees for intramural and fitness courses. Sporting equipment (cross-country skis, snowshoes, stand up paddle boards, kayaks, frisbees, balls, etc.) is available for loan or rent.
Athletics offices are located in the Stewart Athletic Complex, just west of the Centennial Centre.

```
Stewart Athletic Complex
Telephone: 514-398-7789
Website: macdonaldcampusathletics.ca
Facebook: www.facebook.com/Mac-Athletics-and-Recreation-559732057427796/?fref=ts
```


### 1.16 Information Technology (IT) Services

- section 1.16.1: IT Support
- section 1.16.2: Communication and Collaboration
- section 1.16.3: Online Course Materials and Lecture Recordings
- section 1.16.4: Minerva
- section 1.16.5: Secure Your Journey

McGill University students, faculty, staff, and other members of the McGill community benefit from a variety of Information Technology resources. Please visit IT Services > Resources for Students for details.

### 1.16.1 IT Support

McGill's IT Support site is your one-stop shop for information and support on using IT services including email, Microsoft 365 tools, Wi-Fi, VPN, and more. Search the IT Knowledge Base for instructional articles, report issues, make requests for services, chat with support agents, view announcements and system status, and follow up on your support tickets all from one convenient location.

### 1.16.2 Communication and Collaboration

McGill offers communication and collaboration tools that work together to support and enhance your educational experience.

## Email

All students are assigned a McGill email address (usually in the form of firstname.lastname@mail.mcgill.ca) and given a McGill email mailbox. Please refer to section 1.1.8.5: Email Communication for further information on email services.

## MS Teams

Microsoft Teams is the recommended application for conducting virtual meetings, audio and video calls, text messaging, and filesharing among McGill students, faculty, and staff members.

## OneDrive

Students are given 1 Terabyte of free file storage space on the Microsoft 365 cloud where you can store and share documents.

## Microsoft Office and 365 Apps

As a student you can download and install the entire Microsoft 365 apps (previously ProPlus apps) suite (Word, Excel, PowerPoint, OneNote, etc.) to your personal devices, and sync your files with the online versions in OneDrive.

Other Microsoft 365 apps include Forms (surveys and data collection), Sway (interactive online presentations), Stream (video streaming platform), SharePoint Online, and more. Find out about all the Microsoft 365 apps at mcgill.ca/it/explore-services/o365.

Note for Continuing Studies: The above services are not available if you are registered in short courses or seminars not recorded on the official McGill transcript.

### 1.16.3 Online Course Materials and Lecture Recordings

Sign in to myCourses for your online assignments, reading materials, and syllabus. Many course lectures are recorded for streaming playback on demand. Zoom is the cloud-based tool used for attending remote classes when on-campus classes are not available.

See the Teaching \& Learning Services website for more information.

### 1.16.4 Minerva

Minerva is McGill's web-based information system serving applicants, students, staff, and faculty. To access Minerva, go to mcgill.calminerva and log in with your McGill username and password or with your McGill ID and Minerva PIN. Once logged in, you can:

- Apply to McGill and view your application status
- View class schedules, including course descriptions and spaces available in course sections
- Register and make course changes
- Change your major or minor program (not all faculties)
- View your unofficial transcript and degree evaluation reports
- View your McGill Username, used to access computers on campus, WiFi, Email, Office 365, campus printing, and more
- View your Permanent Code, citizenship, and Quebec residency status, and fee information
- Update personal information such as address, telephone number, and emergency contacts
- Update your preferred first name
- Submit an online course evaluation
- Submit an application to participate in an exchange program (not all faculties)
- Apply to graduate
- View graduation status and convocation details
- Order official transcripts
- Retrieve tax receipts
- Official documentation to order a reduced-fare STM Opus card

For information on accessing Minerva, visit McGill's IT Portal.

### 1.16.5 Secure Your Journey

McGill IT Services wants to ensure students have a safe and secure journey from the moment you apply to the university to graduation, and beyond. Our new Secure Your Journey website contains tips on:

- Starting your McGill journey safely with strong passwords and two-factor authentication (2FA);
- Learning securely; and
- Staying vigilant against cyber threats such as phishing.

Visit mcgill.ca/cybersafe for tools and resources to secure your student journey at McGill.

### 1.17 Resources for Study and Research

Resources for study and research at McGill University include libraries, archives, museums, laboratories, and other historical collections.

### 1.17.1 Libraries

The McGill Libraries provide access to over nine million items, both in print and electronic formats, and consist of multiple location and units, including the McGill University Archives, and the McGill University Visual Arts Collection. Visit mcgill.ca/library/branches for a map of all our locations, and bring your McGill ID card if you wish to borrow physical items from our collections. Access to our electronic resources (e-books, e-journals, databases, etc.) is possible anytime and anywhere. You will be prompted to enter your McGill username and password when accessing our e-resources from off campus.

The website (mcgill.ca/library) is the portal to all our resources and services for your learning and research needs. There are thousands of databases available that you can choose from when doing a search on any topic. Librarians have created subject guides for each area of study at McGill. Each guide pulls together all the relevant resources for doing research in that field. Find your subject guide to get started. In addition, unique scholarly materials from the Rare Books and Special Collections have been digitized and are accessible through the library's website. Our website also provides access to items such as newspapers, and escholarship.mcgill.ca, a digital repository, which collects, preserves, and showcases the publications, scholarly works, and theses of McGill University faculty members, researchers, and students.

Friendly staff in each library location can help you locate the information you need. Students have liaison librarians for their departments. Liaison librarians provide workshops on finding, organizing, and citing information, visit your classes to provide instruction on doing research for course assignments, and are available to assist you with your questions, whether in person, on the phone, by email, or via online chat.
Most libraries are open up to 90 hours per week, and several branch libraries extend opening hours during exam periods. The Library offers a variety of comfortable and attractive spaces, such as individual quiet study areas and group study rooms that can be booked for use. Wireless access is available throughout the library, as are hundreds of computers, and all libraries have printing, scanning, and copying machines.

Special library services like the Course Readings Service allows you to access digital items on course reading lists in the Library's catalogue and in myCourses. You can also borrow materials from any library location and the McGill University Collection Centre and return them anywhere across the system. If you need material not owned by the McGill University Library, our network loan and Interlibrary Loan and Document Delivery Service will obtain it for you at no cost for McGill students, faculty, and staff. Loans can be picked up at any library location.

### 1.17.2 McGill Writing Centre

The McGill Writing Centre (MWC), established in 2010, is the University's central resource for writing and communication. Staffed by specialists in writing pedagogy, the Writing Centre offers a slate of credit courses and non-credit activities that attract undergraduate and graduate students from across disciplines.
The MWC's core set of credit courses focuses on a number of relevant topics, e.g., academic or scholarly communication, creative writing, digital genres, business communication, and communicating science to broad audiences. In addition to courses, students can also access non-credit programming (e.g., workshops, writing retreats) and individualized writing consults with the Tutorial Service.

The courses in academic, creative, digital, and professional writing may be taken as electives or to fulfil language requirements in some undergraduate degree programs. In some faculties, you need to obtain approval from your Student Affairs Office as well as from your academic advisor before you take courses outside of your faculty, especially if the courses do not form part of your program requirements.
For further information, please visit the MWC website at mcgill.ca/mwc.

### 1.17.2.1 McGill Writing Centre Course Information

Undergraduate course offerings can be found at mcgill.ca/mwc/courses/undergraduate.
Graphos graduate course offerings can be found at mcgill.ca/graphos/courses.
Continuing Education (non-credit) course offerings can be found at mcgill.ca/mwc/special-interest-courses.

## Course Coordinator Information:

If you have inquiries about courses, please contact the specific course coordinator listed at mcgill.ca/mwc/contact-us.

### 1.17.2.2 McGill Writing Centre Tutorial Service

The McGill Writing Centre Tutorial Service provides writing instruction and support for all McGill students. Our tutors work with students at every stage of the writing process, from outlining to final revision. For more information, visit mcgill.ca/mwc/tutorial-service.

### 1.17.2.3 McGill Writing Centre Contact Information

McGill Writing Centre
McLennan-Redpath Library
Main Floor, Room \#02

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3459 McTavish Street
Montreal QC H3A 0C9
Telephone: 514-398-7109
Fax: 514-398-7416
Website: mcgill.ca/mwc
General Inquiries:mwc@mcgill.ca
Graphos
Website: mcgill.ca/graphos
Inquiries: graphos@mcgill.ca
MWC Tutorial Service
Website:mcgill.ca/mwc/tutorial-service
Inquiries: mwctutorial@mcgill.ca
```


### 1.17.3 University Archives

The McGill University Archives (MUA) acquires, preserves, and makes available to students, faculty, staff and researchers (including the general public) more than 30,000 metres of records dating from 1797 to the present. These records document McGill University faculty, research, alumni, and student organizations, as well as certain Montreal-based organizations. Archived media include:

- textual records
- photographs
- audio tapes
- film
- video
- plans
- University publications
- artifacts

The MUA acquires private records to complement its collection of the University's documentary heritage and to support University research goals. The MUA manages the University's corporate memory and information assets through its records management program. This program manages the lifecycle of administrative records and protects vital evidence of University functions and activities according to federal and Quebec archives and records legislation, in addition to professional standards.

The MUA Reading Room is open Monday to Friday, from 10:00 a.m. to 6:00 p.m.; however, appointments are recommended. The MUA website features virtual exhibitions, tools to search the MUA holdings, and a large bank of digitized images.
McGill University Archives
McLennan Library Building, 4th Floor
3459 rue McTavish
Montreal QC H3A 0C9
Telephone: 514-398-4711
Email: refdesk.archives@mcgill.ca
Website: mcgill.ca/library/branches/mua

### 1.17.4 Redpath Museum

The Redpath Museum is an academic unit of McGill University. Its mission is to foster understanding and appreciation of the diversity of our biological, geological, and cultural heritage through scientific research, collections-based study, and education. Its collections have been growing for over a century, and provide resources for research and for graduate and undergraduate education in biology, geology, anthropology, and other fields. Its largest collections include fossils from the ancient sea floor of eastern Quebec, the oldest land plants, a vast range of minerals, molluscs from around the world, Egyptian and classical antiquities, and artifacts from Central Africa. The Museum also houses research laboratories and classrooms.

The Museum welcomes McGill students and staff to visit its permanent exhibit, which presents the history of life through the ages illustrated by material from Quebec and neighbouring regions, as well as displays that feature the mineral and mollusc collections. The Museum also features a world cultures gallery devoted to cultures throughout the world, including ancient Egypt, classical Greece and Rome, Asia, and Africa.

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859 Sherbrooke Street West
Montreal QC H3A 0C4
Telephone: 514-398-4086, 514-398-4861
Email: redpath.museum@mcgill.ca
Website: mcgill.ca/redpath
```


### 1.17.5 McCord Stewart Montreal Social History Museum

The McCord Stewart Montreal Social History Museum houses one of the finest historical collections in North America. It possesses some of Canada's most significant cultural treasures, including the most comprehensive collection of clothing-comprising over 27,000 garments or accessories-made or worn in Canada; an extensive collection of First Nations objects-the most important of its kind in Quebec, with a corpus of over 16,000 objects from across Canada; and an impressive Photography collection of more than $2,150,000$ historical photographs-including the 400,000 photographs of the renowned Notman Photographic Archives-which offers a unique pictorial record of Canada from pre-Confederation to the present.
The museum also houses paintings by renowned artists such as Louis Dulongpré, James Duncan, Cornelius Krieghoff, and Robert Harris, along with iconographic documents reflecting the perspectives of Canadians over the past three centuries. A Material Culture collection consisting of more than 62,000 objects primarily documents the history of the domestic material environment in Montreal. The museum's textual archives include some 340 linear metres of documents relating to Canadian history.

Finally, the museum's website features award-winning exhibitions, innovative learning resources, and a vast, searchable database of information on the museum's collections. Since the spring 2022, the McCord Stewart Museum Online Collection platform allows everyone to browse bilingual descriptions of over 157,000 objects, photographs and archival documents from its collections. The site also features close to 153,000 royalty-free images that may be downloaded in the highest resolution available, free of charge, with no restrictions on their use.

Exhibitions at the McCord Stewart Museum provide innovative interpretations of the social and cultural history of Montreal, Quebec, and Canada. In addition to guided tours, school programs, cultural activities, and lectures, the museum offers a range of services including Café Notman and the boutique.
Researchers are welcome by appointment. Please contact the museum's Archives and Documentation Centre.

```
6 9 0 \text { Sherbrooke Street West}
Telephone: 514-861-6701, ext. 1234
Email: info@mccord-stewart.ca
Website: musee-mccord-stewart.ca
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### 1.17.6 Lyman Entomological Museum and Research Laboratory

Located on the Macdonald Campus, this institution is the insect collection and systematic entomology laboratory of McGill University. The collection houses 2.8 million specimens of insects and other arthropods, making it the second-largest insect collection in Canada, and the largest university insect collection in the country. The Lyman Museum is not generally open to the public since its main functions are research and teaching, not exhibitions. However, tours are available by appointment to interested parties.

Telephone: 514-398-7914
Website: mcgill.ca/historicalcollections/departmental/lyman

### 1.17.7 Other Historical Collections

In addition to the McGill museums, there are other collections and exhibits of a specialized nature curated by McGill's Heritage Advisory Committee.
McGill began accumulating cultural property by virtue of acquisition or donation even before the university itself was established. At the Montreal Medical Institute, which became McGill's Faculty of Medicine and Health Sciences, specimens were collected and used as teaching tools as early as 1822. Articles published about early collections gained international recognition for faculty members such as Andrew Fernando Holmes and Sir William Dawson. Their collections and others had a major influence on building McGill's reputation as a learned institution.

For more information, and to view the full list of historical collections at McGill, please visit mcgill.ca/historicalcollections.

McGill University is one of Canada's best-known institutions of higher learning and one of the leading universities in the world. With students coming to McGill from some 150 countries, our student body is the most internationally diverse of any research-intensive university in the country.

### 1.18.1 History

The Hon. James McGill—a leading merchant and prominent citizen of Montreal, who died in 1813-bequeathed an estate of 46 acres called Burnside Place together with $£ 10,000$ to the "Royal Institution for the Advancement of Learning" upon condition that the latter erect "upon the said tract or parcel of land, an University or College, for the purpose of education and the advancement of learning in this Province"; and further upon condition that "one of the Colleges to be comprised in the said University shall be named and perpetually be known and distinguished by the appellation of 'McGill College'."
At the time of James McGill's death, the Royal Institution, although authorized by law in 1801, had not been created, but was duly instituted in 1819. In 1821 it obtained a Royal Charter for a university to be called McGill College. Further delay was occasioned by litigation, and the Burnside estate was not acquired until March 1829. The Montreal Medical Institution, which had begun medical lectures at the Montreal General Hospital in 1822, was accepted by the College as its Faculty of Medicine in June 1829. After further litigation, the College received the financial endowment in 1835 and the Arts Building and Dawson Hall were erected. The Faculty of Arts opened its doors in 1843.

Progress, however, was slow until the 1821 Charter was amended in 1852 to constitute the members of the Royal Institution as the Governors of McGill College. Since that time the two bodies have been one. It was first called "The University of McGill College" but in 1885 the Governors adopted the name "McGill University". Even after the amended charter was granted, little advance was made until 1855 when William Dawson was appointed Principal. When he retired 38 years later, McGill had over 1,000 students and Molson Hall (at the west end of the Arts Building), the Redpath Museum, the Redpath Library, the Macdonald Buildings for Engineering and Physics, and a fine suite of medical buildings had been erected.

Since then, the University has continued to grow vigorously. In 1884, the first women students were admitted and in 1899 the Royal Victoria College was opened, a gift of Lord Strathcona, to provide separate teaching and residential facilities for women students. Gradually, however, classes for men and women were merged.

In 1905, Sir William Macdonald established Macdonald College at Sainte-Anne-de-Bellevue as a residential college for Agriculture, Household Science, and the School for Teachers. Those components have since become the Faculty of Agricultural and Environmental Sciences, which includes the School of Human Nutrition, on the Macdonald Campus, and the Faculty of Education, located on the Downtown Campus. The University's general development has been greatly facilitated by the generosity of many benefactors, and particularly by the support of its graduates, as regular public funding for general and capital expenditures did not become available until the early 1950s. Since that time, government grants have become a major factor in the University's financial operations, but it still relies on private support and private donors in its pursuit of excellence in teaching and research.

The University now comprises 10 Faculties and 17 Schools. At present, over 40,000 students are taking credit courses; one in four is registered in Graduate Studies.

The University is also active in providing courses and programs to the community through the School of Continuing Studies.

### 1.18.2 Incorporated and Affiliated Colleges

### 1.18.2.1 Incorporated College

The Royal Victoria College is a non-teaching college of McGill University that provides residential accommodation for both men and women in a co-education environment.

## Royal Victoria College

3425 University Street, Montreal QC H3A 2A8

### 1.18.2.2 Affiliated Theological Colleges

The three colleges below train students for the ministry and grant certificates for ordination but they have remitted their degree-granting powers, except with respect to the M.Div. and honorary doctorates, to the University

## Montreal Diocesan Theological College

3473 University Street, Montreal QC H3A 2A8
Principal: Rev. Dr. Jesse Zink; B.A.(Acad.), M.A.(Chic.), M.Div.(Yale), Ph.D.(Camb.)

## Presbyterian College of Montreal

3495 University Street, Montreal QC H3A 2A8
Principal: Rev. Dr. Roland de Vries; B.A.(Guelph), M.Div.(The Presbyterian College), S.T.M., Ph.D.(McG.)

## United Theological College of Montreal

3475 University Street, Montreal QC H3A 2A8
Principal: Rev. Maylanne Maybee; B.A.(Tor.), Dip.Theol., Cert.Ed.(Oxon), M.Div.(Trin. Coll., Tor.)

### 1.18.3 University Government

McGill University is a corporation created by a Royal Charter granted by the Crown of the United Kingdom, a general supervisory power being retained by the Crown and exercised through the Governor General as Visitor.

The Governors of the University constitute the Royal Institution for the Advancement of Learning, a corporation existing under the laws of the Province of Quebec. In them is vested the management of finances, the appointment of professors, and other duties. Twelve of the governors are elected by the Board from amongst those nominated by its Nominating, Governance and Ethics Committee; three are elected by the Alumni Association; two are elected by the Senate from amongst its members; two are elected by the full-time administrative and support staff from amongst its members; two are elected by the full-time
academic staff; and two are elected by students from amongst the student body. The Board elects the Chancellor of the University and also, from amongst its members, a chair to preside at its meetings. The Chancellor and the President are ex officio members.

The Chancellor is presiding officer of Convocation and of joint sessions of the Board of Governors and the Senate.
The Chair of the Board of Governors is President of the Royal Institution for the Advancement of Learning.
The President and Vice-Chancellor is the chief executive officer of the University, appointed by the Board of Governors after consultation with a statutory committee. The President is, ex officio, Chair of the Senate.
The Senate is the highest academic authority of the University and has control over admission, courses of study, discipline, and degrees. The regulations of Senate are executed by the various faculties and schools, which also carry primary responsibility for the educational work of the University.

### 1.18.4 Recognition of Degrees

The Royal Institution for the Advancement of Learning (McGill University) is a publicly funded institution and holds a Royal Charter dated 1821 (amended in 1852) as well as being incorporated under the laws of the Province of Quebec.

McGill University was a founding member of the organization that evolved into Universities Canada and remains an active member university to this day. In addition, McGill University is a member of the American Association of Universities (A.A.U.). It is also a member of the Association of Commonwealth Universities and the International Association of Universities. Its undergraduate, professional, and graduate degrees-including doctorates in a full range of disciplines-have been recognized by educational, government, and private organizations worldwide for decades.

All of McGill's degree programs are approved by the Government of Quebec.

### 1.18.5 Governance: Board of Governors

### 1.18.5.1 The Visitor

## The Visitor

Her Excellency the Right Honourable Mary Simon; C.C., C.M.M., C.O.M., O.Q., C.D., Governor General and Commander-in-Chief of Canada

Administrator of the Government of Canada

### 1.18.5.2 Board of Governors

## Board of Governors

Maryse Bertrand, Ad.E., M.Sc.(RM)
Chair
Deep Saini
John McCall MacBain; B.A.(McG.), B.A.(Wadham), M.A.(Oxford), M.B.A.(Harvard)

### 1.18.5.2.1 Members

## Members

```
Bob Babinski; B.A.(McG.)
Arun Bajaj; LL.B.(McG.)
Maryse Bertrand; B.C.L.(McG.), M.Sc.(NYU), Ad. E.
Gregory David; B.C.L., LL.B.(McG.)
Ariel Deckelbaum; LL.B., B.C.L., B.A.(McG.)
Alan Desnoyers; B.Com.(McG.)
Luciano D'Iorio; SIOR, A.E.O.
Lucy Gilbert; M.D., M.Sc., F.R.C.O.G.
Celia Greenwood; Ph.D.(McG.)
Joseph Hakim; B.Com.(McG), M.B.A.(C'dia)
Fred Headon; B.A.(Winn.), B.C.L./LL.B.(McG.)
Inez Jabalpurwala; B.A., M.A., M.B.A., M.M.(McG.)
Pierre Matuszewski; B.A.(Laval), M.B.A.(McG.)
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## Members

Ram Panda; M.Eng., M.B.A.(McG.)
Maarika Paul; B.Com., Gr. Dip.(McG.), F.C.P.A., F.C.A., C.B.V.
Adrienne Piggott
Diletta Prando
Samira Sakhia; B.Com., M.B.A.(McG.)
Jonathan Sigler; B.S., M.S.
Petra Rohrbach; B.Sc.(McG.), M.Sc., Ph.D.(Heidel.)
Edith A. Zorychta; B.Sc.(St. FX), M.Sc., Ph.D.(McG.)

### 1.18.5.2.2 Student Representatives

## Student Representatives

Students' Society of McGill (1)
Post-Graduate Students' Society of McGill (1)
Observers ("voice but no vote"):
McGill Association of Continuing Education Students (1)
Macdonald Campus Students' Society (1)

### 1.18.6 Governance: Members of Senate

### 1.18.6.1 Ex-Officio

## Ex-Officio

The Chancellor
The Chair of the Board of Governors
The President and Vice-Chancellor
The Provost, Deputy Provost, and the vice-presidents
The deans of faculties
The Dean of Continuing Studies
The Dean of Graduate and Postdoctoral Studies
The Dean of Students
The Dean/Director of Libraries
The University Registrar and Executive Director of Enrolment Services
The Director of Teaching and Learning Services

### 1.18.6.2 Elected Members

## Elected Members

65 members elected by the faculties, the University libraries, the Board of Governors, and administrative and support staff
21 Student Members

### 1.18.7 Administration

McGill's Senior Administration and governing bodies-the Board of Governors and Senate-provide strategic guidance and oversight, ensuring accountability through a system of formal decision-making and reporting.
Please refer to mcgill.ca/about/administration to meet McGill's senior staff and learn about the University's administration and governance structure.

| Administration |  |
| :---: | :---: |
| John McCall MacBain | Chancellor |
| Deep Saini | President and Vice-Chancellor |
| Véronique Bélanger | Chief of Staff |
| Christopher Manfredi | Provost and Vice-President (Academic) |
| Fabrice Labeau | Deputy Provost (Student Life and Learning) |
| Gillian Nycum | University Registrar and Executive Director of Enrolment Services |
| TBD | Executive Director of Services for Students |
| Christopher Buddle | Associate Provost (Teaching and Academic Planning) |
| Angela Campbell | Associate Provost (Equity and Academic Policies) |
| Petra Rohrbach | Associate Vice-President (Macdonald Campus) and Dean (Faculty of Agricultural and Environmental Sciences) |
| Marc Denoncourt | Chief Information Officer |
| Edyta Rogowska | Secretary-General |
| Diana Dutton | Vice-President (Administration and Finance) (Interim) |
| Diana Dutton | Associate Vice-President (Human Resources) |
| Cristiane Tinmouth | Associate Vice-President (Financial Services) |
| Denis Mondou | Associate Vice-President (Facilities Management and Ancillary Services) |
| Vacant | Vice-President (Communications and External Relations) |
| Lesley Fellows | Vice-President (Health Affairs) and Dean (Faculty of Medicine and Health Sciences) |
| Jean-Pierre Farmer | Associate Vice-President and Vice-Dean (Health Affairs, Faculty of Medicine and Health Sciences) |
| Martha Crago | Vice-President (Research and Innovation) |
| Philippe Gros | Deputy Vice-President (Research and Innovation) |
| Benoit Boulet | Associate Vice-President (Research and Innovation) (Innovation and Partnerships) |
| Lara Khoury | Associate Vice-President (Research) |
| Marc Weinstein | Vice-President (University Advancement) |
| Jean-François Legault | General Counsel and Director of Legal Services |
| Pascal Théoret | Executive Director, Internal Audit |
| 1.18.7.1 Deans, Dire 1.18.7.1.1 Deans |  |
| Deans |  |
| Valérie Orsat | Agricultural and Environmental Sciences |
| Lisa Shapiro | Arts |
| Carola Weil | Continuing Studies |
| Elham Emami | Dental Medicine and Oral Health Sciences |
| Victoria Talwar | Education |
| Viviane Yargeau | Engineering |
| Josephine Nalbantoglu | Graduate and Postdoctoral Studies |
| Robert Leckey | Law |
| Guylaine Beaudry | Libraries |

## Deans

| Yolande E. Chan | Management |
| :--- | :--- |
| Lesley Fellows | Medicine and Health Sciences |
| Sean Ferguson | Music |
| R. Bruce Lennox | Science |
| Robin Beech | Dean of Students |
| 1.18.7.1.2 Directors of Schools |  |
| Directors of Schools | Architecture |
| David Theodore | Biomedical Sciences |
| Alvin Shrier | Communication Sciences and Disorders |
| Susan Rvachew | Computer Science |
| Mathieu Blanchette | Human Nutrition |
| Ryan J. Mailloux | Environment |
| Frederic Fabry | Information Studies |
| Joan Bartlett | Medicine, School of |
| TBA | Nursing |
| Anita Gagnon | Physical and Occupational Therapy |
| Laurie Snider | Population and Global Health |
| Timothy Evans | Prban Pludies Policy |
| Garth W. Green | Picole Ives |

### 1.18.8 Student Governance

All students registered in an undergraduate program on the Downtown Campus are registered members of the accredited Students' Society of McGill University, more commonly known as SSMU. The SSMU is your representative on key issues inside and outside of the campus and will advocate for student priorities to both the McGill administration and government bodies. There are six elected executives of SSMU who represent all 22,000-plus undergrads on the Downtown Campus. There is a Legislative Council that meets with representatives from faculty associations and other student groups around campus on a bi-weekly basis. This council of thirty-seven members meets to discuss student issues and how services are being provided to students.

SSMU operates over 250 clubs and runs 19 student services; for more information, see ssmu.ca/student-life/clubs-services-isg. SSMU provides a great deal of extra-curricular opportunities for students to balance a life of study with a life of involvement, and an opportunity to meet other students. The organization also provides event programming such as Orientation Week, Activities Night, Faculty Olympics, community engagement opportunities, workshops, and concerts. Each faculty and each department also has organizations dedicated to providing extra-curricular involvement for their students.

Situated on the Downtown Campus, SSMU operates a five-floor building including a student lounge, cafeteria, campus bar, and many multipurpose spaces namely for use by student groups, but also for McGill community members.

SSMU offices are located at 3600 McTavish Street, Suite 1200 and operate between the hours of 9:00 a.m. and 5:00 p.m. during the year.
For more information regarding student government at McGill you can contact the SSMU or visit their website at ssmu.ca.
Email: frontctr@ssmu.ca
President: president@ssmu.ca
Welcome to McGill and we look forward to representing your interests.

# Faculty of Agricultural and Environmental Sciences 

## 2.1

## About the Faculty of Agricultural and Environmental Sciences, including School of Human Nutrition

Mission Statement: The Faculty of Agricultural and Environmental Sciences is committed to excellence in teaching, research, and service to ensure that humanity's present and future food, health, and natural resource needs are met while protecting the environment.

## 2.2 <br> Macdonald Campus Facilities

### 2.2.1 Morgan Arboretum

The Morgan Arboretum is one of McGill's teaching and research stations. It has 245 hectares of managed and natural woodlands, fields, and tree plantations used for environmental research and teaching in a wide range of courses. Eighteen formal tree collections contain groups of Canadian native trees and many useful and important exotics. In addition, over 170 species of birds, 30 species of mammals, and 20 species of reptiles and amphibians seasonally inhabit the property. The Arboretum features 25 kilometres of ski, snowshoe, and walking trails in a variety of forest ecosystems that are available for members of the Morgan Arboretum and visitors. A nature interpretation program is also offered at different times of the year. Conservation projects and forest operations, such as the production of maple syrup and firewood, are routinely done on a small-scale basis. More information is available at mcgill.ca/nrs/facilities/arboretum.

### 2.2.2 Macdonald Campus Library

Located in the Barton Building, the Macdonald Campus Library offers outstanding collections, facilities, and services to support a broad range of information needs. The Library's collections encompass a vast range of research material with a specific focus on the areas of agricultural sciences, nutrition, and environmental sciences.
The Library's website leads users to a wealth of information, including the library catalogue, article databases, McGill theses, and instructive web pages on how to gain access to the material and services available to users. The Library's eZone computers provide specialized software such as ArcGIS, STATA, and EndNote. Printer-photocopiers, comfortable seating, three group study rooms equipped with LCD monitors, and a 24 -hour study area are also available to you.
Librarians specializing in specific subject areas are available to help you find information for your course assignments or research topics, either in person or by phone, email, or chat. Research workshops are provided throughout the year.
More information is available at mcgill.ca/library/branches/macdonald, or feel free to drop by.

### 2.2.3 Macdonald Campus Computing Centre

The Macdonald Campus Computing Centre is managed by McGill's IT Customer Services (ICS) unit. Undergraduate computing labs are open 24/7, year round. These labs offer computers running Microsoft Office software, a variety of course-related software, and access to uPrint printers.
For support on all central IT services, contact the ICS Service Desk by email at ITsupport@mcgill.ca or call 514-398-3398. For more information and to search the IT Knowledge Base, visit the IT Services web page at mcgill.ca/it.

### 2.2.4 Lyman Entomological Museum and Research Laboratory

Originally established in 1914 and formerly housed in the Redpath Museum, the Lyman Entomological Museum was moved to the Macdonald Campus in 1961. It houses the largest university collection of insects in Canada, second in size only to the National Collection. The Museum also has an active graduate research program in association with the Department of Natural Resource Sciences. Study facilities are available, on request from the Curator, to all bona fide students of entomology. Visits by other interested parties can be arranged by calling 514-398-7914. More information is available at mcgill.ca/historicalcollections/departmental/lyman.

### 2.2.5 Brace Centre for Water Resources Management

The Brace Centre for Water Resources Management spans two faculties, the Faculty of Engineering and the Faculty of Agriculture and Environmental Sciences, whose members carry out advanced multidisciplinary research related to addressing today's complex water challenges. The centre is also a local chapter of the Quebec water research network, CentrEau. The centre's members engage in research, teaching, and specialized training, and draw on a wide range of facilities available within the University and the Montreal region. More information is available at mcgill.ca/brace.

## 2.3

## About Agricultural \& Environmental Sciences (Undergraduate)

### 2.3.1 Location

McGill University, Macdonald Campus
21, 111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Canada
Telephone: 514-398-7925
Website: mcgill.ca/macdonald
The Faculty of Agricultural and Environmental Sciences and the School of Human Nutrition are located on the Macdonald Campus of McGill University, at the western end of the island of Montreal. Served by public transport (STM www.stm.info, bus, and train), it is easily reached from the McGill Downtown Campus and from the Pierre Elliott Trudeau International Airport. Special arrangements can be made for prospective students to use the McGill inter-campus shuttle bus service. The shuttle service is available to all registered students who attend classes on both campuses.

### 2.3.2 The Faculty of Agricultural and Environmental Sciences, including School of Human Nutrition (Undergraduate)

The Faculty of Agricultural and Environmental Sciences and the School of Human Nutrition are located on McGill University's Macdonald Campus, which occupies 650 hectares in a beautiful waterfront setting on the western tip of the island of Montreal.
Students can earn internationally recognized degrees in the fields of agricultural sciences and applied biosciences, food and nutritional sciences, environmental sciences, and bioresource engineering. Students have the opportunity, in all programs, to study abroad in places such as Panama, Barbados, or Africa. Students may also have the opportunity to participate in internships.

Macdonald is a very diverse and international campus. Students are taught by outstanding professors who are among the top in their fields. The campus has excellent facilities for teaching and research, including well-equipped laboratories, experimental farm and field facilities, and the Morgan Arboretum. The campus is surrounded by the Ottawa and St. Lawrence rivers.
The Faculty is at the forefront of advances in the basic sciences and engineering associated with food supply, human health and nutrition, and the environment; and it is a world leader in plant and animal biotechnology, bioproducts and bioprocessing, bioinformatics, food safety and food quality, environmental engineering, water management, soils, parasitology, microbiology, and ecosystem science and management.

The Macdonald Campus is an exciting place to live, work, study, learn, and discover. Its very intimate collegial and residential setting allows for strong interaction between staff and students, and for enriched student activity and participation in extracurricular activities. A hallmark of our undergraduate programs is the ability to provide hands-on learning experiences in the field and labs, and the smaller class sizes.

### 2.3.3 Faculty Admission Requirements

For information about admission requirements and application deadlines for this Faculty, please refer to the Undergraduate Admissions Guide found at mcgill.ca/applying.

Applications are submitted directly online at mcgill.ca/applying. Please note that the same application is used for all undergraduate programs at McGill and two program choices can be entered. For further information, contact:
Student Affairs Office
Macdonald Campus of McGill University
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Telephone: 514-398-7925
Email: studentinfo.macdonald@mcgill.ca
Website: mcgill.ca/macdonald/prospective

For information about interfaculty transfers, see University Regulations and Resources > Undergraduate $>$ Registration $>$ section 1.3.6: Interfaculty Transfer.

### 2.3.4 Student Information

Friendly staff are on hand to answer your questions about academics, residence, athletics, student life, health concerns, and much more.

### 2.3.4.1 Student Rights and Responsibilities

The regulations and policies governing student rights and responsibilities at McGill University are published jointly by the Dean of Students' Office and the Secretariat, and they can be found at mcgill.ca/secretariat/policies-and-regulations.

### 2.3.4.2 The Student Affairs Office

The Student Affairs Office—located in Laird Hall, Room 106—provides a wide variety of academic services. These include information about admission (prerequisites and program requirements), transfer credits, Academic Standing, examinations (deferrals, conflicts, rereads), exchange programs, interfaculty transfers, program changes, registration (course change, withdrawals), scholarships (in-course), second degrees, second majors, minors, study away, and graduation (convocation).

Website: mcgill.ca/macdonald/studentinfo/sao.

### 2.3.4.3 Student Services

Please see University Regulations and Resources > Undergraduate > Student Services > section 1.13.4: Student Services - Macdonald Campus. Further information is also available on our website: mcgill.ca/macdonald-studentservices.

All eligible McGill students are entitled to use the Student Services located on both causes, regardless of the faculty they are enrolled in.

### 2.3.4.4 Macdonald Campus Residences

Please see University Regulations and Resources > Undergraduate > Residential Facilities > section 1.14.2: University Residences - Macdonald Campus; mcgill.ca/students/housing/residence-options/macdonald; or email residences.macdonald@mcgill.ca.

### 2.3.4.5 Student Life

All undergraduate and Farm Management and Technology students are members of the Macdonald Campus Students' Society (MCSS). The MCSS, through the Students' Council, is involved in numerous campus activities such as social events, academic affairs, and the coordination of clubs and organizations.

The Macdonald Campus Graduate Students' Society (MCGSS) represents graduate students on the Macdonald Campus. MCGSS is part of McGill's Post-Graduate Students' Society (PGSS) which represents all graduate students at McGill.

### 2.3.4.6 Fees

Please refer to the Student Accounts website for information and step-by-step instructions regarding fees.

### 2.3.4.6.1 Tuition Fees

Detailed information about your fees are on your e-bill and account summary by term on which can be found on Minerva.
General information on tuition and other fees is found in University Regulations \& Resources $>$ Undergraduate $>$ section 1.4: Fees.

### 2.3.4.6.2 Other Expenses

In addition to tuition fees and the cost of accommodation and meals, you should be prepared to spend a minimum of $\$ 1,000$ (depending on your program) on prescribed textbooks and classroom supplies. The Macdonald Campus bookstore is open from 10:00 am to 5:00 pm, Monday to Friday. In addition to clothing and stationery, you can also purchase course materials online and pick them up at the Macdonald Campus Bookstore.

Uniforms are required for food laboratories. If you are in the B.Sc.(Nutr.Sc.) program, you will be advised of the uniform requirements on acceptance or promotion.

### 2.3.4.7 Immunization for Dietetics Majors

As a student in the Dietetics Major, you are required to initiate and complete the Compulsory Immunization Program for Health Care Students in Fall of U1, in the NUTR 208 Professional Practice Stage 1A course. Students will meet with our health nurse at the beginning of U1 and should have all previous vaccination records available at that time. Participation in any further Professional Practice (Stage) courses in the Dietetics program will only be permitted if all immunization requirements are complete. Updates to your immunizations may be required during your program. For full details, see mcgill.ca/wellness-hub/hub-clinical-services/medical-notes-and-immunization-reviews.

### 2.3.4.8 Language Requirement for Professions

Quebec law requires that candidates seeking admission to provincially recognized Quebec professional corporations or Ordres have a working knowledge of the French language, i.e., be able to communicate verbally and in writing in that language. Agrologists, chemists, dietitians, and engineers are among those within this group.

For additional information, see University Regulations and Resources $>$ Undergraduate $>$ Admission to Professional and Graduate Studies $>$ section 1.10.1: Language Requirements for Professions.

### 2.3.5 Faculty Information and Regulations

Each student in the Faculty of Agricultural and Environmental Sciences must be aware of the Faculty Regulations as stated in this publication. While departmental and faculty advisors and staff are always available to give advice and guidance, the ultimate responsibility for completeness and correctness of your course selection and registration, for compliance with, and completion of your program and degree requirements, and for the observance of regulations and deadlines, rests with you. It is your responsibility to seek guidance if in any doubt; misunderstanding or misapprehension will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.

### 2.3.5.1 Minimum Credit Requirement

You must complete the minimum credit requirement for your degree as specified in your letter of admission.
Students are normally admitted to a four-year program requiring the completion of 120 credits, but Advanced Standing of up to 30 credits may be granted if you obtain satisfactory results in the Diploma of Collegial Studies, International Baccalaureate, French Baccalaureate, Advanced Levels, and Advanced Placement tests.

Normally, Quebec students who have completed the Diplôme d'études collégiales (DEC) or equivalent diploma are admitted to the first year of a program requiring the completion of a minimum of 90 credits, 113 credits for Bioresource Engineering, 115 credits for Dietetics, and 122 credits for the Concurrent Degrees in Food Science and Nutritional Sciences, including any missing basic science prerequisites.
Students from outside Quebec who are admitted on the basis of a high school diploma enter the Major Freshman/Foundation Year program, which comprises 30 credits (see section 2.5.1: Major Freshman/Foundation Year in this publication).
You will not receive credit toward your degree for any course that overlaps in content with a course successfully completed at McGill, at another university, at CEGEP, or Advanced Placement exams, Advanced Level results, International Baccalaureate Diploma, or French Baccalaureate.
Students transferring from another university must complete a minimum of 60 McGill credits in order to receive a McGill degree. A minimum of 72 McGill credits is required for the B.Eng.(Bioresource Engineering) degree.

If you are a student in the B.Sc.(Ag.Env.Sc.) and in the Diploma in Environment (AES), you must take a minimum of two-thirds of your course credits within the Faculty of Agricultural and Environmental Sciences.

### 2.3.5.2 Minimum Grade Requirement

You must obtain grades of C or better in any required, complementary, or Freshman/Foundation Year courses used to fulfill program requirements. You may not register in a course for which you have not passed all the prerequisite courses with a grade of C or better, except by written permission of the Departmental Chair concerned.

### 2.3.5.3 Academic Advisors

Upon entering the Faculty and before registering, you must consult with the academic advisor of your program for selection and scheduling of required, complementary, and elective courses. The academic advisor will normally continue to act in this capacity for the duration of your studies in the Faculty.
A Faculty advisor is also available in the Student Affairs Office to assist you with student record related matters.

### 2.3.5.4 Categories of Students

### 2.3.5.4.1 Full-time Students

Full-time students in Satisfactory Standing take a minimum of 12 credits per academic term. A normal course load is considered to be 15 credits per term. The maximum number of credits allowed per academic term is 18 credits. Students who wish to be considered for Faculty in-course scholarships must be registered for 27 graded credits during the fall/winter academic year.

Students in Probationary Standing are not permitted to take more than 14 credits per term. In exceptional circumstances, the Committee on Academic Standing may give permission to attempt more.

### 2.3.5.4.2 Part-time Students

Part-time students take fewer than 12 credits per term.

### 2.3.5.5 Academic Standing

You must prove that you can master the material of lectures and laboratories. Examinations are normally held at the end of each course, but other methods of evaluation may also be used. The grade assigned for a course represents your Academic Standing in all the coursework.
The following rules apply to your Academic Standing:

1. When your CGPA (or TGPA in the first term of the program) falls below 2.00 , your Academic Standing becomes Probationary.
2. If you are in Probationary Standing, you may register for no more than 14 credits per term.
3. While in Probationary Standing, you must achieve a TGPA of 2.50 to continue in Probationary Standing or a CGPA of 2.00 in order to return to Satisfactory Standing. Failure to meet at least one of these conditions will result in Unsatisfactory Standing. In the case of Fall term, this will be Interim Unsatisfactory Standing and the rules for Probationary Standing will apply.
4. When your CGPA (or TGPA in the first term of the program) falls below 1.50 , your Academic Standing becomes Unsatisfactory and you must withdraw. In the case of Fall term, the Standing will be Interim Unsatisfactory Standing and the rules for Probationary Standing will apply.
5. If you are in Unsatisfactory Standing, you may not continue in your program. You may apply for readmission only after your registration has been interrupted for at least one term (not including Summer term).
6. Readmission will be in the Standing Unsatisfactory/Readmit and a CGPA of 2.00 must be achieved to return to Satisfactory Standing or a TGPA of 2.50 must be achieved for Probationary Standing. If you fail to meet at least one of these conditions, you will be required to withdraw permanently.
7. Students in the School of Human Nutrition have additional standards in place for the professional program (Dietetics). See section 2.5.5.1: Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Dietetics (115 credits).

### 2.3.5.5.1 Committee on Academic Standing

The Faculty's Committee on Academic Standing, consisting of academic staff, administrative staff, and a student representative, reviews special requests made by students regarding their academic life. Please inquire at the Student Affairs Office, Laird Hall 106, to obtain an application.

### 2.3.5.6 Credit System

The credit assigned to a course reflects the effort it demands of you. Typically, one credit corresponds to three hours of work per week for one term. This includes lecture hours, other contact hours (like labs and tutorials), problem periods as well as personal study hours. For a standard 3-credit course, students should expect to invest nine hours of work weekly.

Refer to University Regulations and Resources > Undergraduate >Student Records> section 1.5.2: Credit System.

### 2.3.5.6.1 School of Continuing Studies Courses

Not all School of Continuing Studies credit courses are recognized for credit within Faculty degree programs. Please contact the Faculty advisor in the Student Affairs Office before registering for such courses.

### 2.3.5.7 Academic Credit Transfer

Transfer credits based on courses taken at other institutions (completed with a grade that is equal to or higher than the grade/CGPA required to graduate from the host university) before entrance to this Faculty are calculated and assigned after you are accepted, and you have accepted the offer of admission.
Transfer credits may also be granted for courses taken at other university-level institutions (completed with a grade that is equal to or higher than the grade/CGPA required to graduate from the host university) while you are attending McGill University. You must secure permission to apply such credits to your program in this Faculty before you begin the work. Grades obtained in such courses do not enter into calculations of grade point averages (GPA).

Exemption from a required or complementary course on the basis of work completed at another institution must be approved by both the instructor of the appropriate McGill course and the academic advisor.

As a full-time degree student, you may register, with approval of the Student Affairs Office, for course(s) at any university in the province of Quebec through BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ). Those courses successfully completed with a minimum grade of C (according to the standards of the university giving the course) will be recognized for the purpose of your degree, but the grades obtained will not enter into your GPA calculations.

For universities outside Quebec, it is your responsibility to ensure that the host institution sends an official transcript to the Student Affairs Office. You must submit all documents required for approval of your transfer credits with your faculty at McGill within one month of completing your exchange program or study away. If you are studying at another Quebec university on an Inter-University Transfer (IUT) agreement, the host university sends your grade(s) to McGill automatically.

For further details, consult University Regulations and Resources > Undergraduate > Student Records > section 1.5.6: Transfer Credits and Undergraduate $>$ Registration > section 1.3.7: Quebec Inter-University Transfer Agreement, or go to www.bci-qc.ca to access the online application.

### 2.3.5.8 Second Academic Majors

While registered in a major in the Faculty of Agricultural and Environmental Sciences, you may pursue a second set of courses of greater scope than a minor (e.g., faculty program, major, honours program, major concentration) in either this Faculty or another faculty. Application for a second academic major must be made to the Associate Dean (Student Affairs) in the Student Affairs Office, Laird Hall, Room 106.

Following are the regulations and procedures for second academic major:

1. You must be in Satisfactory Academic Standing with a minimum CGPA of 3.00 in order to apply for a second academic major.
2. In consultation with the appropriate authority associated with each major (academic advisor, Associate Dean), you must construct a proposal showing all the courses that are to be taken to satisfy the entrance and program requirements of both the first and second academic majors.
3. A minimum of 36 credits must be unique to the Second Major (i.e., not part of the required or complementary courses taken for the First Major).
4. You must obtain prior approval for all proposed second academic majors from your academic advisor and the Student Affairs Office and from the Associate Dean, advisor, or appropriate committee of the other faculty concerned.
5. Normally, proposals for second academic majors will be initiated before completion of U1 year of the First Academic Major.
6. The academic standards applicable to each major will be respected.

### 2.3.5.8.1 Procedures for Minor Programs

If you want to register for a Minor program, you must complete a Minor Approval form (usually at the beginning of your U2 year), and return it duly completed and signed to the Student Affairs Office (saoadvisor.macdonald@mcgill.ca). The Minor program will then be added to your record and will automatically continue each year unless you officially cancel it in writing. If you want to cancel the Minor, you must notify both the Minor advisor and complete the program change form. The program change form must be submitted to the Student Affairs Office (saoadvisor.macdonald@mcgill.ca). The Minor Approval form and the Program Change form are available on the Faculty website and in the Student Affairs Office, Laird Hall, Room 106.

### 2.3.5.9 Course Change Information

1. Courses: please refer to University Regulations and Resources $>$ Undergraduate $>$ Registration $>$ section 1.3.3: Course Change Period, and the Important Dates website.
2. Course withdrawal (Transcript notation of "W"): please refer to University Regulations and Resources $>$ Undergraduate $>$ Registration $>$ section 1.3.3.1: Course Withdrawal, and the Important Dates website.
3. Other changes: information about changes may be obtained from the Student Affairs Office of the Faculty.

### 2.3.5.10 Graduate Courses Available to Undergraduates

Undergraduates who want to take graduate courses must have a cumulative grade point average (CGPA) of at least 3.2. Final approval must be obtained from Enrolment Services. Be advised that graduate courses taken for credit toward an undergraduate degree will not be credited toward a graduate program.

Please see a Faculty advisor in the Student Affairs Office, Laird Hall, 106 for more information.

### 2.3.5.11 Attendance and Conduct in Class

Matters of discipline connected with, or arising from, the general arrangement for teaching are under the jurisdiction of the Dean of the Faculty.
Students may be admonished by a professor or instructor for dishonest or improper conduct. If disciplinary action is required, it must be reported to the Associate Dean (Student Affairs).

Punctual attendance at all classes, laboratory periods, tests, etc., is expected of all students.

### 2.3.5.12 Incomplete Grades

Please refer to University Regulations and Resources $>$ Undergraduate $>$ Student Records $>$ section 1.5.5: Incomplete Courses.

### 2.3.5.13 Examinations

You should refer to University Regulations and Resources > Undergraduate > section 1.6: Examinations: General Information for information about final examinations and deferred examinations. Examination schedules are posted on the McGill website; normally 4 weeks after the start of classes for the Tentative Exam Schedule, and 6 weeks after the start of classes for the Final Exam Schedule.

Every student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course.

Oral presentations made as part of course requirements are in English.

### 2.3.5.13.1 Reassessments and Rereads

Please refer to University Regulations and Resources > Undergraduate > Examinations: General Information > Final Examinations > section 1.6.3.3.2: Reassessments and Rereads: Faculty of Agricultural and Environmental Sciences.

### 2.3.5.13.2 Deferred Examinations

Please refer to University Regulations and Resources > Undergraduate > Examinations: General Information > Final Examinations > section 1.6.3.2: Final Examinations: Deferred Examinations.

### 2.3.5.14 Degree Requirements

To be eligible for a B.Eng.(Bioresource), B.Sc.(Ag.Env.Sc.), B.Sc.(F.Sc.), or Concurrent B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.) degree, you must have passed-or achieved exemption-with a minimum grade of C in all required and complementary courses of the program. You must also have a CGPA of at least 2.00 .

In addition, if you are a student in the Dietetics program, you must have completed the Stages of professional formation requiring a CGPA of 3.00.
You must have completed all Faculty and program requirements; see section 2.3.5.1: Minimum Credit Requirement in this publication.
In order to qualify for a McGill degree, you must complete a minimum residency requirement of 60 credits at McGill. If you are in the B.Sc.(Ag.Env.Sc.), you must take a minimum of two-thirds of your course credits within the Faculty of Agricultural and Environmental Sciences.

Note for B.Eng.(Bioresource) students: If you are completing a B.Eng.(Bioresource) degree, you must complete a minimum residency requirement of 72 credits at McGill. Note that the total credits for your program ( 143 credits) includes those associated with the Year 0 (Freshman/Foundation Year) courses.

### 2.3.5.15 Graduation Honours

For information on the designation of graduation honours and awards, see University Regulations and Resources $>$ Undergraduate $>$ Graduation $>$ section 1.9.3: Graduation Honours.

### 2.3.5.16 Scholarships, Bursaries, Prizes, and Medals

Various scholarships, bursaries, prizes, and medals are open to entering, in-course, and graduating students. No application is required. Full details see mcgill.ca/macdonald/studentinfo/undergrads/scholarships.

### 2.4 Overview of Programs Offered

The Faculty of Agricultural and Environmental Sciences and the School of Human Nutrition offer degrees, certificates, and diplomas in:

- Bachelor of Engineering (Bioresource Engineering)
- Bachelor of Science (Agricultural and Environmental Sciences)
- Bachelor of Science (Food Science)
- Bachelor of Science (Nutritional Sciences)
- Concurrent degree in Food Science and Nutritional Sciences
- Certificate in Ecological Agriculture
- Certificate in Food Science
- Diploma in Environment
- Diploma of Collegial Studies in Farm Management and Technology

The Faculty of Agricultural and Environmental Sciences is one of the four faculties in partnership with the Bieler School of Environment.
Several programs offered by the Faculty and School can lead to professional accreditation. These include:

- the Agricultural Economics Major and the Agro-Environmental Sciences Major - membership in the Ordre des agronomes du Québec and other provincial Institutes of Agriculture;
- Bioresource Engineering - membership as a professional engineer in any province of Canada and the Ordre des agronomes du Québec;
- the Dietetics Major - membership in the Dietitians of Canada and the Ordre des diététistes-nutritionnistes du Québec (ODNQ), previously named Ordre professionnel des diététistes du Québec;
- Food Science - accreditation by the Institute of Food Technologists and professional accreditation by the Ordre des chimistes du Québec.

Professional Practice experiences to complete the Dietetics practicum are provided in the McGill teaching hospitals and in a wide variety of health, education, business, government, and community agencies.

The Faculty also offers M.Sc. and Ph.D. programs in a variety of areas. Further information about these programs is available in the Faculty of Agricultural and Environmental Studies Graduate and Postdoctoral Studies section.

## Programs Offered by the Faculty of Agricultural and Environmental Sciences

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section 2.5.2: Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)
section 2.5.3: Bachelor of Engineering (Bioresource) - B.Eng.(Bioresource)
section 2.5.4: Bachelor of Science (Food Science) - B.Sc.(F.Sc.)
section 2.5.5: Bachelor of Science (Nutritional Sciences) - B.Sc.(Nutr.Sc.)
section 2.4.7: Concurrent Bachelor of Science in Food Science - B.Sc.(F.Sc.) and Bachelor of Science in Nutritional Sciences - B.Sc.(Nutr.Sc.)(Overview)
section 2.4.8: Honours Programs (Overview)
section 2.4.9: Minor Programs (Overview)
section 2.4.10: Post-Baccalaureate Certificate Programs (Overview)
section 2.4.11: Diploma Program (Undergraduate) (Overview)
section 2.4.12: Diploma in Collegial Studies (Overview)
section 2.4.13: Environmental Sciences Programs (Overview)
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### 2.4.1 Internship Opportunities

Internships allow students to gain practical, hands-on experience and develop skill sets that are frequently in high demand by employers. Internships involve a work placement where you are exposed to the main areas of operation of your employer. Each work placement is unique, and you benefit from a program developed exclusively for you by your employer and your instructor.

### 2.4.1.1 FAES 200 / FAES 300 Internship Program

As a full-time undergraduate student (with a CGPA of 2.7 or higher) in the Faculty of Agricultural and Environmental Sciences, you have the opportunity to participate in the Internship program.
The internship should be a minimum length of 10 weeks, with the student working 35 hours a week or more. FAES 200 is a non-credit (pass or fail) course. FAES 300 is a 3-credit course, and you will receive a final grade on your transcript. The internship should be related to your field of study.

### 2.4.1.2 AGRI 310 Internship in Agriculture/Environment

The objective of AGRI 310 is to give you experience working in an enterprise that is related to your field of study, and to find out how your studies can contribute to your understanding and performance in the workplace environment. The internship should be a minimum length of 12 weeks. Through observations of the enterprise's functioning, the decision-making process, and the economic constraints, you should obtain a better understanding of the technical, economic, and social challenges faced by enterprises in your field of study. AGRI 310 is a 3-credit course.

### 2.4.1.3 AGRI 410D1 and AGRI 410D2 Agrology Internship

As a qualified student in the B.Sc.(Ag.Env.Sc.), you have the opportunity to participate in a 420-hour-minimum internship related to your field of study.
AGRI 410 is part of the Professional Agrology Specialization and constitutes practical training as required by the Ordre des agronomes du Québec. Each internship placement must be approved by the instructor.

### 2.4.1.4 AGRI 499 Agricultural Development Internship

AGRI 499 is a supervised internship which provides practical experience working on agricultural issues related to international development. The internship can take many forms, including work in a developing country, for an agency that focuses on international development, or on a research project that aims at solving problems faced by developing populations. Each internship placement must be approved by the instructor.

### 2.4.2 Exchange Programs (Overview)

The Faculty of Agricultural and Environmental Sciences participates in all University-wide student exchange programs available at McGill and also has Faculty-specific exchange programs. For more information, see Study Abroad \& Field Studies $>$ Undergraduate > section 12.4: Exchange Programs, and mcgill.ca/macdonald/studentinfo/undergrads/studying-away-mcgill.

### 2.4.3 Bachelor of Science in Agricultural and Environmental Sciences - B.Sc.(Ag.Env.Sc.) (Overview)

Students register in one major and at least one specialization. They may design their own program by choosing any major, and at least one specialization (see notes below for the majors in Environment and specializations in Agricultural Economics). By choosing two different specializations, students have the option of developing their own interdisciplinary interests. They may also choose to do a minor. The multidisciplinary specialization is designed for those interested in broad training.

Note: Students choosing the major in Environment will select a concentration instead of a specialization.


Note: Specializations in the Agricultural Economics major are restricted to Agricultural Economics students.

All the required and complementary courses for the major must be completed in full. Within each specialization, at least 18 credits must be unique, i.e., they only count for that specialization and do not overlap with either the major or a second specialization. At least 12 credits must be from $400-l e v e l$ courses or higher.

These programs are also available as honours programs for students after they have completed their U2 year if they meet the requirements. See individual programs for details.

### 2.4.3.1 Majors and Honours

Graduates of programs marked with an asterisk (*) can be eligible for membership in the Ordre des agronomes du Québec and other provincial institutes of agriculture.

- Agricultural Economics *
- Agro-environmental Sciences *
- Environmental Biology
- Global Food Security
- Life Sciences (Biological and Agricultural)
- Environment - see Bieler School of Environment > Undergraduate > section 7.5.4: Major in Environment - B.Sc.(Ag.Env.Sc.) and B.Sc.

Full program descriptions are listed at section 2.5.2.1: B.Sc.(Ag.Env.Sc.) Major and Honours Programs.
$\qquad$ Note: In the program description for each major is a suggested list of specializations that complement that major.

### 2.4.3.2 Specializations

Each specialization consists of 24 credits of courses (required and complementary) that provide a coherent package designed to prepare students for a future in a given discipline. Students will select at least one specialization. However, students wishing to broaden their training have the option of choosing to do
two. Although the list of suggested specializations appears under each major in the programs section, students interested in other specializations should consult with their academic advisor.

The following are specializations for the major programs listed above in Agricultural Economics, Agro-Environmental Sciences, Environmental Biology, Global Food Security, and Life Sciences (Biological and Agricultural).
Full program descriptions are also listed at section 2.5.2.2: Specializations.

- Agribusiness, section 2.5.2.2.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Agribusiness (24 credits)
- Animal Biology, section 2.5.2.2.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Animal Biology (24 credits)
- Animal Health and Disease, section 2.5.2.2.3: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Animal Health and Disease (24 credits)
- Animal Production, section 2.5.2.2.4: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Animal Production (24 credits)
- Applied Ecology, section 2.5.2.2.5: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Applied Ecology (24 credits)
- Ecological Agriculture, section 2.5.2.2.6: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Ecological Agriculture (24 credits)
- Environmental Economics, section 2.5.2.2.7: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Environmental Economics ( 24 credits)
- International Agriculture, section 2.5.2.2.8: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - International Agriculture (24 credits)
- Life Sciences (Multidisciplinary), section 2.5.2.2.9: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Life Sciences (Multidisciplinary) ( 24 credits)
- Microbiology and Molecular Biotechnology, section 2.5.2.2.10: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) Microbiology and Molecular Biotechnology (24 credits)
- Plant Biology, section 2.5.2.2.11: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Plant Biology (24 credits)
- Plant Production, section 2.5.2.2.12: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Plant Production (24 credits)
- Professional Agrology, section 2.5.2.2.13: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Professional Agrology (24 credits)
- Professional Agrology for Agribusiness, section 2.5.2.2.14: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) Professional Agrology for Agribusiness ( 24 credits)
- Wildlife Biology, section 2.5.2.2.16: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Wildlife Biology (24 credits)


### 2.4.4 Bachelor of Engineering in Bioresource Engineering - B.Eng.(Bioresource) (Overview)

Bioresource engineering is a unique branch of engineering encompassing biological, agricultural, food, and environmental engineering disciplines, as well as many traditional engineering fields; its focus is the application of professional engineering skills to biological systems. The fundamental basis of bioresource engineering is the transdisciplinary interaction between engineering science and design, with biological, physical, chemical, and other natural sciences. Bioresource engineers strive to design and implement solutions for food sustainability and the well-being of society while maintaining the high-quality of the environment for generations to come.

Together with other B.Eng. programs offered by peer engineering departments in the Faculty of Engineering, Bioresource Engineering is accredited through the Canadian Engineering Accreditation Board. Therefore, graduates of the bachelor bioresource engineering program are eligible for registration as professional engineers (P.Eng.) in any province in Canada, as well as some international jurisdictions. The optional Bioresource Engineering Professional Agrology program qualifies graduates to apply for registration to the Ordre des agronomes du Québec and similar licensing bodies in other provinces in addition to the P.Eng. license.
The complementary portion of the Bioresource Engineering curriculum is organized according to three non-restrictive streams, including: Bio-Environmental Engineering, Bio-Process Engineering, and Bio-Production Engineering.
Students who follow the Bio-Environmental Engineering stream will learn to be responsible stewards of the environment and natural resources. This stream includes the study of soil and water quality management and conservation, organic waste treatment, urban and rural ecology, sustainability engineering, biodiversity preservation, climate change adaptation, and many other related topics.
Students who follow the Bio-Production Engineering stream use natural sciences and engineering skills to design systems and machines for the production of different types of crops, animal-based products, and biomass. Students learn about the design of machines and structures, different production systems and technologies, instrumentation and controls, geospatial data management, precision agriculture, and emerging intelligent bio-production concepts.
Through the Bio-Process Engineering stream, students apply engineering principles to transform agricultural commodities and biomass into products such as food, fiber, fuel, and biochemicals. Topics include the engineering of foods and food processes, physical properties of biological materials, post-harvest technology, fermentation and bio-processing, the management of organic wastes, biotechnology, the design of machinery for bioprocessing, etc.
In addition, students may choose to follow the Bioresource Engineering Professional Agrology as well as the Bioresource Engineering Honors Program. Multiple minors are also available. For details related to curriculum options and to select the most suitable stream, please refer to the Departmental website at mcgill.ca/bioeng.
All required and complementary courses must be passed with a minimum grade of C. Bioresource Engineering students spend one term on the Downtown Campus of McGill University taking courses from the Faculty of Engineering.

Students can also pursue a minor. Several possibilities are: Agricultural Production, Environment, Ecological Agriculture, Biotechnology, Computer Science, Construction Engineering and Management, Entrepreneurship, and Environmental Engineering. Details of some of these minors can be found under Faculty of Engineering > Undergraduate > Browse Academic Units \& Programs > section 6.9.10: Minor Programs. To complete a minor, it is necessary to spend at least one extra term beyond the normal requirements of the B.Eng.(Bioresource) program.

Note: If you are completing a B.Eng.(Bioresource) degree, you must complete a minimum residency requirement of 72 credits at McGill. The total credits for your program ( 143 credits) include those associated with the Year 0 (Freshman/Foundation Year) courses.

See section 2.5.3: Bachelor of Engineering (Bioresource) - B.Eng.(Bioresource) for a list of B.Eng.(Bioresource) programs offered.

### 2.4.5 Bachelor of Science in Food Science - B.Sc.(F.Sc.) (Overview)

Refer to section 2.5.4: Bachelor of Science (Food Science) - B.Sc.(F.Sc.) for a full list of B.Sc.(F.Sc.) programs offered.

## Food Science

- Food Chemistry Option
- Food Science Option

The Food Science program has been designed to combine the basic sciences-particularly chemistry—with specialty courses that are directly related to the discipline.

For academic advising, please consult mcgill.ca/macdonald/studentinfo/advising.

### 2.4.6 Bachelor of Science in Nutritional Sciences - B.Sc.(Nutr.Sc.) (Overview)

## Nutritional Sciences Majors

- Dietetics (professional program leading to professional licensing as Dietitian/Nutritionist)
- Nutrition (available in four concentrations):

Food Function and Safety Global Nutrition Health and Disease Sports Nutrition

- Food Science/Nutritional Sciences (concurrent degree)

Refer to section 2.5.5: Bachelor of Science (Nutritional Sciences) - B.Sc.(Nutr.Sc.) for a full list of B.Sc.(Nutr.Sc.) programs offered.
For academic advising, please consult mcgill.ca/macdonald/studentinfo/advising.
Freshman/Foundation Year advisor
Christine Gurekian
Macdonald-Stewart Building, Room MS2-019
Telephone: 514-398-7842
Email: christinenadia.gurekian@mcgill.ca

### 2.4.7 Concurrent Bachelor of Science in Food Science - B.Sc.(F.Sc.) and Bachelor of Science in Nutritional Sciences B.Sc.(Nutr.Sc.) (Overview)

Please refer to section 2.5.4.4: About the Concurrent B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.) for details.

### 2.4.8 Honours Programs (Overview)

## Honours Programs

- section 2.5.2.1.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Agricultural Economics (42 credits)
- section 2.5.2.1.4: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Agro-Environmental Sciences (54 credits)
- section 2.5.2.1.6: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Environmental Biology (54 credits)
- section 2.5.2.1.8: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Global Food Security (54 credits)
- section 2.5.2.1.10: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Life Sciences (Biological and Agricultural) (54 credits)
- section 2.5.3.2: Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Honours Bioresource Engineering (113 credits)
- section 2.5.4.2: Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Honours Food Science - Food Science Option (90 credits)
- section 2.5.5.7: Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Honours in Nutrition (90 credits)
- section 2.5.4.4.2: Concurrent Bachelor of Science in Food Science (B.Sc.(F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc.(Nutr.Sc.)) - Food Science/Nutritional Science Honours (Concurrent) (122 credits)
- section 7.5.5.4: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Environment ( 69 credits), listed under the Bieler School of Environment


### 2.4.9 Minor Programs (Overview)

## Minor Programs

- Agribusiness Entrepreneurship - section 2.5.6.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Agribusiness Entrepreneurship (18 credits)
- Agricultural Economics - section 2.5.6.3: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Agricultural Economics ( 24 credits)
- Agricultural Production - section 2.5.6.4: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Agricultural Production (24 credits)
- Animal Biology - section 2.5.6.5: Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Minor Animal Biology (24 credits)
- Animal Health and Disease - section 2.5.6.6: Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Minor Animal Health and Disease (24 credits)
- Applied Ecology - section 2.5.6.7: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Applied Ecology (24 credits)
- Ecological Agriculture - section 2.5.6.8: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Ecological Agriculture ( 24 credits)
- Environmental Engineering - section 2.5.6.9: Minor in Environmental Engineering
- Human Nutrition - section 2.5.6.10: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Human Nutrition (24 credits)
- International Agriculture - section 2.5.6.11: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor International Agriculture (24 credits)
- Environment - listed under Bieler School of Environment > Undergraduate > Minor in Environment > section 7.5.1.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Minor Environment (18 credits)
- Some minors of interest to FAES students can also be found at section 9.6.7: Minor for Non-Management Students - listed under Desautels Faculty of Management


### 2.4.10 Post-Baccalaureate Certificate Programs (Overview)

The Faculty offers the following post-baccalaureate certificate programs.

## Post-Baccalaureate Certificate Programs

- Ecological Agriculture
- Food Science

Please refer to section 2.5.7: Post-Baccalaureate Certificate Programs for program descriptions and details.

### 2.4.11 Diploma Program (Undergraduate) (Overview)

## Diploma Program (Undergraduate)

- Diploma in Environment - see Bieler School of Environment > Undergraduate > Diploma in Environment > section 7.5.7.1: Diploma (Dip.) Environment (30 credits)


### 2.4.12 Diploma in Collegial Studies (Overview)

Diploma in Collegial Studies

- section 2.6.3: Farm Management and Technology Program


### 2.4.13 Environmental Sciences Programs (Overview)

### 2.4.13.1 Bieler School of Environment

The Bieler School of Environment is a joint initiative of the Faculty of Agricultural and Environmental Sciences, the Faculty of Arts, and the Faculty of Science. It offers a B.Sc.(Ag.Env.Sc.) Major in Environment, a B.Sc. Major in Environment, a B.A. \& Sc. Interfaculty Program in Environment, a B.A. Faculty Program in Environment, a Minor in Environment, and a Diploma in Environment. These programs allow you to choose to study on both the Macdonald and Downtown campuses.

### 2.4.13.2 Environmental Programs on the Macdonald Campus

A number of integrated environmental science programs are offered on the Macdonald Campus, particularly within the B.Sc.(Ag.Env.Sc.) and B.Eng.(Bioresource) degrees. The objective of these interdepartmental programs is to provide a well-rounded training in a specific interdisciplinary subject as well as a basis for managing natural resources. For a complete list of the programs, see section 2.4: Overview of Programs Offered.

### 2.4.14 Graduate Programs

Graduate work may be undertaken on the Macdonald Campus, through the following academic units:

- Animal Science
- Bioresource Engineering
- Food Science and Agricultural Chemistry
- School of Human Nutrition
- Natural Resource Sciences
- Institute of Parasitology
- Plant Science

The advanced courses of study offered lead to the degrees of Master of Science, Master of Science Applied, and Doctor of Philosophy.
Information on these programs and related fellowships is available from the Graduate and Postdoctoral Studies office, Macdonald Campus of McGill University, 21111 Lakeshore Road, Macdonald-Stewart Building, Sainte-Anne-de-Bellevue QC H9X 3V9 or by contacting gradstudies.macdonald@mcgill.ca.

Further information including full program lists is offered in the Faculty of Agricultural and Environmental Sciences Graduate and Postdoctoral Studies section, and details regarding theses, registration, fellowships, etc., can be accessed at mcgill.ca/gps.

### 2.5 Browse Academic Programs

Degree programs at the undergraduate level in the Faculty may lead to a B.Sc. degree in Agricultural and Environmental Sciences (Ag.Env.Sc.), a B.Sc. in Food Science (F.Sc.), a B.Sc. in Nutritional Sciences (Nutr.Sc.), a B.Eng. in Bioresource Engineering or concurrent B.Sc. in both Food Science and Nutritional Sciences. The Faculty also offers post-baccalaureate undergraduate Certificate programs in Food Science and Ecological Agriculture as well as a Diploma in Environment.

The Bieler School of Environment also offers several B.Sc.(Ag.Env.Sc.) programs; for more information, please visit the Bieler School of Environment section.

### 2.5.1 Major Freshman/Foundation Year

## Program Director

Dr. David Titley-Peloquin
Macdonald-Stewart Building, Room 1-022
Telephone: 514-398-7976

The Freshman/Foundation Year program is designed to provide a basic science foundation to students entering university for the first time from a high school system (outside of the Quebec CEGEP system). The Freshman/Foundation Year program consists of at least 30 credits in fundamental mathematics and science courses in preparation for one of the following degree programs:
B.Sc. (Agricultural \& Environmental Sciences)
B.Eng. (Bioresource)
B.Sc. (Nutritional Sciences)
B.Sc. (Food Science)

Concurrent B.Sc. (Food Science) and B.Sc. (Nutritional Sciences)
Students who have completed the Diploma of Collegial Studies, Advanced Placement Exams, Advanced Levels, the International Baccalaureate, the French Baccalaureate, and/or McGill placement examinations may receive exemption and/or credit for all or part of the Freshman/Foundation Year courses (basic science courses in biology, chemistry, physics, and mathematics). Students who have completed courses at other universities or colleges may also receive exemptions and/or credits. Students should consult with the Faculty's Student Affairs Office.

### 2.5.1.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Freshman/Foundation Year (30 credits)

(All majors except Agricultural Economics - see Advising Notes below*)
If you are entering university for the first time from a high school system, outside of the Quebec CEGEP system, you will be required to complete a Freshman/Foundation year of at least 30 credits as listed below.

Normally, students registered in the Faculty of Agricultural and Environmental Sciences Freshman/Foundation Year program may take a maximum of 8 credits outside the Faculty offerings to meet the requirements of the program. Permission to exceed this limit must be received from the Associate Dean (Student Affairs) prior to registration.

Note: If you are not certain that you have adequate math and/or physics skills to commence the freshman/foundation year you may wish to take preparatory courses prior to the normal Fall semester. You are encouraged to discuss your potential need with your academic adviser. Mathematical skill level will be determined during the first week of classes. Your freshman/foundation year adviser may recommend that you register for an additional weekly Pre-Calculus Lab, of one credit, which may be applied towards the required credits of the degree program.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses - Fall (14.5 credits)

| AEBI 120 | $(3)$ | General Biology |
| :--- | :---: | :--- |
| AECH 110 | (4) | General Chemistry 1 |
| AEMA 101 | $(3)$ | Calculus 1 |
| AEPH 112 | $(4)$ | Introductory Physics 1 |
| AGRI 195 | $(.5)$ | Freshman Seminar 1 |

## Required Courses - Winter (12.5 credits)

| AECH 111 | (4) | General Chemistry 2 |
| :--- | :--- | :--- |
| AEMA 102 | (4) | Calculus 2 |
| AEPH 114 | (4) | Introductory Physics 2 |
| AGRI 196 | $(.5)$ | Freshman Seminar 2 |

## Elective - Winter (3 credits)

## B.Sc. (Ag. \& Env. Sci.) - Agricultural Economics Major - Freshman/Foundation Year (30 cr.)

If you are entering university for the first time from a high school system, outside of the Quebec CEGEP system, you will be required to complete a Freshman/Foundation year of at least 30 credits as listed below.
Note: If you are not certain that you have adequate math and/or physics skills to commence the Freshman/Foundation year you may wish to take preparatory courses prior to the normal Fall semester. You are encouraged to discuss your potential need with your academic adviser. Mathematical skill level will be determined during the first week of classes. Your freshman/foundation year adviser may recommend that you register for an additional weekly Pre-calculus Lab, of one credit, which may be applied towards the required credits of the degree program.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising.

## Required Courses - Fall (14 credits)

| AECH 110 | (4) | General Chemistry 1 |
| :--- | :--- | :--- |
| AEMA 101 | (3) | Calculus 1 |
| AEPH 112 | (4) | Introductory Physics 1 |
| AGEC $200^{* *}$ | $(3)$ | Principles of Microeconomics |

## Required Courses - Winter (10 credits)

| AEBI 122 | (3) | Cell Biology |
| :--- | :--- | :--- |
| AEHM 205 | (3) | Science Literacy |
| AEMA 102 | (4) | Calculus 2 |

## Complementary Courses - Winter ( 6 credits)

One of the following:
BREE 103
(3) Linear Algebra
NUTR 301
Psychology

One of the following:
AGEC 201**
(3)
Principles of Macroeconomics
AGEC 231**
Economic Systems of Agriculture

## Advising Notes:

* Freshman/Foundation Year students intending to major in Agricultural Economics in the B.Sc. (Ag. \& Env. Sci.) degree program should note that the courses AEBI 120 (General Biology), AECH 111 (General Chemistry 2), and AEPH 114 (Introductory Physics 2) are required for all other majors in the B.Sc. (Ag. \& Env. Sci.) degree. Students who are uncertain about their choice of major should be completing the "regular" Agricultural \& Environmental Sciences Freshman/ Foundation Year program; the AGEC 200/201 courses would then be taken as part of the "regular" U1 curriculum should they ultimately decide on the Agricultural Economics Major.
** Freshman/Foundation Year students planning to choose the Agricultural Economics Major will still be required to complete 90 credits in the Major. Since AGEC 200 and AGEC 201/AGEC 231 are normally required in the U1 year of the program, students who take these courses in their freshman/foundation year will be required to substitute 6 other credits. Students should discuss suitable replacement courses with their adviser.


### 2.5.1.2 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Freshman/Foundation Year (30 credits)

If you are entering university for the first time from a high school system (outside of the Quebec CEGEP system) you will be required to complete a Freshman/Foundation year of at least 30 credits as listed below.

Normally, students registered in the Faculty of Agricultural and Environmental Sciences Freshman/Foundation Year program may take a maximum of 8 credits outside the Faculty offerings to meet the requirements of the program. Permission to exceed this limit must be received from the Associate Dean (Student Affairs) prior to registration.

Note: If you are not certain that you have adequate math and/or physics skills to commence the freshman/foundation year you may wish to take preparatory courses prior to the normal Fall semester. You are encouraged to discuss your potential need with your academic adviser. Mathematical skill level will be determined during the first week of classes. Your Freshman/Foundation Year adviser may recommend that you register for an additional weekly Pre-calculus Lab, of one credit, which may be applied towards the required credits of the degree program.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses - Fall (14.5 credits)

| AEBI 120 | (3) | General Biology |
| :--- | :---: | :--- |
| AECH 110 | (4) | General Chemistry 1 |
| AEMA 101 | $(3)$ | Calculus 1 |
| AEPH 113 | $(4)$ | Physics 1 |
| BREE 187 | $(.5)$ | Freshman Seminar 1 |

## Required Courses - Winter (15.5 credits)

| AECH 111 | (4) | General Chemistry 2 |
| :--- | :--- | :--- |
| AEMA 102 | (4) | Calculus 2 |
| AEPH 115 | (4) | Physics 2 |
| BREE 103 | (3) | Linear Algebra |

### 2.5.1.3 Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Freshman/Foundation Year (30 credits)

If you are entering university for the first time from a high school system (outside of the Quebec CEGEP system), you will be required to complete a freshman/foundation year of at least 30 credits as listed below.
Normally, students registered in the Faculty of Agricultural and Environmental Sciences Freshman/Foundation Year program may take a maximum of 8 credits outside the Faculty offerings to meet the requirements of the program. Permission to exceed this limit must be received from the Associate Dean (Student Affairs) prior to registration.

Note: If you are not certain that you have adequate math and/or physics skills to commence the Freshman/Foundation year, you may wish to take preparatory courses prior to the normal Fall semester. You are encouraged to discuss your potential need with your academic adviser. Mathematical skill level will be determined during the first week of classes. Your Freshman/Foundation Year adviser may recommend that you register for an additional weekly Pre-calculus Lab, of one credit, which may be applied towards the required credits of the degree program.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses - Fall (14.5 credits)

| AEBI 120 | (3) | General Biology |
| :--- | :---: | :--- |
| AECH 110 | $(4)$ | General Chemistry 1 |
| AEMA 101 | $(3)$ | Calculus 1 |
| AEPH 112 | $(4)$ | Introductory Physics 1 |
| AGRI 195 | $(.5)$ | Freshman Seminar 1 |

## Required Courses - Winter (12.5 credits)

| AECH 111 | $(4)$ | General Chemistry 2 |
| :--- | :--- | :--- |
| AEMA 102 | (4) | Calculus 2 |
| AEPH 114 | (4) | Introductory Physics 2 |
| AGRI 196 | $(.5)$ | Freshman Seminar 2 |

## Elective - Winter (3 credits)

### 2.5.1.4 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Freshman/Foundation Year (30 credits)

The B.Sc.(Nutr.Sc.) Freshman/Foundation Year is designed to provide the required science entrance prerequisites for students entering university for the first time from a high school system (outside of the Quebec CEGEP system).

## Required Courses - Fall (14.5 credits)

| AEBI 120 | (3) | General Biology |
| :--- | :---: | :--- |
| AECH 110 | $(4)$ | General Chemistry 1 |
| AEMA 101 | $(3)$ | Calculus 1 |
| AEPH 112 | $(4)$ | Introductory Physics 1 |
| AGRI 195 | $(.5)$ | Freshman Seminar 1 |

## Required Courses - Winter (15.5 credits)

| AEBI 122 | $(3)$ | Cell Biology |
| :--- | :---: | :--- |
| AEMA 102 | $(4)$ | Calculus 2 |
| AEPH 114 | $(4)$ | Introductory Physics 2 |
| AGRI 196 | $(.5)$ | Freshman Seminar 2 |
| FDSC 230 | $(4)$ | Organic Chemistry |

### 2.5.1.5 Concurrent Bachelor of Science Food Science (B.Sc. (F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc. (Nutr.Sc.)) - Freshman/Foundation Year (Concurrent) ( 30 credits)

These freshman/foundation year requirements apply to students in the Concurrent Bachelor of Science Food Science (B.Sc. (F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc. (Nutr.Sc.)) degree program.

If you are entering university for the first time from a high school system (outside of the Quebec CEGEP system), you will be required to complete a Freshman/Foundation year of at least 30 credits as listed below.

Normally, students registered in the Faculty of Agricultural and Environmental Sciences Freshman/Foundation Year program may take a maximum of 8 credits outside the Faculty offerings to meet the requirements of the program. Permission to exceed this limit must be received from the Associate Dean (Student Affairs) prior to registration.

Note: If you are not certain that you have adequate math and/or physics skills to commence the Freshman/Foundation year, you may wish to take preparatory courses prior to the normal Fall semester. You are encouraged to discuss your potential need with your academic adviser. Mathematical skill level will be determined during the first week of classes. Your freshman/foundation year adviser may recommend that you register for an additional weekly Pre-calculus Lab, of one credit, which may be applied towards the required credits of the degree program.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses - Fall (14.5 credits)

| AEBI 120 | (3) | General Biology |
| :--- | :---: | :--- |
| AECH 110 | (4) | General Chemistry 1 |
| AEMA 101 | (3) | Calculus 1 |
| AEPH 112 | (4) | Introductory Physics 1 |
| AGRI 195 | $(.5)$ | Freshman Seminar 1 |

## Required Courses - Winter (15.5 credits)

| AEBI 122 | (3) | Cell Biology |
| :--- | :--- | :--- |
| AEMA 102 | (4) | Calculus 2 |
| AEPH 114 | (4) | Introductory Physics 2 |
| AGRI 196 | $(.5)$ | Freshman Seminar 2 |
| FDSC 230 | $(4)$ | Organic Chemistry |

### 2.5.2 Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)

Please refer to section 2.4.3: Bachelor of Science in Agricultural and Environmental Sciences - B.Sc.(Ag.Env.Sc.) (Overview) for general rules and other information regarding B.Sc.(Ag.Env.Sc.) programs.

### 2.5.2.1 B.Sc.(Ag.Env.Sc.) Major and Honours Programs

The faculty offers the following B.Sc.(Ag.Env.Sc.) Major and Honours programs.
The Bieler School of Environment also offers several B.Sc.(Ag.Env.Sc.) programs; for more information, please visit Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.5.4: Major in Environment - B.Sc.(Ag.Env.Sc.) and B.Sc. and section 7.5.5: Honours Environment.

### 2.5.2.1.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Major Agricultural Economics (42 credits)

The B.Sc.(Agr.Env.Sc.); Major in Agricultural Economics is designed to meet the demand for sustainable development as it relates to the environment and resource use, and the economics and management of the global agriculture and food system. This multidisciplinary program in applied economics involves the application of theory and analytical methods to environmental issues and the agricultural and food system. Training in economic theory and applied areas such as marketing, finance, farm management, public policy, ecology, natural resources, and international development.

## Program Prerequisites

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this eCalendar for prerequisites and minimum credit requirements.

## Required Courses ( 36 credits)

AGEC 200
Principles of Microeconomics

| AGEC 201 | $(3)$ | Principles of Macroeconomics |
| :--- | :--- | :--- |
| AGEC 231 | (3) | Economic Systems of Agriculture |
| AGEC 320 | (3) | Intermediate Microeconomic Theory |
| AGEC 330 | (3) | Agriculture and Food Markets |
| AGEC 332 | $(3)$ | Farm Management and Finance |
| AGEC 333 | (3) | Resource Economics |
| AGEC 425 | (3) | Applied Econometrics |
| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| AGEC 442 | (3) | Economics of International Agricultural Development |
| ENVB 210 | (3) | The Biophysical Environment |
| MGCR 211 | (3) | Introduction to Financial Accounting |

## Complementary Courses ( 6 credits)

With the approval of the Academic Adviser, one introductory course in each of the following areas:
Statistics
Written/Oral Communication

## Specialization (24 credits)

Specializations designed to be taken with the Agricultural Economics Major:
Students taking the Major in Agricultural Economics must take one of the following specializations:

- Agribusiness (24 credits)
- Environmental Economics (24 credits)

Students who take the Specialization in Agribusiness can also take the Specialization in Professional Agrology for Agribusiness ( 24 credits). Membership to the OAQ requires successful completion of the Agribusiness and Professional Agrology for Agribusiness specializations.
Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, please refer to "Browse Academic Units \& Programs > Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.) > Specializations", in this eCalendar.

## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.1.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Agricultural Economics (42 credits)

This program is currently not offered.
Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

In addition to satisfying the research requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain Honours. Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.
Students who meet all the requirements will have the name of their program changed to include the word "Honours."
A brief description of the research activities involved will be documented and signed by the Program Director of the student's major, the supervisor of the research project, and the student.

## Program Prerequisites

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.
Required Courses (33 credits)

| AGEC 200 | $(3)$ | Principles of Microeconomics |
| :--- | :--- | :--- |
| AGEC 201 | $(3)$ | Principles of Macroeconomics |
| AGEC 231 | $(3)$ | Economic Systems of Agriculture |
| AGEC 320 | (3) | Intermediate Microeconomic Theory |
| AGEC 330 | $(3)$ | Agriculture and Food Markets |
| AGEC 333 | (3) | Resource Economics |
| AGEC 425 | (3) | Applied Econometrics |
| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| AGEC 442 | (3) | Economics of International Agricultural Development |
| AGEC 491 | (3) | Research and Methodology |
| ENVB 210 | (3) | The Biophysical Environment |

## Honours Courses

Students choose either Plan A or Plan B.

## Honours Plan A

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.
FAES 401
(6) Honours Research Project 1
FAES 402
Honours Research Project 2

## Honours Plan B

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.
FAES 405
(3)
Honours Project 1
FAES 406
(3)
Honours Project 2

## Complementary Courses ( 9 credits)

With the approval of the Academic Adviser, one introductory course in each of the following areas:

- Accounting
- Statistics
- Written/Oral Communication


## Specialization (21-24 credits)

Specializations designed to be taken with the Agricultural Economics Major:

- Agribusiness (24 credits)*
- Environmental Economics (24 credits)
- Professional Agrology (21 credits)*
* Membership to the OAQ requires successful completion of these two specializations.

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, please refer to "Browse Academic Units \& Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar.

## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.1.3 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Major Agro-Environmental Sciences (42 credits)

This Major is focused on the idea that agricultural landscapes are managed ecosystems, and that humans engaged in agriculture must maintain the highest possible environmental standards while providing food and other bioproducts to the marketplace. The Major core focuses on the basic and applied biology of cultivated plants, domestic animals, arable soils, and the economics of agriculture. Students then choose one or two specializations in these or connected disciplines that reflect their interests and career goals.
The program has a strong field component that includes hands-on laboratories, visits to agricultural enterprises, and opportunities for internships. Classes and laboratories exploit the unique setting and facilities of the Macdonald Campus and Farm, which is a fully functioning farm in an urban setting that exemplifies many of the issues at the forefront of modern agricultural production. Graduates of this program are eligible to become members of the Ordre des agronomes du Québec (OAQ).

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Program Prerequisites

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.

## Required Courses (36 credits)

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :--- | :--- |
| AEMA 310 | (3) | Statistical Methods 1 |
| AGEC 200 | $(3)$ | Principles of Microeconomics |
| AGEC 231 | (3) | Economic Systems of Agriculture |
| AGRI 215 | (3) | Agro-Ecosystems Field Course |
| ANSC 250 | (3) | Principles of Animal Science |
| BREE 329 | (3) | Precision Agriculture |
| ENVB 210 | (3) | The Biophysical Environment |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| SOIL 315 | (3) | Soil Nutrient Management |

## Complementary Courses ( 6 credits)

6 credits of complementary courses selected as follows:

One of:
PLNT 300
(3)
Cropping Systems
PLNT 302
(3)
Forage Crops and Pastures

One of:
ANSC 451
(3)
Dairy and Beef Production Management
ANSC 458
Swine and Poultry Production

## Specialization

Choose at least one specialization of 18-24 credits.
Specializations designed to be taken with the Agro-Environmental Sciences Major:

- Animal Production
- Ecological Agriculture
- Plant Production
- *Professional Agrology
- Soil and Water Resources
* Membership to the OAQ requires students successfully complete one of the above specializations in addition to the Professional Agrology Specialization.


## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.1.4 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Agro-Environmental Sciences (54 credits)

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's Major and Specialization.

In addition to satisfying the Honour requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours. The Honours program consists of 12 credits of courses that follow one of two plans listed below.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."
A brief description of the Honours project activities involved will be documented and signed by the Program Director of the student's Major, the supervisor of the Honours project, and the student.

This Major is focused on the idea that agricultural landscapes are managed ecosystems, and that humans engaged in agriculture must maintain the highest possible environmental standards while providing food and other bioproducts to the marketplace. The Major core focuses on the basic and applied biology of cultivated plants, domestic animals, arable soils, and the economics of agriculture. Students then choose one or two specializations in these or connected disciplines that reflect their interests and career goals.

The program has a strong field component that includes hands-on laboratories, visits to agricultural enterprises, and opportunities for internships. Classes and laboratories exploit the unique setting and facilities of the Macdonald Campus and Farm, which is a fully functioning farm in an urban setting that exemplifies many of the issues at the forefront of modern agricultural production. Graduates of this program are eligible to become members of the Ordre des agronomes du Québec (OAQ).

## Program Prerequisites

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.

## Required Courses ( 36 credits)

| AEBI 210 | (3) | Organisms 1 |
| :---: | :---: | :---: |
| AEMA 310 | (3) | Statistical Methods 1 |
| AGEC 200 | (3) | Principles of Microeconomics |
| AGEC 231 | (3) | Economic Systems of Agriculture |
| AGRI 215 | (3) | Agro-Ecosystems Field Course |
| ANSC 250 | (3) | Principles of Animal Science |
| BREE 329 | (3) | Precision Agriculture |
| ENVB 210 | (3) | The Biophysical Environment |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| SOIL 315 | (3) | Soil Nutrient Management |

## Complementary Courses (18 credits)

3 credits from the following:
PLNT 300
PLNT 302

[^1][^2]ANSC 451
(3)
Dairy and Beef Production Management
ANSC 458
Swine and Poultry Production

## Honours Courses

12 credits of Honours Plan A or Plan B

## Honours Plan A

12 credits of Honours research courses in the subject area of the student's Major, chosen in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the research project.
AGRI 401
(6)
Honours Research Project 1
AGRI 402
(6)
Honours Research Project 2

## Honours Plan B

6 credits of Honours project courses in the subject area of the student's Major as well as 6 credits in 400- or 500-level courses, normally selected from the Faculty of Agricultural and Environmental Sciences, in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the project.
AGRI 405
(3)
Honours Project 1
AGRI 406
(3)
Honours Project 2

## Specialization

Choose at least one specialization of 18-24 credits.
Specializations designed to be taken with the Agro-Environmental Sciences Major:

- Animal Production
- Ecological Agriculture
- Plant Production
- Professional Agrology*
* Membership to the OAQ requires students successfully complete one of the above specializations in addition to the Professional Agrology Specialization.


## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.1.5 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Major Environmental Biology (42 credits)

The Environmental Biology Major is about the biology, diversity, and ecology of a broad range of organisms, from plant and vertebrate animals to insects, fungi, and microbes. This Major places a strong emphasis on the ecosystems that species inhabit and the constraints imposed by the physical environment and by environmental change. Environmental Biology has significant field components worked into the course sets, and through this experiential learning, biological diversity, and the ways that species interact with their physical environment in a variety of ecosystems will be studied. The Major makes full use of the unique physical setting and faculty expertise of McGill's Macdonald campus to train students to become ecologists, taxonomists, field biologists, and ecosystem scientists.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Program Prerequisites

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this eCalendar for information on prerequisites and minimum credit requirements.

## Required Courses (36 credits)

| AEBI 210 | (3) | Organisms 1 |
| :--- | :--- | :--- |
| AEBI 211 | (3) | Organisms 2 |
| AEBI 212 | (3) | Evolution and Phylogeny |
| AEHM 205 | (3) | Science Literacy |
| AEMA 310 | $(3)$ | Statistical Methods 1 |


| ENVB 210 | $(3)$ | The Biophysical Environment |
| :--- | :---: | :--- |
| ENVB 222 | (3) | St. Lawrence Ecosystems |
| ENVB 305 | (3) | Population and Community Ecology |
| ENVB 410 | (3) | Ecosystem Ecology |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | $(3)$ | Biochemistry 1 |
| LSCI 230 | $(3)$ | Introductory Microbiology |

## Complementary Courses ( 6 credits)

6 credits of complementary courses selected from:

| ENTO 330 | $(3)$ | Insect Biology |
| :--- | :---: | :--- |
| ENVB 301 | $(3)$ | Meteorology |
| ENVB 313 | $(3)$ | Phylogeny and Biogeography |
| ENVB 437 | $(3)$ | Assessing Environmental Impact |
| ENVB 497 | $(3)$ | Research Project 1 |
| ENVB 498 | $(3)$ | Research Project 2 |
| FAES 300 | (3) | Internship 2 |
| MICR 331 | (3) | Microbial Ecology |
| PLNT 304 | (3) | Biology of Fungi |
| PLNT 358 | (3) | Flowering Plant Diversity |
| PLNT 460 | (3) | Plant Ecology |
| SOIL 300 | (3) | Fish Ecology |
| WILD 302 | (3) | Natural History of Vertebrates |
| WILD 307 | (3) | Integrated Forest Management |

## Specialization

At least one specialization of 18-24 credits.
Specializations designed to be taken with the Environmental Biology Major:

- Applied Ecology
- Plant Biology
- Wildlife Biology

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, refer to "Browse Academic Units \& Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations", in this eCalendar. Consult the Academic Adviser for approval of specializations other than those listed above.

## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.1.6 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Environmental Biology (54 credits)

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's Major and Specialization.

In addition to satisfying the Honours requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."
A brief description of the Honours project activities involved will be documented and signed by the Program Director of the student's Major, the supervisor of the Honours project, and the student.
The Environmental Biology Major is about the biology, diversity, and ecology of a broad range of organisms, from plant and vertebrate animals to insects, fungi, and microbes. This Major places a strong emphasis on the ecosystems that species inhabit and the constraints imposed by the physical environment and by environmental change. Environmental Biology has significant field components worked into the course sets, and through this experiential learning, biological diversity, and the ways that species interact with their physical environment in a variety of ecosystems will be studied. The Major makes full use of the unique physical setting and faculty expertise of McGill's Macdonald campus to train students to become ecologists, taxonomists, field biologists, and ecosystem scientists.

## Program Prerequisites

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for information on prerequisites and minimum credit requirements.

## Required Courses (36 credits)

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :---: | :--- |
| AEBI 211 | $(3)$ | Organisms 2 |
| AEBI 212 | $(3)$ | Evolution and Phylogeny |
| AEHM 205 | $(3)$ | Science Literacy |
| AEMA 310 | $(3)$ | Statistical Methods 1 |
| ENVB 210 | $(3)$ | The Biophysical Environment |
| ENVB 222 | $(3)$ | St. Lawrence Ecosystems |
| ENVB 305 | $(3)$ | Population and Community Ecology |
| ENVB 410 | $(3)$ | Ecosystem Ecology |
| LSCI 204 | $(3)$ | Genetics |
| LSCI 211 | $(3)$ | Biochemistry 1 |
| LSCI 230 | $(3)$ | Introductory Microbiology |

## Complementary Courses (18 credits)

6 credits from the following:

| ENTO 330 | $(3)$ | Insect Biology |
| :--- | :--- | :--- |
| ENVB 301 | $(3)$ | Meteorology |
| ENVB 313 | $(3)$ | Phylogeny and Biogeography |
| ENVB 437 | $(3)$ | Assessing Environmental Impact |
| ENVB 497 | $(3)$ | Research Project 1 |
| ENVB 498 | $(3)$ | Research Project 2 |
| ENVB 529 | (3) | GIS for Natural Resource Management |
| FAES 300 | (3) | Internship 2 |
| MICR 331 | (3) | Microbial Ecology |
| PLNT 304 | (3) | Biology of Fungi |
| PLNT 358 | (3) | Plowering Plant Diversity |
| PLNT 460 | (3) | Geosystems Ecology |
| SOIL 300 | (3) | Fish Ecology |
| WILD 302 | (3) | Natural History of Vertebrates |
| WILD 307 | (3) | Integrated Forest Management |
| WOOD 441 |  |  |

## Honours Courses

12 credits of Honours Plan A or Plan B:

## Honours Plan A

12 credits of Honours research courses in the subject area of the student's Major, chosen in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the research project.

| ENVB 401 | (6) | Honours Research Project 1 |
| :--- | :--- | :--- |
| ENVB 402 | (6) | Honours Research Project 2 |

OR

## Honours Plan B

6 credits of Honours project courses in the subject area of the student's Major as well as 6 credits in 400- or 500-level courses, normally selected from the Faculty of Agricultural and Environmental Sciences, in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the project.

| ENVB 405 | (3) | Honours Project 1 |
| :--- | :--- | :--- |
| ENVB 406 | (3) | Honours Project 2 |

## Specialization

At least one specialization of 18-24 credits.
Specializations designed to be taken with the Environmental Biology Major:

- Applied Ecology
- Plant Biology
- Wildlife Biology

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, refer to "Browse Academic Units \& Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar. Consult the Academic Adviser for approval of specializations other than those listed above.

## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.1.7 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Major Global Food Security (42 credits)

The program provides a global perspective on agriculture and food security, and addresses issues related to rural development, malnutrition, poverty and food safety with special emphasis on the developing world. Using a multidimensional and multidisciplinary approach, the program provides students with a comprehensive set of courses at McGill in combination with hands-on experience through structured internships and study abroad opportunities. The field experience (short courses, internships or full semester) includes project development in local communities, observing subsistence agriculture in situ and participating in various activities which sensitize students to the challenges that countries face to feed their people. Students will have the opportunity to develop the knowledge base needed for successful careers in government, non-government and international institutions in the areas of international and sustainable development, international research and project management, agri-business, and food and agriculture policy analysis.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Program Prerequisites

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this publication for prerequisites and minimum credit requirements.

## Required Courses (33 credits)

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :---: | :--- |
| AEMA 310 | (3) | Statistical Methods 1 |
| AGEC 200 | (3) | Principles of Microeconomics |
| AGEC 442 | (3) | Economics of International Agricultural Development |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |


| AGRI 493 | (3) | International Project Management |
| :--- | :---: | :--- |
| ANSC 250 | (3) | Principles of Animal Science |
| ENVB 210 | (3) | The Biophysical Environment |
| INTD 200 | (3) | Introduction to International Development |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 341 | (3) | Global Food Security |

## Complementary Courses (9 credits)

| AGRI 215 | $(3)$ | Agro-Ecosystems Field Course |
| :--- | :--- | :--- |
| AGRI 340 | (3) | Principles of Ecological Agriculture |
| AGRI 499 | (3) | Agricultural Development Internship |
| ANSC 420 | (3) | Animal Biotechnology |
| BREE 217 | (3) | Hydrology and Water Resources |
| FDSC 310 | (3) | Post Harvest Fruit and Vegetable Technology |
| NRSC 221 | (3) | Environment and Health |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| PLNT 300 | (3) | Cropping Systems |
| PLNT 435 | (3) | Plant Breeding |
| SOIL 315 | (3) | Soil Nutrient Management |
| SOIL 326 | (3) | Soils in a Changing Environment |

## Specialization (24 credits)

Students must also complete at least one Specialization of 24 credits.

### 2.5.2.1.8 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Global Food Security (54 credits)

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's Major and Specialization.

In addition to satisfying the Honours requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours. Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.
Students who meet all the requirements will have the name of their program changed to include the word "Honours."
A brief description of the Honours project activities involved will be documented and signed by the Program Director of the student's Major, the supervisor of the Honours project, and the student.
The program provides a global perspective on agriculture and food security, and addresses issues related to rural development, malnutrition, poverty and food safety with special emphasis on the developing world. Using a multidimensional and multidisciplinary approach, the program provides students with a comprehensive set of courses at McGill in combination with hands-on experience through structured internships and study abroad opportunities. The field experience (short courses, internships, or full semester) includes project development in local communities, observing subsistence agriculture in situ, and participating in various activities which sensitize students to the challenges that countries face to feed their people. Students will have the opportunity to develop the knowledge base needed for successful careers in government, non-government, and international institutions in the areas of international and sustainable development, international research and project management, agri-business, and food and agriculture policy analysis.

## Program Prerequisites

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.

## Required Courses (33 credits)

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :--- | :--- |
| AEMA 310 | $(3)$ | Statistical Methods 1 |
| AGEC 200 | $(3)$ | Principles of Microeconomics |
| AGEC 442 | $(3)$ | Economics of International Agricultural Development |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |
| AGRI 493 | (3) | International Project Management |
| ANSC 250 | (3) | Principles of Animal Science |
| ENVB 210 | (3) | The Biophysical Environment |
| INTD 200 | (3) | Introduction to International Development |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 341 | (3) | Global Food Security |

## Complementary Courses (21 credits)

9 credits from the following:

| AGRI 215 | $(3)$ | Agro-Ecosystems Field Course |
| :--- | :--- | :--- |
| AGRI 340 | (3) | Principles of Ecological Agriculture |
| AGRI 499 | (3) | Agricultural Development Internship |
| ANSC 420 | (3) | Animal Biotechnology |
| BREE 217 | (3) | Hydrology and Water Resources |
| FDSC 310 | (3) | Post Harvest Fruit and Vegetable Technology |
| NRSC 221 | (3) | Environment and Health |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| PLNT 300 | (3) | Cropping Systems |
| PLNT 435 | (3) | Plant Breeding |
| SOIL 315 | (3) | Soil Nutrient Management |
| SOIL 326 | (3) | Soils in a Changing Environment |

## Honours Courses

12 credits of Honours Plan A or Plan B:

## Honours Plan A

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

| FAES 401 | (6) | Honours Research Project 1 |
| :--- | :--- | :--- |
| FAES 402 | (6) | Honours Research Project 2 |

OR

## Honours Plan B

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

| FAES 405 | (3) | Honours Project 1 |
| :--- | :--- | :--- |
| FAES 406 | (3) | Honours Project 2 |

## Specialization (24 credits)

Students must also complete at least one Specialization of 24 credits.

### 2.5.2.1.9 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Major Life Sciences (Biological and Agricultural) (42 credits)

The Life Sciences (Biological and Agricultural) Major provides a strong foundation in the basic biological sciences. It will prepare graduates for careers in the agricultural, environmental, health, and biotechnological fields. Graduates with high academic achievement may go on to postgraduate studies in research, or professional programs in the biological, veterinary, medical, and health sciences fields.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Program Prerequisites

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this eCalendar for prerequisites and minimum credit requirements.

Default Specialization: Students who do not select a Specialization will automatically be assigned to the Life Sciences (Multidisciplinary) Specialization upon entering U2.

## Required Courses ( $\mathbf{3 3}$ credits)

* Other appropriate Statistics courses may be approved as substitutes by the Program Director.

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :---: | :--- |
| AEBI 211 | (3) | Organisms 2 |
| AEBI 212 | (3) | Evolution and Phylogeny |
| AEHM 205 | (3) | Science Literacy |
| AEMA 310* | (3) | Statistical Methods 1 |
| ANSC 400 | (3) | Eukaryotic Cells and Viruses |
| LSCI 202 | (3) | Molecular Cell Biology |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| PARA 438 | (3) | Immunology |

## Complementary Courses (9 credits)

9 credits of the complementary courses selected from:

| ANSC 234 | (3) | Biochemistry 2 |
| :---: | :---: | :---: |
| ANSC 250 | (3) | Principles of Animal Science |
| ANSC 312 | (3) | Animal Health and Disease |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 324 | (3) | Developmental Biology and Reproduction |
| ANSC 326 | (3) | Fundamentals of Population Genetics |
| ANSC 420 | (3) | Animal Biotechnology |
| BINF 511 | (3) | Bioinformatics for Genomics |
| BTEC 306 | (3) | Experiments in Biotechnology |
| ENVB 210 | (3) | The Biophysical Environment |
| ENVB 222 | (3) | St. Lawrence Ecosystems |
| FAES 300 | (3) | Internship 2 |
| LSCI 451 | (3) | Research Project 1 |
| LSCI 452 | (3) | Research Project 2 |


| MICR 331 | (3) | Microbial Ecology |
| :--- | :---: | :--- |
| MICR 338 | $(3)$ | Bacterial Molecular Genetics |
| MICR 341 | (3) | Mechanisms of Pathogenicity |
| MICR 450 | (3) | Environmental Microbiology |
| NRSC 333 | (3) | Pollution and Bioremediation |
| PARA 410 | (3) | Environment and Infection |
| PARA 424 | (3) | Fundamental Parasitology |
| PLNT 304 | (3) | Biology of Fungi |
| PLNT 353 | (3) | Plant Structure and Function |
| PLNT 426 | (3) | Plant Ecophysiology |
| PLNT 435 | (3) | Plant Breeding |

## Specialization

At least one specialization of 18-24 credits from:
Specializations designed to be taken with the Life Sciences (Biological and Agricultural) Major:

- Animal Biology
- Animal Health and Disease
- Life Sciences (Multidisciplinary)
- Microbiology and Molecular Biotechnology

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, please refer to "Browse Academic Units \& Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar.

## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.1.10 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Life Sciences (Biological and Agricultural) (54 credits)

Students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain Honours.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."
A brief description of the Honours project activities involved will be documented and signed by the Program Director of the student's Major, the supervisor of the Honours project, and the student.

The Life Sciences (Biological and Agricultural) Major provides a strong foundation in the basic biological sciences. It will prepare graduates for careers in the agricultural, environmental, health, and biotechnological fields. Graduates with high academic achievement may go on to postgraduate studies in research, or professional programs in the biological, veterinary, medical, and health sciences fields.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Program Prerequisites

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.

## Required Courses (45 credits)

* Other appropriate Statistics courses may be approved as substitutes by the Program Director.

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :---: | :--- |
| AEBI 211 | (3) | Organisms 2 |
| AEBI 212 | (3) | Evolution and Phylogeny |
| AEHM 205 | (3) | Science Literacy |
| AEMA 310* | $(3)$ | Statistical Methods 1 |


| ANSC 400 | $(3)$ | Eukaryotic Cells and Viruses |
| :--- | :---: | :--- |
| LSCI 202 | (3) | Molecular Cell Biology |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| LSCI 401 | (6) | Honours Research Project 1 |
| LSCI 402 | (6) | Honours Research Project 2 |
| PARA 438 | $(3)$ | Immunology |

## Complementary Courses (9 credits)

9 credits of the complementary courses selected from:

| ANSC 234 | (3) | Biochemistry 2 |
| :---: | :---: | :---: |
| ANSC 250 | (3) | Principles of Animal Science |
| ANSC 312 | (3) | Animal Health and Disease |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 324 | (3) | Developmental Biology and Reproduction |
| ANSC 326 | (3) | Fundamentals of Population Genetics |
| ANSC 420 | (3) | Animal Biotechnology |
| BINF 511 | (3) | Bioinformatics for Genomics |
| BTEC 306 | (3) | Experiments in Biotechnology |
| ENVB 210 | (3) | The Biophysical Environment |
| ENVB 222 | (3) | St. Lawrence Ecosystems |
| LSCI 451 | (3) | Research Project 1 |
| LSCI 452 | (3) | Research Project 2 |
| MICR 331 | (3) | Microbial Ecology |
| MICR 338 | (3) | Bacterial Molecular Genetics |
| MICR 341 | (3) | Mechanisms of Pathogenicity |
| MICR 450 | (3) | Environmental Microbiology |
| NRSC 333 | (3) | Pollution and Bioremediation |
| PARA 410 | (3) | Environment and Infection |
| PARA 424 | (3) | Fundamental Parasitology |
| PLNT 304 | (3) | Biology of Fungi |
| PLNT 353 | (3) | Plant Structure and Function |
| PLNT 426 | (3) | Plant Ecophysiology |
| PLNT 435 | (3) | Plant Breeding |

## Specialization

At least one specialization of 18-24 credits from:
Specializations designed to be taken with the Life Sciences (Biological and Agricultural) Major:

- Animal Biology
- Animal Health and Disease
- Life Sciences (Multidisciplinary)
- Microbiology and Molecular Biotechnology


## - Plant Science

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, please refer to "Browse Academic Units \& Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar.

## Electives

To meet the minimum credit requirement for the degree.

### 2.5.2.2 Specializations

The faculty offers the following specializations, to be paired with a B.Sc.(Ag.Env.Sc.) major. Each major program description has a list of suggested specializations. A different specialization may be selected following a consultation with your academic advisor.

### 2.5.2.2.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Agribusiness (24 credits)

The development of commercial agriculture relies on a large supporting sector of manufacturing and service companies involved in the supply of inputs to farming and the transportation, processing, and marketing of agricultural and food products.

This 24-credit specialization includes courses in agricultural sciences, agribusiness, and courses at the Desautels Faculty of Management.
This specialization is limited to students in the Major in Agricultural Economics.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (12 credits)

| AEBI 210 | (3) | Organisms 1 |
| :--- | :--- | :--- |
| AGEC 450 | (3) | Agribusiness Management |
| AGEC 491 | (3) | Research and Methodology |
| ANSC 250 | (3) | Principles of Animal Science |

## Complementary Courses (12 credits)

9 credits chosen from the following list:

| ACCT 361 | (3) | Management Accounting |
| :--- | :---: | :--- |
| AGRI 310 | (3) | Internship in Agriculture/Environment |
| BUSA 364 | (3) | Business Law 1 |
| MGCR 222 | (3) | Introduction to Organizational Behaviour |
| MGCR 331 | (3) | Information Technology Management |
| MGCR 341 | (3) | Introduction to Finance |
| MGCR 352 | (3) | Principles of Marketing |
| MGCR 382 | (3) | International Business |
| ORGB 321 | (3) | Leadership |

3 credits of a course in Animal Production or Plant Production approved by the Adviser.

### 2.5.2.2.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Animal Biology (24 credits)

The specialization in Animal Biology is intended for students who wish to further their studies in the basic biology of large mammals and birds. Successful completion of the program should enable students to qualify for application to most veterinary colleges in North America, to study in a variety of postgraduate biology programs, and to work in many laboratory settings.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (15 credits)

| ANSC 312 | (3) | Animal Health and Disease |
| :--- | :--- | :--- |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 324 | (3) | Developmental Biology and Reproduction |


| ANSC 420 | (3) | Animal Biotechnology |
| :--- | :--- | :--- |
| PARA 438 | (3) | Immunology |

## Complementary Courses (9 credits)

9 credits selected from:

| ANSC 234 | $(3)$ | Biochemistry 2 |
| :--- | :--- | :--- |
| ANSC 251 | $(3)$ | Comparative Anatomy |
| ANSC 326 | $(3)$ | Fundamentals of Population Genetics |
| ANSC 400 | $(3)$ | Eukaryotic Cells and Viruses |
| ANSC 424 | $(3)$ | Metabolic Endocrinology |
| ANSC 433 | $(3)$ | Animal Nutrition and Metabolism |
| ANSC 555 | (3) | The Use and Welfare of Animals |
| ANSC 560 | (3) | Biology of Lactation |
| ANSC 565 | (3) | Applied Information Systems |
| LSCI 451 | (3) | Research Project 1 |

### 2.5.2.2.3 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Animal Health and Disease (24 credits)

This specialization is offered for students wishing to understand general animal physiology and function; the susceptibility of animals to various diseases; methods for limiting and controlling potential outbreaks; and the resulting implications for the animal, the consumer and the environment. It is an ideal choice for students interested in the care of animals, or in working in laboratories where diseases are being researched.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (18 credits)

| ANSC 312 | (3) | Animal Health and Disease |
| :--- | :---: | :--- |
| ANSC 323 | $(3)$ | Mammalian Physiology |
| ANSC 350 | $(3)$ | Food-Borne Pathogens |
| ANSC 424 | $(3)$ | Metabolic Endocrinology |
| MICR 341 | $(3)$ | Mechanisms of Pathogenicity |
| PARA 424 | $(3)$ | Fundamental Parasitology |

## Complementary Courses ( 6 credits)

6 credits of complementary courses selected from:

| ANSC 234 | $(3)$ | Biochemistry 2 |
| :--- | :--- | :--- |
| ANSC 251 | $(3)$ | Comparative Anatomy |
| ANSC 303 | $(2)$ | Farm Livestock Internship |
| ANSC 324 | $(3)$ | Developmental Biology and Reproduction |
| ANSC 433 | $(3)$ | Animal Nutrition and Metabolism |
| ANSC 555 | (3) | The Use and Welfare of Animals |
| FAES 371 | $(1)$ | Special Topics 01 |

### 2.5.2.2.4 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Animal Production (24 credits)

The B.Sc.(Ag.Env.Sc.); Specialization in Animal Production focuses on the improved efficiency of livestock production at the national and international levels including animal nutrition, physiology, and breeding in a context that respects environmental concerns and animal-welfare issues.

When taken in conjunction with the Major Agro-Environmental Sciences and the Specialization in Professional Agriculture, this program conforms with the eligibility requirements of the Ordre des agronomes du Québec.

The credits within this Specialization may not count towards the student's Major or other Specialization. All of the 24 credits count only for this Specialization.

## Required Courses (21 credits)

| ANSC 234 | $(3)$ | Biochemistry 2 |
| :--- | :--- | :--- |
| ANSC 301 | $(3)$ | Principles of Animal Breeding |
| ANSC 312 | $(3)$ | Animal Health and Disease |
| ANSC 323 | $(3)$ | Mammalian Physiology |
| ANSC 324 | $(3)$ | Developmental Biology and Reproduction |
| ANSC 433 | $(3)$ | Animal Nutrition and Metabolism |
| ANSC 555 | (3) | The Use and Welfare of Animals |

## Complementary Courses (3 credits)

3 credits from the following:

| ANSC 451 | (3) | Dairy and Beef Production Management |
| :--- | :--- | :--- |
| ANSC 458 | (3) | Swine and Poultry Production |

### 2.5.2.2.5 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Applied Ecology (24 credits)

Food, water, air, the materials we use, and much of the diversity of life and recreation we enjoy are products of ecological systems. We manage ecosystems to provide these services and our use and mis-use often degrades the ability of ecosystems to provide the benefits and services we value. In the Applied Ecology specialization you will develop your ability to understand how ecosystems function. You will apply systems thinking to the challenge of managing ecosystems for agriculture, forestry, fisheries, protected areas and urban development. You will learn concepts and tools that help you to deal with the complexity that an ecosystem perspective brings. The goal of this specialization is to provide students with an opportunity to further develop their understanding of the ecosystem processes, ecology, and systems thinking necessary to understand, design and manage our interaction with the environment.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (9 credits)

| ENVB 305 | (3) | Population and Community Ecology |
| :--- | :--- | :--- |
| ENVB 437 | (3) | Assessing Environmental Impact |
| ENVB 529 | (3) | GIS for Natural Resource Management |

## Complementary Courses (15 credits)

15 credits selected from the following:

| AGRI 340 | $(3)$ | Principles of Ecological Agriculture |
| :--- | :---: | :--- |
| AGRI 435 | $(3)$ | Soil and Water Quality Management |
| BREE 327 | $(3)$ | Bio-Environmental Engineering |
| ENTO 330 | $(3)$ | Insect Biology |
| ENTO 340 | $(3)$ | Field Entomology |
| ENVB 301 | $(3)$ | Meteorology |
| ENVB 313 | (3) | Phylogeny and Biogeography |
| ENVB 415 | (3) | Ecosystem Management |
| ENVB 500 | (3) | Advanced Topics in Ecotoxicology |
| ENVB 506 | (3) | Quantitative Methods: Ecology |
| ENVB 530 | (3) | Advanced GIS for Natural Resource Management |
| MICR 331 | (3) | Microbial Ecology |
| MICR 450 | (3) | Environmental Microbiology |
| PLNT 304 | Biology of Fungi |  |


| PLNT 426 | $(3)$ | Plant Ecophysiology |
| :--- | :---: | :--- |
| PLNT 460 | $(3)$ | Plant Ecology |
| SOIL 300 | (3) | Geosystems |
| SOIL 326 | $(3)$ | Soils in a Changing Environment |
| SOIL 535 | (3) | Soil Ecology |
| WILD 302 | (3) | Fish Ecology |
| WILD 307 | (3) | Natural History of Vertebrates |
| WILD 350 | (3) | Mammalogy |
| WILD 420 | $(3)$ | Ornithology |
| WILD 421 | $(3)$ | Wildlife Conservation |

### 2.5.2.2.6 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Ecological Agriculture (24 credits)

This specialization focuses on the principles underlying the practice of ecological agriculture. When coupled with the Major in Environmental Biology, agriculture as a managed ecosystem that responds to the laws of community ecology is examined; when combined with the Major Agro-Environmental Sciences and the specialization in Professional Agrology, this specialization focuses more directly on the practice of ecological agriculture and conforms with the eligibility requirements of the Ordre des agronomes du Québec. It is suitable for students wishing to farm and do extension and government work, and those intending to pursue postgraduate work in this field.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (12 credits)

| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| :--- | :--- | :--- |
| AGRI 215 | (3) | Agro-Ecosystems Field Course |
| AGRI 340 | (3) | Principles of Ecological Agriculture |
| SOIL 535 | (3) | Soil Ecology |

## Complementary Courses (12 credits)

Minimum of 6 agronomic credits from:

| AGRI 310 | $(3)$ | Internship in Agriculture/Environment |
| :--- | :---: | :--- |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |
| ANSC 312 | (3) | Animal Health and Disease |
| BREE 327 | (3) | Bio-Environmental Engineering |
| ENTO 352 | (3) | Biocontrol of Pest Insects |
| PLNT 307 | (3) | Agroecology of Vegetables and Fruits |
| PLNT 312 | (3) | Urban Horticulture |
| PLNT 434 | (3) | Weed Biology and Control |

Other complementary courses:

| MICR 331 | (3) | Microbial Ecology |
| :--- | :---: | :--- |
| NUTR 341 | $(3)$ | Global Food Security |
| PLNT 302 | $(3)$ | Forage Crops and Pastures |
| PLNT 460 | $(3)$ | Plant Ecology |
| WOOD 441 | (3) | Integrated Forest Management |

### 2.5.2.2.7 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Environmental Economics (24 credits)

This specialization integrates environmental sciences and decision making with the economics of environment and sustainable development. It is designed to prepare students for careers in natural resource management and the analysis of environmental problems and policies.

This specialization is limited to students in the Major Agricultural Economics.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (12 credits)

| AGEC 491 | (3) | Research and Methodology |
| :--- | :--- | :--- |
| ENVB 305 | $(3)$ | Population and Community Ecology |
| ENVB 437 | (3) | Assessing Environmental Impact |
| ENVB 506 | (3) | Quantitative Methods: Ecology |

## Complementary Courses (12 credits)

12 credits chosen from the following list:

| AGRI 310 | (3) | Internship in Agriculture/Environment |
| :---: | :---: | :---: |
| BREE 217 | (3) | Hydrology and Water Resources |
| BREE 327 | (3) | Bio-Environmental Engineering |
| ECON 225 | (3) | Economics of the Environment |
| ECON 326 | (3) | Ecological Economics |
| ECON 405 | (3) | Natural Resource Economics |
| ENVB 222 | (3) | St. Lawrence Ecosystems |
| ENVB 301 | (3) | Meteorology |
| ENVB 529 | (3) | GIS for Natural Resource Management |
| ENVR 203 | (3) | Knowledge, Ethics and Environment |
| MGPO 440 | (3) | Strategies for Sustainability |
| MICR 331 | (3) | Microbial Ecology |
| NRSC 333 | (3) | Pollution and Bioremediation |
| WILD 421 | (3) | Wildlife Conservation |

### 2.5.2.2.8 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - International Agriculture (24 credits)

Students enter this specialization to acquire a global and applied understanding of agriculture as a fundamental tool to help rural development, alleviate poverty and reach food security, especially in the developing world. This program provides students with a combination of coursework at McGill together with a hands-on experience in a developing country, meeting locals and attending courses with McGill professors and/or local instructors. The costs of these field experiences may vary. The field experience (semester, short course or internship) includes developing projects in local communities, observing subsistence agriculture in situ and participating in various activities which contribute to sensitizing the students to the challenges that developing countries face. Students study water resources, sustainable development, nutrition, planning and development, and a host of other fascinating topics, allowing them to sharpen their skills for future career opportunities.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 6 credits)

| AGEC 442 | (3) | Economics of International Agricultural Development |
| :--- | :--- | :--- |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |

## Complementary Courses (18 credits)

Students select either Option A or Option B.

## Option A

18 credits from the following:

| AGEC 333 | (3) | Resource Economics |
| :--- | :--- | :--- |
| AGEC 430 | (3) | Agriculture, Food and Resource Policy |


| AGRI 215 | $(3)$ | Agro-Ecosystems Field Course |
| :--- | :---: | :--- |
| AGRI 325 | $(3)$ | Sustainable Agriculture and Food Security |
| AGRI 499 | $(3)$ | Agricultural Development Internship |
| BREE 510 | (3) | Watershed Systems Management |
| ENVB 437 | (3) | Assessing Environmental Impact |
| FDSC 525 | (3) | Food Quality Assurance |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| PARA 410 | (3) | Environment and Infection |
| PARA 515 | (3) | Water, Health and Sanitation |
| PLNT 300 | (3) | Cropping Systems |

## Option B

15 credits from any of the McGill Field Study Semesters
African Field Study Semester
Barbados Field Study Semester
Barbados Interdisciplinary Tropical Studies Field Semester
Panama Field Study Semester

## 3 credits from the list in Option A

### 2.5.2.2.9 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Life Sciences (Multidisciplinary) (24 credits)

Students taking this specialization have a wide variety of Life Sciences course offerings to choose from, which allow them to target their program to their own interests in the field. Course choices are balanced between "fundamentals" and "applications." Depending upon the courses chosen, the resulting program may be relatively specialized or very broad, spanning several disciplines. Such a broad background in Life Sciences will open up employment opportunities in a variety of diverse bioscience industries; students with an appropriate CGPA may proceed to a wide variety of postgraduate programs or professional schools.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Complementary Courses ( $\mathbf{2 4}$ credits)

24 credits selected from the following list:

| ANSC 312 | $(3)$ | Animal Health and Disease |
| :--- | :---: | :--- |
| ANSC 323 | $(3)$ | Mammalian Physiology |
| ANSC 324 | (3) | Developmental Biology and Reproduction |
| ANSC 326 | (3) | Fundamentals of Population Genetics |
| ANSC 350 | (3) | Food-Borne Pathogens |
| ANSC 420 | (3) | Animal Biotechnology |
| ANSC 424 | (3) | Metabolic Endocrinology |
| ANSC 433 | (3) | Animal Nutrition and Metabolism |
| ANSC 560 | (3) | Biology of Lactation |
| ANSC 565 | (3) | Applied Information Systems |
| BINF 511 | (3) | Bioinformatics for Genomics |
| BTEC 306 | (3) | Experiments in Biotechnology |
| BTEC 535 | (3) | Functional Genomics in Model Organisms |
| BTEC 555 | (3) | Structural Bioinformatics |
| ENTO 330 | (3) | Insect Biology |
| ENTO 352 | (3) | Biocontrol of Pest Insects |


| ENVB 301 | (3) | Meteorology |
| :---: | :---: | :---: |
| ENVB 305 | (3) | Population and Community Ecology |
| ENVB 313 | (3) | Phylogeny and Biogeography |
| ENVB 506 | (3) | Quantitative Methods: Ecology |
| ENVB 529 | (3) | GIS for Natural Resource Management |
| FDSC 442 | (3) | Food Microbiology |
| MICR 331 | (3) | Microbial Ecology |
| MICR 338 | (3) | Bacterial Molecular Genetics |
| MICR 341 | (3) | Mechanisms of Pathogenicity |
| MICR 450 | (3) | Environmental Microbiology |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |
| PARA 410 | (3) | Environment and Infection |
| PARA 424 | (3) | Fundamental Parasitology |
| PARA 515 | (3) | Water, Health and Sanitation |
| PLNT 304 | (3) | Biology of Fungi |
| PLNT 305 | (3) | Plant Pathology |
| PLNT 310 | (3) | Plant Propagation |
| PLNT 353 | (3) | Plant Structure and Function |
| PLNT 358 | (3) | Flowering Plant Diversity |
| PLNT 426 | (3) | Plant Ecophysiology |
| PLNT 434 | (3) | Weed Biology and Control |
| PLNT 435 | (3) | Plant Breeding |
| PLNT 460 | (3) | Plant Ecology |

### 2.5.2.2.10 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Microbiology and Molecular Biotechnology

 (24 credits)Students following this specialization receive education and training in fundamental principles and applied aspects of microbiology. Complementary courses allow students to focus on basic microbial sciences or applied areas such as biotechnology. Successful graduates may work in university, government and industrial research laboratories, in the pharmaceutical, fermentation and food industries, and with an appropriate CGPA proceed to post-graduate studies or professional biomedical schools.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (18 credits)

| BTEC 306 | (3) | Experiments in Biotechnology |
| :--- | :---: | :--- |
| MICR 331 | (3) | Microbial Ecology |
| MICR 338 | (3) | Bacterial Molecular Genetics |
| MICR 341 | (3) | Mechanisms of Pathogenicity |
| MICR 450 | (3) | Environmental Microbiology |
| PARA 424 | (3) | Fundamental Parasitology |

## Complementary Courses and Suggested Electives (6 credits)

| ANSC 350 | (3) | Food-Borne Pathogens |
| :--- | :--- | :--- |
| ANSC 420 | (3) | Animal Biotechnology |
| BINF 511 | (3) | Bioinformatics for Genomics |


| BTEC 501 | (3) | Bioinformatics |
| :--- | :--- | :--- |
| BTEC 535 | (3) | Functional Genomics in Model Organisms |
| BTEC 555 | (3) | Structural Bioinformatics |
| FDSC 442 | $(3)$ | Food Microbiology |
| MIMM 324 | $(3)$ | Fundamental Virology |
| PLNT 304 | $(3)$ | Biology of Fungi |

### 2.5.2.2.11 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Plant Biology (24 credits)

This specialization emphasizes the study of plants from the cellular to the organismal level. The structure, physiology, development, evolution, and ecology of plants will be studied. Most courses offer laboratory classes that expand on the lecture material and introduce students to the latest techniques in plant biology. Many laboratory exercises use the excellent research and field facilities at the Morgan Arboretum, McGill Herbarium, Emile A. Lods Agronomy Research Centre, the Horticultural Centre and the Plant Science greenhouses as well as McGill field stations. Students may undertake a research project under the guidance of a member of the Plant Science Department as part of their studies. Graduates with the specialization may continue in post-graduate study or work in the fields of botany, mycology, molecular biology, ecology, conservation, or environmental science.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 9 credits)

| PLNT 353 | (3) | Plant Structure and Function |
| :--- | :--- | :--- |
| PLNT 358 | (3) | Flowering Plant Diversity |
| PLNT 426 | (3) | Plant Ecophysiology |

## Complementary Courses ( 15 credits)

15 credits of complementary courses selected from:

| ANSC 326 | $(3)$ | Fundamentals of Population Genetics |
| :--- | :---: | :--- |
| BINF 511 | (3) | Bioinformatics for Genomics |
| ENVB 313 | (3) | Phylogeny and Biogeography |
| PLNT 304 | (3) | Biology of Fungi |
| PLNT 305 | (3) | Plant Pathology |
| PLNT 310 | (3) | Plant Propagation |
| PLNT 435 | $(3)$ | Plant Breeding |
| PLNT 460 | $(3)$ | Plant Ecology |

### 2.5.2.2.12 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Plant Production (24 credits)

This specialization provides students with the knowledge and skills relating to the biology and physiology, breeding, propagation, and management of domesticated plants. The plant industry, in both rural and urban settings, is a sector of growing importance to Canadian and global economies. Graduates are prepared for employment in horticulture or in field crop development, production, and management, in government services, extension, teaching and consulting; or for graduate and postgraduate studies. When taken in conjunction with the Major Agro-Environmental Sciences and the specialization in Professional Agrology, this specialization conforms with the eligibility requirements for the Ordre des agronomes du Québec.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising
Required Courses (18 credits)

| PLNT 300 | $(3)$ | Cropping Systems |
| :--- | :--- | :--- |
| PLNT 305 | $(3)$ | Plant Pathology |
| PLNT 310 | $(3)$ | Plant Propagation |
| PLNT 353 | $(3)$ | Plant Structure and Function |
| PLNT 434 | $(3)$ | Weed Biology and Control |
| PLNT 435 | $(3)$ | Plant Breeding |

## Complementary Courses ( 6 credits)

6 credits of complementary courses selected from:

| AGRI 340 | (3) | Principles of Ecological Agriculture |
| :--- | :---: | :--- |
| ENTO 352 | (3) | Biocontrol of Pest Insects |
| PLNT 302 | (3) | Forage Crops and Pastures |
| PLNT 307 | (3) | Agroecology of Vegetables and Fruits |
| PLNT 312 | (3) | Urban Horticulture |
| PLNT 322 | (3) | Greenhouse Management |
| SOIL 535 | (3) | Soil Ecology |

### 2.5.2.2.13 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Professional Agrology (24 credits)

This Specialization is required for students who wish to qualify for membership in the Ordre des agronomes du Québec (OAQ). It cannot be taken alone; it must be taken with the Major Agro-Environmental Sciences and a Second specialization in Animal Production, Ecological Agriculture, Plant Production, or Soil and Water Resources. This Specialization focuses on working in the professional agrology industry and covers agricultural legislation as well as professional conduct.

The credits within this specialization may not count towards the student's Major or other Specialization. All of the 24 credits count only for this Specialization.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising.

## Required Courses ( 15 credits)

| AGRI 330 | (1) | Agricultural Legislation |
| :--- | :---: | :--- |
| AGRI 410D1 | (3) | Agrology Internship |
| AGRI 410D2 | (3) | Agrology Internship |
| AGRI 430 | (2) | Professional Practice in Agrology |
| AGRI 490 | (3) | Agri-Food Industry Project |
| PLNT 430 | (3) | Pesticides in Agriculture |

## Complementary Courses (9 credits)

Students choose 9 complementary credits, approved by the Academic Adviser, in agricultural sciences or applied agriculture to meet the requirements of the OAQ.

### 2.5.2.2.14 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Professional Agrology for Agribusiness (24 credits)

This Specialization is required for students who wish to qualify for membership in the Ordre des agronomes du Québec (OAQ). It cannot be taken alone; it must be taken with the Major in Agricultural Economics and the Agribusiness Specialization. This Specialization focuses on working in the professional agribusiness industry and covers agricultural legislation as well as professional conduct.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising.

## Required Courses (12 credits)

| AGRI 330 | (1) | Agricultural Legislation |
| :--- | :---: | :--- |
| AGRI 410D1 | (3) | Agrology Internship |
| AGRI 410D2 | (3) | Agrology Internship |
| AGRI 430 | (2) | Professional Practice in Agrology |
| AGRI 490 | (3) | Agri-Food Industry Project |

## Complementary Courses (12 credits)

6 credits from:
AEBI 212
(3)
Evolution and Phylogeny

| LSCI 202 | (3) | Molecular Cell Biology |
| :--- | :--- | :--- |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |

3 credits from:
ANSC 451
(3)
Dairy and Beef Production Management
ANSC 458
Swine and Poultry Production

3 credits from:

| PLNT 300 | (3) | Cropping Systems |
| :--- | :--- | :--- |
| PLNT 302 | (3) | Forage Crops and Pastures |
| PLNT 434 | (3) | Weed Biology and Control |

### 2.5.2.2.15 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Soil and Water Resources (24 credits)

** This program is currently not offered. **
This specialization will interest students who want to understand how soils and water interact within managed ecosystems such as urban or agricultural landscapes. The conservation and management of agricultural soils, issues affecting watershed management and decision making, and the remediation of contaminated soils will be examined. When taken with the Agro-Environmental Sciences Major and the specialization in Professional Agrology, this specialization conforms with the eligibility requirements for the Ordre des agronomes du Québec.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 15 credits)

| AGRI 435 | (3) | Soil and Water Quality Management |
| :--- | :--- | :--- |
| BREE 217 | (3) | Hydrology and Water Resources |
| SOIL 326 | (3) | Soils in a Changing Environment |
| SOIL 331 | (3) | Environmental Soil Physics |
| SOIL 535 | (3) | Soil Ecology |

## Complementary Courses (9 credits)

* Note: Students may take BREE 529 or ENVB 529, but not both.

| BREE 322 | (3) | Organic Waste Management |
| :--- | :---: | :--- |
| BREE 327 | $(3)$ | Bio-Environmental Engineering |
| BREE 510* | (3) | Watershed Systems Management |
| BREE 529* | (3) | GIS for Natural Resource Management |
| ENVB 529* | (3) | GIS for Natural Resource Management |
| NRSC 333 | (3) | Pollution and Bioremediation |
| SOIL 300 | (3) | Geosystems |
| SOIL 510 | $(3)$ | Environmental Soil Chemistry |

### 2.5.2.2.16 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Wildlife Biology (24 credits)

This specialization focuses on the ecology of vertebrate animals, their biological and physical environment, and the interactions that are important in the management of ecological communities and wildlife species. Students have access to local wildlife resources including the Avian Science and Conservation Centre, the McGill Arboretum, the Stonycroft Wildlife Area, the Molson Reserve, and the Ecomuseum.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 15 credits)

| ENVB 529 | (3) | GIS for Natural Resource Management |
| :--- | :---: | :--- |
| WILD 307 | (3) | Natural History of Vertebrates |
| WILD 350 | (3) | Mammalogy |
| WILD 401 | (3) | Fisheries and Wildlife Management |
| WILD 420 | (3) | Ornithology |

## Complementary Courses (9 credits)

9 credits from the following:

| BIOL 307 | $(3)$ | Behavioural Ecology |
| :--- | :---: | :--- |
| BIOL 427 | $(3)$ | Herpetology |
| ENVB 437 | $(3)$ | Assessing Environmental Impact |
| ENVB 506 | (3) | Quantitative Methods: Ecology |
| PARA 424 | (3) | Fundamental Parasitology |
| PLNT 358 | (3) | Flowering Plant Diversity |
| WILD 302 | (3) | Fish Ecology |
| WILD 421 | (3) | Wildlife Conservation |
| WILD 475 | (3) | Desert Ecology |

### 2.5.3 Bachelor of Engineering (Bioresource) - B.Eng.(Bioresource)

For more information on this major, please see section 2.4.4: Bachelor of Engineering in Bioresource Engineering - B.Eng.(Bioresource) (Overview).

### 2.5.3.1 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Major Bioresource Engineering (113 credits)

The B.Eng.(Bioresource); Major in Bioresource Engineering program focuses on biological, agricultural, food, environmental areas, and applying professional engineering skills to biological systems. The design and implementation of technology for the creation of bio-based products, including food, fiber, fuel, and biomaterials, while sustaining a healthful environment. Graduates of this program are eligible for registration as professional engineers in any province across Canada, as well as in some international jurisdictions.

## Required Courses ( 62 credits)

| AEMA 202 | (3) | Intermediate Calculus |
| :---: | :---: | :---: |
| AEMA 305 | (3) | Differential Equations |
| BREE 205 | (3) | Engineering Design 1 |
| BREE 210 | (3) | Mechanical Analysis and Design |
| BREE 216 | (3) | Bioresource Engineering Materials |
| BREE 252 | (3) | Computing for Engineers |
| BREE 301 | (3) | Biothermodynamics |
| BREE 305 | (3) | Fluid Mechanics |
| BREE 312 | (3) | Electric Circuits and Machines |
| BREE 319 | (3) | Engineering Mathematics |
| BREE 327 | (3) | Bio-Environmental Engineering |
| BREE 341 | (3) | Mechanics of Materials |
| BREE 415 | (3) | Design of Machines and Structural Elements |
| BREE 420 | (3) | Engineering for Sustainability |
| BREE 451 | (1) | Undergraduate Seminar 1-Oral Presentation |


| BREE 452 | (1) | Undergraduate Seminar 2 Poster Presentation |
| :--- | :---: | :--- |
| BREE 453 | (1) | Undergraduate Seminar 3-Scientific Writing |
| BREE 485 | (1) | Senior Undergraduate Seminar |
| BREE 490 | (3) | Engineering Design 2 |
| BREE 495 | (3) | Engineering Design 3 |
| BREE 504 | (3) | Instrumentation and Control |
| FACC 250 | (0) | Responsibilities of the Professional Engineer |
| FACC 300 | (3) | Engineering Economy |
| FACC 400 | (1) | Engineering Professional Practice |
| MECH 289 | (3) | Design Graphics |

## Complementary Courses (51 credits)

## Set A

3 credits from the following:

| AEMA 310 | (3) | Statistical Methods 1 |
| :--- | :--- | :--- |
| CIVE 302 | (3) | Probabilistic Systems |

3 credits from the following:

| CHEE 315 | (3) | Heat and Mass Transfer |
| :--- | :--- | :--- |
| MECH 346 | (3) | Heat Transfer |

## Set B - Natural Sciences and Mathematics

Minimum of 3 credits chosen from the following list:

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :---: | :--- |
| AEBI 211 | $(3)$ | Organisms 2 |
| ENVB 210 | $(3)$ | The Biophysical Environment |
| ENVB 305 | $(3)$ | Population and Community Ecology |
| LSCI 202 | (3) | Molecular Cell Biology |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| MICR 331 | (3) | Microbial Ecology |
| PLNT 300 | (3) | Cropping Systems |

With 6 credits chosen in consultation with the Academic Adviser.

## Set C - Social Sciences

Minimum of 3 credits from the following list:

| ENVR 201 | (3) | Society, Environment and Sustainability |
| :--- | :--- | :--- |
| ENVR 203 | (3) | Knowledge, Ethics and Environment |
| SEAD 530 | (3) | Economics for Sustainability in Engineering and Design |
| SOCI 235 | (3) | Technology and Society |

Note: ENVR courses have limited enrolment.

Plus 6 credits of Social Sciences, Management Studies, Humanities, or Law courses at the U1 undergraduate level or higher with approval of the Academic Adviser.

Note: these 6 credits may include one 3-credit language course other than the student's normal spoken languages.

## Set D-Engineering

27 credits from the following list, with the option (and approval of the Academic Adviser) of taking a maximum of 6 credits from other courses offered in the Faculty of Engineering:

| BREE 214 | (3) | Geomatics |
| :---: | :---: | :---: |
| BREE 217 | (3) | Hydrology and Water Resources |
| BREE 314 | (3) | Agri-Food Buildings |
| BREE 322 | (3) | Organic Waste Management |
| BREE 325 | (3) | Food Process Engineering |
| BREE 329 | (3) | Precision Agriculture |
| BREE 403 | (3) | Biological Material Properties |
| BREE 412 | (3) | Machinery Systems Engineering |
| BREE 416 | (3) | Engineering for Land Development |
| BREE 419 | (3) | Structural Design |
| BREE 497 | (3) | Bioresource Engineering Project |
| BREE 501 | (3) | Simulation and Modelling |
| BREE 502 | (3) | Drainage/Irrigation Engineering |
| BREE 505 | (3) | Life Cycle Assessment for Sustainable Agrifood Systems |
| BREE 509 | (3) | Hydrologic Systems and Modelling. |
| BREE 510 | (3) | Watershed Systems Management |
| BREE 515 | (3) | Soil Hydrologic Modelling |
| BREE 518 | (3) | Ecological Engineering |
| BREE 519 | (3) | Advanced Food Engineering |
| BREE 520 | (3) | Food, Fibre and Fuel Elements |
| BREE 522 | (3) | Bio-Based Polymers |
| BREE 529 | (3) | GIS for Natural Resource Management |
| BREE 530 | (3) | Fermentation Engineering |
| BREE 531 | (3) | Post-Harvest Drying |
| BREE 532 | (3) | Post-Harvest Storage |
| BREE 533 | (3) | Water Quality Management |
| BREE 535 | (3) | Food Safety Engineering |

### 2.5.3.2 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Honours Bioresource Engineering (113 credits)

The B.Eng.(Bioresource); Honours in Bioresource Engineering program focuses on biological, agricultural, food, environmental areas, and applying professional engineering skills to biological systems. The design and implementation of technology for the creation of bio-based products, including food, fibre, fuel, and biomaterials, while sustaining a healthful environment. Graduates of this program are eligible for registration as professional engineers in any province across Canada, as well as in some international jurisdictions.

## Required Courses ( 62 credits)

| AEMA 202 | (3) | Intermediate Calculus |
| :--- | :--- | :--- |
| AEMA 305 | (3) | Differential Equations |
| BREE 205 | (3) | Engineering Design 1 |
| BREE 210 | (3) | Mechanical Analysis and Design |


| BREE 216 | (3) | Bioresource Engineering Materials |
| :---: | :---: | :---: |
| BREE 252 | (3) | Computing for Engineers |
| BREE 301 | (3) | Biothermodynamics |
| BREE 305 | (3) | Fluid Mechanics |
| BREE 312 | (3) | Electric Circuits and Machines |
| BREE 319 | (3) | Engineering Mathematics |
| BREE 327 | (3) | Bio-Environmental Engineering |
| BREE 341 | (3) | Mechanics of Materials |
| BREE 415 | (3) | Design of Machines and Structural Elements |
| BREE 420 | (3) | Engineering for Sustainability |
| BREE 451 | (1) | Undergraduate Seminar 1 - Oral Presentation |
| BREE 452 | (1) | Undergraduate Seminar 2 Poster Presentation |
| BREE 453 | (1) | Undergraduate Seminar 3 - Scientific Writing |
| BREE 485 | (1) | Senior Undergraduate Seminar |
| BREE 490 | (3) | Engineering Design 2 |
| BREE 495 | (3) | Engineering Design 3 |
| BREE 504 | (3) | Instrumentation and Control |
| FACC 250 | (0) | Responsibilities of the Professional Engineer |
| FACC 300 | (3) | Engineering Economy |
| FACC 400 | (1) | Engineering Professional Practice |
| MECH 289 | (3) | Design Graphics |

## Complementary Courses (51 credits)

## Honours Courses

Students choose either Plan A or Plan B

## Honours Plan A

12 credits of Honours research courses in the subject area of the student's major in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

## 12 credits from:

| FAES 401 | (6) | Honours Research Project 1 |
| :--- | :--- | :--- |
| FAES 402 | (6) | Honours Research Project 2 |

OR

## Honours Plan B

A minimum of 6 credits of Honours courses and 6 credits in 500-level BREE courses, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the program Director of the student's major and the professor who has agreed to supervise the research project.

6 credits from:

| FAES 405 | (3) | Honours Project 1 |
| :--- | :--- | :--- |
| FAES 406 | (3) | Honours Project 2 |

Plus 6 credits of BREE courses at the 500 level.

## Set A

3 credits from the following:

| AEMA 310 | (3) | Statistical Methods 1 |
| :--- | :--- | :--- |
| CIVE 302 | (3) | Probabilistic Systems |

3 credits from the following:
CHEE 315
(3)
Heat and Mass Transfer
MECH 346
(3)
Heat Transfer

## Set B - Natural Sciences and Mathematics

3 credits chosen from the list below:

| AEBI 210 | $(3)$ | Organisms 1 |
| :--- | :---: | :--- |
| AEBI 211 | $(3)$ | Organisms 2 |
| ENVB 210 | $(3)$ | The Biophysical Environment |
| ENVB 305 | (3) | Population and Community Ecology |
| LSCI 202 | (3) | Molecular Cell Biology |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| MICR 331 | (3) | Microbial Ecology |
| PLNT 300 | (3) | Cropping Systems |

Plus 6 credits chosen in consultation with the Academic Adviser.

## Set C - Social Sciences

Minimum of 3 credits from the following list:

| ENVR 201 | (3) | Society, Environment and Sustainability |
| :--- | :--- | :--- |
| ENVR 203 | (3) | Knowledge, Ethics and Environment |
| SEAD 530 | (3) | Economics for Sustainability in Engineering and Design |
| SOCI 235 | (3) | Technology and Society |

Note: ENVR courses have limited enrolment.
Plus 6 credits of social sciences, management studies, humanities, or law courses at the U1 undergraduate level or higher with approval of the Academic Adviser. Note: these 6 credits may include one 3-credit language course other than the student's normal spoken languages.

## Set D-Engineering

15 credits from the following list, with the option (and approval of the Academic Adviser) of taking a maximum of 6 credits from other courses offered in the Faculty of Engineering:

| BREE 214 | $(3)$ | Geomatics |
| :--- | :---: | :--- |
| BREE 217 | $(3)$ | Hydrology and Water Resources |
| BREE 314 | (3) | Agri-Food Buildings |
| BREE 322 | $(3)$ | Organic Waste Management |
| BREE 325 | $(3)$ | Food Process Engineering |
| BREE 329 | $(3)$ | Precision Agriculture |
| BREE 403 | $(3)$ | Biological Material Properties |


| BREE 412 | $(3)$ | Machinery Systems Engineering |
| :--- | :--- | :--- |
| BREE 416 | $(3)$ | Engineering for Land Development |
| BREE 419 | $(3)$ | Structural Design |
| BREE 497 | $(3)$ | Bioresource Engineering Project |
| BREE 501 | (3) | Simulation and Modelling |
| BREE 502 | (3) | Drainage/Irrigation Engineering |
| BREE 505 | (3) | Life Cycle Assessment for Sustainable Agrifood Systems |
| BREE 509 | (3) | Hydrologic Systems and Modelling. |
| BREE 510 | (3) | Watershed Systems Management |
| BREE 515 | (3) | Soil Hydrologic Modelling |
| BREE 518 | (3) | Ecological Engineering |
| BREE 519 | (3) | Advanced Food Engineering |
| BREE 520 | (3) | Food, Fibre and Fuel Elements |
| BREE 522 | (3) | Bio-Based Polymers |
| BREE 529 | (3) | GIS for Natural Resource Management |
| BREE 530 | (3) | Fermentation Engineering |
| BREE 531 | (3) | Post-Harvest Drying |
| BREE 532 | (3) | Post-Harvest Storage |
| BREE 533 | (3) | Water Quality Management |
| BREE 535 | (3) | Food Safety Engineering |

### 2.5.3.3 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Major Bioresource Engineering - Professional Agrology (113 credits)

The B.Eng.(Bioresource); Major in Bioresource Engineering; Professional Agrology program focuses on biological, agricultural, food, environmental areas, and applying professional engineering skills to biological systems. The design and implementation of technology for the creation of bio-based products, including food, fibre, fuel, and biomaterials, while sustaining a healthful environment. Graduates of this program are eligible for registration as professional engineers in any province across Canada, as well as in some international jurisdictions. This program qualifies graduates to apply for registration in the Ordre des agronomes du Québec and similar licensing bodies in other provinces in addition to the professional engineer licensing.

## Required Courses ( 65 credits)

| AEMA 202 | $(3)$ | Intermediate Calculus |
| :--- | :---: | :--- |
| AEMA 305 | $(3)$ | Differential Equations |
| AGRI 330 | $(1)$ | Agricultural Legislation |
| AGRI 430 | (2) | Professional Practice in Agrology |
| BREE 205 | (3) | Engineering Design 1 |
| BREE 210 | (3) | Mechanical Analysis and Design |
| BREE 216 | (3) | Bioresource Engineering Materials |
| BREE 252 | (3) | Computing for Engineers |
| BREE 301 | (3) | Biothermodynamics |
| BREE 305 | (3) | Fluid Mechanics |
| BREE 312 | (3) | Electric Circuits and Machines |
| BREE 319 | (3) | Engineering Mathematics |
| BREE 327 | (3) | Bio-Environmental Engineering |
| BREE 341 | (3) | Mechanics of Materials |
| BREE 415 | (3) | Design of Machines and Structural Elements |


| BREE 420 | $(3)$ | Engineering for Sustainability |
| :--- | :--- | :--- |
| BREE 451 | (1) | Undergraduate Seminar 1 - Oral Presentation |
| BREE 452 | (1) | Undergraduate Seminar 2 Poster Presentation |
| BREE 453 | (1) | Undergraduate Seminar 3-Scientific Writing |
| BREE 485 | (1) | Senior Undergraduate Seminar |
| BREE 490 | (3) | Engineering Design 2 |
| BREE 495 | (3) | Engineering Design 3 |
| BREE 504 | (3) | Instrumentation and Control |
| FACC 250 | (0) | Responsibilities of the Professional Engineer |
| FACC 300 | (3) | Engineering Economy |
| FACC 400 | (1) | Engineering Professional Practice |
| MECH 289 | (3) | Design Graphics |

## Complementary Courses (48 credits)

48 credits of the complementary courses selected as follows:

## Set A

3 credits from the following:

| AEMA 310 | (3) | Statistical Methods 1 |
| :--- | :--- | :--- |
| CIVE 302 | (3) | Probabilistic Systems |

3 credits from the following:

| CHEE 315 | (3) | Heat and Mass Transfer |
| :--- | :--- | :--- |
| MECH 346 | (3) | Heat Transfer |

## Set B - Natural Sciences

Group 1 - Biology
6 credits from the following list:

| AEBI 210 | (3) | Organisms 1 |
| :--- | :--- | :--- |
| AEBI 211 | (3) | Organisms 2 |
| LSCI 202 | (3) | Molecular Cell Biology |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | $(3)$ | Biochemistry 1 |
| LSCI 230 | $(3)$ | Introductory Microbiology |

Group 2 - Agricultural Sciences
6 credits from the following list:

| ANSC 250 | (3) | Principles of Animal Science |
| :--- | :--- | :--- |
| ANSC 433 | (3) | Animal Nutrition and Metabolism |
| ANSC 451 | $(3)$ | Dairy and Beef Production Management |
| ANSC 458 | $(3)$ | Swine and Poultry Production |
| PLNT 300 | $(3)$ | Cropping Systems |


| PLNT 302 | (3) | Forage Crops and Pastures |
| :--- | :--- | :--- |
| PLNT 307 | (3) | Agroecology of Vegetables and Fruits |
| PLNT 312 | (3) | Urban Horticulture |
| PLNT 322 | (3) | Greenhouse Management |
| PLNT 430 | (3) | Pesticides in Agriculture |

## Set C - Social Sciences

3 credits from the following list:

| ENVR 201 | (3) | Society, Environment and Sustainability |
| :--- | :--- | :--- |
| ENVR 203 | (3) | Knowledge, Ethics and Environment |
| SEAD 530 | (3) | Economics for Sustainability in Engineering and Design |
| SOCI 235 | (3) | Technology and Society |

Note: ENVR courses have limited enrolment.

## Set D-Engineering

27 credits from Group 1, Group 2, and Group 3.
Minimum of 6 credits from each of Group 1, Group 2 and Group 3 with the option (and approval of the Academic Adviser) of taking 6 credits from courses offered in the Faculty of Engineering.

## Group 1 - Soil and Water

| BREE 214 | (3) | Geomatics |
| :--- | :---: | :--- |
| BREE 217 | (3) | Hydrology and Water Resources |
| BREE 322 | (3) | Organic Waste Management |
| BREE 329 | (3) | Precision Agriculture |
| BREE 416 | (3) | Engineering for Land Development |
| BREE 502 | (3) | Drainage/Irrigation Engineering |
| BREE 509 | (3) | Hydrologic Systems and Modelling. |
| BREE 510 | (3) | Watershed Systems Management |
| BREE 515 | (3) | Soil Hydrologic Modelling |
| BREE 518 | (3) | Ecological Engineering |
| BREE 529 | (3) | GIS for Natural Resource Management |
| BREE 533 | (3) | Water Quality Management |

## Group 2 - Food Processing

| BREE 325 | (3) | Food Process Engineering |
| :--- | :---: | :--- |
| BREE 519 | (3) | Advanced Food Engineering |
| BREE 520 | (3) | Food, Fibre and Fuel Elements |
| BREE 530 | (3) | Fermentation Engineering |
| BREE 531 | (3) | Post-Harvest Drying |
| BREE 532 | (3) | Post-Harvest Storage |
| BREE 535 | (3) | Food Safety Engineering |

Group 3-Other Engineering

| BREE 314 | $(3)$ | Agri-Food Buildings |
| :--- | :---: | :--- |
| BREE 403 | $(3)$ | Biological Material Properties |
| BREE 412 | $(3)$ | Machinery Systems Engineering |
| BREE 419 | $(3)$ | Structural Design |
| BREE 497 | (3) | Bioresource Engineering Project |
| BREE 501 | (3) | Simulation and Modelling |
| BREE 505 | (3) | Life Cycle Assessment for Sustainable Agrifood Systems |
| BREE 522 | (3) | Bio-Based Polymers |

### 2.5.3.4 Bachelor of Engineering (Bioresource) - B.Eng.(Bioresource) Related Programs <br> 2.5.3.4.1 Minor in Environmental Engineering

For more information, see section 2.5.6.9: Minor in Environmental Engineering.

### 2.5.3.4.2 Barbados Field Study Semester

For more information, see Study Abroad \& Field Studies > Undergraduate > section 12.2.1.3: Barbados Field Semester.

### 2.5.3.4.3 Internship Opportunities

For more information, see section 2.4.1: Internship Opportunities.

### 2.5.4 Bachelor of Science (Food Science) - B.Sc.(F.Sc.)

Please refer to section 2.4.5: Bachelor of Science in Food Science - B.Sc.(F.Sc.) (Overview) for advising and other information on these B.Sc.(F.Sc.) programs.

### 2.5.4.1 Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Major Food Science - Food Science Option (90 credits)

This program is intended for those students interested in the multidisciplinary field of food science. The courses are integrated to acquaint the student with food processing, food chemistry, quality assurance, analytical procedures, food products, standards, and regulations. The program prepares graduates for employment as scientists in industry or government, in regulatory, research, quality assurance, or product development capacities.
Graduates have the academic qualifications for membership in the Canadian Institute of Food Science and Technology (CIFST). Graduates of the Food Science Major with Food Science Option can also qualify for recognition by the Institute of Food Technologists (IFT).
The Food Science Option is completed to 90 credits with free elective courses.
Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (51 credits)

Note: If an introductory CEGEP-level Organic Chemistry course has not been completed, then FDSC 230 (Organic Chemistry) must be completed as a replacement.

| AEMA 310 | $(3)$ | Statistical Methods 1 |
| :--- | :---: | :--- |
| AGRI 510 | $(3)$ | Professional Practice |
| BREE 324 | $(3)$ | Elements of Food Engineering |
| FDSC 200 | $(3)$ | Introduction to Food Science |
| FDSC 213 | $(3)$ | Analytical Chemistry 1 |
| FDSC 251 | $(3)$ | Food Chemistry 1 |
| FDSC 300 | $(3)$ | Principles of Food Analysis 1 |
| FDSC 310 | $(3)$ | Post Harvest Fruit and Vegetable Technology |
| FDSC 319 | $(3)$ | Food Commodities |
| FDSC 330 | $(3)$ | Food Processing |
| FDSC 400 | $(3)$ | Food Packaging |
| FDSC 442 | $(3)$ | Food Microbiology |


| FDSC 495D1 | $(1.5)$ | Food Science Seminar |
| :--- | :--- | :--- |
| FDSC 495D2 | $(1.5)$ | Food Science Seminar |
| FDSC 525 | $(3)$ | Food Quality Assurance |
| LSCI 211 | $(3)$ | Biochemistry 1 |
| LSCI 230 | $(3)$ | Introductory Microbiology |
| NUTR 207 | $(3)$ | Nutrition and Health |

## Additional Required Courses - Food Science Option (21 credits)

| FDSC 233 | $(3)$ | Physical Chemistry |
| :--- | :---: | :--- |
| FDSC 305 | $(3)$ | Food Chemistry 2 |
| FDSC 315 | $(3)$ | Separation Techniques in Food Analysis 1 |
| FDSC 334 | $(3)$ | Analysis of Food Toxins and Toxicants |
| FDSC 405 | $(3)$ | Food Product Development |
| FDSC 516 | $(3)$ | Flavour Chemistry |
| FDSC 540 | $(3)$ | Sensory Evaluation of Foods |

## Elective Courses (18 credits)

Electives are selected in consultation with an academic adviser, to meet the minimum 90-credit requirement for the degree. A portion of these credits should be in the humanities/social sciences.

### 2.5.4.2 Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Honours Food Science - Food Science Option (90 credits)

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

In addition to satisfying the research requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours. Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.
Students who meet all the requirements will have the name of their program changed to include the word "Honours."
A brief description of the research activities involved will be documented and signed by the Program Director of the student's major, the supervisor of the research project, and the student.
This program is intended for those students interested in the multidisciplinary field of food science. The courses are integrated to acquaint the student with food processing, food chemistry, quality assurance, analytical procedures, food products, standards, and regulations. The program prepares graduates for employment as scientists in industry or government, in regulatory, research, quality assurance, or product development capacities.

Graduates have the academic qualifications for membership in the Canadian Institute of Food Science and Technology (CIFST). Graduates of the Food Science Major with Food Science Option can also qualify for recognition by the Institute of Food Technologists (IFT).

The Food Science Option is completed after 90 credits with free elective courses.
Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (51 credits)

Note: If an introductory CEGEP-level Organic Chemistry course has not been completed, then FDSC 230 (Organic Chemistry) must be completed as a replacement.

| AEMA 310 | (3) | Statistical Methods 1 |
| :--- | :--- | :--- |
| AGRI 510 | (3) | Professional Practice |
| BREE 324 | (3) | Elements of Food Engineering |
| FDSC 200 | (3) | Introduction to Food Science |


| FDSC 213 | $(3)$ | Analytical Chemistry 1 |
| :--- | :---: | :--- |
| FDSC 251 | $(3)$ | Food Chemistry 1 |
| FDSC 300 | $(3)$ | Principles of Food Analysis 1 |
| FDSC 310 | $(3)$ | Post Harvest Fruit and Vegetable Technology |
| FDSC 319 | $(3)$ | Food Commodities |
| FDSC 330 | $(3)$ | Food Processing |
| FDSC 400 | $(3)$ | Food Packaging |
| FDSC 442 | $(3)$ | Food Microbiology |
| FDSC 495D1 | $(1.5)$ | Food Science Seminar |
| FDSC 495D2 | $(1.5)$ | Food Science Seminar |
| FDSC 525 | (3) | Food Quality Assurance |
| LSCI 211 | $(3)$ | Biochemistry 1 |
| LSCI 230 | $(3)$ | Introductory Microbiology |
| NUTR 207 | $(3)$ | Nutrition and Health |

## Additional Required Courses - Food Science Option (21 credits)

| FDSC 233 | $(3)$ | Physical Chemistry |
| :--- | :---: | :--- |
| FDSC 305 | $(3)$ | Food Chemistry 2 |
| FDSC 315 | $(3)$ | Separation Techniques in Food Analysis 1 |
| FDSC 334 | $(3)$ | Analysis of Food Toxins and Toxicants |
| FDSC 405 | $(3)$ | Food Product Development |
| FDSC 516 | $(3)$ | Flavour Chemistry |
| FDSC 540 | $(3)$ | Sensory Evaluation of Foods |

## Honours Courses

Students choose either Plan A or Plan B.

## Honours Plan A

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

| FAES 401 | (6) | Honours Research Project 1 |
| :--- | :--- | :--- |
| FAES 402 | (6) | Honours Research Project 2 |

## Honours Plan B

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

| FAES 405 | (3) | Honours Project 1 |
| :--- | :--- | :--- |
| FAES 406 | (3) | Honours Project 2 |

## Elective Courses (6 credits)

Electives are selected in consultation with an academic adviser, to meet the minimum 90-credit requirement for the degree. A portion of these credits should be in the humanities/social sciences.

### 2.5.4.3 Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Major Food Science - Food Chemistry Option (90 credits)

This program is intended for those students interested in the multidisciplinary field of food science. The courses are integrated to acquaint the student with food processing, food chemistry, quality assurance, analytical procedures, food products, standards, and regulations. The program prepares graduates for employment as scientists in industry or government, in regulatory, research, quality assurance, or product development capacities.

Graduates have the academic qualifications for membership in the Canadian Institute of Food Science and Technology (CIFST). Graduates of the Food Science Major with Food Chemistry Option can also qualify for recognition by the Institute of Food Technologists (IFT) and the Ordre des chimistes du Québec (OCQ). Food Chemistry Option is completed to 90 credits with free elective courses.

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (54 credits)

Note: If an introductory CEGEP-level Organic Chemistry course has not been completed, then FDSC 230 (Organic Chemistry) must be completed as a replacement.

| AEMA 310 | (3) | Statistical Methods 1 |
| :---: | :---: | :---: |
| AGRI 510 | (3) | Professional Practice |
| BREE 324 | (3) | Elements of Food Engineering |
| FDSC 200 | (3) | Introduction to Food Science |
| FDSC 213 | (3) | Analytical Chemistry 1 |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 300 | (3) | Principles of Food Analysis 1 |
| FDSC 310 | (3) | Post Harvest Fruit and Vegetable Technology |
| FDSC 319 | (3) | Food Commodities |
| FDSC 330 | (3) | Food Processing |
| FDSC 400 | (3) | Food Packaging |
| FDSC 442 | (3) | Food Microbiology |
| FDSC 495D1 | (1.5) | Food Science Seminar |
| FDSC 495D2 | (1.5) | Food Science Seminar |
| FDSC 525 | (3) | Food Quality Assurance |
| FDSC 540 | (3) | Sensory Evaluation of Foods |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |

## Additional Required Courses - Food Chemistry Option (30 credits)

Note: Graduates of this program are qualified for recognition by the Institute of Food Technologists (IFT) and the Ordre des chimistes du Québec (OCQ).

| FDSC 233 | $(3)$ | Physical Chemistry |
| :--- | :---: | :--- |
| FDSC 305 | $(3)$ | Food Chemistry 2 |
| FDSC 315 | $(3)$ | Separation Techniques in Food Analysis 1 |
| FDSC 334 | $(3)$ | Analysis of Food Toxins and Toxicants |
| FDSC 405 | $(3)$ | Food Product Development |
| FDSC 490 | $(3)$ | Research Project 1 |
| FDSC 491 | $(3)$ | Research Project 2 |
| FDSC 515 | $(3)$ | Enzymology |
| FDSC 516 | $(3)$ | Flavour Chemistry |
| FDSC 520 | $(3)$ | Biophysical Chemistry of Food |

## Electives (6 credits)

Electives are selected in consultation with an academic adviser, to meet the minimum 90-credit requirement for the degree. A portion of these credits should be in the humanities/social sciences.

### 2.5.4.4 About the Concurrent B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.)

Unique in North America, the concurrent degree program in Food Science and Nutritional Science allows students to complete two degrees at once while offering the best education in these complementary fields. This program opens the door to a multitude of career paths in the nutrition and food industries.

The Food Science component of the program focuses on the chemistry of food and the scientific principles underlying food safety, preservation, processing, and packaging, to provide consumers with quality foods. The Nutritional Science component deals with the science of human nutrient metabolism and the nutritional aspects of food. The program has been carefully structured to ensure that students receive the training that the industry demands, including a stage placement in the Nutrition or Food Industry.

### 2.5.4.4.1 Concurrent Bachelor of Science in Food Science (B.Sc.(F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc.(Nutr.Sc.)) - Food Science/Nutritional Science Major (Concurrent) (122 credits)

The concurrent program B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.) is designed to give motivated students the opportunity to combine the two fields. The two disciplines complement each other with Food Science providing the scientific foundation in the fundamentals of food science and its application in the food system, while Nutritional Sciences brings the fundamental knowledge in the nutritional aspects of food and metabolism. The program aims to train students with the fundamental knowledge in both disciplines to promote the development of healthy food products for human consumption. The overall program is structured and closely integrated to satisfy the academic requirements of both degrees as well as the professional training or exposure to industry.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this publication for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

Required Courses ( 80 credits)

| AEMA 310 | (3) | Statistical Methods 1 |
| :---: | :---: | :---: |
| ANSC 234 | (3) | Biochemistry 2 |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 424 | (3) | Metabolic Endocrinology |
| FDSC 200 | (3) | Introduction to Food Science |
| FDSC 213 | (3) | Analytical Chemistry 1 |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 300 | (3) | Principles of Food Analysis 1 |
| FDSC 305 | (3) | Food Chemistry 2 |
| FDSC 310 | (3) | Post Harvest Fruit and Vegetable Technology |
| FDSC 315 | (3) | Separation Techniques in Food Analysis 1 |
| FDSC 319 | (3) | Food Commodities |
| FDSC 330 | (3) | Food Processing |
| FDSC 334 | (3) | Analysis of Food Toxins and Toxicants |
| FDSC 400 | (3) | Food Packaging |
| FDSC 442 | (3) | Food Microbiology |
| FDSC 497 | (1.5) | Professional Seminar: Food |
| FDSC 525 | (3) | Food Quality Assurance |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 214 | (4) | Food Fundamentals |
| NUTR 307 | (3) | Metabolism and Human Nutrition |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 344 | (4) | Clinical Nutrition 1 |


| NUTR 497 | (1.5) | Professional Seminar: Nutrition |
| :--- | :--- | :--- |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |

## Complementary Courses (30 credits)

Complementary courses are selected as follows:

At least 9 credits from the following:

| AGEC 200 | $(3)$ | Principles of Microeconomics |
| :--- | :---: | :--- |
| AGEC 201 | $(3)$ | Principles of Macroeconomics |
| AGEC 330 | $(3)$ | Agriculture and Food Markets |
| AGEC 430 | $(3)$ | Agriculture, Food and Resource Policy |
| AGEC 442 | $(3)$ | Economics of International Agricultural Development |
| AGEC 450 | $(3)$ | Agribusiness Management |
| NUTR 342 | (3) | Applied Human Resources |

At least 9 credits from the following:

| ANSC 551 | (3) | Carbohydrate and Lipid Metabolism |
| :--- | :---: | :--- |
| ANSC 552 | (3) | Protein Metabolism and Nutrition |
| ENVR 203 | (3) | Knowledge, Ethics and Environment |
| FDSC 516 | $(3)$ | Flavour Chemistry |
| FDSC 536 | $(3)$ | Food Traceability |
| FDSC 537 | $(3)$ | Nutraceutical Chemistry |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 341 | (3) | Global Food Security |
| NUTR 503 | (3) | Nutrition and Exercise |

12 credits from the following:

| FDSC 480 | (12) | Food Industry Internship |
| :--- | :--- | :--- |
| NUTR 480 | $(12)$ | Nutrition Industry Internship |

## Elective Courses (12 credits)

Electives are selected in consultation with an academic adviser.

* Not all courses may be offered every year, please consult with your adviser when planning your program.


### 2.5.4.4.2 Concurrent Bachelor of Science in Food Science (B.Sc.(F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc.(Nutr.Sc.)) - Food Science/Nutritional Science Honours (Concurrent) (122 credits)

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.
In addition to satisfying the research requirements, students must apply for the Honours program in March or April of their U3 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours. Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.
Students who meet all the requirements will have the name of their program changed to include the word "Honours."

A brief description of the research activities involved will be documented and signed by the Program Director of the student's major, the supervisor of the research project, and the student.

The concurrent program B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.) is designed to give motivated students the opportunity to combine the two fields. The two disciplines complement each other with Food Science providing the scientific foundation in the fundamentals of food science and its application in the food system, while Nutritional Sciences brings the fundamental knowledge in the nutritional aspects of food and metabolism. The program aims to train students with the fundamental knowledge in both disciplines to promote the development of healthy food products for human consumption. The overall program is structured and closely integrated to satisfy the academic requirements of both degrees as well as the professional training or exposure to industry.
Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.

## Required Courses ( 80 credits)

| AEMA 310 | (3) | Statistical Methods 1 |
| :---: | :---: | :---: |
| ANSC 234 | (3) | Biochemistry 2 |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 424 | (3) | Metabolic Endocrinology |
| FDSC 200 | (3) | Introduction to Food Science |
| FDSC 213 | (3) | Analytical Chemistry 1 |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 300 | (3) | Principles of Food Analysis 1 |
| FDSC 305 | (3) | Food Chemistry 2 |
| FDSC 310 | (3) | Post Harvest Fruit and Vegetable Technology |
| FDSC 315 | (3) | Separation Techniques in Food Analysis 1 |
| FDSC 319 | (3) | Food Commodities |
| FDSC 330 | (3) | Food Processing |
| FDSC 334 | (3) | Analysis of Food Toxins and Toxicants |
| FDSC 400 | (3) | Food Packaging |
| FDSC 442 | (3) | Food Microbiology |
| FDSC 497 | (1.5) | Professional Seminar: Food |
| FDSC 525 | (3) | Food Quality Assurance |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 214 | (4) | Food Fundamentals |
| NUTR 307 | (3) | Metabolism and Human Nutrition |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 497 | (1.5) | Professional Seminar: Nutrition |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |

## Honours Courses

Students choose either Plan A or Plan B.

## Honours Plan A

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

| FAES 401 | (6) | Honours Research Project 1 |
| :--- | :--- | :--- |
| FAES 402 | (6) | Honours Research Project 2 |

## Honours Plan B

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

| FAES 405 | (3) | Honours Project 1 |
| :--- | :--- | :--- |
| FAES 406 | (3) | Honours Project 2 |

## Complementary Courses (30 credits)

Complementary courses are selected as follows:

At least 9 credits from the following:

| AGEC 200 | (3) | Principles of Microeconomics |
| :--- | :--- | :--- |
| AGEC 201 | (3) | Principles of Macroeconomics |
| AGEC 330 | (3) | Agriculture and Food Markets |
| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| AGEC 442 | (3) | Economics of International Agricultural Development |
| AGEC 450 | (3) | Agribusiness Management |

At least 9 credits from the following:

| AGEC 242 | $(3)$ | Management Theories and Practices |
| :--- | :--- | :--- |
| ENVR 203 | $(3)$ | Knowledge, Ethics and Environment |
| NUTR 301 | (3) | Psychology |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 342 | (3) | Applied Human Resources |

12 credits from the following:

| FDSC 480 | $(12)$ | Food Industry Internship |
| :--- | :--- | :--- |
| NUTR 480 | $(12)$ | Nutrition Industry Internship |

## Elective Courses (12 credits)

Electives are selected in consultation with an academic adviser.

### 2.5.4.5 Bachelor of Science (Food Science) - B.Sc.(F.Sc.) Related Programs <br> 2.5.4.5.1 Certificate in Food Science

Detailed information on this certificate program can be found under section 2.5.7.2: Certificate (Cert.) Food Science ( 30 credits) in this publication.

### 2.5.5 Bachelor of Science (Nutritional Sciences) - B.Sc.(Nutr.Sc.)

Please refer to section 2.4.6: Bachelor of Science in Nutritional Sciences - B.Sc.(Nutr.Sc.) (Overview) for advising and other information regarding the Dietetics and Nutrition majors.

### 2.5.5.1 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Dietetics (115 credits)

The B.Sc.(Nutr.Sc.) Major in Dietetics is a 3.5 year program that includes 40 weeks of internship Professional Practice (Stage) integrated in each year in a planned sequence to provide the academic and practical training for a career as a dietitian-nutritionist. The program includes innovative courses to promote food and nutrition expertise, leadership, communication skills, management skills and critical thinking. Graduates of the program are eligible to be registered as a professional dietitian in province(s) of Canada.

This program is accredited by the Partnership for Dietetic Education and Practice (PDEP) and it is recognized in Quebec by the Ordre des diététistes-nutritionnistes du Québec (ODNQ) and meets all the standards and requirements of this professional order.

## Required Courses (112 credits)

Required courses and Professional Practice (Stage) courses are sequenced in a specific order over nine terms (3.5-year program). See https://www.mcgill.ca/nutrition/programs/undergraduate/dietetics for detailed information regarding the undergraduate program plan.

| AEMA 310 | (3) | Statistical Methods 1 |
| :---: | :---: | :---: |
| ANSC 234 | (3) | Biochemistry 2 |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 424 | (3) | Metabolic Endocrinology |
| IPEA 500 | (0) | Roles in Interprofessional Teams |
| IPEA 501 | (0) | Communication in Interprofessional Teams |
| IPEA 502 | (0) | Patient-Centred Care in Action |
| IPEA 503 | (0) | Managing Interprofessional Conflict |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 208* | (2) | Professional Practice Stage 1A |
| NUTR 209* | (2) | Professional Practice Stage 1B |
| NUTR 214 | (4) | Food Fundamentals |
| NUTR 217 | (4) | Application: Food Fundamentals |
| NUTR 307 | (3) | Metabolism and Human Nutrition |
| NUTR 310* | (2) | Professional Practice Stage 2A |
| NUTR 311* | (5) | Professional Practice Stage 2B |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 341 | (3) | Global Food Security |
| NUTR 342 | (3) | Applied Human Resources |
| NUTR 343 | (3) | Financial Management and Accounting |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 345 | (3) | Food Service Systems Management |
| NUTR 346 | (3) | Applied Food Service Management |
| NUTR 408* | (1) | Professional Practice Stage 3A |
| NUTR 409* | (9) | Professional Practice Stage 3B |
| NUTR 438 | (3) | Interviewing and Counselling |
| NUTR 450 | (3) | Research Methods: Human Nutrition |
| NUTR 505 | (3) | Public Health Nutrition |
| NUTR 508* | (7) | Professional Practice Stage 4A |
| NUTR 509* | (7) | Professional Practice Stage 4B |
| NUTR 511 | (3) | Nutrition and Behaviour |
| NUTR 545 | (4) | Clinical Nutrition 2 |
| NUTR 546 | (4) | Clinical Nutrition 3 |

## Elective Courses (3 credits)

Students who need to improve their proficiency in either English or French are strongly encouraged to choose their electives for that purpose. Students who wish to take language courses should check with the French Language Centre, Faculty of Arts, as placement testing may be required.

Elective choice may include, but is not limited to:

| FRSL 219 | (3) | Français intermédiaire 1: diététique et nutrition |
| :--- | :--- | :--- |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| NUTR 503 | (3) | Nutrition and Exercise |
| NUTR 520 | (3) | Indigenous Peoples' Nutrition |

## Compulsory Immunization

A compulsory immunization program exists at McGill which is required for Dietetics students. Students should complete their immunization upon commencing Year 1 of the Dietetics Major. Confirmation of immunization will be coordinated by the Student Wellness Hub (https://www.mcgill.ca/wellness-hub/ ). Certain deadlines apply.
*Advising Notes for Professional Practice (Stage):
The School firmly applies prerequisite requirements for registration in all required courses in the Dietetics Major. All required courses must be passed with a minimum grade of C. Undergraduate registration for all Professional Practice (Stage) courses is restricted to students in the Dietetics Major with a CGPA greater than or equal to 3.00 . The CGPA requirement is firmly applied. Students in the Dietetics Major who have a CGPA below 3.0 for two consecutive years will not be permitted to continue in the program. Successful completion of each rotation of each level of Stage (Professional Practice) is required to pass that level of Stage. Each level is a prerequisite for the next level. If a student fails one level of Stage, certain conditions will apply to have the option to repeat the Stage and this may include an interview to assess suitability for the profession, and potential to successfully complete the program. Students are reminded that ethical conduct on Professional Practice (Stage) rotations is required. The Faculty reserves the right to require the withdrawal of any student if at any time the Faculty feels the student has displayed unprofessional conduct or demonstrates incompetence.

### 2.5.5.2 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Nutrition - Food Function and Safety (90 credits)

This Major offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan from the molecular to the organismal level. The concentration in food function and safety covers the ranges from health effects of phytochemicals and food toxicants, food chemistry and analysis, food safety, product development and influence of constituents of food on health. This degree does not lead to professional licensure as a Dietitian/Nutritionist. Graduates are qualified for careers in the biotechnology field, pharmaceutical and/or food industries, government laboratories, and the health science communications field. Graduates often continue on to graduate studies preparing for careers in research, medicine, and dentistry or as specialists in nutrition.
Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this eCalendar for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 63 credits)

All required courses must be passed with a minimum grade of C .

| AEMA 310 | $(3)$ | Statistical Methods 1 |
| :--- | :--- | :--- |
| ANSC 234 | $(3)$ | Biochemistry 2 |
| ANSC 323 | $(3)$ | Mammalian Physiology |
| ANSC 424 | $(3)$ | Metabolic Endocrinology |
| FDSC 200 | $(3)$ | Introduction to Food Science |
| FDSC 251 | $(3)$ | Food Chemistry 1 |
| FDSC 300 | $(3)$ | Principles of Food Analysis 1 |
| FDSC 305 | $(3)$ | Food Chemistry 2 |
| FDSC 525 | $(3)$ | Food Quality Assurance |
| LSCI 204 | $(3)$ | Genetics |
| LSCI 211 | $(3)$ | Biochemistry 1 |
| LSCI 230 | $(3)$ | Introductory Microbiology |
| NUTR 207 | $(4)$ | Nutrition and Health |
| NUTR 214 | (3) | Food Fundamentals |
| NUTR 307 | $(3)$ | Metabolism and Human Nutrition |
| NUTR 322 | Applied Sciences Communication |  |


| NUTR 337 | $(3)$ | Nutrition Through Life |
| :--- | :--- | :--- |
| NUTR 344 | $(4)$ | Clinical Nutrition 1 |
| NUTR 401 | $(1)$ | Emerging Issues in Nutrition |
| NUTR 450 | $(3)$ | Research Methods: Human Nutrition |
| NUTR 512 | $(3)$ | Herbs, Foods and Phytochemicals |

## Complementary Courses (12 credits)

12 credits of complementary courses are selected as follows:

## Common Complementary Courses

6 credits from the following courses:

| ANSC 433 | $(3)$ | Animal Nutrition and Metabolism |
| :--- | :--- | :--- |
| ANSC 560 | (3) | Biology of Lactation |
| FDSC 537 | (3) | Nutraceutical Chemistry |
| FDSC 545 | (3) | Advances in Food Microbiology |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| NUTR 503 | (3) | Nutrition and Exercise |
| NUTR 505 | (3) | Public Health Nutrition |
| NUTR 507 | (3) | Advanced Nutritional Biochemistry |
| NUTR 511 | (3) | Nutrition and Behaviour |
| NUTR 537 | (3) | Advanced Human Metabolism |
| NUTR 545 | (4) | Clinical Nutrition 2 |
| NUTR 546 | (4) | Clinical Nutrition 3 |
| NUTR 551 | (3) | Analysis of Nutrition Data |
| PARA 438 | (3) | Immunology |

6 credits from the following courses:

| AGRI 510 | (3) | Professional Practice |
| :---: | :---: | :---: |
| ANSC 350 | (3) | Food-Borne Pathogens |
| FDSC 315 | (3) | Separation Techniques in Food Analysis 1 |
| FDSC 319 | (3) | Food Commodities |
| FDSC 330 | (3) | Food Processing |
| FDSC 334 | (3) | Analysis of Food Toxins and Toxicants |
| FDSC 405 | (3) | Food Product Development |
| FDSC 442 | (3) | Food Microbiology |
| FDSC 516 | (3) | Flavour Chemistry |
| FDSC 520 | (3) | Biophysical Chemistry of Food |
| FDSC 537 | (3) | Nutraceutical Chemistry |
| FDSC 540 | (3) | Sensory Evaluation of Foods |
| NUTR 430 | (3) | Directed Studies: Dietetics and Nutrition 1 |

Elective Courses (15 credits)

15 credits of electives are taken to meet the minimum credit requirement for the degree. Reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval students can take electives at any Canadian or international university.

### 2.5.5.3 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Nutrition - Global Nutrition ( 90 credits)

This Major covers many aspects of human nutrition and food and their impact on health and society at the community and international level. It offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan. The specialization in global nutrition emphasizes the importance of the interaction of nutrition, diet, water, environment, and infection. This degree does not lead to professional licensure as a Dietitian/Nutritionist. Graduates are qualified for careers in national and international governmental and non-governmental food and health agencies, in world development programs, in the food sector, and the health science communications field. Graduates often continue on to graduate studies preparing for careers in public health, epidemiology, research, medicine, and dentistry or as specialists in nutrition.

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 63 credits)

All required courses must be passed with a minimum grade of C .

| AEMA 310 | (3) | Statistical Methods 1 |
| :---: | :---: | :---: |
| ANSC 234 | (3) | Biochemistry 2 |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 424 | (3) | Metabolic Endocrinology |
| FDSC 200 | (3) | Introduction to Food Science |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 305 | (3) | Food Chemistry 2 |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 214 | (4) | Food Fundamentals |
| NUTR 307 | (3) | Metabolism and Human Nutrition |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 401 | (1) | Emerging Issues in Nutrition |
| NUTR 450 | (3) | Research Methods: Human Nutrition |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| NUTR 505 | (3) | Public Health Nutrition |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |

## Complementary Courses (12 credits)

12 credits of complementary courses are selected as follows:

## Common Complementary Courses

6 credits selected from:

| ANSC 433 | (3) | Animal Nutrition and Metabolism |
| :--- | :--- | :--- |
| ANSC 560 | (3) | Biology of Lactation |
| FDSC 537 | (3) | Nutraceutical Chemistry |
| FDSC 545 | (3) | Advances in Food Microbiology |
| NUTR 503 | (3) | Nutrition and Exercise |


| NUTR 507 | (3) | Advanced Nutritional Biochemistry |
| :--- | :--- | :--- |
| NUTR 511 | (3) | Nutrition and Behaviour |
| NUTR 537 | $(3)$ | Advanced Human Metabolism |
| NUTR 545 | (4) | Clinical Nutrition 2 |
| NUTR 546 | $(4)$ | Clinical Nutrition 3 |
| NUTR 551 | $(3)$ | Analysis of Nutrition Data |
| PARA 438 | $(3)$ | Immunology |

6 credits selected from:

| AGEC 330 | (3) | Agriculture and Food Markets |
| :---: | :---: | :---: |
| AGEC 442 | (3) | Economics of International Agricultural Development |
| AGRI 340 | (3) | Principles of Ecological Agriculture |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |
| ANSC 560 | (3) | Biology of Lactation |
| ANTH 302 | (3) | New Horizons in Medical Anthropology |
| GEOG 303 | (3) | Health Geography |
| GEOG 403 | (3) | Global Health and Environmental Change |
| NUTR 341 | (3) | Global Food Security |
| NUTR 430 | (3) | Directed Studies: Dietetics and Nutrition 1 |
| NUTR 506 | (3) | Qualitative Methods in Nutrition |
| NUTR 520 | (3) | Indigenous Peoples' Nutrition |
| PARA 410 | (3) | Environment and Infection |
| PARA 515 | (3) | Water, Health and Sanitation |
| PPHS 501 | (3) | Population Health and Epidemiology |
| PPHS 511 | (3) | Fundamentals of Global Health |
| PPHS 529 | (3) | Global Environmental Health and Burden of Disease |

## Elective Courses (15 credits)

15 credits of Electives are taken to meet the minimum credit requirement for the degree. Reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval students can take electives at any Canadian or international university.

### 2.5.5.4 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Nutrition - Health and Disease (90 credits)

This Major offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan. This concentration emphasizes the influence of diet and nutrition on human health and the pathophysiology of chronic disease. This degree does not lead to professional licensure as a dietitian/nutritionist. Graduates are qualified for careers in heath research, pharmaceutical and/or food industries, government laboratories, and the health science communications field. Graduates often continue on to graduate studies preparing for careers in research, medicine, and dentistry or as specialists in nutrition.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this eCalendar for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (60 credits)

All required courses must be passed with a minimum grade of C .

| AEMA 310 | (3) | Statistical Methods 1 |
| :--- | :--- | :--- |
| ANSC 234 | (3) | Biochemistry 2 |
| ANSC 323 | $(3)$ | Mammalian Physiology |


| ANSC 424 | (3) | Metabolic Endocrinology |
| :---: | :---: | :---: |
| FDSC 200 | (3) | Introduction to Food Science |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 305 | (3) | Food Chemistry 2 |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 214 | (4) | Food Fundamentals |
| NUTR 307 | (3) | Metabolism and Human Nutrition |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 401 | (1) | Emerging Issues in Nutrition |
| NUTR 450 | (3) | Research Methods: Human Nutrition |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |
| PARA 438 | (3) | Immunology |

## Complementary Courses (15 credits)

15 credits of complementary courses are selected as follows:

## Common Complementary Courses

At least 6 credits from the following:

| ANSC 433 | $(3)$ | Animal Nutrition and Metabolism |
| :--- | :--- | :--- |
| ANSC 551 | (3) | Carbohydrate and Lipid Metabolism |
| ANSC 552 | (3) | Protein Metabolism and Nutrition |
| ANSC 560 | (3) | Biology of Lactation |
| FDSC 537 | (3) | Nutraceutical Chemistry |
| FDSC 545 | (3) | Advances in Food Microbiology |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| NUTR 503 | (3) | Nutrition and Exercise |
| NUTR 511 | (3) | Nutrition and Behaviour |
| NUTR 545 | (4) | Clinical Nutrition 2 |
| NUTR 546 | (4) | Clinical Nutrition 3 |
| NUTR 551 | (3) | Analysis of Nutrition Data |

At least 9 credits from the following courses:

| ANAT 214 | (3) | Systemic Human Anatomy |
| :--- | :--- | :--- |
| ANAT 261 | (4) | Introduction to Dynamic Histology |
| ANSC 312 | (3) | Animal Health and Disease |
| ANSC 560 | (3) | Biology of Lactation |
| MICR 341 | (3) | Mechanisms of Pathogenicity |
| MIMM 414 | (3) | Advanced Immunology |


| NUTR 430 | $(3)$ | Directed Studies: Dietetics and Nutrition 1 |
| :--- | :---: | :--- |
| NUTR 551 | (3) | Analysis of Nutrition Data |
| PARA 424 | $(3)$ | Fundamental Parasitology |
| PATH 300 | (3) | Human Disease |
| PHAR 300 | (3) | Drug Action |
| PHAR 301 | (3) | Drugs and Disease |
| PHAR 303 | (3) | Principles of Toxicology |
| PHGY 311 | (3) | Channels, Synapses and Hormones |
| PHGY 312 | (3) | Respiratory, Renal, and Cardiovascular Physiology |
| PHGY 313 | (3) | Blood, Gastrointestinal, and Immune Systems Physiology |

## Elective Courses (15 credits)

15 credits of electives are taken to meet the minimum credit requirement for the degree. A reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval students can take electives at any Canadian or international university.

### 2.5.5.5 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Nutrition - Metabolism, Health and Disease (90 credits)

This Major offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan from the molecular to the organismal level. This concentration emphasizes the influence of diet and nutrition on human health and the pathophysiology of inherited and acquired chronic disease. The links of nutrigenomics, nutrigenetics, and biotechnology with human health and regulation of metabolism are explored. This program does not lead to professional licensure as a dietitian/nutritionist.

## Required Courses (63 credits)

All required courses must be passed with a minimum grade of C .

| AEMA 310 | (3) | Statistical Methods 1 |
| :---: | :---: | :---: |
| ANSC 234 | (3) | Biochemistry 2 |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 424 | (3) | Metabolic Endocrinology |
| FDSC 200 | (3) | Introduction to Food Science |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 305 | (3) | Food Chemistry 2 |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 214 | (4) | Food Fundamentals |
| NUTR 307 | (3) | Metabolism and Human Nutrition |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 401 | (1) | Emerging Issues in Nutrition |
| NUTR 450 | (3) | Research Methods: Human Nutrition |
| NUTR 507 | (3) | Advanced Nutritional Biochemistry |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |
| NUTR 537 | (3) | Advanced Human Metabolism |

## Complementary Courses ( 12 credits)

12 credits of complementary courses are selected as follows:

## Common Complementary Courses

6 credits from the following:

| ANSC 433 | $(3)$ | Animal Nutrition and Metabolism |
| :--- | :---: | :--- |
| ANSC 560 | $(3)$ | Biology of Lactation |
| FDSC 537 | (3) | Nutraceutical Chemistry |
| FDSC 545 | (3) | Advances in Food Microbiology |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| NUTR 503 | (3) | Nutrition and Exercise |
| NUTR 505 | (3) | Public Health Nutrition |
| NUTR 511 | (3) | Nutrition and Behaviour |
| NUTR 545 | (4) | Clinical Nutrition 2 |
| NUTR 546 | (4) | Clinical Nutrition 3 |
| NUTR 551 | (3) | Analysis of Nutrition Data |
| PARA 438 | (3) | Immunology |

6 credits from the following courses:

| ANAT 214 | (3) | Systemic Human Anatomy |
| :---: | :---: | :---: |
| ANAT 261 | (4) | Introduction to Dynamic Histology |
| ANAT 262 | (3) | Introductory Molecular and Cell Biology |
| ANAT 322 | (3) | Neuroendocrinology |
| ANSC 312 | (3) | Animal Health and Disease |
| ANSC 324 | (3) | Developmental Biology and Reproduction |
| ANSC 400 | (3) | Eukaryotic Cells and Viruses |
| ANSC 560 | (3) | Biology of Lactation |
| BIOL 300 | (3) | Molecular Biology of the Gene |
| BTEC 306 | (3) | Experiments in Biotechnology |
| MICR 341 | (3) | Mechanisms of Pathogenicity |
| NUTR 430 | (3) | Directed Studies: Dietetics and Nutrition 1 |
| PARA 424 | (3) | Fundamental Parasitology |
| PATH 300 | (3) | Human Disease |
| PHAR 300 | (3) | Drug Action |
| PHAR 301 | (3) | Drugs and Disease |
| PHAR 303 | (3) | Principles of Toxicology |
| PHGY 311 | (3) | Channels, Synapses and Hormones |
| PHGY 312 | (3) | Respiratory, Renal, and Cardiovascular Physiology |
| PHGY 313 | (3) | Blood, Gastrointestinal, and Immune Systems Physiology |

## Elective Courses (15 credits)

15 credits of electives are taken to meet the minimum credit requirement for the degree. A reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval students can take electives at any Canadian or international university.

### 2.5.5.6 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Nutrition - Sports Nutrition (90 credits)

This Major offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan from the molecular to the organismal level. The concentration in sports nutrition integrates the influence of exercise and physical activity on health and chronic disease prevention. This degree does not lead to professional licensure as a Dietitian/Nutritionist. Graduates are qualified for careers in the biotechnology field, pharmaceutical and/or food industries, government laboratories, and the health science communications field. Graduates often continue on to graduate studies preparing for careers in research, medicine, and dentistry or as specialists in nutrition.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this eCalendar for prerequisites and minimum credit requirements.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 63 credits)

All required courses must be passed with a minimum grade of C .

| AEMA 310 | (3) | Statistical Methods 1 |
| :---: | :---: | :---: |
| ANSC 234 | (3) | Biochemistry 2 |
| ANSC 323 | (3) | Mammalian Physiology |
| ANSC 424 | (3) | Metabolic Endocrinology |
| EDKP 395 | (3) | Exercise Physiology |
| FDSC 200 | (3) | Introduction to Food Science |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 305 | (3) | Food Chemistry 2 |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |
| NUTR 214 | (4) | Food Fundamentals |
| NUTR 307 | (3) | Metabolism and Human Nutrition |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 401 | (1) | Emerging Issues in Nutrition |
| NUTR 450 | (3) | Research Methods: Human Nutrition |
| NUTR 503 | (3) | Nutrition and Exercise |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |

## Complementary Courses (12 credits)

12 credits of complementary courses are selected as follows:

## Common Complementary Courses

6 credits from the following:

| ANSC 433 | (3) | Animal Nutrition and Metabolism |
| :--- | :--- | :--- |
| ANSC 560 | (3) | Biology of Lactation |
| FDSC 537 | (3) | Nutraceutical Chemistry |
| FDSC 545 | (3) | Advances in Food Microbiology |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| NUTR 505 | (3) | Public Health Nutrition |


| NUTR 507 | (3) | Advanced Nutritional Biochemistry |
| :--- | :---: | :--- |
| NUTR 511 | (3) | Nutrition and Behaviour |
| NUTR 537 | (3) | Advanced Human Metabolism |
| NUTR 545 | (4) | Clinical Nutrition 2 |
| NUTR 546 | $(4)$ | Clinical Nutrition 3 |
| NUTR 551 | $(3)$ | Analysis of Nutrition Data |
| PARA 438 | $(3)$ | Immunology |

6 credits from:

| ANAT 214 | $(3)$ | Systemic Human Anatomy |
| :--- | :---: | :--- |
| EDKP 261 | $(3)$ | Motor Development |
| EDKP 330 | $(3)$ | Physical Activity and Public Health |
| EDKP 445 | $(3)$ | Exercise Metabolism |
| EDKP 446 | $(3)$ | Physical Activity and Ageing |
| EDKP 448 | $(3)$ | Exercise and Health Psychology |
| EDKP 449 | $(3)$ | Neuromuscular and Inflammatory Pathophysiology |
| EDKP 485 | $(3)$ | Cardiopulmonary Exercise Pathophysiology |
| EDKP 495 | $(3)$ | Scientific Principles of Training |
| EDKP 542 | $(3)$ | Environmental Exercise Physiology |
| NUTR 430 | $(3)$ | Directed Studies: Dietetics and Nutrition 1 |
| NUTR 551 | $(3)$ | Analysis of Nutrition Data |

## Elective Courses ( 15 credits)

15 credits of electives are taken to meet the minimum credit requirement for the degree. Reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval, students can take electives at any Canadian or international university.

### 2.5.5.7 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Honours in Nutrition (90 credits)

B.Sc.(Nutr.Sc.); Honours in Nutrition is intended for students who are interested in gaining a concentrated research experience in Human Nutrition. Students in the B.Sc.(Nutr.Sc.) Nutrition Major program who have a CGPA of at least 3.6, and a grade of at least A- in all NUTR courses can apply to transfer in Winter U2 term. It is the responisbility of each student to find a professor to support and supervise a research project. Graduation requires completion of a minimum of 90 credits, with CGPA of at least 3.6 , and a grade of at least A- in all NUTR courses. Students who do not maintain Honours standing may transfer registration to the B.Sc.(Nutr.Sc.) Nutrition Major.

## Required Courses (75 credits)

| AEMA 310 | (3) | Statistical Methods 1 |
| :--- | :--- | :--- |
| ANSC 234 | $(3)$ | Biochemistry 2 |
| ANSC 323 | $(3)$ | Mammalian Physiology |
| ANSC 424 | $(3)$ | Metabolic Endocrinology |
| FDSC 200 | $(3)$ | Introduction to Food Science |
| FDSC 251 | $(3)$ | Food Chemistry 1 |
| FDSC 305 | $(3)$ | Food Chemistry 2 |
| LSCI 204 | (3) | Genetics |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Nutroductory Microbiology and Health |
| NUTR 207 |  |  |


| NUTR 214 | $(4)$ | Food Fundamentals |
| :--- | :---: | :--- |
| NUTR 307 | $(3)$ | Metabolism and Human Nutrition |
| NUTR 322 | (3) | Applied Sciences Communication |
| NUTR 337 | (3) | Nutrition Through Life |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 401 | (1) | Emerging Issues in Nutrition |
| NUTR 450 | (3) | Research Methods: Human Nutrition |
| NUTR 491 | (3) | Honours Research 1 |
| NUTR 492 | (3) | Honours Research 2 |
| NUTR 493 | (3) | Honours Research 3 |
| NUTR 494 | (3) | Honours Research 4 |
| NUTR 507 | (3) | Advanced Nutritional Biochemistry |
| NUTR 537 | (3) | Advanced Human Metabolism |
| NUTR 551 | (3) | Analysis of Nutrition Data |

## Elective Courses (15 credits)

15 credits chosen in consultation with the research supervisor, a limited number of credits may be taken at other Quebec and/or Canadian universities.

### 2.5.5.8 Bachelor of Science (Nutritional Sciences) - Related Programs <br> 2.5.5.8.1 Minor in Human Nutrition

Detailed information on this Minor can be found under section 2.5.6.10: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Human Nutrition (24 credits) in this publication.

### 2.5.5.8.2 Concurrent Bachelor of Science in Food Science - B.Sc.(F.Sc.) and Bachelor of Science in Nutritional Sciences - B.Sc.(Nutr.Sc.) - Food Science/Nutritional Science Major

Detailed information on this concurrent program can be found under section 2.5.4.4.1: Concurrent Bachelor of Science in Food Science (B.Sc.(F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc.(Nutr.Sc.)) - Food Science/Nutritional Science Major (Concurrent) (122 credits) in this publication.

### 2.5.6 Minor Programs

The Faculty of Agricultural and Environmental Sciences offers a number of minor programs; the following are offered by the FAES Dean's Office, or in partnership with another school or faculty.
For a full list of minors offered by the Faculty of Agricultural and Environmental Sciences, refer to section 2.4.9: Minor Programs (Overview). For registration information, see section 2.3.5.8.1: Procedures for Minor Programs.

### 2.5.6.1 Minor in Environment (Bieler School of Environment)

For information about the Minor in Environment, consult Bieler School of Environment > Undergraduate > Browse Academic Programs $>$ section 7.5.1: Minor in Environment.

### 2.5.6.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Agribusiness Entrepreneurship (18 credits)

This Minor is a collaboration by the Faculty of Agricultural and Environmental Sciences and the Desautels Faculty of Management. It provides students with an understanding of how to conceptualize, develop, and manage successful ventures in the agricultural, ag-tech, bioresource engineering, environmental, and food sectors - including for-profit private companies and social enterprises - and how to champion intrapreneurship activities in larger organizations. The program covers the essentials of management and is interdisciplinary and integrative. Many courses include a diverse set of students from multiple McGill faculties.

Within this Minor, 18 credits must be unique (only count for the Minor and do not overlap with the Major or Specialization), except for students enrolled in programs with more than 72 credits of required and complementary courses, who can count up to 6 credits of courses in the Major or Specialization.

Students in this Minor are not permitted to take the Desautels Minors in Management, Marketing, Finance or Operations Management (for non-Management students).

Minimum requirements: U2 or above; minimum 3.0 CGPA. This Minor has limited enrolment. Students should contact the program director to apply.

## Required Courses (12 credits)

| INTG 201 | (3) | Integrated Management Essentials 1 |
| :--- | :--- | :--- |
| INTG 202 | (3) | Integrated Management Essentials 2 |
| MGPO 362 | (3) | Fundamentals of Entrepreneurship |
| MGPO 364 | (3) | Entrepreneurship in Practice |

## Complementary Courses ( 6 credits)

6 credits from the following:

| AGEC 231 | $(3)$ | Economic Systems of Agriculture |
| :--- | :--- | :--- |
| AGEC 332 | $(3)$ | Farm Management and Finance |
| AGEC 430 | $(3)$ | Agriculture, Food and Resource Policy |
| AGEC 450 | $(3)$ | Agribusiness Management |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |
| AGRI 493 | (3) | International Project Management |
| FAES $300^{*}$ | (3) | Internship 2 |
| FAES 310 | $(3)$ | Agribusiness Entrepreneurship |

* Note: To be counted towards the Minor in Agribusiness Entrepreneurship, the placement in FAES 300 must be approved by the program coordinator as having entrepreneurial focus.


### 2.5.6.3 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Agricultural Economics (24 credits)

The Minor in Agricultural Economics will complement a student's education in four ways. First, as a social science, Economics will provide an alternative perspective for students in the Faculty. Second, the Minor will provide an excellent foundation of the workings of the economy at large. Third, it will aid students in understanding the business environment surrounding the agri-food industry. Finally, it will challenge students to analyze the interaction between the agricultural economy and the natural resource base.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (12 credits)

| AGEC 200 | (3) | Principles of Microeconomics |
| :--- | :--- | :--- |
| AGEC 201 | (3) | Principles of Macroeconomics |
| AGEC 330 | (3) | Agriculture and Food Markets |
| AGEC 333 | (3) | Resource Economics |

## Complementary Courses (12 credits)

12 credits of complementary courses selected from:

| AGEC 231 | $(3)$ | Economic Systems of Agriculture |
| :--- | :---: | :--- |
| AGEC 242 | $(3)$ | Management Theories and Practices |
| AGEC 320 | (3) | Intermediate Microeconomic Theory |
| AGEC 332 | (3) | Farm Management and Finance |
| AGEC 425 | (3) | Applied Econometrics |
| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| AGEC 442 | (3) | Economics of International Agricultural Development |
| AGEC 450 | (3) | Agribusiness Management |
| AGEC 491 | (3) | Research and Methodology |
| AGEC 492 | (3) | Special Topics in Agricultural Economics 01 |

### 2.5.6.4 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Agricultural Production (24 credits)

This Minor program is designed to allow students in non-agricultural production majors to receive credit for courses in agricultural production and to stimulate "cross-over" studies. The Minor can be associated with existing major programs in the Faculty, but in some instances it may require more than 90 credits to meet the requirements of both the Major and the Minor.
Students are advised to consult their major program adviser and the Academic Adviser of the Minor in their first year. At the time of registration for their penultimate year, students must declare their intent to obtain a Minor Agricultural Production. With the agreement of their major program adviser, they must submit their program of courses already taken, and to be taken in their final year, to the Academic Adviser of the Agricultural Production Minor. The Academic Adviser of the Agricultural Production Minor will then certify which courses the student will apply toward the Minor and that the student's program conforms with the requirements of the Minor.
Notes:

1. Most courses listed at the 300 level and higher have prerequisites. Although instructors may waive prerequisite(s) in some cases, students are urged to prepare their program of study well before their final year.
2. Not all courses are offered every year. For information on available courses, consult Class Schedule at http://www.mcgill.ca/minerva. Complete listings can be found in the "Courses" section of this eCalendar.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## General Regulations

To obtain a Minor in Agricultural Production, students must:
a) ensure that their academic record at the University includes a C grade or higher in the courses as specified in the course requirements given below.
b) offer a minimum total of 24 credits from the courses as given below, of which not more than 6 credits may be counted for both the Major and the Minor programs. This restriction does not apply to elective courses in the Major program.

## Required Courses ( 12 credits)

| AEBI 210 | (3) | Organisms 1 |
| :--- | :--- | :--- |
| ANSC 250 | (3) | Principles of Animal Science |
| ENVB 210 | (3) | The Biophysical Environment |
| PLNT 300 | (3) | Cropping Systems |

## Complementary Courses (12 credits)

12 credits chosen from the following list in consultation with the Academic Adviser for the Minor:

| AGRI 215 | $(3)$ | Agro-Ecosystems Field Course |
| :--- | :--- | :--- |
| AGRI 340 | $(3)$ | Principles of Ecological Agriculture |
| ANSC 451 | (3) | Dairy and Beef Production Management |
| ANSC 458 | (3) | Swine and Poultry Production |
| PLNT 302 | $(3)$ | Forage Crops and Pastures |
| PLNT 307 | $(3)$ | Agroecology of Vegetables and Fruits |

### 2.5.6.5 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Minor Animal Biology (24 credits)

The Minor Animal Biology is intended for students who wish to further their studies in the basic biology of large mammals and birds. Successful completion of the program should provide students with a sound background in the field of biomedical studies and the use of animal models. It should also qualify students to apply to most veterinary colleges in North America, to study in a variety of postgraduate biology programs, and to work in many laboratory settings.

This Minor is not open to students in B.Sc.(Ag.Env.Sc.) programs. These students may register for the specialization in Animal Biology.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 15 credits)

ANSC 312
Animal Health and Disease
ANSC 323
Mammalian Physiology

| ANSC 324 | (3) | Developmental Biology and Reproduction |
| :--- | :--- | :--- |
| ANSC 420 | (3) | Animal Biotechnology |
| PARA 438 | (3) | Immunology |

## Complementary Courses (9 credits)

9 credits selected from:

| ANSC 234 | $(3)$ | Biochemistry 2 |
| :--- | :--- | :--- |
| ANSC 251 | $(3)$ | Comparative Anatomy |
| ANSC 326 | $(3)$ | Fundamentals of Population Genetics |
| ANSC 400 | $(3)$ | Eukaryotic Cells and Viruses |
| ANSC 424 | $(3)$ | Metabolic Endocrinology |
| ANSC 433 | $(3)$ | Animal Nutrition and Metabolism |
| ANSC 555 | $(3)$ | The Use and Welfare of Animals |
| ANSC 560 | (3) | Biology of Lactation |
| ANSC 565 | (3) | Applied Information Systems |
| LSCI 451 | (3) | Research Project 1 |

### 2.5.6.6 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Minor Animal Health and Disease (24 credits)

The Minor in Animal Health and Disease is offered to students wishing to understand general animal physiology and function, the susceptibility of animals to various diseases, methods for limiting and controlling potential outbreaks, and the resulting implications for the animal, the consumer, and the environment. It is an ideal choice for students who are interested in the care of animals, or in working in laboratories where diseases are being researched. It would also be useful to students who wish to apply to most veterinary colleges in North America.
This Minor is not open to students in B.Sc.(Ag.Env.Sc.) programs. These students may register for the specialization in Animal Health and Disease.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses (18 credits)

| ANSC 312 | $(3)$ | Animal Health and Disease |
| :--- | :---: | :--- |
| ANSC 323 | $(3)$ | Mammalian Physiology |
| ANSC 350 | $(3)$ | Food-Borne Pathogens |
| ANSC 424 | $(3)$ | Metabolic Endocrinology |
| MICR 341 | $(3)$ | Mechanisms of Pathogenicity |
| PARA 438 | $(3)$ | Immunology |

## Complementary Courses ( 6 credits)

6 credits selected from the following list:

| ANSC 234 | (3) | Biochemistry 2 |
| :--- | :--- | :--- |
| ANSC 251 | (3) | Comparative Anatomy |
| ANSC 303 | (2) | Farm Livestock Internship |
| ANSC 324 | (3) | Developmental Biology and Reproduction |
| ANSC 433 | (3) | Animal Nutrition and Metabolism |
| ANSC 555 | (3) | The Use and Welfare of Animals |

### 2.5.6.7 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Applied Ecology (24 credits)

Food, water, air, the materials we use, and much of the diversity of life and recreation we enjoy are products of ecological systems. We manage ecosystems to provide these services and our use and misuse often degrades the ability of ecosystems to provide the benefits and services we value. In the Minor Applied Ecology you will develop your ability to understand how ecosystems function. You will apply systems thinking to the challenge of managing ecosystems for agriculture, forestry, fisheries, protected areas, and urban development. Concepts and tools will be presented that help you to deal with the complexity that an ecosystem perspective brings. The goal of this minor is to provide students with an opportunity to further develop their understanding of the ecosystem processes, ecology, and systems thinking necessary to understand, design, and manage our interaction with the environment.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising
To obtain a Minor in Applied Ecology, students must:
a) Ensure all required and complementary courses are passed with a minimum grade of C;
b) Select 24 credits from the courses as given below, of which not more than 6 credits may be counted toward the Major and the Minor programs. This restriction does not apply to elective courses in the Major program.

## Required Courses (9 credits)

| ENVB 305 | (3) | Population and Community Ecology |
| :--- | :--- | :--- |
| ENVB 437 | (3) | Assessing Environmental Impact |
| ENVB 529 | (3) | GIS for Natural Resource Management |

## Complementary Courses (15 credits)

15 credits from the following:

| AGRI 340 | (3) | Principles of Ecological Agriculture |
| :---: | :---: | :---: |
| AGRI 435 | (3) | Soil and Water Quality Management |
| BREE 327 | (3) | Bio-Environmental Engineering |
| ENTO 330 | (3) | Insect Biology |
| ENTO 340 | (3) | Field Entomology |
| ENVB 301 | (3) | Meteorology |
| ENVB 313 | (3) | Phylogeny and Biogeography |
| ENVB 415 | (3) | Ecosystem Management |
| ENVB 500 | (3) | Advanced Topics in Ecotoxicology |
| ENVB 506 | (3) | Quantitative Methods: Ecology |
| ENVB 530 | (3) | Advanced GIS for Natural Resource Management |
| MICR 331 | (3) | Microbial Ecology |
| MICR 450 | (3) | Environmental Microbiology |
| PLNT 304 | (3) | Biology of Fungi |
| PLNT 426 | (3) | Plant Ecophysiology |
| PLNT 460 | (3) | Plant Ecology |
| SOIL 300 | (3) | Geosystems |
| SOIL 326 | (3) | Soils in a Changing Environment |
| SOIL 535 | (3) | Soil Ecology |
| WILD 302 | (3) | Fish Ecology |
| WILD 307 | (3) | Natural History of Vertebrates |
| WILD 350 | (3) | Mammalogy |
| WILD 420 | (3) | Ornithology |
| WILD 421 | (3) | Wildlife Conservation |

### 2.5.6.8 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Ecological Agriculture (24 credits)

The Minor Ecological Agriculture is designed to focus on the principles underlying the practice of ecological agriculture and is suitable for students wishing to farm and do extension and government work, and those intending to pursue postgraduate studies in this field.
This Minor can be associated with existing major programs in the Faculty, but in some instances it may require more than 90 credits to meet the requirements of both the Major and the Minor.

Students are advised, during the U1 year, to consult their Major program adviser and the Academic Adviser of the Minor. At the time of registration for the U2 year, students must declare their intent to obtain the Minor. With the agreement of their Major program adviser they must submit their program of courses already taken, and to be taken, to the Academic Adviser of the Minor. The Academic Adviser of the Minor will then certify which courses the student will apply toward the Minor and confirm that the student's program conforms with its requirements.
For information on academic advising, see: www.mcgill.ca/macdonald/studentinfo/advising

## General Regulations

To obtain a Minor in Ecological Agriculture, students must:
a) Ensure that their academic record at the University includes a C grade or higher in the courses as specified in the course requirements given below.
b) Offer a minimum total of 24 credits from the courses as given below, of which not more than 6 credits may be counted for both the Major and the Minor programs. This restriction does not apply to elective courses in the Major program.

## Required Courses ( 12 credits)

| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| :--- | :--- | :--- |
| AGRI 215 | (3) | Agro-Ecosystems Field Course |
| AGRI 340 | (3) | Principles of Ecological Agriculture |
| SOIL 535 | (3) | Soil Ecology |

## Complementary Courses (12 credits)

| AGRI 310 | $(3)$ | Internship in Agriculture/Environment |
| :--- | :---: | :--- |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |
| ANSC 312 | (3) | Animal Health and Disease |
| BREE 327 | (3) | Bio-Environmental Engineering |
| ENTO 352 | (3) | Biocontrol of Pest Insects |
| MICR 331 | (3) | Microbial Ecology |
| NUTR 341 | (3) | Global Food Security |
| PLNT 302 | (3) | Forage Crops and Pastures |
| PLNT 307 | (3) | Agroecology of Vegetables and Fruits |
| PLNT 312 | (3) | Urban Horticulture |
| PLNT 434 | (3) | Weed Biology and Control |
| PLNT 460 | (3) | Plant Ecology |
| WOOD 441 | (3) | Integrated Forest Management |

### 2.5.6.9 Minor in Environmental Engineering

The Minor program consists of 21 credits in courses that are environment related. This requires the careful selection of complementary courses to permit Bioresource Engineering students to obtain this Minor with a minimum of 12 additional credits.
The Environmental Engineering Minor is administered by the Faculty of Engineering, Department of Civil Engineering (see Faculty of Engineering > Undergraduate > Browse Academic Units \& Programs > Minor Programs > section 6.9.10.11: Bachelor of Engineering (B.Eng.) - Minor Environmental Engineering (21 credits)).

| Courses Available in the Faculty of Agricultural and Environmental Sciences (Partial Listing) |  |
| :--- | :--- |
| BREE 217 | Hydrology and Water Resources |
| BREE 322 | Organic Waste Management |


| Courses Available in the Faculty of Agricultural and Environmental Sciences (Partial Listing) |  |
| :--- | :--- |
| BREE 416 | Engineering for Land Development |
| BREE 518 | Ecological Engineering |
| MICR 331 | Microbial Ecology |

For academic advising, please consult mcgill.ca/macdonald/studentinfo/advising.

### 2.5.6.10 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Human Nutrition (24 credits)

The Minor Human Nutrition is intended to complement a student's primary field of study by providing a focused introduction to the metabolic aspects of human nutrition. It is particularly accessible to students in Biochemistry, Biology, Physiology, Anatomy and Cell Biology, Microbiology and Immunology, Animal Science, or Food Science programs. The completion of 24 credits is required, of which at least 18 must not overlap with the primary program. All courses must be taken in the appropriate sequence and passed with a minimum grade of C. Students may declare their intent to follow the Minor program at the beginning of their U2 year. They must then consult with the academic adviser in the School of Human Nutrition to obtain approval for their course selection. Since some courses may not be offered every year and many have prerequisites, students are cautioned to plan their program in advance.

The Minor program does not carry professional recognition; therefore, it is not suitable for students wishing to become nutritionists or dietitians. However, successful completion may enable students to qualify for many postgraduate nutrition programs.

Note:
Most courses listed at the 300 level and higher have prerequisites. Although instructors may waive prerequisite(s) in some cases, students are urged to prepare their program of study well before their final year.
For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 6 credits)

| NUTR 337 | (3) | Nutrition Through Life |
| :--- | :--- | :--- |
| NUTR 450 | (3) | Research Methods: Human Nutrition |

## Complementary Courses (18 credits)

18 credits are selected as follows:

3 credits in Biochemistry, one of:

| ANSC 234 | (3) | Biochemistry 2 |
| :--- | :--- | :--- |
| BIOC 311 | (3) | Metabolic Biochemistry |

3 credits in Physiology, one of:

| ANSC 323 | (3) | Mammalian Physiology |
| :--- | :--- | :--- |
| PHGY 210 | (3) | Mammalian Physiology 2 |

3 credits in Nutrition, one of:

| ANSC 433 | (3) | Animal Nutrition and Metabolism |
| :--- | :--- | :--- |
| NUTR 307 | (3) | Metabolism and Human Nutrition |

9 credits from:

| ANSC 551 | (3) | Carbohydrate and Lipid Metabolism |
| :--- | :---: | :--- |
| ANSC 552 | (3) | Protein Metabolism and Nutrition |
| MIMM 314 | (3) | Intermediate Immunology |
| NUTR 344 | (4) | Clinical Nutrition 1 |
| NUTR 430 | (3) | Directed Studies: Dietetics and Nutrition 1 |


| NUTR 501 | (3) | Nutrition in Developing Countries |
| :--- | :---: | :--- |
| NUTR 503 | $(3)$ | Nutrition and Exercise |
| NUTR 505 | (3) | Public Health Nutrition |
| NUTR 512 | (3) | Herbs, Foods and Phytochemicals |
| NUTR 551 | $(3)$ | Analysis of Nutrition Data |
| PARA 438 | (3) | Immunology |
| PATH 300 | $(3)$ | Human Disease |

### 2.5.6.11 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor International Agriculture (24 credits)

Students enter this minor to acquire a global and applied understanding of agriculture as a fundamental tool to help rural development, alleviate poverty and reach food security, especially in the developing world. This program provides students with a combination of coursework at McGill together with a hands-on experience in a developing country, meeting locals and attending courses with McGill professors and/or local instructors. The costs of these field experiences may vary. The field experience (semester, short course or internship) includes developing projects in local communities, observing subsistence agriculture in situ and participating in various activities which contribute to sensitizing the students to the challenges that developing countries face. Students study water resources, sustainable development, nutrition, planning and development, and a host of other fascinating topics, allowing them to sharpen their skills for future career opportunities.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses ( 6 credits)

| AGEC 442 | (3) Economics of International Agricultural Development |  |
| :--- | :--- | :--- |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |

## Complementary Courses (18 credits)

Students select 18 credits from either Option A or Option B

## Option A

18 credits from the following:

| AGEC 333 | $(3)$ | Resource Economics |
| :--- | :---: | :--- |
| AGEC 430 | $(3)$ | Agriculture, Food and Resource Policy |
| AGRI 215 | $(3)$ | Agro-Ecosystems Field Course |
| AGRI 325 | $(3)$ | Sustainable Agriculture and Food Security |
| AGRI 499 | (3) | Agricultural Development Internship |
| BREE 510 | $(3)$ | Watershed Systems Management |
| ENVB 437 | (3) | Assessing Environmental Impact |
| FDSC 525 | (3) | Food Quality Assurance |
| NUTR 501 | (3) | Nutrition in Developing Countries |
| PARA 410 | (3) | Environment and Infection |
| PARA 515 | (3) | Water, Health and Sanitation |
| PLNT 300 | (3) | Cropping Systems |

## Option B

15 credits from any of the McGill Field Study Semesters:

## Africa Field Study Semester

Barbados Field Study Semester
Barbados Interdisciplinary Tropical Studies Field Semester
Panama Field Study Semester

Plus 3 credits from the list in Option A

### 2.5.7 Post-Baccalaureate Certificate Programs

The Faculty offers the following 30-credit post-baccalaureate certificate programs.

### 2.5.7.1 Certificate (Cert.) Ecological Agriculture ( 30 credits)

This 30-credit certificate program is very similar to the Minor program and is designed to focus on the principles underlying the practice of ecological agriculture. The certificate may be of special interest to professional agrologists who want further training, as well as formal recognition that they have completed a coherent program of courses beyond their B.Sc. studies.

Students holding a B.Sc. in agriculture or a related area are eligible to register for this program provided that they are otherwise acceptable for admission to the University. Students who have completed the Minor or specialization in Ecological Agriculture are not permitted to register for this program.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## General Regulations

To obtain a certificate in Ecological Agriculture, students must complete a minimum total of 30 credits from the courses as given below.

## Notes:

1. Most courses listed at the 300 level and higher have prerequisites. Although instructors may waive prerequisite(s) in some cases, students are urged to prepare their program of study to ensure that they have met all conditions.
2. Students using AGRI 310 toward the requirements of the Specialization/Minor/Certificate are limited to an experience on farms or other enterprises that are organic, biodynamic, or practising permaculture. The placement must be approved by the academic adviser for the specialization/Minor/certificate.

## Required Courses (12 credits)

| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| :--- | :--- | :--- |
| AGRI 215 | (3) | Agro-Ecosystems Field Course |
| AGRI 340 | (3) | Principles of Ecological Agriculture |
| SOIL 535 | (3) | Soil Ecology |

## Complementary Courses (18 credits)

18 credits chosen from the following, in consultation with the Academic Adviser for Ecological Agriculture.

| AGRI 310 | (3) | Internship in Agriculture/Environment |
| :---: | :---: | :---: |
| AGRI 411 | (3) | Global Issues on Development, Food and Agriculture |
| AGRI 435 | (3) | Soil and Water Quality Management |
| ANSC 312 | (3) | Animal Health and Disease |
| ENTO 352 | (3) | Biocontrol of Pest Insects |
| ENVB 305 | (3) | Population and Community Ecology |
| ENVB 415 | (3) | Ecosystem Management |
| MICR 331 | (3) | Microbial Ecology |
| NUTR 341 | (3) | Global Food Security |
| PARA 424 | (3) | Fundamental Parasitology |
| PLNT 302 | (3) | Forage Crops and Pastures |
| PLNT 307 | (3) | Agroecology of Vegetables and Fruits |
| PLNT 434 | (3) | Weed Biology and Control |
| PLNT 460 | (3) | Plant Ecology |
| SOIL 326 | (3) | Soils in a Changing Environment |
| WOOD 441 | (3) | Integrated Forest Management |

### 2.5.7.2 Certificate (Cert.) Food Science ( $\mathbf{3 0}$ credits)

This program is geared toward mature students, who have an undergraduate degree in a science-related discipline, to acquire the basic knowledge in the food science area to enter food-related industries or a food science graduate program. Students must complete a core course that introduces them to the basics of the field of food science and then choose complementary courses that allow a broad-based exposure in areas such as food chemistry/analysis, food microbiology/nutrition, quality assurance/safety, processing/engineering, communication skills, and ethics.

## Required Course ( 3 credits)

FDSC 200 (3) Introduction to Food Science

## Complementary Courses ( 27 credits)

27 credits (select no more than two 200-level courses)

| AGRI 510 | (3) | Professional Practice |
| :---: | :---: | :---: |
| BREE 324 | (3) | Elements of Food Engineering |
| BREE 535 | (3) | Food Safety Engineering |
| FDSC 213 | (3) | Analytical Chemistry 1 |
| FDSC 251 | (3) | Food Chemistry 1 |
| FDSC 300 | (3) | Principles of Food Analysis 1 |
| FDSC 305 | (3) | Food Chemistry 2 |
| FDSC 310 | (3) | Post Harvest Fruit and Vegetable Technology |
| FDSC 315 | (3) | Separation Techniques in Food Analysis 1 |
| FDSC 319 | (3) | Food Commodities |
| FDSC 330 | (3) | Food Processing |
| FDSC 400 | (3) | Food Packaging |
| FDSC 405 | (3) | Food Product Development |
| FDSC 442 | (3) | Food Microbiology |
| FDSC 495D1 | (1.5) | Food Science Seminar |
| FDSC 495D2 | (1.5) | Food Science Seminar |
| FDSC 515 | (3) | Enzymology |
| FDSC 516 | (3) | Flavour Chemistry |
| FDSC 519 | (3) | Advanced Food Processing |
| FDSC 520 | (3) | Biophysical Chemistry of Food |
| FDSC 525 | (3) | Food Quality Assurance |
| FDSC 536 | (3) | Food Traceability |
| FDSC 537 | (3) | Nutraceutical Chemistry |
| LSCI 211 | (3) | Biochemistry 1 |
| LSCI 230 | (3) | Introductory Microbiology |
| NUTR 207 | (3) | Nutrition and Health |

### 2.5.8 Field Studies

### 2.5.8.1 Africa Field Study Semester

The Africa Field Studies Semester (AFSS) offers students an opportunity to study in East Africa for a semester starting every January. Courses are offered in both natural science and social science, and are taught in environments ranging from desert to tropical rainforest, from manyattas to urban centers. For more information, please visit the AFSS web site.

### 2.5.8.2 Barbados Field Study Semester

This program takes place at Bellairs Research Institute in Barbados; it is a full 15-credit program offered each Fall semester. For more information, see Study Abroad \& Field Studies > Undergraduate > section 12.2.1.3: Barbados Field Semester.

### 2.5.8.3 Barbados Interdisciplinary Tropical Studies Field Semester

This 15-credit program is offered in collaboration with several partners in Barbados, including the University of the West Indies (UWI) during the summer. McGill students live at the Bellairs Research Institute, while BITS courses are conducted both at UWI and Bellairs. For more information, see Study Abroad \& Field Studies > Undergraduate > section 12.2.1.4: Barbados Interdisciplinary Tropical Studies Field Semester.

### 2.5.8.4 Panama Field Study Semester

The Panama Field Study Semester is a joint venture between McGill University and the Smithsonian Tropical Research Institute (STRI) in Panama. It is a 15-credit program offered in the Winter term (January to April).
The program presents a hands-on experience gained through an internship/research project organized around multidisciplinary environmental issues. The nature of the semester will centre on practical environmental problems/questions important for Panama. For more information, please visit the PFSS website: mcgill.ca/pfss.

### 2.6 Academic Units

The following are academic units (departments, institutes, schools, etc.) within the Faculty of Agricultural \& Environmental Sciences.

- section 2.6.1: Department of Animal Science
- section 2.6.2: Department of Bioresource Engineering
- section 2.6.3: Farm Management and Technology Program
- section 2.6.4: Department of Food Science and Agricultural Chemistry
- section 2.6.5: School of Human Nutrition
- section 2.6.6: Department of Natural Resource Sciences
- section 2.6.7: Institute of Parasitology
- section 2.6.8: Department of Plant Science

The Bieler School of Environment also offers several B.Sc.(Ag.Env.Sc.) programs; for more information, please visit the Bieler School of Environment section.

### 2.6.1 Department of Animal Science

### 2.6.1.1 Location

Macdonald Stewart Building, Room MS1-084
Telephone: 514-398-7890
Fax: 514-398-7990
Email: animal.science@mcgill.ca
Website: mcgill.ca/animal

### 2.6.1.2 About the Department of Animal Science

The Department of Animal Science has a number of programs for students who wish to study animal science at the undergraduate level. Whether they are interested in the improvement of livestock production from the point of view of nutrition, breeding, reproduction, and welfare; the study of animals in a health context; or even the advancement of biotechnological processes in laboratory research and animal models to better understand human health and disease, there is a specialization that will appeal to their interests.
The Department of Animal Science plays a crucial role in offering four important specializations:

- Animal Biology
- Animal Health and Disease
- Animal Production
- International Agriculture

Each of these specializations must be taken within the context of a major, and will depend on the student's orientation towards animal production management, animal biotechnology, further studies in animal health, international studies, and/or graduate studies.

Any student with an interest in animals who wishes to become a professional agrologist (a member of the Ordre des agronomes du Québec), should register in the Agro-Environmental Sciences Major and take the specialization in Animal Production, as well as the obligatory specialization in Professional Agrology.

### 2.6.2 Department of Bioresource Engineering

### 2.6.2.1 Location

Macdonald-Stewart Building, Room MS1-028
Macdonald Campus of McGill University
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Telephone: 514-398-7773
Website: mcgill.ca/bioeng

### 2.6.2.2 About the Department of Bioresource Engineering

The Bioresource Engineering discipline focuses on the application of engineering principles to biological systems including plants, animals, and ecosystems. Bioresource engineers seek sustainable solutions to enhance the production and processing of food and other biomaterials as well as preserving and regenerating the quality of soil, water, and other natural resources. B.Eng. is an accredited engineering program administered by the Faculty of Agricultural and Environmental Sciences in coordination with the Faculty of Engineering.

In addition to core engineering sciences and design skills, Bioresource Engineering students take courses dedicated to the infrastructure and processes essential to the emerging circular bioeconomy. Students learn to design, construct, operate, maintain, and innovate equipment, structures, processes, and software related to agriculture, forestry, food, environmental protection, ecological management, bioenergy, and other related industries.
For more information on programs associated with this department, see section 2.5.3: B.Eng Bioresource.

### 2.6.3 Farm Management and Technology Program

### 2.6.3.1 Location

Farm Management and Technology Program
Faculty of Agricultural and Environmental Sciences
Macdonald Campus of McGill University
21,111 Lakeshore Road, Harrison House
Sainte-Anne-de-Bellevue QC H9X 3V9
Telephone: 514-398-7814
Fax: 514-398-7955
Email: fmt.macdonald@mcgill.ca
Website: mcgill.ca/fmt

### 2.6.3.2 About the Farm Management and Technology Program

The Farm Management and Technology (FMT) program is a 3-year academic and practical college program, offered on the Macdonald Campus and taught by the staff of the Faculty of Agricultural and Environmental Sciences of McGill University. For further information on the program, please refer to our website.

### 2.6.3.3 Diploma of College Studies — Farm Management Technology

This three-year academic and practical program is offered on the Macdonald campus and taught by the staff of the Faculty of Agricultural and Environmental Sciences of McGill University. The program is funded by the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec and authorized by the Ministère de l'Éducation, Enseignement supérieur, et Recherche (MEESR).

The educational goals of the program are:

1. to make our graduates competent in the exercise of their profession;
2. to help the student's integration into professional life;
3. to foster professional mobility;
4. to foster a need for continual development of professional knowledge.

## Program Overview

Six academic terms are spent on the Macdonald Campus studying a sequence of courses in soil, plant science, animal science, engineering, and management. The first summer of the program includes a 13 -week internship on an agricultural enterprise other than the home farm, or an agricultural business, where the student learns the many skills related to modern commercial agriculture. Students prepare for their Agricultural Internship during both academic semesters of Year 1 through two Stage courses.

During the second summer, students are registered in Enterprise Management 1. During this period, the students will be responsible for data collection to be used in the next two Enterprise Management courses and the Nutrient Management Plan course when they return to the campus for the Fall semester. These internships will enable the students to relate their academic work to the reality of farming and of the agri-food sector.

Finally, courses in English, Français, Humanities, Physical Education, and two complementary subjects taken during the program will entitle the student to receive a Diploma of College Studies (DEC) from the MEESR.

## Program Outline

## Fall 1

| FMT4 001 | $(1.33)$ | Fall Stage (152-VSA-MC) |
| :--- | :--- | :--- |
| FMT4 002 | $(1.67)$ | Soil Tillage (152-VSB-MC) |
| FMT4 003 | $(1.33)$ | Information Management (152-VSC-MC) |
| FMT4 004 | $(1.33)$ | Animal Physiology and Anatomy (152-VSD-MC) |
| FMT4 005 | $(2.33)$ | Introduction to Plant Science (152-VSE-MC) |
| FMT4 006 | $(1.33)$ | Pesticides and the Environment (152-VSF-MC) |
| FMTP 080 | $(2)$ | English Upgrading |
| FMTP 090 | $(1)$ | Physical Activity and Health (109-101-MQ) |

## Winter 1

| FMT4 007 | $(2)$ | Health and Safety (152-VSG-MC) |
| :--- | :--- | :--- |
| FMT4 008 | $(2.33)$ | Animal Genetics and Nutrition (152-VSH-MC) |
| FMT4 009 | $(2)$ | Soil Fertility (152-VSJ-MC) |
| FMT4 010 | $(1.33)$ | Winter Stage (152-VSK-MC) |
| FMT4 011 | $(2)$ | Farm Accounting (152-VSL-MC) |
| FMT4 012 | $(1.67)$ | Machinery Maintenance (152-VSM-MC) |
| FMTP 077 | $(2.67)$ | Introduction to College English |

## Summer 1

FMT4 013
(2) Agricultural Internship (152-VSN-MC)

## Fall 2

Two courses selected from the Elective Production course list below.

| FMT4 014 | $(2)$ | Marketing Strategies (152-VSP-MC) |
| :--- | :--- | :--- |
| FMT4 015 | $(1.33)$ | Forest Management (152-VSQ-MC) |
| FMTP 005 | $(1.33)$ | Animal Anatomy and Physiology |
| FMTP 008 | $(2.33)$ | Introduction to Animal Science (152-008-MC) |
| FMTP 075 | $(2)$ | Langue française et communication (602-101-03) |
| FMTP 082 | $(2.33)$ | Literary Genres (603-102-04) |
| FMTP 085 | $(2.33)$ | Humanities 1: Knowledge (345-103-04) |

## Winter 2

Two courses selected from the Elective Production course list below.

| FMT4 016 | $(2)$ | Budgeting and Administration (152-VSR-MC) |
| :--- | :--- | :--- |
| FMT4 017 | $(1.33)$ | Agricultural Systems (152-VST-MC) |
| FMTP 083 | $(2.33)$ | Literary Themes (603-103-04) |
| FMTP 091 | $(1)$ | Physical Activity and Effectiveness (109-102-MQ) |
| FMTP 098 | $(2)$ | Français agricole (602-VSG-MC) |

## Summer 2

FMT4 018
(2.33)

Enterprise Management 1 (152-VSU-MC)

## Fall 3

| FMT4 019 | $(2)$ | Nutrient Management Plan (152-VSV-MC) |
| :--- | :--- | :--- |
| FMT4 020 | $(2)$ | Conservation of Soil and Water (152-VSW-MC) |
| FMT4 021 | $(2.67)$ | Enterprise Management 2 (152-VSX-MC) |
| FMT4 022 | $(1.67)$ | Equipment Management (152-VSY-MC) |
| FMTP 078 | $(2)$ | FMT English (603-VSB-MC) |
| FMTP 086 | $(2)$ | Humanities 2: World Views (345-102-03) |
| FMTP 097 | $(2)$ | Landscape Design (504-VSG-MC) |

## Winter 3

| FMT4 023 | $(1.33)$ | Building Management (152-VSZ-MC) |
| :--- | :--- | :--- |
| FMT4 024 | $(1.67)$ | Farm Building Development (152-VTA-MC) |
| FMT4 025 | $(2.33)$ | Enterprise Management 3 (152-VTB-MC) |
| FMT4 026 | $(1.67)$ | Human Resources (152-VTC-MC) |
| FMT4 027 | $(1.33)$ | Precision Agriculture (152-VTD-MC) |
| FMTP 087 | $(2)$ | Humanities 3:Env.\& Org. Issues (345-VSH-MC) |
| FMTP 092 | $(1)$ | Physical Activity and Autonomy (109-103-MQ) |

## Elective Production Courses

We offer four production courses in the area of Animal Science and four production courses in the area of Plant Science. Students must take a minimum of two courses in each category for a total of four courses. Students could elect to take more than four courses if they wish, after a discussion with their academic adviser. They must take a minimum of two courses per semester.

## Animal Science Category

| FMT4 028 | $(2.67)$ | Dairy Replacement Management (152-VTE-MC) |
| :--- | :--- | :--- |
| FMT4 029 | $(2.67)$ | Dairy Performance Management (152-VTF-MC) |
| FMT4 030 | $(2.67)$ | Swine and Poultry Management (152-VTG-MC) |
| FMT4 031 | $(2.67)$ | Beef and Sheep Management (152-VTH-MC) |

## Plant Science Category

| FMT4 033 | $(2.67)$ | Vegetable and Fruit Crops (152-VTK-MC) |
| :--- | :---: | :--- |
| FMT4 034 | $(2.67)$ | Greenhouse Crop Production (152-VTL-MC) |
| FMT4 035 | $(2.67)$ | Field Crop Management 1 (152-VTM-MC) |
| FMT4 036 | $(2.67)$ | Field Crop Management $2(152-V T N-M C)$ |

## Complementary Courses*

Students must take two complementary courses to meet the program requirements. The program offers the following.

* After consultation with their academic adviser, students can substitute complementary courses taken at another collegial institution. This includes science courses which are required for further studies in a degree program. The cost associated with courses taken elsewhere must be assumed by the students.
FMTP 074
Complementary Course 2
FMTP 097
Landscape Design (504-VSG-MC)


## Comprehensive Assessment

The objective of this examination is to ensure that students have attained the objectives and standards for each competency in the program. Successful completion of the Comprehensive Assessment is mandatory to obtain the DEC.

The passing grade is $60 \%$. The mark indicating that the student has successfully completed the Comprehensive Assessment will appear on the student's transcript.

## English Exit Examination

All students who wish to graduate and obtain the DEC must pass the English Exit Examination that is prepared and corrected by the MEESR. Students must take this examination on the dates selected by the MEESR.

### 2.6.3.4 Academic Rules and Information - FMT

The Farm Management and Technology program follows the rules and regulations of McGill University as well as from the Ministère de l'Éducation et de l'Enseignement supérieur (MEES) for the collegial level.

### 2.6.3.4.1 Entrance Requirements - FMT

1. Students should have a good practical knowledge of farming under eastern Canadian conditions. One year of experience is recommended, but under special conditions a four-month summer season is acceptable.
2. The minimum academic entrance requirements are a Quebec Secondary School Diploma (SSD) or its equivalent and the successful completion of the following five courses:

- Secondary IV: History and Citizenship Education or History of Quebec and Canada
- Secondary IV: Science and Technology or Applied Science and Technology or Physical Science
- Secondary IV: Mathematics
- Secondary V: Language of Instruction
- Secondary V: Second Language

3. The minimum entrance requirements for students from Ontario are the Ontario Secondary School Diploma (OSSD), as well as:

- grade 10 French as a second language
- science: SNC2P (recommended with TCJ20 or TDJ20 or TMJ20) or SNC2D (desired with TCJ20 or TDJ20 or TMJ20)
- mathematics: MFM2P or MPM2D

For other Canadian students, the minimum French requirement is grade 10 second language. Please contact the department for more information.
For international students, a recognized French proficiency test may be required. An English proficiency test may also be required. For details on proof of English proficiency, visit mcgill.ca/applying/requirements/prep.
4. All candidates for admission must make arrangements to come to the Macdonald Campus for an interview prior to admission to the program.
5. Admission to this program is only in the Fall semester.
6. We strongly encourage incoming students to acquire their driver's permit (both for cars and farm equipment) before coming to Macdonald Campus. This is first for safety reasons, given that students may work with farm equipment during the first semester. As well, most farmers require their employees and trainees (stagiaires) to drive and possess the appropriate driver's license.

### 2.6.3.4.2 Important Dates - FMT

2.6.3.4.2.1 Sessional Dates

The number of teaching and examination days is set by the Ministère de l'Éducation et de l'Enseignement supérieur (MEES). The sessional dates vary from year to year. At the present time, each semester has 75 teaching days and seven days of exams.

### 2.6.3.4.2.2 Last Day for Withdrawal or Course Additions

The last day to make course registration changes for Fall term courses is September 20.
The last day to make course registration changes for Winter term courses is February 15.

### 2.6.3.4.3 Registration - FMT

Students in the Farm Management and Technology program must register online using Minerva at mcgill.ca/minerva for each semester at McGill.
Note: The University reserves the right to make changes without prior notice to the information contained in this publication, including the alteration of various fees, schedules, conditions of admission and credit requirements, and the revision or cancellation of particular courses. In normal circumstances, individual courses will not be offered with fewer than five registrants.

### 2.6.3.4.4 Academic Standing - FMT

In their first semester, students who fail half or more of the courses for which they are registered or obtain a weighted average grade below $60 \%$ in their first term in the FMT program are placed in unsatisfactory standing and are required to withdraw from the program for a period of at least one semester. If after this period, students wish to be readmitted, they must apply in writing to the Director of the Program.

After the first semester, when a student's cumulative weighted average grade or semestrial weighted average grade drop below $60 \%$, or when a student fails half or more of the courses for which he/she is registered in any one term, the student is placed on academic probation. Students on probation may be limited to a maximum of 10 credits for the following semester, if the Director and/or the Associate Director believe this action to be in the best interest of the student. Course registration is subject to approval by the Associate Director for the following semester.

Students who are on academic probation for two semesters in a row are placed on unsatisfactory standing and are asked to withdraw from the Program. They may apply in writing to the Director or Associate-Director for readmission after a 6 to 12-month waiting period.

Any student who is readmitted to the FMT Program after having been placed on unsatisfactory standing is automatically placed on academic probation for the semester into which he/she is readmitted. The conditions mentioned in the second paragraph above still apply.

### 2.6.3.4.5 Student Rights and Responsibilities

The regulations and policies governing student rights and responsibilities at McGill University are published jointly by the Dean of Students' Office and the Secretariat and can be found at mcgill.ca/secretariat/policies-and-regulations.

### 2.6.3.4.6 Institutional Policy on the Evaluation of Student Achievement - FMT

The policy has the following objectives:

- to establish and explain the principles followed in evaluating student learning;
- to describe the means of translating these principles into practice and to establish the required procedures;
- to articulate the appropriate responsibilities of students, instructors, departments, and academic administrators;
- to account to students, parents, universities, and employers for the standards of learning at the campus;
- to create an environment of awareness and free discussion of pedagogical concerns within all segments of the campus community;
- to provide information that will allow students to more fully understand and participate in the educational process;
- to provide the framework within which instructors and academic administrators can exercise their professional judgment in a competent, just, and coherent fashion.

Copies are available in the Library and students are informed of it at registration.

### 2.6.3.5 Fees and Expenses - FMT 2.6.3.5.1 Fees

Tuition fees are calculated separately from student fees. For eligible Quebec residents in the Farm Management and Technology Program there is no amount charged for tuition, thanks to support from the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec. Out-of-province and international status FMT students registered for full-time studies pay a tuition fee in addition to student fees. Students considered to be studying part-time (less than 8 credits/semester) will be charged half that amount. For information about fees specific to your residency status, consult the Undergraduate fees tables on the Student Accounts Website. Student fees are charged to all students, regardless of residency.

* All fees are subject to change without notice.


### 2.6.3.5.2 Textbooks and Supplies

The cost of textbooks and supplies is estimated at $\$ 250.00$ per semester.

### 2.6.3.5.3 Financial Assistance

In-Course Financial Aid (including loans and bursaries) is available to full-time students on the basis of demonstrated financial need; however, it is recommended that all applicants apply for the maximum government student assistance program for which they are eligible. Students may apply for In-Course Financial Aid through the Financial Aid \& Awards Menu on Minerva and will then be asked to make an appointment with a Financial Aid Counsellor at Student Services. For more information, consult University Regulations and Resources > Undergraduate > section 1.8: Scholarships and Student Aid or contact Student Services, Macdonald Campus, at 514-398-7992.

### 2.6.3.6 Residence Accommodation - FMT

Laird Hall is a co-educational residence with a capacity of 250 students. It accommodates students in double and single rooms. Each floor includes shared washrooms, a fully-equipped kitchen, a television lounge, and a laundry room. For more information, refer to University Regulations and Resources > Undergraduate > Residential Facilities > section 1.14.2: University Residences - Macdonald Campus; mcgill.cal students/housing/macdonald or email residences.macdonald@mcgill.ca.

### 2.6.4 Department of Food Science and Agricultural Chemistry

### 2.6.4.1 Location

Macdonald-Stewart Building, Room MS1-034
McGill University, Macdonald Campus
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Canada
Telephone: 514-398-7773
Fax: 514-398-7990
Email: info.macdonald@mcgill.ca
Website: mcgill.ca/foodscience

### 2.6.4.2 About the Department of Food Science

Food Science is a multidisciplinary field involving chemistry, biochemistry, nutrition, microbiology, and processing that gives students the scientific knowledge to solve real problems associated with the many facets of the food system. Food Science is still a relatively new and growing discipline, brought about mainly as a response to the social changes taking place in North America and other parts of the developed world. The current trend toward a merger between food and pharmaceutical industries to produce the next generation of new food products, such as functional foods and nutraceuticals, is the biggest challenge facing the discipline of Food Science today. You can be part of it.
The programs offered are:

- B.Sc. Food Science (Food Chemistry or Food Science option)
- Concurrent degree, which includes B.Sc. Food Science/B.Sc. Nutritional Sciences
- Post-Baccalaureate Certificate in Food Science

For more information on these programs, see section 2.5.4: Bachelor of Science (Food Science) - B.Sc.(F.Sc.).

### 2.6.5 School of Human Nutrition

### 2.6.5.1 Location

Macdonald Stewart Building
McGill University, Macdonald Campus
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Canada
Telephone: 514-398-7773
Fax: 514-398-7739
Email: nutrition.dietetics@mcgill.ca
Website: mcgill.ca/nutrition

### 2.6.5.2 About the School of Human Nutrition

The health and well-being of individuals and populations in relation to food choices and metabolism prevails as the unifying theme of the programs in the School of Human Nutrition, a part of the McGill University Health Sciences.

The School offers a B.Sc.(Nutr.Sc.) in either the Dietetics Major or the Nutrition Major.
The Dietetics Major is an accredited professional program which leads to eligibility to register with a provincial dietetic regulatory body as a registered dietitian. The 3.5 year ( 115 credits) Dietetics Major is an undergraduate degree which includes 40 weeks of internship (Professional Practice - Stage) which is sequenced and integrated into each year of study. Students are exposed to a variety of practice settings including clinical nutrition, community nutrition, and food service management. The program is designed according to the Integrated Competencies for Dietetics Education and Practice (ICDEP). Accreditation information is available on our website at mcgill.ca/nutrition/programs/undergraduate/dietetics.

The Nutrition Major is a 90-credit undergraduate degree. At its core, it deals with how diet, nutrition, and metabolism affect human health and disease risk. It offers exciting opportunities to specialize in one of four concentrations (Food Function and Safety; Global Nutrition; Health and Disease; and Sports Nutrition), to incorporate research experience, travel for field studies, or a minor in your program. It does not lead to professional licensure as a
Dietitian/Nutritionist; however, it is excellent preparation for further studies including graduate, medical, veterinary, and other professional schools; or for many careers in the food, pharmaceutical, or other industry, government or NGO, or global health organizations.
B.Sc.(F.Sc.)/B.Sc.(Nutr.Sc.): The School also offers a dual degree, the B.Sc. Food Science/Nutritional Science Major, which is a 122 -credit undergraduate degree. You will obtain a strong background in chemical sciences regarding the physical nature and chemical properties of foods, combined with an advanced understanding of the important role of nutrition and metabolism in health and disease.
For more information on programs associated with this school, see section 2.5.5: Bachelor of Science (Nutritional Sciences) - B.Sc.(Nutr.Sc.).
For those interested in applying, please refer to the Undergraduate Admissions site for more information.

### 2.6.5.3 Degrees Offered by the School of Human Nutrition

## Bachelor of Science in Nutritional Sciences - B.Sc.(Nutr.Sc.)

Two undergraduate degree programs are offered by the School.

- The Dietetics Major leads to professional qualification
- The Nutrition Major offers four concentrations:
- Food Function and Safety
- Global Nutrition
- Health and Disease
- Sports Nutrition


## M.Sc.A., M.Sc., and Ph.D.

Graduate degrees in Human Nutrition are also offered in thesis and non-thesis-based research at the master's level and thesis-based research at the doctoral level. Three options are available in the M.Sc. Applied degree:

- Dietetics Credentialing
- Practicum
- Project

For further information, contact the School or refer to the Agricultural \& Environmental Sciences' Graduate and Postdoctoral Studies section.

### 2.6.5.4 Academic Information and Regulations

### 2.6.5.4.1 Application Procedures

Entry into the Dietetics major, the Nutrition major and the Freshman/Foundation Year Program of the B.Sc.(Nutr.Sc.) is only possible in September. Application deadlines:

- Applicants studying outside of Canada: January 15
- Applicants from Canadian high schools outside of Quebec: February 1
- CEGEP applicants: March 1
- Transfer/Second degree applicants from Canadian universities: May 1
- Mature students: May 1

Applications to the School of Human Nutrition must be submitted online. Online applications and admissions information are available at mcgill.ca/applying.

### 2.6.5.4.2 Academic Standing

For general information, see section 2.3.5.5: Academic Standing.
Dietetics students please note:

- Undergraduate registration for all Professional Practice (Stage) courses is restricted to students in the Dietetics Major with a CGPA greater than or equal to 3.00. The CGPA requirement is firmly applied.
- Students in the Dietetics Major who have a CGPA below 3.0 for two consecutive years will not be permitted to continue in the program.


### 2.6.6 Department of Natural Resource Sciences

### 2.6.6.1 Location

Macdonald-Stewart Building
McGill University, Macdonald Campus
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Canada
Telephone: 514-398-7773

Fax: 514-398-7990
Email: info.macdonald@mcgill.ca
Website: mcgill.ca/nrs

### 2.6.6.2 About the Department of Natural Resource Sciences

As humans depend on a wide variety of ecosystem services, society is becoming increasingly aware of the need for sustainable management of natural resources. We require the natural world to provide us with necessities such as air, water, food, and energy; but we also depend on ecosystems for services such as nutrient cycling, biodiversity, recreation, and the splendour of nature. Sustainable management of natural resources via governance of human activities requires an understanding of all of these elements.

The Department of Natural Resource Sciences is a multidisciplinary group with a wide range of interests, including wildlife and fish biology, entomology, agriculture, soil science, microbiology, genomics, meteorology, forest science, landscape ecology, agricultural and resource economics, and environmental policy. We are concerned with the populations and diversity of organisms within ecosystems, the flow of energy and nutrients through ecosystems, and processes that influence human behaviour toward ecosystem services and the environment. Our graduate programs in agricultural economics, entomology, microbiology, and renewable resources allow students to gain disciplinary depth and interdisciplinary breadth.
Natural Resource Sciences plays a strong role in several undergraduate programs, from the inter-departmental majors in:

- Environmental Biology;
- Life Sciences (Biological and Agricultural);
- Environment (Bieler School of Environment);
- Agro-Environmental Sciences; and
- Agricultural Economics;
to the specializations such as:
- Applied Ecology;
- Wildlife Biology;
- Microbiology and Molecular Biotechnology;
- Agribusiness;
- Environmental Economics; and
- Life Sciences (Multidisciplinary).


### 2.6.7 Institute of Parasitology

### 2.6.7.1 Location

Institute of Parasitology
Parasitology Building
McGill University, Macdonald Campus
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Canada
Website: mcgill.ca/parasitology

### 2.6.7.2 About the Institute of Parasitology

The Institute of Parasitology is one of the oldest recognized centres of interdisciplinary research in Canada. We focus on parasitic organisms, the relationship with their host, and the means to limit the impact of parasitic disease on health and well-being.
For more information, please visit the Institute of Parasitology website.

### 2.6.8 Department of Plant Science

### 2.6.8.1 Location

Macdonald Campus
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9
Canada
Telephone: 514-398-7773

Fax: 514-398-8732
Email: plant.science@mcgill.ca
Website: mcgill.ca/plant

### 2.6.8.2 About the Department of Plant Science

Our understanding of biological systems has advanced exponentially since the begining of the twenty-first century, and technological developments now allow us to pose questions that simply could not be asked a few decades ago. We also live in a time of great challenges: the human population is now over eight billion and continues to rise at an alarming rate; the climate is changing drammatically; worldwide energy availability is decreasing; quality freshwater is becoming scarce; biodiversity is disappearing; and a number of wild habitats are threatened by human activities.

How can we keep feeding the growing population with quality food while resources are scarcer than ever? How will plants react to a changing climate? How can we design effective conservation strategies to preserve biodiversity? Plant scientists have a crucial role to play in solving these problems, and using the knowledge accumulated in the field of biology to answer these questions.
The Department of Plant Science contributes to several undergraduate programs that will train tomorrow's agrologists, ecologists, botanists, and biotechnologists. These include Specializations in Ecological Agriculture, Plant Biology, Plant Production, as well as both the Environmetrics and the Food Production and Environment domains of the Bieler School of Environment. For related program information, see section 2.5.2: Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.).

## 3 Faculty of Arts

### 3.1 About the Faculty of Arts

The Downtown Campus of McGill University is an oasis in downtown Montreal. At the centre of the Downtown Campus is the McCall MacBain Arts Building, the oldest building on campus and the University's flagship. For years, its front steps have been a favourite spot to meet and to take a respite from the rigours of coursework. With classrooms, administrative offices, and Moyse Hall-an elegant and superbly equipped theatre-the McCall MacBain Arts Building is truly at the heart of Faculty of Arts and the University. In addition, Faculty of Arts departments and programs are housed in numerous buildings across campus, including principally the Leacock Building, Ferrier Building, Peterson Hall, Morrice Hall, Wilson Hall, the Birks Building, and 680 Sherbrooke St. West. The Office of the Dean of Arts is located in Dawson Hall.
The Faculty of Arts has grown steadily since it was established in 1843 and remains by far the largest faculty at McGill. The Faculty is home to 15 departments, 4 schools, 4 institutes, and 12 research centres. It has more than 350 full-time academic staff teach approximately 8,000 undergraduates and over 1,100 graduate students. Yet despite the numbers, the majority of classes in Arts are smaller than those offered by any other large research university in Canada. The humanities, social science, and language disciplines that constitute the Faculty share a common endeavour: to understand the human condition in order to improve it.

The Faculty maintains bilateral exchange programs with many universities around the world and encourages students to spend a term or two studying abroad through an approved program. Internships have also now become an integral part of an undergraduate degree. The Faculty of Arts Internship Office (AIO) assists students who wish to pursue short-term internship opportunities before completing their studies. The Faculty of Arts stands alone nationally in the scope and extent of services its established infrastructure and comprehensive support system makes available to students before, during, and upon their return from, their internship. Each year, over 200 students intern with organizations around the globe.
McGill is known throughout the world as one of Canada's premier institutions of learning and as one of the leading research universities in the world. Professors at McGill are leaders in their fields and leaders in education and have been the recipients of numerous awards for both research and teaching. The Faculty of Arts prides itself on being immediately responsive to developments and changes within and outside academia and develops its curricula in response to these new realities.

### 3.2 Programs and Teaching in Arts

Established in 1843, the Faculty of Arts is one of the oldest in Canada and remains the largest at McGill. The Faculty is home to 15 departments, 4 schools, 4 institutes, and 12 research centres. It has more than 350 full-time academic staff teach approximately 8,000 undergraduates and over 1,100 graduate students. Yet despite the numbers, the majority of classes in Arts are smaller than those offered by any other large research university in Canada.

The Faculty maintains bilateral exchange programs with many universities around the world and encourages students to spend a term or two studying abroad. Internships are now an integral part of an undergraduate degree. The Faculty of Arts Internship Office (AIO) assists students who wish to pursue short-term internship opportunities before completing their studies. The AIO stands alone nationally in the scope and extent of services its established infrastructure and comprehensive support system make available to students before, during, and upon their return from their internship. Each year, over 200 students intern with organizations around the globe.
McGill Arts graduates are valued for their ability to think critically and communicate effectively, often in more than one language. Their skills in research and analysis may be applied to a wide spectrum of professional fields-such as law, education, business, government, and public service.

The Faculty of Arts offers programs leading to the degrees of B.A., B.S.W., and B.Th. Admission is highly competitive; fulfilment of the minimum admission requirements does not guarantee acceptance. Admission criteria are described in the Undergraduate Admissions Guide at mcgill.ca/applying.

The Faculty of Arts also offers a Diploma in Environment from the Bieler School of Environment. It is a 30-credit program available to holders of a B.Sc. or B.A. or equivalent. All credits for the Diploma must be completed at McGill. For more information, see Bieler School of Environment > Undergraduate $>$ Browse Academic Programs > section 7.5.7: Diploma Environment.
The Faculties of Arts and of Science also jointly offer programs leading to the degree of the Bachelor of Arts and Science (B.A. \& Sc.), which is described in Bachelor of Arts and Science.

### 3.3 About Arts (Undergraduate)

The Downtown Campus of McGill University is an oasis in downtown Montreal. At the centre of the Downtown Campus is the McCall MacBain Arts Building, the oldest building on campus and the University's flagship. For years, its front steps have been a favourite spot to meet and to take a respite from the rigours of coursework. With classrooms, administrative offices, and Moyse Hall—an elegant and superbly equipped theatre-the McCall MacBain Arts Building is truly at the heart of Faculty of Arts and the University. In addition, Faculty of Arts departments and programs are housed in numerous buildings across campus, including principally the Leacock Building, Ferrier Building, Peterson Hall, Morrice Hall, Wilson Hall, the Birks Building, and 680 Sherbrooke St. West. The Office of the Dean of Arts is located in Dawson Hall.

The Faculty of Arts has grown steadily since it was established in 1843 and remains by far the largest faculty at McGill. The Faculty is home to 15 departments, 4 schools, 4 institutes, and 12 research centres. It has more than 350 full-time academic staff teach approximately 8,000 undergraduates and over 1,100 graduate students. Yet, despite the numbers, the majority of classes in Arts are smaller than those offered by any other large research university in Canada. The humanities, social science, and language disciplines that constitute the Faculty share a common endeavour: to understand the human condition in order to improve it.

The Faculty maintains bilateral exchange programs with many universities around the world and encourages students to spend a term or two studying abroadthrough an approved program. Internships have also now become an integral part of an undergraduate degree. The Faculty of Arts Internship Office (AIO) assists students who wish to pursue short-term internship opportunities before completing their studies. The Faculty of Arts stands alone nationally in the scope and extent of services its established infrastructure and comprehensive support system makes available to students before, during, and upon their return from their internship. Each year over 200 students intern with organizations around the globe.

McGill is known throughout the world as one of Canada's premier institutions of learning and as one of the leading research universities in the world. Professors at McGill are leaders in their fields and leaders in education and have been the recipients of numerous awards for both research and teaching. The Faculty of Arts prides itself on being immediately responsive to developments and changes within and outside academia and develop its curricula in response to these new realities.

### 3.3.1 Location

Dawson Hall
853 Sherbrooke Street West
Montreal QC H3A 0G5
Canada

Telephone: 514-398-1029
Fax: 514-398-2157
Faculty of Arts website: mcgill.ca/arts
Faculty of Arts Office of Advising and Student Information Services (OASIS) website: mcgill.ca/oasis

### 3.3.2 Administrative Officers

## Dean

Lisa Shapiro

## Associate Deans

Manuel Balán (Associate Dean, Student Affairs); Michael Fronda (Associate Dean, Academic); Jason Opal (Associate Dean, Graduate); Michael
Blome-Tillmann (Associate Dean, Research); Terri Givens (Associate Dean, Equity, Diversity and Inclusion, and Special Projects)

## Director of Administration

## Richard Courtois

### 3.3.3 Faculty of Arts Office of Advising and Student Information Services (OASIS)

Arts OASIS provides ongoing advice and guidance on programs, degree requirements, academic standing, interfaculty transfer, study away, and graduation for undergraduate Arts students. Arts OASIS is located on the ground floor of Dawson Hall.

Faculty advisors in Arts OASIS offer guidance managing academic situations during periods of personal, financial, or medical problems, by working with you to identify various possibilities and strategies for making informed decisions. Arts OASIS advisors can be contacted by visiting our OASIS website.

Arts OASIS advisors also assist with regard to course selection for newly admitted students, and for overall degree planning, including for Study Away options.

Mission Statement: The mission of the OASIS is to ensure the integrity and coherence of the Arts undergraduate degree. We provide advice and support to our students regarding their academic trajectory, from entry to graduation. We do so valuing principles of fairness, accessibility, respect, engagement, confidentiality, and collaboration with key stakeholders.

While departmental and faculty advisors and staff are always available to give advice and guidance, the ultimate responsibility for completeness and correctness of course selection and registration; for compliance with, and completion of, program and degree requirements; and for the observance of regulations and deadlines, rests with the student. It is the student's responsibility to seek guidance from the OASIS, if in any doubt. Misunderstanding or misapprehension will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.

### 3.4 Faculty Admission Requirements

For information about admission requirements to the B.A., B.A. \& Sc., B.S.W., or B.Th. please refer to the Undergraduate Admissions Guide, found at mcgill.ca/undergraduate-admissions/apply.

For information about interfaculty transfers, please refer to University Regulations and Resources > Undergraduate > section 1.3.6: Interfaculty Transfer, as well as to the relevant information posted on the Arts OASIS website.

For information about readmission, please refer to the Arts OASIS website.

### 3.5 Degree Requirements for the Faculty of Arts

Each student in the Faculty of Arts must be aware of the Faculty regulations as stated in this publication and on the McGill, Arts, and Arts Office of Advising and Student Information Services (OASIS) website mcgill.ca/oasis.
While departmental and Faculty advisors and staff are always available to give advice and guidance, the ultimate responsibility for completeness and correctness of your course selection and registration, for compliance with, and completion of your program and degree requirements, and for the observance of regulations and deadlines, rests with you. It is your responsibility to seek guidance from Arts OASIS if in any doubt; misunderstanding or misapprehension will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.
To be eligible for a B.A. degree, you must fulfil all Faculty and program requirements as indicated below:

- section 3.5.1: Minimum Credit Requirement
- section 3.5.2: Residency Requirement
- University Regulations and Resources > Undergraduate >Student Records > section 1.5.3: Grading and Grade Point Averages (GPA)
- section 3.5.3: Time and Credit Limit for Completion of Degree
- section 3.5.4: About Program Requirements
- section 3.5.5: Course Requirements


### 3.5.1 Minimum Credit Requirement

You must complete the minimum credit requirement for your degree as specified in your letter of admission.
Students are normally admitted to a four-year degree requiring the completion of 120 credits, but Advanced Standing of up to 30 credits may be granted if you obtain satisfactory results in the Diploma of Collegial Studies, International Baccalaureate, French Baccalaureate, Advanced Levels, and Advanced Placement exams. Advanced Placement examination results with a score of four or five must be declared by you at the time of initial registration at the University. You will not receive credit toward your degree for any course that overlaps in content with a course successfully completed at McGill, at another university, at CEGEP, or Advanced Placement exams, Advanced Level results, International Baccalaureate Diploma, or French Baccalaureate.

Students transferring from another university must complete a minimum of 60 McGill credits in order to receive a McGill degree.
If you are readmitted after interrupting your studies for a period of five consecutive years or more, you may be required to complete a minimum of 60 credits and satisfy the requirements of your program. In this case, a new GPA will be calculated. The Associate Dean (Student Affairs), in consultation with the appropriate department, may approve a lower minimum for students who had completed 60 credits or more before interrupting their studies.

If you are readmitted after a period of absence, you will be subject to the program and degree requirements in effect at the time of readmission. For more information about readmission, see the Arts OASIS website: mcgill.ca/oasis.

### 3.5.1.1 Advanced Standing Credits

For the University policy on advanced standing credits please see University Regulations and Information > Undergraduate > Student Records > section 1.5.6.1: Advanced Standing Transfer Credits, and consult mcgill.ca/transfercredit/prospective to see if you qualify for advanced standing and/or transfer credits. Additional information is available at mcgill.ca/transfercredit and on the Arts OASIS FAQ for new students.
Arts students who have been granted advanced standing for the International Baccalaureate, Advanced Placement examinations, GCE A-Levels, French Baccalaureate, CEGEP, Diploma of College Studies (DEC), and other qualifications, but who wish to complete a four-year undergraduate program at McGill, will be permitted to do so with the appropriate limitations on the repetition of courses for which they have received exemptions. This gives students with advanced standing the option of completing 120 McGill credits.
Please contact Arts OASIS should you wish to further discuss this with an advisor.

### 3.5.2 Residency Requirement

To obtain a degree, you must complete a minimum of 60 credits at McGill University toward the fulfilment of your degree requirements. At least two-thirds of all program requirements (Multi-track, Honours, Faculty) must normally be completed at McGill. In addition, some departments may require that you complete specific components of your program at McGill.

Exceptionally, and subject to departmental approval, if you are in a minor concentration and you pursue an approved exchange or study away program, you may complete up to half of the minor concentration requirements elsewhere.

The residency requirement for the Diploma in Environment is 30 credits completed at McGill.

### 3.5.3 Time and Credit Limit for Completion of Degree

If you need 96 or fewer credits to complete your degree requirements, you are expected to complete your degree in no more than eight terms after your initial registration for the degree. If you are a student in the Freshman/Foundation Year program, you become subject to these regulations one year after your initial registration.
If you are registered in the B.A., you are expected to complete the requirements of your program and your degree within 120 credits. You will receive credit for all courses (subject to degree regulations) taken up to and including the semester in which you attain 120 completed credits. Should you wish to remain eligible to enroll in courses towards your McGill B.A. beyond that semester, you must seek permission of the Faculty of Arts following the procedure for "Exceeding the BA Degree Credit Requirements" detailed on the Arts OASIS website. Permission for exceeding the time and/or credit limits will normally be granted only for valid academic reasons, such as completion of your remaining program requirements (subject to departmental approval), or immigration status. If permission is granted, you will receive credit only for required and complementary courses necessary to complete your program requirements.
Students who have been granted Advanced Standing for the International Baccalaureate, Advanced Placement examinations, GCE A-Levels, French Baccalaureate, and other qualifications may complete 120 credits following admission, as per the university regulations described in University Regulations and Resources > Student Records > Advanced Standing Transfer Credits section 3.5.1.1: Advanced Standing Credits for more information.

### 3.5.4 About Program Requirements

If you need 97 or more credits to complete your degree requirements (four-year degree), you are automatically registered in the Freshman/Foundation Year Program and are expected to select one of the Freshman/Foundation Year program concentrations from the Registration Menu on Minerva. For more information, refer to mcgill.ca/oasis.

If you need 96 or fewer credits to complete your B.A. degree requirements (three-year degree or less), you must select a program at the time of registration. You may select the Multi-track system, Honours program, Joint Honours program, or Faculty program. For more information, please refer to the appropriate department: mcgill.ca/arts/departments-programs. If you are unsure of which program to select, contact a faculty advisor in Arts mcgill.ca/oasis/.

### 3.5.4.1 Freshman/Foundation Year Program (Overview)

If you enter McGill directly from high school or enter with 0-23 credits of Advanced Standing, you must complete the Freshman/Foundation Year Program core requirements ( 18 credits), designed to provide a basic foundation prior to selecting a departmental program the following year. You may select one of the following Freshman/Foundation Year Program options on Minerva:

- General option
- French option

Regulations to remember:

- Freshman/Foundation Year Program core courses must be passed with a grade of C or better;
- Courses in U0 cannot be taken under the Satisfactory/Unsatisfactory grading option;
- Advanced Standing credits may possibly be used towards Freshman/Foundation Year Program core requirements, see Transfer Credit and Advanced Standing.

For further details about the Freshman/Foundation Year Program, see Freshman/Foundation Year U0 and consult the Approved Freshman/Foundation Year Courses List for your selection of courses. If you have further questions, consult OASIS.

### 3.5.4.1.1 Bachelor of Arts (B.A.) - Freshman/Foundation Year - General ( $\mathbf{3 0}$ credits)

The Bachelor of Arts Freshman/Foundation Year is designed to ensure that students gain a broad foundation for the three-year degree program. It is comprised of 24-30 credits. In the General option, students develop their own program of study using courses from the social sciences, humanities, languages, and/or math and sciences.

This 30-credit option has a core requirement of 18 credits completed by selecting 6 credits in each of three of the four Arts subject categories: social sciences, humanities, languages, and/or mathematics and science. Students select 12 additional credits from approved courses for Freshman/Foundation Year students based on their interests. A maximum of 18 credits may be taken in any one area and a maximum of 12 credits may be taken in the courses offered by any one department. For more information, see the Arts OASIS website for newly admitted Freshman/Foundation Year students at: http://www.mcgill.ca/oasis.

## Core Requirement (18 credits)

18 credits with 6 credits in each of three of the four Arts categories: social sciences, humanities, languages, and mathematics and science.
The course lists below are organized by Arts category and include only courses approved by the offering department for Freshman/Foundation Year (U0) students. Students may use these lists to plan their course selection.

## Approved Courses - Social Sciences

For a list of the approved Arts Freshman/Foundation Year (U0) courses, see the Arts OASIS website at: http://www.mcgill.ca/oasis.
Note: If you intend to follow a psychology program, you should not register in SOCI 216 (Social Psychology). PSYC 215 (Social Psychology) is more appropriate. Credit will not be given for both courses.
Note: A few courses may be listed in both Social Sciences and in another category. For example, CANS 200 and ISLA 210 are considered to be both Social Sciences and Humanities courses.

## Approved Courses - Humanities

For a list of the approved Arts Freshman/Foundation Year (U0) courses, see the Arts OASIS website at: http://www.mcgill.ca/oasis.
Note: Some of the courses are not suitable for first term as they require university-level prerequisites. Please check the course entries for further information about appropriate background before registering.
Note: A few courses may be listed in both Humanities and in another category. For example, CANS 200 is considered to be both Humanities and Social Science courses; FREN 198 is considered to be both Humanities and Languages courses.

## Approved Courses - Languages

For a list of the approved Arts Freshman/Foundation Year (U0) courses, see the Arts OASIS website at: http://www.mcgill.ca/oasis.
Note: When registering for 'D1' courses, you MUST also register for the second part 'D2' of this full-year course.
Note: No more than one language should be taken at the introductory level during the Freshman/Foundation year. Students with prior knowledge of the language may take higher-level courses with permission from the department.
Note: A few courses may be listed in both Languages and in another category. For example, FREN 198 is considered to be both Languages and Humanities courses.

## Approved Courses - Mathematics and Sciences

For a list of the approved Arts Freshman/Foundation Year (U0) courses, see the Arts OASIS website at: http://www.mcgill.ca/oasis.
Note: Some of the courses are not suitable for first term as they require university-level prerequisites. Please check the course entries for further information about appropriate background before registering.
Note: GEOG 205 is listed as a Mathematics and Sciences course as well as a Social Sciences course.

### 3.5.4.1.2 Bachelor of Arts (B.A.) - Freshman/Foundation Year - French (30 credits)

The Bachelor of Arts Freshman/Foundation Year is designed to ensure that students gain a broad foundation for the three-year degree program. It is comprised of 24-30 credits in one of two program options. In the "En français" or French option, students choose up to 18 credits from a variety of courses conducted in French. These credits may be comprised wholly of language courses, wholly of substantive content courses conducted in French, or a combination of the two.

## Core Requirement (18 credits)

Based on their proficiency in French, students select 18 credits from the courses below in French Language and Literature and French as a Second Language.

## French Language and Literature Courses (FREN)

| FREN 201 | (3) | Le français littéraire (français langue seconde) |
| :--- | :--- | :--- |
| FREN 203 | (3) | Analyse de textes (français langue seconde) |


| FREN 231 | (3) | Linguistique française |
| :--- | :--- | :--- |
| FREN 239 | (3) | Stylistique comparée |
| FREN 245 | (3) | Grammaire normative |

## French as a Second Language (FRSL)

Depending on their level of proficiency, students may include a maximum of 12 credits of intensive French language courses. An intensive language course is a 6 credit term course. Students at the introductory level must take at least 6 credits in French in their Freshman/Foundation year but may be permitted to complete the remaining core requirement credits in year U1.

| FRSL 101 | (3) | Beginners French 1 |
| :---: | :---: | :---: |
| FRSL 102 | (3) | Beginners French 2 |
| FRSL 103 | (3) | Near Beginners French |
| FRSL 104 | (3) | Corrective French Pronunciation |
| FRSL 105 | (6) | Intensive Beginners French |
| FRSL 206 | (3) | Elementary French |
| FRSL 207D1 | (3) | Elementary French 01 |
| FRSL 207D2 | (3) | Elementary French 01 |
| FRSL 208 | (6) | Intensive Elementary French |
| FRSL 211D1 | (3) | Oral and Written French 1 |
| FRSL 211D2 | (3) | Oral and Written French 1 |
| FRSL 212 | (3) | Oral and Written French 1 |
| FRSL 215 | (6) | Oral and Written French 1 - Intensive |
| FRSL 302 | (3) | Listening Comprehension and Oral Expression 1 |
| FRSL 303 | (3) | Listening Comprehension and Oral Expression 2 |
| FRSL 321D1 | (3) | Oral and Written French 2 |
| FRSL 321D2 | (3) | Oral and Written French 2 |
| FRSL 322 | (3) | Oral and Written French 2 |
| FRSL 325 | (6) | Oral and Written French 2 - Intensive |
| FRSL 332 | (3) | Intermediate French: Grammar 01 |
| FRSL 333 | (3) | Intermediate French: Grammar 02 |
| FRSL 407 | (3) | Compréhension et expression orales |
| FRSL 408 | (3) | Français oral: Textes et expressions |
| FRSL 431D1 | (3) | Français fonctionnel avancé |
| FRSL 431D2 | (3) | Français fonctionnel avancé |
| FRSL 432 | (3) | Français fonctionnel |
| FRSL 445 | (3) | Français fonctionnel, écrit 1 |
| FRSL 446 | (3) | Français fonctionnel, écrit 2 |
| FRSL 449 | (3) | Le français des médias |
| FRSL 455 | (3) | Grammaire et création |

## Substantive Content Courses Taught in French

Some subject area courses or "substantive content courses" are taught in French. Some courses may be offered in French and English in alternate years. POLI 226 listed below is such a course. When taught in French, such courses may be counted toward this program.
POLI 226
(3)
La vie politique québécoise

## Remaining Credits (12 credits)

Students select the remaining credits (normally 12) for their Freshman/Foundation year from a list of approved courses for Arts Freshman/Foundation Year students. This list is found with requirements for the Freshman/Foundation Year - General option on the Arts OASIS website at: http://www.mcgill.ca/oasis/.

### 3.5.4.2 Departmental Programs for Bachelor of Arts

If you need 96 or fewer credits to complete your degree requirements, you are required to have an approved program (Multi-track, Honours, Faculty), and to select your courses in each term with a view to timely completion of your degree and program requirements. No course may fulfil the requirements for more than one program or concentration requirement. You must complete one of the following program streams:

### 3.5.4.2.1 Bachelor of Arts Degree: Multi-Track System

To recognize the diversity of student backgrounds and interests, the Faculty of Arts offers a 90-credit multi-track system that includes a major concentration complemented by at least a minor concentration and that may be completed in one of the following ways:

## Options

A Major Concentration (36) + Minor Concentration (18) +36 credits of electives
B Major Concentration (36) + Major Concentration (36) +18 credits of electives
C Major Concentration (36) + Minor Concentration (18) + Minor Concentration (18) +18 credits of electives

## Regulations

- Within option A and option B, all concentrations must be in different academic units.
- Within option C, one of the minor concentrations may be in the same unit as the major concentration. If you pursue a same-unit minor concentration, you will substitute additional complementary (non-required) courses to a total of 18 credits for any courses completed as a part of your major concentration within that unit.
- All credits must be at the 200 level or above. If the Major or Minor program is more than 36 credits (Major) or 18 credits (Minor), then courses at the 100 level may be counted. Courses designated as prerequisties must be included in the program.


## Definitions

- Units: academic departments or administrative equivalents.
- Programs: lists of required and complementary courses (including prerequisites for required courses) prepared and maintained by units.
- Major Concentration: a program of 36 credits taken from a unit's course offerings.
- Minor Concentration: a program of 18 credits taken from a unit's course offerings. Expandable Minor Concentrations are those which can, on the completion of 18 additional approved credits, be expanded into a Major Concentration within the appropriate unit.


### 3.5.4.2.2 Bachelor of Arts Degree: Honours Program

Honours programs demand a high degree of specialization, and require you to satisfy specific departmental and Faculty Honours requirements while maintaining a good Academic Standing. They are designed to prepare you for graduate study.

## Regulations

- To be registered in an Honours program after the first year, you must have attained a GPA and CGPA of at least 3.00 in the previous year, unless you have special permission from the department and the Associate Dean (Student Affairs).
- To complete an Honours degree, you must achieve a minimum CGPA of 3.00. The program GPA (the GPA of all required and complementary courses taken at McGill which constitute the Honours program) must be a minimum of 3.00, although academic units may set higher requirements for their program GPA.
- In addition to the completion of the Honours requirements, you must complete at least a Minor concentration in an academic unit other than the one in which the Honours requirements are satisfied.
- All courses counted towards Major or Minor Concentrations, Honours or Joint Honours Programs, or Faculty Programs must be taken at the 200 level or above.


### 3.5.4.2.3 Bachelor of Arts Degree: Joint Honours Program

If you want to study at the Honours level in two disciplines, you can combine Joint Honours program components from any two Arts disciplines; see section 3.8.6: Joint Honours Programs for a list of available programs. Each Joint Honours component consists of a maximum of 36 required and complementary credits (not including program prerequisites). In cases where a minimum of 24 credits are in courses normally restricted to Honours students, the total of required and complementary credits may be as few as 30 .

To complete a Joint Honours degree, you must achieve a minimum CGPA of 3.00 . The program GPA (the GPA of all required and complementary courses taken at McGill which constitute the Joint Honours program) must be a minimum of 3.00, although academic units may set higher requirements for your component of the program GPA.

### 3.5.4.2.4 Bachelor of Arts Degree: Faculty Programs

A Faculty program is an approved selection of courses constituting a concentration in an intellectually coherent and interfaculty field of studies. These courses must include approved selections from one of the following:

- The Faculties of Arts and of Science, and at least one other faculty
- The Faculty of Arts, and at least one faculty other than the Faculty of Science
- The Faculty of Arts currently recognizes the Faculty program in Environment


### 3.5.4.2.5 Bachelor of Arts Degree: Science Minor Programs and Out-of-Faculty Programs

Bachelor of Arts Degree - Science Minor Programs: If you want to register for a minor program offered by the Faculty of Science, you must fulfil the Arts program requirements as indicated above, as well as complete any prerequisites for the additional program. If you're interested, you must write to the Associate Dean of Arts (Student Affairs), including with your request written approval from the Science Minor advisor.

Bachelor of Arts Degree - Programs outside the Faculties of Arts or Science: If you want to register for a program offered by another faculty, please consult the OASIS website on this topic and read section 3.5.5.3: Programs Outside the Faculties of Arts or Science - For Arts Students.

### 3.5.5 Course Requirements

All required and complementary courses used to fulfil program requirements must be completed with a grade of C or better. If you fail to obtain a satisfactory grade in a required course, you must either pass the supplemental examination in the course if this option is available, or repeat the course. Course substitution will be allowed only in special cases; you should consult your departmental academic advisor.

Normally, you are permitted to repeat a failed course only once. Failure is considered to be a grade of less than C or the administrative failures of J or KF. Before attempting a required course for the third time, you are strongly urged to meet with your Arts OASIS faculty academic advisor to determine if you should continue in your academic program. If the failed course is a complementary course for your program, you may choose to replace it with another appropriate complementary course. If you choose to substitute another complementary course for a complementary course in which a D was received, credit for the first course will still be given, but as an elective. If you repeat a required course in which a D was received, credit will be given only once.

For more information on course requirements, please contact a departmental advisor at mcgill.ca/oasis/advising/departmental-advising-information.

### 3.5.5.1 Course Prerequisites

The Faculty of Arts does not prevent you from registering for courses if you do not have the required prerequisites. However, if you lack the prerequisite course, you must consult with the instructor of the course you want to take to ensure that you have the necessary background. Please note that other faculties may not allow registration without the required prerequisite courses.

### 3.5.5.2 Course Overlap

You will not receive additional credit towards your degree for any course that overlaps in content with a course for which you have already received credit at McGill, CEGEP, at another university, or Advanced Placement exams, Advanced Level results, International Baccalaureate Diploma, or French Baccalaureate. It is your responsibility to consult with a faculty advisor in Arts Academic Advising (OASIS), the Science Office for Undergraduate Student Advising (SOUSA), or the department offering the course as to whether or not credit can be obtained and to be aware of exclusion clauses specified in the course description in this publication. Please refer to the following website for specific information about Advanced Standing credits and McGill course exemptions: mcgill.ca/transfercredit.

Sometimes, the same course is offered by two different departments. Such courses are called "double-prefix" courses. When such courses are offered simultaneously, you should take the course offered by the department in which you are obtaining your degree. For example, in the case of double-prefix courses CHEM XYZ and PHYS XYZ, Chemistry students take CHEM XYZ and the Physics students take PHYS XYZ. If a double-prefix course is offered by different departments in alternate years, you may take whichever course best fits your schedule.

Note for Arts students: Credit for computer courses offered by the School of Computer Science is governed by rules specified in each individual course description.

Note for Science, and Bachelor of Arts and Science students: Credit for statistics courses offered by faculties other than Arts and Science requires the permission of the Associate Dean (Student Affairs), Science, except for students in the B.Sc. Major in Environment, who may take required statistics courses in the Faculty of Agricultural and Environmental Sciences necessary to satisfy their program requirements. Credit for computer courses offered by faculties other than Science requires the permission of the Associate Dean (Student Affairs) Science, and will be granted only under exceptional circumstances.

Credit for statistics courses for Arts, Science, and Bachelor of Arts and Science students will be given with the following stipulations:

- Credit will be given for only one of the following introductory statistics courses: AEMA 310, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, EDPE 375, GEOG 202, MATH 203, MGCR 271, MGCR 273, POTH 204, SOCI 350.
- Students who have already received credit for PSYC 204 will not receive credit for any of the following: AEMA 310, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, EDPE 375, GEOG 202, MATH 203, MGCR 271, MGCR 273, POTH 204, SOCI 350.
- Credit will be given for only one of the following intermediate statistics courses: AEMA 411, ECON 227D1/D2, ECON 257D1/D2, GEOG 351, MATH 204, PSYC 305, SOCI 461, with the exception that you may receive credit for both PSYC 305 and ECON 227D1/D2 or ECON $257 \mathrm{D} 1 / \mathrm{D} 2$.
- Students who have already received credit for MATH 324 or MATH 357 will not receive credit for any of the following: AEMA 310, AEMA 411, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, GEOG 202, GEOG 351, MATH 203, MATH 204, MGCR 271, MGCR 273, PSYC 204, PSYC 305, SOCI 350.
- For 500-level statistics courses not listed above, students must consult a program/department advisor to ensure that no significant overlap exists. Where such overlap exists with a course for which the student has already received credit, credit for the 500 -level course will not be allowed.


### 3.5.5.3 Programs Outside the Faculties of Arts or Science - For Arts Students

The following regulations apply to you if you are an Arts student:

1. Regardless of the minimum credit requirement towards your B.A. degree, you are allowed a maximum of 12 university level credits for the entirety of the degree in elective and/or complementary courses taken in faculties other than the Faculties of Arts or Science.
2. In certain designated programs that include a number of required and complementary courses in other faculties, you are permitted a maximum of 30 university level required, complementary, and elective credits outside the Faculties of Arts or Science for the entirety of the degree. These programs are as follows:

## Minor concentrations:

- Education for Arts Students
- Educational Psychology
- Field Studies *
- 
- Geography Urban Studies *
- Management for Non-Management Students
- 
- Music*
- Musical Applications of Technology
- Musical Science and Technology
- 
- Social Entrepreneurship *


## Major concentrations:

- Geography Urban Studies *
- Music * mcgill.ca/study/faculties/arts/undergraduate/ug_arts_music


## Honours:

- Environment
- Geography Urban Studies *


## Joint Honours:

- Economics and Accounting
- Economics and Finance
- Students pursing a Joint Honours Economics and Finance or Accounting may not complete any of the
mcgill.ca/desautels/programs/bcom/academics/minors-non-management-students/management-minors-non-management-students minors offered by the Desautels Faculty of Management
- For additional Joint Honours options please refer to Faculty of Arts > Undergraduate > Overview of Programs Offered > section 3.8.6: Joint Honours Programs


## Faculty programs:

- Environment
* located within the Faculties of Arts or Science

3. If you combine any two or more of the programs listed above, you may not exceed 40 credits outside the Faculties of Arts or Science.
4. Any courses taught at McGill University may be used towards the maximum allowed with the following exceptions:

- School of Continuing Studies: School of Continuing Studies courses with a teaching unit that starts with C are not for credit (except for CHEM).
- Distance Education (Online Courses): Refer to section 3.5.5.6: Policy on Transfer Credit for Online Courses in this publication.

5. For the purpose of this policy, courses taught in other faculties and specifically listed in the Arts or Science sections of the eCalendar are considered courses taught in the Faculties of Arts or Science.
6. For the purpose of this policy, all courses taken to fulfil the requirements for an approved field semester will be considered as courses in Arts or Science.
7. The maximum number of credits allowed will be strictly enforced. If you use Minerva to register for a course, and it exceeds the specified limitations, the course will be flagged for no credit after the course change period.

Minor offered by another faculty: If you wish to complete a minor that does NOT appear on the list of minors offered by other faculties available to Faculty of Arts students, you must first request Faculty Permission. Details on the process can be found on mcgill.ca/oasis/. Submission of a request for permission does not guarantee approval.

### 3.5.5.4 Inter-University Transfer Credit Policy for Courses Taken Outside the Faculties of Arts and of Science

If you transfer from a faculty outside the Faculties of Arts and of Science at another institution, you may transfer up to a maximum of 30 credits under the following conditions:

- Only courses passed with a grade of C or better will be transferred. Grades of C-, P, or S are not acceptable. The letter grades applied by your former home institution take precedence over the numerical grades, if provided.
- Decisions on whether a course is outside the Faculties of Arts and of Science will be based on the original faculty in which your course was taken.
- Refer to section 3.5.5.6: Policy on Transfer Credit for Online Courses.
- Transfer credits for Continuing Education courses will be granted only if the courses can be used towards a degree program in a faculty other than Continuing Education at your former home university.
- You will be allowed to take courses outside the Faculties of Arts and of Science at McGill only if you have transferred fewer than 12 university credits, and then only up to a maximum of 12 credits.
- If you register for a Faculty of Arts program that requires additional credits outside the Faculties of Arts and of Science, you will be allowed to take only the number of credits outside the Faculties of Arts and of Science required to complete your program, as long as the total number of credits outside the Faculties of Arts and Science, including transfer credits, does not exceed 40 credits.


### 3.5.5.5 Interfaculty Transfer Credit Policy for Courses Taken Outside the Faculties of Arts and of Science

Upon a successful interfaculty transfer to the B.A. degree, you will normally receive credit for all the Arts and Science courses you have completed and up to a maximum of 30 credits for courses outside of Arts and Science you completed with grades of D or better. The grades for these courses will remain included in the GPA (regardless of the grade).

- Upon transfer, you will be allowed to take courses outside the Faculties of Arts and of Science at McGill only if you have transferred fewer than 12 credits, and then only up to a maximum of 12 credits.
- If you register for a Faculty of Arts program that requires additional credits outside the Faculties of Arts and of Science, you will be allowed to take only the number of credits outside the Faculties of Arts and of Science required to complete your program, as long as the total number of credits outside the Faculties of Arts and Science, including transfer credits, does not exceed 40 credits.


### 3.5.5.6 Policy on Transfer Credit for Online Courses

Online / Blended / Multi-Modal course: For the purpose of assessing transfer credit from a non-McGill course, the Faculty of Arts defines a course to be online if the proportion of its mode of delivery exceeds $20 \%$. Accordingly, a course delivered entirely online is categorized as being an online course, as is the case for a course for which there is a blend of delivery modes where the online proportion exceeds $20 \%$ (e.g., over $25 \%$ online and $75 \%$ in person).

A maximum of 6 credits of non-McGill online courses for use as electives only may be applied towards your degree at McGill. Online courses from institutions other than McGill will be approved as transfer credits under the following conditions:

- the course is given by a government-accredited degree-granting institution acceptable to McGill;
- the course counts for credit towards degrees granted at the institution giving the course (i.e., not courses taken towards a certificate/diploma, nor offered through Continuing Studies);
- students have carefully read and completed the steps specified on the following Arts OASIS web page: mcgill.ca/oasis/away/application-process;
- prior approval for the course is obtained from Arts OASIS (please refer to the above link for details).

The combined total of regular course credits and online course credits may not exceed the permitted maximum number of credits per term according to Faculty regulations. Online courses taught at institutions other than McGill may not be used to complete program requirements, except on an individual basis when serious, documented circumstances warrant it. In such cases, prior approval must be obtained from your departmental academic advisor and the Associate Dean of Arts (Student Affairs).

In virtue of agreement between McGill and University of the People (UofP), this policy does not apply to students coming to McGill from UofP.

### 3.5.5.7 Internship Courses

The Faculty of Arts offers internship courses for credit. For more information, refer to section 3.9.2: Faculty of Arts Internship Program.

### 3.5.5.8 Courses in Academic English for English as a Second Language Students - Bachelor of Arts Degree

If your primary language is not English and you have studies for fewer than five years in an English-language secondary institution, you are eligible to take up to $\mathbf{1 2}$ credits of WCOM courses. These courses emphasize academic writing and provide valuable support for non-native English speakers. For more information, please check mcgill.ca/mwc/courses/undergraduate-courses. You are also strongly encouraged to speak to an Arts faculty advisor, OASIS.

Placement tests are required for most WCOM ESL courses. For more information on placement tests, see mcgill.ca/mwc/courses/placement-tests. Once you receive your test result, the MWC will issue you a permit for course registration.

### 3.5.5.9 First-Year Seminar Courses

Registration for First-Year Seminars is limited to students in their first year of study at McGill, i.e., newly admitted students in U0 or U1. These courses are designed to provide a closer interaction with professors and better working relations with peers than are available in large introductory courses. These seminars endeavour to teach the latest scholarly developments and expose participants to advanced research methods. Registration is on a first-come, first-served basis. The maximum number of students in any seminar is 25 , although some are limited to even fewer than that.
You may take only one First-Year Seminar. If you register for more than one, you will be obliged to withdraw from all but one of them.
For a complete listing, see section 3.9.1: First-Year Seminars.
The First-Year Seminars offered by the Faculty of Science are also open to Arts students. For a complete listing, see Faculty of Science > Undergraduate >Faculty Degree Requirements > Course Requirements > section 11.5.5.5: First-Year Seminars: Registration.

### 3.5.5.10 Graduate-Level Courses

For enrolment of undergraduate students in 600-level courses, some conditions must be met.
An undergraduate student will be permitted to take 600-level courses subject to the following conditions:

- The student has a minimum CGPA of 3.3;
- The student is in U3 or higher; Note: Visiting, Special or Exchange students are ineligible;
- The professor of the course and the program advisor or the director of the undergraduate program provide written approval supporting the request;
- A maximum of 6 credits of 600 -level courses are allowed toward the degree;
- The actual course number appears on the transcript;
- The course evaluation methods and grading standards are the same for all students, whether graduate or undergraduate; and
- The regulations and practices of the Faculty of Arts are also applied to such a course.

A copy of the application form is available on the Arts OASIS website.

### 3.6 Advising

Each student in the Faculty of Arts must be aware of the Faculty regulations as stated in the eCalendar and on the McGill, Faculty of Arts, and OASIS website.

While departmental and faculty advisors and staff are always available to give advice and guidance, the ultimate responsibility for completeness and correctness of course selection and registration; for compliance with, and completion of, program and degree requirements; and for the observance of regulations and deadlines, rests with the student. It is the student's responsibility to seek guidance from the Office of Advising and Student Information Services (OASIS) if in any doubt; misunderstanding or misapprehension will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.
If you need 96 or fewer credits to complete your degree requirements, you should consult with a departmental academic advisor in your proposed department of study to obtain advice and approval of your course selection. For a detailed description of advising and registration procedures, you should refer to the website for newly admitted undergraduate students, the Arts OASIS website, and your department's website.

If you need 97-120 credits to complete your degree requirements, you will normally be registered in a Freshman/Foundation Year program until you complete your first year. You should consult with an advisor in Arts OASIS to review your course selection. For a detailed description of advising and registration procedures as a Freshman/Foundation Year student, refer to University Regulations and Resources > Undergraduate > section 1.3: Registration and section 1.11: Undergraduate Advising; the newly admitted undergraduate students website; and the Arts OASIS website.

### 3.7 Examinations

You should refer to University Regulations and Resources > Undergraduate >Examinations: General Information >section 1.6.3: Final Examinations for information about final examinations and deferred examinations.
The exam schedules are posted on the McGill exams website, normally one month after the start of classes for the Tentative Exam Schedule, and two months after the start of classes for the Final Examination Schedule.

Students are warned not to make travel arrangements to leave Montreal prior to the scheduled end of any examination period.

### 3.8 Overview of Programs Offered

### 3.8.1 Programs in the Faculty of Arts

The Faculty of Arts offers programs leading to the degrees of B.A., B.S.W, and B.Th. Admission is competitive; fulfilment of the minimum requirements does not guarantee acceptance. Admission criteria are described in the Undergraduate Admissions Guide, found at mcgill.ca/undergraduate-admissions/apply.

The Faculty of Arts also offers a Diploma in Environment from the Bieler School of Environment; a 30-credit program is available to holders of a B.Sc. or B.A. or equivalent. All credits for the Diploma must be completed at McGill. For more information, see Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.5.7: Diploma Environment.

The Faculties of Arts and of Science jointly offer programs leading to the degree of the Bachelor of Arts and Science (B.A. \& Sc.), which is described in Bachelor of Arts and Science.

### 3.8.2 The Degrees Offered

The Bachelor of Arts (B.A.) degree integrates the Humanities, Social Sciences, Languages and Literatures, and a wide range of Interdisciplinary Studies into a coherent academic program. It is as broad and comprehensive in scope as is human behaviour and communication. Students interested in gaining insight into how society worked and how people expressed themselves in the past, how society works and how people express themselves today, and what we may look for in the future, pursue a B.A. degree.

Students interested in the traditional and the avant-garde are equally at home in the Faculty of Arts. The B.A. is a degree that allows students to appreciate the interdisciplinary connections with the past in order to understand the present and to prepare for a promising future. A McGill B.A. leads to a wide range of opportunities in many fields, especially those that emphasize critical thinking.

The Faculty of Arts at McGill is especially proud of its major and minor concentration programs known as the multi-track system. The multi-track system encourages flexibility, independence, and knowledge in a diversity of disciplines. It provides students with an unprecedented opportunity to tailor a unique academic profile suited to their specific interests and career ambitions. Students also have the option of doing minor concentrations in other faculties.

The Bachelor of Social Work (B.S.W.), an undergraduate program of professional studies, is offered through the School of section 3.9.37: Social Work. In addition to the standard three-year B.S.W. program, the School offers a two-year program for students who already have an undergraduate degree in another discipline.

The B.S.W. program is designed to provide an academic environment in which students will develop: integrated social work knowledge pertaining to its history, theoretical foundations, and research base; practice modalities and policies that influence the delivery of health and social services; professional skills in the well-established methods of practice; an understanding of social policy in Canada; an awareness of the various dimensions of diversity and how they intersect in an increasingly heterogeneous society; and a sense of identity with the profession of social work.

The Bachelor of Theology (B.Th.) degree is offered through the School of section 3.9.33: Religious Studies. The B.Th. program is designed primarily for those who intend to qualify for the ordained ministry in a Christian denomination, although some students pursue the degree out of an interest in the academic study of theology for its own sake, or with a view to combining these studies with proficiency gained in other disciplines.

The Bachelor of Arts \& Science (B.A. \& Sc.) is an interdisciplinary degree intended for students who want to pursue simultaneously a program offered by the Faculty of Arts and one offered by the Faculty of Science, or a program offered jointly by both faculties.

The central objective of the B.A. \& Sc. is to provide students with a broad education that includes in-depth study of disciplines in both faculties. The degree gives students a unique opportunity to achieve a diverse knowledge base, to gain competence in different methods of scholarship, to hone intellectual flexibility, and to integrate material across disciplines.
By choosing their programs appropriately, students who obtain a B.A. \& Sc. are well prepared to pursue employment or postgraduate studies, in a wide variety of fields. The varied intellectual skills they have developed render them extremely attractive candidates for potential employers, for professional programs in fields such as business, law, and medicine, and for graduate programs in traditional and interdisciplinary departments. Please refer to the Bachelor of Arts and Science section for further information.

### 3.8.3 Minor Concentrations

## Minor Concentrations

African Studies - section 3.9.21.1.2: Bachelor of Arts (B.A.) - Minor Concentration African Studies (18 credits)
Anthropology - section 3.9.4.5: Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)
Arabic Language - section 3.9.21.2.3: Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits)
Art History - section 3.9.5.4: Bachelor of Arts (B.A.) - Minor Concentration Art History ( 18 credits)
Behavioural Science - section 3.9.32.5: Bachelor of Arts (B.A.) - Minor Concentration Behavioural Science (18 credits)
Canadian Studies - section 3.9.19.6: Bachelor of Arts (B.A.) - Minor Concentration Canadian Studies (18 credits)

## Minor Concentrations

Classics - section 3.9.17.7: Bachelor of Arts (B.A.) - Minor Concentration Classics (18 credits)
Communication Studies - section 3.9.5.5: Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)
Computer Science - section 3.9.7.3: Bachelor of Arts (B.A.) - Minor Concentration Computer Science (18 credits)
Computer Science, Supplementary - section 3.9.7.4: Bachelor of Arts (B.A.) - Supplementary Minor Concentration in Computer Science (18 credits)
East Asian Language and Literature - section 3.9.8.3: Bachelor of Arts (B.A.) - Minor Concentration East Asian Language and Literature (18 credits)
East Asian Cultural Studies - section 3.9.8.4: Bachelor of Arts (B.A.) - Minor Concentration East Asian Cultural Studies (18 credits)
East Asian Language, Supplementary - section 3.9.8.5: Bachelor of Arts (B.A.) - Supplementary Minor Concentration East Asian Language (18 credits)
Economics - section 3.9.9.3: Bachelor of Arts (B.A.) - Minor Concentration Economics (18 credits)
Educational Psychology - section 3.9.11.3: Bachelor of Arts (B.A.) - Minor Concentration Educational Psychology (18 credits)
Education for Arts Students - section 3.9.10.3: Bachelor of Arts (B.A.) - Minor Concentration Education for Arts Students (18 credits)
English - Literature - section 3.9.12.4: Bachelor of Arts (B.A.) - Minor Concentration English - Literature (18 credits)
English - Drama and Theatre - section 3.9.12.5: Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)
English - Cultural Studies - section 3.9.12.6: Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)
Environment - see Bieler School of Environment > Undergraduate > Browse Academic Programs > section 4.11.14.1: Bachelor of Arts (B.A.) - Minor Concentration Environment (18 credits)

European Literature and Culture - section 3.9.23.10: Bachelor of Arts (B.A.) - Minor Concentration European Literature and Culture (18 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies - section 3.9.15.3: Bachelor of Arts (B.A.) - Minor Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (18 credits)

Geography - section 3.9.16.4: Bachelor of Arts (B.A.) - Minor Concentration Geography (18 credits)
Geography (Urban Studies) - section 3.9.16.5: Bachelor of Arts (B.A.) - Minor Concentration Geography (Urban Studies) (18 credits)
German Language - section 3.9.23.11: Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits)
German Studies - section 3.9.23.12: Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)
GIS and Remote Sensing - section 3.9.16.6: Bachelor of Arts (B.A.) - Minor Concentration GIS \& Remote Sensing (18 credits)
Health Geography - section 3.9.16.7: Bachelor of Arts (B.A.) - Minor Concentration Health Geography (18 credits)
Hispanic Studies - section 3.9.23.16: Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)
History - section 3.9.17.3: Bachelor of Arts (B.A.) - Minor Concentration History (18 credits)
History and Philosophy of Science - section 3.9.30.7.2: Bachelor of Arts (B.A.) - Minor Concentration History and Philosophy of Science (18 credits)
Indigenous Studies - section 3.9.19.10: Bachelor of Arts (B.A.) - Minor Concentration Indigenous Studies (18 credits)
International Development Studies - section 3.9.20.4: Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)
Italian Studies - section 3.9.23.20: Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits)
Jewish Studies - section 3.9.22.3: Bachelor of Arts (B.A.) - Minor Concentration Jewish Studies (18 credits)
Langue et littérature françaises - Études et pratiques littéraires - section 3.9.25.5: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et littérature françaises -Études et pratiques littéraires (18 crédits)

Langue et littérature françaises - Langue française - section 3.9.25.4: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue \& littérature françaises - Langue française ( 18 crédits)
Langue et littérature françaises - Traduction - section 3.9.25.6: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et litt. françaises Traduction (18 crédits)
Latin American \& Caribbean Studies - section 3.9.23.29.4: Bachelor of Arts (B.A.) - Minor Concentration Latin American \& Caribbean Studies (18 credits)

Linguistics - section 3.9.24.4: Bachelor of Arts (B.A.) - Minor Concentration Linguistics (18 credits)
Management for Non-Management Students - see Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > Minors for Non-Management Students > : Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) (18 credits)

Mathematics - section 3.9.26.3: Bachelor of Arts (B.A.) - Minor Concentration Mathematics (18 credits)
Mathematics, Supplementary - section 3.9.26.4: Bachelor of Arts (B.A.) - Supplementary Minor Concentration in Mathematics (18 credits)

## Minor Concentrations

Medieval Studies - section 3.9.12.17.2: Bachelor of Arts (B.A.) - Minor Concentration Medieval Studies (18 credits)
Music - section 3.9.29.5: Bachelor of Arts (B.A.) - Minor Concentration Music (18 credits)
Musical Applications of Technology - see Schulich School of Music > Undergraduate > Browse Academic Units \& Programs > Department of Music Research > section 10.6.1.12: Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology (18 credits)

Musical Science and Technology - see Schulich School of Music > Undergraduate > Browse Academic Units \& Programs > Department of Music Research > section 10.6.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits)

Persian Language - section 3.9.21.2.4: Bachelor of Arts (B.A.) - Minor Concentration Persian Language (18 credits)
Philosophy - section 3.9.30.3: Bachelor of Arts (B.A.) - Minor Concentration Philosophy ( 18 credits)
Political Science - section 3.9.31.5: Bachelor of Arts (B.A.) - Minor Concentration Political Science (18 credits)
Psychology - section 3.9.32.4: Bachelor of Arts (B.A.) - Minor Concentration Psychology (18 credits)
Quebec Studies - section 3.9.19.11.3: Bachelor of Arts (B.A.) - Minor Concentration Quebec Studies \& Community-Engaged Learning/ La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire ( 18 credits)

Religious Studies - section 3.9.33.9: Bachelor of Arts (B.A.) - Minor Concentration Religious Studies (18 credits)
Russian - section 3.9.23.24: Bachelor of Arts (B.A.) - Minor Concentration Russian (18 credits)
Russian Culture - section 3.9.23.25: Bachelor of Arts (B.A.) - Minor Concentration Russian Culture (18 credits)
Science for Arts Students - section 3.9.34.3: Bachelor of Arts (B.A.) - Minor Concentration Science for Arts Students (18 credits)
Social Entrepreneurship - section 3.9.35.3: Bachelor of Arts (B.A.) - Minor Concentration Social Entrepreneurship (18 credits)
Social Studies of Medicine - section 3.9.36.3: Bachelor of Arts (B.A.) - Minor Concentration Social Studies of Medicine (18 credits)
Sociology - section 3.9.38.4: Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)
South Asian Studies - section 3.9.17.11: Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)
Statistics - section 3.9.26.5: Bachelor of Arts (B.A.) - Minor Concentration Statistics (18 credits)
Statistics, Supplementary - section 3.9.26.6: Bachelor of Arts (B.A.) - Supplementary Minor Concentration Statistics (18 credits)
Turkish Language - section 3.9.21.2.5: Bachelor of Arts (B.A.) - Minor Concentration Turkish Language (18 credits)
Urdu Language - section 3.9.21.2.6: Bachelor of Arts (B.A.) - Minor Concentration Urdu Language (18 credits)
World Cinemas - section 3.9.12.18.2: Bachelor of Arts (B.A.) - Minor Concentration World Cinemas (18 credits)
World Islamic \& Middle East Studies - section 3.9.21.2.7: Bachelor of Arts (B.A.) - Minor Concentration World Islamic \& Middle East Studies (18 credits)

### 3.8.4 Major Concentrations

## Major Concentrations

African Studies - section 3.9.21.1.3: Bachelor of Arts (B.A.) - Major Concentration African Studies (36 credits)
Anthropology - section 3.9.4.6: Bachelor of Arts (B.A.) - Major Concentration Anthropology (36 credits)
Art History - section 3.9.5.6: Bachelor of Arts (B.A.) - Major Concentration Art History (36 credits)
Canadian Studies - section 3.9.19.7: Bachelor of Arts (B.A.) - Major Concentration Canadian Studies (36 credits)
Classics - section 3.9.17.8: Bachelor of Arts (B.A.) - Major Concentration Classics (36 credits)
Computer Science - section 3.9.7.5: Bachelor of Arts (B.A.) - Major Concentration Computer Science (36 credits)
East Asian Studies - section 3.9.8.6: Bachelor of Arts (B.A.) - Major Concentration East Asian Studies (36 credits)
Economics - section 3.9.9.4: Bachelor of Arts (B.A.) - Major Concentration Economics (36 credits)
English - Literature - section 3.9.12.7: Bachelor of Arts (B.A.) - Major Concentration English - Literature (36 credits)
English - Drama and Theatre - section 3.9.12.8: Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre (36 credits)
English - Cultural Studies - section 3.9.12.9: Bachelor of Arts (B.A.) - Major Concentration English - Cultural Studies (36 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies - section 3.9.15.4: Bachelor of Arts (B.A.) - Major Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)

## Major Concentrations

Geography - section 3.9.16.8: Bachelor of Arts (B.A.) - Major Concentration Geography (37 credits)
Geography (Urban Studies) - section 3.9.16.9: Bachelor of Arts (B.A.) - Major Concentration Geography (Urban Studies) (36 credits)
German Studies - section 3.9.23.13: Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)
Hispanic Studies - section 3.9.23.17: Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)
History - section 3.9.17.4: Bachelor of Arts (B.A.) - Major Concentration History (36 credits)
International Development Studies - section 3.9.20.5: Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)
Italian Studies - section 3.9.23.21: Bachelor of Arts (B.A.) - Major Concentration Italian Studies (36 credits)
Jewish Studies - section 3.9.22.4: Bachelor of Arts (B.A.) - Major Concentration Jewish Studies (36 credits)
Langue et littérature françaises - Études et pratiques littéraires - section 3.9.25.8: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)

Langue et littérature françaises - Traduction - section 3.9.25.9: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)

Latin American \& Caribbean Studies - section 3.9.23.29.5: Bachelor of Arts (B.A.) - Major Concentration Latin American \& Caribbean Studies (36 credits)
Liberal Arts - section 3.9.23.30.3: Bachelor of Arts (B.A.) - Major Concentration Liberal Arts (36 credits)
Linguistics - section 3.9.24.5: Bachelor of Arts (B.A.) - Major Concentration Linguistics (36 credits)
Mathematics - section 3.9.26.8: Bachelor of Arts (B.A.) - Major Concentration Mathematics (36 credits)
Music - section 3.9.29.6: Bachelor of Arts (B.A.) - Major Concentration Music (36 credits)
Philosophy - section 3.9.30.4: Bachelor of Arts (B.A.) - Major Concentration Philosophy (36 credits)
Political Science - section 3.9.31.6: Bachelor of Arts (B.A.) - Major Concentration Political Science (36 credits)
Psychology - section 3.9.32.6: Bachelor of Arts (B.A.) - Major Concentration Psychology (36 credits)
Religious Studies - section 3.9.33.10: Bachelor of Arts (B.A.) - Major Concentration Religious Studies (36 credits)
Russian - section 3.9.23.26: Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)
Sociology - section 3.9.38.5: Bachelor of Arts (B.A.) - Major Concentration Sociology (36 credits)
Statistics - section 3.9.26.7: Bachelor of Arts (B.A.) - Major Concentration Statistics (36 credits)
World Islamic and Middle East Studies - section 3.9.21.2.8: Bachelor of Arts (B.A.) - Major Concentration World Islamic \& Middle East Studies (36 credits)

### 3.8.5 Honours Programs

## Honours Programs

Anthropology - section 3.9.4.7: Bachelor of Arts (B.A.) - Honours Anthropology (60 credits)
Art History - section 3.9.5.7: Bachelor of Arts (B.A.) - Honours Art History (54 credits)
Canadian Studies - section 3.9.19.8: Bachelor of Arts (B.A.) - Honours Canadian Studies (54 credits)
Classics - section 3.9.17.9: Bachelor of Arts (B.A.) - Honours Classics (54 credits)
East Asian Studies - section 3.9.8.7: Bachelor of Arts (B.A.) - Honours East Asian Studies (60 credits)
Economics - section 3.9.9.5: Bachelor of Arts (B.A.) - Honours Economics (42 credits)
English (Literature) - section 3.9.12.10: Bachelor of Arts (B.A.) - Honours English-Literature (54 credits)
English (Drama and Theatre) - section 3.9.12.11: Bachelor of Arts (B.A.) - Honours English - Drama and Theatre (54 credits)
English (Cultural Studies) - section 3.9.12.12: Bachelor of Arts (B.A.) - Honours English - Cultural Studies (54 credits)
Environment - see Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.5.5.1: Bachelor of Arts (B.A.) - Honours Environment ( 60 credits)

Gender, Sexuality, Feminist, \& Social Justice Studies - section 3.9.15.5: Bachelor of Arts (B.A.) - Honours Gender, Sexuality, Feminist, \& Social Justice Studies (57 credits)

## Honours Programs

Geography - section 3.9.16.10: Bachelor of Arts (B.A.) - Honours Geography ( 61 credits)
Geography - Urban Studies - section 3.9.16.11: Bachelor of Arts (B.A.) - Honours Urban Studies (60 credits)
German Studies - section 3.9.23.14: Bachelor of Arts (B.A.) - Honours German Studies ( 60 credits)
Hispanic Studies - section 3.9.23.18: Bachelor of Arts (B.A.) - Honours Hispanic Studies (60 credits)
History - section 3.9.17.5: Bachelor of Arts (B.A.) - Honours History (54 credits)
International Development Studies - section 3.9.20.6: Bachelor of Arts (B.A.) - Honours International Development Studies (57 credits)
Italian Studies (Literature) - section 3.9.23.22: Bachelor of Arts (B.A.) - Honours Italian Studies (54 credits)
Jewish Studies - section 3.9.22.5: Bachelor of Arts (B.A.) - Honours Jewish Studies (60 credits)
Langue et littérature françaises - Études et pratiques littéraires - section 3.9.25.7: Baccalauréat ès Arts (B.A.) - Spécialisation enrichie Langue \& littérature françaises - Etudes et pratiques littéraires ( 72 crédits)

Latin-American and Caribbean Studies - section 3.9.23.29.6: Bachelor of Arts (B.A.) - Honours Latin American and Caribbean Studies (60 credits)
Liberal Arts - section 3.9.23.30.4: Bachelor of Arts (B.A.) - Honours Liberal Arts (60 credits)
Linguistics - section 3.9.24.6: Bachelor of Arts (B.A.) - Honours Linguistics ( 60 credits)
Mathematics - see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > Mathematics and Statistics (MATH) > section 11.12.22.15: Bachelor of Science (B.Sc.) - Honours Mathematics ( 63 credits)

Philosophy - section 3.9.30.5: Bachelor of Arts (B.A.) - Honours Philosophy ( 60 credits)
Political Science - section 3.9.31.7: Bachelor of Arts (B.A.) - Honours Political Science (54 credits)
Psychology - section 3.9.32.7: Bachelor of Arts (B.A.) - Honours Psychology ( 60 credits)
Religious Studies - section 3.9.33.14: Bachelor of Theology (B.Th.) - Honours Religious Studies ( 120 credits)
Russian - section 3.9.23.27: Bachelor of Arts (B.A.) - Honours Russian (60 credits)
Sociology - section 3.9.38.6: Bachelor of Arts (B.A.) - Honours Sociology (51 credits)
World Islamic and Middle East Studies - section 3.9.21.2.9: Bachelor of Arts (B.A.) - Honours World Islamic \& Middle East Studies (60 credits)

### 3.8.6 Joint Honours Programs

There are two types of joint honours programs available in the Faculty of Arts:

- Fully-integrated programs, such as Mathematics and Computer Science;
- Programs that are created by combining the joint honours program components from two Arts disciplines. Students must register for both joint honours program components. Joint honours students should consult an advisor in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Students can choose joint honours program components from any two of the following disciplines:

## Joint Honours Programs

Accounting (can only be combined with Economics) - section 3.9.9.7: Bachelor of Arts (B.A.) - Joint Honours Component Economics / Joint Honours Component Accounting ( 60 credits)

African Studies - section 3.9.21.1.4: Bachelor of Arts (B.A.) - Joint Honours Component African Studies (36 credits)
Anthropology - section 3.9.4.8: Bachelor of Arts (B.A.) - Joint Honours Component Anthropology (36 credits)
Art History - section 3.9.5.8: Bachelor of Arts (B.A.) - Joint Honours Component Art History (36 credits)
Canadian Studies - section 3.9.19.9: Bachelor of Arts (B.A.) - Joint Honours Component Canadian Studies (36 credits)
Classics - section 3.9.17.10: Bachelor of Arts (B.A.) - Joint Honours Component Classics (36 credits)
East Asian Studies - section 3.9.8.8: Bachelor of Arts (B.A.) - Joint Honours Component East Asian Studies (36 credits)
Economics - section 3.9.9.6: Bachelor of Arts (B.A.) - Joint Honours Component Economics (30 credits)
English - Cultural Studies - section 3.9.12.15: Bachelor of Arts (B.A.) - Joint Honours Component English - Cultural Studies (36 credits)
English - Drama and Theatre - section 3.9.12.13: Bachelor of Arts (B.A.) - Joint Honours Component English - Drama and Theatre (36 credits)
English - Literature - section 3.9.12.14: Bachelor of Arts (B.A.) - Joint Honours Component English - Literature (36 credits)

## Joint Honours Programs

Environment - see Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.5.6.1: Bachelor of Arts (B.A.) - Joint Honours Component Environment ( 36 credits)

Finance - section 3.9.9.8: Bachelor of Arts (B.A.) - Joint Honours Component Economics / Joint Honours Component Finance ( 60 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies - section 3.9.15.6: Bachelor of Arts (B.A.) - Jt Honours Component Gender, Sexuality, Feminist, \& Social Justice Studies ( 36 credits)

Geography - section 3.9.16.12: Bachelor of Arts (B.A.) - Joint Honours Component Geography (37 credits)
German Studies - section 3.9.23.15: Bachelor of Arts (B.A.) - Joint Honours Component German Studies (36 credits)
Hispanic Studies - section 3.9.23.19: Bachelor of Arts (B.A.) - Joint Honours Component Hispanic Studies (36 credits)
History - section 3.9.17.6: Bachelor of Arts (B.A.) - Joint Honours Component History (36 credits)
International Development Studies - section 3.9.20.7: Bachelor of Arts (B.A.) - Joint Honours Component International Development Studies (36 credits)

Italian Studies - section 3.9.23.23: Bachelor of Arts (B.A.) - Joint Honours Component Italian Studies (36 credits)
Jewish Studies - section 3.9.22.6: Bachelor of Arts (B.A.) - Joint Honours Component Jewish Studies (36 credits)
Langue et littérature françaises - Études et pratiques littéraires - section 3.9.25.10: Baccalauréat ès Arts (B.A.) - Double Spécialisation Langue \& littérature françaises - Études et pratiques littéraires (36 crédits)

Latin American and Caribbean Studies - section 3.9.23.29.7: Bachelor of Arts (B.A.) - Joint Honours Component Latin American and Caribbean Studies (36 credits)

Linguistics - section 3.9.24.7: Bachelor of Arts (B.A.) - Joint Honours Component Linguistics (36 credits)
Mathematics - section 3.9.26.9: Bachelor of Arts (B.A.) - Joint Honours Component Mathematics (36 credits)
Philosophy - section 3.9.30.6: Bachelor of Arts (B.A.) - Joint Honours Component Philosophy (36 credits)
Political Science - section 3.9.31.8: Bachelor of Arts (B.A.) - Joint Honours Component Political Science (36 credits)
Psychology - section 3.9.32.8: Bachelor of Arts (B.A.) - Joint Honours Component Psychology (36 credits)
Russian - section 3.9.23.28: Bachelor of Arts (B.A.) - Joint Honours Component Russian ( 36 credits)
Sociology - section 3.9.38.7: Bachelor of Arts (B.A.) - Joint Honours Component Sociology (36 credits)
World Islamic and Middle East Studies - section 3.9.21.2.10: Bachelor of Arts (B.A.) - Joint Honours Component World Islamic \& Middle East Studies (36 credits)

### 3.8.7 Faculty Programs

## Faculty Programs

Environment - see Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.5.2: B.A. Faculty Program in Environment

### 3.8.8 Other Degree Programs

The following degree programs are offered by schools within the Faculty of Arts. These programs involve their own admission requirements and application procedures; interested candidates should contact the respective school for further information.

## Other Degree Programs in the Faculty of Arts

Religious Studies - section 3.9.33.13: Bachelor of Theology (B.Th.) - Religious Studies (120 credits) (see section 3.9.33: Religious Studies for further information)
Social Work - section 3.9.37.4: Bachelor of Social Work (B.S.W.) - Social Work (Three-Year Program) (90 credits) (see section 3.9.37: Social Work for further information)

### 3.9 Browse Academic Units \& Programs

Established in 1843 , the Faculty of Arts is one of the oldest in Canada and remains the largest at McGill. The Faculty is home to 15 departments, 4 schools, 4 institutes, and 12 research centres. It has more than 350 full-time academic staff teach approximately 8,000 undergraduates and over 1,100 graduate students.

The Bachelor of Arts degree integrates the Humanities, Social Sciences, Languages and Literatures, and a wide range of Interdisciplinary Studies into a coherent academic program. Students have considerable program flexibility. They may concentrate on one or more Arts disciplines while obtaining minor concentrations in other disciplines or faculties.

The Faculty also offers programs leading to a Bachelor of Social Work (B.S.W.), a Bachelor of Theology (B.Th.), and a Diploma in Environment from the Bieler School of Environment.

### 3.9.1 First-Year Seminars

The Faculty of Arts offers the following First-Year Seminars (FYS). Note that each Seminar in the list below is not necessarily offered each year. Refer to the Class Schedule for the specific offerings each term.

Please see section section 3.5.5.9: First-Year Seminar Courses to determine if you qualify to register for an FYS course.
ARTH 199 FYS: Themes in Art History (3 credits)
EAST 199 FYS: East Asian Culture (3 credits)
ENGL 199 FYS: Form and Representation (3 credits)
FREN 198 FYS: Introduction to French and Québec Literature (3 credits)
GERM 197 FYS: Images of Otherness (3 credits)
HISP 199 FYS: Hispanic Literature and Culture (3 credits)
HIST 194 FYS: Jewish Concepts of Others ( 3 credits)
HIST 195 FYS: Sources of World History (3 credits)
HIST 197 FYS: Race in Latin America (3 credits)
HIST 198 FYS: Nation Building and Nationalism (3 credits)
HIST 199 FYS: History (3 credits)
ISLA 199 FYS: Narrations of the Middle East (3 credits)
ITAL 199 FYS: Italy's Literature in Context (3 credits)
JWST 199 FYS: Images - Jewish Identities (3 credits)
LING 199 First Year Seminar: Language and Mind (3 credits)
LLCU 199 FYS: Literary Animals (3 credits)
PHIL 197 FYS: Right and Wrong (3 credits)
PHIL 198 FYS: Knowledge and Ideas in Early Modern Philosophy (3 credits)
PHIL 199 FYS: Minds, Brain, and Machines (3 credits)

### 3.9.2 Faculty of Arts Internship Program

Most departments in the Faculty of Arts offer undergraduate students the opportunity to earn university credits while gaining experience in areas relevant to their fields of study. Open to U2 and U3 students, normally after completing 30 credits of a 90 -credit program or 45 credits of a 96 - to 120 -credit program; normally with a minimum CGPA of 2.7 , and with permission of the departmental internship advisor. Arts internships involve a minimum of 150 hours of work with an approved host institution or organization. Students are required to submit a major topical paper that discusses an aspect of the internship from an academic perspective.

For more information about the Faculty of Arts Internship Program, see mcgill.ca/arts-internships.

### 3.9.3 Study Abroad and Field Studies

## Study Abroad Options

Studying at another university is an opportunity to enrich your undergraduate education and provide you with a chance for personal growth. A term or year abroad takes planning, and must be approved by the Faculty of Arts. Be sure to carefully read about the various types of study abroad opportunities and regulations for Faculty of Arts undergraduate students at megill.ca/oasis/away:

- Bilateral Student Exchanges
- Independent Study Abroad
- Studies at a Quebec University (IUT)
- Online Courses
- Summer Explore Program

Arts OASIS reserves the right to refuse to award McGill transfer credit for any studies completed at another university if these studies were not pre-approved or if the host school or any of its courses fails to meet the Arts OASIS study away policies or McGill's program or degree requirements. Please note that study away requests involving study abroad organizations or companies which act as intermediaries are not approved.

## Field Study Courses and Field Study Minor

See details at mcgill.ca/mcgillabroad/go-abroad/field-study-semester, or at Faculty of Science > Undergraduate >Browse Academic Units \& Programs > Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits).

For more Field Study information, please contact the coordinator:
Internships \& Field Studies Office
Faculty of Science
Burnside Hall, Room 720
Email: ifso.science@mcgill.ca
Website: mcgill.ca/science/undergraduate/internships-field/field
or

Science Office for Undergraduate Student Advising (SOUSA)
Faculty of Science
Dawson Hall, Room 405
Telephone: 514-398-5442
Website: mcgill.ca/science/student

### 3.9.4 <br> Anthropology

### 3.9.4.1 Location

Stephen Leacock Building, Room 712
855 Sherbrooke Street West
Montreal QC H3A 2T7
Telephone: 514-398-6868
Website: mcgill.ca/anthropology
Administrative and Student Affairs Coordinator: Ms. Joanne Terrasi; 514-398-6868, giovanna.terrasi@mcgill.ca

### 3.9.4.2 About Anthropology

The Honours program and Major Concentration in Anthropology emphasize the similarity and diversity of human behaviour; understanding of social and cultural systems; and the processes of socio-cultural change from human origins to the present day. Within Anthropology, the Department concentrates on the fields of Archaeology and Socio-Cultural Anthropology.

Our programs serve as a useful background for those who are planning a career in teaching and research in social sciences and humanities, or a career in law, medicine, foreign service, community organization, public administration, and journalism. The Multi-track Major and Minor Concentrations provide students with a solid grounding in anthropology as a whole, or in selected topical or sub-disciplinary areas, while allowing students to follow programs in other departments that suit their needs and interests. The Honours program provides a greater focus on Anthropology with substantial breadth and depth. The completion of an Honours program is an asset when applying to graduate or professional schools.

Students should have a GPA of at least 3.50 to register in an Honours or Joint Honours program after their first year. For information regarding CGPAs needed at graduation for Honours, First-Class Honours, and Joint Honours degrees, see University Regulations \& Resources > Undergraduate > Graduation > Graduation Honours > section 1.9.3.4: Honours and First-Class Honours for Faculties of Arts and Science (including B.A. \& Sc.).

### 3.9.4.3 Core Courses

Core courses in Anthropology ( 350 level) provide students with essential knowledge of method and theory. They are more intensive than other 300-level courses, and are restricted to Anthropology program students in U2 standing or above.

### 3.9.4.4 Anthropology Minor Concentrations

The Minor Concentration in Anthropology consists of 18 credits (six 3-credit courses) in the discipline and is designed to complement students' study in related disciplines or in interdisciplinary programs. The degree may enhance the employment profile of graduating students wishing to work in social services; in multicultural or multiethnic settings; in international development, aboriginal history, or museum work; or in educational or media related professions.
Students should register in the Minor Concentration prior to their second year of study at McGill. No credits taken in a minor may overlap with another degree program. The Minor Concentration may be expanded into the single Anthropology Major Concentration.

### 3.9.4.5 Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)

The Minor Concentration Anthropology permits students to explore the development and diversity of human beings and human society and culture through courses in human evolution, prehistoric archaeology, and socio-cultural anthropology. Students may include courses in all of these fields, or may focus on one or two.

This program may be expanded to the Major Concentration Anthropology.

## Complementary Courses (18 credits)

6-9 credits from 200-level courses in Anthropology.
$9-12$ credits from any 300-, or 400-, or 500-level courses in Anthropology (only 3 credits of which can be at the 400 or 500 level. Only 1 Special Topic course can be taken.)

### 3.9.4.6 Bachelor of Arts (B.A.) - Major Concentration Anthropology ( 36 credits)

The Major concentration is especially appropriate for students who aim to take courses across several sub-disciplinary or topical concentrations, and for whom specialization is premature. There are no prerequisites for admission to the Major Concentration Anthropology. Students are encouraged to take a course in quantitative methods (listed under the Honours program), but this course cannot count as part of this concentration.

## Complementary Courses (36 credits)

## 200 Level

6 credits selected from 200-level courses in Anthropology (ANTH).

## Core (350 Level)

6 credits, from the following Core courses ( 350 level):
(Note: These are restricted to students in any Anthropology program with U2 standing or above.)

| ANTH 352 | (3) | History of Anthropological Theory |
| :--- | :--- | :--- |
| ANTH 355 | (3) | Theories of Culture and Society |
| ANTH 357 | (3) | Archaeological Methods |
| ANTH 358 | (3) | The Process of Anthropological Research |
| ANTH 359 | (3) | History of Archaeological Theory |

## 400 Level

6 credits, two 400-level Anthropology (ANTH) courses.

## Undergraduate Level

18 credits of additional undergraduate-level Anthropology courses of which no more than 6 credits may be at the 200 level.

### 3.9.4.7 Bachelor of Arts (B.A.) - Honours Anthropology ( 60 credits)

The Honours Program in Anthropology provides a greater focus on Anthropology with substantial breadth and depth. The completion of an Honours program is an asset when applying to graduate or professional schools.

## Required Course ( 6 credits)

ANTH 490
(6)
Honours Thesis

## Complementary Courses (54 credits)

Honours students select their courses as specified below. Students may take a maximum of 9 credits at the 300 and 400 level offered by other departments if they are directly related to their focus of study within Anthropology and are approved by their departmental program adviser.

## 200/300 Level

A maximum of 36 credits of 200- and 300-level courses (of which a maximum of 21 credits may be at the 200 level and a maximum of 6 credits may be Special Topic courses.)

## Core (350 Level)

A minimum of 9 credits of core courses at the 350 level selected from:

| ANTH 352 | (3) | History of Anthropological Theory |
| :--- | :--- | :--- |
| ANTH 355 | (3) | Theories of Culture and Society |
| ANTH 357 | (3) | Archaeological Methods |
| ANTH 358 | (3) | The Process of Anthropological Research |
| ANTH 359 | (3) | History of Archaeological Theory |

## 400/500 Level

A minimum of 9 credits of Anthropology (ANTH) courses at the 400- or 500-level, and a maximum of 3 credits can be a Special Topic course.

### 3.9.4.8 Bachelor of Arts (B.A.) - Joint Honours Component Anthropology (36 credits)

Students interested in Joint Honours should consult an adviser in the other department for specific course requirements. A form will be supplied by the Anthropology Department to keep track of courses required by both departments for the programs selected.

Students who wish to study at the Honours level in two disciplines can combine the Joint Honours Program component in Anthropology with one in any other Arts discipline.

The Joint Honours thesis topic should be arranged by consultation with an adviser in Anthropology and the other discipline, and supervisors should be appointed in each department who will work together to guide the student.
Joint Honours students must maintain a GPA of 3.50 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

## Required Course (3 credits)

The Joint Honours thesis should be determined in consultation with advisers from both Joint Honours components programs. Normally, the thesis is 6 credits of coursework with 3 credits applying to each Joint Honours component.
ANTH 491
(3)
Joint Honours Thesis

## Complementary Courses (33 credits)

## 200 Level

A maximum of 12 credits of Anthropology (ANTH) courses at the 200 level.

## 300 Level

A minimum of 6 credits of Anthropology (ANTH) courses at the 300 level (only one 3-credit Special Topic course at the 300 level is permitted).

## Core (350 Level)

A minimum of 9 credits of core courses at the 350 level selected from:

| ANTH 352 | (3) | History of Anthropological Theory |
| :--- | :--- | :--- |
| ANTH 355 | (3) | Theories of Culture and Society |
| ANTH 357 | (3) | Archaeological Methods |
| ANTH 358 | (3) | The Process of Anthropological Research |
| ANTH 359 | (3) | History of Archaeological Theory |

## 400/500 Level

A minimum of 6 credits of Anthropology (ANTH) courses at the 400 or 500 level (maximum of one 3-credit Special Topic course at the 400 level).

### 3.9.4.9 Anthropology (ANTH) Related Programs and Study Semesters 3.9.4.9.1 Africa Field Study Semester

The Department of Geography, Faculty of Science, coordinates the 15-credit interdisciplinary Africa Field Study Semester; see Study Abroad \& Field Studies > Undergraduate > section 12.2.1.1: Africa Field Study Semester.

### 3.9.5 Art History and Communication Studies

### 3.9.5.1 Location

McCall MacBain Arts Building, Room 155
853 Sherbrooke Street West
Montreal QC H3A 0G5
Telephone: 514-398-2850
Website: mcgill.ca/ahcs

### 3.9.5.2 About Art History and Communication Studies

In the field of Art History, the Department offers comprehensive programs of courses and seminars on the history of the visual arts, material culture, and architecture from antiquity to the present, focusing primarily on Europe and North America. The works of art and architecture are discussed within their cultural, political, historical, religious, philosophical, and social context.

Major and minor concentrations, honours, joint honours component, and graduate programs are available in Art History. For the most up-to-date information on Department requirements and detailed course descriptions, please visit our Department's website, or consult an appropriate undergraduate advisor through:

Student Affairs Office
McCall MacBain Arts Building, Room 155
Telephone: 514-398-2850
The Department offers a minor concentration in the field of Communication Studies, as well as an M.A. and a Ph.D. program at the graduate level as described in Arts Graduate section.

### 3.9.5.3 Orientation Session for New Students

All new students entering the Art History and Communication Studies undergraduate programs are required to attend an information session prior to registration. The orientation, or Departmental Advising Fair, will take place on the first business day following Discover McGill in late August/early September.
At the Advising Fair, the academic advisor will explain the requirements of the Department's programs. Incoming students will have an opportunity to ask questions and receive advice on how to plan their courses. Afterwards, students may meet individually with an advisor regarding registration. Students may sign up for advising appointments after the Departmental Advising Fair.

### 3.9.5.4 Bachelor of Arts (B.A.) - Minor Concentration Art History (18 credits)

The Minor Concentration in Art History provides an introduction to the study of diverse artistic traditions from ancient to contemporary times. It is expandable to the Major Concentration Art History.

## Complementary Courses (18 credits)

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline.

| ARTH 302 | (3) | Aspects of Canadian Art |
| :--- | :--- | :--- |
| ARTH 305 | (3) | Methods in Art History |
| ARTH 315 | (3) | Indigenous Art and Culture |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 357 | (3) | Early Chinese Art |

3-15 complementary courses chosen from among departmental course offerings. At least 9 of these credits must be at the 300 level or above. Note: Courses in studio practice cannot be counted towards the Minor Concentration.

| ARTH 200 | (3) | Introduction to Art History 1 |
| :--- | :--- | :--- |
| ARTH 202 | (3) | Introduction to Contemporary Art |
| ARTH 204 | (3) | Introduction to Medieval Art and Architecture |
| ARTH 205 | (3) | Introduction to Modern Art |
| ARTH 207 | (3) | Introduction Early Modern Art 1400-1700 |


| ARTH 209 | (3) | Introduction to Ancient Art and Architecture |
| :---: | :---: | :---: |
| ARTH 215 | (3) | Introduction to East Asian Art |
| ARTH 223 | (3) | Introduction Italian Renaissance Art 1300-1500 |
| ARTH 225 | (3) | Introduction to Seventeenth - Century Art |
| ARTH 226 | (3) | Introduction to Eighteenth-Century Art and Architecture |
| ARTH 300 | (3) | Canadian Art to 1914 |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ARTH 305 | (3) | Methods in Art History |
| ARTH 310 | (3) | Postcolonialism |
| ARTH 314 | (3) | The Medieval City |
| ARTH 315 | (3) | Indigenous Art and Culture |
| ARTH 321 | (3) | Visual Culture of the Dutch Republic |
| ARTH 323 | (3) | Realism and Impressionism |
| ARTH 324 | (3) | Sixteenth-Century Art in Italy |
| ARTH 325 | (3) | Visual Culture Renaissance Venice |
| ARTH 326 | (3) | Studies in Manuscript and Print Culture |
| ARTH 334 | (3) | Eighteenth Century European Art |
| ARTH 335 | (3) | Art in the Age of Revolution |
| ARTH 336 | (3) | Art Now |
| ARTH 337 | (3) | Modern Art and Theory to WWI |
| ARTH 338 | (3) | Modern Art and Theory: WWI - WWII |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 340 | (3) | The Gothic Cathedral |
| ARTH 351 | (3) | Vision and Visuality in Art History |
| ARTH 352 | (3) | Feminism in Art and Art History |
| ARTH 353 | (3) | Selected Topics in Art History 1 |
| ARTH 354 | (3) | Selected Topics Art History 2 |
| ARTH 356 | (3) | Modern and Contemporary Chinese Art |
| ARTH 357 | (3) | Early Chinese Art |
| ARTH 358 | (3) | Later Chinese Art (960-1911) |
| ARTH 360 | (3) | Studies in the Photographic |
| ARTH 366 | (3) | Italian Renaissance Art 1 |
| ARTH 367 | (3) | Italian Renaissance Art 2 |
| ARTH 368 | (3) | Studies in Northern Renaissance Art 01 |
| ARTH 411 | (3) | Canadian Art and Race |
| ARTH 420 | (3) | Selected Topics in Art and Architecture 1 |
| ARTH 421 | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 422 | (3) | Selected Topics in Art and Architecture 3 |
| ARTH 425 | (3) | Arts of Medieval Spain |
| ARTH 430 | (3) | Concepts - Discipline Art History |
| ARTH 435 | (3) | Early Modern Visual Culture |
| ARTH 440 | (3) | The Body and Visual Culture |
| ARTH 447 | (3) | Independent Research Course |


| ARTH 457 | (3) | Brushwork in Chinese Painting |
| :--- | :---: | :--- |
| ARTH 466 | (3) | Studies in Italian Renaissance Art 01 |
| ARTH 473 | (3) | Studies in 17th and Early 18th Century Art 04 |
| ARTH 474 | (3) | Studies in Later 18th and 19th Century Art 03 |
| ARTH 479 | (3) | Studies: Modern Art and Theoretical Problems 04 |
| ARTH 490 | (3) | Museum Internship |
| ARTH 501 | (3) | Advanced Topics in Art History and Visual Culture |
| ARTH 502 | (3) | Advanced Topics in Art and Architectural History |

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the Departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.

| ARCH 250 | (3) | Architectural History 1 |
| :--- | :--- | :--- |
| ARCH 251 | (3) | Architectural History 2 |
| PHIL 336 | (3) | Aesthetics |
| PHIL 436 | (3) | Aesthetics 2 |

### 3.9.5.5 Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)

The Minor Concentration Communication Studies provides undergraduate students with a critical understanding of the role that communications media and communication technologies play in a society. It offers students intellectually challenging and innovative instruction in key traditions of Communications and Media Studies and new theoretical and methodological practices being developed in the field. The courses included in the program focus on issues of the relationship between communication, democracy and urban life, the social life of communication technologies, the historical development and transformation of media and communication forms, institutions, practices and technologies, and the mass media representation and mobilization of social difference.

## Required Course (3 credits)

COMS 210 (3) Introduction to Communication Studies

## Complementary Courses (15 credits)

Five courses in Communication Studies selected from:

| COMS 200 | $(3)$ | History of Communication |
| :--- | :--- | :--- |
| COMS 230 | $(3)$ | Communication and Democracy |
| COMS 300 | (3) | Media and Modernity in the 20th Century |
| COMS 301 | (3) | Core Concepts in Critical Theory |
| COMS 310 | (3) | Media and Feminist Studies |
| COMS 320 | (3) | Media and Empire |
| COMS 330 | (3) | Media in Cultural Life |
| COMS 340 | (3) | New Media |
| COMS 350 | (3) | Sound Culture |
| COMS 354 | (3) | Media Studies of Crime |
| COMS 355 | (3) | Media Governance |
| COMS 361 | (3) | Selected Topics Communication Studies 1 |
| COMS 362 | (3) | Selected Topics Communication Studies 2 |
| COMS 400 | (3) | Critical Theory Seminar |
| COMS 410 | (3) | Cultures in Visualization |
| COMS 411 | (3) | Disability, Technology and Communication |


| COMS 425 | (3) | Urban Culture and Everyday Life |
| :--- | :--- | :--- |
| COMS 435 | (3) | Advanced Issues in Media Governance |
| COMS 490 | (3) | Special Topics in History and Theory of Media |
| COMS 491 | (3) | Special Topics in Communications Studies |
| COMS 492 | (3) | Power, Difference and Justice |
| COMS 495 | (3) | Directed Reading |
| COMS 497 | (3) | Independent Study |
| COMS 510 | (3) | Canadian Broadcasting Policy |

### 3.9.5.6 Bachelor of Arts (B.A.) - Major Concentration Art History ( $\mathbf{3 6}$ credits)

The Major Concentration in Art History concentrates on analysis of forms of visual and material culture from ancient to contemporary times. It provides a grounding in diverse fields and methods of the discipline.

## Complementary Courses ( $\mathbf{3 6}$ credits)

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline:

| ARTH 302 | (3) | Aspects of Canadian Art |
| :--- | :--- | :--- |
| ARTH 305 | (3) | Methods in Art History |
| ARTH 315 | (3) | Indigenous Art and Culture |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 357 | $(3)$ | Early Chinese Art |

21-33 complementary credits chosen from among departmental course offerings as follows:
-A maximum of 12 credits may be at the 200 level.
-A minimum of 3 credits must be at the 400 level or above (excluding ARTH 490 Museum Internship).
Note: Courses in studio practice cannot be counted toward the Major concentration.

| ARTH 200 | (3) | Introduction to Art History 1 |
| :--- | :--- | :--- |
| ARTH 202 | (3) | Introduction to Contemporary Art |
| ARTH 204 | (3) | Introduction to Medieval Art and Architecture |
| ARTH 205 | (3) | Introduction to Modern Art |
| ARTH 207 | (3) | Introduction Early Modern Art 1400-1700 |
| ARTH 209 | (3) | Introduction to Ancient Art and Architecture |
| ARTH 215 | (3) | Introduction to East Asian Art |
| ARTH 223 | (3) | Introduction Italian Renaissance Art 1300-1500 |
| ARTH 225 | (3) | Introduction to Seventeenth - Century Art |
| ARTH 226 | (3) | Introduction to Eighteenth-Century Art and Architecture |
| ARTH 300 | (3) | Canadian Art to 1914 |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ARTH 310 | (3) | Postcolonialism |
| ARTH 314 | (3) | The Medieval City |
| ARTH 315 | (3) | Indigenous Art and Culture |
| ARTH 321 | (3) | Visual Culture of the Dutch Republic |
| ARTH 323 | Realism and Impressionism |  |


| ARTH 324 | (3) | Sixteenth-Century Art in Italy |
| :---: | :---: | :---: |
| ARTH 325 | (3) | Visual Culture Renaissance Venice |
| ARTH 326 | (3) | Studies in Manuscript and Print Culture |
| ARTH 334 | (3) | Eighteenth Century European Art |
| ARTH 335 | (3) | Art in the Age of Revolution |
| ARTH 336 | (3) | Art Now |
| ARTH 337 | (3) | Modern Art and Theory to WWI |
| ARTH 338 | (3) | Modern Art and Theory: WWI - WWII |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 340 | (3) | The Gothic Cathedral |
| ARTH 351 | (3) | Vision and Visuality in Art History |
| ARTH 352 | (3) | Feminism in Art and Art History |
| ARTH 353 | (3) | Selected Topics in Art History 1 |
| ARTH 354 | (3) | Selected Topics Art History 2 |
| ARTH 356 | (3) | Modern and Contemporary Chinese Art |
| ARTH 357 | (3) | Early Chinese Art |
| ARTH 358 | (3) | Later Chinese Art (960-1911) |
| ARTH 360 | (3) | Studies in the Photographic |
| ARTH 366 | (3) | Italian Renaissance Art 1 |
| ARTH 367 | (3) | Italian Renaissance Art 2 |
| ARTH 368 | (3) | Studies in Northern Renaissance Art 01 |
| ARTH 411 | (3) | Canadian Art and Race |
| ARTH 420 | (3) | Selected Topics in Art and Architecture 1 |
| ARTH 421 | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 422 | (3) | Selected Topics in Art and Architecture 3 |
| ARTH 425 | (3) | Arts of Medieval Spain |
| ARTH 430 | (3) | Concepts - Discipline Art History |
| ARTH 435 | (3) | Early Modern Visual Culture |
| ARTH 440 | (3) | The Body and Visual Culture |
| ARTH 447 | (3) | Independent Research Course |
| ARTH 457 | (3) | Brushwork in Chinese Painting |
| ARTH 466 | (3) | Studies in Italian Renaissance Art 01 |
| ARTH 473 | (3) | Studies in 17th and Early 18th Century Art 04 |
| ARTH 474 | (3) | Studies in Later 18th and 19th Century Art 03 |
| ARTH 479 | (3) | Studies: Modern Art and Theoretical Problems 04 |
| ARTH 490 | (3) | Museum Internship |
| ARTH 501 | (3) | Advanced Topics in Art History and Visual Culture |
| ARTH 502 | (3) | Advanced Topics in Art and Architectural History |

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.

| ARCH 250 | (3) | Architectural History 1 |
| :--- | :--- | :--- |
| ARCH 251 | (3) | Architectural History 2 |

PHIL 336
(3)
Aesthetics
PHIL 436
(3)
Aesthetics 2

### 3.9.5.7 Bachelor of Arts (B.A.) - Honours Art History ( $\mathbf{5 4}$ credits)

The Honours Art History program provides in-depth training, with emphasis on art historical methods and research, while allowing students flexibility in choosing courses that match their academic needs and interests. It is designed especially for students who anticipate pursuing graduate studies and careers in art history or related disciplines.
Students are encouraged to apply for this program after their first year of study at the University and after completion of no less than 12 credits in Art History. Admission is on a competitive basis. While the Faculty of Arts regulations require a minimum CGPA of 3.0 for Honours programs, the Department requires in addition a program GPA of 3.50 for admission into the program and the awarding of Honours.

## Required Courses (6 credits)

| ARTH 400 | (3) | Selected Methods in Art History |
| :--- | :--- | :--- |
| ARTH 401 | (3) | Honours Research Paper |

## Complementary Courses (48 credits)

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline:

| ARTH 302 | (3) | Aspects of Canadian Art |
| :--- | :--- | :--- |
| ARTH 305 | (3) | Methods in Art History |
| ARTH 315 | (3) | Indigenous Art and Culture |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 357 | $(3)$ | Early Chinese Art |

33-45 credits of complementary courses chosen from among departmental course offerings as follows:
-A maximum of 15 credits may be at the 200 level.
-A minimum of 6 credits must be at the 400 level or above (other than ARTH 490 Museum Internship).
-6 credits should be taken in a language other than English or in courses in one or two related disciplines selected with the written approval of the academic adviser.

| ARTH 200 | (3) | Introduction to Art History 1 |
| :--- | :--- | :--- |
| ARTH 202 | (3) | Introduction to Contemporary Art |
| ARTH 204 | (3) | Introduction to Medieval Art and Architecture |
| ARTH 205 | (3) | Introduction to Modern Art |
| ARTH 207 | (3) | Introduction Early Modern Art 1400-1700 |
| ARTH 209 | (3) | Introduction to Ancient Art and Architecture |
| ARTH 215 | (3) | Introduction to East Asian Art |
| ARTH 223 | (3) | Introduction Italian Renaissance Art 1300-1500 |
| ARTH 225 | (3) | Introduction to Seventeenth - Century Art |
| ARTH 226 | (3) | Introduction to Eighteenth-Century Art and Architecture |
| ARTH 300 | (3) | Canadian Art to 1914 |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ARTH 305 | (3) | Methods in Art History |
| ARTH 310 | (3) | Postcolonialism |
| ARTH 314 | (3) | The Medieval City |
| ARTH 315 | Indigenous Art and Culture |  |


| ARTH 321 | (3) | Visual Culture of the Dutch Republic |
| :---: | :---: | :---: |
| ARTH 323 | (3) | Realism and Impressionism |
| ARTH 324 | (3) | Sixteenth-Century Art in Italy |
| ARTH 325 | (3) | Visual Culture Renaissance Venice |
| ARTH 326 | (3) | Studies in Manuscript and Print Culture |
| ARTH 334 | (3) | Eighteenth Century European Art |
| ARTH 335 | (3) | Art in the Age of Revolution |
| ARTH 336 | (3) | Art Now |
| ARTH 337 | (3) | Modern Art and Theory to WWI |
| ARTH 338 | (3) | Modern Art and Theory: WWI - WWII |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 340 | (3) | The Gothic Cathedral |
| ARTH 351 | (3) | Vision and Visuality in Art History |
| ARTH 352 | (3) | Feminism in Art and Art History |
| ARTH 353 | (3) | Selected Topics in Art History 1 |
| ARTH 354 | (3) | Selected Topics Art History 2 |
| ARTH 356 | (3) | Modern and Contemporary Chinese Art |
| ARTH 357 | (3) | Early Chinese Art |
| ARTH 358 | (3) | Later Chinese Art (960-1911) |
| ARTH 360 | (3) | Studies in the Photographic |
| ARTH 366 | (3) | Italian Renaissance Art 1 |
| ARTH 367 | (3) | Italian Renaissance Art 2 |
| ARTH 368 | (3) | Studies in Northern Renaissance Art 01 |
| ARTH 411 | (3) | Canadian Art and Race |
| ARTH 420 | (3) | Selected Topics in Art and Architecture 1 |
| ARTH 421 | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 422 | (3) | Selected Topics in Art and Architecture 3 |
| ARTH 425 | (3) | Arts of Medieval Spain |
| ARTH 430 | (3) | Concepts - Discipline Art History |
| ARTH 435 | (3) | Early Modern Visual Culture |
| ARTH 440 | (3) | The Body and Visual Culture |
| ARTH 447 | (3) | Independent Research Course |
| ARTH 457 | (3) | Brushwork in Chinese Painting |
| ARTH 466 | (3) | Studies in Italian Renaissance Art 01 |
| ARTH 473 | (3) | Studies in 17th and Early 18th Century Art 04 |
| ARTH 474 | (3) | Studies in Later 18th and 19th Century Art 03 |
| ARTH 479 | (3) | Studies: Modern Art and Theoretical Problems 04 |
| ARTH 490 | (3) | Museum Internship |
| ARTH 501 | (3) | Advanced Topics in Art History and Visual Culture |
| ARTH 502 | (3) | Advanced Topics in Art and Architectural History |

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.

| ARCH 250 | (3) | Architectural History 1 |
| :--- | :--- | :--- |
| ARCH 251 | (3) | Architectural History 2 |
| PHIL 336 | (3) | Aesthetics |
| PHIL 436 | (3) | Aesthetics 2 |

### 3.9.5.8 Bachelor of Arts (B.A.) - Joint Honours Component Art History (36 credits)

The Joint Honours Component Art History is a flexible program that emphasizes breadth, depth as well as art historical methods and research. It is designed especially for students who anticipate pursuing graduate studies and careers in art history or related disciplines.

Students are encouraged to apply for admission to the Joint Honours program after their first year of study at the University and after completion of no less than 12 credits in Art History. Admission is on a competitive basis. While the Faculty of Arts regulations require a minimum CGPA of 3.0 for Honours programs, the Department requires in addition a program GPA of 3.50 for admission into the program and the awarding of Honours

## Required Courses ( 6 credits)

| ARTH 400 | (3) | Selected Methods in Art History |
| :--- | :--- | :--- |
| ARTH 401 | (3) | Honours Research Paper |

## Complementary Courses (30 credits)

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline:

| ARTH 302 | (3) | Aspects of Canadian Art |
| :--- | :--- | :--- |
| ARTH 305 | (3) | Methods in Art History |
| ARTH 315 | (3) | Indigenous Art and Culture |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 357 | (3) | Early Chinese Art |

15-27 credits chosen from among departmental course offerings as follows:
-A maximum of 12 credits may be at the 200 level.
-A minimum of 3 credits must be at the 400 level or above (other than ARTH 490 Museum Internship).

| ARTH 200 | (3) | Introduction to Art History 1 |
| :---: | :---: | :---: |
| ARTH 202 | (3) | Introduction to Contemporary Art |
| ARTH 204 | (3) | Introduction to Medieval Art and Architecture |
| ARTH 205 | (3) | Introduction to Modern Art |
| ARTH 207 | (3) | Introduction Early Modern Art 1400-1700 |
| ARTH 209 | (3) | Introduction to Ancient Art and Architecture |
| ARTH 215 | (3) | Introduction to East Asian Art |
| ARTH 223 | (3) | Introduction Italian Renaissance Art 1300-1500 |
| ARTH 225 | (3) | Introduction to Seventeenth - Century Art |
| ARTH 226 | (3) | Introduction to Eighteenth-Century Art and Architecture |
| ARTH 300 | (3) | Canadian Art to 1914 |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ARTH 305 | (3) | Methods in Art History |
| ARTH 310 | (3) | Postcolonialism |
| ARTH 314 | (3) | The Medieval City |
| ARTH 315 | (3) | Indigenous Art and Culture |
| ARTH 321 | (3) | Visual Culture of the Dutch Republic |


| ARTH 323 | (3) | Realism and Impressionism |
| :---: | :---: | :---: |
| ARTH 324 | (3) | Sixteenth-Century Art in Italy |
| ARTH 325 | (3) | Visual Culture Renaissance Venice |
| ARTH 326 | (3) | Studies in Manuscript and Print Culture |
| ARTH 334 | (3) | Eighteenth Century European Art |
| ARTH 335 | (3) | Art in the Age of Revolution |
| ARTH 336 | (3) | Art Now |
| ARTH 337 | (3) | Modern Art and Theory to WWI |
| ARTH 338 | (3) | Modern Art and Theory: WWI - WWII |
| ARTH 339 | (3) | Critical Issues - Contemporary Art |
| ARTH 340 | (3) | The Gothic Cathedral |
| ARTH 351 | (3) | Vision and Visuality in Art History |
| ARTH 352 | (3) | Feminism in Art and Art History |
| ARTH 353 | (3) | Selected Topics in Art History 1 |
| ARTH 354 | (3) | Selected Topics Art History 2 |
| ARTH 356 | (3) | Modern and Contemporary Chinese Art |
| ARTH 357 | (3) | Early Chinese Art |
| ARTH 358 | (3) | Later Chinese Art (960-1911) |
| ARTH 360 | (3) | Studies in the Photographic |
| ARTH 366 | (3) | Italian Renaissance Art 1 |
| ARTH 367 | (3) | Italian Renaissance Art 2 |
| ARTH 368 | (3) | Studies in Northern Renaissance Art 01 |
| ARTH 411 | (3) | Canadian Art and Race |
| ARTH 420 | (3) | Selected Topics in Art and Architecture 1 |
| ARTH 421 | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 422 | (3) | Selected Topics in Art and Architecture 3 |
| ARTH 425 | (3) | Arts of Medieval Spain |
| ARTH 430 | (3) | Concepts - Discipline Art History |
| ARTH 435 | (3) | Early Modern Visual Culture |
| ARTH 440 | (3) | The Body and Visual Culture |
| ARTH 447 | (3) | Independent Research Course |
| ARTH 457 | (3) | Brushwork in Chinese Painting |
| ARTH 466 | (3) | Studies in Italian Renaissance Art 01 |
| ARTH 473 | (3) | Studies in 17th and Early 18th Century Art 04 |
| ARTH 474 | (3) | Studies in Later 18th and 19th Century Art 03 |
| ARTH 479 | (3) | Studies: Modern Art and Theoretical Problems 04 |
| ARTH 490 | (3) | Museum Internship |
| ARTH 501 | (3) | Advanced Topics in Art History and Visual Culture |
| ARTH 502 | (3) | Advanced Topics in Art and Architectural History |

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the Departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.
ARCH 250
(3)
Architectural History 1
ARCH 251
(3)
Architectural History 2
PHIL 336
Aesthetics
PHIL 436
Aesthetics 2

### 3.9.6 Cognitive Science

Students with an interest in cognition may want to consider the Minor in Cognitive Science. For more information, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.8: Cognitive Science.

### 3.9.7 Computer Science

### 3.9.7.1 Location

Main Office
McConnell Engineering Building, Room 318
3480 University Street
Montreal QC H3A 0E9
Telephone: 514-398-7071

## Undergraduate Student Affairs Office

McConnell Engineering Building, Room 320
3480 University Street
Montreal QC H3A 0E9
Telephone: 514-398-7071, ext. 00739
Email: ugrad-sec@cs.mcgill.ca
Website: cs.mcgill.ca

### 3.9.7.2 About Computer Science

For a list of teaching staff, an outline of the nature of computer science, and the opportunities for study in this discipline, refer to Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.9: Computer Science (COMP). The School also offers a program in the Faculty of Engineering and major concentrations for the Bachelor of Arts and Science.
Students must have completed MATH 133, MATH 140, MATH 141, or equivalents in order to begin taking courses in computer science programs.


Note: At the time of registration in the penultimate year, students must declare their intent to receive the Minor Concentration in Computer Science.

### 3.9.7.3 Bachelor of Arts (B.A.) - Minor Concentration Computer Science (18 credits)

The Minor Concentration Computer Science is designed for students who want to gain a basic understanding of computer science principles and may be taken in conjunction with any program in the Faculty of Arts.
Students are strongly encouraged to talk to an adviser of the School before choosing their complementary courses to ensure they follow an approved course sequence.
MATH 133, MATH 140, and MATH 141 (or their equivalents) should be completed prior to taking courses in this program.

## Required Courses (9 credits)

* Students who have sufficient knowledge of programming should not take COMP 202, and instead should replace it with an additional Computer Science complementary course.

| COMP 202* | (3) | Foundations of Programming |
| :--- | :--- | :--- |
| COMP 206 | (3) | Introduction to Software Systems |
| COMP 250 | (3) | Introduction to Computer Science |

## Complementary Courses (9 credits)

9 credits selected from the following list or from Computer Science (COMP) courses at the 300 level or above excluding COMP 364 and COMP 396.
COMP 230
(3)
Logic and Computability

| COMP 251 | (3) | Algorithms and Data Structures |
| :--- | :--- | :--- |
| COMP 273 | (3) | Introduction to Computer Systems |
| COMP 280 | (3) | History and Philosophy of Computing |
| MATH 240 | (3) | Discrete Structures |

### 3.9.7.4 Bachelor of Arts (B.A.) - Supplementary Minor Concentration in Computer Science (18 credits)

The Supplementary Minor Concentration may be taken only by students registered in the Major Concentration Computer Science or the Major Concentration Software Engineering. There may be no overlap in credits taken for this Supplementary Minor Concentration and the Major Concentration Computer Science/Software Engineering. Taken together, these constitute a program very close to the Major Computer Science offered by the Faculty of Science. Students must get their selection of courses approved by an Academic Adviser in the School of Computer Science.

Students with two programs in the same department/unit must have a third program in a different department/unit to be eligible to graduate. Please refer to the Faculty of Arts regulations for "Faculty Degree Requirements", "About Program Requirements" and "Departmental Programs" for the Multi-track System options.

## Complementary Courses (18 credits)

18 credits selected from Computer Science (COMP) courses at the 300 level or above excluding COMP 364 and COMP 396.
Students may also select a maximum of 3 credits of MATH courses from the list below.

| MATH 223 | $(3)$ | Linear Algebra |
| :--- | :--- | :--- |
| MATH 318 | (3) | Mathematical Logic |
| MATH 323 | (3) | Probability |
| MATH 324 | (3) | Statistics |
| MATH 340 | (3) | Discrete Mathematics |

### 3.9.7.5 Bachelor of Arts (B.A.) - Major Concentration Computer Science (36 credits)

This Major concentration represents an in-depth introduction to computer science and its sub-areas. Students that are interested in further study in Computer Science can combine the Major Concentration Computer Science with the Supplementary Minor in Computer Science to constitute a program very close to the Major Computer Science offered by the Faculty of Science. For further information, please consult the Program Adviser.

Students with two programs in the same department/unit must have a third program in a different department/unit to be eligible to graduate. Please refer to the Faculty of Arts regulations for "Faculty Degree Requirements," "About Program Requirements," and "Departmental Programs" for the Multi-track System options.

## Required Courses (18 credits)

MATH 133, MATH 140, and MATH 141 (or their equivalents) should be completed prior to taking courses in this program.

## Notes for the list below:

* Students who have sufficient knowledge in programming do not need to take COMP 202 and should replace it with an additional computer science complementary course.

| COMP 202* | (3) | Foundations of Programming |
| :--- | :--- | :--- |
| COMP 206 | (3) | Introduction to Software Systems |
| COMP 250 | (3) | Introduction to Computer Science |
| COMP 251 | (3) | Algorithms and Data Structures |
| COMP 273 | (3) | Introduction to Computer Systems |
| MATH 240 | $(3)$ | Discrete Structures |

## Complementary Courses (18 credits)

18 credits selected as follows:
3 credits from each of the groups A, B, C, and D:

## Group A:

| MATH 222 | (3) | Calculus 3 |
| :--- | :--- | :--- |
| MATH 323 | (3) | Probability |
| MATH 324 | (3) | Statistics |

Group B:

| MATH 223 | (3) | Linear Algebra |
| :--- | :--- | :--- |
| MATH 318 | (3) | Mathematical Logic |
| MATH 340 | (3) | Discrete Mathematics |

Group C:

| COMP 330 | (3) | Theory of Computation |
| :--- | :--- | :--- |
| COMP 350 | (3) | Numerical Computing |
| COMP 360 | (3) | Algorithm Design |

Group D:

| COMP 302 | (3) | Programming Languages and Paradigms |
| :--- | :--- | :--- |
| COMP 303 | (3) | Software Design |

An additional 3 credits may be selected from Group A or B.

The remaining complementary credits must be selected from COMP 230 and COMP courses at the 300 level or above (except COMP 364, COMP 396).

### 3.9.7.6 Bachelor of Arts (B.A.) - Major Concentration Software Engineering ( $\mathbf{3 6}$ credits)

The Major Concentration Software Engineering focuses on the techniques and methodology required to design and develop complex software systems and covers the subject commonly known as "Software Engineering". Arts students that are interested in further study in Computer Science can combine the Major Concentration in Software Engineering with the Supplementary Minor Concentration in Computer Science. For further information, please consult the Program Adviser.
Students with two programs in the same department/unit must have a third program in a different department/unit to be eligible to graduate. Please refer to the Faculty of Arts regulations for "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs" for the Multi-track System options.

MATH 133, MATH 140, and MATH 141 (or their equivalents) must be completed prior to taking courses in this program.
Note: This program does not lead to certification as a Professional Engineer.

## Required Courses ( $\mathbf{3 0}$ credits)

* Note: Students who have sufficient knowledge in a programming language do not need to take COMP 202 but can replace it with an additional Computer Science complementary course.

| COMP 202* | (3) | Foundations of Programming |
| :--- | :--- | :--- |
| COMP 206 | (3) | Introduction to Software Systems |
| COMP 250 | (3) | Introduction to Computer Science |
| COMP 251 | (3) | Algorithms and Data Structures |
| COMP 273 | (3) | Introduction to Computer Systems |
| COMP 302 | (3) | Programming Languages and Paradigms |
| COMP 303 | (3) | Software Design |
| COMP 421 | (3) | Database Systems |


| MATH 223 | (3) | Linear Algebra |
| :--- | :--- | :--- |
| MATH 240 | (3) | Discrete Structures |

## Complementary Courses ( 6 credits)

At least 6 credits from:

| ECSE 326 | (3) | Software Requirements Engineering |
| :--- | :--- | :--- |
| ECSE 437 | (3) | Software Delivery |
| ECSE 539 | (4) | Advanced Software Language Engineering |

or any COMP courses at the 300 level or above, excluding COMP 364 and COMP 396.

Suggested COMP courses are:

| COMP 322 | (1) | Introduction to C++ |
| :--- | :--- | :--- |
| COMP 361D1 | (3) | Software Engineering Project |
| COMP 361D2 | (3) | Software Engineering Project |
| COMP 529 | (4) | Software Architecture |
| COMP 533 | (3) | Model-Driven Software Development |

### 3.9.7.7 Computer Science Related Programs

### 3.9.7.7.1 Joint Honours in Mathematics and Computer Science

For more information, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.22: Mathematics and Statistics (MATH). Admission to the program is based on a strong performance in CEGEP-level mathematics courses. Students must consult an honours advisor in both departments.

According to Faculty regulations, joint honours students must maintain a minimum CGPA of 3.00 and a minimum program GPA of 3.00.

### 3.9.8 East Asian Studies

### 3.9.8.1 Location

Department of East Asian Studies
680 Sherbrooke Street West, Room 425
Montreal QC H3A 2M7
Telephone: 514-398-3650
Email: asian.studies@mcgill.ca
Website: mcgill.ca/eas

### 3.9.8.2 About East Asian Studies

Welcome to East Asian Studies! If you want to understand the challenges our world is facing today-from climate change to population flows-you owe it to yourself to learn about the cultures and histories of Asia. At McGill, you can study the languages and cultures of China, Japan, and Korea with renowned faculty whose research extends across regions and disciplines, from Buddhist art to Japanese Anime, from Korean cinema to Chinese sci-fi. We offer general survey courses on Korea, China, and Japan as well as upper-level lectures and seminars on questions of media, gender, religion, archaeology, and critical theory.

At East Asian Studies, we believe that the first step towards gaining knowledge of the history, literature, philosophy, or film of any culture begins with a deep learning of languages. We offer small, hands-on, intensive language classes led by excellent teachers who are committed to every student's progress as well as to facilitating a vibrant community of collaborative learning. We also offer guidance and support for students interested in study abroad programs in other Asian cities.

Our graduate program offers both M.A. and Ph.D. degrees. Students conduct original research, working closely with faculty supervisors in their area of specialty. Guided by their advisors and the Graduate Program Director, graduate students select from a variety of courses, both inside and outside the department, to tailor the right training for their progress in their chosen research path.

Whether doing a minor, major, honours/joint honours, or pursuing graduate work, a degree in East Asian Studies will prepare you for future leadership roles in a variety of professions. Our graduates have successfully pursued careers in business, academia, law, the arts, and the sciences. Their background in East

Asian Studies continues to spark life-long interests in comparative investigation of societies, politics, and art, fuelled by a commitment to understand the world through challenging familiar perspectives. We invite you to join us!

### 3.9.8.3 Bachelor of Arts (B.A.) - Minor Concentration East Asian Language and Literature (18 credits)

This program may be expanded to the Major Concentration East Asian Studies.

## Complementary Courses (18 credits)

18 credits selected as specified below.

## Introduction to East Asian Culture

3 credits from the following:

| EAST 211 | $(3)$ | Introduction: East Asian Culture: China |
| :--- | :--- | :--- |
| EAST 212 | (3) | Introduction: East Asian Culture: Japan |
| EAST 213 | (3) | Introduction: East Asian Culture: Korea |

## East Asian Language

9 credits of language (see the list below). Students may meet this requirement by passing the first level of Korean, Chinese or Japanese with a grade of "C" or better. Students with prior knowledge of an Asian language may substitute a second level in place of a first level. Or, these students may take 6 credits of language at the 400-level or above from the list and an additional 3 credits of East Asian Studies (EAST) courses.

Note: Admission to language courses is subject to placement tests.

| EAST 220D1 | (4.5) | First Level Korean |
| :---: | :---: | :---: |
| EAST 220D2 | (4.5) | First Level Korean |
| EAST 230D1 | (4.5) | First Level Chinese |
| EAST 230D2 | (4.5) | First Level Chinese |
| EAST 240D1 | (4.5) | First Level Japanese |
| EAST 240D2 | (4.5) | First Level Japanese |
| EAST 241 | (3) | Japanese Writing Beginners 1 |
| EAST 242 | (3) | Japanese Writing Beginners 2 |
| EAST 320D1 | (4.5) | Second Level Korean |
| EAST 320D2 | (4.5) | Second Level Korean |
| EAST 330D1 | (4.5) | Second Level Chinese |
| EAST 330D2 | (4.5) | Second Level Chinese |
| EAST 340D1 | (4.5) | Second Level Japanese |
| EAST 340D2 | (4.5) | Second Level Japanese |
| EAST 341 | (3) | Japanese Writing Intermediate 1 |
| EAST 342 | (3) | Japanese Writing Intermediate 2 |
| EAST 420 | (3) | Third Level Korean 1 |
| EAST 421 | (3) | Third Level Korean 2 |
| EAST 430D1 | (3) | Third Level Chinese |
| EAST 430D2 | (3) | Third Level Chinese |
| EAST 440D1 | (3) | Third Level Japanese |
| EAST 440D2 | (3) | Third Level Japanese |
| EAST 530D1 | (3) | Fourth Level Chinese |
| EAST 530D2 | (3) | Fourth Level Chinese |
| EAST 533 | (3) | Classical Chinese 1 |
| EAST 534 | (3) | Classical Chinese 2 |


| EAST 535 | $(3)$ | Chinese for Business 1 |
| :--- | :---: | :--- |
| EAST 536 | $(3)$ | Chinese for Business 2 |
| EAST 540D1 | $(3)$ | Fourth Level Japanese |
| EAST 540D2 | $(3)$ | Fourth Level Japanese |
| EAST 543 | $(3)$ | Classical Japanese 1 |
| EAST 544 | $(3)$ | Classical Japanese 2 |

## East Asian Studies (EAST)

| EAST 303 | (3) | Current Topics: Chinese Studies 1 |
| :---: | :---: | :---: |
| EAST 304 | (3) | Current Topics: Chinese Studies 2 |
| EAST 305 | (3) | Current Topics: Japanese Studies 1 |
| EAST 306 | (3) | Current Topics: Japanese Studies 2 |
| EAST 307 | (3) | Topics: East Asian Language and Literature 1 |
| EAST 308 | (3) | Topics: East Asian Language and Literature 2 |
| EAST 313 | (3) | Current Topics: Korean Studies 1 |
| EAST 314 | (3) | Current Topics: Korean Studies 2 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 352 | (3) | Critical Approaches to Chinese Literature |
| EAST 353 | (3) | Approaches to Chinese Cinema |
| EAST 356 | (3) | Modern and Contemporary Chinese Art |
| EAST 361 | (3) | Animation and New Media |
| EAST 362 | (3) | Japanese Cinema |
| EAST 363 | (3) | Early and Medieval Japan |
| EAST 364 | (3) | Mass Culture and Postwar Japan |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 372 | (3) | Topics in Television: Asia |
| EAST 375 | (3) | Korean Media and Popular Culture |
| EAST 377 | (3) | Topics: Transnational Asian Culture |
| EAST 385 | (3) | Global Korea |
| EAST 388 | (3) | Asian Migrations and Diasporas |
| EAST 389 | (3) | Global Cinema and Media Asia |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453 | (3) | Topics: Chinese Literature |
| EAST 454 | (3) | Topics: Chinese Cinema |
| EAST 461 | (3) | Inventing Modern Japanese Novel |
| EAST 462 | (3) | Japan in Asia |
| EAST 464 | (3) | Image, Text, Performance |
| EAST 467 | (3) | Topics: Japanese Cinema |
| EAST 468 | (3) | Science and Technology: Asia |
| EAST 477 | (3) | Media and Environment in Asia |


| EAST 478 | $(3)$ | Topics: Korean Film and Media |
| :--- | :--- | :--- |
| EAST 491 | $(3)$ | Tutorial: East Asian Languages and Literatures 1 |
| EAST 492 | $(3)$ | Tutorial: East Asian Languages and Literatures 2 |
| EAST 493 | $(3)$ | Special Topics: East Asian Studies 1 |
| EAST 494 | $(3)$ | Special Topics: East Asian Studies 2 |
| EAST 501 | $(3)$ | Advanced Topics in Japanese Studies 1 |
| EAST 502 | $(3)$ | Advanced Topics in Japanese Studies 2 |
| EAST 503 | $(3)$ | Advanced Topics in Chinese Studies 1 |
| EAST 504 | $(3)$ | Advanced Topics in Chinese Studies 2 |
| EAST 505 | $(3)$ | Advanced Topics in Korean Studies |
| EAST 515 | $(3)$ | Seminar: Beyond Orientalism |
| EAST 525 | $(3)$ | Critical Area Studies in Asia |
| EAST 527 | $(3)$ | Culture and Capital in Asia |
| EAST 550 | $(3)$ | Classical Chinese Poetry Themes and Genres |
| EAST 551 | $(3)$ | Technologies of Self in Early China |
| EAST 559 | $(3)$ | Advanced Topics: Chinese Literature |
| EAST 562 | $(3)$ | Japanese Literary Theory and Practice |
| EAST 563 | (3) | Images, Ideograms, Aesthetics |
| EAST 564 | (3) | Structures of Modernity: Asia |
| EAST 569 | (3) | Advanced Topics: Japanese Literature |
| EAST 582 | (3) | Japanese Culture and Society |

### 3.9.8.4 Bachelor of Arts (B.A.) - Minor Concentration East Asian Cultural Studies ( $\mathbf{1 8}$ credits)

This program may be expanded to the Major Concentration East Asian Studies.

## Introduction to East Asian Culture

6 credits, two of the following courses:

| EAST 211 | (3) | Introduction: East Asian Culture: China |
| :--- | :--- | :--- |
| EAST 212 | (3) | Introduction: East Asian Culture: Japan |
| EAST 213 | (3) | Introduction: East Asian Culture: Korea |

## East Asian Literature, Culture and Society

12 credits of courses in East Asian Literature, Culture and Society selected from the list below.
East Asian Studies (EAST)

| EAST 215 | $(3)$ | Introduction to East Asian Art |
| :--- | :---: | :--- |
| EAST 250 | $(3)$ | Introduction to Asian Media Studies |
| EAST 279 | $(3)$ | Introduction to Film History |
| EAST 303 | (3) | Current Topics: Chinese Studies 1 |
| EAST 304 | (3) | Current Topics: Chinese Studies 2 |
| EAST 305 | (3) | Current Topics: Japanese Studies 1 |
| EAST 306 | (3) | Current Topics: Japanese Studies 2 |
| EAST 307 | (3) | Topics: East Asian Language and Literature 1 |


| EAST 308 | (3) | Topics: East Asian Language and Literature 2 |
| :---: | :---: | :---: |
| EAST 313 | (3) | Current Topics: Korean Studies 1 |
| EAST 314 | (3) | Current Topics: Korean Studies 2 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 352 | (3) | Critical Approaches to Chinese Literature |
| EAST 353 | (3) | Approaches to Chinese Cinema |
| EAST 356 | (3) | Modern and Contemporary Chinese Art |
| EAST 361 | (3) | Animation and New Media |
| EAST 362 | (3) | Japanese Cinema |
| EAST 363 | (3) | Early and Medieval Japan |
| EAST 364 | (3) | Mass Culture and Postwar Japan |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 372 | (3) | Topics in Television: Asia |
| EAST 375 | (3) | Korean Media and Popular Culture |
| EAST 377 | (3) | Topics: Transnational Asian Culture |
| EAST 385 | (3) | Global Korea |
| EAST 388 | (3) | Asian Migrations and Diasporas |
| EAST 389 | (3) | Global Cinema and Media Asia |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453 | (3) | Topics: Chinese Literature |
| EAST 454 | (3) | Topics: Chinese Cinema |
| EAST 461 | (3) | Inventing Modern Japanese Novel |
| EAST 462 | (3) | Japan in Asia |
| EAST 464 | (3) | Image, Text, Performance |
| EAST 467 | (3) | Topics: Japanese Cinema |
| EAST 468 | (3) | Science and Technology: Asia |
| EAST 477 | (3) | Media and Environment in Asia |
| EAST 478 | (3) | Topics: Korean Film and Media |
| EAST 491 | (3) | Tutorial: East Asian Languages and Literatures 1 |
| EAST 492 | (3) | Tutorial: East Asian Languages and Literatures 2 |
| EAST 493 | (3) | Special Topics: East Asian Studies 1 |
| EAST 494 | (3) | Special Topics: East Asian Studies 2 |
| EAST 501 | (3) | Advanced Topics in Japanese Studies 1 |
| EAST 502 | (3) | Advanced Topics in Japanese Studies 2 |
| EAST 503 | (3) | Advanced Topics in Chinese Studies 1 |
| EAST 504 | (3) | Advanced Topics in Chinese Studies 2 |
| EAST 505 | (3) | Advanced Topics in Korean Studies |
| EAST 515 | (3) | Seminar: Beyond Orientalism |
| EAST 525 | (3) | Critical Area Studies in Asia |
| EAST 527 | (3) | Culture and Capital in Asia |
| EAST 550 | (3) | Classical Chinese Poetry Themes and Genres |


| EAST 551 | (3) | Technologies of Self in Early China |
| :--- | :--- | :--- |
| EAST 559 | (3) | Advanced Topics: Chinese Literature |
| EAST 562 | (3) | Japanese Literary Theory and Practice |
| EAST 564 | (3) | Structures of Modernity: Asia |
| EAST 569 | (3) | Advanced Topics: Japanese Literature |
| LLCU 279 | (3) | Introduction to Film History |

## Anthropology (ANTH)

ANTH 331
ANTH 500
(3)

Economics (ECON)
ECON 335
(3)
(3)

ECON 411

History (HIST)
HIST 208

HIST 218
HIST 308
HIST 338
HIST 358
HIST 439
HIST 441
HIST 442
HIST 443
HIST 445
HIST 508
(3)

HIST 568D1
(3)
(3)

HIST 578D1

Introduction to East Asian History
Modern East Asian History
Formation of Chinese Tradition
Twentieth-Century China
China's Middle Empires
History of Women in China
Topics: Culture and Ritual in China
Asian Diaspora: Chinese Overseas
Topics: Modern Japan
Late Imperial China
The Art of War in China
Topics in Chinese History
Topics in Chinese History
Seminar in Japanese History
Seminar in Japanese History

## Management (ORGB)

ORGB 380
Cross Cultural Management

## Political Science (POLI)

POLI 349
(3)

Foreign Policy: Asia

## Religious Studies (RELG)

| RELG 253 | (3) | Religions of East Asia |
| :--- | :--- | :--- |
| RELG 264 | (3) | Introductory Tibetan 1 |


| RELG 265 | $(3)$ | Introductory Tibetan 2 |
| :--- | :--- | :--- |
| RELG 344 | $(3)$ | Mahayana Buddhism |
| RELG 352 | $(3)$ | Japanese Religions: History and Thought |
| RELG 354 | $(3)$ | Chinese Religions |
| RELG 364 | $(3)$ | Intermediate Tibetan 1 |
| RELG 365 | $(3)$ | Intermediate Tibetan 2 |
| RELG 442 | (3) | Pure Land Buddhism |
| RELG 451 | (3) | Zen Buddhism: Poetry and Art |
| RELG 464 | (3) | Advanced Tibetan 1 |
| RELG 465 | (3) | Advanced Tibetan 2 |
| RELG 549 | (3) | Japanese Buddhism in Historical Context |

### 3.9.8.5 Bachelor of Arts (B.A.) - Supplementary Minor Concentration East Asian Language (18 credits)

This program may not be expanded to the Major Concentration East Asian Studies.
The program offers students who have a background in an East Asian language the opportunity to study this language at the advanced level ( 300 level and above), including the classical language.

## Complementary Courses (18 credits)

There are two options.
18 credits in second, third, or fourth level language courses in a single East Asian language, or a combination of an advanced language and other courses in East Asian culture, literature, or society at the 300 level or above, chosen in consultation with the Departmental Program Adviser.

### 3.9.8.6 Bachelor of Arts (B.A.) - Major Concentration East Asian Studies (36 credits)

Complementary Courses ( 36 credits)

## Introduction to East Asian Culture

3-6 credits from the following courses:

| EAST 211 | $(3)$ | Introduction: East Asian Culture: China |
| :--- | :--- | :--- |
| EAST 212 | $(3)$ | Introduction: East Asian Culture: Japan |
| EAST 213 | $(3)$ | Introduction: East Asian Culture: Korea |

$0-3$ credits from the following:

| EAST 215 | (3) | Introduction to East Asian Art |
| :--- | :--- | :--- |
| EAST 250 | (3) | Introduction to Asian Media Studies |

## East Asian Language

6-9 credits of East Asian language courses selected from the list below.
Note: Admission to language courses is subject to placement tests.

| EAST 220D1 | $(4.5)$ | First Level Korean |
| :--- | :---: | :--- |
| EAST 220D2 | $(4.5)$ | First Level Korean |
| EAST 230D1 | $(4.5)$ | First Level Chinese |
| EAST 230D2 | $(4.5)$ | First Level Chinese |
| EAST 240D1 | $(4.5)$ | First Level Japanese |
| EAST 240D2 | $(4.5)$ | First Level Japanese |


| EAST 241 | $(3)$ | Japanese Writing Beginners 1 |
| :--- | :--- | :--- |
| EAST 242 | $(3)$ | Japanese Writing Beginners 2 |
| EAST 320D1 | $(4.5)$ | Second Level Korean |
| EAST 320D2 | $(4.5)$ | Second Level Korean |
| EAST 330D1 | $(4.5)$ | Second Level Chinese |
| EAST 330D2 | $(4.5)$ | Second Level Chinese |
| EAST 340D1 | $(4.5)$ | Second Level Japanese |
| EAST 340D2 | $(4.5)$ | Second Level Japanese |
| EAST 341 | $(3)$ | Japanese Writing Intermediate 1 |
| EAST 342 | $(3)$ | Japanese Writing Intermediate 2 |
| EAST 420 | $(3)$ | Third Level Korean 1 |
| EAST 421 | $(3)$ | Third Level Korean 2 |
| EAST 430D1 | $(3)$ | Third Level Chinese |
| EAST 430D2 | $(3)$ | Third Level Chinese |
| EAST 440D1 | $(3)$ | Third Level Japanese |
| EAST 440D2 | $(3)$ | Fourd Level Chinese |
| EAST 530D1 | $(3)$ | Fourth Level Chinese |
| EAST 530D2 | $(3)$ | Classical Chinese 1 |
| EAST 533 | $(3)$ | Classical Chinese 2 |
| EAST 534 | $(3)$ | Chinese for Business 1 |
| EAST 535 | $(3)$ | Chinese for Business 2 |
| EAST 536 | $(3)$ | Fourth Level Japanese |
| EAST 540D1 | $(3)$ | Fourth Level Japanese |
| EAST 540D2 | $(3)$ | Classical Japanese 2 |
| EAST 544 |  |  |

## East Asian Literature, Culture and Society

21-24 credits of courses in East Asian Literature, Culture and Society selected from the list below. At least 6 credits must be taken at the 400 or 500 level.

| East Asian Studies (EAST) |  |  |
| :--- | :---: | :--- |
| EAST 215 | $(3)$ | Introduction to East Asian Art |
| EAST 250 | $(3)$ | Introduction to Asian Media Studies |
| EAST 279 | $(3)$ | Introduction to Film History |
| EAST 303 | $(3)$ | Current Topics: Chinese Studies 1 |
| EAST 304 | $(3)$ | Current Topics: Chinese Studies 2 |
| EAST 305 | $(3)$ | Current Topics: Japanese Studies 1 |
| EAST 306 | $(3)$ | Current Topics: Japanese Studies 2 |
| EAST 307 | $(3)$ | Topics: East Asian Language and Literature 1 |
| EAST 308 | $(3)$ | Topics: East Asian Language and Literature 2 |
| EAST 313 | $(3)$ | Current Topics: Korean Studies 1 |
| EAST 314 | $(3)$ | Current Topics: Korean Studies 2 |
| EAST 328 | $(3)$ | Archaeology East Asian Empires |
| EAST 350 | $(3)$ | Gender and Sexuality in Chinese Literature |


| EAST 351 | (3) | Women Writers of China |
| :---: | :---: | :---: |
| EAST 352 | (3) | Critical Approaches to Chinese Literature |
| EAST 353 | (3) | Approaches to Chinese Cinema |
| EAST 356 | (3) | Modern and Contemporary Chinese Art |
| EAST 361 | (3) | Animation and New Media |
| EAST 362 | (3) | Japanese Cinema |
| EAST 363 | (3) | Early and Medieval Japan |
| EAST 364 | (3) | Mass Culture and Postwar Japan |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 372 | (3) | Topics in Television: Asia |
| EAST 375 | (3) | Korean Media and Popular Culture |
| EAST 377 | (3) | Topics: Transnational Asian Culture |
| EAST 385 | (3) | Global Korea |
| EAST 388 | (3) | Asian Migrations and Diasporas |
| EAST 389 | (3) | Global Cinema and Media Asia |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453 | (3) | Topics: Chinese Literature |
| EAST 454 | (3) | Topics: Chinese Cinema |
| EAST 461 | (3) | Inventing Modern Japanese Novel |
| EAST 462 | (3) | Japan in Asia |
| EAST 464 | (3) | Image, Text, Performance |
| EAST 467 | (3) | Topics: Japanese Cinema |
| EAST 468 | (3) | Science and Technology: Asia |
| EAST 477 | (3) | Media and Environment in Asia |
| EAST 478 | (3) | Topics: Korean Film and Media |
| EAST 491 | (3) | Tutorial: East Asian Languages and Literatures 1 |
| EAST 492 | (3) | Tutorial: East Asian Languages and Literatures 2 |
| EAST 493 | (3) | Special Topics: East Asian Studies 1 |
| EAST 494 | (3) | Special Topics: East Asian Studies 2 |
| EAST 501 | (3) | Advanced Topics in Japanese Studies 1 |
| EAST 502 | (3) | Advanced Topics in Japanese Studies 2 |
| EAST 503 | (3) | Advanced Topics in Chinese Studies 1 |
| EAST 504 | (3) | Advanced Topics in Chinese Studies 2 |
| EAST 505 | (3) | Advanced Topics in Korean Studies |
| EAST 515 | (3) | Seminar: Beyond Orientalism |
| EAST 525 | (3) | Critical Area Studies in Asia |
| EAST 527 | (3) | Culture and Capital in Asia |
| EAST 550 | (3) | Classical Chinese Poetry Themes and Genres |
| EAST 551 | (3) | Technologies of Self in Early China |
| EAST 559 | (3) | Advanced Topics: Chinese Literature |
| EAST 562 | (3) | Japanese Literary Theory and Practice |
| EAST 564 | (3) | Structures of Modernity: Asia |


| EAST 569 | (3) | Advanced Topics: Japanese Literature |
| :--- | :--- | :--- |
| LLCU 279 | (3) | Introduction to Film History |

## Anthropology (ANTH)

ANTH 331
ANTH 500

Prehistory of East Asia
ANTH 500
(3)

Chinese Diversity and Diaspora

## Economics (ECON)

ECON 335
(3)

ECON 411
The Japanese Economy
Economic Development: A World Area

## Geography (GEOG)

GEOG 408
Geography of Development

## History (HIST)

| HIST 208 | $(3)$ | Introduction to East Asian History |
| :--- | :---: | :--- |
| HIST 218 | (3) | Modern East Asian History |
| HIST 308 | (3) | Formation of Chinese Tradition |
| HIST 338 | (3) | Twentieth-Century China |
| HIST 358 | (3) | China's Middle Empires |
| HIST 439 | (3) | History of Women in China |
| HIST 441 | (3) | Asian Diaspora: Chinese Overseas |
| HIST 442 | (3) | Topics: Modern Japan |
| HIST 443 | (3) | Late Imperial China |
| HIST 445 | (3) | The Art of War in China |
| HIST 508 | (3) | Topics in Chinese History |
| HIST 568D1 | (3) | Topics in Chinese History |
| HIST 568D2 | (3) | Seminar in Japanese History |
| HIST 578D1 | Seminar in Japanese History |  |

## Management (ORGB)

ORGB 380
Cross Cultural Management

## Political Science (POLI)

POLI 349
Foreign Policy: Asia

## Religious Studies (RELG)

RELG 253
(3)
(3)
(3)

Religions of East Asia
Introductory Tibetan 1
Introductory Tibetan 2

| RELG 344 | $(3)$ | Mahayana Buddhism |
| :--- | :---: | :--- |
| RELG 352 | $(3)$ | Japanese Religions: History and Thought |
| RELG 354 | $(3)$ | Chinese Religions |
| RELG 364 | $(3)$ | Intermediate Tibetan 1 |
| RELG 365 | $(3)$ | Intermediate Tibetan 2 |
| RELG 442 | $(3)$ | Pure Land Buddhism |
| RELG 451 | $(3)$ | Zen Buddhism: Poetry and Art |
| RELG 464 | $(3)$ | Advanced Tibetan 1 |
| RELG 465 | $(3)$ | Advanced Tibetan 2 |
| RELG 549 | $(3)$ | Japanese Buddhism in Historical Context |

### 3.9.8.7 Bachelor of Arts (B.A.) - Honours East Asian Studies (60 credits)

According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00. In addition, Honours students must maintain a minimum GPA of 3.30 in program courses.

## Required Courses (6 credits)

Honours thesis:

| EAST 498D1 | (3) | Honours Thesis: East Asian Studies |
| :--- | :--- | :--- |
| EAST 498D2 | (3) | Honours Thesis: East Asian Studies |

## Complementary Courses (54 credits)

## Introduction to East Asian Culture

3-6 credits from:

| EAST 211 | $(3)$ | Introduction: East Asian Culture: China |
| :--- | :--- | :--- |
| EAST 212 | $(3)$ | Introduction: East Asian Culture: Japan |
| EAST 213 | $(3)$ | Introduction: East Asian Culture: Korea |

$0-3$ credits from:

| EAST 215 | (3) | Introduction to East Asian Art |
| :--- | :--- | :--- |
| EAST 250 | (3) | Introduction to Asian Media Studies |

## East Asian Language

24 credits of an East Asian language selected from the list below.
Note: Admission to language courses is subject to placement tests.

| EAST 220D1 | $(4.5)$ | First Level Korean |
| :--- | :---: | :--- |
| EAST 220D2 | $(4.5)$ | First Level Korean |
| EAST 230D1 | $(4.5)$ | First Level Chinese |
| EAST 230D2 | $(4.5)$ | First Level Chinese |
| EAST 240D1 | $(4.5)$ | First Level Japanese |
| EAST 240D2 | $(4.5)$ | First Level Japanese |
| EAST 241 | $(3)$ | Japanese Writing Beginners 1 |
| EAST 242 | $(3)$ | Japanese Writing Beginners 2 |


| EAST 320D1 | $(4.5)$ | Second Level Korean |
| :--- | :--- | :--- |
| EAST 320D2 | $(4.5)$ | Second Level Korean |
| EAST 330D1 | $(4.5)$ | Second Level Chinese |
| EAST 330D2 | $(4.5)$ | Second Level Chinese |
| EAST 340D1 | $(4.5)$ | Second Level Japanese |
| EAST 340D2 | $(4.5)$ | Second Level Japanese |
| EAST 341 | $(3)$ | Japanese Writing Intermediate 1 |
| EAST 342 | $(3)$ | Japanese Writing Intermediate 2 |
| EAST 420 | $(3)$ | Third Level Korean 1 |
| EAST 421 | $(3)$ | Third Level Korean 2 |
| EAST 430D1 | $(3)$ | Third Level Chinese |
| EAST 430D2 | $(3)$ | Third Level Chinese |
| EAST 440D1 | $(3)$ | Third Level Japanese |
| EAST 440D2 | $(3)$ | Third Level Japanese |
| EAST 530D1 | $(3)$ | Fourth Level Chinese |
| EAST 530D2 | $(3)$ | Classical Chinese 1 |
| EAST 533 | $(3)$ | Classical Chinese 2 |
| EAST 534 | $(3)$ | Fourth Level Japanese |
| EAST 540D1 | $(3)$ | Fourth Level Japanese |
| EAST 540D2 | $(3)$ | Classical Japanese 2 |
| EAST 544 |  |  |

## East Asian Literature, Culture and Society

24 credits of courses in East Asian Literature, Culture and Society.

## East Asian Studies (EAST)

| EAST 303 | (3) | Current Topics: Chinese Studies 1 |
| :---: | :---: | :---: |
| EAST 304 | (3) | Current Topics: Chinese Studies 2 |
| EAST 305 | (3) | Current Topics: Japanese Studies 1 |
| EAST 306 | (3) | Current Topics: Japanese Studies 2 |
| EAST 307 | (3) | Topics: East Asian Language and Literature 1 |
| EAST 308 | (3) | Topics: East Asian Language and Literature 2 |
| EAST 313 | (3) | Current Topics: Korean Studies 1 |
| EAST 314 | (3) | Current Topics: Korean Studies 2 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 352 | (3) | Critical Approaches to Chinese Literature |
| EAST 353 | (3) | Approaches to Chinese Cinema |
| EAST 356 | (3) | Modern and Contemporary Chinese Art |
| EAST 358 | (3) | Later Chinese Art (960-1911) |
| EAST 361 | (3) | Animation and New Media |
| EAST 362 | (3) | Japanese Cinema |
| EAST 363 | (3) | Early and Medieval Japan |


| EAST 364 | (3) | Mass Culture and Postwar Japan |
| :---: | :---: | :---: |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 372 | (3) | Topics in Television: Asia |
| EAST 375 | (3) | Korean Media and Popular Culture |
| EAST 377 | (3) | Topics: Transnational Asian Culture |
| EAST 385 | (3) | Global Korea |
| EAST 388 | (3) | Asian Migrations and Diasporas |
| EAST 389 | (3) | Global Cinema and Media Asia |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453 | (3) | Topics: Chinese Literature |
| EAST 454 | (3) | Topics: Chinese Cinema |
| EAST 461 | (3) | Inventing Modern Japanese Novel |
| EAST 462 | (3) | Japan in Asia |
| EAST 464 | (3) | Image, Text, Performance |
| EAST 467 | (3) | Topics: Japanese Cinema |
| EAST 468 | (3) | Science and Technology: Asia |
| EAST 477 | (3) | Media and Environment in Asia |
| EAST 478 | (3) | Topics: Korean Film and Media |
| EAST 491 | (3) | Tutorial: East Asian Languages and Literatures 1 |
| EAST 492 | (3) | Tutorial: East Asian Languages and Literatures 2 |
| EAST 493 | (3) | Special Topics: East Asian Studies 1 |
| EAST 494 | (3) | Special Topics: East Asian Studies 2 |
| EAST 501 | (3) | Advanced Topics in Japanese Studies 1 |
| EAST 502 | (3) | Advanced Topics in Japanese Studies 2 |
| EAST 503 | (3) | Advanced Topics in Chinese Studies 1 |
| EAST 504 | (3) | Advanced Topics in Chinese Studies 2 |
| EAST 505 | (3) | Advanced Topics in Korean Studies |
| EAST 515 | (3) | Seminar: Beyond Orientalism |
| EAST 525 | (3) | Critical Area Studies in Asia |
| EAST 527 | (3) | Culture and Capital in Asia |
| EAST 550 | (3) | Classical Chinese Poetry Themes and Genres |
| EAST 551 | (3) | Technologies of Self in Early China |
| EAST 559 | (3) | Advanced Topics: Chinese Literature |
| EAST 562 | (3) | Japanese Literary Theory and Practice |
| EAST 564 | (3) | Structures of Modernity: Asia |
| EAST 569 | (3) | Advanced Topics: Japanese Literature |

## Anthropology (ANTH)

| ANTH 331 | (3) | Prehistory of East Asia |
| :--- | :--- | :--- |
| ANTH 500 | (3) | Chinese Diversity and Diaspora |

## Economics (ECON)

| ECON 335 | (3) | The Japanese Economy |
| :--- | :--- | :--- |
| ECON 411 | (3) | Economic Development: A World Area |

## Geography (GEOG)

GEOG 408
Geography of Development

History (HIST)

| HIST 208 | $(3)$ | Introduction to East Asian History |
| :--- | :---: | :--- |
| HIST 218 | (3) | Modern East Asian History |
| HIST 308 | (3) | Formation of Chinese Tradition |
| HIST 338 | (3) | Twentieth-Century China |
| HIST 358 | (3) | China's Middle Empires |
| HIST 439 | (3) | History of Women in China |
| HIST 441 | (3) | Asian Diaspora: Chinese Overseas |
| HIST 442 | (3) | Topics: Modern Japan |
| HIST 443 | (3) | Late Imperial China |
| HIST 445 | (3) | The Art of War in China |
| HIST 508 | (3) | Topics in Chinese History |
| HIST 568D1 | (3) | Seminar in Japanese History |
| HIST 568D2 | (3) | Seminar in Japanese History |
| HIST 578D1 |  |  |

## Management (ORGB)

ORGB 380
Cross Cultural Management

## Political Science (POLI)

POLI 349
(3)

Foreign Policy: Asia

## Religious Studies (RELG)

| RELG 253 | $(3)$ | Religions of East Asia |
| :--- | :---: | :--- |
| RELG 264 | $(3)$ | Introductory Tibetan 1 |
| RELG 265 | $(3)$ | Introductory Tibetan 2 |
| RELG 344 | (3) | Mahayana Buddhism |
| RELG 352 | (3) | Japanese Religions: History and Thought |
| RELG 354 | (3) | Chinese Religions |
| RELG 364 | (3) | Intermediate Tibetan 1 |
| RELG 365 | (3) | Intermediate Tibetan 2 |
| RELG 442 | (3) | Pure Land Buddhism |
| RELG 451 | (3) | Zen Buddhism: Poetry and Art |
| RELG 464 | (3) | Advanced Tibetan 1 |
| RELG 465 | (3) | Advanced Tibetan 2 |

RELG 549
(3)

Japanese Buddhism in Historical Context

### 3.9.8.8 Bachelor of Arts (B.A.) - Joint Honours Component East Asian Studies (36 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00. In addition, Joint Honours students must maintain a minimum GPA of 3.30 in program courses.

## Required Course (3 credits)

| EAST 495D1 | (1.5) | Joint Honours Thesis: East Asian Studies |
| :--- | :--- | :--- |
| EAST 495D2 | $(1.5)$ | Joint Honours Thesis: East Asian Studies |

## Complementary Courses (33 credits)

## Introduction to East Asian Culture

3-6 credits from:

| EAST 211 | $(3)$ | Introduction: East Asian Culture: China |
| :--- | :--- | :--- |
| EAST 212 | (3) | Introduction: East Asian Culture: Japan |
| EAST 213 | $(3)$ | Introduction: East Asian Culture: Korea |

$0-3$ credits selected from:

| EAST 215 | (3) | Introduction to East Asian Art |
| :--- | :--- | :--- |
| EAST 250 | (3) | Introduction to Asian Media Studies |

## East Asian Language

18 credits in an East Asian language above the introductory level selected from the following courses:

| EAST 320D1 | $(4.5)$ | Second Level Korean |
| :--- | :---: | :--- |
| EAST 320D2 | $(4.5)$ | Second Level Korean |
| EAST 330D1 | $(4.5)$ | Second Level Chinese |
| EAST 330D2 | $(4.5)$ | Second Level Chinese |
| EAST 340D1 | $(4.5)$ | Second Level Japanese |
| EAST 340D2 | $(4.5)$ | Second Level Japanese |
| EAST 341 | $(3)$ | Japanese Writing Intermediate 1 |
| EAST 342 | (3) | Thapanese Writing Intermediate 2 Level Korean 1 |
| EAST 420 | (3) | Third Level Korean 2 |
| EAST 421 | $(3)$ | Third Level Chinese |
| EAST 430D1 | $(3)$ | Third Level Japanese Chinese |
| EAST 430D2 | $(3)$ | Third Level Japanese |
| EAST 440D1 | (3) | Fourth Level Chinese |
| EAST 440D2 | (3) | Fourth Level Chinese |
| EAST 530D1 | (3) | Classical Chinese 1 |
| EAST 530D2 | (3) | Classical Chinese 2 |
| EAST 533 |  |  |


| EAST 540D1 | (3) | Fourth Level Japanese |
| :--- | :---: | :--- |
| EAST 540D2 | (3) | Fourth Level Japanese |
| EAST 544 | (3) | Classical Japanese 2 |

## East Asian Studies (EAST)

9 credits chosen from the following East Asian Studies courses, at least 3 credits must be at the 400 -level or above.

| EAST 303 | (3) | Current Topics: Chinese Studies 1 |
| :---: | :---: | :---: |
| EAST 304 | (3) | Current Topics: Chinese Studies 2 |
| EAST 305 | (3) | Current Topics: Japanese Studies 1 |
| EAST 306 | (3) | Current Topics: Japanese Studies 2 |
| EAST 307 | (3) | Topics: East Asian Language and Literature 1 |
| EAST 308 | (3) | Topics: East Asian Language and Literature 2 |
| EAST 313 | (3) | Current Topics: Korean Studies 1 |
| EAST 314 | (3) | Current Topics: Korean Studies 2 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 352 | (3) | Critical Approaches to Chinese Literature |
| EAST 353 | (3) | Approaches to Chinese Cinema |
| EAST 356 | (3) | Modern and Contemporary Chinese Art |
| EAST 358 | (3) | Later Chinese Art (960-1911) |
| EAST 361 | (3) | Animation and New Media |
| EAST 362 | (3) | Japanese Cinema |
| EAST 363 | (3) | Early and Medieval Japan |
| EAST 364 | (3) | Mass Culture and Postwar Japan |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 372 | (3) | Topics in Television: Asia |
| EAST 375 | (3) | Korean Media and Popular Culture |
| EAST 377 | (3) | Topics: Transnational Asian Culture |
| EAST 385 | (3) | Global Korea |
| EAST 388 | (3) | Asian Migrations and Diasporas |
| EAST 389 | (3) | Global Cinema and Media Asia |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453 | (3) | Topics: Chinese Literature |
| EAST 454 | (3) | Topics: Chinese Cinema |
| EAST 461 | (3) | Inventing Modern Japanese Novel |
| EAST 462 | (3) | Japan in Asia |
| EAST 464 | (3) | Image, Text, Performance |
| EAST 467 | (3) | Topics: Japanese Cinema |
| EAST 468 | (3) | Science and Technology: Asia |
| EAST 477 | (3) | Media and Environment in Asia |
| EAST 478 | (3) | Topics: Korean Film and Media |
| EAST 491 | (3) | Tutorial: East Asian Languages and Literatures |


| EAST 492 | $(3)$ | Tutorial: East Asian Languages and Literatures 2 |
| :--- | :--- | :--- |
| EAST 493 | $(3)$ | Special Topics: East Asian Studies 1 |
| EAST 494 | (3) | Special Topics: East Asian Studies 2 |
| EAST 501 | (3) | Advanced Topics in Japanese Studies 1 |
| EAST 502 | (3) | Advanced Topics in Japanese Studies 2 |
| EAST 503 | (3) | Advanced Topics in Chinese Studies 1 |
| EAST 504 | (3) | Advanced Topics in Chinese Studies 2 |
| EAST 505 | (3) | Advanced Topics in Korean Studies |
| EAST 515 | (3) | Seminar: Beyond Orientalism |
| EAST 525 | (3) | Critical Area Studies in Asia |
| EAST 527 | (3) | Culture and Capital in Asia |
| EAST 550 | (3) | Classical Chinese Poetry Themes and Genres |
| EAST 551 | (3) | Technologies of Self in Early China |
| EAST 559 | (3) | Advanced Topics: Chinese Literature |
| EAST 562 | (3) | Japanese Literary Theory and Practice |
| EAST 564 | (3) | Structures of Modernity: Asia |
| EAST 569 | (3) | Advanced Topics: Japanese Literature |

### 3.9.9 Economics

### 3.9.9.1 Location

Stephen Leacock Building, 4th Floor
855 Sherbrooke Street West
Montreal QC H3A 2T7
Email: undergraduate.economics@mcgill.ca
Website: mcgill.ca/economics

### 3.9.9.2 About Economics

For more up-to-date, detailed information about the Department and its programs, please visit our website:

- Majors and Minors - mcgill.ca/economics/undergraduates/majorminor
- Honours - mcgill.ca/economics/undergraduates/honours

U0 students interested in economics should take ECON 208 and ECON 209. These courses provide good preparation for the honours and major programs, although neither course is a prerequisite for either program. The first year of microeconomics courses for the Honours program (ECON 250D1/D2) and for the Majors program (ECON 230D1/D2) should not be taken in the U0 year.

Note: The Honours Economics program is offered to both B.A. and B.Com. students. All honours students must meet with a department's honours advisor in each year of their honours program.

Information on credit for economics courses taken elsewhere is available at mcgill.ca/economics/undergraduates/courses. For information on Economics internships, see mcgill.ca/arts-internships/resources/credit/economics.

### 3.9.9.3 Bachelor of Arts (B.A.) - Minor Concentration Economics (18 credits)

The Minor Concentration in Economics provides a moderate level of specialization in Economics for students who usually are pursuing Major Concentrations or Honours Programs in other fields of study. It does, however, provide an option to switch to or add a Major Concentration in Economics. There is a special Minor for Management students.

## Program Requirements

## Complementary Courses ( 18 credits)

18 credits, of which 6 credits must be from Group A and 12 credits from Group B.

## Group A

| ECON 208 | (3) | Microeconomic Analysis and Applications |
| :--- | :--- | :--- |
| ECON 209 | (3) | Macroeconomic Analysis and Applications |
| ECON 230D1 | (3) | Microeconomic Theory |
| ECON 230D2 | (3) | Microeconomic Theory |

## Group B

Economics courses with course numbers above ECON 208 (excluding ECON 295), at least 6 credits of which must be at the 300,400 or 500 level.
Program Notes:
Only one of ECON 208 or ECON 230D1/D2 or ECON 250D1/D2 can be credited to the Economics Minor. Only one of ECON 209 or the 6 credit combination of (ECON 332 and ECON 333) or (ECON 353 and ECON 354 can be credited to the Economics Minor. The combination of ECON 230D1/D2 and ECON 209 is allowed.

## Special Minor in Economics for Management Students

Information on this Minor Concentration and its special restrictions is in the Desautels Faculty of Management website at www.mcgill.ca/desautels/programs/bcom/academics/areas-study/economics/minor-concentration-economics. Students should consult with the advisers in both the Faculty of Management and the Department of Economics for advice on this minor concentration.

### 3.9.9.4 Bachelor of Arts (B.A.) - Major Concentration Economics ( $\mathbf{3 6}$ credits)

The Major Concentration in Economics is a planned sequence of courses designed to permit the student a degree of specialization in economics. It consists of 36 credits in courses approved by the Economics Department. Students wishing to pursue this concentration need to consult the department's rules and regulations at: www.mcgill.ca/economics/undergraduates/majorminor.
All students who wish to begin (or continue) the Major Concentration Economics should see a majors adviser in the Department of Economics in each of their university years. Further information may be obtained from the Department's website, or from any majors adviser; consult the Department website for a list of advisers and their email addresses.

Students who are registering for the first time with the Department should attend the orientation meeting in August (check the website for details) before seeing an adviser.

A student choosing the Major Concentration Economics must take 36 credits in Economics. The Economics courses will normally be taken at McGill and will be selected from the courses shown below. Major Concentration in Economics students entering University at the U1 year in September should directly proceed to ECON 230D1/ECON 230D2 without taking ECON 208 and ECON 209.

Note: Students who wish to switch from the Major Concentration to Honours Economics must complete all the requirements of the Honours program.
Mathematics: Mastery of high school mathematics is required for all economics courses.
Prerequisites: In general, 200-level courses have no prerequisites and 300-level and 400-level courses have ECON 230D1/ECON 230D2 or ECON 250D1/ECON 250D2 (or ECON 208 and ECON 209, or MGCR 293 and ECON 295) as prerequisites. In addition, 400-level courses have Calculus 1 (or its equivalent) or a course in mathematical techniques for economic analysis (or its equivalent) as a prerequisite.

## Required Courses (18 credits)

All students must take 6 credits of approved statistics courses. Students should refer to the Department's document "Rules on Stats Courses for Economics Students" available at: http://www.mcgill.ca/economics/undergraduates/courses/.

| ECON 227D1 | (3) | Economic Statistics |
| :--- | :---: | :--- |
| ECON 227D2 | (3) | Economic Statistics |
| ECON 230D1 | (3) | Microeconomic Theory |
| ECON 230D2 | (3) | Microeconomic Theory |
| ECON 332 | (3) | Macroeconomic Theory: Majors 1 |
| ECON 333 | (3) | Macroeconomic Theory - Majors 2 |

## Complementary Courses (18 credits)

18 credits in Economics selected from other 200- (with numbers above 209), 300-, 400- and 500-level courses. At least 6 of these credits must be in $400-$ or 500 -level courses. No more than 6 credits may be at the 200 level.

### 3.9.9.5 Bachelor of Arts (B.A.) - Honours Economics (42 credits)

The Honours Economics program (B.A. and B.Com.) consists of 30 specified credits of Honours courses and a further 12 credits of approved Economics courses.

Continuation in the Honours program from one year to the next requires a minimum grade of B- in ECON 250 and a minimum B-average in required and complementary Honours economics courses. Students failing to meet these requirements must switch out of the Honours program. If they continue to register in Honours, they will not be allowed to graduate with Honours. Note that graduation with Honours has more stringent requirements (see below) than these.

To be awarded an Honours degree, a student must obtain a 3.00 GPA in the required/core courses, a 3.00 average in the required and complementary credits in Economics, and a CGPA of 3.00 . For a First Class Honours degree, the minimum requirements are a 3.50 program GPA in the required courses, a 3.50 average in the required and complementary credits in Economics, and a CGPA of 3.50. Students also have to meet the requirements of the Faculty of Arts for Honours and First Class Honours. In cases where a student takes a Supplemental Exam in a course, both the original and the Supplemental Exam grades will be counted in the calculation of the GPA and CGPA averages.

All Honours students are required to see an Honours advisor and also consult the Honours and Joint Honours programs available on the Department's website: http://www.mcgill.ca/economics/undergraduates/honours. For the current list of advisers in Economics and their advising times, see the Department of Economics' website.

## Program Prerequisites ( $0-10$ credits)

For entering this program:

| MATH $133^{*}$ | (3) | Linear Algebra and Geometry |
| :--- | :--- | :--- |
| MATH $140^{* *}$ | (3) | Calculus 1 |
| MATH $141^{* *}$ | (4) | Calculus 2 |
| * Or equivalent (to be completed prior to U2) |  |  |
| ** Or equivalent |  |  |

## Required (core) Courses (30 credits)

Please refer to the Department's document "Rules on Stats Courses for Economics Students" available at: http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics course may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468.

Normally, ECON 250D1/ECON 250D2 is taken in the U1 year, ECON 353 and ECON 354 are taken in U2, and ECON 450 and ECON 452 are taken in U3. ECON 257D1/ECON 257D2 can be taken in U1 or U2; and ECON 468 can be taken in U2 or U3.

| ECON 250D1 | (3) | Introduction to Economic Theory: Honours |
| :--- | :--- | :--- |
| ECON 250D2 | (3) | Introduction to Economic Theory: Honours |
| ECON 257D1 | (3) | Economic Statistics - Honours |
| ECON 257D2 | (3) | Economic Statistics - Honours |
| ECON 353 | (3) | Macroeconomics - Honours 1 |
| ECON 354 | (3) | Macroeconomics - Honours 2 |
| ECON 450 | (3) | Advanced Economic Theory 1 - Honours |
| ECON 452 | (3) | Advanced Economic Theory 2 - Honours |
| ECON 468 | (3) | Econometrics 1-Honours |

3 credits from:

| ECON 460 | $(3)$ | History of Thought 1 - Honours |
| :--- | :--- | :--- |
| ECON 461 | (3) | History of Thought 2 - Honours |
| ECON 469 | (3) | Econometrics 2 - Honours |

## Complementary Courses (12 credits)

Complementary courses are usually taken in U2 or U3.

12 credits of Economics courses at the 300, 400, or 500 level, approved by an Honours adviser. Unless explicitly approved by the Honours advisor, at least 9 of the 12 credits have to be at the 400 or 500 level. Note that Honours students are not permitted to register for majors or general Economics courses where an Honours or a more advanced undergraduate course in the same subject is offered.

### 3.9.9.6 Bachelor of Arts (B.A.) - Joint Honours Component Economics (30 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two approved disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs" on the Economics Department webiste.
Joint Honours students should consult an adviser in each of the relevant departments to discuss their course selection and their interdisciplinary research project (if applicable) in each year of their program.
For the Economics component of this program, Joint Honours students should consult: http://www.mcgill.ca/economics/undergraduates/honours. For the current list of advisers in Economics and their advising times, see the website of the Department of Economics.

Continuation in the Economic component of this program from one year to the next requires a minimum grade of B- in ECON 250D1/D2, and a minimum B- average in the required and complementary Honours Economics courses. Students failing to meet these requirements must switch out of the Honours program. If they continue to register in Honours, they will not be allowed to graduate with Honours. Note that graduation with Honours has more stringent requirements (see below) than these.

For graduation with the Economics component, a student must also obtain a 3.00 GPA in the required courses, a 3.00 average in the required and complementary credits in Economics, and a CGPA of 3.00 . For a First Class Honours degree, the minimum requirements are a 3.50 program GPA in the required courses, a 3.50 average in the required and complementary credits in Economics, and a CGPA of 3.50. In cases where a student takes a Supplemental Exam in an Economics course, both the original and the Supplemental Exam grades will be counted in the calculation of the GPA and CGPA averages.

Students also have to meet the requirements of the other component of this program and of the relevant Faculty for Honours and First Class Honours.

## Program Prerequisites ( $\mathbf{0}-10$ credits)

For entering the program:

| MATH $133^{*}$ | (3) | Linear Algebra and Geometry |
| :--- | :--- | :--- |
| MATH $140^{* *}$ | (3) | Calculus 1 |
| MATH $141^{* *}$ | (4) | Calculus 2 |
| * Or equivalent (to be completed prior to U2) |  |  |
| ** Or equivalent |  |  |

## Required Courses (27 credits)

Please refer to the Department's document "Rules on Stats Courses for Economics Students" available at:
http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics courses may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468.

| ECON 250D1 | (3) | Introduction to Economic Theory: Honours |
| :--- | :--- | :--- |
| ECON 250D2 | (3) | Introduction to Economic Theory: Honours |
| ECON 257D1 | (3) | Economic Statistics - Honours |
| ECON 257D2 | (3) | Economic Statistics - Honours |
| ECON 353 | (3) | Macroeconomics - Honours 1 |
| ECON 354 | (3) | Macroeconomics - Honours 2 |
| ECON 450 | (3) | Advanced Economic Theory 1 - Honours |
| ECON 452 | (3) | Advanced Economic Theory 2 - Honours |
| ECON 468 | (3) | Econometrics 1 - Honours |

## Complementary Course (3 credits)

3 credits from:

| ECON 460 | (3) | History of Thought $1-$ Honours |
| :--- | :--- | :--- |
| ECON 461 | (3) | History of Thought 2 - Honours |
| ECON 469 | (3) | Econometrics $2-$ Honours |

### 3.9.9.7 Bachelor of Arts (B.A.) - Joint Honours Component Economics / Joint Honours Component Accounting (60 credits)

The B.A. Joint Honours in Economics and Accounting is offered jointly by the Economics Department and the Desautels Faculty of Management. Students in this program should see an Economics adviser and a Management adviser. For the economics part, they should consult:
http://www.mcgill.ca/economics/undergraduates/honours. For the current list of advisers in Economics and their advising times, see the website of the Department of Economics. For the Management component of this Joint Honours program, students should see the Honours program adviser in the Desautels Faculty of Management.

All Joint Honours students should consult the Economics Honours and Joint Honours programs at http://www.mcgill.ca/economics/undergraduates/honours.
The B.A. Joint Honours in Economics and Accounting requires the completion of 30 specified credits of Honours economics courses and 30 specified credits for Accounting.

Continuation from one year to the next in the Economics part of this Joint Honours program requires a minimum grade of B-in ECON 250, and a minimum B- average in the required and complementary Honours Economics courses. Note that graduation with Honours has more stringent requirements than these (see below).
For graduation with Honours in the Economics component, a student must obtain a 3.00 GPA in the required courses, a 3.00 average in the required and complementary credits in Economics, and a CGPA of 3.00. For a First Class Honours degree, the minimum requirements are a 3.50 program GPA in the required courses, a 3.50 average in the required and complementary credits in Economics, and a CGPA of 3.50. In cases where a student takes a Supplemental Exam in an Economics course, both the initial and the Supplemental Exam grades will be counted in the calculation of the GPA and CGPA averages.
For the Management part of this program, students also have to meet the requirements of the Faculty of Management for Honours and First Class Honours.
To earn Honours in Economics and Accounting, the Faculty of Management requires that students must achieve a grade of B- or better in all courses of the Accounting component of this program.

## Program Prerequisites ( $0-10$ credits)

For entering the program:

| MATH $133^{*}$ | (3) | Linear Algebra and Geometry |
| :--- | :---: | :--- |
| MATH $140^{* *}$ | (3) | Calculus 1 |
| MATH $141^{* *}$ | (4) | Calculus 2 |
| * Or equivalent (to be completed prior to U2) |  |  |
| ** Or equivalent |  |  |

## Economics - Required Courses (27 credits)

For the regulations governing courses in statistics, please refer to the Department's document "Rules on Stats Courses for Economics Students" available on the following website: http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics courses may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468 .

| ECON 250D1 | (3) | Introduction to Economic Theory: Honours |
| :--- | :---: | :--- |
| ECON 250D2 | (3) | Introduction to Economic Theory: Honours |
| ECON 257D1 | (3) | Economic Statistics - Honours |
| ECON 257D2 | (3) | Economic Statistics - Honours |
| ECON 353 | (3) | Macroeconomics - Honours 1 |
| ECON 354 | (3) | Macroeconomics - Honours 2 |
| ECON 450 | (3) | Advanced Economic Theory 1 - Honours |
| ECON 452 | (3) | Advanced Economic Theory 2 - Honours |
| ECON 468 | (3) | Econometrics 1 - Honours |

## Notes:

1. Three of the 6 credits for ECON 250 are counted in the Management Core, where it replaces MGCR 293.
2. Three of the 6 credits for ECON 257 are counted in the Core, where it replaces MGCR 271.
3. Three of the 6 credits for ECON 352 are counted in the Core, where it replaces ECON 295.

## Economics - Complementary Courses (3 credits)

3 credits selected from the following Economics courses:

| ECON 460 | $(3)$ | History of Thought $1-$ Honours |
| :--- | :--- | :--- |
| ECON 461 | (3) | History of Thought 2 - Honours |
| ECON 469 | $(3)$ | Econometrics $2-$ Honours |

## Accounting - Required Courses (18 credits)

| ACCT 351 | (3) | Intermediate Financial Accounting 1 |
| :--- | :--- | :--- |
| ACCT 352 | (3) | Intermediate Financial Accounting 2 |
| ACCT 361 | (3) | Management Accounting |
| ACCT 455 | (3) | Development of Accounting Thought |
| MGCR 211 | (3) | Introduction to Financial Accounting |
| MGCR 341 | (3) | Introduction to Finance |

## Accounting - Complementary Courses (12 credits)

12 credits of Accounting courses selected from:

| ACCT 354 | (3) | Financial Statement Analysis |
| :--- | :---: | :--- |
| ACCT 362 | (3) | Cost Accounting |
| ACCT 385 | (3) | Principles of Taxation |
| ACCT 452 | (3) | Financial Reporting Valuation |
| ACCT 453 | (3) | Advanced Financial Accounting |
| ACCT 463 | $(3)$ | Management Control |
| ACCT 475 | $(3)$ | Principles of Auditing |
| ACCT 486 | $(3)$ | Business Taxation 2 |

### 3.9.9.8 Bachelor of Arts (B.A.) - Joint Honours Component Economics / Joint Honours Component Finance (60 credits)

The B.A. Joint Honours in Economics and Finance is offered jointly by the Economics Department and the Desautels Faculty of Management. Students in this program should see an Economics adviser and a Management adviser. For the economics part, they should consult:
http://www.mcgill.ca/economics/undergraduates/honours. For the current list of advisers in Economics and their advising times, see the website of the Department of Economics. For the Management component of this Joint Honours program, students should see the Honours program adviser in the Desautels Faculty of Management.

All Joint Honours students should consult the Economics Honours and Joint Honours programs at http://www.mcgill.ca/economics/undergraduates/honours.
The B.A. Joint Honours in Economics and Finance requires the completion of 30 specified credits of Honours Economics courses listed in the Economics Honours Program and 30 specified credits for Finance. This program is designed to take advantage of both McGill's Finance and Economics course offerings to produce a student who is well trained in these two complementary areas. To enter this Joint Honours program, students must have completed two terms of Calculus.

Continuation from one year to the next in the Economics part of this Joint Honours program requires a minimum grade of B- in ECON 250D1/D2, and a minimum B- average in the required and complementary Honours Economics courses.

For the Economics component, a student must also obtain a 3.00 GPA in the required courses, a 3.00 average in the required and complementary credits in Economics, and a CGPA of 3.00 . For a First Class Honours degree, the minimum requirements are a 3.50 program GPA in the required courses, a 3.50 average in the required and complementary credits in Economics, and a CGPA of 3.50. In cases where a student takes a Supplemental Exam in a course, both the initial and the Supplemental Exam grades will be counted in the calculation of the GPA and CGPA averages.

For the Management part of this program, students also have to meet the requirements of the Faculty of Management for Honours and First Class Honours.
To earn the Honours in Economics and Finance, the Faculty of Management requires that students must achieve a grade of B- or better in all courses in the Finance component of this program.

## Program Prerequisites ( 0 -10 credits)

| MATH $133^{*}$ | (3) | Linear Algebra and Geometry |
| :--- | :--- | :--- |
| MATH $140^{* *}$ | (3) | Calculus 1 |
| MATH $141^{* *}$ | (4) | Calculus 2 |

* Or equivalent (to be taken prior to U2)
** Or equivalent


## Required Courses (45 credits)

## Economics

Please refer to the Department's document "Rules on Stats Courses for Economics Students" available on the following website: http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics courses may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468.

| ECON 250D1 | (3) | Introduction to Economic Theory: Honours |
| :--- | :--- | :--- |
| ECON 250D2 | (3) | Introduction to Economic Theory: Honours |
| ECON 257D1 | (3) | Economic Statistics - Honours |
| ECON 257D2 | (3) | Economic Statistics - Honours |
| ECON 353 | (3) | Macroeconomics - Honours 1 |
| ECON 354 | (3) | Macroeconomics - Honours 2 |
| ECON 450 | (3) | Advanced Economic Theory 1 - Honours |
| ECON 452 | (3) | Advanced Economic Theory 2 - Honours |
| ECON 468 | (3) | Econometrics 1-Honours |

## Finance

| FINE 342 | $(3)$ | Corporate Finance |
| :--- | :---: | :--- |
| FINE 441 | $(3)$ | Investment Management |
| FINE 443 | $(3)$ | Applied Corporate Finance |
| FINE 547 | $(3)$ | Advanced Finance Seminar |
| MGCR 211 | $(3)$ | Introduction to Financial Accounting |
| MGCR 341 | $(3)$ | Introduction to Finance |

Notes:

1. Three of the 6 credits for ECON 250 are counted in the Management Core, where it replaces MGCR 293.
2. Three of the 6 credits for ECON 257 are counted in the Core, where it replaces MGCR 271.
3. Three of the 6 credits for ECON 352 are counted in the Core, where it replaces ECON 295.

## Complementary Courses (15 credits)

## Economics

3 credits selected from the following:

| ECON 460 | (3) | History of Thought 1 - Honours |
| :--- | :--- | :--- |
| ECON 461 | (3) | History of Thought 2 - Honours |
| ECON 469 | (3) | Econometrics 2 - Honours |

## Finance

6 credits selected from the following:

| FINE 442 | $(3)$ | Capital Markets and Institutions |
| :--- | :--- | :--- |
| FINE 448 | (3) | Financial Derivatives |
| FINE 449 | (3) | Risk Management in Finance |
| FINE 451 | (3) | Fixed Income Analysis |
| FINE 452 | (3) | Applied Quantitative Finance |

6 credits from any undergraduate FINE course.

### 3.9.9.9 Standing in Honours and Joint Honours Programs

Normally, to be awarded an Honours degree, a student must obtain a 3.00 program GPA in the required and complementary credits in Economics, and a CGPA of 3.00 . For a First Class Honours degree, the minimum requirements are normally a 3.50 program GPA in the required and complementary credits in Economics, and a CGPA of 3.50. For additional requirements for the B.Com. Honours in Economics, Joint Honours in Economics and Finance, and Joint Honours in Economics and Accounting, consult the Desautels Faculty of Management section of this publication for their program grade and GPA requirements. In particular, these programs also require a minimum grade of B- in all Management courses.

### 3.9.9.10 Economics (ECON) Related Programs

### 3.9.9.10.1 Minors in Management

Economics students can also do the minor offered by the Desautels Faculty of Management for non-Management students. Refer to Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.7: Minor for Non-Management Students for more information about program requirements and applying.

- Management for Non-Management Students; see Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management $>$ Minors for Non-Management Students > : Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) ( 18 credits).


### 3.9.10 Education for Arts Students

### 3.9.10.1 Location

Internships \& Student Affairs Office
Faculty of Education
3700 McTavish Street
Montreal QC H3A 1Y2
Telephone: 514-398-7042
Email: isa.administrator@mcgill.ca
Website: mcgill.ca/isa/student/minor

### 3.9.10.2 About Education for Arts Students

This Minor Concentration allows Arts students to develop and explore an interest in education. It gives students a solid footing in the basics of pedagogy and may provide a starting point towards a B.Ed., B.A.(Education), or MATL degree. Students who wish to apply for the minor must first review important information and procedures at mcgill.ca/isa/student/minor.

Completion of the Minor concentration does not qualify a student for certification to teach in the province of Quebec. Students interested in a teaching career should consult Undergraduate Education program offerings, or Integrated Studies in Education for graduate program information.

### 3.9.10.3 Bachelor of Arts (B.A.) - Minor Concentration Education for Arts Students (18 credits)

This Minor concentration allows Arts students to develop and explore an interest in education. It will give students a solid footing in the basics of pedagogy and may provide a starting point towards a B.Ed. degree.
Completion of this Minor concentration DOES NOT qualify a student to enter the teaching profession. Students interested in a teaching career should consult the Faculty of Education section of the eCalendar for information about Bachelor of Education programs that lead to teacher certification. See Faculty of Education programs offered by the Department of Integrated Studies in Education.

Students should consult the Faculty of Arts section on "Faculty Degree Requirements", and "Course Requirements" for information on "Courses Outside the Faculties of Arts and of Science" and other topics such as course restrictions, credit counting, etc.
This minor program requires an application due to limited enrolment space. Please see http://www.mcgill.ca/isa/faculty-advising/minor-programs for procedures and deadlines.

## Required Course (6 credits)

| EDEC 260 | (3) | Philosophical Foundations |
| :--- | :--- | :--- |
| EDPE 300 | (3) | Educational Psychology |

## Complementary Courses (12 credits)

## Group A

## 6 credits selected as follows:

3 credits, one of:

| EDEC 233 | $(3)$ | Indigenous Education |
| :--- | :--- | :--- |
| EDEC 248 | $(3)$ | Equity and Education |
| EDEC 249 | $(3)$ | Global Education and Social Justice |

3 credits, one of:
EDEC 247
Policy Issues in Quebec and Indigenous Education
EDEM 220
(3)
Contemporary Issues in Education

## Group B

6 credits to be chosen from the following list:

* Note: Either EDES 335 or EDES 353 may be taken but not both.

| EDEC 262 | $(3)$ | Media, Technology and Education |
| :--- | :--- | :--- |
| EDES 335* | (3) | Teaching Secondary Science 1 |
| EDES 353* | (3) | Teaching Secondary Mathematics 1 |
| EDPE 304 | (3) | Measurement and Evaluation |
| EDPI 341 | (3) | Instruction in Inclusive Schools |

### 3.9.11 Educational Psychology

### 3.9.11.1 Location

Department of Educational and Counselling Psychology
Faculty of Education
3700 McTavish Street
Montreal QC H3A 1Y2
Telephone: 514-398-4242
Email: ecpinfo.education@mcgill.ca
Website: mcgill.ca/edu-ecp

## Program Director

Professor Alenoush Saroyan
Department of Educational and Counselling Psychology
Faculty of Education
3700 McTavish Street, Room 614
Telephone: 514-398-4248

## Program Coordinators

Department of Educational and Counselling Psychology
Faculty of Education
3700 McTavish Street, Room 614
Telephone: 514-398-4248
Email: ecpundergrad.education@mcgill.ca

### 3.9.11.2 About Educational Psychology

Educational Psychology encompasses:
a. the theoretical and applied study of learning, cognition, and instruction in a variety of educational settings across ages and domains;
b. instructional technology and computers as cognitive tools in learning;
c. cognitive and social processes in learning;
d. evaluation and enhancement of learning and teaching;
e. methods of fostering inclusive education;
f. relationships of phenomena related to teaching, learning, and assessment in human development; and
g. the impact of family and community on children's learning and development.

For further information, please refer to Faculty of Education > Undergraduate > Browse Academic Units \& Programs > section 5.7.1: Educational and Counselling Psychology.

### 3.9.11.3 Bachelor of Arts (B.A.) - Minor Concentration Educational Psychology (18 credits)

Completion of this Minor concentration DOES NOT qualify a student to enter the teaching profession. Students interested in a teaching career should consult the Faculty of Education section of this eCalendar for information about Bachelor of Education programs that lead to teacher certification. See Faculty of Education programs offered by the Department of Integrated Studies in Education.
Respecting Faculty of Arts Multi-track System regulations, students registering for the Major Concentration Psychology and the Minor Concentration Educational Psychology must complete an additional minor concentration in Arts in a unit other than Psychology.

Students should consult the Faculty of Arts sections on "Faculty Degree Requirements," "Program Requirements," and "Departmental Programs" for information on the "Multi-track System" and "Course Requirements" for information on "Courses Outside the Faculties of Arts and of Science" and other topics such as course restrictions, credit counting, etc.

## Required Course (3 credits)

This required course has a prerequisite of an introductory course in psychology taken at either CEGEP or university level (e.g., PSYC 100 or EDPE 300 ). Students who do not have this prerequisite prior to entry into the program may take either PSYC 100 or EDPE 300 . EDPE 300 may count as one of the complementary courses for the Minor concentration.
EDPE 335
(3)
Instructional Psychology

## Complementary Courses ( 15 credits)

15 credits to be selected as follows:

3 credits to be taken near the end of program completion, one of:
Note: Students with a background in psychology should normally select EDPE 355 . EDPE 355 has a prerequisite, either PSYC 231 or permission of the instructor.
EDPE 355
Cognition and Education
EDPE 555
(3)
Socio-Cultural Foundations of Learning Sciences

12 credits selected from the following list:

* Note: Students may not receive credit for both EDPE 208 and PSYC 304. EDPE 208 is not open to students registered in a major or minor concentration in Psychology.

| EDPE 208* | (3) | Personality and Social Development |
| :--- | :---: | :--- |
| EDPE 304 | $(3)$ | Measurement and Evaluation |
| EDPE 355 | $(3)$ | Cognition and Education |
| EDPE 377 | $(3)$ | Adolescence and Education |
| EDPE 515 | $(3)$ | Gender Identity Development |
| EDPE 535 | $(3)$ | Instructional Design |
| EDPE 555 | $(3)$ | Socio-Cultural Foundations of Learning Sciences |
| EDPI 341 | (3) | Instruction in Inclusive Schools |
| EDPI 526 | (3) | Supporting Students' Strengths and Talents |
| EDPI 527 | (3) | Creativity and its Cultivation |
| EDPI 543 | Family, School and Community |  |

### 3.9.12 English

### 3.9.12.1 Location

McCall MacBain Arts Building, Room 155
853 Sherbrooke Street West
Montreal QC H3A 0G5
Telephone: 514-398-5196
Website: mcgill.ca/english

### 3.9.12.2 About English

The Department of English offers a wide variety of courses covering three linked and overlapping areas: literature written in English; drama, including courses in dramatic literature and courses that introduce the student to the basic elements of theatrical performance; and cultural studies, including analysis of a variety of visual and verbal media. These three areas are integrally related, and all students in the English Department programs are invited to do work in all three, while concentrating in one of them.

Note: Students intending to apply for Honours, or who have already been accepted, should consult an Honours advisor regarding their course selections throughout their program.

For the most up-to-date information on departmental activities, detailed course descriptions, academic advising, and policies, visit the Department's undergraduate studies page.

### 3.9.12.3 Department of English Student Association (DESA)

DESA is the representative body for the students of the English Department at McGill. Any student taking one or more courses in the Department is automatically a member. For more information, please refer to mcgill.ca/english/undergraduate/desa.

### 3.9.12.4 Bachelor of Arts (B.A.) - Minor Concentration English - Literature (18 credits)

The Minor Concentration English - Literature may be expanded to the Major Concentration English - Literature.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses ( 6 credits)

| ENGL 202 | (3) | Departmental Survey of English Literature 1 |
| :--- | :--- | :--- |
| ENGL 203 | (3) | Departmental Survey of English Literature 2 |

## Complementary Courses (12 credits)

12 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Major Author

3 credits on a Major Author:

| ENGL 315 | (3) | Shakespeare |
| :--- | :---: | :--- |
| ENGL 316 | $(3)$ | Milton |
| ENGL 357 | (3) | Chaucer |
| ENGL 409 | (3) | Studies in a Canadian Author |
| ENGL 416 | $(3)$ | Studies in Shakespeare |
| ENGL 417 | (3) | A Major English Poet |
| ENGL 418 | $(3)$ | A Major Modernist Writer |

## Pre-1800

3 credits from a list of pre-1800 literature courses:

| ENGL 300 | (3) | The Seventeenth Century |
| :---: | :---: | :---: |
| ENGL 301 | (3) | Earlier 18th Century Novel |
| ENGL 302 | (3) | Restoration and 18th C. English Literature 1 |
| ENGL 303 | (3) | Restoration and 18th C. English Literature 2 |
| ENGL 304 | (3) | Later Eighteenth Century Novel |
| ENGL 305 | (3) | Renaissance English Literature 1 |
| ENGL 307 | (3) | Renaissance English Literature 2 |
| ENGL 308 | (3) | English Renaissance Drama 1 |
| ENGL 309 | (3) | English Renaissance Drama 2 |
| ENGL 315 | (3) | Shakespeare |
| ENGL 316 | (3) | Milton |
| ENGL 342 | (3) | Introduction to Old English |
| ENGL 347 | (3) | Great Writings of Europe 1 |
| ENGL 348 | (3) | Great Writings of Europe 2 |
| ENGL 349 | (3) | English Literature and Folklore 1 |
| ENGL 356 | (3) | Middle English |
| ENGL 357 | (3) | Chaucer |
| ENGL 358 | (3) | Chaucer - Troilus and Criseyde |
| ENGL 400 | (3) | Earlier English Renaissance |
| ENGL 401 | (3) | Studies in the 17th Century |
| ENGL 403 | (3) | Studies in the 18th Century |
| ENGL 416 | (3) | Studies in Shakespeare |
| ENGL 452 | (3) | Studies in Old English |
| ENGL 456 | (3) | Middle English |

## Additional Literature

6 additional credits from ENGL offerings in Literature which includes all the courses specifically listed in the Literature categories for the Major Concentration in English - Literature program and the courses listed below. Any ENGL course not on these Literature lists, such as courses in Cultural Studies, may not count.

| ENGL 199 | (3) | FYS: Form and Representation |
| :---: | :---: | :---: |
| ENGL 204 | (3) | English Literature and the Bible |
| ENGL 237 | (3) | Introduction to Study of a Literary Form |
| ENGL 297 | (3) | Special Topics of Literary Study |
| ENGL 338 | (3) | Short Story |
| ENGL 343 | (3) | Literature and Science 1 |
| ENGL 345 | (3) | Literature and Society |
| ENGL 354 | (3) | Sexuality and Representation |
| ENGL 364 | (3) | Creative Writing |
| ENGL 369 | (3) | Creative Writing: Playwriting |
| ENGL 385 | (3) | Topics in Literature and Film |
| ENGL 394 | (3) | Popular Literary Forms |
| ENGL 421 | (3) | African Literature |


| ENGL 424 | $(3)$ | Irish Literature |
| :--- | :---: | :--- |
| ENGL 437 | (3) | Studies in Literary Form |
| ENGL 438 | (3) | Studies in Literary Form |
| ENGL 440 | $(3)$ | First Nations and Inuit Literature and Media |
| ENGL 447 | (3) | Crosscurrents/English Literature and European Literature 1 |
| ENGL 460 | (3) | Studies in Literary Theory |
| ENGL 461 | (3) | Studies in Literary Theory 2 |
| ENGL 464 | (3) | Creative Writing: Poetry |

### 3.9.12.5 Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)

The Minor Concentration English - Drama and Theatre may be expanded to the Major Concentration English - Drama and Theatre.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses ( 3 credits)

ENGL 230
(3)
Introduction to Theatre Studies

## Complementary Courses ( $\mathbf{1 5}$ credits)

15 credits selected as described below.

## Theatre History Courses

3 credits from a list of courses in Theatre History:

| ENGL 306 | $(3)$ | Theatre History: Medieval and Early Modern |
| :--- | :--- | :--- |
| ENGL 309 | $(3)$ | English Renaissance Drama 2 |
| ENGL 310 | $(3)$ | Restoration and 18th Century Drama |
| ENGL 312 | $(3)$ | Victorian and Edwardian Drama 1 |
| ENGL 370 | $(3)$ | Theatre History: The Long Eighteenth Century |
| ENGL 371 | $(3)$ | Theatre History: 19th to 21st Centuries |
| ENGL 467 | (3) | Advanced Studies in Theatre History |
| ENGL 485 | (3) | Special Topics in Theatre History 1700-1900 |
| ENGL 486 | $(3)$ | Special Topics in Theatre History |

## Drama and Theatre Courses Before 1900

3 credits from a list of courses in Drama and Theatre before 1900:

| ENGL 306 | $(3)$ | Theatre History: Medieval and Early Modern |
| :--- | :--- | :--- |
| ENGL 308 | $(3)$ | English Renaissance Drama 1 |
| ENGL 309 | $(3)$ | English Renaissance Drama 2 |
| ENGL 310 | (3) | Restoration and 18th Century Drama |
| ENGL 312 | (3) | Victorian and Edwardian Drama 1 |
| ENGL 315 | (3) | Shakespeare |
| ENGL 370 | (3) | Theatre History: The Long Eighteenth Century |
| ENGL 416 | (3) | Studies in Shakespeare |
| ENGL 485 | $(3)$ | Special Topics in Theatre History 1700-1900 |

## Drama and Theatre Courses at the $\mathbf{4 0 0}$ level

3 credits from a list of Drama and Theatre courses:

| ENGL 407 | $(3)$ | The 20th Century |
| :--- | :---: | :--- |
| ENGL 413 | $(3)$ | Special Topics in Canadian Drama and Theatre |
| ENGL 430 | (3) | Studies in Drama |
| ENGL 431 | (3) | Studies in Drama |
| ENGL 458 | (3) | Theories of Text and Performance 1 |
| ENGL 459 | (3) | Theories of Text and Performance 2 |
| ENGL 467 | (3) | Advanced Studies in Theatre History |
| ENGL 485 | (3) | Special Topics in Theatre History 1700-1900 |
| ENGL 486 | (3) | Special Topics in Theatre History |

## Drama and Theatre Option's Offerings - Additional Courses

6 additional credits from the option's offerings.
This category includes all the courses listed above except required courses, as well as the courses listed below.
Note: Any English course not on the lists specifically for the Drama and Theatre option—such as unlisted courses in Cultural Studies—may not count toward the Drama and Theatre program. Please consult a departmental adviser for guidance on course choices.

| ENGL 314 | $(3)$ | 20th Century Drama |
| :--- | :--- | :--- |
| ENGL 369 | $(3)$ | Creative Writing: Playwriting |
| ENGL 375 | $(3)$ | Interpretation Dramatic Text |
| ENGL 434 | (3) | Independent Theatre Project |

## Drama and Theatre - Courses of Interest - Other Departments

Permission to count extra-departmental credits must be obtained in advance of taking any course from outside the Department of English. Students are normally permitted to count 3 credits from other departments towards their Drama and Theatre Minor. Permission is obtained with the signature of a Department of English program adviser on the student's program audit sheet.
This list comprises courses in other departments that might be accepted by an adviser for credit toward the student's Drama and Theatre program. This list applies only to these courses as they are offered in the current academic year.
There might be other courses in the Faculty of Arts for which a student could receive Drama and Theatre program credit. A student who has identified a course not noted below should show their program adviser the course syllabus in advance and, if he or she agrees, get the adviser's initialled approval of the course on their program audit sheet. The Department requires a complete signed audit sheet in the student's file in Arts 155 in order to process the file for graduation.
Included in the list are courses taught in languages other than English and courses that have prerequisites.

* Note: The courses in the list below with an asterisk ("*") have an historical dimension and may count toward this program requirement. Other courses could count toward the "option's offerings" component of the program.

| EAST 464 | $(3)$ | Image, Text, Performance |
| :--- | :---: | :--- |
| HISP $324^{*}$ | (3) | 20th Century Drama |
| MUAR $387^{*}$ | $(3)$ | The Opera |
| PHIL 242 | $(3)$ | Introduction to Feminist Theory |
| PSYC 212 | $(3)$ | Perception |

### 3.9.12.6 Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)

The Minor Concentration English - Cultural Studies may be expanded to the Major Concentration English - Cultural Studies.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses (6 credits)

| ENGL 275 | (3) | Introduction to Cultural Studies |
| :--- | :--- | :--- |
| ENGL 277 | (3) | Introduction to Film Studies |

## Complementary Courses (12 credits)

12 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Major Figures

3 credits from a list of courses on Major Figures in Cultural Studies:

| ENGL 315 | (3) | Shakespeare |
| :--- | :--- | :--- |
| ENGL 381 | (3) | A Film-Maker 1 |
| ENGL 418 | (3) | A Major Modernist Writer |
| ENGL 481 | (3) | A Film-Maker 2 |

## Historical Dimension

3 credits from a list of courses in Cultural Studies with an historical dimension:

| ENGL 350 | $(3)$ | Studies in the History of Film 1 |
| :--- | :--- | :--- |
| ENGL 351 | (3) | Studies in the History of Film 2 |
| ENGL 363 | (3) | Studies in the History of Film 3 |
| ENGL 374 | (3) | Film Movement or Period |
| ENGL 451 | (3) | A Period in Cinema |
| ENGL 480 | $(3)$ | Studies in History of Film 1 |

## Additional Cultural Studies

6 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Minor Concentration English Cultural Studies.

| ENGL 280 | $(3)$ | Introduction to Film as Mass Medium |
| :--- | :---: | :--- |
| ENGL 354 | $(3)$ | Sexuality and Representation |
| ENGL 366 | $(3)$ | Film Genre |
| ENGL 378 | $(3)$ | Media and Culture |
| ENGL 379 | (3) | Film Theory |
| ENGL 380 | (3) | Non-Fiction Media: Cinema, Television, Radio |
| ENGL 382 | (3) | International Cinema 1 |
| ENGL 383 | (3) | Studies in Communications 1 |
| ENGL 385 | (3) | Topics in Literature and Film |
| ENGL 386 | (3) | Fans, Celebrities, Audiences |
| ENGL 388 | (3) | Studies in Popular Culture |
| ENGL 389 | (3) | Studies in Popular Culture |
| ENGL 390 | (3) | Political and Cultural Theory |
| ENGL 391 | (3) | Special Topics: Cultural Studies 1 |


| ENGL 395 | $(3)$ | Cultural and Theatre Studies |
| :--- | :--- | :--- |
| ENGL 440 | (3) | First Nations and Inuit Literature and Media |
| ENGL 476 | (3) | Alternative Approaches to Media 1 |
| ENGL 482 | (3) | International Cinema 2 |

### 3.9.12.7 Bachelor of Arts (B.A.) - Major Concentration English - Literature (36 credits)

The Literature option provides a grounding in the basic texts and methods of the discipline as well as wide acquaintance with substantial areas of the field.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses (9 credits)

These courses should be taken in the first two terms of the program.
ENGL 202
(3)
Departmental Survey of English Literature 1
ENGL 203
Departmental Survey of English Literature 2
ENGL 311
(3)
Poetics

## Complementary Courses (27 credits)

27 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Canadian Literature

3 credits from a list of Canadian Literature courses:

| ENGL 228 | $(3)$ | Canadian Literature 1 |
| :--- | :--- | :--- |
| ENGL 229 | $(3)$ | Canadian Literature 2 |
| ENGL 327 | $(3)$ | Canadian Prose Fiction 1 |
| ENGL 328 | $(3)$ | Development of Canadian Poetry 1 |
| ENGL 333 | $(3)$ | Development of Canadian Poetry 2 |
| ENGL 339 | $(3)$ | Canadian Prose Fiction 2 |
| ENGL 409 | $(3)$ | Studies in a Canadian Author |
| ENGL 410 | $(3)$ | Theme or Movement Canadian Literature |
| ENGL 411 | $(3)$ | Studies in Canadian Fiction |

## Theory or Criticism

3 credits from a list of courses on Theory or Criticism:

| ENGL 317 | (3) | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | (3) | Theory of English Studies 2 |
| ENGL 319 | (3) | Theory of English Studies 3 |
| ENGL 322 | (3) | Theories of the Text |
| ENGL 346 | (3) | Materiality and Sociology of Text |
| ENGL 352 | (3) | Theories of Difference |

## Areas of English Literature

6 credits, 3 credits each from two of the following areas: Backgrounds of English Literature, Old English, Medieval, Renaissance:

## Backgrounds of English Literature

| ENGL 347 | $(3)$ | Great Writings of Europe 1 |
| :--- | :--- | :--- |
| ENGL 348 | $(3)$ | Great Writings of Europe 2 |
| ENGL 349 | (3) | English Literature and Folklore 1 |

## Old English

| ENGL 342 | $(3)$ | Introduction to Old English |
| :--- | :--- | :--- |
| ENGL 349 | $(3)$ | English Literature and Folklore 1 |
| ENGL 452 | (3) | Studies in Old English |

## Medieval

| ENGL 337 | $(3)$ | Theme or Genre in Medieval Literature |
| :--- | :---: | :--- |
| ENGL 349 | $(3)$ | English Literature and Folklore 1 |
| ENGL 356 | (3) | Middle English |
| ENGL 357 | (3) | Chaucer |
| ENGL 358 | $(3)$ | Chaucer - Troilus and Criseyde |
| ENGL 456 | (3) | Middle English |

## Renaissance

| ENGL 300 | $(3)$ | The Seventeenth Century |
| :--- | :---: | :--- |
| ENGL 305 | (3) | Renaissance English Literature 1 |
| ENGL 307 | (3) | Renaissance English Literature 2 |
| ENGL 308 | (3) | English Renaissance Drama 1 |
| ENGL 309 | (3) | English Renaissance Drama 2 |
| ENGL 315 | (3) | Shakespeare |
| ENGL 316 | (3) | Milton |
| ENGL 349 | (3) | English Literature and Folklore 1 |
| ENGL 400 | (3) | Earlier English Renaissance |
| ENGL 401 | (3) | Studies in the 17th Century |
| ENGL 416 | (3) | Studies in Shakespeare |

## Areas of English Literature

6 credits, 3 credits each from two of the following areas: Restoration, 18th Century, Romantic, Victorian, 19th Century American:

## Restoration

| ENGL 302 | (3) | Restoration and 18th C. English Literature 1 |
| :--- | :--- | :--- |
| ENGL 303 | (3) | Restoration and 18th C. English Literature 2 |

## 18 Century

| ENGL 301 | $(3)$ | Earlier 18th Century Novel |
| :--- | :--- | :--- |
| ENGL 302 | $(3)$ | Restoration and 18th C. English Literature 1 |
| ENGL 303 | (3) | Restoration and 18th C. English Literature 2 |


| ENGL 304 | (3) | Later Eighteenth Century Novel |
| :--- | :--- | :--- |
| ENGL 403 | (3) | Studies in the 18th Century |

## Romantic

| ENGL 331 | $(3)$ | Literature Romantic Period 1 |
| :--- | :--- | :--- |
| ENGL 332 | (3) | Literature Romantic Period 2 |
| ENGL 405 | (3) | Studies in 19th Century Literature 2 |

## Victorian

| ENGL 329 | $(3)$ | English Novel: 19th Century 1 |
| :--- | :--- | :--- |
| ENGL 330 | $(3)$ | English Novel: 19th Century 2 |
| ENGL 334 | $(3)$ | Victorian Poetry |
| ENGL 404 | $(3)$ | Studies in 19th Century Literature 1 |
| ENGL 405 | $(3)$ | Studies in 19th Century Literature 2 |

## 19th Century American

| ENGL 326 | (3) | 19th Century American Prose |
| :--- | :--- | :--- |
| ENGL 422 | (3) | Studies in 19th Century American Literature |

## Areas of English Literature

3 credits from one of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary:

## Early 20th Century

| ENGL 361 | (3) | Poetry of the 20th Century 1 |
| :--- | :--- | :--- |
| ENGL 414 | (3) | Studies in 20th Century Literature 1 |

## Modernist

| ENGL 335 | (3) | The 20th Century Novel 1 |
| :--- | :--- | :--- |
| ENGL 361 | (3) | Poetry of the 20th Century 1 |
| ENGL 414 | (3) | Studies in 20th Century Literature 1 |
| ENGL 418 | (3) | A Major Modernist Writer |

## Post-modernist

| ENGL 320 | (3) | Postcolonial Literature |
| :--- | :--- | :--- |
| ENGL 339 | (3) | Canadian Prose Fiction 2 |
| ENGL 443 | (3) | Contemporary Women's Fiction |

## Contemporary

| ENGL 320 | (3) | Postcolonial Literature |
| :--- | :--- | :--- |
| ENGL 333 | (3) | Development of Canadian Poetry 2 |
| ENGL 336 | (3) | The 20th Century Novel 2 |
| ENGL 339 | (3) | Canadian Prose Fiction 2 |


| ENGL 362 | (3) | Poetry of the 20th Century 2 |
| :--- | :--- | :--- |
| ENGL 407 | (3) | The 20th Century |
| ENGL 408 | (3) | The 20th Century |
| ENGL 419 | (3) | Studies in 20th Century Literature |
| ENGL 443 | (3) | Contemporary Women's Fiction |

## Additional Literature

6 additional credits from ENGL offerings in Literature which includes all the courses specifically listed in the Literature categories above and the courses listed below. Any ENGL course not on these Literature lists, such as courses in Cultural Studies, may not count toward the Major Concentration in English - Literature.

| ENGL 199 | (3) | FYS: Form and Representation |
| :---: | :---: | :---: |
| ENGL 204 | (3) | English Literature and the Bible |
| ENGL 237 | (3) | Introduction to Study of a Literary Form |
| ENGL 297 | (3) | Special Topics of Literary Study |
| ENGL 338 | (3) | Short Story |
| ENGL 343 | (3) | Literature and Science 1 |
| ENGL 345 | (3) | Literature and Society |
| ENGL 354 | (3) | Sexuality and Representation |
| ENGL 364 | (3) | Creative Writing |
| ENGL 369 | (3) | Creative Writing: Playwriting |
| ENGL 385 | (3) | Topics in Literature and Film |
| ENGL 394 | (3) | Popular Literary Forms |
| ENGL 421 | (3) | African Literature |
| ENGL 424 | (3) | Irish Literature |
| ENGL 437 | (3) | Studies in Literary Form |
| ENGL 438 | (3) | Studies in Literary Form |
| ENGL 440 | (3) | First Nations and Inuit Literature and Media |
| ENGL 447 | (3) | Crosscurrents/English Literature and European Literature 1 |
| ENGL 460 | (3) | Studies in Literary Theory |
| ENGL 461 | (3) | Studies in Literary Theory 2 |
| ENGL 464 | (3) | Creative Writing: Poetry |

## Major Author

3 credits on a Major Author must be included in the 27 complementary course credits.

ENGL 315
ENGL 316
ENGL 357
ENGL 409
ENGL 416
(3)
(3)

Shakespeare
Milton
Chaucer
Studies in a Canadian Author
Studies in Shakespeare
A Major English Poet
A Major Modernist Writer

### 3.9.12.8 Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre ( $\mathbf{3 6}$ credits)

The Drama and Theatre option tries to place its subject in as broad a social and philosophical context as possible. The Drama and Theatre program is not designed to provide professional theatre training. The aim is rather to encourage students to explore the subject as a liberal arts discipline.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses ( 6 credits)

6 credits to be taken in the first two terms of the program
ENGL 230
(3)
Introduction to Theatre Studies
ENGL 355
(3)
The Poetics of Performance

## Complementary Courses ( 30 credits)

30 credits selected as described below.
3 credits from the following practice-based courses:

| ENGL 269 | (3) | Introduction to Performance |
| :--- | :--- | :--- |
| ENGL 365 | (3) | Costuming for the Theatre 1 |
| ENGL 368 | (3) | Stage Scenery and Lighting 1 |
| ENGL 372 | (3) | Stage Scenery and Lighting 2 |
| ENGL 377 | (3) | Costuming for the Theatre 2 |

## Performance-Oriented Courses

3 credits from the list of Performance-Oriented Courses:

| ENGL 365 | (3) | Costuming for the Theatre 1 |
| :--- | :--- | :--- |
| ENGL 367 | (3) | Acting 2 |
| ENGL 368 | (3) | Stage Scenery and Lighting 1 |
| ENGL 372 | (3) | Stage Scenery and Lighting 2 |
| ENGL 376 | (3) | Scene Study |
| ENGL 377 | (3) | Costuming for the Theatre 2 |
| ENGL 396 | (3) | Theatre Practicum 1 |
| ENGL 397 | (3) | Theatre Practicum 2 |
| ENGL 465D1 | (4.5) | Theatre Laboratory |
| ENGL 465D2 | (3) | Theatre Laboratory |
| ENGL 466D1 | (3) | Directing for the Theatre |
| ENGL 466D2 | (3) | Acting 3 |

## Drama and/or Theatre Courses with a Canadian Component

3 credits from the list of Drama and/or Theatre courses with a Canadian component:
ENGL 313
Canadian Drama and Theatre
ENGL 413
Special Topics in Canadian Drama and Theatre

## Theory or Criticism Courses

3 credits from the list of Theory or Criticism courses:

| ENGL 317 | (3) | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | (3) | Theory of English Studies 2 |
| ENGL 319 | (3) | Theory of English Studies 3 |
| ENGL 322 | $(3)$ | Theories of the Text |
| ENGL 346 | $(3)$ | Materiality and Sociology of Text |
| ENGL 352 | $(3)$ | Theories of Difference |

## Theatre History Courses

3 credits from the list of Theatre History courses:

| ENGL 306 | $(3)$ | Theatre History: Medieval and Early Modern |
| :--- | :--- | :--- |
| ENGL 310 | (3) | Restoration and 18th Century Drama |
| ENGL 312 | (3) | Victorian and Edwardian Drama 1 |
| ENGL 370 | (3) | Theatre History: The Long Eighteenth Century |
| ENGL 371 | (3) | Theatre History: 19th to 21st Centuries |
| ENGL 467 | (3) | Advanced Studies in Theatre History |
| ENGL 486 | (3) | Special Topics in Theatre History |

## Drama and Theatre Before 1900 Courses

3 credits from the list of courses in Drama and Theatre before 1900:

| ENGL 306 | (3) | Theatre History: Medieval and Early Modern |
| :--- | :---: | :--- |
| ENGL 308 | (3) | English Renaissance Drama 1 |
| ENGL 310 | (3) | Restoration and 18th Century Drama |
| ENGL 312 | (3) | Victorian and Edwardian Drama 1 |
| ENGL 315 | $(3)$ | Shakespeare |
| ENGL 370 | $(3)$ | Theatre History: The Long Eighteenth Century |
| ENGL 416 | (3) | Studies in Shakespeare |

## Drama and Theatre Option's Offerings - Additional Courses

12 additional credits from the option's offerings.
This category includes all the courses listed above except required courses, as well as the courses listed below.
Note: Any English course not on the lists specifically for the Drama and Theatre option—such as unlisted courses in Cultural Studies-may not count toward the Drama and Theatre program. Please consult a departmental adviser for guidance on course choices.

| ENGL 314 | $(3)$ | 20th Century Drama |
| :--- | :---: | :--- |
| ENGL 375 | $(3)$ | Interpretation Dramatic Text |
| ENGL 430 | $(3)$ | Studies in Drama |
| ENGL 431 | $(3)$ | Studies in Drama |
| ENGL 434 | $(3)$ | Independent Theatre Project |
| ENGL 458 | $(3)$ | Theories of Text and Performance 1 |
| ENGL 459 | $(3)$ | Theories of Text and Performance 2 |

## Drama and Theatre - Courses of Interest - Other Departments

Students are normally permitted to count 6 credits from other departments toward their English programs. In exceptional circumstances, an adviser, approached by a student with strong academic grounds for including a third such course, may grant permission, to a maximum of 9 extra-departmental credits, and must so indicate in advance by signing the departmental program audit sheet.

This list comprises courses in other departments that might be accepted by an adviser for credit toward the student's Drama and Theatre program. This list applies only to these courses as they are offered in the current academic year.

There might be other courses in the Faculty of Arts for which a student could receive Drama and Theatre program credit. A student who has identified a course not noted below, should show their program adviser the course syllabus in advance and, if he or she agrees, get the adviser's initialled approval of the course on their program audit sheet. The Department requires a complete signed audit sheet in the student's file in Arts 155 in order to process the file for graduation.

Included in the list are courses taught in languages other than English and courses that have prerequisites.

* Note: The courses in the list below with an asterisk ("*") have an historical dimension and may count toward this program requirement. Other courses could count toward the "option's offerings" component of the program.

| EAST 464 | $(3)$ | Image, Text, Performance |
| :--- | :--- | :--- |
| MUAR $387^{*}$ | (3) | The Opera |
| PHIL 242 | (3) | Introduction to Feminist Theory |
| PSYC 212 | $(3)$ | Perception |

### 3.9.12.9 Bachelor of Arts (B.A.) - Major Concentration English - Cultural Studies (36 credits)

The Cultural Studies option concentrates on analysis of forms of cultural expression and symbolic interaction, and of the various media through which these may be disseminated and transformed. Such study concerns symbolic form, aesthetically based forms of analysis, and the various modes of criticism and theory relevant to media which contain both verbal and non-verbal elements. The aim is above all to hone students' analytical and interpretive skills while introducing them to specific critical approaches to cultural studies. This is not a major in journalism or communications; and while many of our graduates go on to do creative work in a variety of media, instruction in film and video production is not part of the curriculum.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses ( 9 credits)

These courses should be taken in the first two terms of the program.

| ENGL 275 | (3) | Introduction to Cultural Studies |
| :--- | :--- | :--- |
| ENGL 277 | (3) | Introduction to Film Studies |
| ENGL 359 | (3) | The Poetics of the Image |

## Complementary Courses ( 27 credits)

27 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Major Figures

3 credits from a list of courses on Major Figures in Cultural Studies:

| ENGL 315 | $(3)$ | Shakespeare |
| :--- | :--- | :--- |
| ENGL 381 | $(3)$ | A Film-Maker 1 |
| ENGL 418 | $(3)$ | A Major Modernist Writer |
| ENGL 481 | (3) | A Film-Maker 2 |

## Canadian Component

3 credits from a list of courses in Cultural Studies with a Canadian component:
ENGL 393
ENGL 440
Canadian Cinema
First Nations and Inuit Literature and Media
ENGL 441
Special Topics in Canadian Cultural Studies

## Theory or Criticism

3 credits from a list of courses on Theory or Criticism:

| ENGL 317 | (3) | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | (3) | Theory of English Studies 2 |
| ENGL 319 | (3) | Theory of English Studies 3 |
| ENGL 322 | (3) | Theories of the Text |
| ENGL 346 | (3) | Materiality and Sociology of Text |
| ENGL 352 | (3) | Theories of Difference |

## 400-Level Theory

3 credits from a list of 400 -level courses in Cultural Studies with a theoretical component.

## Historical Dimension

6 credits from a list of courses in Cultural Studies with an historical dimension:

| ENGL 350 | $(3)$ | Studies in the History of Film 1 |
| :--- | :--- | :--- |
| ENGL 351 | (3) | Studies in the History of Film 2 |
| ENGL 363 | (3) | Studies in the History of Film 3 |
| ENGL 374 | $(3)$ | Film Movement or Period |
| ENGL 451 | $(3)$ | A Period in Cinema |
| ENGL 480 | $(3)$ | Studies in History of Film 1 |

## Additional Cultural Studies

9 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Major Concentration English Cultural Studies.

| ENGL 280 | (3) | Introduction to Film as Mass Medium |
| :---: | :---: | :---: |
| ENGL 354 | (3) | Sexuality and Representation |
| ENGL 366 | (3) | Film Genre |
| ENGL 378 | (3) | Media and Culture |
| ENGL 379 | (3) | Film Theory |
| ENGL 380 | (3) | Non-Fiction Media: Cinema, Television, Radio |
| ENGL 382 | (3) | International Cinema 1 |
| ENGL 383 | (3) | Studies in Communications 1 |
| ENGL 385 | (3) | Topics in Literature and Film |
| ENGL 386 | (3) | Fans, Celebrities, Audiences |
| ENGL 388 | (3) | Studies in Popular Culture |
| ENGL 389 | (3) | Studies in Popular Culture |
| ENGL 390 | (3) | Political and Cultural Theory |
| ENGL 391 | (3) | Special Topics: Cultural Studies 1 |
| ENGL 395 | (3) | Cultural and Theatre Studies |
| ENGL 476 | (3) | Alternative Approaches to Media 1 |
| ENGL 482 | (3) | International Cinema 2 |

## Other Departments

Students are normally permitted to count 6 credits from other departments toward their English programs. In exceptional circumstances, an adviser who is approached by a student with strong academic grounds for including a third such course may grant permission (to a maximum of 9 extra-departmental credits) and must so indicate in advance by signing the departmental program audit sheet.

### 3.9.12.10 Bachelor of Arts (B.A.) - Honours English - Literature (54 credits)

Entry to Honours is by application, normally after two terms in a Departmental program, including at least 18 credits of English. The Faculty of Arts requires that all students admitted to Honours programs complete a second program minor in addition to their Honours program.

Admission to the Honours program is limited to a small number of students with excellent records. The minimum CGPA for application to the Honours program is 3.30 . Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3 ) may also consult the Director of the Honours program for special permission to apply. In neither instance is admission guaranteed. After admission into the Honours program, the student is required to maintain a CGPA at a level set by the Faculty for graduation with Honours and a program GPA at the level set by the Department.
The Honours program in English requires 54 credits. Students intending to apply for Honours should plan to complete as many of the specific requirements of their option as possible within the first two years. With the written approval of an adviser, up to 9 credits may be taken outside the Department. All Honours students must complete at least 6 of their complementary credits at the 500 level. Ideally, 500 -level seminars chosen will be relevant to the area of the student's independent study in the Honours Essay course (ENGL 491D1/ENGL 491D2), taken without exception in the final year of the program. The Honours Essay is first planned in consultation with a supervisor at the time of application to the Honours program; it is then guided and evaluated by that supervisor during the completion of ENGL 491. Graduation with Honours requires 54 credits of English, a minimum mark of B+ on the Honours Essay, a minimum CGPA of 3.00 , and a minimum program GPA of 3.50 . Graduation with First Class Honours requires a mark of A on the Honours Essay, a minimum CGPA of 3.50, and a minimum program GPA of 3.70 .

## Required Courses (18 credits)

ENGL 202, ENGL 203 and ENGL 311 are normally taken in the first two terms of the program. ENGL 360 is normally taken in the second year of the program.

| ENGL 202 | (3) | Departmental Survey of English Literature 1 |
| :--- | :---: | :--- |
| ENGL 203 | (3) | Departmental Survey of English Literature 2 |
| ENGL 311 | (3) | Poetics |
| ENGL 360 | (3) | Literary Criticism |
| ENGL 491D1 | $(3)$ | Honours Essay |
| ENGL 491D2 | $(3)$ | Honours Essay |

## Complementary Courses (36 credits)

36 credits selected as described below. At least 6 of the 36 credits must be at the 500 level. A maximum of 9 credits may be from another department with the signed permission of the program adviser. At least 3 of the 36 credits must be devoted to a course on a Major Author, and 3 must be devoted to a course on Canadian Literature, as indicated under the rubrics dedicated to these offerings in each year's list of Complementary Courses on the Department of English website (http://www.mcgill.ca/english). A maximum of 9 of the 36 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Theory

3 credits from a list of courses on Theory:

| ENGL 317 | (3) | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | (3) | Theory of English Studies 2 |
| ENGL 319 | (3) | Theory of English Studies 3 |
| ENGL 322 | (3) | Theories of the Text |
| ENGL 346 | (3) | Materiality and Sociology of Text |
| ENGL 352 | (3) | Theories of Difference |

## Areas of English Literature

6 credits, 3 credits each from two of the following areas: Backgrounds of English Literature, Old English, Medieval, Renaissance.

## Backgrounds of English Literature

| ENGL 347 | $(3)$ | Great Writings of Europe 1 |
| :--- | :--- | :--- |
| ENGL 348 | (3) | Great Writings of Europe 2 |
| ENGL 349 | (3) | English Literature and Folklore 1 |
| ENGL 447 | $(3)$ | Crosscurrents/English Literature and European Literature 1 |

## Old English

| ENGL 342 | (3) | Introduction to Old English |
| :--- | :--- | :--- |
| ENGL 452 | (3) | Studies in Old English |
| ENGL 553 | (3) | Old English Literature |

## Medieval

| ENGL 337 | $(3)$ | Theme or Genre in Medieval Literature |
| :--- | :---: | :--- |
| ENGL 349 | $(3)$ | English Literature and Folklore 1 |
| ENGL 356 | (3) | Middle English |
| ENGL 357 | (3) | Chaucer |
| ENGL 358 | $(3)$ | Chaucer - Troilus and Criseyde |
| ENGL 456 | (3) | Middle English |
| ENGL 500 | $(3)$ | Middle English |

## Renaissance

| ENGL 300 | $(3)$ | The Seventeenth Century |
| :--- | :--- | :--- |
| ENGL 305 | $(3)$ | Renaissance English Literature 1 |
| ENGL 307 | $(3)$ | Renaissance English Literature 2 |
| ENGL 308 | (3) | English Renaissance Drama 1 |
| ENGL 309 | (3) | English Renaissance Drama 2 |
| ENGL 315 | (3) | Shakespeare |
| ENGL 316 | (3) | Milton |
| ENGL 400 | (3) | Earlier English Renaissance |
| ENGL 401 | (3) | Studies in the 17th Century |
| ENGL 416 | (3) | Studies in Shakespeare |
| ENGL 501 | (3) | 16th Century |
| ENGL 516 | (3) | Shakespeare |

## Areas of English Literature

6 credits, 3 credits each from two of the following areas: Restoration, 18th Century, Romantic, Victorian, 19th Century American.

## Restoration

| ENGL 302 | $(3)$ | Restoration and 18th C. English Literature 1 |
| :--- | :--- | :--- |
| ENGL 303 | (3) | Restoration and 18th C. English Literature 2 |
| ENGL 310 | (3) | Restoration and 18th Century Drama |

## 18th Century

| ENGL 301 | (3) | Earlier 18th Century Novel |
| :--- | :--- | :--- |
| ENGL 302 | $(3)$ | Restoration and 18th C. English Literature 1 |
| ENGL 303 | (3) | Restoration and 18th C. English Literature 2 |
| ENGL 304 | $(3)$ | Later Eighteenth Century Novel |
| ENGL 310 | $(3)$ | Restoration and 18th Century Drama |
| ENGL 403 | (3) | Studies in the 18th Century |
| ENGL 503 | $(3)$ | 18 th Century |

## Romantic

| ENGL 331 | (3) | Literature Romantic Period 1 |
| :--- | :--- | :--- |
| ENGL 332 | (3) | Literature Romantic Period 2 |

## Victorian

| ENGL 329 | $(3)$ | English Novel: 19th Century 1 |
| :--- | :--- | :--- |
| ENGL 330 | $(3)$ | English Novel: 19th Century 2 |
| ENGL 334 | (3) | Victorian Poetry |
| ENGL 404 | (3) | Studies in 19th Century Literature 1 |
| ENGL 405 | $(3)$ | Studies in 19th Century Literature 2 |
| ENGL 423 | $(3)$ | Studies in 19th Century Literature |
| ENGL 504 | $(3)$ | 19th Century |

## 19th Century American

| ENGL 326 | (3) | 19th Century American Prose |
| :--- | :--- | :--- |
| ENGL 422 | (3) | Studies in 19th Century American Literature |

## Areas of English Literature

6 credits, 3 credits each from two of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary.

## Early 20th Century

ENGL 327
ENGL 328
ENGL 361
ENGL 414
(3)
(3)
(3)

Canadian Prose Fiction 1
Development of Canadian Poetry 1
Poetry of the 20th Century 1
Studies in 20th Century Literature 1

Modernist
ENGL 327
ENGL 328
(3) Development of Canadian Poetry 1

ENGL 335
(3) The 20th Century Novel 1

ENGL 361
(3)
(3)

Canadian Prose Fiction 1

Poetry of the 20th Century 1
Studies in 20th Century Literature 1
A Major Modernist Writer

## Post-modernist

| ENGL 320 | (3) | Postcolonial Literature |
| :--- | :--- | :--- |
| ENGL 333 | (3) | Development of Canadian Poetry 2 |
| ENGL 339 | (3) | Canadian Prose Fiction 2 |
| ENGL 443 | (3) | Contemporary Women's Fiction |

## Contemporary

| ENGL 320 | (3) | Postcolonial Literature |
| :---: | :---: | :---: |
| ENGL 333 | (3) | Development of Canadian Poetry 2 |
| ENGL 336 | (3) | The 20th Century Novel 2 |
| ENGL 339 | (3) | Canadian Prose Fiction 2 |
| ENGL 362 | (3) | Poetry of the 20th Century 2 |
| ENGL 407 | (3) | The 20th Century |
| ENGL 408 | (3) | The 20th Century |
| ENGL 419 | (3) | Studies in 20th Century Literature |
| ENGL 421 | (3) | African Literature |
| ENGL 443 | (3) | Contemporary Women's Fiction |

## Literature Stream Offerings

6 credits from among English Department Literature stream offerings.

## Department Offerings

9 credits from among other Department offerings (ENGL courses).

### 3.9.12.11 Bachelor of Arts (B.A.) - Honours English - Drama and Theatre ( $\mathbf{5 4}$ credits)

Entry to Honours is by application, normally after two terms in a Departmental program, including at least 18 credits of English. The Faculty of Arts requires that all students admitted to Honours programs complete a second program minor in addition to their Honours program.

Admission to the Honours program is limited to a small number of students with excellent records. The minimum CGPA for application to the Honours program is 3.30 . Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3 ) may also consult the Director of the Honours program for special permission to apply. In neither instance is admission guaranteed. After admission into the Honours program, the student is required to maintain a CGPA at a level set by the Faculty for graduation with Honours and a program GPA at the level set by the Department.

The Honours program in English requires 54 credits. Students intending to apply for Honours should plan to complete as many of the specific requirements of their option as possible within the first two years. With the written approval of an adviser, up to 9 credits may be taken outside the Department. All Honours students must complete at least 6 of their complementary credits at the 500 level. Ideally, 500 -level seminars chosen will be relevant to the area of the student's independent study in the Honours Essay course (ENGL 491D1/ENGL 491D2), taken without exception in the final year of the program. The Honours Essay is first planned in consultation with a supervisor at the time of application to the Honours program; it is then guided and evaluated by that supervisor during the completion of ENGL 491. Graduation with Honours requires 54 credits of English, a minimum mark of B+ on the Honours Essay, a minimum CGPA of 3.00 , and a minimum program GPA of 3.50 . Graduation with First Class Honours requires a mark of A on the Honours Essay, a minimum CGPA of 3.50, and a minimum program GPA of 3.70 .

## Required Courses (12 credits)

Note: ENGL 230 and ENGL 355 should be taken in the first two terms of the program.

| ENGL 230 | (3) | Introduction to Theatre Studies |
| :--- | :--- | :--- |
| ENGL 355 | (3) | The Poetics of Performance |
| ENGL 491D1 | (3) | Honours Essay |
| ENGL 491D2 | (3) | Honours Essay |

## Complementary Courses ( 42 credits)

42 credits selected as described below. At least 6 of the 42 credits must be at the 500 level. A maximum of 9 credits may be from another department with the signed permission of the Program Adviser. A maximum of 9 of the 42 credits are allowed at the 200 level, none in the final year of the program.

## 3 credits from the following practice-based courses:

| ENGL 269 | (3) | Introduction to Performance |
| :--- | :--- | :--- |
| ENGL 365 | (3) | Costuming for the Theatre 1 |
| ENGL 368 | (3) | Stage Scenery and Lighting 1 |
| ENGL 372 | (3) | Stage Scenery and Lighting 2 |
| ENGL 377 | (3) | Costuming for the Theatre 2 |

## Shakespeare or Another Major Figure in Drama and Theatre Courses

3 credits from a list of courses on Shakespeare or, when available and with an instructor's signed permission on the student's Audit Sheet, another major figure in Drama and Theatre:
ENGL 315
(3)
Shakespeare
ENGL 416
(3)
Studies in Shakespeare
ENGL 516
(3)
Shakespeare

## Drama and/or Theatre Courses with a Canadian Component

3 credits from a list of courses in Drama and/or Theatre with a Canadian component:
ENGL 313
(3)
Canadian Drama and Theatre
ENGL 413
(3)
Special Topics in Canadian Drama and Theatre

## Theatre History Courses

3 credits from the list of courses in Theatre History:

| ENGL 306 | (3) | Theatre History: Medieval and Early Modern |
| :---: | :---: | :---: |
| ENGL 308 | (3) | English Renaissance Drama 1 |
| ENGL 310 | (3) | Restoration and 18th Century Drama |
| ENGL 312 | (3) | Victorian and Edwardian Drama 1 |
| ENGL 314 | (3) | 20th Century Drama |
| ENGL 315 | (3) | Shakespeare |
| ENGL 370 | (3) | Theatre History: The Long Eighteenth Century |
| ENGL 371 | (3) | Theatre History: 19th to 21st Centuries |
| ENGL 416 | (3) | Studies in Shakespeare |
| ENGL 467 | (3) | Advanced Studies in Theatre History |
| ENGL 486 | (3) | Special Topics in Theatre History |
| ENGL 516 | (3) | Shakespeare |

## Drama and Theatre Before 1900 Courses

3 credits from the list of courses in Drama and Theatre before 1900:

| ENGL 306 | (3) | Theatre History: Medieval and Early Modern |
| :--- | :--- | :--- |
| ENGL 308 | (3) | English Renaissance Drama 1 |
| ENGL 310 | (3) | Restoration and 18th Century Drama |


| ENGL 312 | $(3)$ | Victorian and Edwardian Drama 1 |
| :--- | :--- | :--- |
| ENGL 315 | (3) | Shakespeare |
| ENGL 370 | $(3)$ | Theatre History: The Long Eighteenth Century |
| ENGL 416 | $(3)$ | Studies in Shakespeare |
| ENGL 516 | $(3)$ | Shakespeare |

## Theory Courses

3 credits from the list of courses in Theory:

| ENGL 317 | $(3)$ | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | $(3)$ | Theory of English Studies 2 |
| ENGL 319 | $(3)$ | Theory of English Studies 3 |
| ENGL 322 | $(3)$ | Theories of the Text |
| ENGL 346 | $(3)$ | Materiality and Sociology of Text |
| ENGL 352 | $(3)$ | Theories of Difference |

## 400-Level Theory Courses

3 credits from a list of courses with a theoretical component, from the option's offerings at the 400 level or above:

| ENGL 458 | (3) | Theories of Text and Performance 1 |
| :--- | :--- | :--- |
| ENGL 459 | (3) | Theories of Text and Performance 2 |
| ENGL 467 | (3) | Advanced Studies in Theatre History |

## Performance-Oriented Courses

9 credits from the list of Performance-Oriented courses:

| ENGL 365 | (3) | Costuming for the Theatre 1 |
| :--- | :--- | :--- |
| ENGL 367 | (3) | Acting 2 |
| ENGL 368 | (3) | Stage Scenery and Lighting 1 |
| ENGL 372 | (3) | Stage Scenery and Lighting 2 |
| ENGL 376 | (3) | Scene Study |
| ENGL 377 | (3) | Costuming for the Theatre 2 |
| ENGL 396 | (3) | Theatre Practicum 1 |
| ENGL 397 | (4.5) | Theatre Laboratory |
| ENGL 465D1 | (4.5) | Theatre Laboratory |
| ENGL 465D2 | (3) | Directing for the Theatre |
| ENGL 466D1 | (3) | Directing for the Theatre |
| ENGL 466D2 | (3) | Acting 3 |
| ENGL 469 | (3) | Drama Workshop |
| ENGL 565 |  |  |

## English Courses

12 credits in English selected in consultation with an academic adviser.
Drama and Theatre - Courses of Interest - Other Departments

Students are normally permitted to count 6 credits from other departments toward their English programs. In exceptional circumstances, an adviser, approached by a student with strong academic grounds for including a third such course, may grant permission, to a maximum of 9 extra-departmental credits, and must so indicate in advance by signing the departmental program audit sheet.

This list comprises courses in other departments that might be accepted by an adviser for credit towards the student's Drama and Theatre program. This list applies only to these courses as they are offered in the current academic year.
There might be other courses in the Faculty of Arts for which a student could receive Drama and Theatre program credit. A student who has identified a course not noted below should show their program adviser the course syllabus in advance and, if he or she agrees, get the adviser's initialled approval of the course on their program audit sheet. The Department requires a complete signed audit sheet in the student's file in Arts 155 in order to process the file for graduation.
Included in the list are courses taught in languages other than English and courses that have prerequisites.

* Note: The courses in the list below with an asterisk ("*") have an historical dimension and may count toward this program requirement. Other courses could count toward the "option's offerings" component of the program.

| EAST 464 | (3) | Image, Text, Performance |
| :--- | :--- | :--- |
| MUAR $387^{*}$ | (3) | The Opera |
| PHIL 242 | (3) | Introduction to Feminist Theory |
| PSYC 212 | (3) | Perception |

### 3.9.12.12 Bachelor of Arts (B.A.) - Honours English - Cultural Studies (54 credits)

Entry to Honours is by application, normally after two terms in a Departmental program, including at least 18 credits of English. The Faculty of Arts requires that all students admitted to Honours programs complete a second-program minor in addition to their Honours program.
Admission to the Honours program is limited to a small number of students with excellent records. The minimum CGPA for application to the Honours program is 3.30 . Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3 ) may also consult the Director of the Honours program for special permission to apply. In neither instance is admission guaranteed. After admission into the Honours program, the student is required to maintain a CGPA at a level set by the Faculty for graduation with Honours and a program GPA at the level set by the Department.
The Honours program in English requires 54 credits. Students intending to apply for Honours should plan to complete as many of the specific requirements of their option as possible within the first two years. With the written approval of an adviser, up to 9 credits may be taken outside the Department. All Honours students must complete at least 6 of their complementary credits at the 500 level. Ideally, 500 -level seminars chosen will be relevant to the area of the student's independent study in the Honours Essay course (ENGL 491D1/ENGL 491D2), taken without exception in the final year of the program. The Honours Essay is first planned in consultation with a supervisor at the time of application to the Honours program; it is then guided and evaluated by that supervisor during the completion of ENGL 491. Graduation with Honours requires 54 credits of English, a minimum mark of B+ on the Honours Essay, a minimum CGPA of 3.00 , and a minimum program GPA of 3.50 . Graduation with First Class Honours requires a mark of A on the Honours Essay, a minimum CGPA of 3.50, and a minimum program GPA of 3.70 .

## Required Courses ( 15 credits)

ENGL 275, ENGL 277, and ENGL 359 should be taken in the first two terms in the program.

| ENGL 275 | $(3)$ | Introduction to Cultural Studies |
| :--- | :---: | :--- |
| ENGL 277 | (3) | Introduction to Film Studies |
| ENGL 359 | (3) | The Poetics of the Image |
| ENGL 491D1 | (3) | Honours Essay |
| ENGL 491D2 | $(3)$ | Honours Essay |

## Complementary Courses (39 credits)

39 credits selected as described below. At least 6 of the 39 credits must be at the 500 level. A maximum of 9 credits may be from another department with the signed permission of the program adviser. A maximum of 9 of the 39 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Major Figures

3 credits from a list of courses on Major Figures in Cultural Studies:
ENGL 315
Shakespeare

| ENGL 381 | (3) | A Film-Maker 1 |
| :--- | :---: | :--- |
| ENGL 409 | $(3)$ | Studies in a Canadian Author |
| ENGL 416 | $(3)$ | Studies in Shakespeare |
| ENGL 417 | (3) | A Major English Poet |
| ENGL 418 | $(3)$ | A Major Modernist Writer |
| ENGL 481 | $(3)$ | A Film-Maker 2 |
| ENGL 516 | $(3)$ | Shakespeare |

## Canadian Component

3 credits from a list of courses with a Canadian component:

| ENGL 393 | $(3)$ | Canadian Cinema |
| :--- | :--- | :--- |
| ENGL 440 | $(3)$ | First Nations and Inuit Literature and Media |
| ENGL 441 | (3) | Special Topics in Canadian Cultural Studies |

## Theory or Criticism

3 credits from a list of courses on Theory or Criticism:

| ENGL 317 | $(3)$ | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | (3) | Theory of English Studies 2 |
| ENGL 319 | (3) | Theory of English Studies 3 |
| ENGL 322 | $(3)$ | Theories of the Text |
| ENGL 346 | $(3)$ | Materiality and Sociology of Text |
| ENGL 352 | $(3)$ | Theories of Difference |

## Historical Dimension

6 credits from a list of courses in Cultural Studies with an historical dimension:

| ENGL 350 | $(3)$ | Studies in the History of Film 1 |
| :--- | :--- | :--- |
| ENGL 351 | (3) | Studies in the History of Film 2 |
| ENGL 363 | (3) | Studies in the History of Film 3 |
| ENGL 374 | $(3)$ | Film Movement or Period |
| ENGL 451 | (3) | A Period in Cinema |
| ENGL 480 | $(3)$ | Studies in History of Film 1 |

## 400-Level Theory

3 credits from a list of 400-level courses in Cultural Studies with a theoretical component:

| ENGL 454 | (3) | Topics in Cultural Studies and Gender |
| :--- | :---: | :--- |
| ENGL 479 | $(3)$ | Philosophy of Film |
| ENGL 483 | $(3)$ | Seminar in the Film |
| ENGL 484 | (3) | Seminar in the Film |
| ENGL 488 | (3) | Special Topics / Communications and Mass Media 2 |
| ENGL 489 | (3) | Culture and Critical Theory 1 |
| ENGL 490 | (3) | Culture and Critical Theory 2 |
| ENGL 492 | (3) | Image and Text |

## Departmental Offerings

6 credits from among other Departmental offerings (ENGL courses).

## Additional Cultural Studies

15 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Honours English - Cultural Studies.

| ENGL 280 | (3) | Introduction to Film as Mass Medium |
| :---: | :---: | :---: |
| ENGL 354 | (3) | Sexuality and Representation |
| ENGL 366 | (3) | Film Genre |
| ENGL 378 | (3) | Media and Culture |
| ENGL 379 | (3) | Film Theory |
| ENGL 380 | (3) | Non-Fiction Media: Cinema, Television, Radio |
| ENGL 382 | (3) | International Cinema 1 |
| ENGL 383 | (3) | Studies in Communications 1 |
| ENGL 385 | (3) | Topics in Literature and Film |
| ENGL 386 | (3) | Fans, Celebrities, Audiences |
| ENGL 388 | (3) | Studies in Popular Culture |
| ENGL 389 | (3) | Studies in Popular Culture |
| ENGL 390 | (3) | Political and Cultural Theory |
| ENGL 391 | (3) | Special Topics: Cultural Studies 1 |
| ENGL 395 | (3) | Cultural and Theatre Studies |
| ENGL 472 | (3) | Special Topics: Cultural Studies 2 |
| ENGL 476 | (3) | Alternative Approaches to Media 1 |
| ENGL 477 | (3) | Alternative Approaches to Media 2 |
| ENGL 482 | (3) | International Cinema 2 |
| ENGL 512 | (3) | Contemporary Studies in Literature and Culture |
| ENGL 585 | (3) | Cultural Studies: Film |
| ENGL 586 | (3) | Cultural Studies: Other Media |
| ENGL 587 | (3) | Theoretical Approaches to Cultural Studies |

### 3.9.12.13 Bachelor of Arts (B.A.) - Joint Honours Component English - Drama and Theatre (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs." Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) The minimum CGPA for application to the Joint Honours program is 3.30 . Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3 ) may also consult the Director of the Honours program for special permission to apply. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00 , a minimum program GPA of 3.50, and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50 , a minimum program GPA of 3.70 , and a minimum mark of A on the Honours Essay.
Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

## Required Courses (6 credits)

ENGL 230
(3)
Introduction to Theatre Studies
ENGL 355
The Poetics of Performance

## Complementary Courses (30 credits)

30 credits selected as described below. In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. In addition to the Advanced Study requirement, 3 of the remaining 24 Complementary Course credits must be completed at the 500 level. A maximum of 9 of the 30 credits are allowed at the 200 level, none in the final year of the program.

## Advanced Study

6 credits of advanced study, in one of the following two forms A or B, in order of preference:
A) 6 credits of honours essay:
ENGL 491D1
Honours Essay
ENGL 491D2
Honours Essay
OR
B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).
(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formally recommended for the joint subject according to the description of that Joint Honours program found in the Arts section of the eCalendar. For example, Joint Honours with Anthropology allows the option of combining 3 credits of essay work with 3 credits in the joint subject to create a joint essay.)

## 3 credits from the following practice-based courses:

| ENGL 269 | (3) | Introduction to Performance |
| :--- | :--- | :--- |
| ENGL 365 | (3) | Costuming for the Theatre 1 |
| ENGL 368 | (3) | Stage Scenery and Lighting 1 |
| ENGL 372 | (3) | Stage Scenery and Lighting 2 |
| ENGL 377 | (3) | Costuming for the Theatre 2 |
| ENGL 396 | (3) | Theatre Practicum 1 |
| ENGL 397 | (3) | Theatre Practicum 2 |

## Theory Courses

3 credits from a list of theory courses:

| ENGL 317 | (3) | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | (3) | Theory of English Studies 2 |
| ENGL 319 | (3) | Theory of English Studies 3 |
| ENGL 322 | $(3)$ | Theories of the Text |
| ENGL 346 | $(3)$ | Materiality and Sociology of Text |
| ENGL 352 | $(3)$ | Theories of Difference |

## Dramatic Literature

## 3 credits in Dramatic Literature:

For a list of courses for the current academic year, please consult the Department of English web page http://www.mcgill.ca/english/.

## History of the Theatre

3 credits in History of the Theatre:

| ENGL 306 | $(3)$ | Theatre History: Medieval and Early Modern |
| :--- | :--- | :--- |
| ENGL 308 | $(3)$ | English Renaissance Drama 1 |
| ENGL 310 | $(3)$ | Restoration and 18th Century Drama |
| ENGL 312 | $(3)$ | Victorian and Edwardian Drama 1 |
| ENGL 314 | $(3)$ | 20 th Century Drama |
| ENGL 315 | $(3)$ | Shakespeare |
| ENGL 370 | $(3)$ | Theatre History: The Long Eighteenth Century |
| ENGL 371 | $(3)$ | Theatre History: 19th to 21st Centuries |
| ENGL 416 | $(3)$ | Studies in Shakespeare |
| ENGL 467 | (3) | Advanced Studies in Theatre History |
| ENGL 486 | $(3)$ | Special Topics in Theatre History |
| ENGL 516 | $(3)$ | Shakespeare |
| ENGL 566 | $(3)$ | Special Studies in Drama 1 |

## Performance-Oriented Courses

3 credits from the list of Performance-Oriented courses:

| ENGL 365 | (3) | Costuming for the Theatre 1 |
| :---: | :---: | :---: |
| ENGL 367 | (3) | Acting 2 |
| ENGL 368 | (3) | Stage Scenery and Lighting 1 |
| ENGL 372 | (3) | Stage Scenery and Lighting 2 |
| ENGL 376 | (3) | Scene Study |
| ENGL 377 | (3) | Costuming for the Theatre 2 |
| ENGL 396 | (3) | Theatre Practicum 1 |
| ENGL 397 | (3) | Theatre Practicum 2 |
| ENGL 465D1* | (4.5) | Theatre Laboratory |
| ENGL 465D2* | (4.5) | Theatre Laboratory |
| ENGL 466D1** | (3) | Directing for the Theatre |
| ENGL 466D2** | (3) | Directing for the Theatre |
| ENGL 469 | (3) | Acting 3 |
| ENGL 565 | (3) | Drama Workshop |

*, ** Note: Spanned credits. The amount over 3 credits can be attributed to Departmental Offerings credits.

## Departmental Offerings

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

### 3.9.12.14 Bachelor of Arts (B.A.) - Joint Honours Component English - Literature (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs." Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) The minimum CGPA for application to the Joint Honours program is 3.30 . Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3 ) may also consult the Director of the Honours program for special permission to apply. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00 , a minimum program GPA of 3.50, and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50 , a minimum program GPA of 3.70 , and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

## Required Courses (12 credits)

| ENGL 202 | (3) | Departmental Survey of English Literature 1 |
| :--- | :--- | :--- |
| ENGL 203 | (3) | Departmental Survey of English Literature 2 |
| ENGL 311 | (3) | Poetics |
| ENGL 360 | (3) | Literary Criticism |

## Complementary Courses (24 credits)

24 credits selected as described below.
In addition to the 6 -credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. Students are encouraged to take courses at the 300 level and above. At least 3 of the 24 credits must be devoted to a course on a Major Author as indicated under the rubrics dedicated to these offerings in each year's list of Complementary Courses on the Department of English website (http://www.mcgill.ca/english). In addition to the Advanced Study requirement, 3 of the remaining 18 Complementary Courses credits must be completed at the 500 level. A maximum of 9 of the 24 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Advanced Study

6 credits of advanced study, in one of the following two forms A or B, in order of preference:
A) 6-credits of honours essay:

| ENGL 491D1 | (3) | Honours Essay |
| :--- | :--- | :--- |
| ENGL 491D2 | (3) | Honours Essay |

B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).
(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formally recommended for the joint subject according to the description of that Joint Honours program found in the Arts section of the eCalendar. For example, Joint Honours with Anthropology allows the option of combining 3 credits of essay work with 3 credits in the joint subject to create a joint essay.)

## Areas of English Literature

3 credits from one of the following areas: Backgrounds of English Literature, Old English, Medieval, Renaissance.

## Backgrounds of English Literature

| ENGL 347 | $(3)$ | Great Writings of Europe 1 |
| :--- | :--- | :--- |
| ENGL 348 | $(3)$ | Great Writings of Europe 2 |
| ENGL 349 | (3) | English Literature and Folklore 1 |
| ENGL 447 | (3) | Crosscurrents/English Literature and European Literature 1 |

## Old English

ENGL 342
(3)
Introduction to Old English
ENGL 452
Studies in Old English
ENGL 553
(3)
Old English Literature

## Medieval

| ENGL 337 | $(3)$ | Theme or Genre in Medieval Literature |
| :--- | :---: | :--- |
| ENGL 349 | $(3)$ | English Literature and Folklore 1 |
| ENGL 356 | (3) | Middle English |
| ENGL 357 | (3) | Chaucer |
| ENGL 358 | $(3)$ | Chaucer - Troilus and Criseyde |
| ENGL 456 | (3) | Middle English |
| ENGL 500 | $(3)$ | Middle English |

## Renaissance

| ENGL 300 | (3) | The Seventeenth Century |
| :--- | :---: | :--- |
| ENGL 305 | (3) | Renaissance English Literature 1 |
| ENGL 307 | (3) | Renaissance English Literature 2 |
| ENGL 308 | (3) | English Renaissance Drama 1 |
| ENGL 309 | (3) | English Renaissance Drama 2 |
| ENGL 315 | (3) | Shakespeare |
| ENGL 316 | (3) | Milton |
| ENGL 349 | (3) | English Literature and Folklore 1 |
| ENGL 400 | (3) | Earlier English Renaissance |
| ENGL 401 | (3) | Studies in the 17th Century |
| ENGL 416 | (3) | Studies in Shakespeare |
| ENGL 501 | (3) | 16th Century |
| ENGL 516 | (3) | Shakespeare |

## Areas of English Literature

3 credits from one of the following areas: Restoration, 18th Century, Romantic, Victorian, 19th Century American.

## Restoration

| ENGL 302 | (3) | Restoration and 18th C. English Literature 1 |
| :--- | :--- | :--- |
| ENGL 303 | (3) | Restoration and 18th C. English Literature 2 |
| ENGL 310 | (3) | Restoration and 18th Century Drama |

## 18th Century

| ENGL 301 | (3) | Earlier 18th Century Novel |
| :--- | :--- | :--- |
| ENGL 302 | (3) | Restoration and 18th C. English Literature 1 |
| ENGL 303 | (3) | Restoration and 18th C. English Literature 2 |
| ENGL 304 | (3) | Later Eighteenth Century Novel |
| ENGL 310 | $(3)$ | Restoration and 18th Century Drama |
| ENGL 403 | (3) | Studies in the 18th Century |
| ENGL 503 | $(3)$ | 18 th Century |

## Romantic

| ENGL 331 | (3) | Literature Romantic Period 1 |
| :--- | :--- | :--- |
| ENGL 332 | (3) | Literature Romantic Period 2 |

## Victorian

| ENGL 329 | $(3)$ | English Novel: 19th Century 1 |
| :--- | :--- | :--- |
| ENGL 330 | $(3)$ | English Novel: 19th Century 2 |
| ENGL 334 | $(3)$ | Victorian Poetry |
| ENGL 404 | $(3)$ | Studies in 19th Century Literature 1 |
| ENGL 405 | $(3)$ | Studies in 19th Century Literature 2 |
| ENGL 423 | $(3)$ | Studies in 19th Century Literature |
| ENGL 504 | $(3)$ | 19 th Century |

## 19th Century American

| ENGL 326 | (3) | 19th Century American Prose |
| :--- | :--- | :--- |
| ENGL 422 | (3) | Studies in 19th Century American Literature |

## Areas of English Literature

3 credits from one of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary.

## Early 20th Century

ENGL 327
ENGL 328
ENGL 361
ENGL 414
(3) Canadian Prose Fiction 1
(3) Development of Canadian Poetry 1
(3) Poetry of the 20th Century 1
(3)

Studies in 20th Century Literature 1

Modernist

| ENGL 327 | $(3)$ | Canadian Prose Fiction 1 |
| :--- | :--- | :--- |
| ENGL 328 | (3) | Development of Canadian Poetry 1 |
| ENGL 335 | (3) | The 20th Century Novel 1 |
| ENGL 361 | (3) | Poetry of the 20th Century 1 |
| ENGL 414 | (3) | Studies in 20th Century Literature 1 |
| ENGL 418 | (3) | A Major Modernist Writer |
| ENGL 505 | (3) | 20th Century |

## Post-modernist

(3) Postcolonial Literature

ENGL 333
(3) Development of Canadian Poetry 2

ENGL 339
(3) Canadian Prose Fiction 2

ENGL 443
Contemporary Women's Fiction

## Contemporary

| ENGL 320 | $(3)$ | Postcolonial Literature |
| :--- | :---: | :--- |
| ENGL 333 | $(3)$ | Development of Canadian Poetry 2 |
| ENGL 336 | $(3)$ | The 20th Century Novel 2 |
| ENGL 339 | (3) | Canadian Prose Fiction 2 |
| ENGL 362 | (3) | Poetry of the 20th Century 2 |
| ENGL 407 | (3) | The 20th Century |
| ENGL 408 | (3) | The 20th Century |
| ENGL 419 | $(3)$ | Studies in 20th Century Literature |
| ENGL 421 | $(3)$ | African Literature |
| ENGL 443 | $(3)$ | Contemporary Women's Fiction |

## Theory

3 credits from a list of courses on Theory:

| ENGL 317 | $(3)$ | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | $(3)$ | Theory of English Studies 2 |
| ENGL 319 | $(3)$ | Theory of English Studies 3 |
| ENGL 322 | $(3)$ | Theories of the Text |
| ENGL 346 | $(3)$ | Materiality and Sociology of Text |
| ENGL 352 | $(3)$ | Theories of Difference |

## Department Offerings

6 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

### 3.9.12.15 Bachelor of Arts (B.A.) - Joint Honours Component English - Cultural Studies ( $\mathbf{3 6}$ credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs". Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) Applications will be considered by the Department's Honours Committee on the basis of the student's program GPA, at a minimum of 3.50. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00 , a minimum program GPA of 3.50 , and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50 , a minimum program GPA of 3.70 , and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

## Required Courses (9 credits)

| ENGL 275 | (3) | Introduction to Cultural Studies |
| :--- | :--- | :--- |
| ENGL 277 | (3) | Introduction to Film Studies |
| ENGL 359 | (3) | The Poetics of the Image |

## Complementary Courses (27 credits)

27 credits selected as described below.
In addition to the 6 -credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. Students are encouraged to take courses at the 300 level and above. In addition to the Advanced Study requirement, 3 of the
remaining 21 Complementary Course credits must be completed at the 500 level. A maximum of 9 of the 27 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## Advanced Study

6 credits of advanced study, in one of the following two forms A or B, in order of preference:
A) 6 credits of honours essay:

| ENGL 491D1 | (3) | Honours Essay |
| :--- | :--- | :--- |
| ENGL 491D2 | (3) | Honours Essay |

B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).
(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formally recommended for the joint subject according to the description of that Joint Honours program found in the Arts section of the eCalendar. For example, Joint Honours with Anthropology allows the option of combining 3 credits of essay work with 3 credits in the joint subject to create a joint essay.)

## Major Figures

3 credits from a list of courses on Major Figures in Cultural Studies:

| ENGL 315 | $(3)$ | Shakespeare |
| :--- | :--- | :--- |
| ENGL 381 | $(3)$ | A Film-Maker 1 |
| ENGL 409 | $(3)$ | Studies in a Canadian Author |
| ENGL 416 | $(3)$ | Studies in Shakespeare |
| ENGL 417 | $(3)$ | A Major English Poet |
| ENGL 418 | $(3)$ | A Major Modernist Writer |
| ENGL 481 | $(3)$ | A Film-Maker 2 |
| ENGL 516 | $(3)$ | Shakespeare |

## Theory

3 credits from a list of courses on Theory:

| ENGL 317 | (3) | Theory of English Studies 1 |
| :--- | :--- | :--- |
| ENGL 318 | (3) | Theory of English Studies 2 |
| ENGL 319 | (3) | Theory of English Studies 3 |
| ENGL 322 | (3) | Theories of the Text |
| ENGL 346 | (3) | Materiality and Sociology of Text |
| ENGL 352 | (3) | Theories of Difference |

## Historical Dimension

3 credits from a list of courses in Cultural Studies with an historical dimension:

| ENGL 350 | (3) | Studies in the History of Film 1 |
| :--- | :--- | :--- |
| ENGL 351 | (3) | Studies in the History of Film 2 |
| ENGL 363 | (3) | Studies in the History of Film 3 |
| ENGL 374 | (3) | Film Movement or Period |
| ENGL 451 | (3) | A Period in Cinema |

ENGL 480
(3)
Studies in History of Film 1

## 400-Level Theory

3 credits from a list of 400 -level courses in Cultural Studies with a theoretical component:

| ENGL 454 | $(3)$ | Topics in Cultural Studies and Gender |
| :--- | :---: | :--- |
| ENGL 479 | $(3)$ | Philosophy of Film |
| ENGL 483 | $(3)$ | Seminar in the Film |
| ENGL 484 | $(3)$ | Seminar in the Film |
| ENGL 488 | $(3)$ | Special Topics / Communications and Mass Media 2 |
| ENGL 489 | $(3)$ | Culture and Critical Theory 1 |
| ENGL 490 | $(3)$ | Culture and Critical Theory 2 |
| ENGL 492 | $(3)$ | Image and Text |

## Departmental Offerings

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

### 3.9.12.16 Admission Requirements to the Joint Honours Program - English Component

Applications will be considered by the Department's Honours Committee on the basis of the student's program GPA, at a minimum of 3.50 . The application form is available from this link: mcgill.ca/english/files/english/joint_honours_application.pdf or in the Department's General Office (Arts Building, Room 155), and the specific submission requirements are described by that form. The application will take some time to prepare, and allowance for such preparation (at least several weeks) must be made in order to meet the application deadline. Incomplete applications will not be considered.
Acceptance into Joint Honours English may be conditional on particular revisions to the Program Course Proposal to be submitted with the application form. This proposal goes on file in the General Office with the other submissions. Only course choices that are appropriate, given the nature of the Joint Honours program proposed, including the Honours Essay if applicable, will be approved. In order to graduate with Joint Honours, all subsequent course substitutions in the initially approved Joint Honours English program must be endorsed by the Joint Honours advisor when they are made (i.e., at the start of each term) and entered on the Program Course Proposal with the advisor's initialled approval.

For more information and to download the application form, please refer to our website at mcgill.ca/english/undergraduate/programs $>$ Joint Honours.

### 3.9.12.17 Medieval Studies

### 3.9.12.17.1 About the Medieval Studies Program

The minor concentration in Medieval Studies facilitates undergraduate training in the interrelated branches of the discipline (e.g., history, literature, art history, languages, religion, philosophy), providing them with experience working in a field that is inherently interdisciplinary and a valuable credential should they choose to pursue graduate study in the field (in any area).

Further information for new and returning students is available at mcgill.ca/medieval and from the Program Director:
Prof. Cecily Hilsdale; 514-398-3651; cecily.hilsdale@mcgill.ca

### 3.9.12.17.2 Bachelor of Arts (B.A.) - Minor Concentration Medieval Studies (18 credits)

The Minor Concentration in Medieval Studies facilitates undergraduate training in the interrelated branches of the discipline (e.g., history, literature, art history, languages, religion, philosophy), providing students with experience working in an inherently interdisciplinary filed and a valuable credential to pursue graduate study in the field (in any area).

## Required Course (3 credits)

MDST 400 (3) Interdisciplinary Seminar in Medieval Studies

## Complementary Courses (15 credits)

15 credits from the following list, of which only 9 credits may be taken in any one department. No more than 6 credits may be taken below the 300 level.

## Art History and Communication Studies

| ARTH 204 | (3) | Introduction to Medieval Art and Architecture |
| :--- | :--- | :--- |
| ARTH 314 | (3) | The Medieval City |


| ARTH 425 | (3) | Arts of Medieval Spain |
| :--- | :--- | :--- |
| English |  |  |
| ENGL 306 | (3) | Theatre History: Medieval and Early Modern |
| ENGL 337 | (3) | Theme or Genre in Medieval Literature |
| ENGL 342 | (3) | Introduction to Old English |
| ENGL 348* | (3) | Great Writings of Europe 2 |
| ENGL 349* | (3) | English Literature and Folklore 1 |
| ENGL 356 | (3) | Middle English |
| ENGL 357 | (3) | Chaucer |
| ENGL 452 | (3) | Studies in Old English |
| ENGL 456 | (3) | Middle English |
| ENGL 500 | (3) | Middle English |
| ENGL 553 | (3) | Old English Literature |

* Note: When content relates to Medieval Studies.


## History and Classical Studies

| CLAS 419 | $(3)$ | Advanced Latin: Post-Classical |
| :--- | :---: | :--- |
| HIST 194 | $(3)$ | FYS: Jewish Concepts of Others |
| HIST 319 | (3) | The Scientific Revolution |
| HIST 323 | (3) | History and Sexuality 1 |
| HIST 356 | (3) | Medicine in the Medieval West |
| HIST 358 | (3) | China's Middle Empires |
| HIST 380 | (3) | The Medieval Mediterranean |
| HIST 401 | (3) | Topics: Medieval Culture and Society |
| HIST 567D1 | Seminar: Medieval Medicine |  |
| HIST 567D2 | (3) | Seminar: Medieval Medicine |

## Islamic Studies

| ISLA 325 | $(3)$ | Introduction to Shi'i Islam |
| :--- | :---: | :--- |
| ISLA 345 | $(3)$ | Science and Civilization in Islam |
| ISLA 350 | $(3)$ | From Tribe to Dynasty |
| ISLA 420 | $(3)$ | Indo-Islamic Civilization: Medieval |
| ISLA 430 | $(3)$ | Islamdom: Baghdad to Cordoba |
| ISLA 516 | $(3)$ | Medieval Islam, 13th-15th Century |

## Jewish Studies

| JWST 261 | (3) History of Jewish Philosophy and Thought |  |
| :--- | :--- | :--- |
| JWST 337 | (3) | Jewish Philosophy and Thought 1 |

## Languages, Literatures, and Cultures

ITAL 355
(3)
Dante and the Middle Ages

| ITAL 356 | (3) | Medieval Discourses on Love |
| :--- | :--- | :--- |
| ITAL 465 | (3) | Religious Identities in Italy |

## Langue et littérature françaises

| FREN $455^{*}$ | (3) | La littérature médiévale 1 |
| :--- | :--- | :--- |
| FREN 456* | (3) | La littérature médiévale 2 |

** Note: Course taught and all coursework done in French.

## Philosophy

| PHIL 344 | (3) | Medieval and Renaissance Political Theory |
| :--- | :--- | :--- |
| PHIL 356 | (3) | Early Medieval Philosophy |

## Religious Studies

| RELG 322 | (3) | Church and Empire to 1300 |
| :--- | :--- | :--- |
| RELG 532 | (3) | History of Christian Thought 1 |

### 3.9.12.18 World Cinemas 3.9.12.18.1 About World Cinemas Minor Concentration

The World Cinemas program was established to coordinate faculty expertise and student interest in different national and international cinematic traditions. It offers courses across various departments, primarily in Arts, in order to train students to approach film studies from a variety of traditions and locations, while introducing them to different modes of cinematic practice and production from around the world.

Further information for new and returning students is available at mcgill.ca/worldcinemas.

### 3.9.12.18.2 Bachelor of Arts (B.A.) - Minor Concentration World Cinemas (18 credits)

The Minor Concentration World Cinemas instructs students in film aesthetics, history, and theory by acquainting them with cinematic practices from different national and international traditions. This interdisciplinary program draws on the already existing teaching and research activities in several departments within the Faculty of Arts and will serve as an institutional context for future teaching and research endeavors in film studies.

## Required Courses (6 credits)

* Take either EAST 279 or LLCU 279.

| EAST 279* | (3) | Introduction to Film History |
| :--- | :--- | :--- |
| ENGL 277 | (3) | Introduction to Film Studies |
| LLCU 279* | (3) | Introduction to Film History |

## Complementary Courses (12 credits)

12 credits selected from the course list below with the following specifications:
a minimum of 6 credits in non-U.S. cinemas;
a maximum of 6 credits from any one department.
No more than 6 credits may be taken from the same discipline as the student's other major or minor concentrations.

| CANS 300 | (3) | Topics in Canadian Studies 1 |
| :--- | :---: | :--- |
| EAST 353 | (3) | Approaches to Chinese Cinema |
| EAST 361 | $(3)$ | Animation and New Media |
| EAST 362 | $(3)$ | Japanese Cinema |
| EAST 368 | (3) | Asian Genre Cinemas |
| EAST 369 | $(3)$ | Gender and Sexuality in Asian Media |
| EAST 454 | $(3)$ | Topics: Chinese Cinema |


| EAST 467 | (3) | Topics: Japanese Cinema |
| :---: | :---: | :---: |
| EAST 564 | (3) | Structures of Modernity: Asia |
| ENGL 279 | (3) | Introduction to Film as Art |
| ENGL 280 | (3) | Introduction to Film as Mass Medium |
| ENGL 350 | (3) | Studies in the History of Film 1 |
| ENGL 351 | (3) | Studies in the History of Film 2 |
| ENGL 354 | (3) | Sexuality and Representation |
| ENGL 363 | (3) | Studies in the History of Film 3 |
| ENGL 366 | (3) | Film Genre |
| ENGL 374 | (3) | Film Movement or Period |
| ENGL 379 | (3) | Film Theory |
| ENGL 381 | (3) | A Film-Maker 1 |
| ENGL 382 | (3) | International Cinema 1 |
| ENGL 385 | (3) | Topics in Literature and Film |
| ENGL 391 | (3) | Special Topics: Cultural Studies 1 |
| ENGL 393 | (3) | Canadian Cinema |
| ENGL 450 | (3) | Film Aesthetics |
| ENGL 451 | (3) | A Period in Cinema |
| ENGL 476 | (3) | Alternative Approaches to Media 1 |
| ENGL 479 | (3) | Philosophy of Film |
| ENGL 480 | (3) | Studies in History of Film 1 |
| ENGL 481 | (3) | A Film-Maker 2 |
| ENGL 482 | (3) | International Cinema 2 |
| ENGL 483 | (3) | Seminar in the Film |
| ENGL 484 | (3) | Seminar in the Film |
| ENGL 492 | (3) | Image and Text |
| ENGL 585 | (3) | Cultural Studies: Film |
| FILM 499 | (3) | Internship: World Cinemas |
| FREN 310 | (3) | Cinéma français |
| FREN 311 | (3) | Cinéma francophone |
| FREN 315 | (3) | Cinéma québécois |
| GERM 357 | (3) | German Culture in European Context |
| GERM 369 | (3) | The German Novel |
| GERM 370 | (3) | Special Topics in German Film |
| GERM 373 | (3) | Weimar German Cinema |
| HISP 340 | (3) | Latin American Cinema |
| HISP 341 | (3) | Spanish Cinema |
| HIST 435 | (3) | Topics in South Asian History |
| ITAL 329 | (3) | Italian Cinematic Tradition |
| ITAL 374 | (3) | Classics of Italian Cinema |
| ITAL 375 | (3) | Cinema and Society in Modern Italy |
| ITAL 477 | (3) | Italian Cinema and Video |
| LLCU 200 | (3) | Topics in Film |


| LLCU 300 | (3) | Cinema and the Visual |
| :--- | :--- | :--- |
| MUHL 330 | (3) | Music and Film |
| PLAI 500 | (3) | Advanced Interdisciplinary Humanities Seminar |
| RUSS 213 | (3) | Introduction to Soviet Film |
| RUSS 395 | (3) | Soviet Cinema: Art and Politics |

### 3.9.13 Environment

Arts students who are interested in studying the environment should refer to Bieler School of Environment > Undergraduate .

- Minor: section 7.5.1: Minor in Environment
- Faculty Program: section 7.5.2: B.A. Faculty Program in Environment
- Honours: section 7.5.5: Honours Environment
- Joint Honours: section 7.5.6: Joint Honours Component Environment
- Diploma: section 7.5.7: Diploma Environment


### 3.9.14 French Language Centre

### 3.9.14.1 Location

French Language Centre<br>Arts Building, Room 155<br>853 Sherbrooke Street West<br>Montreal QC H3A 0G5<br>Telephone: 514-398-8896<br>Email: fc@mcgill.ca<br>Website: mcgill.ca/flc

### 3.9.14.2 About French as a Second Language

Courses in French as a Second Language are open to students in any program who need to develop their oral and written skills in the French language either for use in their future professional career or as preparation for more advanced studies in French linguistics, literature, civilization, translation, or in Canadian studies.

Arts Freshman/Foundation Year students enrolled in the "En français" option may select up to a maximum of 18 credits from FRSL courses.

### 3.9.14.3 Admission and Registration

A Placement Test is required before admission to any FRSL course, including Beginners' French. All students should be ready to provide a copy of their transcript from high school or CEGEP. Departmental permission will be given after the student's level has been determined by a placement test. Where students' levels in French make admission to this Department inappropriate, they will be directed to Le Département des littératures de langue française, de traduction et de création or the School of Continuing Studies.
Students must be registered to attend FRSL courses; no auditors are accepted.
Placement tests are held throughout the year until places are filled. For the schedule, location, and most current information, refer to the French Language Centre's website at mcgill.ca/flc/registration/placement-tests.

Only a limited number of students can be tested at a time and they will be served in order of registration for oral evaluation sessions.
Registration is limited and Departmental permission is absolutely required.
As numbers are limited in all courses, students who meet the required standard for any given course are admitted on a first-come, first-served basis. Students must attend all classes during the first two weeks in order to keep their places.
The Department reserves the right to transfer a student to another course if the level is inappropriate. Any absence from class during the Course Change period may lead to losing one's place to another student.

### 3.9.15 Gender, Sexuality, and Feminist Studies

### 3.9.15.1 Location

Institute for Gender, Sexuality, and Feminist Studies (IGSF)
3487 Peel Street, 2nd Floor
Montreal QC H3A 1W7
Telephone: 514-398-3911
Email: info.igsf@mcgill.ca
Website: mcgill.ca/igsf/undergraduate
Advisor: Andrew Folco
Email: andrew.folco@mcgill.ca

### 3.9.15.2 About Gender, Sexuality, Feminist, and Social Justice Studies

Gender, Sexuality, Feminist, and Social Justice Studies (GSFS) is an interdisciplinary program that recognizes social justice as a driving concept inherent to the study of gender, sexuality, and feminism. Social justice frameworks incorporate critical race studies, disability studies, and Indigenous studies into the examination of gender, sexuality, and feminism.

For further information, consult our website.

### 3.9.15.3 Bachelor of Arts (B.A.) - Minor Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (18 credits)

The Minor Concentration in Gender, Sexuality, Feminist, \& Social Justice Studies (GSFS) is an interdisciplinary program that centrally engages contemporary and historical issues centered on gender, sexuality, feminism, and social justice. The program provides students with opportunities to explore the meaning and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine how such categories might inform and reproduce power relationships.

## Complementary Courses (18 credits)

3 credits from the following:

| GSFS 200 | (3) | Feminist and Social Justice Studies |
| :--- | :--- | :--- |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |

3 credits Gender, Sexuality Feminist, and Social Justice Studies (GSFS) from the following:

| GSFS 301 | $(3)$ | Current Topics 1 |
| :--- | :--- | :--- |
| GSFS 302 | $(3)$ | Current Topics 2 |
| GSFS 303 | (3) | Gender and Disability |
| GSFS 304 | (3) | Postcolonial Feminist Theories |
| GSFS 305 | (3) | Critical Race and Social Justice Theories |
| GSFS 306 | (3) | Queer Theory |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 | (3) | Sexuality and Gender: New Directions |

Credits may count towards only one program requirement.

12 credits from the following:
Minimum of 6 credits must be at the 300 level or higher. Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.
Maximum of 3 transfer credits may be accepted from approved exchange programs subject to University approval.

| ANTH 227 | (3) | Medical Anthropology |
| :---: | :---: | :---: |
| ANTH 327 | (3) | Anthropology of South Asia |
| ANTH 381* | (3) | Special Topic 2 |
| ANTH 407 | (3) | Anthropology of the Body |
| ANTH 413 | (3) | Gender in Archaeology |
| ANTH 480* | (3) | Special Topic 5 |
| ANTH 555* | (3) | Advanced Topics in Ethnology |
| ARCH 533* | (3) | New Approaches to Architectural History |
| ARTH 205* | (3) | Introduction to Modern Art |
| ARTH 353* | (3) | Selected Topics in Art History 1 |
| ARTH 354* | (3) | Selected Topics Art History 2 |
| ARTH 421* | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 440* | (3) | The Body and Visual Culture |
| CANS 405* | (3) | Canadian Studies Seminar 5 |
| CLAS 308 | (3) | Gender in the Ancient World |
| COMS 310 | (3) | Media and Feminist Studies |
| COMS 400* | (3) | Critical Theory Seminar |
| COMS 411 | (3) | Disability, Technology and Communication |
| COMS 490* | (3) | Special Topics in History and Theory of Media |
| COMS 492 | (3) | Power, Difference and Justice |
| COMS 541* | (3) | Cultural Industries |
| EAST 313* | (3) | Current Topics: Korean Studies 1 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453* | (3) | Topics: Chinese Literature |
| EDPC 503 | (3) | Intersectional Relationships and Sexualities |
| EDPE 515 | (3) | Gender Identity Development |
| ENGL 275 | (3) | Introduction to Cultural Studies |
| ENGL 290 | (3) | Postcolonial and World Literatures in English |
| ENGL 320 | (3) | Postcolonial Literature |
| ENGL 371* | (3) | Theatre History: 19th to 21st Centuries |
| ENGL 388* | (3) | Studies in Popular Culture |
| ENGL 413* | (3) | Special Topics in Canadian Drama and Theatre |
| ENGL 418* | (3) | A Major Modernist Writer |
| ENGL 440* | (3) | First Nations and Inuit Literature and Media |


| ENGL 443 | (3) | Contemporary Women's Fiction |
| :---: | :---: | :---: |
| ENGL 444 | (3) | Studies in Women Authors |
| ENGL 489* | (3) | Culture and Critical Theory 1 |
| ENGL 516* | (3) | Shakespeare |
| GEOG 331* | (3) | Urban Social Geography |
| GEOG 507* | (3) | Advanced Social Geography |
| GERM 364 | (3) | Gender and Society in German Literature and Culture |
| GSFS 200 | (3) | Feminist and Social Justice Studies |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |
| GSFS 300 | (3) | Research Inquiry in GSFS |
| GSFS 301 | (3) | Current Topics 1 |
| GSFS 302 | (3) | Current Topics 2 |
| GSFS 303 | (3) | Gender and Disability |
| GSFS 304 | (3) | Postcolonial Feminist Theories |
| GSFS 305 | (3) | Critical Race and Social Justice Theories |
| GSFS 306 | (3) | Queer Theory |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 400 | (3) | Capstone: Engaging Fields of GSFS |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 | (3) | Sexuality and Gender: New Directions |
| GSFS 450 | (3) | Independent Reading and Research |
| GSFS 499 | (3) | GSFS Internship |
| HISP 340* | (3) | Latin American Cinema |
| HISP 358 | (3) | Gender and Textualities |
| HIST 201* | (3) | Modern African History |
| HIST 323 | (3) | History and Sexuality 1 |
| HIST 343 | (3) | Women in Post-Confederation Canada |
| HIST 344 | (3) | The Chinese Family in History |
| HIST 347 | (3) | History and Sexuality 2 |
| HIST 354 | (3) | Women in Europe 1700-2000 |
| HIST 380 | (3) | The Medieval Mediterranean |
| HIST 382* | (3) | History of South Africa |
| HIST 408 | (3) | Selected Topics in Indigenous History |
| HIST 412 | (3) | Women and Gender in Modern Britain |
| HIST 420 | (3) | Gender and Sexuality in Modern China |
| HIST 424 | (3) | Gender, Sexuality and Medicine |
| HIST 429 | (3) | Topics: Gender/Feminist Histories |


| HIST 433 | (3) | British Queer History |
| :---: | :---: | :---: |
| HIST 525 | (3) | Women, Work and Family in Global History |
| HIST 526 | (3) | Women and War |
| HSEL 308 | (3) | Issues in Women's Health |
| HSEL 309 | (3) | Women's Reproductive Health |
| INDG 200 | (3) | Introduction to Indigenous Studies |
| INDG 401* | (3) | Interdisciplinary Seminar in Indigenous Studies |
| ISLA 310 | (3) | Women in Islam |
| ISLA 585 | (3) | Arab Women's Literature |
| ITAL 375* | (3) | Cinema and Society in Modern Italy |
| ITAL 383 | (3) | Women's Writing since 1880 |
| ITAL 477* | (3) | Italian Cinema and Video |
| MUAR 250 | (3) | Women Making Music |
| MUAR 399 | (3) | Music and Queer Identity |
| PHIL 242 | (3) | Introduction to Feminist Theory |
| PHIL 327 | (3) | Philosophy of Race |
| PHIL 442 | (3) | Topics in Feminist Theory |
| PHIL 446* | (3) | Current Issues in Political Philosophy |
| POLI 348 | (3) | Gender and Canadian Politics |
| POLI 366* | (3) | Topics in Political Theory 1 |
| POLI 422* | (3) | Developing Areas/Topics 2 |
| POLI 423* | (3) | Politics of Ethno-Nationalism |
| POLI 432* | (3) | Selected Topics: Comparative Politics |
| POLI 444* | (3) | Topics in International Politics 2 |
| PSYC 436 | (3) | Human Sexuality and Its Problems |
| RELG 271 | (3) | Religion and Sexuality |
| RELG 313* | (3) | Topics in Biblical Studies 1 |
| RELG 336* | (3) | Contemporary Theological Issues |
| RELG 338 | (3) | Women and the Christian Tradition |
| RELG 372 | (3) | Hindu Goddesses |
| RELG 399* | (3) | Christian Spirituality |
| SOCI 247 | (3) | Family and Modern Society |
| SOCI 270 | (3) | Sociology of Gender |
| SOCI 321 | (3) | Gender and Work |
| SOCI 370 | (3) | Sociology: Gender and Development |
| SOCI 386 | (3) | Contemporary Social Movements |
| SOCI 390 | (3) | Gender and Health |
| SOCI 489 | (3) | Gender, Deviance and Social Control |
| SOCI 513 | (3) | Social Aspects HIV/AIDS in Africa |
| SOCI 519 | (3) | Gender and Globalization |
| SOCI 530 | (3) | Sex and Gender |
| SOCI 535 | (3) | Sociology of the Family |

Note: Courses marked with and asterisk $\left(^{*}\right)$ count toward Gender, Sexuality, Feminist, and Social Justice Studies when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

### 3.9.15.4 Bachelor of Arts (B.A.) - Major Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)

The Major Concentration in Gender, Sexuality, Feminist, \& Social Justice Studies (GSFS) is an interdisciplinary program that centrally engages contemporary and historical issues centered on gender, sexuality, feminism, and social justice. The program provides students with opportunities to explore the meaning and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine how such categories might inform and reproduce power relationships. The Major Concentration consists of required GSFS courses that allow for an immersion into this area of study, and complementary courses from a range of departments, disciplines, and faculties. Students must see and adviser in Gender, Sexuality, Feminist, and Social Justice Studies at a minimum upon declaring the GSFS Major Concentration and prior to selecting courses for the final year of study.

Students are advised to take GSFS 200 and 250 in their first year in the program, GSFS 300 in their second year of the program, and GSFS 400 in their final year of the program.

Students must see an adviser in Women's Studies at a minimum upon registering in GSFS and prior to selecting courses for the final year of study.

## Required Courses (12 credits)

| GSFS 200 | (3) | Feminist and Social Justice Studies |
| :--- | :--- | :--- |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |
| GSFS 300 | (3) | Research Inquiry in GSFS |
| GSFS 400 | (3) | Capstone: Engaging Fields of GSFS |

## Complementary Courses (24 credits)

9 credits selected from the GSFS Course List, 3 credits of which must be at the 400 or 500 level.
15 credits selected from the Complementary Course List. Three credits minimum must be at the 400 or 500 level and 9 credits maximum may be at the 200 level.

Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.

Maximum of 12 transfer credits may be accepted by approved exchange programs, subject to University approval.

## Gender, Sexuality, Feminist, and Social Justice Studies (GSFS)

9 credits from the following:

| GSFS 301 | $(3)$ | Current Topics 1 |
| :--- | :--- | :--- |
| GSFS 302 | $(3)$ | Current Topics 2 |
| GSFS 303 | $(3)$ | Gender and Disability |
| GSFS 304 | $(3)$ | Postcolonial Feminist Theories |
| GSFS 305 | $(3)$ | Critical Race and Social Justice Theories |
| GSFS 306 | (3) | Queer Theory |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 |  | Sexuality and Gender: New Directions |

Credits may count towards only one program requirement.
15 credits from the following:

| ANTH 227 | (3) | Medical Anthropology |
| :---: | :---: | :---: |
| ANTH 327 | (3) | Anthropology of South Asia |
| ANTH 381* | (3) | Special Topic 2 |
| ANTH 407 | (3) | Anthropology of the Body |
| ANTH 413 | (3) | Gender in Archaeology |
| ANTH 480* | (3) | Special Topic 5 |
| ANTH 555* | (3) | Advanced Topics in Ethnology |
| ARCH 533* | (3) | New Approaches to Architectural History |
| ARTH 205* | (3) | Introduction to Modern Art |
| ARTH 353* | (3) | Selected Topics in Art History 1 |
| ARTH 354* | (3) | Selected Topics Art History 2 |
| ARTH 421* | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 440* | (3) | The Body and Visual Culture |
| CANS 405* | (3) | Canadian Studies Seminar 5 |
| CLAS 308 | (3) | Gender in the Ancient World |
| COMS 310 | (3) | Media and Feminist Studies |
| COMS 400* | (3) | Critical Theory Seminar |
| COMS 411 | (3) | Disability, Technology and Communication |
| COMS 490* | (3) | Special Topics in History and Theory of Media |
| COMS 492 | (3) | Power, Difference and Justice |
| COMS 541* | (3) | Cultural Industries |
| EAST 313* | (3) | Current Topics: Korean Studies 1 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453* | (3) | Topics: Chinese Literature |
| EDPC 503 | (3) | Intersectional Relationships and Sexualities |
| EDPE 515 | (3) | Gender Identity Development |
| ENGL 275 | (3) | Introduction to Cultural Studies |
| ENGL 290 | (3) | Postcolonial and World Literatures in English |
| ENGL 320 | (3) | Postcolonial Literature |
| ENGL 371* | (3) | Theatre History: 19th to 21st Centuries |
| ENGL 388* | (3) | Studies in Popular Culture |
| ENGL 413* | (3) | Special Topics in Canadian Drama and Theatre |
| ENGL 418* | (3) | A Major Modernist Writer |
| ENGL 440* | (3) | First Nations and Inuit Literature and Media |
| ENGL 443 | (3) | Contemporary Women's Fiction |
| ENGL 444 | (3) | Studies in Women Authors |
| ENGL 489* | (3) | Culture and Critical Theory 1 |
| ENGL 516* | (3) | Shakespeare |
| GEOG 331* | (3) | Urban Social Geography |


| GEOG 507* | (3) | Advanced Social Geography |
| :---: | :---: | :---: |
| GERM 364 | (3) | Gender and Society in German Literature and Culture |
| GSFS 200 | (3) | Feminist and Social Justice Studies |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |
| GSFS 300 | (3) | Research Inquiry in GSFS |
| GSFS 301 | (3) | Current Topics 1 |
| GSFS 302 | (3) | Current Topics 2 |
| GSFS 303 | (3) | Gender and Disability |
| GSFS 304 | (3) | Postcolonial Feminist Theories |
| GSFS 305 | (3) | Critical Race and Social Justice Theories |
| GSFS 306 | (3) | Queer Theory |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 400 | (3) | Capstone: Engaging Fields of GSFS |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 | (3) | Sexuality and Gender: New Directions |
| GSFS 450 | (3) | Independent Reading and Research |
| GSFS 499 | (3) | GSFS Internship |
| HISP 340* | (3) | Latin American Cinema |
| HISP 358 | (3) | Gender and Textualities |
| HIST 201* | (3) | Modern African History |
| HIST 323 | (3) | History and Sexuality 1 |
| HIST 343 | (3) | Women in Post-Confederation Canada |
| HIST 344 | (3) | The Chinese Family in History |
| HIST 347 | (3) | History and Sexuality 2 |
| HIST 354 | (3) | Women in Europe 1700-2000 |
| HIST 380 | (3) | The Medieval Mediterranean |
| HIST 382* | (3) | History of South Africa |
| HIST 408 | (3) | Selected Topics in Indigenous History |
| HIST 412 | (3) | Women and Gender in Modern Britain |
| HIST 420 | (3) | Gender and Sexuality in Modern China |
| HIST 424 | (3) | Gender, Sexuality and Medicine |
| HIST 429 | (3) | Topics: Gender/Feminist Histories |
| HIST 433 | (3) | British Queer History |
| HIST 525 | (3) | Women, Work and Family in Global History |
| HIST 526 | (3) | Women and War |
| HSEL 308 | (3) | Issues in Women's Health |
| HSEL 309 | (3) | Women's Reproductive Health |


| INDG 401* | (3) | Interdisciplinary Seminar in Indigenous Studies |
| :---: | :---: | :---: |
| ISLA 310 | (3) | Women in Islam |
| ISLA 585 | (3) | Arab Women's Literature |
| ITAL 375* | (3) | Cinema and Society in Modern Italy |
| ITAL 383 | (3) | Women's Writing since 1880 |
| ITAL 477* | (3) | Italian Cinema and Video |
| MUAR 250 | (3) | Women Making Music |
| MUAR 399 | (3) | Music and Queer Identity |
| PHIL 242 | (3) | Introduction to Feminist Theory |
| PHIL 442 | (3) | Topics in Feminist Theory |
| PHIL 446* | (3) | Current Issues in Political Philosophy |
| POLI 366* | (3) | Topics in Political Theory 1 |
| POLI 422* | (3) | Developing Areas/Topics 2 |
| POLI 423* | (3) | Politics of Ethno-Nationalism |
| POLI 432* | (3) | Selected Topics: Comparative Politics |
| POLI 444* | (3) | Topics in International Politics 2 |
| PSYC 436 | (3) | Human Sexuality and Its Problems |
| RELG 313* | (3) | Topics in Biblical Studies 1 |
| RELG 336* | (3) | Contemporary Theological Issues |
| RELG 338 | (3) | Women and the Christian Tradition |
| RELG 372 | (3) | Hindu Goddesses |
| RELG 399* | (3) | Christian Spirituality |
| SOCI 247 | (3) | Family and Modern Society |
| SOCI 270 | (3) | Sociology of Gender |
| SOCI 321 | (3) | Gender and Work |
| SOCI 370 | (3) | Sociology: Gender and Development |
| SOCI 386 | (3) | Contemporary Social Movements |
| SOCI 390 | (3) | Gender and Health |
| SOCI 489 | (3) | Gender, Deviance and Social Control |
| SOCI 513 | (3) | Social Aspects HIV/AIDS in Africa |
| SOCI 519 | (3) | Gender and Globalization |
| SOCI 530 | (3) | Sex and Gender |
| SOCI 535 | (3) | Sociology of the Family |

Note: Courses marked with and asterisk $\left(^{*}\right)$ count toward Gender, Sexuality, Feminist, and Social Justice Studies when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

### 3.9.15.5 Bachelor of Arts (B.A.) - Honours Gender, Sexuality, Feminist, \& Social Justice Studies (57 credits)

The Honours program offers a significant degree of analysis and depth of study into contemporary and historical critical issues centered on gender, sexuality, feminism, and social justice beyond the Major through required and complementary course work, intensive research, and seminars. The program enables students to explore the meanings and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine how such categories might inform and reproduce power relationships. The Honours program culminates in the completion of an Honours thesis, supervised by a faculty member whose approval is sought the year prior. The Colloquium requires supplemental reading and writing assignments, training in research and thesis writing methods, presentation to the group of theses in progress, and response to the work of others. Honours students must maintain a program GPA of 3.30 and a CGPA of 3.00 .

Students are advised to take GSFS 200 and GFSF 250 in their first year in the program, and GSFS 300 in their second year of the program. Students must take GSFS 495D1/D2 and GSFS 496D1/D2 in their last full year of the program.

Students must see and adviser in Women's Studies at a minimum upon registering in GSFS and prior to selecting courses for the final year of study.

## Required Courses (18 credits)

| GSFS 200 | (3) | Feminist and Social Justice Studies |
| :--- | :--- | :--- |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |
| GSFS 300 | (3) | Research Inquiry in GSFS |
| GSFS 495D1 | $(1.5)$ | Honours/Joint Honours Colloquium |
| GSFS 495D2 | $(1.5)$ | Honours/Joint Honours Colloquium |
| GSFS 496D1 | $(3)$ | Honours Thesis |
| GSFS 496D2 | $(3)$ | Honours Thesis |

## Complementary Courses (39 credits)

9 credits selected from the GSFS Course List, 3 credits of which must be at the 400 or 500 level.
30 credits selected from the Complementary Course List. Nine credits minimum must be at the 400 or 500 level and 12 credits maximum may be at the 200 level.

Interdisciplinary complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.

Maximum of 12 transfer credits may be accepted by approved exchange programs, subject to University approval.

## Gender, Sexuality, Feminist, and Social Justice Studies (GSFS)

9 credits from the following:

| GSFS 301 | (3) | Current Topics 1 |
| :--- | :--- | :--- |
| GSFS 302 | (3) | Current Topics 2 |
| GSFS 303 | (3) | Gender and Disability |
| GSFS 304 | (3) | Postcolonial Feminist Theories |
| GSFS 305 | (3) | Critical Race and Social Justice Theories |
| GSFS 306 | (3) | Queer Theory |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 | (3) | Sexuality and Gender: New Directions |

Credits may count towards only one program requirement.
30 credits from the following:

| ANTH 227 | $(3)$ | Medical Anthropology |
| :--- | :---: | :--- |
| ANTH 327 | $(3)$ | Anthropology of South Asia |
| ANTH $381^{*}$ | $(3)$ | Special Topic 2 |
| ANTH 407 | $(3)$ | Anthropology of the Body |
| ANTH 413 | (3) | Gender in Archaeology |
| ANTH $480^{*}$ | $(3)$ | Special Topic 5 |


| ANTH 555* | (3) | Advanced Topics in Ethnology |
| :---: | :---: | :---: |
| ARCH 533* | (3) | New Approaches to Architectural History |
| ARTH 205* | (3) | Introduction to Modern Art |
| ARTH 353* | (3) | Selected Topics in Art History 1 |
| ARTH 354* | (3) | Selected Topics Art History 2 |
| ARTH 421* | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 440* | (3) | The Body and Visual Culture |
| CANS 405* | (3) | Canadian Studies Seminar 5 |
| CLAS 308 | (3) | Gender in the Ancient World |
| COMS 310 | (3) | Media and Feminist Studies |
| COMS 320 | (3) | Media and Empire |
| COMS 400* | (3) | Critical Theory Seminar |
| COMS 411 | (3) | Disability, Technology and Communication |
| COMS 490* | (3) | Special Topics in History and Theory of Media |
| COMS 492 | (3) | Power, Difference and Justice |
| COMS 541* | (3) | Cultural Industries |
| EAST 313* | (3) | Current Topics: Korean Studies 1 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453* | (3) | Topics: Chinese Literature |
| EDPC 503 | (3) | Intersectional Relationships and Sexualities |
| EDPE 515 | (3) | Gender Identity Development |
| ENGL 275 | (3) | Introduction to Cultural Studies |
| ENGL 290 | (3) | Postcolonial and World Literatures in English |
| ENGL 320 | (3) | Postcolonial Literature |
| ENGL 371* | (3) | Theatre History: 19th to 21st Centuries |
| ENGL 388* | (3) | Studies in Popular Culture |
| ENGL 413* | (3) | Special Topics in Canadian Drama and Theatre |
| ENGL 418* | (3) | A Major Modernist Writer |
| ENGL 440* | (3) | First Nations and Inuit Literature and Media |
| ENGL 443 | (3) | Contemporary Women's Fiction |
| ENGL 444 | (3) | Studies in Women Authors |
| ENGL 489* | (3) | Culture and Critical Theory 1 |
| ENGL 516* | (3) | Shakespeare |
| GEOG 331* | (3) | Urban Social Geography |
| GEOG 507* | (3) | Advanced Social Geography |
| GERM 364 | (3) | Gender and Society in German Literature and Culture |
| GSFS 200 | (3) | Feminist and Social Justice Studies |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |
| GSFS 300 | (3) | Research Inquiry in GSFS |


| GSFS 301 | (3) | Current Topics 1 |
| :---: | :---: | :---: |
| GSFS 302 | (3) | Current Topics 2 |
| GSFS 303 | (3) | Gender and Disability |
| GSFS 304 | (3) | Postcolonial Feminist Theories |
| GSFS 305 | (3) | Critical Race and Social Justice Theories |
| GSFS 306 | (3) | Queer Theory |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 400 | (3) | Capstone: Engaging Fields of GSFS |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 | (3) | Sexuality and Gender: New Directions |
| GSFS 450 | (3) | Independent Reading and Research |
| GSFS 499 | (3) | GSFS Internship |
| HISP 340* | (3) | Latin American Cinema |
| HISP 358 | (3) | Gender and Textualities |
| HIST 201* | (3) | Modern African History |
| HIST 323 | (3) | History and Sexuality 1 |
| HIST 343 | (3) | Women in Post-Confederation Canada |
| HIST 344 | (3) | The Chinese Family in History |
| HIST 347 | (3) | History and Sexuality 2 |
| HIST 354 | (3) | Women in Europe 1700-2000 |
| HIST 380 | (3) | The Medieval Mediterranean |
| HIST 382* | (3) | History of South Africa |
| HIST 408 | (3) | Selected Topics in Indigenous History |
| HIST 412 | (3) | Women and Gender in Modern Britain |
| HIST 420 | (3) | Gender and Sexuality in Modern China |
| HIST 424 | (3) | Gender, Sexuality and Medicine |
| HIST 429 | (3) | Topics: Gender/Feminist Histories |
| HIST 433 | (3) | British Queer History |
| HIST 525 | (3) | Women, Work and Family in Global History |
| HIST 526 | (3) | Women and War |
| HSEL 308 | (3) | Issues in Women's Health |
| HSEL 309 | (3) | Women's Reproductive Health |
| INDG 401* | (3) | Interdisciplinary Seminar in Indigenous Studies |
| ISLA 310 | (3) | Women in Islam |
| ISLA 585 | (3) | Arab Women's Literature |
| ITAL 375* | (3) | Cinema and Society in Modern Italy |
| ITAL 383 | (3) | Women's Writing since 1880 |


| ITAL 477* | (3) | Italian Cinema and Video |
| :---: | :---: | :---: |
| MUAR 250 | (3) | Women Making Music |
| MUAR 399 | (3) | Music and Queer Identity |
| PHIL 242 | (3) | Introduction to Feminist Theory |
| PHIL 442 | (3) | Topics in Feminist Theory |
| PHIL 446* | (3) | Current Issues in Political Philosophy |
| POLI 366* | (3) | Topics in Political Theory 1 |
| POLI 422* | (3) | Developing Areas/Topics 2 |
| POLI 423* | (3) | Politics of Ethno-Nationalism |
| POLI 432* | (3) | Selected Topics: Comparative Politics |
| POLI 444* | (3) | Topics in International Politics 2 |
| PSYC 436 | (3) | Human Sexuality and Its Problems |
| RELG 313* | (3) | Topics in Biblical Studies 1 |
| RELG 336* | (3) | Contemporary Theological Issues |
| RELG 338 | (3) | Women and the Christian Tradition |
| RELG 372 | (3) | Hindu Goddesses |
| RELG 399* | (3) | Christian Spirituality |
| SOCI 247 | (3) | Family and Modern Society |
| SOCI 270 | (3) | Sociology of Gender |
| SOCI 321 | (3) | Gender and Work |
| SOCI 370 | (3) | Sociology: Gender and Development |
| SOCI 386 | (3) | Contemporary Social Movements |
| SOCI 390 | (3) | Gender and Health |
| SOCI 489 | (3) | Gender, Deviance and Social Control |
| SOCI 513 | (3) | Social Aspects HIV/AIDS in Africa |
| SOCI 519 | (3) | Gender and Globalization |
| SOCI 530 | (3) | Sex and Gender |
| SOCI 535 | (3) | Sociology of the Family |

Note: Courses marked with and asterisk $\left({ }^{*}\right)$ are acceptable ONLY when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

### 3.9.15.6 Bachelor of Arts (B.A.) - Jt Honours Component Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)

The Joint Honours program offers a significant degree of analysis and depth of study into contemporary and historical critical issues centered on gender, sexuality, feminism, and social justice beyond the Major through required and complementary course work, intensive research, and seminars. The program enables students to explore the meanings and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine how such categories might inform and reproduce power relationships. The Joint Honours program culminates in the completion of an Honours thesis, supervised by a faculty member whose approval is sought the year prior. The Colloquium requires supplemental reading and writing assignments, training in research and thesis writing methods, presentation to the group of theses in progress, and response to the work of others. Joint Honours students must maintain a program GPA of 3.30 and a CGPA of 3.00.

Students are advised to take GSFS 200 and GSFS 250 in their first year in the program, and GSFS 300 in their second year of the program. Students must take GSFS 495D1/D2 and GSFS 497D1/D2 in their last full year of the program.

Students must see and adviser in Women's Studies at a minimum upon registering in GSFS and prior to selecting courses for the final year of study.

## Required Courses (15 credits)

| GSFS 200 | (3) | Feminist and Social Justice Studies |
| :--- | :--- | :--- |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |


| GSFS 300 | (3) | Research Inquiry in GSFS |
| :--- | :--- | :--- |
| GSFS 495D1 | $(1.5)$ | Honours/Joint Honours Colloquium |
| GSFS 495D2 | $(1.5)$ | Honours/Joint Honours Colloquium |
| GSFS 497D1 | $(1.5)$ | Joint Honours Thesis |
| GSFS 497D2 | $(1.5)$ | Joint Honours Thesis |

## Complementary Courses (21 credits)

9 credits selected from the GSFS Course List, 3 credits of which must be at the 400 or 500 level.
12 credits selected from the Complementary Course List. Three credits minimum must be at the 400 or 500 level and 9 credits maximum may be at the 200 level.
Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.
Maximum of 12 transfer credits may be accepted by approved exchange programs, subject to University approval.

## Gender, Sexuality, Feminist, and Social Justice Studies (GSFS)

9 credits from the following:

| GSFS 301 | $(3)$ | Current Topics 1 |
| :--- | :--- | :--- |
| GSFS 302 | $(3)$ | Current Topics 2 |
| GSFS 303 | $(3)$ | Gender and Disability |
| GSFS 304 | (3) | Postcolonial Feminist Theories |
| GSFS 305 | (3) | Critical Race and Social Justice Theories |
| GSFS 306 | (3) | Queer Theory |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 | (3) | Sexuality and Gender: New Directions |

Credits may count towards only one program requirement.
12 credits from the following:

| ANTH 227 | $(3)$ | Medical Anthropology |
| :--- | :---: | :--- |
| ANTH 327 | $(3)$ | Anthropology of South Asia |
| ANTH 381* | (3) | Special Topic 2 |
| ANTH 407 | (3) | Anthropology of the Body |
| ANTH 413 | (3) | Gender in Archaeology |
| ANTH 480* | (3) | Special Topic 5 |
| ANTH 555* | (3) | Advanced Topics in Ethnology |
| ARCH 533* | (3) | New Approaches to Architectural History |
| ARTH 205* | (3) | Introduction to Modern Art |
| ARTH 353* | (3) | Selected Topics in Art History 1 |


| ARTH 354* | (3) | Selected Topics Art History 2 |
| :---: | :---: | :---: |
| ARTH 421* | (3) | Selected Topics in Art and Architecture 2 |
| ARTH 440* | (3) | The Body and Visual Culture |
| CANS 405* | (3) | Canadian Studies Seminar 5 |
| CLAS 308 | (3) | Gender in the Ancient World |
| COMS 310 | (3) | Media and Feminist Studies |
| COMS 400* | (3) | Critical Theory Seminar |
| COMS 411 | (3) | Disability, Technology and Communication |
| COMS 490* | (3) | Special Topics in History and Theory of Media |
| COMS 492 | (3) | Power, Difference and Justice |
| COMS 541* | (3) | Cultural Industries |
| EAST 313* | (3) | Current Topics: Korean Studies 1 |
| EAST 350 | (3) | Gender and Sexuality in Chinese Literature |
| EAST 351 | (3) | Women Writers of China |
| EAST 369 | (3) | Gender and Sexuality in Asian Media |
| EAST 370 | (3) | History of Sexuality in Japan |
| EAST 390 | (3) | The Chinese Family in History |
| EAST 453* | (3) | Topics: Chinese Literature |
| EDPC 503 | (3) | Intersectional Relationships and Sexualities |
| EDPE 515 | (3) | Gender Identity Development |
| ENGL 275 | (3) | Introduction to Cultural Studies |
| ENGL 290 | (3) | Postcolonial and World Literatures in English |
| ENGL 320 | (3) | Postcolonial Literature |
| ENGL 371* | (3) | Theatre History: 19th to 21st Centuries |
| ENGL 388* | (3) | Studies in Popular Culture |
| ENGL 413* | (3) | Special Topics in Canadian Drama and Theatre |
| ENGL 418* | (3) | A Major Modernist Writer |
| ENGL 440* | (3) | First Nations and Inuit Literature and Media |
| ENGL 443 | (3) | Contemporary Women's Fiction |
| ENGL 444 | (3) | Studies in Women Authors |
| ENGL 489* | (3) | Culture and Critical Theory 1 |
| ENGL 516* | (3) | Shakespeare |
| GEOG 331* | (3) | Urban Social Geography |
| GEOG 507* | (3) | Advanced Social Geography |
| GERM 364 | (3) | Gender and Society in German Literature and Culture |
| GSFS 200 | (3) | Feminist and Social Justice Studies |
| GSFS 250 | (3) | Sexual and Gender Diversity Studies |
| GSFS 300 | (3) | Research Inquiry in GSFS |
| GSFS 301 | (3) | Current Topics 1 |
| GSFS 302 | (3) | Current Topics 2 |
| GSFS 303 | (3) | Gender and Disability |
| GSFS 304 | (3) | Postcolonial Feminist Theories |
| GSFS 305 | (3) | Critical Race and Social Justice Theories |


| GSFS 306 | (3) | Queer Theory |
| :---: | :---: | :---: |
| GSFS 307 | (3) | Indigenous Feminisms |
| GSFS 308 | (3) | Sex and Gender Minority Cultures |
| GSFS 400 | (3) | Capstone: Engaging Fields of GSFS |
| GSFS 401 | (3) | Special Topics 1 |
| GSFS 402 | (3) | Special Topics 2 |
| GSFS 403 | (3) | Feminisms and the Law |
| GSFS 404 | (3) | Politics of Identity |
| GSFS 405 | (3) | Social Justice and Activism |
| GSFS 406 | (3) | Trans*Feminisms |
| GSFS 407 | (3) | Sexuality and Gender: New Directions |
| GSFS 450 | (3) | Independent Reading and Research |
| GSFS 499 | (3) | GSFS Internship |
| HISP 340* | (3) | Latin American Cinema |
| HISP 358 | (3) | Gender and Textualities |
| HIST 201* | (3) | Modern African History |
| HIST 323 | (3) | History and Sexuality 1 |
| HIST 343 | (3) | Women in Post-Confederation Canada |
| HIST 344 | (3) | The Chinese Family in History |
| HIST 347 | (3) | History and Sexuality 2 |
| HIST 354 | (3) | Women in Europe 1700-2000 |
| HIST 380 | (3) | The Medieval Mediterranean |
| HIST 382* | (3) | History of South Africa |
| HIST 408 | (3) | Selected Topics in Indigenous History |
| HIST 412 | (3) | Women and Gender in Modern Britain |
| HIST 420 | (3) | Gender and Sexuality in Modern China |
| HIST 424 | (3) | Gender, Sexuality and Medicine |
| HIST 429 | (3) | Topics: Gender/Feminist Histories |
| HIST 433 | (3) | British Queer History |
| HIST 525 | (3) | Women, Work and Family in Global History |
| HIST 526 | (3) | Women and War |
| HSEL 308 | (3) | Issues in Women's Health |
| HSEL 309 | (3) | Women's Reproductive Health |
| INDG 401* | (3) | Interdisciplinary Seminar in Indigenous Studies |
| ISLA 310 | (3) | Women in Islam |
| ISLA 585 | (3) | Arab Women's Literature |
| ITAL 375* | (3) | Cinema and Society in Modern Italy |
| ITAL 383 | (3) | Women's Writing since 1880 |
| ITAL 477* | (3) | Italian Cinema and Video |
| MUAR 250 | (3) | Women Making Music |
| MUAR 399 | (3) | Music and Queer Identity |
| PHIL 242 | (3) | Introduction to Feminist Theory |
| PHIL 442 | (3) | Topics in Feminist Theory |


| PHIL 446* | (3) | Current Issues in Political Philosophy |
| :---: | :---: | :---: |
| POLI 366* | (3) | Topics in Political Theory 1 |
| POLI 422* | (3) | Developing Areas/Topics 2 |
| POLI 423* | (3) | Politics of Ethno-Nationalism |
| POLI 432* | (3) | Selected Topics: Comparative Politics |
| POLI 444* | (3) | Topics in International Politics 2 |
| PSYC 436 | (3) | Human Sexuality and Its Problems |
| RELG 313* | (3) | Topics in Biblical Studies 1 |
| RELG 336* | (3) | Contemporary Theological Issues |
| RELG 338 | (3) | Women and the Christian Tradition |
| RELG 372 | (3) | Hindu Goddesses |
| RELG 399* | (3) | Christian Spirituality |
| SOCI 247 | (3) | Family and Modern Society |
| SOCI 270 | (3) | Sociology of Gender |
| SOCI 321 | (3) | Gender and Work |
| SOCI 370 | (3) | Sociology: Gender and Development |
| SOCI 386 | (3) | Contemporary Social Movements |
| SOCI 390 | (3) | Gender and Health |
| SOCI 489 | (3) | Gender, Deviance and Social Control |
| SOCI 513 | (3) | Social Aspects HIV/AIDS in Africa |
| SOCI 519 | (3) | Gender and Globalization |
| SOCI 530 | (3) | Sex and Gender |
| SOCI 535 | (3) | Sociology of the Family |

Note: Courses marked with and asterisk $\left({ }^{*}\right)$ are acceptable ONLY when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

### 3.9.16 Geography (GEOG)

### 3.9.16.1 Location

Burnside Hall, Room 305
805 Sherbrooke Street West
Montreal QC H3A 0B9
Telephone: 514-398-4951
Email: undergrad.geog@mcgill.ca
Website: mcgill.ca/geography

### 3.9.16.2 About Geography

The Department of Geography offers programs in both Arts and Science.
Refer to Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.17: Geography (GEOG) for B.Sc. programs in Geography.

Refer to Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs > section 4.11.17: Geography (GEOG) for B.A. \& Sc. programs in Geography.
The Department of Geography offers the B.A. \& Sc. interfacutly programs in Sustainability, Science and Society in partnership with the Bieler School of Environment. These programs are described in Bachelor of Arts \& Science > Undergraduate >Browse Academic Units \& Programs $>$ section 4.11.34: Sustainability, Science, and Society.

Geography is a broad, holistic discipline; both a natural and a social science because it examines people and their environment and serves as a bridge between physical and cultural processes.

Human Geography is concerned especially with the political, economic, social, and cultural processes and resource practices that create spatial patterns and define particular places.

Physical Geography integrates disciplines such as climatology, geomorphology, geology, biology, hydrology, ecology, soil science, and even marine science.
Whether considering greenhouse gas emissions, the spread of disease, or threats to biodiversity, in all cases geographers are interested in where things happen, why, and with what consequences. Our graduates go on to careers in environmental consulting, social agencies, or non-governmental organizations. Skills in Geographic Information Science (GIS) are very marketable. Students are well prepared for graduate work in social sciences, urban planning, and environmental studies at leading schools.

### 3.9.16.3 Prerequisites and Advising

There are no prerequisites for entrance to the B.A. Geography programs. Students who are interested in these programs should contact the Geography undergraduate advisor at advisor.geog@mcgill.ca.

### 3.9.16.4 Bachelor of Arts (B.A.) - Minor Concentration Geography (18 credits)

The B.A.; Minor Concentration in Geography focuses on the interactions among people, places, and the environment, and is an excellent complement to many majors. It includes coursework in methodological techniques, human, and/or physical Geography. This Minor Concentration may be expanded into the Major Concentration Geography, but not into the Major Concentration Geography (Urban Studies).

## Required (3 credits)

$$
\text { GEOG } 216 \quad \text { (3) Geography of the World Economy }
$$

## Complementary Courses (15 credits)

6 credits selected from:

| GEOG 201 | (3) | Introductory Geo-Information Science |
| :--- | :--- | :--- |
| GEOG 203 | (3) | Environmental Systems |
| GEOG 210 | (3) | Global Places and Peoples |
| GEOG 217 | (3) | Cities in the Modern World |
| GEOG 221 | (3) | Environment and Health |
| GEOG 272 | $(3)$ | Earth's Changing Surface |

9 credits from Geography (GEOG) courses at the 300 level or above.

### 3.9.16.5 Bachelor of Arts (B.A.) - Minor Concentration Geography (Urban Studies) ( 18 credits)

This interdisciplinary program introduces students in the Faculty of Arts to a range of urban dynamics and the challenges facing contemporary cities around the world. Students should observe the levels indicated by course numbers: 200-level are first year (U1); 300-level, second year (U2); 400- or 500-level, third year (U3).

## Required (3 credits)

GEOG 217 (3) Cities in the Modern World

## Complementary Courses (15 credits)

15 credits selected from the following lists. At least 9 credits must be completed at the 300 -level or above:

## Group A

6-9 credits selected from:

| GEOG 201 | $(3)$ | Introductory Geo-Information Science |
| :--- | :--- | :--- |
| GEOG 210 | $(3)$ | Global Places and Peoples |
| GEOG 216 | $(3)$ | Geography of the World Economy |
| GEOG 303 | $(3)$ | Health Geography |
| GEOG 310 | $(3)$ | Development and Livelihoods |


| GEOG 311 | $(3)$ | Economic Geography |
| :--- | :---: | :--- |
| GEOG 314 | $(3)$ | Geospatial Analysis |
| GEOG 315 | $(3)$ | Urban Transportation Geography |
| GEOG 316 | $(3)$ | Political Geography |
| GEOG 325 | $(3)$ | New Master-Planned Cities |
| GEOG 331 | $(3)$ | Urban Social Geography |
| GEOG 333 | $(3)$ | Introduction to Programming for Spatial Sciences |
| GEOG 408 | $(3)$ | Geography of Development |
| GEOG 409 | $(3)$ | Geographies of Developing Asia |
| GEOG 414 | $(3)$ | Advanced Geospatial Analysis |
| GEOG 417 | $(3)$ | Urban Geography |
| GEOG 418 | $(3)$ | Geographies of Race |
| GEOG 420 | $(3)$ | Memory, Place, and Power |

## Group B

6-9 credits selected from:

## Architecture

Although Architecture courses have prerequisites, they are waived for Urban Studies students, but courses at the 500-level may not be taken before U3.
ARCH 528
(3)
History of Housing

## Art History and Communication Studies

| ARTH 204 | (3) | Introduction to Medieval Art and Architecture |
| :--- | :--- | :--- |
| COMS 425 | (3) | Urban Culture and Everyday Life |

## Civil Engineering

CIVE 540
(3)

Urban Transportation Planning

## History

| HIST 353 | (3) | History of Montreal |
| :--- | :--- | :--- |
| HIST 397 | (3) | Canada: Ethnicity, Migration |

Management
FINE 445
(3)
Real Estate Finance

## Political Science

| POLI 318 | (3) | Comparative Local Government |
| :--- | :--- | :--- |
| POLI 321 | (3) | Issues: Canadian Public Policy |

## Quebec Studies

QCST 200
Introduction to the Study of Quebec

## Sociology

| SOCI 222 | (3) | Urban Sociology |
| :--- | :--- | :--- |
| SOCI 230 | (3) | Sociology of Ethnic Relations |
| SOCI 333 | (3) | Social Stratification |
| SOCI 366 | (3) | Neighborhoods and Inequality |
| SOCI 388 | (3) | Crime |

## Urban Planning

| URBP 201 | (3) | Planning the 21st Century City |
| :--- | :--- | :--- |
| URBP 501 | (2) | Principles and Practice 1 |
| URBP 504 | (3) | Planning for Active Transportation |
| URBP 506 | (3) | Environmental Policy and Planning |
| URBP 530 | (3) | Urban Infrastructure and Services in International Context |
| URBP 536 | (2) | Current Issues in Transportation 1 |
| URBP 537 | (2) | Current Issues in Transportation 2 |
| URBP 551 | (3) | Urban Design and Planning |
| URBP 556 | (3) | Urban Economy: A Spatial Perspective |

### 3.9.16.6 Bachelor of Arts (B.A.) - Minor Concentration GIS \& Remote Sensing (18 credits)

The Minor Concentration in GIS \& Remote Sensing program provides B.A. students with the fundamentals of geospatial tools and technologies.

## Required Courses (6 credits)

| GEOG 201 | (3) | Introductory Geo-Information Science |
| :--- | :--- | :--- |
| GEOG 314 | (3) | Geospatial Analysis |

## Complementary Courses (12 credits)

3 credits selected from:

| COMP 202 | (3) | Foundations of Programming |
| :--- | :--- | :--- |
| GEOG 333 | (3) | Introduction to Programming for Spatial Sciences |

3 credits selected from:

| ATOC 309* | (3) | Weather Radars and Satellites |
| :--- | :--- | :--- |
| GEOG 308* | (3) | Remote Sensing for Earth Observation |
| GEOG 414* | (3) | Advanced Geospatial Analysis |

6 credits selected from:

| ATOC 309* | (3) | Weather Radars and Satellites |
| :--- | :--- | :--- |
| ESYS 300 | (3) | Investigating the Earth System |
| GEOG 202 | (3) | Statistics and Spatial Analysis |
| GEOG 308* | (3) | Remote Sensing for Earth Observation |
| GEOG 384 | $(3)$ | Principles of Geospatial Web |


| GEOG 414* | (3) | Advanced Geospatial Analysis |
| :--- | :--- | :--- |
| GEOG 506 | (3) | Advanced Geographic Information Science |
| GEOG 535 | (3) | Remote Sensing and Interpretation |

* may be taken in either list of complementary courses, but credits from one group may not be doubled-counted in the other.


### 3.9.16.7 Bachelor of Arts (B.A.) - Minor Concentration Health Geography (18 credits)

There is increasing consensus around the idea that health is not just an expression of individual characteristics but an interaction between the characteristics of the individual and the environments, both physical and social, to which one is exposed over a lifetime of daily living and working. Health outcomes vary dramatically by physical and social characteristics of places both within and between countries and these provide a wedge for our understanding of the factors that might be modified to improve the health of large groups of people. The B.A.; Minor Concentration in Health Geography introduces students to both local and global health issues and provides a skill set in spatial and statistical analyses of diverse health outcomes in populations.

## Required Courses (12 credits)

| GEOG 201 | $(3)$ | Introductory Geo-Information Science |
| :--- | :--- | :--- |
| GEOG 221 | $(3)$ | Environment and Health |
| GEOG 303 | (3) | Health Geography |
| GEOG 403 | (3) | Global Health and Environmental Change |

## Complementary Courses ( 6 credits)

3 credits from:

| ENVR 200 | (3) | The Global Environment |
| :--- | :--- | :--- |
| ENVR 201 | (3) | Society, Environment and Sustainability |
| GEOG 203 | (3) | Environmental Systems |
| GEOG 210 | (3) | Global Places and Peoples |
| GEOG 217 | $(3)$ | Cities in the Modern World |

3 credits from:

| GEOG 503 | $(3)$ | Advanced Topics in Health Geography |
| :--- | :---: | :--- |
| PPHS $501^{*}$ | $(3)$ | Population Health and Epidemiology |
| PPHS $511^{*}$ | $(3)$ | Fundamentals of Global Health |
| PPHS 525*+ | (3) | Health Care Systems in Comparative Perspective |
| PPHS 529* | (3) | Global Environmental Health and Burden of Disease |
| SOCI 309 | (3) | Health and Illness |
| SOCI 365* | (3) | Health and Development |
| SOCI 525*+ | (3) |  |
| + Students can take PPHS 525 OR SOCI 525 Care Systems in Comparative Perspective |  |  |
| * These courses may have additional prerequisites or restrictions. |  |  |

### 3.9.16.8 Bachelor of Arts (B.A.) - Major Concentration Geography (37 credits)

The B.A.; Major Concentration in Geography focuses on the interactions among people, places, and the environment. It includes coursework in human and physical Geography, methodological techniques, and field.

## Required Courses (7 credits)

GEOG 201 (3) Introductory Geo-Information Science
GEOG 216
(3)
Geography of the World Economy
GEOG 290
(1)
Local Geographical Excursion

## Complementary Courses (30 credits)

## Physical Geography

3 credits from:
GEOG 203
(3)
Environmental Systems
GEOG 272
(3)
Earth's Changing Surface

## Statistics

3 credits from:
Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.

| BIOL 373 | (3) | Biometry |
| :--- | :--- | :--- |
| GEOG 202 | (3) | Statistics and Spatial Analysis |
| MATH 203 | (3) | Principles of Statistics 1 |
| PSYC 204 | (3) | Introduction to Psychological Statistics |
| SOCI 350 | (3) | Statistics in Social Research |

## Field Courses

## 3 credits from:

Note: Field course offerings are determined each year in February.

| GEOG 425 | $(3)$ | Southeast Asia Urban Field Studies |
| :--- | :--- | :--- |
| GEOG 494 | $(3)$ | Urban Field Studies |
| GEOG 495 | $(3)$ | Field Studies - Physical Geography |
| GEOG 496 | $(3)$ | Geographical Excursion |
| GEOG 499 | (3) | Subarctic Field Studies |

## Analysis and Methodology

3 credits from:

| GEOG 308 | $(3)$ | Remote Sensing for Earth Observation |
| :--- | :--- | :--- |
| GEOG 314 | $(3)$ | Geospatial Analysis |
| GEOG 333 | $(3)$ | Introduction to Programming for Spatial Sciences |
| GEOG 351 | (3) | Quantitative Methods |
| GEOG 414 | (3) | Advanced Geospatial Analysis |
| GEOG 506 | (3) | Advanced Geographic Information Science |
| GEOG 512 | (3) | Advanced Quantitative Methods in Social Field Research |

## Geography

The remaining 18 credits are to be selected from Geography (GEOG) courses excluding GEOG 200 and GEOG 205. Of these 18 credits, at least 3 credits must be at the 400 level or above.

### 3.9.16.9 Bachelor of Arts (B.A.) - Major Concentration Geography (Urban Studies) ( $\mathbf{3 6}$ credits)

This major concentration exposes students to various approaches to the study of the urban world. Urban Studies is an interdisciplinary program that introduces students in the Faculty of Arts to a range of urban dynamics and the challenges facing contemporary cities around the world, and a variety of methodological approaches. Students should observe the levels indicated by course numbers: 200-level are first year (U1); 300-level, second year (U2); 400- or 500-level, third year (U3).
For students majoring in Urban Studies, the total number of credits permitted outside Arts and Science is 30 credits. Faculty of Arts regulations about "Courses Outside the Faculties of Arts and of Science" may be found in the Arts guidelines for "Course Requirements".

## Required Courses (9 credits)

| GEOG 201 | (3) | Introductory Geo-Information Science |
| :--- | :--- | :--- |
| GEOG 217 | (3) | Cities in the Modern World |
| GEOG 351 | (3) | Quantitative Methods |

## Complementary Courses (27 credits)

## Statistics

3 credits from:
NOTE: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.

| BIOL 373 | (3) | Biometry |
| :--- | :---: | :--- |
| GEOG 202 | (3) | Statistics and Spatial Analysis |
| MATH 203 | (3) | Principles of Statistics 1 |
| PSYC 204 | (3) | Introduction to Psychological Statistics |
| SOCI 350 | (3) | Statistics in Social Research |

## Field Course

3 credits selected from:
*NOTE: Students may take either GEOG 425 or GEOG 494, but not both.
GEOG 425
(3)
Southeast Asia Urban Field Studies
GEOG 494
(3)
Urban Field Studies

## Remaining Courses

21 credits selected from the course lists below. Of these 21 credits, at least 15 credits must be at the 300 -level or above. At least 6 credits must also be taken outside of Geography.

## Geography

| GEOG 210 | $(3)$ | Global Places and Peoples |
| :--- | :--- | :--- |
| GEOG 216 | $(3)$ | Geography of the World Economy |
| GEOG 221 | $(3)$ | Environment and Health |
| GEOG 303 | $(3)$ | Health Geography |
| GEOG 310 | $(3)$ | Development and Livelihoods |
| GEOG 311 | $(3)$ | Economic Geography |
| GEOG 314 | $(3)$ | Geospatial Analysis |
| GEOG 315 | $(3)$ | Urban Transportation Geography |
| GEOG 316 | $(3)$ | Political Geography |
| GEOG 325 | $(3)$ | New Master-Planned Cities |


| GEOG 331 | $(3)$ | Urban Social Geography |
| :--- | :---: | :--- |
| GEOG 333 | $(3)$ | Introduction to Programming for Spatial Sciences |
| GEOG 408 | $(3)$ | Geography of Development |
| GEOG 409 | $(3)$ | Geographies of Developing Asia |
| GEOG 414 | $(3)$ | Advanced Geospatial Analysis |
| GEOG 417 | $(3)$ | Urban Geography |
| GEOG 418 | $(3)$ | Geographies of Race |
| GEOG 420 | $(3)$ | Memory, Place, and Power |
| GEOG 503 | $(3)$ | Advanced Topics in Health Geography |
| GEOG 504 | $(3)$ | Advanced Economic Geography |
| GEOG 507 | $(3)$ | Advanced Social Geography |
| GEOG 511 | $(3)$ | Advanced Political Geography |
| GEOG 525 | $(3)$ | Asian Cities in the 21st Century |

## Architecture

Although Architecture courses have prerequisites, they are waived for Urban Studies students, but 500-level courses may not be taken before the U3.

| ARCH 517 | (3) | Sustainable Residential Development |
| :--- | :--- | :--- |
| ARCH 528 | (3) | History of Housing |

## Art History and Communication Studies

| ARTH 204 | (3) | Introduction to Medieval Art and Architecture |
| :--- | :--- | :--- |
| COMS 425 | (3) | Urban Culture and Everyday Life |

## Civil Engineering

CIVE 540
(3)

Urban Transportation Planning

## History

| HIST 353 | (3) | History of Montreal |
| :--- | :--- | :--- |
| HIST 397 | (3) | Canada: Ethnicity, Migration |

## Management

FINE 445
(3)

Real Estate Finance

## Political Science

| POLI 318 | (3) | Comparative Local Government |
| :--- | :--- | :--- |
| POLI 321 | (3) | Issues: Canadian Public Policy |

## Quebec Studies

QCST 200
(3)

Introduction to the Study of Quebec

## Sociology

| SOCI 222 | $(3)$ | Urban Sociology |
| :--- | :--- | :--- |
| SOCI 230 | $(3)$ | Sociology of Ethnic Relations |
| SOCI 333 | (3) | Social Stratification |
| SOCI 366 | $(3)$ | Neighborhoods and Inequality |
| SOCI 388 | $(3)$ | Crime |

## Urban Planning

| URBP 201 | (3) | Planning the 21st Century City |
| :--- | :--- | :--- |
| URBP 501 | (2) | Principles and Practice 1 |
| URBP 504 | (3) | Planning for Active Transportation |
| URBP 506 | (3) | Environmental Policy and Planning |
| URBP 530 | (3) | Urban Infrastructure and Services in International Context |
| URBP 536 | (2) | Current Issues in Transportation 1 |
| URBP 537 | (2) | Current Issues in Transportation 2 |
| URBP 551 | (3) | Urban Design and Planning |
| URBP 556 | (3) | Urban Economy: A Spatial Perspective |

### 3.9.16.10 Bachelor of Arts (B.A.) - Honours Geography (61 credits)

The B.A.; Honours Geography program focuses on the interactions among people, places, and the environment. Along with additional course work, the program is distinguished by the Honours project, which entails independent, original research conducted over two semesters, normally in the final year of study, under the supervision of a department faculty member.

In addition to the Faculty of Arts requirement that Honours students maintain a minimum CGPA of 3.00, students in the Geography Honours program must maintain a program GPA of at least 3.30 to remain in the program and receive an Honours degree.

## Required Courses (19 credits)

| GEOG 201 | $(3)$ | Introductory Geo-Information Science |
| :--- | :--- | :--- |
| GEOG 216 | (3) | Geography of the World Economy |
| GEOG 290 | (1) | Local Geographical Excursion |
| GEOG 351 | (3) | Quantitative Methods |
| GEOG 381 | (3) | Geographic Thought and Practice |
| GEOG 491D1 | (3) | Honours Research |
| GEOG 491D2 | (3) | Honours Research |

## Complementary Courses (42 credits)

## Introductory Physical Geography

3 credits from:

| GEOG 203 | (3) | Environmental Systems |
| :--- | :--- | :--- |
| GEOG 272 | $(3)$ | Earth's Changing Surface |

## Statistics

## 3 credits from:

Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
BIOL 373
(3)
Biometry

| GEOG 202 | (3) | Statistics and Spatial Analysis |
| :--- | :--- | :--- |
| MATH 203 | (3) | Principles of Statistics 1 |
| PSYC 204 | (3) | Introduction to Psychological Statistics |
| SOCI 350 | (3) | Statistics in Social Research |

## Field Courses

3 credits from:
Note: Field course offerings are determined each year in February.

| GEOG 425 | (3) | Southeast Asia Urban Field Studies |
| :--- | :--- | :--- |
| GEOG 494 | (3) | Urban Field Studies |
| GEOG 495 | (3) | Field Studies - Physical Geography |
| GEOG 496 | (3) | Geographical Excursion |
| GEOG 499 | (3) | Subarctic Field Studies |

## Geography

24 credits of Geography (GEOG) courses excluding GEOG 200 and GEOG 205, selected in consultation with the Program Adviser. No more than 6 credits may be taken from 200-level courses.

## Outside Geography

9 credits at the 300 or 400 level or above of courses taught by units other than Geography selected from the humanities, social and physical sciences or engineering that have been approved by the Program Adviser as related to the student's focus within Geography.

### 3.9.16.11 Bachelor of Arts (B.A.) - Honours Urban Studies ( 60 credits)

This program exposes students to various approaches to the study of the urban world. Urban Studies is an interdisciplinary program that introduces students in the Faculty of Arts to a range of urban dynamics and the challenges facing contemporary cities around the world, and a variety of methodological approaches. Students should observe the levels indicated by course numbers: 200-level are first year (U1); 300-level, second year (U2); 400- or 500-level, third year (U3).

The Honours Urban Studies program is more concentrated and focused than the Major Concentration. In addition to the Faculty of Arts requirement that Honours students maintain a minimum CGPA of 3.00, students in the Honours Urban Studies must maintain a program GPA of at least 3.30 and complete a 6 -credit Honours thesis. Honours students are encouraged to participate in 500 -level seminars with graduate students.
For students in the Honours Urban Studies, the total number of credits permitted outside Arts and Science is 30 credits. Faculty of Arts regulations about "Courses Outside the Faculties of Arts and of Science" may be found in the Arts guidelines for "Course Requirements".

## Required Courses (18 credits)

| GEOG 201 | (3) | Introductory Geo-Information Science |
| :--- | :---: | :--- |
| GEOG 217 | (3) | Cities in the Modern World |
| GEOG 351 | (3) | Quantitative Methods |
| GEOG 381 | (3) | Geographic Thought and Practice |
| GEOG 491D1 | (3) | Honours Research |
| GEOG 491D2 | (3) | Honours Research |

## Complementary Courses (42 credits)

## Statistics

3 credits from:
Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
BIOL 373
(3)
Biometry

| GEOG 202 | (3) | Statistics and Spatial Analysis |
| :--- | :--- | :--- |
| MATH 203 | (3) | Principles of Statistics 1 |
| PSYC 204 | (3) | Introduction to Psychological Statistics |
| SOCI 350 | (3) | Statistics in Social Research |

## Field Course

3 credits from:
*NOTE: Students may take either GEOG 425 or GEOG 494, but not both.
GEOG 425
(3)
Southeast Asia Urban Field Studies
GEOG 494
(3)
Urban Field Studies

## Geography

12 credits selected from the course list below. Of these 12 credits, at least 6 credits must be at the 300 -level or above.

| GEOG 210 | (3) | Global Places and Peoples |
| :---: | :---: | :---: |
| GEOG 216 | (3) | Geography of the World Economy |
| GEOG 221 | (3) | Environment and Health |
| GEOG 303 | (3) | Health Geography |
| GEOG 310 | (3) | Development and Livelihoods |
| GEOG 311 | (3) | Economic Geography |
| GEOG 314 | (3) | Geospatial Analysis |
| GEOG 315 | (3) | Urban Transportation Geography |
| GEOG 316 | (3) | Political Geography |
| GEOG 325 | (3) | New Master-Planned Cities |
| GEOG 331 | (3) | Urban Social Geography |
| GEOG 333 | (3) | Introduction to Programming for Spatial Sciences |
| GEOG 408 | (3) | Geography of Development |
| GEOG 409 | (3) | Geographies of Developing Asia |
| GEOG 414 | (3) | Advanced Geospatial Analysis |
| GEOG 417 | (3) | Urban Geography |
| GEOG 418 | (3) | Geographies of Race |
| GEOG 420 | (3) | Memory, Place, and Power |

## Remaining Courses

18 credits selected from the course lists below. Of these 18 credits, at least 12 credits must be at the 300 -level or above. At least 6 credits must also be taken outside of Geography.

## Architecture

Although Architecture courses have prerequisites, they are waived for Urban Studies students, but the course may not be taken before the U3.
ARCH 517
(3) Sustainable Residential Development
ARCH 528
(3)
History of Housing

## Art History and Communication Studies

ARTH 204

Urban Culture and Everyday Life

## Civil Engineering

CIVE 540
(3)

Urban Transportation Planning

## Geography

GEOG 503
GEOG 504
(3)

GEOG 511

Asian Cities in the 21st Century

## History

HIST 353
HIST 397

History of Montreal
HIST 397
Canada: Ethnicity, Migration

## Management

FINE 445
Real Estate Finance

## Political Science

POLI 318

POLI 321
(3)

Comparative Local Government
Issues: Canadian Public Policy

## Quebec Studies

QCST 200
Introduction to the Study of Quebec

## Sociology

SOCI 222
SOCI 230
SOCI 333
SOCI 366
(3)
(3)

## Urban Planning

URBP 201
URBP 501
(2)

URBP 504
(3)

URBP 530
(2)

Crime
Urban Sociology
Sociology of Ethnic Relations
Social Stratification
Neighborhoods and Inequality

Planning the 21st Century City
Principles and Practice 1
Planning for Active Transportation
Environmental Policy and Planning
Urban Infrastructure and Services in International Context
Current Issues in Transportation 1

| URBP 537 | (2) | Current Issues in Transportation 2 |
| :--- | :--- | :--- |
| URBP 551 | (3) | Urban Design and Planning |
| URBP 556 | (3) | Urban Economy: A Spatial Perspective |

## Additional Courses

6 credits to be taken at the 300 -level or above. Courses may be selected from the lists above or from outside the program in consultation with the student's adviser.

### 3.9.16.12 Bachelor of Arts (B.A.) - Joint Honours Component Geography (37 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components of Geography and another Arts discipline. As with the regular Honours program, the Geography component of Joint Honours focuses on the interactions among people, places, and the environment, and requires an Honours project, which entails independent, original research conducted over two semesters, normally in the final year of study, under the supervision of a department faculty member. The requirements for Honours programs vary considerably among units, so students interested in Joint Honours should consult an adviser in each department to discuss their course selection and research project(s).
In addition to the Faculty of Arts requirement that Joint Honours students maintain a CGPA of at least 3.00, students in a Joint Honours Component Geography program must maintain a program GPA of at least 3.30 to remain in the Honours program and receive an Honours degree. In addition to meeting these Geography requirements, students must meet the requirements set forth by the other unit.

## Required Courses ( 13 credits)

| GEOG 201 | (3) | Introductory Geo-Information Science |
| :--- | :--- | :--- |
| GEOG 216 | (3) | Geography of the World Economy |
| GEOG 290 | (1) | Local Geographical Excursion |
| GEOG 351 | (3) | Quantitative Methods |
| GEOG 381 | (3) | Geographic Thought and Practice |

## Complementary Courses ( 24 credits)

## Introductory Physical Geography

3 credits from:
GEOG 203
Environmental Systems
GEOG 272
Earth's Changing Surface

## Statistics

## 3 credits from:

Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.

| BIOL 373 | (3) | Biometry |
| :--- | :---: | :--- |
| GEOG 202 | (3) | Statistics and Spatial Analysis |
| MATH 203 | (3) | Principles of Statistics 1 |
| PSYC 204 | (3) | Introduction to Psychological Statistics |
| SOCI 350 | (3) | Statistics in Social Research |

## Research

3-6 credits of research courses. Where both departments require an Honours Thesis, the student has the option of submitting the thesis to either department. If the thesis is submitted to the other department, then the student must register for GEOG 492D1/GEOG 492D2. In some cases, it is required that the thesis be jointly supervised by faculty of both departments.

| GEOG 491D1 | (3) | Honours Research |
| :--- | :--- | :--- |
| GEOG 491D2 | (3) | Honours Research |


| GEOG 492D1 | (1.5) | Joint Honours Research |
| :--- | :--- | :--- |
| GEOG 492D2 | $(1.5)$ | Joint Honours Research |

## Geography

12-15 credits from a coherent set of Geography (GEOG) courses excluding GEOG 200 and GEOG 205, approved by the Program Adviser. Including a field course is desirable. No more than 6 credits may be taken from 200-level courses.

### 3.9.16.13 Geography (GEOG) Related Programs and Study Semesters

The following programs, as well as several other opportunities for field study, are offered by the Faculty of Science. For further information, refer to mcgill.ca/mcgillabroad/students-going-abroad/plan-and-prepare/field-study-semester or the Science Internship \& Field Studies Office.

### 3.9.16.13.1 Africa Field Study Semester

The Africa program introduces students to East Africa specifically with a view to increasing their understanding of the goals, circumstances, challenges, and opportunities of people living in the areas visited. For more information, see mcgill.ca/africa.

### 3.9.16.13.2 Barbados Field Study Semester

The Barbados program is offered on McGill's Caribbean campus at the Bellairs Research Institute. Students participating in the BFSS learn about the Sustainable Development Goals (SDGs) of the United Nations, with a focus on the sustainable development of Barbados and Small Island Developing States (SIDS). For more information, see mcgill.ca/bfss.

### 3.9.16.13.3 Panama Field Study Semester

The Panama program is a joint venture between McGill University and the Smithsonian Tropical Research Institute (STRI) and addresses Latin America's social and tropical environmental issues. For more information, see mcgill.ca/pfss.

### 3.9.16.13.4 Arctic Field Study Semester

The primary mission of the McGill Arctic Field Studies is to train a future generation of northern specialists and leaders who are able to understand and address the rapidly changing polar environment in a scientifically and culturally responsible manner. For more information, see mcgill.calarctic.

### 3.9.16.13.5 Earth System Science Interdepartmental Major

This interdepartmental program is offered by the Departments of Atmospheric and Oceanic Sciences, Earth and Planetary Sciences, and Geography.
Science students interested in this program should contact the ESYS Program adviser:
William (Bill) Minarik
Telephone: 514-398-2596
Email: william.minarik@mcgill.ca
For more information, see section 11.12.11: Earth System Science (ESYS).

### 3.9.16.13.6 Sustainability, Science and Society - Bachelor of Arts and Science (B.A. \& Sc.)

The Interfaculty Program in Sustainability, Science and Society as well as the Honours in Sustainability, Science and Society is open only to students in the B.A. \& Sc. degree.

Students in the Department of Geography interested in this program should contact:
Michelle Maillet
Email: advisor.geog@mcgill.ca
For more information about these programs, see Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs $>$ section 4.11.34: Sustainability, Science, and Society.

### 3.9.17 History and Classical Studies

### 3.9.17.1 Location

Administrative Service Centre II
Stephen Leacock Building, Room 712
855 Sherbrooke Street West
Montreal QC H3A 2T7
Telephone: 514-396-1496
Fax: 514-398-7476
Email: undergrad.hcs@mcgill.ca
Websites: History: mcgill.ca/history; Classical Studies: mcgill.ca/classics

### 3.9.17.2 About History and Classical Studies 3.9.17.2.1 About History

The Department offers a wide variety of history courses on diverse cultures and societies around the world from antiquity to contemporary times, as well as covering thematic subjects such as historical theory and methodology, history and sexuality, imperialism and colonialism, histories of science, environmental history, and the history of thought and ideas. Exploring the past provides a context for understanding the present. Indeed, history is a window onto the full diversity of human experience. The study of history also encourages the development of transferable skills in research, writing, and critical thinking, and lays the foundation for careers in a variety of professions, including law, business, journalism, academia, finance, government, the arts, science, education, and medicine.

### 3.9.17.2.2 Programs in History

The Department offers four kinds of undergraduate programs:

- Minor Concentration
- Major Concentration
- Honours
- Joint Honours Component (combined with another component from a second discipline)

In all four of our programs, students are required to take a minimum number of courses at the advanced level in order to build research skills and encourage depth. Additionally, students in the major, honours, and joint honours programs are expected to achieve breadth and diversity in their studies. Please visit the Program website for more details.
Students are encouraged to meet regularly with a departmental advisor to work out a program that suits their specific needs while making sure all program requirements are fulfilled.

IMPORTANT NOTE: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for History programs, but may be considered as having met prerequisites for an upper-level course-please discuss with the professor of an upper-level course requiring the prerequisite, or with your academic program advisor.

### 3.9.17.2.3 About Classics

Classical Studies provides an in-depth study of the languages, literature, history, and culture of ancient Greece and Rome. Students may complete an undergraduate program in Classics by selecting from Classics courses (CLAS), History courses (HIST) that focus on ancient Greece or Rome, as well as courses in several related disciplines in the Faculty of Arts such as Philosophy, English, and Art History. Classical Studies is inherently interdisciplinary.

A complete list of Classics, Ancient History, and related courses is found on the Department's website.
The Department offers four kinds of undergraduate degrees:

- Minor Concentration
- Major Concentration
- Honours
- Joint Honours Component (combined with another component from a second discipline)

The Minor Concentration and Major Concentration provide a useful complement for students in the arts and sciences. The Joint Honours and Honours degrees are designed to train students who wish to make Classics a basis for academic careers. They also offer students the prospect of favourable consideration for graduate and other professional schools.

### 3.9.17.2.4 About South Asian Studies

The Minor Concentration in South Asian Studies - collaboratively offered by the Departments of Anthropology, English, History and Classical Studies, Political Science, and Sociology, as well as the Institute of Islamic Studies and the School of Religious Studies - offers breadth and depth on the history, literature, languages, politics, religions, and cultures of South Asia.
The minor concentration offers two streams:

- Culture and Civilization; and
- Languages (e.g., Persian, Sanskrit, Tibetan, and Urdu-Hindi).

The Culture and Civilization stream allows students to explore their interests in Southern Asia (India, Pakistan, Nepal, Bangladesh, Sri Lanka, Bhutan), through humanities and social science classes while the Languages stream permits combined study of two South Asian languages (at introductory and intermediate levels) or one South Asian language in depth.
For further details, please contact the advisor for the Minor Concentration in South Asian Studies, Prof. Andrea Farran (andrea.farran@mcgill.ca).

### 3.9.17.3 Bachelor of Arts (B.A.) - Minor Concentration History (18 credits)

The Minor Concentration History introduces students to the study of diverse cultures and societies around the world from antiquity to contemporary times. It is an excellent complement to the major concentrations offered in the Faculty of Arts. The Minor Concentration History is expandable to a Major Concentration History.

Students wishing to complete a history program are encouraged to consult a Program Adviser at the beginning of their first year, and to fill out a departmental program advising/audit form. For more information about the undergraduate programs in history, and for advising information and forms, visit the program's website at http://www.mcgill.ca/history/undergraduate.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for history programs.

## Complementary Courses (18 credits)

18 credits of history courses (HIST or Cognate courses - see list below), of which no more than 6 credits may be at the 100- or 200-level.
All undergraduate-level HIST courses.

## Cognate Courses

The following non-HIST courses may be counted toward the History minor program (max. 3 credits). Additional courses may be submitted for consideration to the Undergraduate Program Director. Faculty regulations stipulate that a course may not be counted toward more than one program.

| CLAS 303 | (3) | Ancient Greek Religion |
| :---: | :---: | :---: |
| CLAS 304 | (3) | Ancient Greek Democracy |
| CLAS 305 | (3) | Roman Religion |
| CLAS 345 | (3) | Study Tour: Greece |
| CLAS 406 | (3) | Greek and Roman Historiography |
| ISLA 305 | (3) | Topics in Islamic History |
| ISLA 315 | (3) | Ottoman State and Society to 1839 |
| ISLA 350 | (3) | From Tribe to Dynasty |
| ISLA 355 | (3) | Modern History of the Middle East |
| ISLA 365 | (3) | Middle East Since the 1970's |
| ISLA 410 | (3) | History: Middle-East 1798-1918 |
| ISLA 411 | (3) | History: Middle-East 1918-1945 |
| ISLA 511 | (3) | Medieval Islam, 10th-12th Century |
| ISLA 515 | (3) | The Medieval School in Islam |
| ISLA 516 | (3) | Medieval Islam, 13th-15th Century |
| JWST 240 | (3) | The Holocaust |
| JWST 245 | (3) | Jewish Life in the Islamic World |
| JWST 303 | (3) | The Soviet Jewish Experience |
| JWST 312 | (3) | Modern Jewish History |
| JWST 334 | (3) | Jews and Muslims: A Modern History |
| JWST 348 | (3) | Modern Jewish Studies |
| JWST 365 | (3) | Modern Jewish Ideologies |
| JWST 366 | (3) | History of Zionism |
| JWST 371 | (3) | Jews and the City |
| RELG 326 | (3) | Christians in the Roman World |

Notes: 200-level cognate courses count toward the 6-credit limit of 200-level courses allowed for the program.

### 3.9.17.4 Bachelor of Arts (B.A.) - Major Concentration History (36 credits)

The Major Concentration History is a highly flexible program that emphasizes both breadth and depth, while introducing students to different historical theories and methodologies. Students select from a wide variety of courses on diverse cultures and societies around the world from antiquity to contemporary times, and also on thematic subjects such history and sexuality, imperialism and colonialism, histories of science, environmental history, and the history of thought and ideas. Students design their program to match their geographic, chronological, thematic or methodological interests.

Students wishing to complete a history program should consult a Program Adviser at the beginning of their first year, and fill out a departmental program advising/audit form. For more information, visit the program's website at http://www.mcgill.ca/history/undergraduate.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the credit requirements for history programs.

## Complementary Courses ( $\mathbf{3 6}$ credits)

36 credits of HIST or cognate courses (see list below) according to the following requirements.
Distribution requirement:
-3 credits from Group A
-3 credits from Group B
-3 credits from Group C
Temporal Breadth requirement:
-At least 3 credits focused on the period before 1800
-At least 3 credits focused on the period after 1800
Notes: The same course may be used to satisfy both a Distribution and Temporal Breadth requirement. HIST 299 may not be used to satisfy Temporal Breadth requirements.
Level requirement:
-Maximum 15 credits of complementary courses at the 200-level.
-Minimum 6 credits of 400- or 500- level courses. Note: students may use at most 3 credits of HIST 498 or HIST 499 to fulfill this requirement.

## Group A:

| HIST 202 | $(3)$ | Survey: Canada to 1867 |
| :--- | :--- | :--- |
| HIST 203 | $(3)$ | Survey: Canada since 1867 |
| HIST 211 | (3) | American History to 1865 |
| HIST 212 | (3) | Medieval Europe |
| HIST 214 | (3) | Early Modern Europe |
| HIST 215 | (3) | Modern Europe |
| HIST 216 | (3) | Introduction to Russian History |
| HIST 221 | (3) | United States since 1865 |
| HIST 226 | (3) | East Central and Southeastern Europe in 20th Century |
| HIST 250 | (3) | Making Great Britain and Ireland |

## Group B:

| HIST 200 | $(3)$ | Introduction to African History |
| :--- | :---: | :--- |
| HIST 201 | $(3)$ | Modern African History |
| HIST 205 | $(3)$ | Ancient Mediterranean History |
| HIST 206 | (3) | Indian Ocean World History |
| HIST 208 | (3) | Introduction to East Asian History |
| HIST 209 | (3) | Introduction to South Asian History |
| HIST 210 | (3) | Introduction to Latin American History |
| HIST 218 | (3) | Modern East Asian History |
| HIST 275 | (3) | Ancient Roman History |

Group C:

| HIST 207 | $(3)$ | Jewish History: 400 B.C.E. to 1000 |
| :--- | :--- | :--- |
| HIST 213 | (3) | World History, 600-2000 |
| HIST 219 | (3) | Jewish History: 1000-2000 |
| HIST 222 | (3) | History of Pandemics |


| HIST 223 | $(3)$ | Indigenous Peoples and Empires |
| :--- | :--- | :--- |
| HIST 224 | $(3)$ | Introduction to the African Diaspora |
| HIST 238 | (3) | Histories of Science |
| HIST 240 | (3) | Modern History of Islamic Movements |
| HIST 249 | (3) | Health and the Healer in Western History |
| HIST 262 | (3) | Mediterranean and European Interconnections |
| HIST 292 | (3) | History and the Environment |
| HIST 298 | (3) | Topics in History |
| HIST 299 | (3) | The Historian's Craft |

## Courses offered by other units

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.

| CLAS 303 | (3) | Ancient Greek Religion |
| :---: | :---: | :---: |
| CLAS 304 | (3) | Ancient Greek Democracy |
| CLAS 305 | (3) | Roman Religion |
| CLAS 345 | (3) | Study Tour: Greece |
| CLAS 406 | (3) | Greek and Roman Historiography |
| ISLA 305 | (3) | Topics in Islamic History |
| ISLA 315 | (3) | Ottoman State and Society to 1839 |
| ISLA 350 | (3) | From Tribe to Dynasty |
| ISLA 355 | (3) | Modern History of the Middle East |
| ISLA 410 | (3) | History: Middle-East 1798-1918 |
| ISLA 411 | (3) | History: Middle-East 1918-1945 |
| ISLA 511 | (3) | Medieval Islam, 10th-12th Century |
| ISLA 516 | (3) | Medieval Islam, 13th-15th Century |
| JWST 240 | (3) | The Holocaust |
| JWST 245 | (3) | Jewish Life in the Islamic World |
| JWST 303 | (3) | The Soviet Jewish Experience |
| JWST 311 | (3) | Gender in Jewish History |
| JWST 312 | (3) | Modern Jewish History |
| JWST 334 | (3) | Jews and Muslims: A Modern History |
| JWST 348 | (3) | Modern Jewish Studies |
| JWST 365 | (3) | Modern Jewish Ideologies |
| JWST 366 | (3) | History of Zionism |
| JWST 371 | (3) | Jews and the City |

### 3.9.17.5 Bachelor of Arts (B.A.) - Honours History (54 credits)

The Honours History program provides in-depth training, with emphasis on historical methods and research, while allowing students flexibility in choosing courses that match their academic needs and interests. It is designed especially for students who anticipate pursuing graduate studies in history or related disciplines.
Students wishing to complete the Honours History program should consult a Program Adviser at the beginning of their first year to map out a course of study. They should fill out a departmental program advising/audit form. For more information, visit the program's website at http://www.mcgill.ca/history/undergraduate.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for history programs.

## Required Course (3 credits)

HIST 399 (3) History and Historiography

## Complementary Courses (51 credits)

51 credits of HIST or cognate courses (see list below) according to the following requirements.
Distribution requirement:
-3 credits from Group A
-3 credits from Group B
-3 credits from Group C
Temporal Breadth requirement:
-At least 3 credits focused on the period before 1800
-At least 3 credits focused on the period after 1800
Notes: The same course may be used to satisfy both a Distribution and Temporal Breadth requirement. HIST 299 and HIST 399 may not be used to satisfy Temporal Breadth requirements.

Level requirement:
-Minimum 6 credits of honours seminars (500-level D1/D2 courses)
-Minimum 6 additional credits of 400-level or higher HIST courses. A second honours seminar may be used to fulfill this requirement.
-Maximum 18 credits complementary courses at 200-level
GPA requirements - 3.30 in program courses, $3.0(B)$ or higher in each program course, CGPA 3.0 or higher.

## Group A:

| HIST 202 | $(3)$ | Survey: Canada to 1867 |
| :--- | :---: | :--- |
| HIST 203 | $(3)$ | Survey: Canada since 1867 |
| HIST 211 | $(3)$ | American History to 1865 |
| HIST 212 | $(3)$ | Medieval Europe |
| HIST 214 | (3) | Early Modern Europe |
| HIST 215 | (3) | Modern Europe |
| HIST 216 | (3) | Introduction to Russian History |
| HIST 221 | (3) | United States since 1865 |
| HIST 226 | (3) | East Central and Southeastern Europe in 20th Century |
| HIST 250 | (3) | Making Great Britain and Ireland |

## Group B:

| HIST 200 | $(3)$ | Introduction to African History |
| :--- | :---: | :--- |
| HIST 201 | (3) | Modern African History |
| HIST 205 | (3) | Ancient Mediterranean History |
| HIST 206 | (3) | Indian Ocean World History |
| HIST 208 | (3) | Introduction to East Asian History |
| HIST 209 | (3) | Introduction to South Asian History |
| HIST 210 | (3) | Introduction to Latin American History |
| HIST 218 | (3) | Modern East Asian History |
| HIST 275 | (3) | Ancient Roman History |

## Group C:

| HIST 207 | $(3)$ | Jewish History: 400 B.C.E. to 1000 |
| :--- | :---: | :--- |
| HIST 213 | (3) | World History, 600-2000 |
| HIST 219 | (3) | Jewish History: $1000-2000$ |
| HIST 222 | (3) | History of Pandemics |
| HIST 223 | (3) | Indigenous Peoples and Empires |
| HIST 224 | (3) | Introduction to the African Diaspora |
| HIST 238 | (3) | Histories of Science |
| HIST 240 | (3) | Modern History of Islamic Movements |
| HIST 249 | (3) | Health and the Healer in Western History |
| HIST 262 | (3) | Mediterranean and European Interconnections |
| HIST 292 | (3) | Topics in History |
| HIST 298 | (3) | The Historian's Craft |
| HIST 299 |  |  |

## Courses Offered by Other Units

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.

| CLAS 303 | (3) | Ancient Greek Religion |
| :---: | :---: | :---: |
| CLAS 304 | (3) | Ancient Greek Democracy |
| CLAS 305 | (3) | Roman Religion |
| CLAS 345 | (3) | Study Tour: Greece |
| CLAS 406 | (3) | Greek and Roman Historiography |
| ISLA 305 | (3) | Topics in Islamic History |
| ISLA 315 | (3) | Ottoman State and Society to 1839 |
| ISLA 350 | (3) | From Tribe to Dynasty |
| ISLA 355 | (3) | Modern History of the Middle East |
| ISLA 410 | (3) | History: Middle-East 1798-1918 |
| ISLA 411 | (3) | History: Middle-East 1918-1945 |
| ISLA 511 | (3) | Medieval Islam, 10th-12th Century |
| ISLA 515 | (3) | The Medieval School in Islam |
| ISLA 516 | (3) | Medieval Islam, 13th-15th Century |
| JWST 240 | (3) | The Holocaust |
| JWST 245 | (3) | Jewish Life in the Islamic World |
| JWST 303 | (3) | The Soviet Jewish Experience |
| JWST 311 | (3) | Gender in Jewish History |
| JWST 312 | (3) | Modern Jewish History |
| JWST 334 | (3) | Jews and Muslims: A Modern History |
| JWST 348 | (3) | Modern Jewish Studies |
| JWST 365 | (3) | Modern Jewish Ideologies |
| JWST 366 | (3) | History of Zionism |
| JWST 371 | (3) | Jews and the City |

## Cognate course allowance:

6 credits of non-HIST courses directly related to the student's program may be counted as complementary courses for the program with signed Program Adviser permission.

Notes: 200-level cognate courses count against the 18-credit limit of 200-level courses allowed for the program. Cognate courses may not be used to replace 400 -level or 500-level requirements. Courses listed in the complementary course list as HIST equivalent (e.g., CLAS 304) are counted as HIST courses, not as "cognate" courses.

### 3.9.17.6 Bachelor of Arts (B.A.) - Joint Honours Component History ( $\mathbf{3 6}$ credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. The Joint Honours Component History is a flexible program that emphasizes breadth, depth as well as historical methods and research.
Students wishing to complete the Joint Honours History Component should consult a Program Adviser at the beginning of their first year to map out a course of study, and fill out a departmental program advising/audit form. For more information, visit the program's website: http://www.mcgill.ca/history/undergraduate. Students must also fulfill program requirements in the second honours component and should consult an adviser in that program.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for history programs.

## Required Course (3 credits)

HIST 399
(3)
History and Historiography

## Complementary Courses ( 33 credits)

33 credits of HIST courses or cognate courses (see list below) according to the following requirements.
Distribution requirement:
-3 credits from Group A
-3 credits from Group B
-3 credits from Group C
Temporal Breadth requirement:

- At least 3 credits focused on the period before 1800
- At least 3 credits focused on the period after 1800

Notes: The same course may be used to satisfy both a Distribution and Temporal Breadth requirement. HIST 299 and HIST 399 may not be used to satisfy Temporal Breadth requirements.
Level requirement:

- Minimum 6 credits honours seminar (500-level D1/D2 courses)
- Minimum 6 additional credits 400-level or higher HIST courses. A second honours seminar may be used to fulfill this requirement.
- Maximum 18 credits complementary courses at 200-level

GPA requirements - 3.30 in program courses, $3.0(B)$ or higher in each program course, CGPA 3.0 or higher.

## Group A:

| HIST 202 | $(3)$ | Survey: Canada to 1867 |
| :--- | :--- | :--- |
| HIST 203 | $(3)$ | Survey: Canada since 1867 |
| HIST 211 | $(3)$ | American History to 1865 |
| HIST 212 | $(3)$ | Medieval Europe |
| HIST 214 | $(3)$ | Early Modern Europe |
| HIST 215 | $(3)$ | Modern Europe |
| HIST 216 | $(3)$ | Introduction to Russian History |
| HIST 221 | $(3)$ | United States since 1865 |
| HIST 226 | (3) | East Central and Southeastern Europe in 20th Century |
| HIST 250 | Making Great Britain and Ireland |  |

## Group B:

HIST 200 (3) Introduction to African History

| HIST 201 | (3) | Modern African History |
| :--- | :---: | :--- |
| HIST 205 | (3) | Ancient Mediterranean History |
| HIST 206 | (3) | Indian Ocean World History |
| HIST 208 | (3) | Introduction to East Asian History |
| HIST 209 | (3) | Introduction to South Asian History |
| HIST 210 | $(3)$ | Introduction to Latin American History |
| HIST 218 | (3) | Modern East Asian History |
| HIST 275 | (3) | Ancient Roman History |

Group C:

| HIST 207 | $(3)$ | Jewish History: 400 B.C.E. to 1000 |
| :--- | :---: | :--- |
| HIST 213 | (3) | World History, 600-2000 |
| HIST 219 | (3) | Jewish History: $1000-2000$ |
| HIST 222 | $(3)$ | History of Pandemics |
| HIST 223 | (3) | Indigenous Peoples and Empires |
| HIST 224 | (3) | Introduction to the African Diaspora |
| HIST 238 | (3) | Histories of Science |
| HIST 240 | (3) | Modern History of Islamic Movements |
| HIST 249 | (3) | Mediterranean and European Interconnections |
| HIST 262 | (3) | History and the Environment |
| HIST 292 | (3) | Topics in History |
| HIST 298 | (3) | The Historian's Craft |
| HIST 299 |  |  |

## Courses Offered by Other Units

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.

| CLAS 303 | $(3)$ | Ancient Greek Religion |
| :--- | :---: | :--- |
| CLAS 304 | $(3)$ | Ancient Greek Democracy |
| CLAS 305 | $(3)$ | Roman Religion |
| CLAS 345 | $(3)$ | Study Tour: Greece |
| CLAS 406 | $(3)$ | Greek and Roman Historiography |
| ISLA 305 | (3) | Topics in Islamic History |
| ISLA 315 | (3) | Ottoman State and Society to 1839 |
| ISLA 350 | (3) | From Tribe to Dynasty |
| ISLA 355 | (3) | Modern History of the Middle East |
| ISLA 365 | (3) | Middle East Since the 1970's |
| ISLA 410 | (3) | History: Middle-East 1918-1945 |
| ISLA 411 | (3) | Medieval Islam, 10th-12th Century |
| ISLA 511 | (3) | The Medieval School in Islam |
| ISLA 515 | (3) | Medieval Islam, 13th-15th Century |
| ISLA 516 | The Holocaust |  |


| JWST 245 | (3) | Jewish Life in the Islamic World |
| :--- | :---: | :--- |
| JWST 303 | (3) | The Soviet Jewish Experience |
| JWST 311 | (3) | Gender in Jewish History |
| JWST 312 | (3) | Modern Jewish History |
| JWST 334 | (3) | Jews and Muslims: A Modern History |
| JWST 348 | (3) | Modern Jewish Studies |
| JWST 365 | (3) | Modern Jewish Ideologies |
| JWST 366 | (3) | History of Zionism |
| JWST 371 | (3) | Jews and the City |
| RELG 326 | (3) | Christians in the Roman World |

Notes: 200-level cognate courses count against the 12-credit limit of 200-level courses allowed for the program. Cognate courses may not be used to replace 400 -level or higher requirements.

### 3.9.17.7 Bachelor of Arts (B.A.) - Minor Concentration Classics (18 credits)

The Minor Concentration in Classical Studies introduces students to the linguistic, historical and cultural dimensions of Greece and Rome. The Minor Concentration can be expanded to a Major Concentration in Classics.

## Required Course (3 credits)

CLAS 201
(3)
Greece and Rome

## Complementary Courses ( $\mathbf{1 5}$ credits)

15 credits of Classics (CLAS) or related courses according to the following stipulations:
6 credits minimum of Ancient Greek or Latin.

| CLAS 210 | $(3)$ | Introductory Latin 1 |
| :--- | :--- | :--- |
| CLAS 212 | (3) | Introductory Latin 2 |
| CLAS 215 | (6) | Intensive Introductory Latin |
| CLAS 220 | (3) | Introductory Ancient Greek 1 |
| CLAS 222 | (3) | Introductory Ancient Greek 2 |
| CLAS 225 | (6) | Intensive Introductory Ancient Greek |
| CLAS 310 | (3) | Intermediate Latin 1 |
| CLAS 312 | (3) | Intermediate Latin 2 |
| CLAS 315 | (3) | Intermediate Latin 2: Selections |
| CLAS 320 | (3) | Intermediate Ancient Greek 1 |
| CLAS 322 | (3) | Intermediate Ancient Greek 2 |
| CLAS 326 | (3) | Intermediate Ancient Greek 2: Selections |
| CLAS 410 | (3) | Advanced Latin: Authors |
| CLAS 412 | (3) | Advanced Latin: Themes |
| CLAS 419 | (3) | Advanced Latin: Post-Classical |
| CLAS 420 | (3) | Advanced Ancient Greek: Authors |
| CLAS 422 | (3) | Advanced Ancient Greek: Themes |
| CLAS 429 | (3) | Medieval Greek |

NOTE: Minimum 3 credits CLAS courses at the 400-level
NOTE: Maximum 9 credits complementary courses at the 200-level

Note: a maximum total of 6 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) may be counted toward the program.

### 3.9.17.8 Bachelor of Arts (B.A.) - Major Concentration Classics ( $\mathbf{3 6}$ credits)

The Major Concentration in Classical Studies is an in-depth study of ancient Greece and Rome. Two Streams are offered. The Classical Languages stream emphasizes ancient Greek and Latin language, requiring advanced coursework in one or both languages. The Classical Studies stream provides a broad foundation in ancient languages and Greek and Roman literature while allowing students greater flexibility to take a variety of courses in translation.

## Required Courses ( 3 credits)

CLAS 201
(3)
Greece and Rome

## Complementary Courses (33 credits)

33 credits from one of the following two streams.

## Classical Languages Stream

33 credits of classics (CLAS) or related courses according to the following stipulations:
Minimum 6 credits advanced Ancient Greek and/or Latin.

| CLAS 410 | $(3)$ | Advanced Latin: Authors |
| :--- | :--- | :--- |
| CLAS 412 | (3) | Advanced Latin: Themes |
| CLAS 419 | (3) | Advanced Latin: Post-Classical |
| CLAS 420 | $(3)$ | Advanced Ancient Greek: Authors |
| CLAS 422 | $(3)$ | Advanced Ancient Greek: Themes |
| CLAS 429 | (3) | Medieval Greek |

NOTE: Maximum 12 credits of complementary courses at the 200 level.
NOTE: 9 credits maximum of non-CLAS courses may be counted toward the program.

## Classical Studies Stream

6 credits in the following:
CLAS 301
(3)
Ancient Greek Literature and Society
CLAS 302
(3)
Roman Literature and Society

27 credits of classics (CLAS) or related courses according to the following stipulations:
Minimum 6 credits intermediate Ancient Greek and/or Latin.

| CLAS 310 | (3) | Intermediate Latin 1 |
| :--- | :--- | :--- |
| CLAS 312 | (3) | Intermediate Latin 2 |
| CLAS 315 | (3) | Intermediate Latin 2: Selections |
| CLAS 320 | (3) | Intermediate Ancient Greek 1 |
| CLAS 322 | (3) | Intermediate Ancient Greek 2 |
| CLAS 326 | (3) | Intermediate Ancient Greek 2: Selections |

NOTE: Minimum 6 credits 400-level CLAS courses.
NOTE: Maximum 12 credits of complementary courses at the 200 level.
NOTE: 9 credits maximum of non-CLAS courses may be counted toward the program.

Note: For either stream students may count a maximum total of 12 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) toward the program.

### 3.9.17.9 Bachelor of Arts (B.A.) - Honours Classics ( 54 credits)

The Honours Classics program is designed for students who plan to pursue graduate studies in Classics or related discipline. The program is highly interdisciplinary. It emphasizes the study of ancient Greek and Latin, requiring proficiency in both languages and advanced coursework in at least one, combined with a strong foundation in ancient history, literature and material cultural studies. Honours students are encouraged to begin coursework in both Greek and Latin as soon as possible, and to meet with the classics program adviser to map out their courses and program.
According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00.

## Required Courses ( $\mathbf{2 4}$ credits)

| CLAS 201 | (3) | Greece and Rome |
| :--- | :---: | :--- |
| CLAS 301 | (3) | Ancient Greek Literature and Society |
| CLAS 302 | (3) | Roman Literature and Society |
| CLAS 310 | (3) | Intermediate Latin 1 |
| CLAS 312 | (3) | Intermediate Latin 2 |
| CLAS 320 | (3) | Intermediate Ancient Greek 1 |
| CLAS 322 | $(3)$ | Intermediate Ancient Greek 2 |
| CLAS 500 | $(3)$ | Classics Seminar |

## Complementary Courses (30 credits)

30 credits classics (CLAS) or related courses according to the following stipulations:
Minimum 6 credits advanced ancient Greek and/or Latin.

| CLAS 410 | (3) | Advanced Latin: Authors |
| :--- | :--- | :--- |
| CLAS 412 | (3) | Advanced Latin: Themes |
| CLAS 419 | (3) | Advanced Latin: Post-Classical |
| CLAS 420 | (3) | Advanced Ancient Greek: Authors |
| CLAS 422 | (3) | Advanced Ancient Greek: Themes |
| CLAS 429 | (3) | Medieval Greek |

Minimum 3 credits advanced classical literature courses:

| CLAS 400 | $(3)$ | Ancient Drama and Theatre |
| :--- | :---: | :--- |
| CLAS 401 | $(3)$ | Ancient Comedy |
| CLAS 402 | $(3)$ | Hellenistic Literature and Society |
| CLAS 403 | (3) | The Greek and Roman Novel |
| CLAS 405 | (3) | The Epic Tradition |
| CLAS 406 | (3) | Greek and Roman Historiography |
| CLAS 407 | (3) | Ancient Lyric and Elegy |
| CLAS 408 | (3) | Greek and Roman Oratory |
| CLAS 409 | (3) | Ancient Didactic Poetry |
| CLAS 461 | (3) | Greco-Roman Religious Literature |

Minimum 3 credits courses in ancient history or classical civilization:
CLAS 303
(3)
Ancient Greek Religion
CLAS 304
(3)
Ancient Greek Democracy
CLAS 305
(3)
Roman Religion

| CLAS 306 | (3) | Classics in Modern Media |
| :---: | :---: | :---: |
| CLAS 308 | (3) | Gender in the Ancient World |
| CLAS 404 | (3) | Classical Tradition |
| HIST 205 | (3) | Ancient Mediterranean History |
| HIST 275 | (3) | Ancient Roman History |
| HIST 368 | (3) | Greek History: Classical Period |
| HIST 369 | (3) | Greek History: Early Greece |
| HIST 375 | (3) | Rome: Republic to Empire |
| HIST 376 | (3) | Fall of the Roman Empire |
| HIST 391 | (3) | Rise of Rome |
| HIST 400 | (3) | Ancient Greece, Rome and China |
| HIST 407 | (3) | Topics in Ancient History |
| HIST 450 | (3) | Ancient History Methods |
| HIST 469 | (3) | Alexander and Hellenistic World |
| HIST 475 | (3) | Topics: Roman History |
| PHIL 345 | (3) | Greek Political Theory |
| PHIL 350 | (3) | History and Philosophy of Ancient Science |
| PHIL 353 | (3) | The Presocratic Philosophers |
| PHIL 354 | (3) | Plato |
| PHIL 355 | (3) | Aristotle |
| PHIL 452 | (3) | Later Greek Philosophy |
| PHIL 453 | (3) | Ancient Metaphysics and Natural Philosophy |
| PHIL 454 | (3) | Ancient Moral Theory |
| RELG 210 | (3) | Jesus of Nazareth |
| RELG 311 | (3) | Formation of the New Testament |
| RELG 312 | (3) | The Gospels |
| RELG 326 | (3) | Christians in the Roman World |

Other courses may be counted towards this requirement with the approval of the program adviser.

Minimum 3 credits in classical art or archaeology:

| ARTH 209 | $(3)$ | Introduction to Ancient Art and Architecture |
| :--- | :--- | :--- |
| CLAS 240 | (3) | Introduction to Classical Archaeology |
| CLAS 345 | (3) | Study Tour: Greece |
| CLAS 348 | (3) | Topics: Classical Archaeology |
| CLAS 349 | (3) | Archaeology Fieldwork: Italy |

Other courses may be counted towards this requirement with the approval of the program adviser.
NOTE: Maximum 18 credits of complementary courses at the 200 level.

Note: a maximum total of 18 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) may be counted toward the program.

### 3.9.17.10 Bachelor of Arts (B.A.) - Joint Honours Component Classics (36 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs". The Joint Honours Component Classics emphasizes
the study of ancient Greek and Latin: proficiency in both languages is required, advanced coursework is required in at least one of the classical languages. The program is designed for students who wish to pursue graduate studies in classics or related disciplines (such as ancient History), or for graduate programs that require proficiency in ancient languages.
According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00 .

## Required Courses ( 12 credits)

| CLAS 201 | (3) | Greece and Rome |
| :--- | :--- | :--- |
| CLAS 310 | (3) | Intermediate Latin 1 |
| CLAS 320 | (3) | Intermediate Ancient Greek 1 |
| CLAS 500 | $(3)$ | Classics Seminar |

## Complementary Courses (24 credits)

24 credits of Classics (CLAS) or related courses according to the following stipulations:
Minimum 6 credits advanced Ancient Greek and/or Latin.

| CLAS 410 | (3) | Advanced Latin: Authors |
| :--- | :--- | :--- |
| CLAS 412 | (3) | Advanced Latin: Themes |
| CLAS 419 | (3) | Advanced Latin: Post-Classical |
| CLAS 420 | (3) | Advanced Ancient Greek: Authors |
| CLAS 422 | $(3)$ | Advanced Ancient Greek: Themes |
| CLAS 429 | $(3)$ | Medieval Greek |

NOTE: Maximum 15 credits complementary courses at the 200 level.
NOTE: Maximum 9 credits of non-CLAS courses.
Note: students may count a maximum total of 12 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) toward the program.

### 3.9.17.11 Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)

The B.A.: Minor Concentration in South Asian Studies offers breadth and depth on the history, literature, languages, politics, religions, cultures, and societies of South Asia. The minor concentration is divided into two streams, "Culture and Civilization" and "Languages." An interdisciplinary curriculum is collaboratively offered by the Department of Anthropology, English, History and Classical Studies, Political Science, and Sociology, the Institute of Islamic Studies, and the School of Religious Studies, and is complemented by language instruction in Persian, Sanskrit, Tibetan, and Urdu-Hindi.

## Complementary Courses (18 credits)

18 credits from one of the following streams:

## Stream 1: Culture and Civilization

Note: As course content may change according to the offering unit's yearly curriculum, all classes listed must be approved in consultation with the South Asian Studies adviser as relevant to the Minor Concentration. Students should refer to the eCalendar to confirm any prerequisites for the following courses.

## Introductory Curriculum

6 credits from the following:

| ANTH 327 | (3) | Anthropology of South Asia |
| :--- | :---: | :--- |
| ANTH 361 | (3) | Archaeology of South Asia |
| ENGL 297 | (3) | Special Topics of Literary Study |
| HIST 209 | (3) | Introduction to South Asian History |
| ISLA 330 | (3) | Islamic Mysticism: Sufism |
| POLI 322 | (3) | Political Change in South Asia |
| RELG 252 | (3) | Hinduism and Buddhism |
| RELG 254 | $(3)$ | Introduction to Yoga Traditions |

## Intermediate and Advanced Curriculum

12 credits from the following:

| ANTH 308 | (3) | Political Anthropology 01 |
| :---: | :---: | :---: |
| ANTH 510 | (3) | Advanced Problems in Anthropology of Religion |
| ENGL 336 | (3) | The 20th Century Novel 2 |
| ENGL 404 | (3) | Studies in 19th Century Literature 1 |
| ENGL 408 | (3) | The 20th Century |
| HIST 341 | (3) | Themes in South Asian History |
| HIST 435 | (3) | Topics in South Asian History |
| HIST 481 | (3) | History of Bangladesh and Pakistan |
| ISLA 305 | (3) | Topics in Islamic History |
| ISLA 420 | (3) | Indo-Islamic Civilization: Medieval |
| ISLA 421 | (3) | Islamic Culture - Indian Subcontinent |
| ISLA 489 | (3) | Special Topics 6 |
| ISLA 555 | (3) | Urdu Poetry |
| ISLA 581 | (3) | Special Topics 1 |
| POLI 423 | (3) | Politics of Ethno-Nationalism |
| POLI 435 | (3) | Identity and Inequality |
| RELG 288 | (3) | Introduction to Sikhism |
| RELG 344 | (3) | Mahayana Buddhism |
| RELG 348 | (3) | Classical Hinduism |
| RELG 350 | (3) | Bhakti Hinduism |
| RELG 353 | (3) | Gandhi: His Life and Thought |
| RELG 366 | (3) | Rivers, Religion, and Environment in South Asia |
| RELG 369 | (3) | Tibetan Buddhism |
| RELG 372 | (3) | Hindu Goddesses |
| RELG 378 | (3) | Pilgrimage, Heritage, and Tourism |
| RELG 444 | (3) | Indian Ocean Religious Networks |
| RELG 453 | (3) | Vajrayana Buddhism |
| RELG 454 | (3) | Modern Hindu Thought |
| RELG 544 | (3) | Ethnography as Method in Religious Studies |
| RELG 545 | (3) | Ramayana: Multiple Lives |
| RELG 546 | (3) | Indian Philosophy |
| RELG 547 | (3) | Special Topics in Hinduism |
| RELG 548 | (3) | Indian Buddhist Philosophy |
| RELG 551 | (3) | Special Topics in Buddhism |
| RELG 552 | (3) | Advaita Vedanta |
| RELG 556 | (3) | Issues in Buddhist Studies |
| RELG 558 | (3) | Indian Tantric Traditions |
| RELG 559 | (3) | Caste and Dalits: Historical and Political Perspectives |
| RELG 560 | (3) | Buddhist Poetry |
| SOCI 370 | (3) | Sociology: Gender and Development |

SOCI 550
(3)
Developing Societies

Additions may be made during a particular calendar year depending on the central focus of the courses, subject to adviser approval.
Maximum of 6 relevant transfer credits may be accepted from approved exchange programs subject to adviser and University approval.
Students may apply up to 6 credits in South Asian language study, with approval from the adviser.

## Stream 2: Language

Either 18 credits in one of the following languages: Persian, Sanskrit, Tibetan, or Urdu-Hindi, from the courses listed below.
Or 18 credits of combined language study from courses listed below, consisting of 6 credits of one of Persian, Sanskrit, Tibetan, or Urdu-Hindi and 12 credits of another South Asian language from the courses listed below.

Note: Students should refere to the eCalendar to confirm any prerequisites for the following courses.

## PERSIAN

| ISLA 241D1 | (3) | Introductory Persian |
| :--- | :---: | :--- |
| ISLA 241D2 | $(3)$ | Introductory Persian |
| ISLA 342D1 | (3) | Lower Intermediate Persian |
| ISLA 342D2 | (3) | Lower Intermediate Persian |
| ISLA 443D1 | $(3)$ | Upper Intermediate Persian |
| ISLA 443D2 | $(3)$ | Upper Intermediate Persian |
| ISLA 545 | $(3)$ | Advanced Persian 1 |
| ISLA 546 | $(3)$ | Advanced Persian 2 |

## SANSKRIT

| RELG 257D1 | (3) | Introductory Sanskrit |
| :--- | :--- | :--- |
| RELG 257D2 | (3) | Introductory Sanskrit |
| RELG 357D1 | (3) | Sanskrit 2 |
| RELG 357D2 | (3) | Sanskrit 2 |
| RELG 457D1 | (3) | Advanced Sanskrit |
| RELG 457D2 | (3) | Advanced Sanskrit |

TIBETAN

| RELG 264 | $(3)$ | Introductory Tibetan 1 |
| :--- | :---: | :--- |
| RELG 265 | $(3)$ | Introductory Tibetan 2 |
| RELG 364 | $(3)$ | Intermediate Tibetan 1 |
| RELG 365 | $(3)$ | Intermediate Tibetan 2 |
| RELG 464 | (3) | Advanced Tibetan 1 |
| RELG 465 | (3) | Advanced Tibetan 2 |

## URDU-HINDI

| ISLA 251D1 | (3) | Introductory Urdu-Hindi |
| :--- | :--- | :--- |
| ISLA 251D2 | (3) | Introductory Urdu-Hindi |
| ISLA 352D1 | (3) | Intermediate Urdu-Hindi |
| ISLA 352D2 | (3) | Intermediate Urdu-Hindi |
| ISLA 553 | (3) | Advanced Urdu-Hindi 1 |

Additions may be made during a particular calendar year depending on the central focus of the courses, subject to adviser approval.
Maximum of 6 relevant transfer credits may be accepted from approved exchange programs subject to adviser and University approval.

### 3.9.18 Information Studies

### 3.9.18.1 Location

School of Information Studies
3661 Peel Street
Montreal QC H3A 1X1
Telephone: 514-399-9499
Email: sis@mcgill.ca
Website: mcgill.ca/sis

### 3.9.18.2 About Information Studies

The School of Information Studies (SIS) is a dynamic teaching and research unit engaged in the education of information professionals and scholars. The School educates individuals who make a difference in the management and design of information resources, services, and systems, finding better ways to manage, organize, access, disseminate, use, and preserve information and recorded knowledge from a human-centred perspective. As the pioneer school of its kind in Canada, SIS has been offering programs at McGill since 1897, with continuous accreditation of professional programs by the American Library Association (A.L.A.) since 1929.
The School of Information Studies offers programs at the graduate level, including a Master of Information Studies, graduate certificates, and a Ph.D. in Information Studies.
Research at the School is conducted in the broad domain of human-information interaction (HII), which includes three research areas:

- human-computer interaction;
- information behaviour and services; and
- information and knowledge management.

Research projects address such topics as data mining, digital curation, information classification, information preservation, knowledge management, multisensory information, and user experience.
Information about current graduate program offerings is available in the Faculty of Arts $>$ Graduate $>$ Graduate Studies at a Glance section. For complete information about the School of Information Studies, please see the School's website at mcgill.ca/sis.

### 3.9.19 Institute for the Study of Canada

### 3.9.19.1 Location

McGill Institute for the Study of Canada
840 ave du Docteur-Penfield, room 102
Montreal QC H3A 0G2
Telephone: 514-398-8346
Email: misc.iecm@mcgill.ca
Website: mcgill.ca/misc

### 3.9.19.2 About the McGill Institute for the Study of Canada

Established in 1994 thanks to an innovative agreement between the Bronfman family and McGill University, the McGill Institute for the Study of Canada (MISC) runs an academic program at McGill University, supports an active research environment, and organizes a variety of large-scale, public events on matters of interest to Canadians, including MISC's Annual Conferences, which attract a great deal of attention from policy-makers, media, and the general public. While the Institute itself is non-partisan, MISC is no stranger to debate and controversy.
Our program focuses on different aspects of Canada and its key institutions, including the humanities, social sciences, and liberal arts. Adaptive thinking, communication, independent learning, research capacity, assertiveness, collaboration, critical thinking, problem solving, leadership and networking, and public engagement are the main learning objectives. The program has a focused, practical approach to learning, with more leadership training. The Minor Concentration enables students to take courses about Canada outside the areas of their other major or minor concentrations.
For more information, see the Institute's mcgill.ca/misc.

### 3.9.19.3 Canadian Studies

Canadian Studies provides students with a broad multidisciplinary view of the nature and development of Canada. The McGill Institute for the Study of Canada offers the following programs in Canadian Studies:

- Minor Concentration
- Major Concentration
- Honours
- Joint Honours Component

The Minor Concentration in Canadian Studies is designed to encourage bilingualism, interdisciplinarity, and critical engagement. Our graduates go on to careers in the arts, government, the media, education, law, business, social service, and the University.
The Major Concentration in Canadian Studies is an interdisciplinary program focused on in-depth multidisciplinary perspectives on Canada and its key institutions, with an emphasis on public affairs as it relates to social and cultural issues and debates in the Canadian context and the responses and actions taken or needed to be taken. The program draws on interdisciplinary perspectives incorporating research and approaches from both the humanities and the social sciences.
Students interested in pursuing Canadian Studies at the graduate level or who are interested in deepening their understanding and in doing an individual thesis project should consider the Joint Honours Component or the Honours program with a Canadian Studies component. For more information, please see mcgill.ca/misc/undergraduate/cans.

### 3.9.19.4 Indigenous Studies

The McGill Institute for the Study of Canada offers the following program in Indigenous Studies:
The Minor Concentration in Indigenous Studies provides students with a broad, interdisciplinary view of key issues in the historical, social, and cultural dimensions of Indigenous life in Canada. Core courses offered by the program will provide interdisciplinary treatments of Indigenous life, and students will choose complementary courses from among those offered in other units at McGill. Topics addressed in courses include the history of Indigenous populations in Canada, aboriginal art and culture, the experience of indigeneity and gender, and legacies of Indigenous resistance to the Canadian state. The Minor in Indigenous Studies draws on expertise and experience in Indigenous affairs located at McGill University and within the broader community. For more information, please see mcgill.ca/indigenous-studies.

### 3.9.19.5 Quebec Studies

The McGill Institute for the Study of Canada offer the following program in Quebec Studies:
The goal of the Minor in Quebec Studies and Community-Engaged Learning is to offer an interdisciplinary overview of Quebec's historical and contemporary realities, as well as a community-engaged learning experience in a Montreal organization. Students are offered the possibility of linking academic course content with hands-on experience within a Montreal-based community organization. For more information, please see mcgill.ca/qcst.

### 3.9.19.6 Bachelor of Arts (B.A.) - Minor Concentration Canadian Studies (18 credits)

This interdisciplinary program focuses on different aspects of Canada and its key institutions, with an emphasis on public affairs. The Minor Concentration enables students to take courses about Canada outside the areas of their other major or minor concentrations.

## Required Courses ( 6 credits)

| CANS 200 | (3) | Understanding Canada |
| :--- | :--- | :--- |
| CANS 420 | (3) | Shaping Public Affairs in Canada |

## Complementary Courses (12 credits)

3 credits chosen from:

| ECON 219 | $(3)$ | Current Economic Problems: Topics |
| :--- | :--- | :--- |
| ENGL 228 | $(3)$ | Canadian Literature 1 |
| ENGL 229 | $(3)$ | Canadian Literature 2 |
| FREN 252 | (3) | Littérature québécoise |
| HIST 202 | (3) | Survey: Canada to 1867 |
| HIST 203 | $(3)$ | Survey: Canada since 1867 |
| INDG 200 | (3) | Introduction to Indigenous Studies |
| POLI 221 | (3) | Government of Canada |
| POLI 222 | (3) | Political Process and Behaviour in Canada |


| QCST 200 | (3) | Introduction to the Study of Quebec |
| :---: | :---: | :---: |
| SOCI 230 | (3) | Sociology of Ethnic Relations |
| 3-9 credits in interdisciplinary Canadian Studies (CANS) courses from the following: |  |  |
| CANS 300 | (3) | Topics in Canadian Studies 1 |
| CANS 301 | (3) | Topics in Canadian Studies 2 |
| CANS 306 | (3) | Topics in Indigenous Public Affairs |
| CANS 307 | (3) | Canada in the World |
| CANS 308 | (3) | Sex and Gender in Canada |
| CANS 310 | (3) | Canadian Cultures: Context and Issues |
| CANS 311 | (3) | Topics in Canadian Public Affairs 1 |
| CANS 312 | (3) | Topics in Canadian Public Affairs 2 |
| CANS 315 | (3) | Indigenous Art and Culture |
| CANS 401 | (3) | Canadian Studies Seminar 1 |
| CANS 402 | (3) | Canadian Studies Seminar 2 |
| CANS 404 | (3) | Canadian Studies Seminar 4 |
| CANS 405 | (3) | Canadian Studies Seminar 5 |
| CANS 406 | (3) | Canadian Studies Seminar 6 |
| CANS 412 | (3) | Canada and Americas Seminar |
| CANS 413 | (3) | Canada and Quebec Seminar |
| CANS 499 | (3) | Internship - Canadian Studies |

$0-6$ credits chosen from:

| ANTH 338 | (3) | Indigenous Studies of Anthropology |
| :---: | :---: | :---: |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ECON 303 | (3) | Canadian Economic Policy |
| ECON 305 | (3) | Industrial Organization |
| ECON 308 | (3) | Governmental Policy Towards Business |
| ENGL 313 | (3) | Canadian Drama and Theatre |
| ENGL 393 | (3) | Canadian Cinema |
| FREN 315 | (3) | Cinéma québécois |
| HIST 303 | (3) | History of Quebec |
| HIST 342 | (3) | Canada and the World |
| HIST 343 | (3) | Women in Post-Confederation Canada |
| HIST 357 | (3) | Cultural Diversity in Canada |
| HIST 363 | (3) | Canada 1870-1914 |
| HIST 364 | (3) | Canada 1914-1945 |
| HIST 367 | (3) | Canada since 1945 |
| LING 325 | (3) | Canadian English |
| POLI 336 | (3) | Le Québec et le Canada |
| POLI 372 | (3) | Indigenous Peoples and the Canadian State |
| POLI 417 | (3) | Health Care in Canada |


| POLI 426 | (3) | Partis politiques et comportements électoraux au Québec |
| :--- | :--- | :--- |
| POLI 478 | (3) | The Canadian Constitution |
| QCST 300 | (3) | Quebec Culture and Society |
| SOCI 375 | (3) | Suspect Minorities in Canada |
| SOCI 475 | (3) | Canadian Ethnic Studies Seminar |

### 3.9.19.7 Bachelor of Arts (B.A.) - Major Concentration Canadian Studies (36 credits)

The Major Concentration in Canadian Studies is an interdisciplinary program focused on in-depth multidisciplinary perspectives on Canada and its key institutions, with an emphasis on public affairs as it relates to social and cultural issues and debates in the Canadian context and the responses and actions taken or needed to be taken. The program draws on interdisciplinary perspectives incorporating research and approaches from both the humanities and the social sciences.

## Required Courses (12 credits)

| CANS 200 | (3) | Understanding Canada |
| :--- | :--- | :--- |
| CANS 306 | (3) | Topics in Indigenous Public Affairs |
| CANS 420 | (3) | Shaping Public Affairs in Canada |
| QCST 200 | (3) | Introduction to the Study of Quebec |

## Complementary Courses ( 24 credits)

## 200 Level

3 credits chosen from:

| ECON 219 | $(3)$ | Current Economic Problems: Topics |
| :--- | :---: | :--- |
| ENGL 228 | (3) | Canadian Literature 1 |
| ENGL 229 | (3) | Canadian Literature 2 |
| FREN 252 | (3) | Littérature québécoise |
| HIST 202 | (3) | Survey: Canada to 1867 |
| HIST 203 | (3) | Survey: Canada since 1867 |
| INDG 200 | (3) | Introduction to Indigenous Studies |
| POLI 221 | (3) | Government of Canada |
| POLI 222 | (3) | Political Process and Behaviour in Canada |
| SOCI 230 | (3) | Sociology of Ethnic Relations |

## 300-400 Levels

9-15 credits in the interdisciplinary Canadian Studies (CANS) courses chosen from:

| CANS 300 | (3) | Topics in Canadian Studies 1 |
| :--- | :--- | :--- |
| CANS 301 | (3) | Topics in Canadian Studies 2 |
| CANS 307 | (3) | Canada in the World |
| CANS 308 | (3) | Sex and Gender in Canada |
| CANS 310 | (3) | Canadian Cultures: Context and Issues |
| CANS 311 | (3) | Topics in Canadian Public Affairs 1 |
| CANS 312 | (3) | Topics in Canadian Public Affairs 2 |
| CANS 315 | (3) | Indigenous Art and Culture |
| CANS 401 | (3) | Canadian Studies Seminar 1 |
| CANS 402 | (3) | Canadian Studies Seminar 2 |


| CANS 404 | (3) | Canadian Studies Seminar 4 |
| :---: | :---: | :---: |
| CANS 405 | (3) | Canadian Studies Seminar 5 |
| CANS 406 | (3) | Canadian Studies Seminar 6 |
| CANS 408 | (3) | Individual Reading Course |
| CANS 412 | (3) | Canada and Americas Seminar |
| CANS 413 | (3) | Canada and Quebec Seminar |
| CANS 499 | (3) | Internship - Canadian Studies |
| 6-12 credits chosen from: |  |  |
| ANTH 338 | (3) | Indigenous Studies of Anthropology |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ECON 303 | (3) | Canadian Economic Policy |
| ECON 305 | (3) | Industrial Organization |
| ECON 308 | (3) | Governmental Policy Towards Business |
| ENGL 313 | (3) | Canadian Drama and Theatre |
| ENGL 393 | (3) | Canadian Cinema |
| FREN 315 | (3) | Cinéma québécois |
| HIST 303 | (3) | History of Quebec |
| HIST 342 | (3) | Canada and the World |
| HIST 343 | (3) | Women in Post-Confederation Canada |
| HIST 357 | (3) | Cultural Diversity in Canada |
| HIST 363 | (3) | Canada 1870-1914 |
| HIST 364 | (3) | Canada 1914-1945 |
| HIST 367 | (3) | Canada since 1945 |
| LING 325 | (3) | Canadian English |
| POLI 336 | (3) | Le Québec et le Canada |
| POLI 372 | (3) | Indigenous Peoples and the Canadian State |
| POLI 417 | (3) | Health Care in Canada |
| POLI 426 | (3) | Partis politiques et comportements électoraux au Québec |
| POLI 478 | (3) | The Canadian Constitution |
| QCST 300 | (3) | Quebec Culture and Society |
| SOCI 375 | (3) | Suspect Minorities in Canada |
| SOCI 475 | (3) | Canadian Ethnic Studies Seminar |

### 3.9.19.8 Bachelor of Arts (B.A.) - Honours Canadian Studies ( $\mathbf{5 4}$ credits)

The B.A.; Honours in Canadian Studies is an interdisciplinary program focused on in-depth multidisciplinary perspectives on Canada and its key institutions, with an emphasis on public affairs as it relates to social and cultural issues and debates in the Canadian context, and the responses and actions taken or needed to be taken. The program draws on interdisciplinary perspectives incorporating research and approaches from both the humanities and the social sciences.

Students with a GPA of 3.30 in their program courses and, in keeping with Faculty regulations, a minimum CGPA of 3.00 in general, are eligible to apply to the Honours program. Application deadlines are December 15 and May 15. Forms are available on the McGill Institute for the Study of Canada (MISC) website.

Required Courses (18 credits)
CANS 200
(3)
Understanding Canada

| CANS 306 | $(3)$ | Topics in Indigenous Public Affairs |
| :--- | :--- | :--- |
| CANS 420 | (3) | Shaping Public Affairs in Canada |
| CANS 480 | (3) | Honours Thesis 1 |
| CANS 481 | (3) | Honours Thesis 2 |
| QCST 200 | (3) | Introduction to the Study of Quebec |

## Complementary Courses ( $\mathbf{3 6}$ credits)

Note: Students may not choose more than 9 credits in disciplines of their other major or minor concentrations.

## 200 Level

9 credits selected from:

| ECON 219 | (3) | Current Economic Problems: Topics |
| :--- | :---: | :--- |
| ENGL 228 | (3) | Canadian Literature 1 |
| ENGL 229 | (3) | Canadian Literature 2 |
| FREN 252 | (3) | Littérature québécoise |
| HIST 202 | (3) | Survey: Canada to 1867 |
| HIST 203 | (3) | Survey: Canada since 1867 |
| INDG 200 | (3) | Introduction to Indigenous Studies |
| POLI 221 | (3) | Government of Canada |
| POLI 222 | (3) | Political Process and Behaviour in Canada |
| SOCI 230 | (3) | Sociology of Ethnic Relations |

## 300 and 400 levels

9-15 credits in interdisciplinary Canadian Studies (CANS) courses chosen from the following list, of which at least 3 credits have to be at the 400 level.

| CANS 300 | (3) | Topics in Canadian Studies 1 |
| :---: | :---: | :---: |
| CANS 301 | (3) | Topics in Canadian Studies 2 |
| CANS 307 | (3) | Canada in the World |
| CANS 308 | (3) | Sex and Gender in Canada |
| CANS 310 | (3) | Canadian Cultures: Context and Issues |
| CANS 311 | (3) | Topics in Canadian Public Affairs 1 |
| CANS 312 | (3) | Topics in Canadian Public Affairs 2 |
| CANS 315 | (3) | Indigenous Art and Culture |
| CANS 401 | (3) | Canadian Studies Seminar 1 |
| CANS 402 | (3) | Canadian Studies Seminar 2 |
| CANS 404 | (3) | Canadian Studies Seminar 4 |
| CANS 405 | (3) | Canadian Studies Seminar 5 |
| CANS 406 | (3) | Canadian Studies Seminar 6 |
| CANS 408 | (3) | Individual Reading Course |
| CANS 412 | (3) | Canada and Americas Seminar |
| CANS 413 | (3) | Canada and Quebec Seminar |
| CANS 499 | (3) | Internship - Canadian Studies |

[^3]| ANTH 338 | (3) | Indigenous Studies of Anthropology |
| :---: | :---: | :---: |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ECON 303 | (3) | Canadian Economic Policy |
| ECON 305 | (3) | Industrial Organization |
| ECON 308 | (3) | Governmental Policy Towards Business |
| ENGL 313 | (3) | Canadian Drama and Theatre |
| ENGL 393 | (3) | Canadian Cinema |
| FREN 315 | (3) | Cinéma québécois |
| HIST 303 | (3) | History of Quebec |
| HIST 342 | (3) | Canada and the World |
| HIST 343 | (3) | Women in Post-Confederation Canada |
| HIST 357 | (3) | Cultural Diversity in Canada |
| HIST 363 | (3) | Canada 1870-1914 |
| HIST 364 | (3) | Canada 1914-1945 |
| HIST 367 | (3) | Canada since 1945 |
| LING 325 | (3) | Canadian English |
| POLI 336 | (3) | Le Québec et le Canada |
| POLI 372 | (3) | Indigenous Peoples and the Canadian State |
| POLI 417 | (3) | Health Care in Canada |
| POLI 426 | (3) | Partis politiques et comportements électoraux au Québec |
| POLI 478 | (3) | The Canadian Constitution |
| QCST 300 | (3) | Quebec Culture and Society |
| SOCI 375 | (3) | Suspect Minorities in Canada |
| SOCI 475 | (3) | Canadian Ethnic Studies Seminar |

### 3.9.19.9 Bachelor of Arts (B.A.) - Joint Honours Component Canadian Studies (36 credits)

The B.A.; Joint Honours - Canadian Studies Component is an interdisciplinary program focused on in-depth multidisciplinary perspectives on Canada and its key institutions, with an emphasis on public affairs as it related to social and cultural issues and debates in the Canadian context, and the responses and actions taken or needed to be taken.

Students who wish to study a the Honours level in two disciplines can combine Joint Honours components from any two Arts disciplines. Students with a minimum program GPA of 3.30 in their program courses and, in keeping with Faculty regulations, a minimum CGPA of 3.00 in general, are eligible to apply to the Joint Honours. Application deadlines are December 25 and May 15. Forms are available on the McGill Institute for the Study of Canada (MISC) website.

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

## Required Courses ( 15 credits)

| CANS 200 | $(3)$ | Understanding Canada |
| :--- | :--- | :--- |
| CANS 306 | $(3)$ | Topics in Indigenous Public Affairs |
| CANS 420 | (3) | Shaping Public Affairs in Canada |
| CANS 492 | (3) | Joint Honours Thesis |
| QCST 200 | (3) | Introduction to the Study of Quebec |

## Complementary Courses (21 credits)

## 200 Level

6 credits chosen from:

| ECON 219 | $(3)$ | Current Economic Problems: Topics |
| :--- | :---: | :--- |
| ENGL 228 | (3) | Canadian Literature 1 |
| ENGL 229 | (3) | Canadian Literature 2 |
| FREN 252 | (3) | Littérature québécoise |
| HIST 202 | (3) | Survey: Canada to 1867 |
| HIST 203 | (3) | Survey: Canada since 1867 |
| INDG 200 | (3) | Introduction to Indigenous Studies |
| POLI 221 | (3) | Government of Canada |
| POLI 222 | (3) | Political Process and Behaviour in Canada |
| SOCI 230 | (3) | Sociology of Ethnic Relations |

## 300 and 400 levels

9 credits in interdisciplinary Canadian Studies (CANS) courses chosen from the following list of which at least 3 credits have to be at the 400 level:

| CANS 300 | (3) | Topics in Canadian Studies 1 |
| :--- | :--- | :--- |
| CANS 301 | (3) | Topics in Canadian Studies 2 |
| CANS 307 | (3) | Canada in the World |
| CANS 308 | (3) | Sex and Gender in Canada |
| CANS 310 | $(3)$ | Canadian Cultures: Context and Issues |
| CANS 311 | (3) | Topics in Canadian Public Affairs 1 |
| CANS 312 | (3) | Topics in Canadian Public Affairs 2 |
| CANS 315 | (3) | Indigenous Art and Culture |
| CANS 401 | (3) | Canadian Studies Seminar 1 |
| CANS 402 | (3) | Canadian Studies Seminar 2 |
| CANS 404 | (3) | Canadian Studies Seminar 4 |
| CANS 405 | (3) | Canadian Studies Seminar 5 |
| CANS 406 | (3) | Canadian Studies Seminar 6 |
| CANS 408 | (3) | Individual Reading Course |
| CANS 412 | (3) | Canada and Americas Seminar |
| CANS 413 | (3) | Canada and Quebec Seminar |
| CANS 499 | (3) | Internship - Canadian Studies |

6 credits chosen from the following list:

| ANTH 338 | (3) | Indigenous Studies of Anthropology |
| :--- | :---: | :--- |
| ARTH 302 | (3) | Aspects of Canadian Art |
| ECON 303 | $(3)$ | Canadian Economic Policy |
| ECON 305 | (3) | Industrial Organization |
| ECON 308 | $(3)$ | Governmental Policy Towards Business |
| ENGL 313 | $(3)$ | Canadian Drama and Theatre |
| ENGL 393 | $(3)$ | Canadian Cinema |
| FREN 315 | (3) | Cinéma québécois |
| HIST 303 | (3) | History of Quebec |
| HIST 342 | (3) | Canada and the World |


| HIST 343 | $(3)$ | Women in Post-Confederation Canada |
| :--- | :---: | :--- |
| HIST 364 | $(3)$ | Canada 1914-1945 |
| HIST 367 | $(3)$ | Canada since 1945 |
| LING 325 | (3) | Canadian English |
| POLI 336 | (3) | Le Québec et le Canada |
| POLI 372 | (3) | Indigenous Peoples and the Canadian State |
| POLI 417 | (3) | Health Care in Canada |
| POLI 426 | (3) | Partis politiques et comportements électoraux au Québec |
| POLI 478 | (3) | The Canadian Constitution |
| QCST 300 | (3) | Quebec Culture and Society |
| SOCI 375 | (3) | Suspect Minorities in Canada |
| SOCI 475 | (3) | Canadian Ethnic Studies Seminar |

### 3.9.19.10 Bachelor of Arts (B.A.) - Minor Concentration Indigenous Studies (18 credits)

The Minor Concentration in Indigenous Studies provides students with a broad, interdisciplinary view of key issues in the historical, social and cultural dimensions of Indigenous life in Canada. Core courses offered within the program will provide interdisciplinary treatments of Indigenous life. The Program will focus on the history of indigenous populations in Canada, Aboriginal art and culture, the experience of indigeneity and gender, and legacies of Indigenous resistance to the Canadian state.

## Required Courses ( 6 credits)

| INDG 200 | (3) | Introduction to Indigenous Studies |
| :--- | :--- | :--- |
| INDG 401 | (3) | Interdisciplinary Seminar in Indigenous Studies |

## Complementary Courses (12 credits)

A maximum of 3 complementary course credits at the 200-level. A maximum of 6 credits from any given discipline with the exception of Indigenous Studies (INDG) courses.

## Anthropology

| ANTH 338 | (3) | Indigenous Studies of Anthropology |
| :--- | :--- | :--- |
| ANTH 436 | (3) | North American Native Peoples |

## Canadian Studies

| CANS 306 | $(3)$ | Topics in Indigenous Public Affairs |
| :--- | :--- | :--- |
| CANS 315 | (3) | Indigenous Art and Culture |
| English |  |  |
| ENGL 297 | (3) | Special Topics of Literary Study |
| ENGL 440 | (3) | First Nations and Inuit Literature and Media |

## Gender, Sexuality, and Feminist Studies

GSFS 307
(3)

Indigenous Feminisms

## Geography

GEOG 301
(3)

Geography of Nunavut

## History

| HIST 202 | (3) | Survey: Canada to 1867 |
| :--- | :---: | :--- |
| HIST 223 | (3) | Indigenous Peoples and Empires |
| HIST 303 | (3) | History of Quebec |
| HIST 309 | (3) | History of Latin America to 1825 |
| HIST 333 | (3) | Indigenous Peoples and French |
| HIST 361 | (3) | Topics in Canadian Regional History |
| HIST 363 | (3) | Canada 1870-1914 |
| HIST 408 | (3) | Selected Topics in Indigenous History |

## Indigenous Studies

| INDG 202 | $(3)$ |
| :--- | :--- |
| INDG 300 | $(3)$ |
| INDG 301 | $(3)$ |
| INDG 302 | $(3)$ |
| INDG 400 | $(3)$ |
| INDG 420 | (3) |
| INDG 450 |  |

Topics in Indigenous Studies 1
Topics in Indigenous Studies 2
Indigenous Contemporary Resistance
Introduction to Kanien'ké:ha
Seminar: Indigenous Studies
Indigenous Food Sovereignty
INDG 450
Rotinonhsón:ni Land-Based Pedagogy

## Interdisciplinary Field Course

IDFC 500
(3)

Indigenous Field Studies

## Law

| CMPL 500 | (3) | Indigenous Peoples and the State |
| :--- | :--- | :--- |
| CMPL 500D1 | (1.5) | Indigenous Peoples and the State |
| CMPL 500D2 | (1.5) | Indigenous Peoples and the State |

## Linguistics

LING 211
(3)

LING 411
Introduction to Indigenous Languages
Structure of an Indigenous Language

## Political Science

POLI 372
(3)

POLI 436
Indigenous Peoples and the Canadian State
Aboriginal Rights in the Canadian Constitution

### 3.9.19.11 Quebec Studies/Études sur le Québec 3.9.19.11.1 Généralités: Études sur le Québec

Le Programme études québecoises veut favoriser la recherche et la formation multidisciplinaire.
Avec l'appui des départements, la concentration Mineure en Études québecoises et apprentissage par engagement est constituée d'une suite agencée de cours ayant pour but de fournir un enseignement interdisciplinaire aussi complet que possible sur la société québécoise à l'intérieur d'un cadre canadien et international.

Sauf les cours Introduction to the Study of Quebec (QCST 200), Quebec Culture and Society (QCST 300), Histoire et culture de Montréal et du Québec en français (QCST 336), et le séminaire Contemporary Issues in Quebec (QCST 440), les cours compris dans la concentration Mineure sont sous la responsabilité des divers départements. Pour connaître la description de ces cours et, le cas échéant, les conditions d'admission, l'étudiant(e) est donc invité(e) à se reporter
aux autres sections de cette publication et, au besoin, à consulter les départements concernés, d'autant plus que tous les cours ne se donnent pas nécessairement à chaque année. Veuillez noter que les conseillers pédagogiques ou les directeurs de programmes peuvent suggérer l'inscription à un cours sans toutefois imposer ce choix. La décision finale revient à l'étudiant(e) en ce qui concerne l'inscription à un cours en autant que l'étudiant(e) répond aux conditions d'admission pour ce cours.

Le titre de chaque cours indique s'il est donné en français ou en anglais, mais les travaux et les examens peuvent toujours être rédigés dans l'une ou l'autre de ces deux langues (sauf au Département des littératures de langue française, de traduction et de création, où le français est de rigueur).

Pour de plus amples renseignements, veuillez voir mcgill.ca/qcst ou contactez
Directeur: Professeur Pascal Brissette (Département des littératures de langue française, de traduction et de création)
Bureau: Pavillon Arts, W130a
Courriel: pascal.brissette@mcgill.ca
Coordonnateur scientifique des études québécoises: Stéphan Gervais
Bureau: Pavillon Ferrier, 840 avenue du Docteur-Penfield, Ferrier 102E
Courriel: stephan.gervais@mcgill.ca Tel: 514-398-3960
Coordonateur des affaires étudiantes: David Roseman
Bureau: Pavillon Ferrier, 102G
Envoyer un courriel pour un rendez-vous david.roseman@mcgill.ca Tel: 514-398-8920

### 3.9.19.11.2 About Quebec Studies

The Quebec Studies program is intended to stimulate interdisciplinary studies and exchanges centering on Quebec society.
With departmental support, a minor concentration is offered, consisting of a coherent series of courses providing an interdisciplinary perspective on Quebec society in a Canadian and international context.

Except for the general courses Introduction to the Study of Quebec (QCST 200), Quebec Culture and Society (QCST 300), Histoire et culture de Montréal et du Québec en français (QCST 336), and the seminar Contemporary Issues in Quebec (QCST 440), courses included in the Minor Concentration are the responsibility of the various departments. To obtain a complete description of these courses and the admission requirements (where applicable), students should read the relevant sections of the eCalendar and, if necessary, consult with the departments concerned, bearing in mind that not all courses are available in any given year. Please take note that an advisor or a director of a program can recommend registration in a course without imposing this choice. The final decision belongs to the student if the student has successfully completed the course prerequisites.

The title of each course indicates whether it is given in French or English, but term papers and exams can be written in either of these two languages (except in the Département des littératures de langue française, de traduction et de création, where French is mandatory).

Further information for new and returning students is available at mcgill.ca/qcst or by contacting:
Program Director: Professor Pascal Brissette (Département des littératures de language française, de traduction et de création)
Office: Arts Building, Room 130a
Email: pascal.brissette@mcgill.ca
Scientific Coordinator: Mr. Stéphan Gervais
Office: Ferrier Building, 840 Dr Penfield Avenue, Room 102E
Email: stephan.gervais@mcgill.ca | Tel: 514-398-3960
Administrative and Student Affairs Coordinator : Mr. David Roseman
Office: Ferrier Building, Room 102G
Email: david.roseman@mcgill.ca for an advising appointment | Tel: 514-398-8920

### 3.9.19.11.3 Bachelor of Arts (B.A.) - Minor Concentration Quebec Studies \& Community-Engaged Learning/ La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire ( 18 credits)

La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire a pour but de donner à l'étudiant(e) une connaissance interdisciplinaire des réalités historiques et contemporaines du Québec en complémentarité à sa propre discipline de spécialisation tout en misant sur un apprentissage par engagement communautaire en milieu montréalais. En collaboration avec le Social Equity and Diversity Education (SEDE) Office, les étudiants ont ainsi la possibilité, grâce a un stage, de mettre en pratique le contenu d'enseignement des cours au sein d'un organisme communautaire montréalais. Enjeux liés à l'équité, à la diversité et a l'inclusion en contexte montréalais.

The goal of the Minor Concentration Quebec Studies and Community-Engaged Learning is to give students an interdisciplinary overview of Quebec historical and contemporary realities that is complementary to their degree by taking advantage of a community engagement learning approach within the Montreal community. With the collaboration of the Social Equity and Diversity Education (SEDE) Office, students have the possibility to link the academic course content with a hands-on experience within a Montreal community organization. Equity, diversity and inclusion issues within the Montreal context.

## Required Courses / Cours Obligatoires (9 credits)

De façon usuelle, les cours obligatoires ( 9 crédits) sont complétés selon la séquence suivante : QCST 200 ( 3 crédits) en U0 ou U1, QCST 300 ( 3 crédits) en U1 et QCST 440 (3 crédits) en U2 ou en U3. Les cours complémentaires ( 9 crédits) peuvent être complétés en U1, U2 ou en U3.

Normally, the required courses ( 9 credits) are completed in the following order: QCST 200 (3 credits) in U0 or U1, QCST 300 ( 3 credits) in U1 and QCST 440 (3 credits) in U2 or in U3. The complementary courses ( 9 credits) can be completed in U1, U2, or U3.

| QCST 200 | $(3)$ | Introduction to the Study of Quebec |
| :--- | :--- | :--- |
| QCST 300 | (3) | Quebec Culture and Society |
| QCST 440 | (3) | Contemporary Issues in Quebec |

## Complementary Courses / Cours Complémentaires (9 credits)

De ces 9 crédits, 6 doivent être des cours provenant du tronc commun ou des cours approuvés par la direction du programme.
3 crédits doivent provenir d'un cours dont la langue d'enseignement est le français et peuvent provenir d'un cours de français langue seconde.
Au moins 6 des 9 crédits complémentaires doivent être du niveau 300 ou supérieur.
Le choix de ces cours se fera en consultation avec le directeur du programme et variera selon le domaine de spécialisation de chaque étudiant(e).
Of these 9 credits, 6 credits must be core courses, or courses approved by the Program Director.
3 credits must be taught in the French language and can be chosen from French as a Second Language course offerings.
At least 6 of the 9 complementary credits must be at the 300 level or above.
The selection of courses will be made in consultation with the Program Director and will vary depending on the major concentration or honours program of each student.

## Core Courses / Cours inscrits au tronc commun

| FREN 252 | (3) | Littérature québécoise |
| :--- | :--- | :--- |
| POLI 226 | (3) | La vie politique québécoise |
| POLI 336 | (3) | Le Québec et le Canada |
| QCST 336 | (6) | Quebec Studies Summer Seminar |

## Anthropology / Anthropologie

ANTH 436
(3)
North American Native Peoples

## Art History and Communication Studies

COMS 510
Canadian Broadcasting Policy

## Canadian Studies / Études sur le Canada

| CANS 200 | $(3)$ | Understanding Canada |
| :--- | :--- | :--- |
| CANS 301 | (3) | Topics in Canadian Studies 2 |
| CANS 306 | (3) | Topics in Indigenous Public Affairs |
| CANS 405 | (3) | Canadian Studies Seminar 5 |

## English / Anglais

ENGL 313
(3)

Canadian Drama and Theatre

## Environment

ENVR 380
(3)

Topics in Environment 1

## French Language and Literature / Langue et littérature françaises

FREN 252
(3)

Littérature québécoise

| FREN 315 | (3) | Cinéma québécois |
| :--- | :--- | :--- |
| FREN 450 | (3) | Questions de littérature québécoise |
| FREN 595 | (3) | Séminaire avancé de recherche |

## History / Histoire

| HIST 202 | (3) | Survey: Canada to 1867 |
| :--- | :---: | :--- |
| HIST 203 | (3) | Survey: Canada since 1867 |
| HIST 223 | (3) | Indigenous Peoples and Empires |
| HIST 333 | (3) | Indigenous Peoples and French |
| HIST 335 | (3) | Science and Medicine in Canada |
| HIST 353 | (3) | History of Montreal |
| HIST 364 | (3) | Canada 1914-1945 |
| HIST 367 | (3) | Canada since 1945 |
| HIST 580D1 | (3) | European and Native-American Encounters |
| HIST 580D2 | (3) | European and Native-American Encounters |

## Political Science / Science politique

| POLI 221 | $(3)$ | Government of Canada |
| :--- | :---: | :--- |
| POLI 222 | (3) | Political Process and Behaviour in Canada |
| POLI 226 | (3) | La vie politique québécoise |
| POLI 326 | $(3)$ | Provincial Politics |
| POLI 336 | (3) | Le Québec et le Canada |
| POLI 342 | (3) | Canadian Foreign Policy |
| POLI 378 | $(3)$ | The Canadian Judicial Process |
| POLI 417 | (3) | Health Care in Canada |
| POLI 426 | (3) | Partis politiques et comportements électoraux au Québec |

## Sociology / Sociologie

| SOCI 230 | (3) | Sociology of Ethnic Relations |
| :--- | :--- | :--- |
| SOCI 475 | (3) | Canadian Ethnic Studies Seminar |

### 3.9.20 International Development

### 3.9.20.1 Location

Institute for the Study of International Development
3610 McTavish Street, 2nd Floor
Montreal QC H3A 1Y2
Telephone: 514-398-4804
Email: ids@mcgill.ca
Website: mcgill.ca/isid

Advisor: Lisa Stanischewski, lisa.stanischewski@mcgill.ca

### 3.9.20.2 About International Development

McGill's Institute for the Study of International Development (ISID) works to improve people's lives through cutting edge research, training, and communication that accelerates global sustainable development. It does this by educating successive generations of socially responsible and politically engaged students, developing intellectual capacity, and conducting leading edge research that is relevant for policymaking. Equally important, ISID is committed to connecting our teaching and research with the decision makers and principal actors tackling today's most pressing issues by supporting and engaging with NGOs, governments, community organizations, private sector actors, and civil society more broadly, working to increase our collective capacity for achieving sustainable development that will lead to economic and social improvements across the globe.

### 3.9.20.3 International Development Studies <br> 3.9.20.3.1 About International Development Studies

The International Development Studies (IDS) program is designed for those students who wish to take advantage of the resources available at McGill to pursue an interdisciplinary program of study focusing on the problems of the developing countries.

Most courses above the 200 level have prerequisites. Although these may be waived by instructors in some cases, students are urged to confirm their eligibility for courses when they prepare their programs of study. Note that certain courses (especially those in Management) may not be available owing to space limitations. Students should check the Class Schedule on Minerva for confirmation as to which term courses are offered.
Further information for new and returning students is available at mcgill.ca/isid/undergraduate.

### 3.9.20.4 Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)

The B.A.; Minor Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, and key development-related themes.

At least 9 of the 18 credits must be at the 300 level or above.
Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

## Required Courses (9 credits)

| ECON 208 | (3) | Microeconomic Analysis and Applications |
| :--- | :--- | :--- |
| ECON 313 | (3) | Economic Development 1 |
| INTD 200 | (3) | Introduction to International Development |

## Complementary Courses (9 credits)

## Thematic

9 credits from the following:

## Agriculture

AGRI 411 (3) Global Issues on Development, Food and Agriculture

## Agricultural Economics

| AGEC 430 | (3) | Agriculture, Food and Resource Policy |
| :--- | :--- | :--- |
| AGEC 442 | (3) | Economics of International Agricultural Development |

## Anthropology

| ANTH 202 | (3) | Socio-Cultural Anthropology |
| :--- | :--- | :--- |
| ANTH 206 | (3) | Environment and Culture |
| ANTH 209 | (3) | Anthropology of Religion |
| ANTH 212 | (3) | Anthropology of Development |
| ANTH 222 | (3) | Legal Anthropology |
| ANTH 227 | (3) | Medical Anthropology |


| ANTH 308 | $(3)$ | Political Anthropology 01 |
| :--- | :---: | :--- |
| ANTH 318 | (3) | Globalization and Religion |
| ANTH 322 | (3) | Social Change in Modern Africa |
| ANTH 326 | (3) | Anthropology of Latin America |
| ANTH 327 | (3) | Anthropology of South Asia |
| ANTH 338 | (3) | Indigenous Studies of Anthropology |
| ANTH 339 | (3) | Ecological Anthropology |
| ANTH 343 | (3) | Anthropology and the Animal |
| ANTH 418 | (3) | Environment and Development |
| ANTH 422 | (3) | Contemporary Latin American Culture and Society |
| ANTH 436 | (3) | North American Native Peoples |
| ANTH 500 | (3) | Chinese Diversity and Diaspora |
| ANTH 512 | (3) | Political Ecology |

## Business Administration

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BUSA 433*
* When topic is relevant to IDS.

\section*{Canadian Studies}

Indigenous Art and Culture

\section*{East Asian Studies}
EAST 211

EAST 213
Introduction: East Asian Culture: China
Introduction: East Asian Culture: Korea

\section*{Economics}

ECON 209
ECON 223
(3)

ECON 314
(3)
(3)

ECON 336
(3)

ECON 347
(3)

ECON 411
(3)

ECON 416
(3)

ECON 473
Income Distribution

\section*{English}

\section*{Geography}
\begin{tabular}{lll} 
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 221 & \((3)\) & Environment and Health \\
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 303 & \((3)\) & Health Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods \\
GEOG 325 & \((3)\) & New Master-Planned Cities \\
GEOG 403 & \((3)\) & Global Health and Environmental Change \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 425 & \((3)\) & Southeast Asia Urban Field Studies \\
GEOG 510 & \((3)\) & Humid Tropical Environments
\end{tabular}

\section*{History}

Students may count either HIST 339 or POLI 347 towards their program but not both.
\begin{tabular}{|c|c|c|}
\hline HIST 197 & (3) & FYS: Race in Latin America \\
\hline HIST 200 & (3) & Introduction to African History \\
\hline HIST 201 & (3) & Modern African History \\
\hline HIST 208 & (3) & Introduction to East Asian History \\
\hline HIST 209 & (3) & Introduction to South Asian History \\
\hline HIST 213 & (3) & World History, 600-2000 \\
\hline HIST 218 & (3) & Modern East Asian History \\
\hline HIST 223 & (3) & Indigenous Peoples and Empires \\
\hline HIST 309 & (3) & History of Latin America to 1825 \\
\hline HIST 317 & (3) & Themes in Indian Ocean World History \\
\hline HIST 333 & (3) & Indigenous Peoples and French \\
\hline HIST 338 & (3) & Twentieth-Century China \\
\hline HIST 340 & (3) & History of Modern Egypt \\
\hline HIST 341 & (3) & Themes in South Asian History \\
\hline HIST 360 & (3) & Latin America since 1825 \\
\hline HIST 361 & (3) & Topics in Canadian Regional History \\
\hline HIST 363 & (3) & Canada 1870-1914 \\
\hline HIST 366 & (3) & Themes in Latin American History \\
\hline HIST 382 & (3) & History of South Africa \\
\hline HIST 408 & (3) & Selected Topics in Indigenous History \\
\hline HIST 409 & (3) & Topics in Latin American History \\
\hline HIST 419 & (3) & Central America \\
\hline HIST 528 & (3) & Indian Ocean World Slave Trade \\
\hline
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 350 & (3) & Culture and Development \\
INTD 352 & (3) & Disasters and Development \\
INTD 354 & \((3)\) & Civil Society and Development
\end{tabular}
\begin{tabular}{lll} 
INTD 356 & \((3)\) & Quantitative Methods for Development \\
INTD 358 & \((3)\) & Ethnographic Approaches to Development \\
INTD 360 & (3) & Environmental Challenges in Development \\
INTD 397 & \((3)\) & Topics in International Development \\
INTD 398 & (3) & Topics in Conflict and Development \\
INTD 490 & (3) & Development Research Project \\
INTD 499 & (3) & Internship: International Development Studies
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 365 & \((3)\) & Middle East Since the 1970's \\
ISLA 383 & \((3)\) & Central Questions in Islamic Law \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
ISLA 421 & &
\end{tabular}

\section*{Latin American \& Caribbean Studies}
LACS 497
(3)
Research Seminar: Latin America and the Caribbean
* When topic is relevant to IDS.

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 382 & (3) & International Business \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Management, Organizational Behavior}
ORGB 380 (3) Cross Cultural Management

\section*{Management Policy}
\begin{tabular}{lll} 
MGPO 435 & (3) & The Origins of Capitalism \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MSUS 402 & (3) & Systems Thinking and Sustainability
\end{tabular}

\section*{Nutrition}
NUTR 501 (3) Nutrition in Developing Countries

\section*{Political Science}
\begin{tabular}{|c|c|c|}
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 480 & (3) & Contentious Politics \\
\hline
\end{tabular}

\section*{Religious Studies}
\begin{tabular}{lll} 
RELG 331 & (3) & Religion and Globalization \\
RELG 370 & (3) & Religion and Human Rights \\
RELG 371 & (3) & Ethics of Violence/Non-Violence \\
RELG 375 & \((3)\) & Religion, Politics and Society
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 234 & (3) & Population and Society \\
SOCI 254 & (3) & Development and Underdevelopment \\
SOCI 265 & (3) & War, States and Social Change \\
SOCI 307 & (3) & Globalization
\end{tabular}
\begin{tabular}{lcl} 
SOCI 309 & (3) & Health and Illness \\
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 513 & \((3)\) & Social Aspects HIV/AIDS in Africa \\
SOCI 519 & \((3)\) & Gender and Globalization \\
SOCI 520 & \((3)\) & Migration and Immigrant Groups \\
SOCI 550 & \((3)\) & Developing Societies \\
SOCI 555 & \((3)\) & Comparative Historical Sociology
\end{tabular}

\section*{Social Work}

SWRK 400
(3)

Policy and Practice for Refugees

\subsection*{3.9.20.5 Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)}

The B.A.; Major Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

\section*{Course Selection Guidelines for the Overall Program}
1. At least 18 of the 36 credits must be at the 300 level or above.
2. At least 9 credits must be from INTD courses.
3. Students cannot take more than 12 credits in any one discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
INTD 200 & (3) & Introduction to International Development \\
INTD 497 & (3) & Advanced Topics in International Development
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

6 credits from the following two Introductory Categories.

\section*{Culture, Populations and Development}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 202 & (3) & Socio-Cultural Anthropology \\
ANTH 212 & (3) & Anthropology of Development \\
GEOG 210 & (3) & Global Places and Peoples \\
INTD 350 & (3) & Culture and Development
\end{tabular}

\section*{Politics, Society and Development}

3 credits from the following:
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 243 & (3) & International Politics of Economic Relations
\end{tabular}
\begin{tabular}{lll} 
POLI 244 & (3) & International Politics: State Behaviour \\
SOCI 254 & (3) & Development and Underdevelopment
\end{tabular}

\section*{Thematic}

12-15 credits from the following:

\section*{Agriculture}

Global Issues on Development, Food and Agriculture

\section*{Agricultural Economics}
AGEC 430

Agriculture, Food and Resource Policy
AGEC 442
Economics of International Agricultural Development

Anthropology
\begin{tabular}{|c|c|c|}
\hline ANTH 206 & (3) & Environment and Culture \\
\hline ANTH 209 & (3) & Anthropology of Religion \\
\hline ANTH 222 & (3) & Legal Anthropology \\
\hline ANTH 227 & (3) & Medical Anthropology \\
\hline ANTH 308 & (3) & Political Anthropology 01 \\
\hline ANTH 318 & (3) & Globalization and Religion \\
\hline ANTH 322 & (3) & Social Change in Modern Africa \\
\hline ANTH 326 & (3) & Anthropology of Latin America \\
\hline ANTH 327 & (3) & Anthropology of South Asia \\
\hline ANTH 338 & (3) & Indigenous Studies of Anthropology \\
\hline ANTH 339 & (3) & Ecological Anthropology \\
\hline ANTH 343 & (3) & Anthropology and the Animal \\
\hline ANTH 418 & (3) & Environment and Development \\
\hline ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
\hline ANTH 436 & (3) & North American Native Peoples \\
\hline ANTH 500 & (3) & Chinese Diversity and Diaspora \\
\hline ANTH 512 & (3) & Political Ecology \\
\hline
\end{tabular}

\section*{Business Administration}

BUSA 433*
(3)

Topics in International Business 1
* When topic is relevant to IDS.

\section*{Canadian Studies}
CANS 315
Indigenous Art and Culture

\section*{East Asian Studies}

EAST 211
(3)

EAST 213

Introduction: East Asian Culture: China
Introduction: East Asian Culture: Korea

\section*{Economics}
\begin{tabular}{lll} 
ECON 205 & \((3)\) & An Introduction to Political Economy \\
ECON 209 & \((3)\) & Macroeconomic Analysis and Applications \\
ECON 223 & \((3)\) & Political Economy of Trade Policy \\
ECON 314 & \((3)\) & Economic Development 2 \\
ECON 326 & \((3)\) & Ecological Economics \\
ECON 336 & \((3)\) & The Chinese Economy \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ECON 411 & \((3)\) & Economic Development: A World Area \\
ECON 416 & \((3)\) & Topics in Economic Development 2 \\
ECON 473 & \((3)\) & Income Distribution
\end{tabular}

\section*{English}

ENGL 440
First Nations and Inuit Literature and Media

\section*{Geography}

GEOG 216
GEOG 221
GEOG 302

(3)

GEOG 303
GEOG 310
GEOG 325
GEOG 403
GEOG 408
GEOG 410
GEOG 425
GEOG 510
Humid Tropical Environments

\section*{History}
\begin{tabular}{|c|c|c|}
\hline HIST 197 & (3) & FYS: Race in Latin America \\
\hline HIST 200 & (3) & Introduction to African History \\
\hline HIST 201 & (3) & Modern African History \\
\hline HIST 208 & (3) & Introduction to East Asian History \\
\hline HIST 209 & (3) & Introduction to South Asian History \\
\hline HIST 213 & (3) & World History, 600-2000 \\
\hline HIST 218 & (3) & Modern East Asian History \\
\hline HIST 223 & (3) & Indigenous Peoples and Empires \\
\hline HIST 309 & (3) & History of Latin America to 1825 \\
\hline HIST 317 & (3) & Themes in Indian Ocean World History \\
\hline HIST 333 & (3) & Indigenous Peoples and French \\
\hline HIST 338 & (3) & Twentieth-Century China \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
HIST 340 & \((3)\) & History of Modern Egypt \\
HIST 341 & (3) & Themes in South Asian History \\
HIST 360 & (3) & Latin America since 1825 \\
HIST 361 & (3) & Topics in Canadian Regional History \\
HIST 363 & (3) & Canada 1870-1914 \\
HIST 366 & (3) & Themes in Latin American History \\
HIST 382 & (3) & History of South Africa \\
HIST 408 & (3) & Selected Topics in Indigenous History \\
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 528 & Indian Ocean World Slave Trade
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 350 & \((3)\) & Culture and Development \\
INTD 352 & (3) & Disasters and Development \\
INTD 354 & (3) & Civil Society and Development \\
INTD 360 & \((3)\) & Environmental Challenges in Development \\
INTD 397 & \((3)\) & Topics in International Development \\
INTD 398 & \((3)\) & Topics in Conflict and Development \\
INTD 490 & (3) & Development Research Project \\
INTD 499 & \((3)\) & Internship: International Development Studies
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 355 & (3) & Modern History of the Middle East \\
ISLA 360 & (3) & Islam and Politics \\
ISLA 365 & (3) & Middle East Since the 1970's \\
ISLA 383 & (3) & Central Questions in Islamic Law \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
ISLA 421 & Islamic Culture - Indian Subcontinent
\end{tabular}

\section*{Latin American \& Caribbean Studies}

LACS 497*
Research Seminar: Latin America and the Caribbean
* When topic is relevant to IDS.

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 382 & (3) & International Business \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Management, Organizational Behavior}

ORGB 380
Cross Cultural Management

\section*{Management Policy}
\begin{tabular}{lll} 
MGPO 435 & \((3)\) & The Origins of Capitalism \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MSUS 402 & (3) & Systems Thinking and Sustainability
\end{tabular}

\section*{Nutrition}
NUTR 501
(3)
Nutrition in Developing Countries

\section*{Political Science}
\begin{tabular}{|c|c|c|}
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 422 & (3) & Developing Areas/Topics 2 \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline
\end{tabular}

Contentious Politics

\section*{Religious Studies}
\begin{tabular}{lll} 
RELG 331 & (3) & Religion and Globalization \\
RELG 370 & (3) & Religion and Human Rights \\
RELG 371 & (3) & Ethics of Violence/Non-Violence \\
RELG 375 & (3) & Religion, Politics and Society
\end{tabular}

\section*{Sociology}

SOCI 234
(3)

SOCI 265
(3)

SOCI 307
(3)

SOCI 309
(3)

SOCI 365
(3)

SOCI 370
SOCI 446
(3)

SOCI 513
SOCI 519
(3)

SOCI 520
(3)

SOCI 555
Population and Society
War, States and Social Change
Globalization
Health and Illness
Health and Development
Sociology: Gender and Development
Colonialism and Society
Social Aspects HIV/AIDS in Africa
Gender and Globalization
Migration and Immigrant Groups
Developing Societies
Comparative Historical Sociology

\section*{Social Work}

SWRK 400
(3)

Policy and Practice for Refugees

\section*{Methods}

3-6 credits from the following: *

\section*{Anthropology}

\section*{ANTH 358}
(3)

The Process of Anthropological Research

\section*{Economics}
\begin{tabular}{lll} 
ECON 227D1 & (3) & Economic Statistics \\
ECON 227D2 & (3) & Economic Statistics
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 356 & (3) & Quantitative Methods for Development \\
INTD 358 & (3) & Ethnographic Approaches to Development
\end{tabular}

\section*{Political Science}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 350 & (3) & Statistics in Social Research \\
SOCI 461 & (3) & Quantitative Data Analysis \\
SOCI 477 & (3) & Qualitative Methods in Sociology
\end{tabular}

\footnotetext{
* When selecting their Methods courses, students must consult with the IDS Adviser. They must also consult with the most recent Faculty of Arts policy on course overlap: https://www.mcgill.ca/study/faculties/arts/undergraduate/ug_arts_course_reqs
}

\subsection*{3.9.20.6 Bachelor of Arts (B.A.) - Honours International Development Studies (57 credits)}

The B.A.; Honours in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

Honours students must maintain a CGPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Course Selection Guidelines for the Overall Program}
1. At least 30 of the 57 credits must be at the 300 level or above; 9 credits of these must be at the 400 level or above.
2. At least 12 credits must be from INTD courses.
3. Students cannot take more than 18 credits in any discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
INTD 200 & (3) & Introduction to International Development \\
INTD 498 & (3) & Honours Seminar in International Development
\end{tabular}

\section*{Complementary Courses (45 credits)}

6 credits from the following two Introductory Categories.

\section*{Culture, Populations and Development}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 202 & (3) & Socio-Cultural Anthropology \\
ANTH 212 & (3) & Anthropology of Development \\
GEOG 210 & (3) & Global Places and Peoples \\
INTD 350 & (3) & Culture and Development
\end{tabular}

\section*{Politics, Society and Development}

3 credits from the following:
\begin{tabular}{lll} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 243 & (3) & International Politics of Economic Relations \\
POLI 244 & (3) & International Politics: State Behaviour \\
SOCI 254 & \((3)\) & Development and Underdevelopment
\end{tabular}

\section*{Thematic}

30-33 credits from the following:

\section*{Agriculture}
(3)

Global Issues on Development, Food and Agriculture

\section*{Agricultural Economics}
\begin{tabular}{lll} 
AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
AGEC 442 & (3) & Economics of International Agricultural Development
\end{tabular}

Anthropology
\begin{tabular}{lll} 
ANTH 206 & (3) & Environment and Culture \\
ANTH 209 & (3) & Anthropology of Religion \\
ANTH 222 & (3) & Legal Anthropology \\
ANTH 227 & (3) & Medical Anthropology \\
ANTH 308 & (3) & Political Anthropology 01 \\
ANTH 318 & (3) & Globalization and Religion \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 338 & (3) & Indigenous Studies of Anthropology \\
ANTH 339 & (3) & Ecological Anthropology \\
ANTH 343 & (3) & Anthropology and the Animal \\
ANTH 418 & (3) & Convironment and Development \\
ANTH 422 & (3) & North American Native Peoples \\
ANTH 436 & (3) & (3)
\end{tabular}

\section*{Business Administration}
BUSA 433*

Topics in International Business 1
* When topic is relevant to IDS.

\section*{Canadian Studies}

CANS 315
(3)

Indigenous Art and Culture

\section*{East Asian Studies}

EAST 211
EAST 213
Introduction: East Asian Culture: China
Introduction: East Asian Culture: Korea

\section*{Economics}

ECON 205
ECON 209
ECON 223

An Introduction to Political Economy
Macroeconomic Analysis and Applications
Political Economy of Trade Policy

ECON 314
ECON 326
ECON 336
ECON 347
ECON 411
ECON 416
ECON 473
(3)
(3)

\section*{English}

ENGL 440
(3)

Geography
GEOG 216
(3)

GEOG 221
(3)
(3)
(3)
(3)

GEOG 403

GEOG 410

GEOG 510

\section*{History}
\begin{tabular}{|c|c|c|}
\hline HIST 197 & (3) & FYS: Race in Latin America \\
\hline HIST 200 & (3) & Introduction to African History \\
\hline HIST 201 & (3) & Modern African History \\
\hline HIST 208 & (3) & Introduction to East Asian History \\
\hline HIST 209 & (3) & Introduction to South Asian History \\
\hline HIST 213 & (3) & World History, 600-2000 \\
\hline HIST 218 & (3) & Modern East Asian History \\
\hline HIST 223 & (3) & Indigenous Peoples and Empires \\
\hline HIST 309 & (3) & History of Latin America to 1825 \\
\hline HIST 317 & (3) & Themes in Indian Ocean World History \\
\hline HIST 333 & (3) & Indigenous Peoples and French \\
\hline HIST 338 & (3) & Twentieth-Century China \\
\hline HIST 340 & (3) & History of Modern Egypt \\
\hline HIST 341 & (3) & Themes in South Asian History \\
\hline HIST 360 & (3) & Latin America since 1825 \\
\hline HIST 361 & (3) & Topics in Canadian Regional History \\
\hline HIST 363 & (3) & Canada 1870-1914 \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
HIST 366 & (3) & Themes in Latin American History \\
HIST 382 & (3) & History of South Africa \\
HIST 408 & (3) & Selected Topics in Indigenous History \\
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 528 & (3) & Indian Ocean World Slave Trade
\end{tabular}

\section*{International Development Studies}
INTD 350
INTD 352
INTD 354
INTD 360
(3) Culture and Development 1 Disasters and Development

\section*{Islamic Studies}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 365 & \((3)\) & Middle East Since the 1970's \\
ISLA 383 & \((3)\) & Central Questions in Islamic Law \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & (3) & Mslamic Culture - Indian Subcontinent
\end{tabular}

\section*{Latin American \& Caribbean Studies}

LACS 497
(3)

Research Seminar: Latin America and the Caribbean
* When topic is relevant to IDS

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 382 & (3) & International Business \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Management, Organizational Behavior}

ORGB 380
Cross Cultural Management

\section*{Management Policy}
\begin{tabular}{lll} 
MGPO 435 & \((3)\) & The Origins of Capitalism \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MSUS 402 & (3) & Systems Thinking and Sustainability
\end{tabular}

\section*{Nutrition}
NUTR 501
(3)
Nutrition in Developing Countries

\section*{Political Science}
\begin{tabular}{|c|c|c|}
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 422 & (3) & Developing Areas/Topics 2 \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline
\end{tabular}

Contentious Politics

\section*{Religious Studies}
\begin{tabular}{lll} 
RELG 331 & (3) & Religion and Globalization \\
RELG 370 & (3) & Religion and Human Rights \\
RELG 371 & (3) & Ethics of Violence/Non-Violence \\
RELG 375 & (3) & Religion, Politics and Society
\end{tabular}

\section*{Sociology}

SOCI 234
(3)

SOCI 265
(3)

SOCI 307
(3)

SOCI 309
(3)
(3)

SOCI 370
(3)

SOCI 513
(3)

SOCI 519
(3)

SOCI 520
(3)

SOCI 555
Population and Society
War, States and Social Change
Globalization
Health and Illness
Health and Development
Sociology: Gender and Development
Colonialism and Society
Social Aspects HIV/AIDS in Africa
Gender and Globalization
Migration and Immigrant Groups
Developing Societies
Comparative Historical Sociology

\section*{Social Work}

SWRK 400
(3)

Policy and Practice for Refugees

\section*{Methods}

6-9 credits from the following: *

\section*{Anthropology}
ANTH 358
(3)
The Process of Anthropological Research

\section*{Economics}
\begin{tabular}{lll} 
ECON 227D1 & (3) & Economic Statistics \\
ECON 227D2 & (3) & Economic Statistics
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 356 & (3) & Quantitative Methods for Development \\
INTD 358 & (3) & Ethnographic Approaches to Development
\end{tabular}

\section*{Political Science}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 350 & (3) & Statistics in Social Research \\
SOCI 461 & (3) & Quantitative Data Analysis \\
SOCI 477 & (3) & Qualitative Methods in Sociology
\end{tabular}
* When selecting their Methods courses, students must consult with the IDS Adviser. They must also consult with the most recent Faculty of Arts policy on course overlap: https://www.mcgill.ca/study//faculties/arts/undergraduate/ug_arts_course_reqs

\subsection*{3.9.20.7 Bachelor of Arts (B.A.) - Joint Honours Component International Development Studies ( \(\mathbf{3 6}\) credits)}

The B.A.; Joint Honours - International Development Studies component focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary Honours thesis (if applicable).
Honours students must maintain a CGPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Course Selection Guidelines for the Overall Program}
1. At least 18 of the 36 credits must be at the 300 level or above. Nine credits must be at the 400 level or above.
2. At least 12 credits must be from INTD courses.
3. Students cannot take more than 12 credits in any one discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

NOTE: Students in the Econ-IDS Joint Honours program are required to take ECON 257D1/D2 and therefore cannot also take ECON 227 as part of their IDS program requirements.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
INTD 200 & (3) & Introduction to International Development \\
INTD 498 & (3) & Honours Seminar in International Development
\end{tabular}

\section*{Complementary Courses (24 credits)}

6 credits from the following two Introductory Categories.

\section*{Culture, Populations and Development}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 202 & (3) & Socio-Cultural Anthropology \\
ANTH 212 & (3) & Anthropology of Development \\
GEOG 210 & (3) & Global Places and Peoples \\
INTD 350 & (3) & Culture and Development
\end{tabular}

\section*{Politics, Society and Development}

3 credits from the following:
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 243 & (3) & International Politics of Economic Relations \\
POLI 244 & \((3)\) & International Politics: State Behaviour
\end{tabular}

\section*{Thematic (12 credits)}

12 credits from the following:

\section*{Agriculture}

AGRI 411
(3)

Global Issues on Development, Food and Agriculture

\section*{Agricultural Economics}
\begin{tabular}{lll} 
AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
AGEC 442 & (3) & Economics of International Agricultural Development
\end{tabular}

Anthropology
\begin{tabular}{lll} 
ANTH 206 & \((3)\) & Environment and Culture \\
ANTH 209 & \((3)\) & Anthropology of Religion \\
ANTH 222 & \((3)\) & Legal Anthropology \\
ANTH 227 & \((3)\) & Medical Anthropology \\
ANTH 308 & (3) & Political Anthropology 01 \\
ANTH 318 & (3) & Globalization and Religion \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 338 & (3) & Ecological Anthropology \\
ANTH 339 & (3) & Anthropology and the Animal \\
ANTH 343 & (3) & Environment and Development \\
ANTH 418 & (3) & Contemporary Latin American Culture and Society \\
ANTH 422 & (3) & North American Native Peoples \\
ANTH 436 & (3) & Chinese Diversity and Diaspora \\
ANTH 500 & (3) & Political Ecology \\
ANTH 512 &
\end{tabular}

\section*{Business Administration}

BUSA 433*
Topics in International Business 1
* When topic is relevant to IDS.

\section*{Canadian Studies}

CANS 315
Indigenous Art and Culture

\section*{East Asian Studies}

EAST 211
(3)

Introduction: East Asian Culture: China
Introduction: East Asian Culture: Korea

\section*{Economics}
\begin{tabular}{lll} 
ECON 205 & \((3)\) & An Introduction to Political Economy \\
ECON 209 & \((3)\) & Macroeconomic Analysis and Applications \\
ECON 223 & \((3)\) & Political Economy of Trade Policy \\
ECON 314 & \((3)\) & Economic Development 2 \\
ECON 326 & \((3)\) & Ecological Economics \\
ECON 336 & \((3)\) & The Chinese Economy \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ECON 411 & \((3)\) & Economic Development: A World Area \\
ECON 416 & \((3)\) & Topics in Economic Development 2 \\
ECON 473 & \((3)\) & Income Distribution
\end{tabular}

\section*{English}

ENGL 440
First Nations and Inuit Literature and Media

\section*{Geography}

GEOG 216
GEOG 221
GEOG 302

(3)

GEOG 303
GEOG 310
GEOG 325
GEOG 403
GEOG 408
GEOG 410
GEOG 425
GEOG 510
Humid Tropical Environments

\section*{History}
\begin{tabular}{|c|c|c|}
\hline HIST 197 & (3) & FYS: Race in Latin America \\
\hline HIST 200 & (3) & Introduction to African History \\
\hline HIST 201 & (3) & Modern African History \\
\hline HIST 208 & (3) & Introduction to East Asian History \\
\hline HIST 209 & (3) & Introduction to South Asian History \\
\hline HIST 213 & (3) & World History, 600-2000 \\
\hline HIST 218 & (3) & Modern East Asian History \\
\hline HIST 223 & (3) & Indigenous Peoples and Empires \\
\hline HIST 309 & (3) & History of Latin America to 1825 \\
\hline HIST 317 & (3) & Themes in Indian Ocean World History \\
\hline HIST 333 & (3) & Indigenous Peoples and French \\
\hline HIST 338 & (3) & Twentieth-Century China \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
HIST 340 & \((3)\) & History of Modern Egypt \\
HIST 341 & (3) & Themes in South Asian History \\
HIST 360 & (3) & Latin America since 1825 \\
HIST 361 & (3) & Topics in Canadian Regional History \\
HIST 363 & (3) & Canada 1870-1914 \\
HIST 366 & (3) & Themes in Latin American History \\
HIST 382 & (3) & History of South Africa \\
HIST 408 & (3) & Selected Topics in Indigenous History \\
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 528 & (3) & Indian Ocean World Slave Trade
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lcl} 
INTD 350 & \((3)\) & Culture and Development \\
INTD 352 & \((3)\) & Disasters and Development \\
INTD 354 & \((3)\) & Civil Society and Development \\
INTD 360 & \((3)\) & Environmental Challenges in Development \\
INTD 397 & \((3)\) & Topics in International Development \\
INTD 398 & \((3)\) & Topics in Conflict and Development \\
INTD 490 & (3) & Development Research Project \\
INTD 491 & (3) & Honours Thesis \\
INTD 492 & \((6)\) & Honours Thesis with Field Research \\
INTD 497 & (3) & Advanced Topics in International Development \\
INTD 499 & (3) & Internship: International Development Studies \\
INTD 597 & (3) & Seminar in International Development
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 365 & \((3)\) & Middle East Since the 1970's \\
ISLA 383 & \((3)\) & Central Questions in Islamic Law \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
ISLA 421 & Islamic Culture - Indian Subcontinent
\end{tabular}

\section*{Latin American \& Caribbean Studies}
LACS 497*

\footnotetext{
* When topic is relevant to IDS.
}

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 382 & (3) & International Business \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Management, Organizational Behavior}
ORGB 380 (3) Cross Cultural Management

\section*{Management Policy}

MGPO 435
MGPO 438
MGPO 440
MGPO 469
MGPO 475
MSUS 402

\section*{Nutrition}

NUTR 501
(3)
(3)
(3)

Nutrition in Developing Countries

\section*{Political Science}
\begin{tabular}{|c|c|c|}
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 422 & (3) & Developing Areas/Topics 2 \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline
\end{tabular}
\begin{tabular}{lll} 
POLI 445 & \((3)\) & International Political Economy: Monetary Relations \\
POLI 450 & (3) & Peacebuilding \\
POLI 474 & (3) & Inequality and Development \\
POLI 476 & (3) & Religion and Politics \\
POLI 480 & (3) & Contentious Politics
\end{tabular}

\section*{Religious Studies}
\begin{tabular}{lll} 
RELG 331 & (3) & Religion and Globalization \\
RELG 370 & (3) & Religion and Human Rights \\
RELG 371 & (3) & Ethics of Violence/Non-Violence \\
RELG 375 & \((3)\) & Religion, Politics and Society
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 234 & \((3)\) & Population and Society \\
SOCI 265 & \((3)\) & War, States and Social Change \\
SOCI 307 & \((3)\) & Globalization \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 513 & \((3)\) & Social Aspects HIV/AIDS in Africa \\
SOCI 519 & (3) & Gender and Globalization \\
SOCI 520 & (3) & Migration and Immigrant Groups \\
SOCI 550 & (3) & Developing Societies \\
SOCI 555 & (3) & Comparative Historical Sociology
\end{tabular}

\section*{Social Work}
SWRK 400
Policy and Practice for Refugees

\section*{Methods ( 6 credits)}

6 credits from the following:*
* When selecting their Methods courses, students must consult with the IDS Adviser. They must also consult with the most recent Faculty of Arts policy on course overlap: https://www.mcgill.ca/study/faculties/arts/undergraduate/ug_arts_course_reqs

Anthropology
ANTH 358
(3)
The Process of Anthropological Research

Economics
\begin{tabular}{lll} 
ECON 227D1 & (3) & Economic Statistics \\
ECON 227D2 & (3) & Economic Statistics
\end{tabular}

International Development Studies
\begin{tabular}{lll} 
INTD 356 & (3) & Quantitative Methods for Development \\
INTD 358 & (3) & Ethnographic Approaches to Development
\end{tabular}

Political Science
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

Sociology
SOCI 350
SOCI 461
(3)

Statistics in Social Research

SOCI 477
Quantitative Data Analysis
Qualitative Methods in Sociology

\subsection*{3.9.21 Islamic Studies}

Please see section 3.9.21.1: African Studies (AFRI) or section 3.9.21.2: World Islamic and Middle East Studies for more information.

\subsection*{3.9.21.1 African Studies (AFRI) \\ 3.9.21.1.1 About African Studies}

Established in 1969, the African Studies Program at McGill was the first of its kind in Canada. The Program offers courses across the disciplines leading to a Minor and Major Concentration and a Joint Honors Program, allowing students many exciting opportunities to explore a wide range of political, historical, social, economic, and environmental issues pertaining to Africa. The underlying conception of the African Studies Program emanates from the basic premise that African Studies is a foundational field of study and a global intellectual enterprise, rather than one constrained by territorial boundaries.

For students pursuing a Major or Minor Concentration in African Studies, the plan of study begins with an introductory course that explores African issues from an interdisciplinary and global perspective and ends with an advanced research seminar. In addition to facilitating opportunities for students to travel and study in Africa, the Program also offers a course in Swahili, which greatly enhances knowledge of African culture and society and can, along with other courses offered, pave the path towards exciting future career and travel opportunities in Africa. The African Studies Program also sponsors a variety of other types of scholarly and cultural activities throughout the academic year related to Africa and the African diaspora, many of which are initiated by its undergraduate student organization, the African Studies Students' Association (ASSA), as well as the McGill African Students' Society (MASS).

\subsection*{3.9.21.1.2 Bachelor of Arts (B.A.) - Minor Concentration African Studies (18 credits)}

The Minor Concentration African Studies is available for those students majoring in a discipline of the Faculty of Arts who wish to acquire interdisciplinary knowledge of Africa.
This program may be expanded to the Major Concentration African Studies.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
AFRI 200 & (3) & Introduction to African Studies \\
AFRI 598 & (3) & Research Seminar in African Studies
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits selected as follows:
3 credits from the Group A or "core" course list and
9 credits from the Group B course list drawn from at least 2 disciplines with no more than 6 credits from any one discipline.
If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the program adviser.
Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

\section*{Group A}

3 credits from:
\begin{tabular}{lll} 
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
POLI 324 & (3) & Developing Areas/Africa
\end{tabular}

\section*{Group B}

9 credits from the Group B course lists below drawn from at least 2 disciplines with no more than 6 credits from any one discipline.

\section*{African Studies}
\begin{tabular}{lcl} 
AFRI 401 & (3) & Swahili Language and Culture \\
AFRI 480 & (3) & Honours Thesis \\
AFRI 481 & (3) & Special Topics 1 \\
AFRI 499 & (3) & Arts Internships: African Studies \\
HIST 579D1 & (3) & Seminar: African History \\
HIST 579D2 & (3) & Seminar: African History
\end{tabular}

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 301 & (3) & Nomadic Pastoralists \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 411 & (3) & Primate Studies and Conservation \\
ANTH 416 & (3) & Environment/Development: Africa
\end{tabular}

\section*{Economics}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
ECON 416 & (3) & Topics in Economic Development 2
\end{tabular}

\section*{English}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lll} 
ENGL 320* & (3) & Postcolonial Literature \\
ENGL 352* & (3) & Theories of Difference \\
ENGL 421 & (3) & African Literature
\end{tabular}

\section*{Geography}
\begin{tabular}{lll} 
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 403 & (3) & Global Health and Environmental Change \\
GEOG 404 & (3) & Environmental Management 2 \\
GEOG 408 & (3) & Geography of Development \\
GEOG 410 & (3) & Geography of Underdevelopment: Current Problems \\
GEOG 416 & (3) & Africa South of the Sahara
\end{tabular}

History
\begin{tabular}{lcl} 
HIST 200 & \((3)\) & Introduction to African History \\
HIST 201 & \((3)\) & Modern African History \\
HIST 381 & \((3)\) & Colonial Africa \\
HIST 382 & \((3)\) & History of South Africa \\
HIST 498 & \((3)\) & Independent Research \\
HIST 528 & \((3)\) & Indian Ocean World Slave Trade
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 410 & \((3)\) & History: Middle-East 1798-1918
\end{tabular}

\section*{Political Science}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 324 & (3) & Developing Areas/Africa \\
POLI 522* & (3) & Seminar: Developing Areas
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 484 & \((3)\) & Emerging Democratic States \\
SOCI 513 & \((3)\) & Social Aspects HIV/AIDS in Africa \\
SOCI 550 & \((3)\) & Developing Societies
\end{tabular}

\subsection*{3.9.21.1.3 Bachelor of Arts (B.A.) - Major Concentration African Studies (36 credits)}

The Major Concentration African Studies provides students with an interdisciplinary approach to the study of the African continent.
Students wishing to major in African Studies should consult the Program Adviser at the beginning of their first academic year. In the African Studies Major concentration, students will be encouraged to identify an area within a discipline of the Faculty, taking as many relevant courses as possible in that field.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
AFRI 200 & (3) & Introduction to African Studies \\
AFRI 598 & (3) & Research Seminar in African Studies
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 0}\) credits)}

30 credits selected as follows:
9 credits from the Group A or "core" course list and
21 credits from the Group B course list drawn from at least 3 disciplines with no more than 9 credits from any one discipline.
If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the Program Adviser.
Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

\section*{Group A}

9 credits from:
\begin{tabular}{lll} 
ANTH 322 & (3) & Social Change in Modern Africa \\
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
POLI 324 & (3) & Developing Areas/Africa
\end{tabular}

\section*{Group B}

21 credits from the Group B course lists below drawn from at least 3 disciplines with no more than 9 credits from any one discipline.

\section*{African Studies}
\begin{tabular}{lcl} 
AFRI 401 & (3) & Swahili Language and Culture \\
AFRI 480 & (3) & Honours Thesis \\
AFRI 481 & (3) & Special Topics 1 \\
AFRI 499 & (3) & Arts Internships: African Studies \\
HIST 579D1 & (3) & Seminar: African History \\
HIST 579D2 & (3) & Seminar: African History
\end{tabular}

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 301 & (3) & Nomadic Pastoralists \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 411 & (3) & Primate Studies and Conservation \\
ANTH 416 & (3) & Environment/Development: Africa
\end{tabular}

\section*{Economics}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
ECON 416 & (3) & Topics in Economic Development 2
\end{tabular}

\section*{English}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lcl} 
ENGL 320* & (3) & Postcolonial Literature \\
ENGL 352* & (3) & Theories of Difference \\
ENGL 421 & (3) & African Literature
\end{tabular}

\section*{Geography}
\begin{tabular}{lll} 
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 403 & (3) & Global Health and Environmental Change \\
GEOG 404 & (3) & Environmental Management 2 \\
GEOG 408 & (3) & Geography of Development \\
GEOG 410 & (3) & Geography of Underdevelopment: Current Problems \\
GEOG 416 & (3) & Africa South of the Sahara
\end{tabular}

\section*{History}
\begin{tabular}{lcl} 
HIST 200 & \((3)\) & Introduction to African History \\
HIST 201 & \((3)\) & Modern African History \\
HIST 381 & \((3)\) & Colonial Africa \\
HIST 382 & \((3)\) & History of South Africa \\
HIST 498 & (3) & Independent Research \\
HIST 528 & (3) & Indian Ocean World Slave Trade
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 410 & \((3)\) & History: Middle-East 1798-1918
\end{tabular}

\section*{Political Science}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 324 & (3) & Developing Areas/Africa \\
POLI 522* & (3) & Seminar: Developing Areas
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 484 & \((3)\) & Emerging Democratic States \\
SOCI 513 & \((3)\) & Social Aspects HIV/AIDS in Africa \\
SOCI 550 & (3) & Developing Societies
\end{tabular}

\subsection*{3.9.21.1.4 Bachelor of Arts (B.A.) - Joint Honours Component African Studies (36 credits)}

The Joint Honours program in African Studies provides students with an interdisciplinary approach to the study of the African continent.
Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs". Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary Honours thesis (if applicable). Joint Honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations a minimum CGPA of 3.00 in general.

At least 9 of the 36 credits must be at the 400 level or above.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
AFRI 200 & (3) & Introduction to African Studies \\
AFRI 480* & (3) & Honours Thesis \\
AFRI 598 & (3) & Research Seminar in African Studies
\end{tabular}
* Honours Thesis course must be taken for the AFRI Joint Honours component. Students must meet the specific requirements regarding Thesis credits of their second program in addition to the AFRI 480 Honours Thesis.

\section*{Complementary Courses (27 credits)}

\section*{Group A}

9 credits from:
\begin{tabular}{lll} 
ANTH 322 & (3) & Social Change in Modern Africa \\
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
POLI 324 & (3) & Developing Areas/Africa
\end{tabular}

\section*{Group B}

18 credits from the Group B course lists below drawn from at least 3 disciplines with no more than 9 credits from any one discipline.

\section*{African Studies}
\begin{tabular}{lll} 
AFRI 401 & (3) & Swahili Language and Culture \\
AFRI 481 & (3) & Special Topics 1 \\
AFRI 499 & (3) & Arts Internships: African Studies
\end{tabular}

\section*{Anthropology}
\begin{tabular}{lcl} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 222 & (3) & Legal Anthropology \\
ANTH 301 & (3) & Nomadic Pastoralists \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 355 & \((3)\) & Theories of Culture and Society \\
ANTH 411 & (3) & Primate Studies and Conservation \\
ANTH 416 & (3) & Environment/Development: Africa \\
ANTH 451 & \((3)\) & Research in Society and Development in Africa
\end{tabular}

\section*{Economics}
\begin{tabular}{lll} 
ECON 208 & \((3)\) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2
\end{tabular}

\section*{English}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lcl} 
ENGL 320* & (3) & Postcolonial Literature \\
ENGL 352* & (3) & Theories of Difference \\
ENGL 421 & (3) & African Literature
\end{tabular}

\section*{Geography}
\begin{tabular}{lll} 
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 403 & (3) & Global Health and Environmental Change \\
GEOG \(404^{*}\) & (3) & Environmental Management 2 \\
GEOG 408 & (3) & Geography of Development
\end{tabular}
\begin{tabular}{lll} 
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 416* & (3) & Africa South of the Sahara \\
GEOG 423* & (3) & Dilemmas of Development \\
GEOG 451* & (3) & Research in Society and Development in Africa \\
GEOG 493* & \((3)\) & Health and Environment in Africa
\end{tabular}
* Note: Normally offered as field courses (in African Studies Field Semester)

\section*{History}
\begin{tabular}{lcl} 
HIST 200 & \((3)\) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
HIST 382 & \((3)\) & History of South Africa \\
HIST 444 & (3) & British Colonies: Africa and Asia \\
HIST 498 & (3) & Independent Research \\
HIST 528 & (3) & Indian Ocean World Slave Trade
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 410 & \((3)\) & History: Middle-East 1798-1918
\end{tabular}

\section*{Political Science}
* Note: Course is counted only when African materials are taught. Admission to this course will be subject to the Political Science departmental requirements and approval of the Departmental Honours Adviser. Priority will be given to Political Science students.
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 324 & (3) & Developing Areas/Africa \\
POLI 522* & (3) & Seminar: Developing Areas
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & (3) & Colonialism and Society \\
SOCI 484 & \((3)\) & Emerging Democratic States \\
SOCI 513 & \((3)\) & Social Aspects HIV/AIDS in Africa \\
SOCI 550 & (3) & Developing Societies
\end{tabular}
3.9.21.1.5 African Studies Related Programs and Study Semesters
3.9.21.1.5.1 Africa Field Study Semester

See Study Abroad \& Field Studies > Undergraduate > section 12.2.1.1: Africa Field Study Semester for details of the 15-credit interdisciplinary AFSS.

\subsection*{3.9.21.2 World Islamic and Middle East Studies 3.9.21.2.1 Location}

Morrice Hall, Room 319
3485 McTavish Street

\author{
Montreal QC H3A 0E1 \\ Telephone: 514-398-6077 \\ Email: info.islamics@mcgill.ca \\ Website: mcgill.ca/islamicstudies
}

\subsection*{3.9.21.2.2 About World Islamic and Middle East Studies}

The undergraduate programs in World Islamic and Middle East Studies offer students language-based interdisciplinary training about the Islamic world. Combining humanities and social-science approaches, the programs introduce students to the textual traditions and social life of Muslims-and the non-Muslims interacting with them-in different times and places, including, but not limited to, the Middle East.
Students in the programs learn about the complexity and variety of Muslim societies and cultures across the world, paying attention to regional specificities but also becoming aware of past and present global links. With solid grounding in language training (Arabic, Persian, Turkish, or Urdu), students take courses on history, law, religion, philosophy, art, literature, women and gender in Islamic societies, political science, and anthropology, combining knowledge about the contemporary Islamic world and the traditions that are important for understanding it.
The Institute of Islamic Studies offers:
- major and minor concentrations;
- honours and joint honours programs for students wishing to pursue more in-depth studies; and
- language minors in Arabic, Persian, Turkish, and Urdu for students interested in language training.

To register for a WIMES program, you must have been offered admission into a bachelor's program at McGill; for more information, please refer to mcgill.ca/undergraduate-admissions/apply.

\subsection*{3.9.21.2.3 Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits)}

The Minor Concentration in Arabic Language provides students with comprehensive training in listening, speaking, reading, and writing in Arabic.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Arabic language ( 3 levels) from the list below.
In the case of Introductory Arabic ( 9 credits), the extra 3 credits will be counted as electives.
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 322 & \((6)\) & Lower Intermediate Arabic \\
ISLA 322D1 & \((3)\) & Lower Intermediate Arabic \\
ISLA 322D2 & (3) & Lower Intermediate Arabic \\
ISLA 423D1 & \((3)\) & Higher Intermediate Arabic \\
ISLA 423D2 & \((3)\) & Higher Intermediate Arabic \\
ISLA 524 & \((3)\) & Advanced Arabic 1 \\
ISLA 525 & \((3)\) & Advanced Arabic 2 \\
ISLA 526 & (3) & Colloquial Arabic
\end{tabular}

\subsection*{3.9.21.2.4 Bachelor of Arts (B.A.) - Minor Concentration Persian Language (18 credits)}

The Minor Concentration in Persian Language provides students with comprehensive training in listening, speaking, reading, and writing in Persian.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Persian language ( 3 levels) from the list below.
\begin{tabular}{lll} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & (3) & Introductory Persian \\
ISLA 342D1 & (3) & Lower Intermediate Persian \\
ISLA 342D2 & \((3)\) & Lower Intermediate Persian
\end{tabular}
\begin{tabular}{lll} 
ISLA 443D1 & (3) & Upper Intermediate Persian \\
ISLA 443D2 & (3) & Upper Intermediate Persian \\
ISLA 545 & (3) & Advanced Persian 1 \\
ISLA 546 & (3) & Advanced Persian 2
\end{tabular}

\subsection*{3.9.21.2.5 Bachelor of Arts (B.A.) - Minor Concentration Turkish Language (18 credits)}

The Minor Concentration in Turkish Language provides students with comprehensive training in listening, speaking, reading, and writing in Turkish.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Turkish language ( 3 levels) from the list below.
\begin{tabular}{lcl} 
ISLA 232D1 & (3) & Introductory Turkish \\
ISLA 232D2 & (3) & Introductory Turkish \\
ISLA 333D1 & (3) & Lower Intermediate Turkish \\
ISLA 333D2 & (3) & Lower Intermediate Turkish \\
ISLA 434D1 & (3) & Higher Intermediate Turkish \\
ISLA 434D2 & (3) & Higher Intermediate Turkish \\
ISLA 535D1 & (3) & Advanced Turkish \\
ISLA 535D2 & (3) & Advanced Turkish
\end{tabular}

\subsection*{3.9.21.2.6 Bachelor of Arts (B.A.) - Minor Concentration Urdu Language (18 credits)}

The Minor Concentration in Urdu Language provides students with comprehensive training in listening, speaking, reading, and writing in Urdu.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Urdu language (3 levels) from the list below.
\begin{tabular}{lcl} 
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Introductory Urdu-Hindi \\
ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
ISLA 553 & (3) & Advanced Urdu-Hindi 1 \\
ISLA 554 & (3) & Advanced Urdu-Hindi 2 \\
ISLA 555 & \((3)\) & Urdu Poetry
\end{tabular}

\subsection*{3.9.21.2.7 Bachelor of Arts (B.A.) - Minor Concentration World Islamic \& Middle East Studies (18 credits)}

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the languages, textual traditions, and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

\section*{Complementary Courses (18 credits)}

18 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:
3 credits at the 100-/200 level, in non-language ISLA courses;
6 credits at the 300 level, in non-language ISLA courses;
9 credits at any level. If non-language courses are selected, no more than 6 credits overall at the 100-200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{ISLA 100/200-Level}

3 credits from:
\begin{tabular}{lll} 
ISLA 199 & \((3)\) & FYS: Narrations of the Middle East \\
ISLA 200 & (3) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 232D1 & \((3)\) & Introductory Turkish \\
ISLA 232D2 & \((3)\) & Introductory Turkish \\
ISLA 241D1 & \((3)\) & Introductory Persian \\
ISLA 241D2 & \((3)\) & Introductory Persian \\
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Introductory Urdu-Hindi
\end{tabular}

\section*{ISLA 300 Level and Higher}

6 credits from:
\begin{tabular}{|c|c|c|}
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 315 & (3) & Ottoman State and Society to 1839 \\
\hline ISLA 322D1 & (3) & Lower Intermediate Arabic \\
\hline ISLA 322D2 & (3) & Lower Intermediate Arabic \\
\hline ISLA 325 & (3) & Introduction to Shi'i Islam \\
\hline ISLA 330 & (3) & Islamic Mysticism: Sufism \\
\hline ISLA 333D1 & (3) & Lower Intermediate Turkish \\
\hline ISLA 333D2 & (3) & Lower Intermediate Turkish \\
\hline ISLA 340 & (3) & Islamic Law and Human Rights \\
\hline ISLA 342D1 & (3) & Lower Intermediate Persian \\
\hline ISLA 342D2 & (3) & Lower Intermediate Persian \\
\hline ISLA 345 & (3) & Science and Civilization in Islam \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
\hline ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 360 & (3) & Islam and Politics \\
\hline ISLA 370 & (3) & The Qur'an: History and Interpretation \\
\hline ISLA 380 & (3) & Islamic Philosophy and Theology \\
\hline ISLA 383 & (3) & Central Questions in Islamic Law \\
\hline ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
\hline ISLA 388 & (3) & Persian Literature \\
\hline ISLA 392 & (3) & Arabic Literature as World Literature \\
\hline ISLA 423D1 & (3) & Higher Intermediate Arabic \\
\hline ISLA 423D2 & (3) & Higher Intermediate Arabic \\
\hline
\end{tabular}

\section*{ISLA Courses}
\begin{tabular}{|c|c|c|}
\hline ISLA 199 & (3) & FYS: Narrations of the Middle East \\
\hline ISLA 200 & (3) & Islamic Civilization \\
\hline ISLA 210 & (3) & Muslim Societies \\
\hline ISLA 325 & (3) & Introduction to Shi'i Islam \\
\hline ISLA 330 & (3) & Islamic Mysticism: Sufism \\
\hline ISLA 340 & (3) & Islamic Law and Human Rights \\
\hline ISLA 345 & (3) & Science and Civilization in Islam \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 360 & (3) & Islam and Politics \\
\hline ISLA 370 & (3) & The Qur'an: History and Interpretation \\
\hline ISLA 380 & (3) & Islamic Philosophy and Theology \\
\hline ISLA 383 & (3) & Central Questions in Islamic Law \\
\hline ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
\hline ISLA 388 & (3) & Persian Literature \\
\hline ISLA 392 & (3) & Arabic Literature as World Literature \\
\hline ISLA 410 & (3) & History: Middle-East 1798-1918 \\
\hline ISLA 411 & (3) & History: Middle-East 1918-1945 \\
\hline ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
\hline ISLA 420 & (3) & Indo-Islamic Civilization: Medieval \\
\hline ISLA 421 & (3) & Islamic Culture - Indian Subcontinent \\
\hline ISLA 430 & (3) & Islamdom: Baghdad to Cordoba \\
\hline ISLA 488 & (3) & Tales of Wonder-Islamic World \\
\hline ISLA 499 & (3) & World Islamic and Middle East Studies Internship \\
\hline ISLA 502 & (3) & Art in the Age of Empires \\
\hline ISLA 505 & (3) & Islam: Origin and Early Development \\
\hline ISLA 506 & (3) & Revolutions in the Arab World \\
\hline ISLA 512 & (3) & Art of the Ottoman Empire \\
\hline ISLA 515 & (3) & The Medieval School in Islam \\
\hline ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
\hline ISLA 555 & (3) & Urdu Poetry \\
\hline ISLA 585 & (3) & Arab Women's Literature \\
\hline
\end{tabular}

\section*{Non-ISLA Courses}
\begin{tabular}{lcl} 
ANTH 327 & \((3)\) & Anthropology of South Asia \\
HIST 240 & (3) & Modern History of Islamic Movements \\
HIST 341 & (3) & Themes in South Asian History \\
HIST 435 & (3) & Topics in South Asian History \\
HIST 591D1 & (3) & Modern Middle East History \\
HIST 591D2 & (3) & Modern Middle East History
\end{tabular}
\begin{tabular}{lcl} 
JWST 261 & \((3)\) & History of Jewish Philosophy and Thought \\
JWST 323 & (3) & The Israeli Novel \\
JWST 338 & \((3)\) & Jewish Philosophy and Thought 2 \\
JWST 366 & (3) & History of Zionism \\
PHIL 356 & (3) & Early Medieval Philosophy \\
POLI 340 & (3) & Developing Areas/Middle East \\
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 307 & (3) & Bible, Quran and Interpretations \\
RELG 309 & (3) & World Religions and Cultures They Create \\
RELG 573 & (3) & Religions in Global Society
\end{tabular}

\subsection*{3.9.21.2.8 Bachelor of Arts (B.A.) - Major Concentration World Islamic \& Middle East Studies (36 credits)}

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}
\(12-15\) credits (2 levels) in one language: Arabic, Persian, Turkish, or Urdu. In the case of Arabic, the first two levels involve 15 credits. The extra 3 credits will be counted toward the remainder of the complementary courses requirement.

21-24 credits (21 if Introductory Arabic has been chosen), of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:

3 credits of 100-/200-level non-language ISLA courses;
6 credits of 300 -level non-language ISLA courses;
6 credits of 400-/500-level non-language ISLA courses;
6-9 credits at any level, including more language courses, but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{Languages (12-15 credits)}

\section*{Arabic}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 322 & \((6)\) & Lower Intermediate Arabic \\
ISLA 322D1 & \((3)\) & Lower Intermediate Arabic \\
ISLA 322D2 & \((3)\) & Lower Intermediate Arabic \\
ISLA 423D1 & \((3)\) & Higher Intermediate Arabic \\
ISLA 423D2 & Higher Intermediate Arabic \\
ISLA 524 & \((3)\) & Advanced Arabic 1 \\
ISLA 525 & \((3)\) & Advanced Arabic 2
\end{tabular}

\section*{Persian}
\begin{tabular}{lll} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & (3) & Introductory Persian \\
ISLA 342D1 & (3) & Lower Intermediate Persian
\end{tabular}
\begin{tabular}{lll} 
ISLA 342D2 & (3) & Lower Intermediate Persian \\
ISLA 443D1 & (3) & Upper Intermediate Persian \\
ISLA 443D2 & (3) & Upper Intermediate Persian \\
ISLA 545 & (3) & Advanced Persian 1 \\
ISLA 546 & (3) & Advanced Persian 2
\end{tabular}

Turkish
\begin{tabular}{lcl} 
ISLA 232D1 & (3) & Introductory Turkish \\
ISLA 232D2 & (3) & Introductory Turkish \\
ISLA 333D1 & (3) & Lower Intermediate Turkish \\
ISLA 333D2 & (3) & Lower Intermediate Turkish \\
ISLA 434D1 & (3) & Higher Intermediate Turkish \\
ISLA 434D2 & (3) & Higher Intermediate Turkish \\
ISLA 535D1 & (3) & Advanced Turkish \\
ISLA 535D2 & (3) & Advanced Turkish
\end{tabular}

\section*{Urdu}
\begin{tabular}{lcl} 
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Introductory Urdu-Hindi \\
ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
ISLA 553 & (3) & Advanced Urdu-Hindi 1 \\
ISLA 554 & (3) & Advanced Urdu-Hindi 2
\end{tabular}

\section*{ISLA 100-/200-Level}

3 credits from:
\begin{tabular}{lll} 
ISLA 199 & (3) & FYS: Narrations of the Middle East \\
ISLA 200 & (3) & Islamic Civilization \\
ISLA 210 & (3) & Muslim Societies
\end{tabular}

\section*{ISLA 300-Level}

6 credits from:
\begin{tabular}{lll} 
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 315 & \((3)\) & Ottoman State and Society to 1839 \\
ISLA 325 & \((3)\) & Introduction to Shi'i Islam \\
ISLA 330 & \((3)\) & Islamic Mysticism: Sufism \\
ISLA 340 & \((3)\) & Islamic Law and Human Rights \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 350 & \((3)\) & From Tribe to Dynasty \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 370 & \((3)\) & The Qur'an: History and Interpretation
\end{tabular}
\begin{tabular}{lll} 
ISLA 380 & (3) & Islamic Philosophy and Theology \\
ISLA 383 & (3) & Central Questions in Islamic Law \\
ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
ISLA 388 & (3) & Persian Literature \\
ISLA 392 & (3) & Arabic Literature as World Literature
\end{tabular}

\section*{ISLA 400-/500-Level}

6 credits from:
\begin{tabular}{lll} 
ISLA 410 & \((3)\) & History: Middle-East 1798-1918 \\
ISLA 411 & \((3)\) & History: Middle-East 1918-1945 \\
ISLA 415 & \((3)\) & Modern Iran: Anthropological Approach \\
ISLA 420 & \((3)\) & Indo-Islamic Civilization: Medieval \\
ISLA 421 & (3) & Islamic Culture - Indian Subcontinent \\
ISLA 430 & (3) & Islamdom: Baghdad to Cordoba \\
ISLA 488 & (3) & Tales of Wonder-Islamic World \\
ISLA 502 & (3) & Art in the Age of Empires \\
ISLA 505 & (3) & Islam: Origin and Early Development \\
ISLA 506 & (3) & Revolutions in the Arab World \\
ISLA 512 & (3) & The Medieval School in Islam \\
ISLA 515 & (3) & Medieval Islam, 13th-15th Century Empire \\
ISLA 516 & (3) & Colloquial Arabic \\
ISLA 526 & (3) & Urdu Poetry \\
ISLA 555 & & Arab Women's Literature \\
ISLA 585 & &
\end{tabular}

6-9 credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{Non-ISLA Courses}
\begin{tabular}{lcl} 
ANTH 327 & (3) & Anthropology of South Asia \\
HIST 240 & (3) & Modern History of Islamic Movements \\
HIST 341 & (3) & Themes in South Asian History \\
HIST 435 & (3) & Topics in South Asian History \\
HIST 591D1 & (3) & Modern Middle East History \\
HIST 591D2 & (3) & Modern Middle East History \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 261 & (3) & History of Jewish Philosophy and Thought \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & The Israeli Novel \\
JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
JWST 340D1 & (3) & Advanced Hebrew
\end{tabular}
\begin{tabular}{lcl} 
JWST 340D2 & (3) & Advanced Hebrew \\
JWST 366 & (3) & History of Zionism \\
JWST 367 & (3) & Hebrew through Israeli Cinema \\
JWST 368 & (3) & A Taste of Hebrew Literature \\
JWST 369 & (3) & History of the Hebrew Language \\
JWST 370 & (3) & Israeli Popular Culture \\
PHIL 356 & (3) & Early Medieval Philosophy \\
POLI 340 & (3) & Developing Areas/Middle East \\
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 307 & (3) & Bible, Quran and Interpretations \\
RELG 309 & (3) & World Religions and Cultures They Create \\
RELG 573 & (3) & Religions in Global Society
\end{tabular}

\subsection*{3.9.21.2.9 Bachelor of Arts (B.A.) - Honours World Islamic \& Middle East Studies (60 credits)}

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.
Honours students must maintain a program GPA of 3.30 in their World Islamic and Middle East Studies courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
ISLA 495 & (3) & World Islamic and Middle East Studies Research Seminar \\
ISLA 496 & (3) & Independent Reading and Research
\end{tabular}

\section*{Complementary Courses (54 credits)}

54 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:
18-21 credits ( 3 levels) in one language: Arabic, Persian, Turkish, or Urdu (lists below).
33-36 credits (33 if Introductory Arabic has been chosen), distributed as follows:
3 credits of 100-/200-level non-language ISLA courses;
12 credits of 300-level non-language ISLA courses;
9 credits of 400-/500-level non-language ISLA courses;
\(9-12\) credits at any level, including more language courses, but no more than 9 credits overall at the \(100-/ 200-\mathrm{level}\). Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.
Languages (18-21 credits)

\section*{Arabic}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 322 & \((6)\) & Lower Intermediate Arabic \\
ISLA 322D1 & \((3)\) & Lower Intermediate Arabic \\
ISLA 322D2 & \((3)\) & Lower Intermediate Arabic \\
ISLA 423D1 & \((3)\) & Higher Intermediate Arabic \\
ISLA 423D2 & \((3)\) & Higher Intermediate Arabic
\end{tabular}

ISLA 524
ISLA 525

\section*{Persian}
\begin{tabular}{lll} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & \((3)\) & Introductory Persian \\
ISLA 342D1 & \((3)\) & Lower Intermediate Persian \\
ISLA 342D2 & (3) & Lower Intermediate Persian \\
ISLA 443D1 & \((3)\) & Upper Intermediate Persian \\
ISLA 443D2 & \((3)\) & Upper Intermediate Persian \\
ISLA 545 & \((3)\) & Advanced Persian 1 \\
ISLA 546 & \((3)\) & Advanced Persian 2
\end{tabular}

\section*{Turkish}

ISLA 232D1
ISLA 232D2
ISLA 333D1
ISLA 333D2
ISLA 434D1
ISLA 434D2
ISLA 535D1
ISLA 535D2
Introductory Turkish
Introductory Turkish
Lower Intermediate Turkish
Lower Intermediate Turkish
Higher Intermediate Turkish
Higher Intermediate Turkish
Advanced Turkish
Advanced Turkish

\section*{Urdu}

ISLA 251D1
ISLA 251D2
ISLA 352D1
(3)
(3)

Introductory Urdu-Hindi
Introductory Urdu-Hindi
Intermediate Urdu-Hindi
Intermediate Urdu-Hindi
Advanced Urdu-Hindi 1
Advanced Urdu-Hindi 2

\section*{ISLA 100-/200-Level}

3 credits from:
\begin{tabular}{lll} 
ISLA 199 & (3) & FYS: Narrations of the Middle East \\
ISLA 200 & (3) & Islamic Civilization \\
ISLA 210 & (3) & Muslim Societies
\end{tabular}

\section*{ISLA 300-Level}

12 credits from:
\begin{tabular}{lll} 
ISLA 310 & (3) & Women in Islam \\
ISLA 315 & (3) & Ottoman State and Society to 1839 \\
ISLA 325 & (3) & Introduction to Shi'i Islam
\end{tabular}
\begin{tabular}{lll} 
ISLA 330 & \((3)\) & Islamic Mysticism: Sufism \\
ISLA 340 & \((3)\) & Islamic Law and Human Rights \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 350 & \((3)\) & From Tribe to Dynasty \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & (3) & Islam and Politics \\
ISLA 370 & (3) & The Qur'an: History and Interpretation \\
ISLA 380 & (3) & Islamic Philosophy and Theology \\
ISLA 383 & (3) & Central Questions in Islamic Law \\
ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
ISLA 388 & (3) & Persian Literature \\
ISLA 392 & (3) & Arabic Literature as World Literature
\end{tabular}

\section*{ISLA 400-/500-Level}

9 credits from:
\begin{tabular}{lll} 
ISLA 410 & \((3)\) & History: Middle-East 1798-1918 \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & \((3)\) & Modern Iran: Anthropological Approach \\
ISLA 420 & \((3)\) & Indo-Islamic Civilization: Medieval \\
ISLA 421 & \((3)\) & Islamic Culture - Indian Subcontinent \\
ISLA 430 & (3) & Islamdom: Baghdad to Cordoba \\
ISLA 488 & (3) & Tales of Wonder-Islamic World \\
ISLA 502 & (3) & Art in the Age of Empires \\
ISLA 505 & (3) & Islam: Origin and Early Development \\
ISLA 506 & (3) & Revolutions in the Arab World \\
ISLA 512 & (3) & Art of the Ottoman Empire \\
ISLA 515 & (3) & The Medieval School in Islam \\
ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
ISLA 526 & (3) & Colloquial Arabic \\
ISLA 555 & (3) & Urdu Poetry \\
ISLA 585 & & Arab Women's Literature
\end{tabular}

9-12 credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 9 credits overall at the 100-/200level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{Non-ISLA Courses}
\begin{tabular}{lcl} 
ANTH 327 & (3) & Anthropology of South Asia \\
HIST 240 & (3) & Modern History of Islamic Movements \\
HIST 435 & (3) & Topics in South Asian History \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & \((3)\) & Introductory Hebrew \\
JWST 261 & (3) & History of Jewish Philosophy and Thought \\
JWST 320D1 & \((3)\) & Intermediate Hebrew
\end{tabular}
\begin{tabular}{lcl} 
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & The Israeli Novel \\
JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Advanced Hebrew \\
JWST 366 & (3) & History of Zionism \\
JWST 367 & (3) & Hebrew through Israeli Cinema \\
JWST 368 & (3) & A Taste of Hebrew Literature \\
JWST 369 & History of the Hebrew Language \\
JWST 370 & (3) & Israeli Popular Culture \\
PHIL 356 & (3) & Devely Medieval Philosophy \\
POLI 340 & (3) & Foreign Policy: The Middle East \\
POLI 341 & (3) & Arab-Israel Conflict, Crisis, Peace \\
POLI 347 & (3) & Judaism, Christianity and Islam \\
RELG 204 & (3) & Bible, Quran and Interpretations \\
RELG 307 & (3) & World Religions and Cultures They Create \\
RELG 309 & (3) & Religions in Global Society \\
RELG 573 & &
\end{tabular}

\subsection*{3.9.21.2.10 Bachelor of Arts (B.A.) - Joint Honours Component World Islamic \& Middle East Studies (36 credits)}

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.
Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs."
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a program GPA of 3.30 in their World Islamic \& Middle East Studies courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Course (3 credits)}

ISLA 495 (3) World Islamic and Middle East Studies Research Seminar

\section*{Complementary Courses (33 credits)}

33 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:
\(12-15\) credits (2 levels) in one language: Arabic, Persian, Turkish, or Urdu (lists below). In the case of Arabic, the first two levels involve 15 credits. The extra 3 credits will be counted toward the remainder of the complementary courses requirement.
18-21 credits (18 if Introductory Arabic has been chosen), distributed as follows:
3 credits of 100-/200-level non-language ISLA courses;
9 credits of 300 -level non-language ISLA courses;
3 credits of 400-/500-level non-language ISLA courses;
3-6 credits at any level, including more language courses, but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

Languages (12-15 credits)

\section*{Arabic}
ISLA 221D1
(4.5)
Introductory Arabic
\begin{tabular}{lll} 
ISLA 221D2 & (4.5) & Introductory Arabic \\
ISLA 322 & (6) & Lower Intermediate Arabic \\
ISLA 322D1 & \((3)\) & Lower Intermediate Arabic \\
ISLA 322D2 & \((3)\) & Lower Intermediate Arabic \\
ISLA 423D1 & \((3)\) & Higher Intermediate Arabic \\
ISLA 423D2 & (3) & Higher Intermediate Arabic \\
ISLA 524 & \((3)\) & Advanced Arabic 1 \\
ISLA 525 & \((3)\) & Advanced Arabic 2
\end{tabular}

\section*{Persian}
\begin{tabular}{lcl} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & (3) & Introductory Persian \\
ISLA 342D1 & (3) & Lower Intermediate Persian \\
ISLA 342D2 & (3) & Lower Intermediate Persian \\
ISLA 443D1 & \((3)\) & Upper Intermediate Persian \\
ISLA 443D2 & (3) & Upper Intermediate Persian \\
ISLA 545 & (3) & Advanced Persian 1 \\
ISLA 546 & \((3)\) & Advanced Persian 2
\end{tabular}

\section*{Turkish}
\begin{tabular}{lcl} 
ISLA 232D1 & (3) & Introductory Turkish \\
ISLA 232D2 & (3) & Introductory Turkish \\
ISLA 333D1 & (3) & Lower Intermediate Turkish \\
ISLA 333D2 & (3) & Lower Intermediate Turkish \\
ISLA 434D1 & (3) & Higher Intermediate Turkish \\
ISLA 434D2 & (3) & Higher Intermediate Turkish \\
ISLA 535D1 & (3) & Advanced Turkish \\
ISLA 535D2 & (3) & Advanced Turkish
\end{tabular}

\section*{Urdu}
\begin{tabular}{lll} 
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Introductory Urdu-Hindi \\
ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
ISLA 553 & (3) & Advanced Urdu-Hindi 1 \\
ISLA 554 & \((3)\) & Advanced Urdu-Hindi 2
\end{tabular}

\section*{ISLA 100-/200-Level}

3 credits from:
\begin{tabular}{lll} 
ISLA 199 & (3) & FYS: Narrations of the Middle East \\
ISLA 200 & (3) & Islamic Civilization \\
ISLA 210 & (3) & Muslim Societies
\end{tabular}

\section*{ISLA 300-Level}

9 credits from:
\begin{tabular}{lll} 
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 315 & \((3)\) & Ottoman State and Society to 1839 \\
ISLA 325 & \((3)\) & Introduction to Shi'i Islam \\
ISLA 330 & \((3)\) & Islamic Mysticism: Sufism \\
ISLA 340 & \((3)\) & Islamic Law and Human Rights \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 350 & \((3)\) & From Tribe to Dynasty \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 370 & \((3)\) & The Qur'an: History and Interpretation \\
ISLA 380 & (3) & Islamic Philosophy and Theology \\
ISLA 383 & (3) & Central Questions in Islamic Law \\
ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
ISLA 388 & (3) & Persian Literature \\
ISLA 392 & &
\end{tabular}

\section*{ISLA 400-/500-Level}

3 credits from:
\begin{tabular}{lll} 
ISLA 410 & \((3)\) & History: Middle-East 1798-1918 \\
ISLA 411 & \((3)\) & History: Middle-East 1918-1945 \\
ISLA 415 & \((3)\) & Modern Iran: Anthropological Approach \\
ISLA 420 & (3) & Indo-Islamic Civilization: Medieval \\
ISLA 421 & (3) & Islamic Culture - Indian Subcontinent \\
ISLA 430 & (3) & Islamdom: Baghdad to Cordoba \\
ISLA 488 & (3) & Tales of Wonder-Islamic World \\
ISLA 502 & (3) & Art in the Age of Empires \\
ISLA 505 & (3) & Islam: Origin and Early Development \\
ISLA 506 & (3) & Revolutions in the Arab World \\
ISLA 512 & (3) & Art of the Ottoman Empire \\
ISLA 515 & (3) & The Medieval School in Islam \\
ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
ISLA 526 & (3) & Colloquial Arabic \\
ISLA 555 & (3) & Urdu Poetry \\
ISLA 585 & (3) & Arab Women's Literature \\
\hline
\end{tabular}

3-6 credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 6 credits overall of at the 200 level. Students may fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{Non-ISLA Courses}

ANTH 327
Anthropology of South Asia
\begin{tabular}{|c|c|c|}
\hline HIST 240 & (3) & Modern History of Islamic Movements \\
\hline HIST 341 & (3) & Themes in South Asian History \\
\hline HIST 435 & (3) & Topics in South Asian History \\
\hline HIST 591D1 & (3) & Modern Middle East History \\
\hline HIST 591D2 & (3) & Modern Middle East History \\
\hline JWST 220D1 & (3) & Introductory Hebrew \\
\hline JWST 220D2 & (3) & Introductory Hebrew \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline JWST 320D1 & (3) & Intermediate Hebrew \\
\hline JWST 320D2 & (3) & Intermediate Hebrew \\
\hline JWST 323 & (3) & The Israeli Novel \\
\hline JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
\hline JWST 340D1 & (3) & Advanced Hebrew \\
\hline JWST 340D2 & (3) & Advanced Hebrew \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 367 & (3) & Hebrew through Israeli Cinema \\
\hline JWST 368 & (3) & A Taste of Hebrew Literature \\
\hline JWST 369 & (3) & History of the Hebrew Language \\
\hline JWST 370 & (3) & Israeli Popular Culture \\
\hline PHIL 356 & (3) & Early Medieval Philosophy \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline RELG 204 & (3) & Judaism, Christianity and Islam \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 309 & (3) & World Religions and Cultures They Create \\
\hline RELG 573 & (3) & Religions in Global Society \\
\hline
\end{tabular}

\subsection*{3.9.22 Jewish Studies}

\subsection*{3.9.22.1 Location}

Leacock Building
855 Sherbrooke Street West, 7th floor
Montreal QC H3A 2T7
Telephone: 514-398-2844
Fax: 514-398-7476
Website: mcgill.ca/jewishstudies

\subsection*{3.9.22.2 About Jewish Studies}

The Department of Jewish Studies, established in 1968, offers an interdisciplinary approach to the study of Judaica. It includes:
- a selection of courses that will enable students not taking a concentration in Jewish Studies to broaden their knowledge of Jewish history and culture;
- elementary, intermediate, and advanced courses in Jewish languages - Hebrew, Yiddish, and Aramaic. In the case of the first two, this includes attention to both spoken idiom and written texts;
- specialized courses in the various disciplines that comprise Jewish Studies for students who have specific academic interests;
- a minor concentration for students who wish to add competence in Jewish Studies to their major field of study;
- a comprehensive major concentration, and an honours program culminating in advanced seminars and tutorials for students contemplating careers in the various fields of Judaica. The Honours program in Jewish Studies will give students the necessary linguistic, textual, and bibliographical knowledge to enable them to pursue graduate work in Jewish Studies.

\subsection*{3.9.22.3 Bachelor of Arts (B.A.) - Minor Concentration Jewish Studies (18 credits)}

In order to permit students flexibility within their chosen area, all courses in the Jewish Studies Concentrations are placed into the category "Complementary Courses". There is no language requirement for this minor concentration.

This program may be expanded to the Major Concentration Jewish Studies.

\section*{Complementary Courses (18 credits)}

18 credits in Jewish Studies of which 9 are normally taken at the 300 level or above.
Consultation with an adviser is strongly recommended.

\section*{Areas of Jewish Studies}

At least 9 credits will normally be taken at an advanced level in a single area or theme (e.g., Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies).

\section*{Biblical Studies}
\begin{tabular}{lll} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 310 & (3) & Believers, Heretics and Critics \\
JWST 327 & (3) & A Book of the Bible \\
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 510 & (3) & Jewish Bible Interpretation 1 \\
JWST 511 & (3) & Jewish Bible Interpretation 2 \\
JWST 520 & (3) & Bible Interpretation in Antiquity \\
JWST 538 & (3) & Early Rabbinic Parshanut 1 \\
JWST 581 & (3) & Aramaic Language \\
RELG 307 & (3) & Bible, Quran and Interpretations
\end{tabular}

\section*{East European Studies}
\begin{tabular}{lcl} 
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
JWST 206 & (3) & Introduction to Yiddish Literature \\
JWST 217 & \((3)\) & Jewish Studies 3: 1000-2000 \\
JWST 240 & \((3)\) & The Holocaust \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 445 & (3) & Tutorial in Yiddish Literature \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial: Eastern European Studies 1 Nationalism \\
JWST 585 & (3) & Tutorial: Eastern European Studies 2 \\
JWST 586 & &
\end{tabular}

\section*{Jewish History}
\begin{tabular}{|c|c|c|}
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 307 & (3) & Jews in Poland \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline HIST 572D1 & (3) & Seminar in Jewish History \\
\hline HIST 572D2 & (3) & Seminar in Jewish History \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 306 & (3) & The American Jewish Community \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 315 & (3) & Modern Liberal Jewish Thought \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline
\end{tabular}

\section*{Jewish Thought}
\begin{tabular}{|c|c|c|}
\hline EDER 318 & (3) & Teaching the Jewish Liturgy \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline JWST 310 & (3) & Believers, Heretics and Critics \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 315 & (3) & Modern Liberal Jewish Thought \\
\hline JWST 337 & (3) & Jewish Philosophy and Thought 1 \\
\hline JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
\hline JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 474 & (3) & Maimonides' Mishneh Torah \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline
\end{tabular}

\section*{Language and Literature - Hebrew}
\begin{tabular}{lll} 
JWST 199 & (3) & FYS: Images - Jewish Identities \\
JWST 220D1 & (3) & Introductory Hebrew
\end{tabular}
\begin{tabular}{lcl} 
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 225 & (3) & Literature and Society \\
JWST 300 & (3) & Charisma and Social Change \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & The Israeli Novel \\
JWST 325 & (3) & Israeli Literature in Translation \\
JWST 340D1 & Advanced Hebrew \\
JWST 340D2 & (3) & Hebrew through Israeli Cinema \\
JWST 367 & (3) & A Taste of Hebrew Literature \\
JWST 368 & (3) & History of the Hebrew Language \\
JWST 369 & (3) & Israeli Popular Culture \\
JWST 370 & (3) & Holocaust Literature \\
JWST 383 & (3) & Contemporary Hebrew Literature \\
JWST 403 & (3) & The Poetry of Nationalism \\
JWST 445 &
\end{tabular}

\section*{Language and Literature - Yiddish}
\begin{tabular}{lcl} 
JWST 206 & \((3)\) & Introduction to Yiddish Literature \\
JWST 281 & \((3)\) & Introductory Yiddish 1 \\
JWST 282 & \((3)\) & Introductory Yiddish 2 \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2 \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 530 & (3) & Topics in Yiddish Literature
\end{tabular}

\section*{Modern Jewish Studies}
\begin{tabular}{lcl} 
EDER 319 & (3) & Teaching the Holocaust \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 240 & (3) & The Holocaust \\
JWST 309 & (3) & Mows in Film \\
JWST 346 &
\end{tabular}
\begin{tabular}{lcl} 
JWST 347 & \((3)\) & Modern Jewish Studies \\
JWST 348 & (3) & Modern Jewish Studies \\
JWST 349 & (3) & Modern Jewish Studies \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 383 & (3) & American Jewish Literature \\
JWST 386 & (3) & Modern Jewish Authors \\
JWST 387 & (3) & The Poetry of Nationalism \\
JWST 445 & (3) & Topics: Modern Jewish Thought \\
JWST 558 & (3) & Tutorial: Eastern European Studies 1 \\
JWST 585 & (3) & Tutorial: Eastern European Studies 2 \\
JWST 586 & (3) & Arab-Israel Conflict, Crisis, Peace \\
POLI 347 & &
\end{tabular}

\section*{Rabbinic Studies}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 316 & (3) & Social and Ethical Issues Jewish Law 1 \\
JWST 345 & (3) & Introduction to Rabbinic Literature \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 538 & (3) & Early Rabbinic Parshanut 1
\end{tabular}

\section*{Other Department Courses - History}

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.
\begin{tabular}{lcl} 
HIST 194 & (3) & FYS: Jewish Concepts of Others \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: \(1000-2000\) \\
HIST 307 & (3) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History
\end{tabular}

\subsection*{3.9.22.4 Bachelor of Arts (B.A.) - Major Concentration Jewish Studies (36 credits)}

In order to permit students flexibility within their chosen area, all courses in the Jewish Studies concentrations are placed into the category "Complementary Courses".

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits in Jewish Studies of which 24 are normally taken at the 300 level or above, selected as described below. Consultation with an adviser is strongly recommended.

\section*{Jewish History}

6 credits (minimum) in the history of Jewish civilization to be chosen from:
\begin{tabular}{lcl} 
HIST 194 & (3) & FYS: Jewish Concepts of Others \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 211 & \((3)\) & Jewish Studies 1: Biblical Period \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. -1000 \\
JWST 217 & \((3)\) & Jewish Studies 3: 1000-2000
\end{tabular}

\section*{Jewish Language}

6 credits reflecting an advanced level of competence in either Hebrew or Yiddish chosen from the following:
\begin{tabular}{lcl} 
JWST 327 & (3) & A Book of the Bible \\
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Advanced Hebrew \\
JWST 367 & Hebrew through Israeli Cinema \\
JWST 368 & (3) & A Taste of Hebrew Literature \\
JWST 369 & (3) & History of the Hebrew Language \\
JWST 370 &
\end{tabular}

\section*{Areas of Jewish Studies}

24 credits in Jewish Studies of which at least 12 are devoted to a single area of study: Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies.
Students without the background necessary to complete the advanced language requirement may substitute up to 12 credits in language.
Note: Hebrew language courses are found listed under the heading "Language and Literature - Hebrew", and Yiddish language courses are found under the heading "Language and Literature - Yiddish" in the areas of study lists below.

\section*{Biblical Studies}
\begin{tabular}{lcl} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 310 & (3) & Believers, Heretics and Critics \\
JWST 327 & (3) & A Book of the Bible \\
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 510 & (3) & Jewish Bible Interpretation 1 \\
JWST 511 & (3) & Jewish Bible Interpretation 2 \\
JWST 520 & (3) & Bible Interpretation in Antiquity \\
JWST 538 & (3) & Early Rabbinic Parshanut 1 \\
JWST 581 & (3) & Aramaic Language
\end{tabular}

RELG 307
(3)

\section*{East European Studies}
\begin{tabular}{lcl} 
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
JWST 206 & \((3)\) & Introduction to Yiddish Literature \\
JWST 217 & \((3)\) & Jewish Studies 3: 1000-2000 \\
JWST 240 & (3) & The Holocaust \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & \((3)\) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 381 & (3) & Holocaust Literature \\
JWST 383 & (3) & The Poetry of Nationalism \\
JWST 445 & (3) & Tutorial in Yiddish Literature \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial: Eastern European Studies 1 \\
JWST 585 & (3) & Tutorial: Eastern European Studies 2
\end{tabular}

\section*{Jewish History}
\begin{tabular}{|c|c|c|}
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 307 & (3) & Jews in Poland \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline HIST 572D1 & (3) & Seminar in Jewish History \\
\hline HIST 572D2 & (3) & Seminar in Jewish History \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 306 & (3) & The American Jewish Community \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 315 & (3) & Modern Liberal Jewish Thought \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline
\end{tabular}

\section*{Jewish Thought}
\begin{tabular}{lll} 
EDER 318 & (3) & Teaching the Jewish Liturgy \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: \(1000-2000\)
\end{tabular}
\begin{tabular}{lcl} 
HIST 427 & \((3)\) & The Hasidic Movement \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & \((3)\) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 261 & (3) & History of Jewish Philosophy and Thought \\
JWST 310 & (3) & Believers, Heretics and Critics \\
JWST 314 & (3) & Denominations in North American Judaism \\
JWST 315 & (3) & Modern Liberal Jewish Thought \\
JWST 337 & (3) & Jewish Philosophy and Thought 1 \\
JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 558 & (3) & Topics: Modern Jewish Thought
\end{tabular}
\begin{tabular}{lcl} 
Language and Literature - Hebrew & \\
JWST 199 & (3) & FYS: Images - Jewish Identities \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 225 & (3) & Literature and Society \\
JWST 300 & (3) & Charisma and Social Change \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & The Israeli Novel \\
JWST 325 & (3) & Israeli Literature in Translation \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Hebrew through Israeli Cinema \\
JWST 367 & (3) & A Taste of Hebrew Literature \\
JWST 368 & (3) & History of the Hebrew Language \\
JWST 369 & (3) & Israeli Popular Culture \\
JWST 370 & (3) & Holocaust Literature \\
JWST 383 & (3) & Contemporary Hebrew Literature \\
JWST 403 & (3) & \\
JWST 445 & The Poetry of Nationalism \\
\hline
\end{tabular}

\section*{Language and Literature - Yiddish}

JWST 206
JWST 281
JWST 282
JWST 351
(3)
(3) Introductory Yiddish 1
(3)
(3)

Introduction to Yiddish Literature

Introductory Yiddish 2
Studies in Modern Jewish Literature
\begin{tabular}{lcl} 
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2 \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 530 & (3) & Topics in Yiddish Literature
\end{tabular}

\section*{Modern Jewish Studies}
\begin{tabular}{|c|c|c|}
\hline EDER 319 & (3) & Teaching the Holocaust \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline HIST 572D1 & (3) & Seminar in Jewish History \\
\hline HIST 572D2 & (3) & Seminar in Jewish History \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 309 & (3) & Jews in Film \\
\hline JWST 346 & (3) & Modern Jewish Studies \\
\hline JWST 347 & (3) & Modern Jewish Studies \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 349 & (3) & Modern Jewish Studies \\
\hline JWST 351 & (3) & Studies in Modern Jewish Literature \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 383 & (3) & Holocaust Literature \\
\hline JWST 386 & (3) & American Jewish Literature \\
\hline JWST 387 & (3) & Modern Jewish Authors \\
\hline JWST 445 & (3) & The Poetry of Nationalism \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
\hline JWST 586 & (3) & Tutorial: Eastern European Studies 2 \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline
\end{tabular}

\section*{Rabbinic Studies}
\begin{tabular}{lll} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: 1000-2000 \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & \((3)\) & Jewish Studies 2: 400 B.C.E. - 1000
\end{tabular}
\begin{tabular}{lcl} 
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 316 & (3) & Social and Ethical Issues Jewish Law 1 \\
JWST 345 & (3) & Introduction to Rabbinic Literature \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 538 & (3) & Early Rabbinic Parshanut 1
\end{tabular}

\section*{Other Department Courses - History}

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.
The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.
\begin{tabular}{lcl} 
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
HIST 307 & (3) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History
\end{tabular}

\subsection*{3.9.22.5 Bachelor of Arts (B.A.) - Honours Jewish Studies (60 credits)}

Honours students must maintain a GPA of 3.00 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 491 & (3) & Honours Thesis 1 \\
JWST 492 & (3) & Honours Thesis 2
\end{tabular}

\section*{Complementary Courses (51 credits)}

51 credits selected as follows:

\section*{Jewish History}

6 credits of courses on Jewish history.

One of:
\begin{tabular}{lll} 
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000
\end{tabular}

One of:
\begin{tabular}{lll} 
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000
\end{tabular}

\section*{Jewish Language}

0-18 credits of a Jewish language. Each Honours student will complete at least one Jewish language at the advanced level of instruction. A student who can demonstrate competence in a Jewish language may be permitted to substitute other courses for all or part of the language requirement.

Hebrew language courses are found listed under the heading "Language and Literature - Hebrew," and Yiddish language courses are found under the heading "Language and Literature - Yiddish."

\section*{Areas of Jewish Studies}

27-45 credits of courses chosen to reflect progress to the advanced level in two of the areas of study: Biblical Studies, Rabbinic Studies, Literature (Hebrew, Yiddish), Jewish Thought, Jewish History, Modern Jewish Studies, and East European Studies.
Hebrew literature courses are found listed under the heading "Language and Literature - Hebrew," and Yiddish literature courses are found under the heading "Language and Literature - Yiddish".

Students should select their courses in consultation with a program adviser.

\section*{Biblical Studies}
\begin{tabular}{lcl} 
JWST 211 & \((3)\) & Jewish Studies 1: Biblical Period \\
JWST 310 & \((3)\) & Believers, Heretics and Critics \\
JWST 327 & \((3)\) & A Book of the Bible \\
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 510 & (3) & Jewish Bible Interpretation 1 \\
JWST 511 & (3) & Jewish Bible Interpretation 2 \\
JWST 520 & (3) & Bible Interpretation in Antiquity \\
JWST 538 & (3) & Early Rabbinic Parshanut 1 \\
JWST 581 & (3) & Aramaic Language \\
RELG 307 & (3) & Bible, Quran and Interpretations
\end{tabular}

\section*{East European Studies}
\begin{tabular}{lcl} 
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
JWST 206 & \((3)\) & Introduction to Yiddish Literature \\
JWST 217 & \((3)\) & Jewish Studies 3: 1000-2000 \\
JWST 240 & \((3)\) & The Holocaust \\
JWST 351 & \((3)\) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & The Poetry of Nationalism \\
JWST 445 & (3) & Tutorial in Yiddish Literature \\
JWST 485 & \((3)\) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial: Eastern European Studies 1 \\
JWST 585 & (3) & Tutorial: Eastern European Studies 2
\end{tabular}

\section*{Jewish History}
\begin{tabular}{lll} 
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000
\end{tabular}
\begin{tabular}{lcl} 
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History \\
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000 - 2000 \\
JWST 240 & (3) & The Holocaust \\
JWST 306 & (3) & The American Jewish Community \\
JWST 314 & (3) & Denominations in North American Judaism \\
JWST 315 & (3) & Modern Liberal Jewish Thought \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism
\end{tabular}

\section*{Jewish Thought}
\begin{tabular}{|c|c|c|}
\hline EDER 318 & (3) & Teaching the Jewish Liturgy \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline JWST 310 & (3) & Believers, Heretics and Critics \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 315 & (3) & Modern Liberal Jewish Thought \\
\hline JWST 337 & (3) & Jewish Philosophy and Thought 1 \\
\hline JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
\hline JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 474 & (3) & Maimonides' Mishneh Torah \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline
\end{tabular}

\section*{Language and Literature - Hebrew}
\begin{tabular}{lcl} 
JWST 199 & (3) & FYS: Images - Jewish Identities \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 225 & (3) & Literature and Society \\
JWST 300 & (3) & Charisma and Social Change
\end{tabular}
\begin{tabular}{lcl} 
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & The Israeli Novel \\
JWST 325 & (3) & Israeli Literature in Translation \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Advanced Hebrew \\
JWST 367 & (3) & Hebrew through Israeli Cinema \\
JWST 368 & (3) & A Taste of Hebrew Literature \\
JWST 369 & (3) & Israeli Popular Culture of the Hebrew Language \\
JWST 370 & (3) & Holocaust Literature \\
JWST 383 & (3) & Contemporary Hebrew Literature \\
JWST 403 & (3) & The Poetry of Nationalism \\
JWST 445 &
\end{tabular}

\section*{Language and Literature - Yiddish}
\begin{tabular}{lcl} 
JWST 206 & \((3)\) & Introduction to Yiddish Literature \\
JWST 281 & \((3)\) & Introductory Yiddish 1 \\
JWST 282 & (3) & Introductory Yiddish 2 \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2 \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 530 & (3) & Topics in Yiddish Literature
\end{tabular}

\section*{Modern Jewish Studies}
\begin{tabular}{lcl} 
EDER 319 & \((3)\) & Teaching the Holocaust \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 240 & (3) & The Holocaust \\
JWST 309 & (3) & Mows in Film \\
JWST 346 & (3) & Modern Jewish Studies \\
JWST 347 & (3) & Modern Jewish Studies \\
JWST 348 & (3) & Modern Jewish Studies \\
JWST 349 &
\end{tabular}
\begin{tabular}{lcl} 
JWST 351 & \((3)\) & Studies in Modern Jewish Literature \\
JWST 359 & \((3)\) & Topics in Jewish Philosophy 2 \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 383 & (3) & Holocaust Literature \\
JWST 386 & (3) & American Jewish Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 445 & (3) & The Poetry of Nationalism \\
JWST 558 & (3) & Topics: Modern Jewish Thought \\
JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
JWST 586 & (3) & Tutorial: Eastern European Studies 2 \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace
\end{tabular}

\section*{Rabbinic Studies}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: 1000-2000 \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 316 & (3) & Social and Ethical Issues Jewish Law 1 \\
JWST 345 & (3) & Introduction to Rabbinic Literature \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 538 & (3) & Early Rabbinic Parshanut 1
\end{tabular}

\section*{Other Department Courses - History}

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.
\begin{tabular}{lcl} 
HIST 194 & \((3)\) & FYS: Jewish Concepts of Others \\
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: \(1000-2000\) \\
HIST 307 & (3) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & & Seminar in Jewish History
\end{tabular}

\subsection*{3.9.22.6 Bachelor of Arts (B.A.) - Joint Honours Component Jewish Studies (36 credits)}

Students who wish to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.00 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 491 & (3) & Honours Thesis 1 \\
JWST 492 & (3) & Honours Thesis 2
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits selected as follows:

\section*{Jewish History}

6 credits of courses on Jewish history.

One of:
\begin{tabular}{lll} 
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. -1000
\end{tabular}

One of:
\begin{tabular}{lll} 
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000
\end{tabular}

\section*{Jewish Language}

0-6 credits of a Jewish language. Each Joint Honours student will complete at least one Jewish language at the advanced level of instruction. A student who can demonstrate competence in a Jewish language may be permitted to substitute other courses for all or part of the language requirement.
\begin{tabular}{lll} 
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Advanced Hebrew \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2
\end{tabular}

\section*{Areas of Jewish Studies}

15-21 credits, planned with an adviser and normally chosen to reflect progress to the advanced level in one of the areas of study: Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies.

\section*{Biblical Studies}
\begin{tabular}{lcl} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 310 & (3) & Believers, Heretics and Critics \\
JWST 327 & (3) & A Book of the Bible \\
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 510 & (3) & Jewish Bible Interpretation 1 \\
JWST 511 & (3) & Jewish Bible Interpretation 2 \\
JWST 520 & (3) & Bible Interpretation in Antiquity \\
JWST 538 & (3) & Early Rabbinic Parshanut 1 \\
JWST 581 & (3) & Aramaic Language \\
RELG 307 & (3) & Bible, Quran and Interpretations
\end{tabular}

\section*{East European Studies}
\begin{tabular}{|c|c|c|}
\hline HIST 307 & (3) & Jews in Poland \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline JWST 206 & (3) & Introduction to Yiddish Literature \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 351 & (3) & Studies in Modern Jewish Literature \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
\hline JWST 383 & (3) & Holocaust Literature \\
\hline JWST 445 & (3) & The Poetry of Nationalism \\
\hline JWST 485 & (3) & Tutorial in Yiddish Literature \\
\hline JWST 486 & (3) & Tutorial in Yiddish Literature \\
\hline JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
\hline JWST 586 & (3) & Tutorial: Eastern European Studies 2 \\
\hline
\end{tabular}

\section*{Jewish History}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: \(1000-2000\) \\
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History \\
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & The Holocaust \\
JWST 240 & (3) & The American Jewish Community \\
JWST 306 & (3) & Denominations in North American Judaism \\
JWST 314 & (3) & Modern Liberal Jewish Thought \\
JWST 315 & (3) & The Shtetl: 1500-1897 \\
JWST 361 & (3) & Modern Jewish Ideologies \\
JWST 365 & (3) & History of Zionism \\
JWST 366 & &
\end{tabular}

\section*{Jewish Thought}
\begin{tabular}{lll} 
EDER 318 & \((3)\) & Teaching the Jewish Liturgy \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
HIST 427 & (3) & The Hasidic Movement \\
JWST 201 & \((3)\) & Jewish Law
\end{tabular}
\begin{tabular}{lcl} 
JWST 216 & \((3)\) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 261 & (3) & History of Jewish Philosophy and Thought \\
JWST 310 & (3) & Believers, Heretics and Critics \\
JWST 314 & (3) & Denominations in North American Judaism \\
JWST 315 & (3) & Modern Liberal Jewish Thought \\
JWST 337 & (3) & Jewish Philosophy and Thought 1 \\
JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 558 & (3) & Topics: Modern Jewish Thought
\end{tabular}

\section*{Language and Literature - Hebrew}
\begin{tabular}{lcl} 
JWST 199 & (3) & FYS: Images - Jewish Identities \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 225 & (3) & Literature and Society \\
JWST 300 & (3) & Charisma and Social Change \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Tntermediate Hebrew \\
JWST 323 & (3) & Israeli Literature in Translation Novel \\
JWST 325 & (3) & Advanced Hebrew \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & A Taste of Hebrew Literature \\
JWST 367 & (3) & History of the Hebrew Language \\
JWST 368 & (3) & Israeli Popular Culture \\
JWST 369 & (3) & Holocaust Literature \\
JWST 370 & (3) & Contemporary Hebrew Literature \\
JWST 383 & (3) & The Poetry of Nationalism \\
JWST 403 & JWST 445 &
\end{tabular}

\section*{Language and Literature - Yiddish}
\begin{tabular}{lcl} 
JWST 206 & (3) & Introduction to Yiddish Literature \\
JWST 281 & (3) & Introductory Yiddish 1 \\
JWST 282 & (3) & Introductory Yiddish 2 \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature
\end{tabular}
\begin{tabular}{lcl} 
JWST 383 & (3) & Holocaust Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2 \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 530 & (3) & Topics in Yiddish Literature
\end{tabular}

\section*{Modern Jewish Studies}
\begin{tabular}{|c|c|c|}
\hline EDER 319 & (3) & Teaching the Holocaust \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline HIST 572D1 & (3) & Seminar in Jewish History \\
\hline HIST 572D2 & (3) & Seminar in Jewish History \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 309 & (3) & Jews in Film \\
\hline JWST 346 & (3) & Modern Jewish Studies \\
\hline JWST 347 & (3) & Modern Jewish Studies \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 349 & (3) & Modern Jewish Studies \\
\hline JWST 351 & (3) & Studies in Modern Jewish Literature \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 383 & (3) & Holocaust Literature \\
\hline JWST 386 & (3) & American Jewish Literature \\
\hline JWST 387 & (3) & Modern Jewish Authors \\
\hline JWST 445 & (3) & The Poetry of Nationalism \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
\hline JWST 586 & (3) & Tutorial: Eastern European Studies 2 \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline
\end{tabular}

\section*{Rabbinic Studies}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: 1000-2000 \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 316 & (3) & Social and Ethical Issues Jewish Law 1
\end{tabular}
\begin{tabular}{lcl} 
JWST 345 & (3) & Introduction to Rabbinic Literature \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 538 & (3) & Early Rabbinic Parshanut 1
\end{tabular}

\section*{Other Department Courses - History}

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.
\begin{tabular}{lcl} 
HIST 194 & \((3)\) & FYS: Jewish Concepts of Others \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: \(1000-2000\) \\
HIST 307 & (3) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History
\end{tabular}

\subsection*{3.9.22.7 Jewish Studies Related Programs}
3.9.22.7.1 Jewish Teacher Training Program

Established in 1973 in the Faculty of Education in conjunction with the Department of Jewish Studies, this program prepares students to teach at the elementary and secondary school levels.

Students are encouraged to acquire a strong general background in the Bible as well as in Jewish liturgy, traditions, and history prior to registering in the program. Students lacking the ability to teach in Hebrew should consider spending a term at an Israeli university.

Further information can be obtained by:
- contacting the Director, Dr. Eric Caplan, at 514-398-6544;
- consulting Faculty of Education > Undergraduate > Browse Academic Units \& Programs > Department of Integrated Studies in Education \(>\) section 5.7.2.13: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Jewish Studies ( 120 credits);
- consulting mcgill.ca/edu-jttp for further details.

\subsection*{3.9.23 Languages, Literatures, and Cultures}

\subsection*{3.9.23.1 Location}

Department of Languages, Literatures, and Cultures
680 Sherbrooke Street West, Suite 425
Montreal QC H3A 2M7
Telephone: 514-398-3650
Email: info.llcu@mcgill.ca
Website: mcgill.ca/langlitcultures

\subsection*{3.9.23.2 About Languages, Literatures, and Cultures}

The Department of Languages, Literatures, and Cultures is dedicated to fostering a critical understanding of European and Latin American cultures in a global context. To this end, we offer programs in:
- section 3.9.23.3: European Literature and Culture
- section 3.9.23.4: German Studies
- section 3.9.23.5: Hispanic Studies
- section 3.9.23.6: Italian Studies
- section 3.9.23.7: Latin American and Caribbean Studies
- section 3.9.23.8: Liberal Arts
- section 3.9.23.9: Russian and Slavic Studies

These programs immerse students in the study of specific languages, literatures, thought, cinemas, cultures, and national traditions while encouraging transnational approaches and cultural plurality. In addition, we offer a selection of courses that are not specific to just one language or culture, including film, eco-criticism, literary theory, book history, and digital humanities.

In terms of undergraduate studies, we seek to broaden students' liberal arts background. Our goal is to enable our undergraduates to develop communicative skills in at least one target language and to provide critical tools to understand the complexities of other cultural traditions. The skills acquired are invaluable for careers in business, government, the media, cultural and literary fields, and numerous other professions.
For a list of LLCU courses offered, click here.

\section*{Graduate Studies}

We are committed to international standards of excellence in graduate student training; our graduate programs in German, Hispanic, Italian, and Russian Studies offer a vibrant research environment combining the rigour of traditional philological inquiry with a range of other theoretical and methodological approaches, many of them informed and/or creatively challenged by broader transnational and interdisciplinary perspectives.
Students who envision graduate studies upon completion of the B.A. are strongly advised to pursue an honours or joint honours program (honours students must submit their thesis by March 15). Although the Major and Minor concentrations form an important part of the Multi-track B.A. in Arts, this general degree does not provide the specialized training called for by most graduate programs in the humanities and social sciences.

\section*{Undergraduate Advising}

Students may need to obtain Departmental approval to register for language courses and are strongly urged to consult with the Department for advice/approval of their program plans. A placement test is available and may be booked before the start of term with the Language advisor of the respective area of study. Please see the Program Advisors section of our website at mcgill.ca/langlitcultures/contact.

Students may begin at the intermediate or advanced level in their first year if they have taken approved courses in high school, CEGEP, or through McGill Summer Studies. Please consult with our advisor for more information.

The Department of Languages, Literatures, and Cultures offers undergraduate programs and concentrations which permit students to pursue a variety of intellectual and pre-professional options.

\subsection*{3.9.23.3 European Literature and Culture}

The Minor Concentration in European Literature and Culture provides students with a broad foundation for understanding the development and interconnectedness of European culture, and its relevance for the comprehension of today's world through the study of literature and the arts from the Middle Ages to modern times. Knowledge of a language other than English is not required to complete the program.

\section*{Undergraduate Programs}

Advisor: Stephanie Posthumus
680 Sherbrooke Street West, Room 331
- section 3.9.23.10: Bachelor of Arts (B.A.) - Minor Concentration European Literature and Culture (18 credits)

\subsection*{3.9.23.4 German Studies}

With faculty members working at the forefront of literary, media, and cultural studies, the Department of Languages, Literatures, and Cultures - German Studies immerses students in both the rich literary traditions of the German language, and in the innovative directions of transdisciplinary research.

With our multiple major, minor, honours, and joint honours undergraduate programs, as well as our graduate program, we accommodate a broad range of student interests, from the debates of the eighteenth-century Enlightenment to questions of migration and multiculturalism in contemporary German culture. While our department offers a wide spectrum of courses in language, literature, and culture, our particular strengths lie in philosophy, critical theory, cultural studies, philology, cinema, and media studies. Students receive close attention and individual mentoring in both their academic and professional training.

We also consider German Studies to be part of a broader humanistic endeavor and encourage students to draw on the wealth of faculty working on relevant topics both at McGill and the many other Montreal universities, in departments and programs such as History, Philosophy, Music, Art History and Communications, Jewish Studies, English, and other national literatures.

\section*{Undergraduate Programs}

Advisor: Tove Holmes
680 Sherbrooke Street West, Room 473
Telephone: 514-399-9429
- section 3.9.23.11: Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits) (Expandable)
- section 3.9.23.12: Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)
- section 3.9.23.13: Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)
- section 3.9.23.14: Bachelor of Arts (B.A.) - Honours German Studies ( 60 credits)
- section 3.9.23.15: Bachelor of Arts (B.A.) - Joint Honours Component German Studies (36 credits)

\subsection*{3.9.23.5 Hispanic Studies}

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.

McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website.

\section*{Undergraduate Programs}

Advisor: Prof. Amanda Holmes
680 Sherbrooke Street West, Room 386
Telephone: 514-398-4400, ext. 00864
- section 3.9.23.16: Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)
- section 3.9.23.17: Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)
- section 3.9.23.18: Bachelor of Arts (B.A.) - Honours Hispanic Studies (60 credits)
- section 3.9.23.19: Bachelor of Arts (B.A.) - Joint Honours Component Hispanic Studies (36 credits)

\section*{Note: Advanced Placement (AP) credits and courses taken at other universities in Quebec will not be accredited toward the Minor.}

\subsection*{3.9.23.6 Italian Studies}

The Department of Languages, Literatures, and Cultures - Italian Studies has a mission to maintain the traditions and study of the great classics, as well as to provide a window on an increasingly complex and diverse contemporary Italian culture. It promotes the study of the Italian language through an excellent and rigorous language training program. Its undergraduate and graduate programs also offer courses in Italian literature, both in Italian and in English, as well as in Italian film. The Department periodically invites scholars specializing in contemporary politics, the Italian immigrant experience, and social change, enabling students to gain both a broader and more critical understanding of various aspects of Italian culture through contact with specialists in these areas.

\section*{Undergraduate Programs}

Advisor: Eugenio Bolongaro
680 Sherbrooke, Room 443
Telephone: 514-399-9423
- section 3.9.23.20: Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits) (Expandable)
- section 3.9.23.21: Bachelor of Arts (B.A.) - Major Concentration Italian Studies (36 credits)
- section 3.9.23.22: Bachelor of Arts (B.A.) - Honours Italian Studies (54 credits)
- section 3.9.23.23: Bachelor of Arts (B.A.) - Joint Honours Component Italian Studies (36 credits)

\subsection*{3.9.23.7 Latin American and Caribbean Studies}

The Honours Latin American and Caribbean Studies is designed to meet the needs of students who plan to attend graduate or professional school upon completion of the B.A. This program provides a comprehensive interdisciplinary understanding of Latin America and the Caribbean upon which more specialized coursework and research may be based. This program is recommended for students who envision graduate study in a specific discipline, such as History or Political Science. While the Faculty of Arts regulations require a minimum CGPA of 3.0 for Honours programs, in addition, students pursuing the Honours Latin American and Caribbean Studies must normally maintain a B+ (3.30) average in all program courses. Students must also meet all additional Faculty of Arts requirements for graduation with Honours.

The B.A. - Joint Honours Latin American and Caribbean Studies Component provides students with an interdisciplinary approach to the study of the Latin American and Caribbean region. Students wishing to study at the Honours level in two disciplines can combine Joint Honours programs in any two Arts disciplines. For a list of available joint honours programs, see Faculty of Arts > Undergraduate > Overview of Programs Offered > section 3.8.6: Joint Honours Programs. Joint Honours students should consult an advisor in each department to discuss their course selection and their research project. Joint honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations, a minimum CGPA of 3.00 in general. At least 9 of the 36 credits must be at the 400 level or above.

\section*{Undergraduate Programs}

Advisor: Prof. Katherine Zien
Department of English, Arts Building
Telephone: 514-398-4400, ext. 09343
- section 3.9.23.29.4: Bachelor of Arts (B.A.) - Minor Concentration Latin American \& Caribbean Studies (18 credits)
- section 3.9.23.29.5: Bachelor of Arts (B.A.) - Major Concentration Latin American \& Caribbean Studies (36 credits)
- section 3.9.23.29.6: Bachelor of Arts (B.A.) - Honours Latin American and Caribbean Studies ( 60 credits)
- section 3.9.23.29.7: Bachelor of Arts (B.A.) - Joint Honours Component Latin American and Caribbean Studies (36 credits)

\subsection*{3.9.23.8 Liberal Arts}

The Major Concentration in Liberal Arts exposes students to texts from and histories of a suitably wide range of cultures and societies. Students are able to choose among three intellectual streams: literature and the arts (including theatre and architecture); history, culture and society; and philosophy and religion. Students in each stream must satisfy distribution requirements in relation to minimum number of 300/400+ level courses; maximum number of courses in one discipline; geographical areas and historical periods. All students majoring in Liberal Arts are also required to complete a Minor Concentration in a language program (other than English). Students who are native speakers of a language other than English are strongly encouraged to fulfill this requirement in a third language.
The Honours in Liberal Arts exposes students to texts from and histories of a suitably wide range of cultures and societies. Students are able to choose among three intellectual streams: literature and the arts (including theatre and architecture); history, culture and society; and philosophy and religion. Students in each stream must satisfy a language requirement as well as distribution requirements in relation to minimum number of 300/400+ level courses; maximum number of courses in one discipline; geographical areas and historical periods. Honours student must maintain a program GPA of 3.30 and an overall GPA of 3.00. All students in the Honours Liberal Arts are also required to complete a Minor Concentration in a language program (other than English). Students who are native speakers of a language other than English are strongly encouraged to fulfill this requirement in a third language.

\section*{Undergraduate Programs}

Advisor: Matteo Soranzo
680 Sherbrooke, Room 433
- section 3.9.23.30.3: Bachelor of Arts (B.A.) - Major Concentration Liberal Arts (36 credits)
- section 3.9.23.30.4: Bachelor of Arts (B.A.) - Honours Liberal Arts ( 60 credits)

\subsection*{3.9.23.9 Russian and Slavic Studies}

In addition to offering the only full undergraduate and graduate programs (including M.A. and Ph.D.) in Quebec, the Department of Languages, Literatures, and Cultures - Russian and Slavic Studies continues to attract one of the largest student enrolments in North America. We are proud to have approximately 25 graduates each year from undergraduate programs, many of whom have received credit for courses taken in Russia during their studies. Due to expanding global links-both commercial and institutional—many opportunities are open to students with qualifications in Russian studies. Students may be interested in the organization of human society, comparative literature, and linguistics; Russian Studies are highly relevant to all of these.

\section*{Undergraduate Programs}

Advisor: Lyudmila Parts
680 Sherbrooke, Room 332
Telephone: 514-399-9412
- section 3.9.23.24: Bachelor of Arts (B.A.) - Minor Concentration Russian ( 18 credits) (Expandable)
- section 3.9.23.25: Bachelor of Arts (B.A.) - Minor Concentration Russian Culture (18 credits)
- section 3.9.23.26: Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)
- section 3.9.23.27: Bachelor of Arts (B.A.) - Honours Russian (60 credits)
- section 3.9.23.28: Bachelor of Arts (B.A.) - Joint Honours Component Russian (36 credits)

\subsection*{3.9.23.10 Bachelor of Arts (B.A.) - Minor Concentration European Literature and Culture ( 18 credits)}

The Minor Concentration in European Literature and Culture provides students with a broad foundation for understanding the development and interconnectedness of European culture, and its relevance for the comprehension of today's world through the study of literature and the arts from the Middle Ages to modern times. Knowledge of a language other than English is not required to complete the program.

\section*{Required Course (3 credits)}

LLCU 210 (3) Introduction to European Literature and Culture

\section*{Complementary Courses (15 credits)}
\(9-15\) credits selected from the list below. At least 6 credits should be at the 300 -level or above.
Students with an advanced knowledge of German, Italian, Russian, or Spanish can count GERM, HISP, ITAL, and RUSS literature courses taught in those languages toward the Minor Concentration. No more than 6 credits in any given area (LLCU, GERM, HISP, ITAL, and RUSS) shall count toward the Minor Concentration (not including LLCU 210).
\begin{tabular}{|c|c|c|}
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 367 & (3) & Topics in German Thought \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 370 & (3) & Special Topics in German Film \\
\hline HISP 225 & (3) & Hispanic Civilization 1 \\
\hline HISP 226 & (3) & Hispanic Civilization 2 \\
\hline HISP 301 & (3) & Hispanic Literature and Culture in English 1 \\
\hline ITAL 355 & (3) & Dante and the Middle Ages \\
\hline ITAL 365 & (3) & The Italian Renaissance \\
\hline ITAL 374 & (3) & Classics of Italian Cinema \\
\hline ITAL 450 & (3) & Italy and the Visual Age \\
\hline ITAL 464 & (3) & Machiavelli \\
\hline ITAL 465 & (3) & Religious Identities in Italy \\
\hline ITAL 477 & (3) & Italian Cinema and Video \\
\hline LLCU 200 & (3) & Topics in Film \\
\hline LLCU 201 & (3) & Literature and Culture Topics \\
\hline LLCU 220 & (3) & Introduction to Literary Analysis \\
\hline LLCU 230 & (3) & Environmental Imaginations \\
\hline LLCU 279 & (3) & Introduction to Film History \\
\hline LLCU 300 & (3) & Cinema and the Visual \\
\hline LLCU 301 & (3) & Topics in Culture and Thought \\
\hline RUSS 217 & (3) & Russia's Eternal Questions \\
\hline RUSS 218 & (3) & Russian Literature and Revolution \\
\hline RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
\hline RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
\hline RUSS 330 & (3) & Chekhov without Borders \\
\hline RUSS 337 & (3) & Vladimir Nabokov \\
\hline RUSS 340 & (3) & Russian Short Story \\
\hline RUSS 357 & (3) & Leo Tolstoy \\
\hline RUSS 358 & (3) & Fyodor Dostoevsky \\
\hline RUSS 385 & (3) & Staging Russianness: From Pushkin to Chekhov \\
\hline RUSS 427 & (3) & Russian Fin de Siècle \\
\hline RUSS 428 & (3) & Russian Avantgarde \\
\hline RUSS 430 & (3) & High Stalinist Culture 1 \\
\hline RUSS 440 & (3) & Russia and Its Others \\
\hline
\end{tabular}
RUSS 454
(3)
Narratives of Desire

0-6 credits in literature courses offered by Classical Studies (CLAS), English (ENGL), and French (FREN) selected from the following list:
\begin{tabular}{|c|c|c|}
\hline CLAS 203 & (3) & Greek Mythology \\
\hline CLAS 301 & (3) & Ancient Greek Literature and Society \\
\hline CLAS 302 & (3) & Roman Literature and Society \\
\hline CLAS 306 & (3) & Classics in Modern Media \\
\hline CLAS 336 & (3) & Modern Greek Literature \\
\hline ENGL 200 & (3) & Survey of English Literature 1 \\
\hline ENGL 201 & (3) & Survey of English Literature 2 \\
\hline ENGL 215 & (3) & Introduction to Shakespeare \\
\hline ENGL 310 & (3) & Restoration and 18th Century Drama \\
\hline ENGL 314 & (3) & 20th Century Drama \\
\hline ENGL 329 & (3) & English Novel: 19th Century 1 \\
\hline ENGL 337 & (3) & Theme or Genre in Medieval Literature \\
\hline ENGL 347 & (3) & Great Writings of Europe 1 \\
\hline ENGL 349 & (3) & English Literature and Folklore 1 \\
\hline ENGL 356 & (3) & Middle English \\
\hline ENGL 447 & (3) & Crosscurrents/English Literature and European Literature 1 \\
\hline ENGL 456 & (3) & Middle English \\
\hline FREN 355 & (3) & Littérature du 20e siècle 1 \\
\hline FREN 360 & (3) & La littérature du 19e siècle 1 \\
\hline FREN 362 & (3) & La littérature du 17e siècle 1 \\
\hline FREN 364 & (3) & La littérature du 18e siècle 1 \\
\hline FREN 366 & (3) & Littérature de la Renaissance 1 \\
\hline FREN 453 & (3) & Littérature du 20e siècle 2 \\
\hline FREN 455 & (3) & La littérature médiévale 1 \\
\hline FREN 456 & (3) & La littérature médiévale 2 \\
\hline FREN 457 & (3) & La littérature de la Renaissance 2 \\
\hline FREN 458 & (3) & La littérature du 17e siècle 2 \\
\hline FREN 459 & (3) & La littérature du 18e siècle 2 \\
\hline FREN 482 & (3) & La littérature du 19e siècle 2 \\
\hline FREN 485 & (3) & Littérature française contemporaine \\
\hline
\end{tabular}

\subsection*{3.9.23.11 Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits)}

The Minor Concentration in German Language is designed to allow students to achieve linguistic proficiency in German and to introduce students to some of the major aspects of German culture.
This program may be expanded to the Major Concentration German Studies.
Students may begin at the intermediate or advanced level in their first year if they have taken German courses in high school or in CEGEP or through McGill Summer Studies.
Note: Beginners' and Intermediate language levels are offered either as a one-term intensive course or a two-term spanned course. Students choose which version of the level they prefer.

Complementary Courses (18 credits)

18 credits of language courses or any course above the 325 level given in the German language, selected from the following:

\section*{Language Courses}
\begin{tabular}{lcl} 
GERM 200 & \((6)\) & German Language, Intensive Beginners \\
GERM 202 & (6) & German Language, Beginners' \\
GERM 202D1 & (3) & German Language, Beginners' \\
GERM 202D2 & (3) & German Language, Beginners \\
GERM 300 & (6) & German Language Intensive Intermediate \\
GERM 307 & (6) & German Language - Intermediate \\
GERM 307D1 & (3) & German Language - Intermediate \\
GERM 307D2 & (3) & German Language - Intermediate \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}

\section*{List of Complementary Courses:}
\begin{tabular}{|c|c|c|}
\hline GERM 326 & (3) & Topics: German Language and Culture \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
\hline GERM 333 & (3) & What is Enlightenment? \\
\hline GERM 335 & (3) & Science and Literature \\
\hline GERM 336 & (3) & German Language, Media and Culture \\
\hline GERM 337 & (3) & Literature and Revolution \\
\hline GERM 340 & (3) & Romanticism \\
\hline GERM 344 & (3) & Realism \\
\hline GERM 348 & (3) & Nature and Ecopoetics \\
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 375 & (3) & German Media Studies \\
\hline GERM 379 & (3) & German Visual Culture \\
\hline GERM 381 & (3) & Topics in German Thought \\
\hline GERM 385 & (3) & Critical Theory \\
\hline GERM 388 & (3) & Post-Wall Culture \\
\hline GERM 390 & (3) & Topics in 21 st Century German Literature and Culture \\
\hline GERM 397 & (3) & Individual Reading Course 01 \\
\hline GERM 398 & (3) & Individual Reading Course 02 \\
\hline
\end{tabular}

Advanced Topics in German Literature and Culture

\subsection*{3.9.23.12 Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)}

The Minor Concentration in German Studies provides an introduction to and critical understanding of a variety of aspects of German culture from the eighteenth century to the present day. It is designed to complement other forms of disciplinary and cultural inquiry, such as international studies, the digital humanities, and studies in other languages or geographic areas. Courses include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture.
This program may be expanded to a Major Concentration.

\section*{Complementary Courses (18 credits)}

18 credits of courses in German literature, culture, and film taught in English or German selected from the following list.
A maximum of 6 credits of LLCU courses can be taken, with prior departmental approval.
Beginners' and Intermediate Language courses may not be applied towards this Minor Concentration.
GERM 325 may be applied towards this Minor Concentration.
\begin{tabular}{|c|c|c|}
\hline GERM 259 & (3) & Introduction to German Literature 1 \\
\hline GERM 260 & (3) & Introduction to German Literature 2 \\
\hline GERM 325 & (6) & German Language - Intensive Advanced \\
\hline GERM 326 & (3) & Topics: German Language and Culture \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
\hline GERM 333 & (3) & What is Enlightenment? \\
\hline GERM 335 & (3) & Science and Literature \\
\hline GERM 336 & (3) & German Language, Media and Culture \\
\hline GERM 337 & (3) & Literature and Revolution \\
\hline GERM 340 & (3) & Romanticism \\
\hline GERM 344 & (3) & Realism \\
\hline GERM 348 & (3) & Nature and Ecopoetics \\
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 359 & (3) & Bertolt Brecht \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 373 & (3) & Weimar German Cinema \\
\hline GERM 375 & (3) & German Media Studies \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
GERM 379 & \((3)\) & German Visual Culture \\
GERM 381 & \((3)\) & Topics in German Thought \\
GERM 385 & \((3)\) & Critical Theory \\
GERM 388 & (3) & Post-Wall Culture \\
GERM 390 & \((3)\) & Topics in 21st Century German Literature and Culture \\
GERM 397 & \((3)\) & Individual Reading Course 01 \\
GERM 398 & \((3)\) & Individual Reading Course 02 \\
GERM 401 & \((3)\) & Advanced Topics in German Literature and Culture
\end{tabular}

\subsection*{3.9.23.13 Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)}

The Major Concentration in German Studies provides students with a rigorous and broad inquiry into the major features that have defined German cultural life since the eighteenth century. Knowledge of the German language is a core component of the major concentration and normally courses towards the major concentration will be taught in German. Courses will include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture. Students will acquire the skills of critical reading and viewing that allow them to interpret complex works of art and evaluate their social and cultural significance.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

6 credits must be in pre-20th century literature and culture.
A minimum of 9 credits of literature, culture, and film courses taught in German.
A maximum of 6 credits of LLCU courses, with prior departmental approval.

\section*{Language Courses}
\begin{tabular}{lcl} 
GERM 200 & \((6)\) & German Language, Intensive Beginners \\
GERM 202 & (6) & German Language, Beginners' \\
GERM 202D1 & (3) & German Language, Beginners' \\
GERM 202D2 & (3) & German Language, Beginners \\
GERM 300 & (6) & German Language Intensive Intermediate \\
GERM 307 & (6) & German Language - Intermediate \\
GERM 307D1 & (3) & German Language - Intermediate \\
GERM 307D2 & (3) & German Language - Intermediate \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}

\section*{Literature and Culture Courses}
\begin{tabular}{lll} 
GERM 259 & (3) & Introduction to German Literature 1 \\
GERM 260 & (3) & Introduction to German Literature 2 \\
GERM 326 & (3) & Topics: German Language and Culture \\
GERM \(331^{*}\) & (3) & Germany after Reunification \\
GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
GERM 333 & (3) & What is Enlightenment? \\
GERM 335 & (3) & Science and Literature \\
GERM 336 & (3) & German Language, Media and Culture \\
GERM 337 & (3) & Literature and Revolution \\
GERM 340 & (3) & Romanticism \\
GERM 344 & (3) & Realism \\
GERM 348 & (3) & Nature and Ecopoetics
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 359 & (3) & Bertolt Brecht \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 373 & (3) & Weimar German Cinema \\
\hline GERM 375 & (3) & German Media Studies \\
\hline GERM 379 & (3) & German Visual Culture \\
\hline GERM 381 & (3) & Topics in German Thought \\
\hline GERM 385 & (3) & Critical Theory \\
\hline GERM 388 & (3) & Post-Wall Culture \\
\hline GERM 390 & (3) & Topics in 21 st Century German Literature and Culture \\
\hline GERM 397 & (3) & Individual Reading Course 01 \\
\hline GERM 398 & (3) & Individual Reading Course 02 \\
\hline GERM 401 & (3) & Advanced Topics in German Literature and Culture \\
\hline GERM 580 & (3) & Topics in German Literature and Culture \\
\hline
\end{tabular}

\subsection*{3.9.23.14 Bachelor of Arts (B.A.) - Honours German Studies ( 60 credits)}

The Honours in German Studies provides students with a rigorous and broad inquiry into the major features that have defined German cultural life since the eighteenth century. Knowledge of the German language is a core component of the Honours program and all courses towards Honours will be taught in German. Courses will include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture. Students will acquire the skills of critical reading and viewing that allow them to interpret complex works of art and evaluate their social and cultural significance.

Note: Beginners' and intermediate language levels are offered either as a one-term intensive course or a two-term spanned course. Students choose which version of the level they prefer.

Admission to the Honours program requires departmental approval. Students may begin this program in their first year. Honours students must maintain a GPA of 3.30 in their program courses, and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

Honours students, according to Faculty regulations, also must complete at least a minor concentration (18 credits) in another academic unit.

\section*{Required Courses (6 credits)}
GERM 575
(6)
Honours Thesis

\section*{Complementary Courses (54 credits)}

54 credits of complementary courses taken in German selected with the following specifications:
6 credits must be in pre-20th century literature and culture.
Students can take a maximum of 6 credits of LLCU courses and only with prior approval.

A maximum of 9 credits in GERM courses offered in English and only with prior approval.
3 credits at the 400-level.

\section*{Language Courses}
\begin{tabular}{lcl} 
GERM 200 & \((6)\) & German Language, Intensive Beginners \\
GERM 202 & (6) & German Language, Beginners' \\
GERM 202D1 & (3) & German Language, Beginners' \\
GERM 202D2 & (3) & German Language, Beginners \\
GERM 300 & (6) & German Language Intensive Intermediate \\
GERM 307 & (6) & German Language - Intermediate \\
GERM 307D1 & (3) & German Language - Intermediate \\
GERM 307D2 & (3) & German Language - Intermediate \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}

\section*{List of Complementary Courses:}
\begin{tabular}{lll} 
GERM 259 & \((3)\) & Introduction to German Literature 1 \\
GERM 260 & \((3)\) & Introduction to German Literature 2 \\
GERM \(331^{*}\) & \((3)\) & Germany after Reunification \\
GERM 332 & \((3)\) & Topics in Eighteenth-Century German Literature and Culture \\
GERM 333 & (3) & What is Enlightenment? \\
GERM 335 & (3) & Science and Literature \\
GERM \(336^{*}\) & (3) & German Language, Media and Culture \\
GERM 337 & (3) & Literature and Revolution \\
GERM 340 & (3) & Romanticism \\
GERM 344 & (3) & Realism \\
GERM 348 & (3) & Nature and Ecopoetics \\
GERM 350 & (3) & Modernism and the Avant-Garde \\
GERM 351 & (3) & Berlin \\
GERM 355 & (3) & Nietzsche and Wagner \\
GERM 357 & (3) & German Media Studies \\
GERM 375 & (3) & German Culture in European Context \\
GERM 358 & (3) & (3)
\end{tabular}
\begin{tabular}{lcl} 
GERM 381 & \((3)\) & Topics in German Thought \\
GERM 385 & (3) & Critical Theory \\
GERM 388 & (3) & Post-Wall Culture \\
GERM 390 & (3) & Topics in 21st Century German Literature and Culture \\
GERM 397 & \((3)\) & Individual Reading Course 01 \\
GERM 398 & \((3)\) & Individual Reading Course 02 \\
GERM 401 & \((3)\) & Advanced Topics in German Literature and Culture \\
GERM 580 & \((3)\) & Topics in German Literature and Culture
\end{tabular}
*NOTE: Students can take either GERM 331 or GERM 336 but not both.

\subsection*{3.9.23.15 Bachelor of Arts (B.A.) - Joint Honours Component German Studies ( \(\mathbf{3 6}\) credits)}

The Joint Honours - German Studies Component provides students with a rigorous and broad inquiry into the major features that have defined German cultural life since the eighteenth century. Knowledge of the German language is a core component of the Joint Honours Component and normally courses towards the Joint Honours Component will be taught in German. Courses will include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture. Students will acquire the skills of critical reading and viewing that allow them to interpret complex works of art and evaluate their social and cultural significance.

Note: Beginners' and intermediate language levels are offered either as a one-term intensive course or a two-term spanned course. Students choose which version of the level they prefer.
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).
Admission to the Joint Honours program requires departmental approval. Joint Honours students must maintain a GPA of 3.30 in their program courses, and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Course (3 credits)}
GERM 570 (3) Joint Honours Thesis

\section*{Complementary Courses (33 credits)}

33 credits of complementary courses selected with the following specifications:
Students can elect to take either the German language stream in which most courses must be taught in German or the translation stream in which courses can be taught in either German or English.

6 credits must be in pre-20th Century literature and culture.
Students of the German language stream can take a maximum of 9 credits of LLCU courses or German Studies courses taught in English, only with prior approval.

3 credits at the 400 level (only applies to German language stream).

\section*{Language Courses}
\begin{tabular}{lcl} 
GERM 200 & \((6)\) & German Language, Intensive Beginners \\
GERM 202 & (6) & German Language, Beginners' \\
GERM 202D1 & (3) & German Language, Beginners' \\
GERM 202D2 & (3) & German Language, Beginners \\
GERM 300 & (6) & German Language Intensive Intermediate \\
GERM 307 & (6) & German Language - Intermediate \\
GERM 307D1 & (3) & German Language - Intermediate \\
GERM 307D2 & (3) & German Language - Intermediate \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}

\section*{Literature and Culture Courses}
*NOTE: Students can take either GERM 331 or GERM 336 but not both.
\begin{tabular}{|c|c|c|}
\hline GERM 259 & (3) & Introduction to German Literature 1 \\
\hline GERM 260 & (3) & Introduction to German Literature 2 \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
\hline GERM 333 & (3) & What is Enlightenment? \\
\hline GERM 336 & (3) & German Language, Media and Culture \\
\hline GERM 337 & (3) & Literature and Revolution \\
\hline GERM 340 & (3) & Romanticism \\
\hline GERM 344 & (3) & Realism \\
\hline GERM 348 & (3) & Nature and Ecopoetics \\
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 359 & (3) & Bertolt Brecht \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 375 & (3) & German Media Studies \\
\hline GERM 379 & (3) & German Visual Culture \\
\hline GERM 381 & (3) & Topics in German Thought \\
\hline GERM 385 & (3) & Critical Theory \\
\hline GERM 388 & (3) & Post-Wall Culture \\
\hline GERM 390 & (3) & Topics in 21st Century German Literature and Culture \\
\hline GERM 397 & (3) & Individual Reading Course 01 \\
\hline GERM 398 & (3) & Individual Reading Course 02 \\
\hline GERM 401 & (3) & Advanced Topics in German Literature and Culture \\
\hline GERM 580 & (3) & Topics in German Literature and Culture \\
\hline
\end{tabular}

\subsection*{3.9.23.16 Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)}

The Minor Concentration in Hispanic Studies provides students with a solid foundation on Spanish language and culture. It can be expanded to the Major Concentration in Hispanic Studies.

\section*{Complementary Courses (18 credits)}
\(0-12\) credits in language courses.
HISP 210 (6) Spanish Language: Beginners
\begin{tabular}{lll} 
HISP 218 & (6) & Spanish Language Intensive - Elementary \\
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220 & (6) & Spanish Language: Intermediate
\end{tabular}

6-18 credits to be chosen from among Hispanic Studies course offerings other than language courses, of which no more than 6 credits may be courses taught in English.
Note: Advanced Placement (AP) credits cannot be counted towards the Minor.

\subsection*{3.9.23.17 Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)}

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.
McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website.

\section*{Complementary Courses}

36 credits selected as follows:

\section*{Language and Civilization}

0-18 credits in Language and Civilization from:
\begin{tabular}{lcl} 
HISP 210D1 & (3) & Spanish Language: Beginners \\
HISP 210D2 & (3) & Spanish Language: Beginners \\
HISP 218 & (6) & Spanish Language Intensive - Elementary \\
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220D1 & (3) & Spanish Language: Intermediate \\
HISP 220D2 & (3) & Spanish Language: Intermediate \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2
\end{tabular}

\section*{Survey of Literature}

6-12 credits in Survey of Literature from:
\begin{tabular}{lll} 
HISP 241 & (3) & Survey of Spanish Literature and Culture 1 \\
HISP 242 & (3) & Survey of Spanish Literature and Culture 2 \\
HISP 243 & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & (3) & Survey of Latin American Literature and Culture 2
\end{tabular}

\section*{300-Level or Above Hispanic Literature}

12-30 credits in Hispanic literature at the 300 level or above, of which at least 6 credits must be in literature of the pre-1800 period, from:
\begin{tabular}{lll} 
HISP 320 & (3) & Contemporary Brazilian Literature and Film \\
HISP 321 & (3) & Hispanic Literature of the 18th Century \\
HISP 324 & (3) & 20th Century Drama \\
HISP 325 & (3) & Spanish Novel of the 19th Century \\
HISP 326 & (3) & Spanish Romanticism
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline HISP 327 & (3) & Literature of Ideas: Spain \\
\hline HISP 328 & (3) & Literature of Ideas: Latin America \\
\hline HISP 332 & (3) & Latin American Literature of 19th Century \\
\hline HISP 333 & (3) & Theatre, Performance and Politics in Latin America \\
\hline HISP 340 & (3) & Latin American Cinema \\
\hline HISP 341 & (3) & Spanish Cinema \\
\hline HISP 345 & (3) & Contemporary Hispanic Cultural Studies \\
\hline HISP 347 & (3) & Queer Iberia \\
\hline HISP 350 & (3) & Spanish Literature from 1898 to the Civil War \\
\hline HISP 352 & (3) & Latin American Novel \\
\hline HISP 355 & (3) & Contemporary Spanish Literature and Culture \\
\hline HISP 356 & (3) & Latin American Short Story \\
\hline HISP 357 & (3) & Latin American Digital Literature and Culture \\
\hline HISP 358 & (3) & Gender and Textualities \\
\hline HISP 425 & (3) & Topics in Hispanic and Lusophone Visual Cultures \\
\hline HISP 432 & (3) & Literature - Discovery and Exploration Spain New World \\
\hline HISP 438 & (3) & Topics: Spanish Literature \\
\hline HISP 439 & (3) & Topics: Latin American Literature \\
\hline HISP 453 & (3) & 20th Century Latin American Poetry \\
\hline HISP 454 & (3) & Major Figures: Spanish Literature and Culture \\
\hline HISP 455 & (3) & Major Figures: Latin American Literature and Culture \\
\hline HISP 505 & (3) & Seminar in Hispanic Studies 01 \\
\hline
\end{tabular}

\section*{Pre-1800 Literature}

At least 6 credits from:
\begin{tabular}{lll} 
HISP 432 & (3) & Literature - Discovery and Exploration Spain New World \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 451 & (3) & Don Quixote \\
HISP 458 & (3) & Golden Age Literature: Renaissance \\
HISP 460 & (3) & Golden Age Literature: Baroque
\end{tabular}

Note: No more than 12 credits in courses taught in English shall count towards the Major.

\subsection*{3.9.23.18 Bachelor of Arts (B.A.) - Honours Hispanic Studies ( 60 credits)}

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.
McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website

Prerequisite for admission into Honours Hispanic Studies: a first-year Spanish course with a final grade of B+. Honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations, a minimum CGPA of 3.00 in general.
Students must take an 18-credit Minor concentration in another area.
Required Courses (21 credits)
\begin{tabular}{lcl} 
HISP 241 & (3) & Survey of Spanish Literature and Culture 1 \\
HISP 242 & (3) & Survey of Spanish Literature and Culture 2 \\
HISP 243 & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & (3) & Survey of Latin American Literature and Culture 2 \\
HISP 451 & (3) & Don Quixote \\
HISP 490D1 & (3) & Honours Thesis \\
HISP 490D2 & (3) & Honours Thesis
\end{tabular}

\section*{Complementary Courses (39 credits)}

39 credits with at least 6 credits selected from:
\begin{tabular}{lll} 
HISP 432 & (3) & Literature - Discovery and Exploration Spain New World \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 458 & (3) & Golden Age Literature: Renaissance \\
HISP 460 & \((3)\) & Golden Age Literature: Baroque
\end{tabular}

All remaining credits may be selected from courses given in Spanish in the Department at or above the intermediate Spanish language level (HISP 219 OR HISP 220D1/HISP 220D2).

No more than 18 credits in courses taught in English will count towards the Honours program.

\subsection*{3.9.23.19 Bachelor of Arts (B.A.) - Joint Honours Component Hispanic Studies (36 credits)}

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.

McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).
Joint Honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
HISP 451 & (3) & Don Quixote \\
HISP 490D1 & (3) & Honours Thesis \\
HISP 490D2 & (3) & Honours Thesis
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits selected as follows:

\section*{Survey of Literature}

At least 6-12 credits from the following:
\begin{tabular}{lll} 
HISP 241 & (3) & Survey of Spanish Literature and Culture 1 \\
HISP 242 & (3) & Survey of Spanish Literature and Culture 2 \\
HISP 243 & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & (3) & Survey of Latin American Literature and Culture 2
\end{tabular}

\section*{400-Leve}

At least 6 credits from the 400 -level courses below:
\begin{tabular}{lll} 
HISP 432 & \((3)\) & Literature - Discovery and Exploration Spain New World \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 458 & (3) & Golden Age Literature: Renaissance \\
HISP 460 & \((3)\) & Golden Age Literature: Baroque
\end{tabular}

All remaining credits may be selected from courses given in Spanish in the Department above the Intermediate Spanish language level (HISP 219 OR HISP 220D1/HISP 220D2).

No more than 12 credits in courses taught in English shall count towards this program.

\subsection*{3.9.23.20 Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits)}

This program may be expanded to the Major Concentration Italian Studies.

\section*{Complementary Courses (18 credits)}

18 credits selected from three Italian course lists as follows:
Group A - Basic Language Courses and Group B - Courses taught in Italian (12-18 credits combined)
Group C - Courses taught in English (0-6 credits)

\section*{Group A - Basic Language Courses}
\begin{tabular}{lcl} 
ITAL 205D1 & (3) & Italian for Beginners \\
ITAL 205D2 & (3) & Italian for Beginners \\
ITAL 206 & (6) & Beginners Italian Intensive \\
ITAL 210D1 & (3) & Italian for Advanced Beginners \\
ITAL 210D2 & \((3)\) & Italian for Advanced Beginners \\
ITAL 215D1 & (3) & Intermediate Italian \\
ITAL 215D2 & (3) & Intermediate Italian \\
ITAL 216 & (6) & Intermediate Italian Intensive
\end{tabular}

\section*{Group B - Courses Taught in Italian}
\begin{tabular}{|c|c|c|}
\hline ITAL 250* & (3) & Italian Literary Composition \\
\hline ITAL 255* & (6) & Advanced Reading and Composition \\
\hline ITAL 260 & (3) & Reading Italian Literature \\
\hline ITAL 270 & (3) & Manzoni: Novel and Nationhood \\
\hline ITAL 281 & (3) & Masterpieces of Italian Literature 2 \\
\hline ITAL 290 & (3) & Commedia Dell'Arte \\
\hline ITAL 295 & (3) & Italian Cultural Studies \\
\hline ITAL 310 & (3) & The Invention of Italian Literature \\
\hline ITAL 329 & (3) & Italian Cinematic Tradition \\
\hline ITAL 332 & (3) & Italian Theatrical Traditions \\
\hline ITAL 341 & (3) & The Art of Essay Writing \\
\hline ITAL 345 & (3) & Romanticism in Italy \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 360 & (3) & Contemporary Italian Prose \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
ITAL 362 & \((3)\) & Post-World War 2 Literature and Society \\
ITAL 368 & (3) & Literature of the Renaissance \\
ITAL 371 & (3) & The Italian Baroque \\
ITAL 376 & (3) & Italian Epic Poetry \\
ITAL 380 & (3) & Italian Realisms \\
ITAL 383 & (3) & Women's Writing since 1880 \\
ITAL 400 & (3) & Italian Regional Identities \\
ITAL 410 & (3) & Italian Modernism \\
ITAL 411 & (3) & Pirandello \\
ITAL 420 & (3) & Leopardi Poet and Philosopher \\
ITAL 435 & (3) & Petrarch and His Legacy \\
ITAL 436 & (3) & Tasso's "Gerusalemme Liberata" \\
ITAL 542 & (3) & History of Italian Language \\
ITAL 551 & (3) & Boccaccio and the Italian Novella \\
ITAL 560 & (3) & Topics in 19th and 20th Century Literature \\
ITAL 563 & (3) & 13th-16th Century Literature
\end{tabular}

\section*{Group C - Courses Taught in English}
\begin{tabular}{lll} 
ITAL 199 & \((3)\) & FYS: Italy's Literature in Context \\
ITAL 230 & \((3)\) & Understanding Italy \\
ITAL 307 & \((3)\) & Topics in Italian Culture \\
ITAL 355 & \((3)\) & Dante and the Middle Ages \\
ITAL 361 & \((3)\) & Modern Italian Literature \\
ITAL 363 & \((3)\) & Gender, Literature and Society \\
ITAL 365 & (3) & The Italian Renaissance \\
ITAL 374 & \((3)\) & Classics of Italian Cinema \\
ITAL 375 & (3) & Cinema and Society in Modern Italy \\
ITAL 385 & (3) & Italian Futurist Movement \\
ITAL 395 & (3) & Interdisciplinary Seminar \\
ITAL 416 & (3) & The Twentieth Century \\
ITAL 450 & (3) & Italy and the Visual Age \\
ITAL 464 & (3) & Machiavelli \\
ITAL 465 & (3) & Religious Identities in Italy \\
ITAL 477 & (3) & Italian Cinema and Video
\end{tabular}

\subsection*{3.9.23.21 Bachelor of Arts (B.A.) - Major Concentration Italian Studies (36 credits)}

All students wishing to register for the Major Concentration Italian Studies are strongly urged to meet with a departmental adviser.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits selected from the three Italian course lists as follows:
Group A - Basic Language Courses (0-12 credits)
- Students with no knowledge of the Italian language must take 12 credits in language.
- Students with some knowledge of the language may take 6 credits only selected from ITAL 210D1/ITAL 210D2, ITAL 215D1/ITAL 215D2, or ITAL 216.
- Students with competency in the language may substitute courses from Groups B and C for Group A - Basic Language courses. ALL students with some background must consult with the Department for proper placement.

Group B - Courses Taught in Italian (a minimum of 12 credits, of which a maximum of 6 credits may be at the 200 level)
Group C - Courses Taught in English (0-12 credits)
Group A - Basic Language Courses
\begin{tabular}{lcl} 
ITAL 205D1 & (3) & Italian for Beginners \\
ITAL 205D2 & (3) & Italian for Beginners \\
ITAL 206 & (6) & Beginners Italian Intensive \\
ITAL 210D1 & (3) & Italian for Advanced Beginners \\
ITAL 210D2 & (3) & Italian for Advanced Beginners \\
ITAL 215D1 & (3) & Intermediate Italian \\
ITAL 215D2 & (3) & Intermediate Italian \\
ITAL 216 & (6) & Intermediate Italian Intensive
\end{tabular}

\section*{Group B - Courses Taught in Italian}
* Note: Only one of ITAL 250 or ITAL 255 can count toward the program.
\begin{tabular}{|c|c|c|}
\hline ITAL 250* & (3) & Italian Literary Composition \\
\hline ITAL 255* & (6) & Advanced Reading and Composition \\
\hline ITAL 260 & (3) & Reading Italian Literature \\
\hline ITAL 270 & (3) & Manzoni: Novel and Nationhood \\
\hline ITAL 281 & (3) & Masterpieces of Italian Literature 2 \\
\hline ITAL 290 & (3) & Commedia Dell'Arte \\
\hline ITAL 295 & (3) & Italian Cultural Studies \\
\hline ITAL 310 & (3) & The Invention of Italian Literature \\
\hline ITAL 329 & (3) & Italian Cinematic Tradition \\
\hline ITAL 332 & (3) & Italian Theatrical Traditions \\
\hline ITAL 341 & (3) & The Art of Essay Writing \\
\hline ITAL 345 & (3) & Romanticism in Italy \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 360 & (3) & Contemporary Italian Prose \\
\hline ITAL 362 & (3) & Post-World War 2 Literature and Society \\
\hline ITAL 368 & (3) & Literature of the Renaissance \\
\hline ITAL 371 & (3) & The Italian Baroque \\
\hline ITAL 376 & (3) & Italian Epic Poetry \\
\hline ITAL 380 & (3) & Italian Realisms \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 400 & (3) & Italian Regional Identities \\
\hline ITAL 410 & (3) & Italian Modernism \\
\hline ITAL 411 & (3) & Pirandello \\
\hline ITAL 420 & (3) & Leopardi Poet and Philosopher \\
\hline ITAL 435 & (3) & Petrarch and His Legacy \\
\hline ITAL 436 & (3) & Tasso's "Gerusalemme Liberata" \\
\hline
\end{tabular}
\begin{tabular}{lll} 
ITAL 542 & (3) & History of Italian Language \\
ITAL 551 & (3) & Boccaccio and the Italian Novella \\
ITAL 560 & (3) & Topics in 19th and 20th Century Literature \\
ITAL 563 & (3) & 13th-16th Century Literature
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Group C-Courses Taught in English} \\
\hline ITAL 199 & (3) & FYS: Italy's Literature in Context \\
\hline ITAL 230 & (3) & Understanding Italy \\
\hline ITAL 307 & (3) & Topics in Italian Culture \\
\hline ITAL 355 & (3) & Dante and the Middle Ages \\
\hline ITAL 361 & (3) & Modern Italian Literature \\
\hline ITAL 363 & (3) & Gender, Literature and Society \\
\hline ITAL 365 & (3) & The Italian Renaissance \\
\hline ITAL 374 & (3) & Classics of Italian Cinema \\
\hline ITAL 375 & (3) & Cinema and Society in Modern Italy \\
\hline ITAL 385 & (3) & Italian Futurist Movement \\
\hline ITAL 395 & (3) & Interdisciplinary Seminar \\
\hline ITAL 416 & (3) & The Twentieth Century \\
\hline ITAL 450 & (3) & Italy and the Visual Age \\
\hline ITAL 464 & (3) & Machiavelli \\
\hline ITAL 465 & (3) & Religious Identities in Italy \\
\hline ITAL 477 & (3) & Italian Cinema and Video \\
\hline
\end{tabular}

\subsection*{3.9.23.22 Bachelor of Arts (B.A.) - Honours Italian Studies ( \(\mathbf{5 4}\) credits)}

Honours students must maintain a GPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.
Admission to the Honours program in Italian requires Departmental approval. Students wishing to register should consult with the Department as early as possible. Qualified students may begin Honours in Italian Studies in the first year, instead of the second, at the discretion of the Department.

\section*{Required Courses ( 6 credits)}

One of the two honours thesis courses below:
\begin{tabular}{lcl} 
ITAL 471D1 & (3) & Honours Thesis \\
ITAL 471D2 & (3) & Honours Thesis \\
ITAL 472 & (6) & Honours Thesis (Intensive)
\end{tabular}

\section*{Complementary Courses (48 credits)}

48 credits, 9 of which must be at the 400 level or above, selected from the four Italian course lists as follows:
0-12 credits from Group A - Basic Language Courses.
30-48 credits from Group B - Courses Taught in Italian.
0-9 credits combined from Group C - Courses Taught in English and Group D - Courses Offered in Other Departments.
Note: Students with advanced standing in the language must replace language courses with courses from groups B, C, and D.

\section*{Group A - Basic Language Courses}
\begin{tabular}{lll} 
ITAL 205D1 & (3) & Italian for Beginners \\
ITAL 205D2 & (3) & Italian for Beginners
\end{tabular}
\begin{tabular}{lcl} 
ITAL 206 & (6) & Beginners Italian Intensive \\
ITAL 210D1 & (3) & Italian for Advanced Beginners \\
ITAL 210D2 & (3) & Italian for Advanced Beginners \\
ITAL 215D1 & (3) & Intermediate Italian \\
ITAL 215D2 & (3) & Intermediate Italian \\
ITAL 216 & (6) & Intermediate Italian Intensive
\end{tabular}

\section*{Group B - Courses Taught in Italian}
* Note: Only one of ITAL 250 or ITAL 255 can count toward the program.
\begin{tabular}{|c|c|c|}
\hline ITAL 250* & (3) & Italian Literary Composition \\
\hline ITAL 255* & (6) & Advanced Reading and Composition \\
\hline ITAL 260 & (3) & Reading Italian Literature \\
\hline ITAL 270 & (3) & Manzoni: Novel and Nationhood \\
\hline ITAL 281 & (3) & Masterpieces of Italian Literature 2 \\
\hline ITAL 290 & (3) & Commedia Dell'Arte \\
\hline ITAL 295 & (3) & Italian Cultural Studies \\
\hline ITAL 307 & (3) & Topics in Italian Culture \\
\hline ITAL 310 & (3) & The Invention of Italian Literature \\
\hline ITAL 329 & (3) & Italian Cinematic Tradition \\
\hline ITAL 332 & (3) & Italian Theatrical Traditions \\
\hline ITAL 345 & (3) & Romanticism in Italy \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 360 & (3) & Contemporary Italian Prose \\
\hline ITAL 371 & (3) & The Italian Baroque \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 400 & (3) & Italian Regional Identities \\
\hline ITAL 410 & (3) & Italian Modernism \\
\hline ITAL 560 & (3) & Topics in 19th and 20th Century Literature \\
\hline
\end{tabular}

\section*{Group C - Courses Taught in English}
\begin{tabular}{lcl} 
ITAL 199 & \((3)\) & FYS: Italy's Literature in Context \\
ITAL 230 & \((3)\) & Understanding Italy \\
ITAL 355 & \((3)\) & Dante and the Middle Ages \\
ITAL 363 & (3) & Gender, Literature and Society \\
ITAL 365 & (3) & The Italian Renaissance \\
ITAL 374 & \((3)\) & Classics of Italian Cinema \\
ITAL 375 & (3) & Cinema and Society in Modern Italy \\
ITAL 450 & (3) & Italy and the Visual Age \\
ITAL 464 & (3) & Machiavelli \\
ITAL 465 & (3) & Religious Identities in Italy \\
ITAL 477 & (3) & Italian Cinema and Video
\end{tabular}
\begin{tabular}{lcl} 
Group D - Courses Offered in Other Departments \\
ARTH 223 & \((3)\) & Introduction Italian Renaissance Art 1300-1500 \\
ARTH 325 & \((3)\) & Visual Culture Renaissance Venice \\
CLAS 302 & \((3)\) & Roman Literature and Society \\
CLAS 404 & \((3)\) & Classical Tradition \\
ENGL 447 & \((3)\) & Crosscurrents/English Literature and European Literature 1 \\
HIST 345 & \((3)\) & History of Italian Renaissance \\
HIST 380 & \((3)\) & The Medieval Mediterranean \\
HIST 398 & \((3)\) & Topics in Italian History \\
HIST 401 & (3) & Topics: Medieval Culture and Society \\
MUHL 387 & (3) & Opera from Mozart to Puccini
\end{tabular}

\subsection*{3.9.23.23 Bachelor of Arts (B.A.) - Joint Honours Component Italian Studies (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

Admission to Joint Honours requires departmental approval. Students wishing to register in the program should consult with the Department as early as possible. Students may register for Joint Honours in the first year, instead of the second year, if in the opinion of the departments they are found to be qualified.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
ITAL 355 & (3) & Dante and the Middle Ages \\
ITAL 470 & (3) & Joint Honours Thesis
\end{tabular}

\section*{Complementary Courses (30 credits)}

30 credits, 6 of which must be at the 400 level or above, selected from the four Italian course lists as follows:
0-12 credits from Group A - Basic Language Courses.
12-30 credits from Group B - Courses Taught in Italian.
0-18 credits combined from Group C - Courses Taught in English and Group D - Courses Offered in Other Departments.
Note: Students with advanced standing in the language must replace language courses with courses from groups B, C, and D.

\section*{Group A - Basic Language Courses}
\begin{tabular}{lcl} 
ITAL 205D1 & (3) & Italian for Beginners \\
ITAL 205D2 & (3) & Italian for Beginners \\
ITAL 206 & (6) & Beginners Italian Intensive \\
ITAL 210D1 & (3) & Italian for Advanced Beginners \\
ITAL 210D2 & (3) & Italian for Advanced Beginners \\
ITAL 215D1 & (3) & Intermediate Italian \\
ITAL 215D2 & (3) & Intermediate Italian \\
ITAL 216 & (6) & Intermediate Italian Intensive
\end{tabular}

\section*{Group B - Courses Taught in Italian}
* Note: Only one of ITAL 250 or ITAL 255 can count toward the program.
\begin{tabular}{lcl} 
ITAL 250* & (3) & Italian Literary Composition \\
ITAL \(255^{*}\) & (6) & Advanced Reading and Composition \\
ITAL 260 & (3) & Reading Italian Literature \\
ITAL 270 & (3) & Manzoni: Novel and Nationhood \\
ITAL 281 & (3) & Masterpieces of Italian Literature 2 \\
ITAL 290 & (3) & Commedia Dell'Arte \\
ITAL 295 & (3) & Italian Cultural Studies \\
ITAL 307 & (3) & Topics in Italian Culture \\
ITAL 310 & (3) & The Invention of Italian Literature \\
ITAL 332 & (3) & Italian Theatrical Traditions \\
ITAL 356 & (3) & Medieval Discourses on Love \\
ITAL 360 & (3) & Contemporary Italian Prose \\
ITAL 383 & (3) & Women's Writing since 1880 \\
ITAL 400 & (3) & Italian Regional Identities Modernism \\
ITAL 410 & (3) & Topics in 19th and 20th Century Literature \\
ITAL 560 & &
\end{tabular}

\section*{Group C - Courses Taught in English}
\begin{tabular}{lll} 
ITAL 199 & (3) & FYS: Italy's Literature in Context \\
ITAL 355 & (3) & Dante and the Middle Ages \\
ITAL 365 & (3) & The Italian Renaissance \\
ITAL 375 & (3) & Cinema and Society in Modern Italy \\
ITAL 464 & (3) & Machiavelli \\
ITAL 477 & \((3)\) & Italian Cinema and Video
\end{tabular}
\begin{tabular}{lcl} 
Group D - Courses Offered in Other Departments \\
ARTH 223 & \((3)\) & Introduction Italian Renaissance Art 1300-1500 \\
ARTH 325 & \((3)\) & Visual Culture Renaissance Venice \\
CLAS 302 & (3) & Roman Literature and Society \\
CLAS 404 & (3) & Classical Tradition \\
ENGL 447 & (3) & Crosscurrents/English Literature and European Literature 1 \\
HIST 345 & (3) & History of Italian Renaissance \\
HIST 380 & (3) & The Medieval Mediterranean \\
HIST 398 & (3) & Topics in Italian History \\
HIST 401 & (3) & Topics: Medieval Culture and Society \\
MUHL 387 & (3) & Opera from Mozart to Puccini
\end{tabular}

\subsection*{3.9.23.24 Bachelor of Arts (B.A.) - Minor Concentration Russian (18 credits)}

The Minor Concentration in Russian will give students a basic working knowledge of Russian and the tools with which to explore Russian life and culture in the original. Students who can demonstrate to the Department that they have acquired the equivalent competence elsewhere may waive prerequisites for 300-level courses and above.

The Minor Concentration in Russian may be expanded to the Major Concentration in Russian.

\section*{Complementary Courses (18 credits)}

18 credits to be chosen from:
\begin{tabular}{|c|c|c|}
\hline RUSS 210 & (3) & Elementary Russian Language 1 \\
\hline RUSS 211 & (3) & Elementary Russian Language 2 \\
\hline RUSS 215* & (6) & Elementary Russian Language Intensive 1 \\
\hline RUSS 300 & (3) & Russian for Heritage Speakers 1 \\
\hline RUSS 301 & (3) & Russian for Heritage Speakers 2 \\
\hline RUSS 310 & (3) & Intermediate Russian Language 1 \\
\hline RUSS 311 & (3) & Intermediate Russian Language 2 \\
\hline RUSS 316** & (6) & Intermediate Russian Language Intensive 2 \\
\hline RUSS 327 & (3) & Reading Russian Poetry \\
\hline RUSS 328 & (3) & Readings in Russian \\
\hline RUSS 410 & (3) & Advanced Russian Language 1 \\
\hline RUSS 411 & (3) & Advanced Russian Language 2 \\
\hline RUSS 415*** & (6) & Advanced Russian Language Intensive 1 \\
\hline RUSS 453 & (3) & Advanced Russian Language and Syntax \\
\hline
\end{tabular}
* RUSS 215 is not open to students who have taken RUSS 210 and RUSS 211.
** RUSS 316 is not open to students who have taken RUSS 310 and RUSS 311.
*** RUSS 415 is not open to students who have taken RUSS 410 and RUSS 411.

\subsection*{3.9.23.25 Bachelor of Arts (B.A.) - Minor Concentration Russian Culture (18 credits)}

The Minor Concentration Russian Culture is designed primarily as an adjunct to area studies and/or programs in the humanities or social sciences. There are no Russian language requirements.

This program may be expanded into a Major Concentration in Russian.

\section*{Complementary Courses (18 credits)}

Courses offered by LLC may be accepted subject to approval by the Department.
18 credits selected with the following specifications:
At least 6 credits from Group A
6-12 credits from Group B

\section*{Group A}

At least 6 credits from:
\begin{tabular}{lll} 
RUSS 217 & (3) & Russia's Eternal Questions \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2
\end{tabular}

\section*{Group B}

6-12 credits from:
\begin{tabular}{lll} 
RUSS 213 & \((3)\) & Introduction to Soviet Film \\
RUSS 229 & (3) & Introduction to Russian Folklore \\
RUSS 250 & (3) & The Central European Novel \\
RUSS 330 & (3) & Chekhov without Borders \\
RUSS 333 & (3) & Petersburg: City of Myth \\
RUSS 337 & \((3)\) & Vladimir Nabokov
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RUSS 340 & (3) & Russian Short Story \\
\hline RUSS 347 & (3) & Late and Post-Soviet Culture \\
\hline RUSS 350 & (3) & Central European Film \\
\hline RUSS 357 & (3) & Leo Tolstoy \\
\hline RUSS 358 & (3) & Fyodor Dostoevsky \\
\hline RUSS 365 & (3) & Supernatural and Absurd in Russian Literature \\
\hline RUSS 369 & (3) & Narrative and Memory in Russian Culture \\
\hline RUSS 381 & (3) & Russia's Utopia Complex \\
\hline RUSS 382 & (3) & Russian Opera \\
\hline RUSS 385 & (3) & Staging Russianness: From Pushkin to Chekhov \\
\hline RUSS 390 & (3) & Special Topics in Russian \\
\hline RUSS 395 & (3) & Soviet Cinema: Art and Politics \\
\hline RUSS 397 & (3) & Tarkovsky: Cinema and Philosophy \\
\hline RUSS 398 & (3) & Soviet Women Filmmakers \\
\hline RUSS 427 & (3) & Russian Fin de Siècle \\
\hline RUSS 428 & (3) & Russian Avantgarde \\
\hline RUSS 430 & (3) & High Stalinist Culture 1 \\
\hline RUSS 440 & (3) & Russia and Its Others \\
\hline RUSS 454 & (3) & Narratives of Desire \\
\hline RUSS 475 & (3) & Special Topics in Russ Culture \\
\hline RUSS 500 & (3) & Special Topics \\
\hline RUSS 501 & (3) & Topics in Slavic Culture \\
\hline
\end{tabular}

\subsection*{3.9.23.26 Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)}

The Major Concentration in Russian gives students a foundation in the language, literature, and culture of Russia from the 19th century to the present. It incorporates a balance of instruction in the Russian language, the opportunity to read selected texts in the original language, and to explore Russian language and culture through translated texts.

By arrangement with the Department and subject to University approval, transfer credits will be accepted from Department-approved exchange/immersion programs.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits selected from the following specifications:

\section*{Group A: Russian Language ( \(\mathbf{1 8}\) credits)}

Students entering this program with previous knowledge of or exposure to Russian may, with permission of the Department, replace this group with selections from Group B or Group C.
18 credits selected from the following courses or their equivalent:
\begin{tabular}{lcl} 
RUSS 210 & (3) & Elementary Russian Language 1 \\
RUSS 211 & (3) & Elementary Russian Language 2 \\
RUSS \(215^{*}\) & (6) & Elementary Russian Language Intensive 1 \\
RUSS 300 & (3) & Russian for Heritage Speakers 1 \\
RUSS 301 & (3) & Russian for Heritage Speakers 2 \\
RUSS 310 & (3) & Intermediate Russian Language 1 \\
RUSS 311 & (3) & Intermediate Russian Language 2 \\
RUSS \(316^{* *}\) & (6) & Intermediate Russian Language Intensive 2
\end{tabular}
\begin{tabular}{lcl} 
RUSS 327 & (3) & Reading Russian Poetry \\
RUSS 328 & (3) & Readings in Russian \\
RUSS 410 & (3) & Advanced Russian Language 1 \\
RUSS 411 & (3) & Advanced Russian Language 2 \\
RUSS \(415^{* * *}\) & (6) & Advanced Russian Language Intensive 1 \\
RUSS 453 & \((3)\) & Advanced Russian Language and Syntax
\end{tabular}
*RUSS 215 is not open to students who have taken RUSS 210 or RUSS 211.
**RUSS 316 is not open to students who have taken RUSS 310 or RUSS 311.
***RUSS 415 is not open to students who have taken RUSS 410 or RUSS 411.

\section*{Group B (9 credits)}

9 credits selected from the following courses or their equivalent:
\begin{tabular}{lll} 
RUSS 217 & (3) & Russia's Eternal Questions \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
RUSS 229 & (3) & Introduction to Russian Folklore
\end{tabular}

\section*{Group C (9 credits)}
\begin{tabular}{lll}
9 credits selected from the following courses or their equivalent: \\
RUSS 213 & (3) & Introduction to Soviet Film \\
RUSS 250 & (3) & The Central European Novel \\
RUSS 330 & (3) & Chekhov without Borders \\
RUSS 333 & (3) & Petersburg: City of Myth \\
RUSS 337 & (3) & Vladimir Nabokov \\
RUSS 340 & (3) & Russian Short Story \\
RUSS 347 & (3) & Late and Post-Soviet Culture \\
RUSS 350 & (3) & Central European Film \\
RUSS 357 & (3) & Leo Tolstoy \\
RUSS 358 & (3) & Supdor Dostoevsky \\
RUSS 365 & (3) & Narrative and Memory in Russian Culture and Absurd in Russian Literature \\
RUSS 369 & (3) & Russia's Utopia Complex \\
RUSS 381 & (3) & Russian Opera \\
RUSS 382 & (3) & Staging Russianness: From Pushkin to Chekhov \\
RUSS 385 & (3) & Special Topics in Russian \\
RUSS 390 & (3) & Soviet Cinema: Art and Politics \\
RUSS 395 & (3) & Tarkovsky: Cinema and Philosophy \\
RUSS 397 & (3) & Soviet Women Filmmakers \\
RUSS 398 & RUSS 427 & (3)
\end{tabular}
\begin{tabular}{lll} 
RUSS 454 & (3) & Narratives of Desire \\
RUSS 475 & (3) & Special Topics in Russ Culture \\
RUSS 500 & (3) & Special Topics \\
RUSS 501 & (3) & Topics in Slavic Culture
\end{tabular}

\subsection*{3.9.23.27 Bachelor of Arts (B.A.) - Honours Russian ( 60 credits)}

The Honours Russian program is for students intending to pursue graduate studies or advanced careers in the field. Students must complete 60 credits in the program, and according to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00 .

By arrangement with the Department and subject to University approval, transfer credits will be accepted from Department-approved exchange/immersion programs.

Students who have acquired language competency elsewhere will replace lower-level courses with upper-level courses. A total of 6 credits may be taken in courses offered by other departments in the Faculty; these are listed at the end of this section. Students are particularly encouraged to select from LLC course offerings.

For admission into the Honours program and approval of all course selections, students must regularly consult with an academic adviser in the Department.
Honours students, according to Faculty regulations, also must complete at least a minor concentration (18 credits) in another academic unit.

\section*{Group A: Required Courses (12 credits)}
\begin{tabular}{lll} 
RUSS 452 & (3) & Advanced Russian Language and Syntax 1 \\
RUSS 453 & (3) & Advanced Russian Language and Syntax \\
RUSS 490* & (3) & Honours Seminar 01 \\
RUSS 491* & (3) & Honours Seminar 02
\end{tabular}

\footnotetext{
* Note: Students must submit project proposals to their departmental adviser by March 15 th or November 15 th of the preceding term for individual reading and independent research courses.
}

\section*{Complementary Courses (48 credits)}

\section*{Group B: Russian Language}

0-24 credits to be chosen from:
\begin{tabular}{lcl} 
RUSS 210 & \((3)\) & Elementary Russian Language 1 \\
RUSS 211 & (3) & Elementary Russian Language 2 \\
RUSS 215 & (6) & Elementary Russian Language Intensive 1 \\
RUSS 310 & (3) & Intermediate Russian Language 1 \\
RUSS 311 & (3) & Intermediate Russian Language 2 \\
RUSS 316 & (6) & Intermediate Russian Language Intensive 2 \\
RUSS 410 & (3) & Advanced Russian Language 1 \\
RUSS 411 & (3) & Advanced Russian Language 2 \\
RUSS 415 & (6) & Advanced Russian Language Intensive 1
\end{tabular}

Note: Students entering this program with previous knowledge of or exposure to Russian may, with permission of the Department, replace this group with selections from Group C or D.

\section*{Group C: \(\mathbf{2 0 0}\) level}

9-12 credits to be chosen from:
\begin{tabular}{lll} 
RUSS 213 & (3) & Introduction to Soviet Film \\
RUSS 217 & (3) & Russia's Eternal Questions \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1
\end{tabular}
\begin{tabular}{lll} 
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
RUSS 229 & (3) & Introduction to Russian Folklore \\
RUSS 250 & (3) & The Central European Novel
\end{tabular}

\section*{Group D: 300 and 400 level}

12-33 credits to be chosen from:
\begin{tabular}{lcl} 
RUSS 327 & \((3)\) & Reading Russian Poetry \\
RUSS 328 & \((3)\) & Readings in Russian \\
RUSS 330 & \((3)\) & Chekhov without Borders \\
RUSS 333 & (3) & Petersburg: City of Myth \\
RUSS 337 & (3) & Vladimir Nabokov \\
RUSS 340 & (3) & Russian Short Story \\
RUSS 347 & (3) & Late and Post-Soviet Culture \\
RUSS 350 & (3) & Central European Film \\
RUSS 357 & (3) & Leo Tolstoy \\
RUSS 358 & (3) & Fyodor Dostoevsky \\
RUSS 365 & (3) & Supernatural and Absurd in Russian Literature \\
RUSS 369 & (3) & Narrative and Memory in Russian Culture \\
RUSS 381 & (3) & Russia's Utopia Complex \\
RUSS 382 & (3) & Russian Opera \\
RUSS 385 & (3) & Staging Russianness: From Pushkin to Chekhov \\
RUSS 390 & (3) & Special Topics in Russian in Slavic Culture \\
RUSS 397 & (3) & (3) \\
RUSS 398 & (3) 501 & (3)
\end{tabular}

\section*{Group E: LLC and Faculty of Arts}
\(0-6\) credits to be chosen from the following or their equivalent:
\begin{tabular}{lcl} 
ANTH 303 & (3) & Ethnographies of Post-socialism \\
HIST 216 & (3) & Introduction to Russian History \\
HIST 226 & (3) & East Central and Southeastern Europe in 20th Century \\
HIST 306 & (3) & East Central Europe, 1944-2004 \\
HIST 313 & (3) & Habsburg Monarchy, 1618-1918 \\
HIST 316 & (3) & History of the Russian Empire \\
HIST 326 & (3) & History of the Soviet Union
\end{tabular}
\begin{tabular}{lcl} 
HIST 406 & (3) & Topics: Russian History \\
HIST 576D1 & (3) & Seminar: Topics in Russian History \\
HIST 576D2 & (3) & Seminar: Topics in Russian History \\
JWST 303 & (3) & The Soviet Jewish Experience \\
POLI 329 & (3) & Russian and Soviet Politics \\
POLI 331 & (3) & Politics in East Central Europe \\
POLI 419 & (3) & Transitions from Communism \\
SOCI 455 & (3) & Post-Socialist Societies
\end{tabular}

Note: For pre/corequisites and availability of Anthropology (ANTH), Economics (ECON), History (HIST), Jewish Studies (JWST), Political Science (POLI), and Sociology (SOCI) courses, students should consult the offering department and Class Schedule.

Students are particularly encouraged to select from the growing options available under the LLC course offerings; these are subject to Departmental approval.

\subsection*{3.9.23.28 Bachelor of Arts (B.A.) - Joint Honours Component Russian ( \(\mathbf{3 6}\) credits)}

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Prior to registering for each Joint Honours component, students must consult with advisers in the respective departments for approval of their course selection.
According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00. Departments may require a higher program GPA. Joint Honours students must meet the requirements of both components of their program.

The specific course requirements for the 36 -credit Joint Honours Component Russian program are determined on an individual basis in consultation with the student's program adviser(s).

The Honours thesis course, RUSS 490, is usually completed in the student's final year and is on a topic in Russian literature or culture agreed upon in consultation with the student's thesis advisor.* It is to be written independently from the thesis that is required by the second program in which the student is pursuing their Joint Honours degree
*Note: Students must submit their Russian thesis project proposals to the Russian Studies departmental adviser by March 15th or November 15th of the preceding term for independent research courses.

\section*{Required Course (3 credits)}
RUSS 490
(3)
Honours Seminar 01

\section*{Complementary Courses (33 credits)}

33 credits selected from the following specifications:

\section*{Group A:Russian Language}

Students entering this program with previous knowledge of or exposure to Russian may, with permission of the Department, replace this group with selections from Group B or Group C.

18 credits selected from the following courses or their equivalent:
\begin{tabular}{lcl} 
RUSS 210 & \((3)\) & Elementary Russian Language 1 \\
RUSS 211 & (3) & Elementary Russian Language 2 \\
RUSS \(215^{*}\) & (6) & Elementary Russian Language Intensive 1 \\
RUSS 300 & (3) & Russian for Heritage Speakers 1 \\
RUSS 301 & (3) & Russian for Heritage Speakers 2 \\
RUSS 310 & (3) & Intermediate Russian Language 1 \\
RUSS 311 & (6) & Intermediate Russian Language 2 \\
RUSS \(316^{* *}\) & (3) & Intermediate Russian Language Intensive 2 \\
RUSS 327 & (3) & Reading Russian Poetry \\
RUSS 328 & (3) & Advanced Russian Language 1 in Russian \\
RUSS 410 &
\end{tabular}
\begin{tabular}{lll} 
RUSS 411 & (3) & Advanced Russian Language 2 \\
RUSS \(415^{* * *}\) & (6) & Advanced Russian Language Intensive 1 \\
RUSS 453 & (3) & Advanced Russian Language and Syntax
\end{tabular}
*RUSS 215 is not open to students who have taken RUSS 210 or RUSS 211.
**RUSS 316 is not open to students who have taken RUSS 310 or RUSS 311.
***RUSS 415 is not open to students who have taken RUSS 410 or RUSS 411.

\section*{Group B}

6-9 credits selected from the following courses or their equivalent:
\begin{tabular}{lll} 
RUSS 217 & (3) & Russia's Eternal Questions \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
RUSS 229 & (3) & Introduction to Russian Folklore \\
RUSS 250 & (3) & The Central European Novel
\end{tabular}

\section*{Group C}
\begin{tabular}{|c|c|c|}
\hline RUSS 213 & (3) & Introduction to Soviet Film \\
\hline RUSS 330 & (3) & Chekhov without Borders \\
\hline RUSS 333 & (3) & Petersburg: City of Myth \\
\hline RUSS 337 & (3) & Vladimir Nabokov \\
\hline RUSS 340 & (3) & Russian Short Story \\
\hline RUSS 347 & (3) & Late and Post-Soviet Culture \\
\hline RUSS 350 & (3) & Central European Film \\
\hline RUSS 357 & (3) & Leo Tolstoy \\
\hline RUSS 358 & (3) & Fyodor Dostoevsky \\
\hline RUSS 365 & (3) & Supernatural and Absurd in Russian Literature \\
\hline RUSS 369 & (3) & Narrative and Memory in Russian Culture \\
\hline RUSS 381 & (3) & Russia's Utopia Complex \\
\hline RUSS 382 & (3) & Russian Opera \\
\hline RUSS 385 & (3) & Staging Russianness: From Pushkin to Chekhov \\
\hline RUSS 390 & (3) & Special Topics in Russian \\
\hline RUSS 395 & (3) & Soviet Cinema: Art and Politics \\
\hline RUSS 397 & (3) & Tarkovsky: Cinema and Philosophy \\
\hline RUSS 398 & (3) & Soviet Women Filmmakers \\
\hline RUSS 427 & (3) & Russian Fin de Siècle \\
\hline RUSS 428 & (3) & Russian Avantgarde \\
\hline RUSS 430 & (3) & High Stalinist Culture 1 \\
\hline RUSS 440 & (3) & Russia and Its Others \\
\hline RUSS 454 & (3) & Narratives of Desire \\
\hline RUSS 475 & (3) & Special Topics in Russ Culture \\
\hline RUSS 500 & (3) & Special Topics \\
\hline
\end{tabular}

\begin{abstract}
RUSS 501 (3) Topics in Slavic Culture
* Students must submit proposals to their departmental adviser by March 15 th or November 15th of the preceding term for individual reading and independent research courses.
\end{abstract}

\section*{Group D: Languages, Literatures, and Cultures and Faculty of Arts}
\(0-3\) credits to be chosen from the following or their equivalent:
\begin{tabular}{lll} 
ANTH 303 & \((3)\) & Ethnographies of Post-socialism \\
HIST 216 & \((3)\) & Introduction to Russian History \\
HIST 226 & \((3)\) & East Central and Southeastern Europe in 20th Century \\
HIST 306 & (3) & East Central Europe, 1944-2004 \\
HIST 313 & (3) & Habsburg Monarchy, 1618-1918 \\
HIST 316 & (3) & History of the Russian Empire \\
HIST 326 & (3) & History of the Soviet Union \\
HIST 406 & (3) & Topics: Russian History \\
HIST 576D1 & (3) & Seminar: Topics in Russian History \\
HIST 576D2 & (3) & Seminar: Topics in Russian History \\
JWST 303 & (3) & The Soviet Jewish Experience \\
POLI 329 & (3) & Politics in East Central Europe and Soviet Politics \\
POLI 331 & (3) & Transitions from Communism \\
POLI 419 & (3) & Post-Socialist Societies \\
SOCI 455 &
\end{tabular}

Note: For pre/corequisites and availability of Anthropology (ANTH), Economics (ECON), History (HIST), Jewish Studies (JWST), Political Science (POLI), and Sociology (SOCI) courses, students should consult the offering department and Class Schedule.

\subsection*{3.9.23.29 Latin-American and Caribbean Studies 3.9.23.29.1 About Latin-American and Caribbean Studies}

Established in 1971, the interdisciplinary program in Latin-American and Caribbean Studies offers a comprehensive array of courses on the peoples, cultures, history, literature, politics, economy, and geography of Latin America and the Caribbean, providing students with a broad-based understanding of this geographic region, and with the language and research skills required for advanced scholarship. The program in Latin-American and Caribbean Studies encourages the free exchange of ideas and perspectives in order to foster an environment suitable for serious reflection and critical analysis.

\section*{Study Abroad}

Students in the program in Latin-American and Caribbean Studies are encouraged to consider the opportunities for foreign study and research made available by bilateral exchange agreements with leading universities in the Spanish and Portuguese-speaking world. These exchanges are open to all members of the McGill University community. Further information may be obtained from:
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Service Point
3415 McTavish Street
Montreal QC H3A 0C8
Telephone: 514-398-7878

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or from the International Education website.
An agreement of cooperation with the Center for Latin American Studies at Georgetown University (Washington, D.C.) permits Honours students in Latin-American and Caribbean Studies at McGill to count a portion of their undergraduate coursework toward the degree requirements for Georgetown's M.A. in Latin American Studies, thus permitting completion of the M.A. in one calendar year. See the Program Adviser for additional information.

\subsection*{3.9.23.29.2 Undergraduate Degree Programs}

The Latin American and Caribbean Studies Program is designed for those students who wish to take advantage of the resources available at McGill to acquire a deeper understanding of the Latin American and Caribbean region and its peoples. The interdisciplinary program in Latin-American and Caribbean Studies offers an Honours, a Joint Honours degree, a Major*, and a Minor concentration as part of the Multi-track B.A. in Arts.

Note: * Major concentration offered by Latin American and Caribbean Studies (Major Concentration Latin American Studies) is currently under review pending government approval

Further information for new and returning students is available at mcgill.ca/langlitcultures/undergraduate.

\subsection*{3.9.23.29.3 Latin-American and Caribbean Studies Faculty}

\section*{Program Chair}

Katherine Zein (English)

\section*{Program Committee}

M Balan (Political Science/Institute for the Study of International Development); E. Kohn (Anthropology); C. LeGrand (History and Classical Studies);
F. Macchi (Languages, Literatures, and Cultures); C Raynor (Languages, Literatures, and Cultures); D. Studnicki-Gizbert (History and Classical Studies);
K. Zien (English)

\subsection*{3.9.23.29.4 Bachelor of Arts (B.A.) - Minor Concentration Latin American \& Caribbean Studies (18 credits)}

The B.A.; Minor Concentration in Latin American and Caribbean Studies focuses on a broad, interdisciplinary view of key aspects of Latin America and the Caribbean. The program may be expanded to the Major Concentration in Latin American and Caribbean Studies.

\section*{Required Course (3 credits)}
LACS 497
(3)
Research Seminar: Latin America and the Caribbean

\section*{Complementary Courses ( 15 credits)}

3-6 credits to be chosen from:
\begin{tabular}{lcl} 
HISP 210D1 & (3) & Spanish Language: Beginners \\
HISP 210D2 & (3) & Spanish Language: Beginners \\
HISP 218 & (6) & Spanish Language Intensive - Elementary \\
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220D1 & (3) & Spanish Language: Intermediate \\
HISP 220D2 & (3) & Spanish Language: Intermediate \\
HISP 243 & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & (3) & Survey of Latin American Literature and Culture 2
\end{tabular}

3-6 credits to be chosen from:
\begin{tabular}{lll} 
HIST 309 & (3) & History of Latin America to 1825 \\
HIST 360 & (3) & Latin America since 1825 \\
LACS 480 & (3) & Latin American and Caribbean Studies Reading Course \\
LACS 499 & (3) & Internship: Latin America and Caribbean Studies \\
POLI 319 & (3) & Politics of Latin America
\end{tabular}

3-9 credits to be selected from the following course list in consultation with the Program Adviser. If more than one course is chosen, they must be from at least two different disciplines or departments. At least one course should be at the 300 level or above. No more than 6 credits in Spanish or Portuguese language shall count for the Minor Concentration.

\section*{Courses Offered by Other Units}

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 307 & \((3)\) & Andean Prehistory \\
ANTH 319 & (3) & Inka Archaeology and Ethnohistory \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 332 & \((3)\) & Mesoamerican Archaeology
\end{tabular}
ANTH 422
(3)
Contemporary Latin American Culture and Society

\section*{Canadian Studies}
CANS 412
(3)
Canada and Americas Seminar

\section*{Economics}
\begin{tabular}{lll} 
ECON 313 & (3) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2
\end{tabular}

\section*{English}
* when given under a topic related to Latin American \& Caribbean Studies
ENGL 431
(3)
Studies in Drama

\section*{Geography}
* Note: GEOG 404 may only count toward the requirements for this program when the topic is related to Panama.
\begin{tabular}{lll} 
GEOG 310 & (3) & Development and Livelihoods \\
GEOG 404* & (3) & Environmental Management 2 \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & (3) & Geography of Underdevelopment: Current Problems \\
GEOG 498 & \((3)\) & Humans in Tropical Environments \\
GEOG 510 & (3) & Humid Tropical Environments
\end{tabular}

\section*{Hispanic Studies}
\begin{tabular}{|c|c|c|}
\hline HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
\hline HISP 220D1 & (3) & Spanish Language: Intermediate \\
\hline HISP 220D2 & (3) & Spanish Language: Intermediate \\
\hline HISP 225 & (3) & Hispanic Civilization 1 \\
\hline HISP 226 & (3) & Hispanic Civilization 2 \\
\hline HISP 301 & (3) & Hispanic Literature and Culture in English 1 \\
\hline HISP 320 & (3) & Contemporary Brazilian Literature and Film \\
\hline HISP 328 & (3) & Literature of Ideas: Latin America \\
\hline HISP 332 & (3) & Latin American Literature of 19th Century \\
\hline HISP 333 & (3) & Theatre, Performance and Politics in Latin America \\
\hline HISP 352 & (3) & Latin American Novel \\
\hline HISP 356 & (3) & Latin American Short Story \\
\hline HISP 358 & (3) & Gender and Textualities \\
\hline HISP 437 & (3) & Colonial / Postcolonial Latin America \\
\hline HISP 439 & (3) & Topics: Latin American Literature \\
\hline HISP 453 & (3) & 20th Century Latin American Poetry \\
\hline HISP 505 & (3) & Seminar in Hispanic Studies 01 \\
\hline
\end{tabular}

\section*{History}
\begin{tabular}{lcl} 
HIST 197 & \((3)\) & FYS: Race in Latin America \\
HIST 223 & \((3)\) & Indigenous Peoples and Empires \\
HIST 366 & (3) & Themes in Latin American History \\
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 580D1 & (3) & European and Native-American Encounters \\
HIST 580D2 & (3) & European and Native-American Encounters
\end{tabular}

\section*{Political Science}
POLI 227
(3)
Developing Areas/Introduction

\subsection*{3.9.23.29.5 Bachelor of Arts (B.A.) - Major Concentration Latin American \& Caribbean Studies ( \(\mathbf{3 6}\) credits) \\ Required Courses ( 18 credits)}
* Note: Successful completion of intermediate-level Spanish (HISP 220D1/D2 or HISP 219 or equivalent) is a prerequisite for the required courses HISP 243 and HISP 244.
\begin{tabular}{lll} 
HISP 243* & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244* & (3) & Survey of Latin American Literature and Culture 2 \\
HIST 309 & (3) & History of Latin America to 1825 \\
HIST 360 & (3) & Latin America since 1825 \\
LACS 497 & (3) & Research Seminar: Latin America and the Caribbean \\
POLI 319 & (3) & Politics of Latin America
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits selected from the Complementary Course List in consultation with the Program Adviser with the following requirements:
1) Courses from at least two disciplines or departments must be included.
2) At least 6 of the 18 credits must be at the 300 level or above.
3) No more than 6 credits in Spanish or Portuguese language (HISP 210D1/D2, HISP 218, HISP 219, HISP 220D1/D2, HISP 222) shall count for the Major concentration.

\section*{Complementary Course List}

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
ANTH 307 & (3) & Andean Prehistory \\
ANTH 319 & (3) & Inka Archaeology and Ethnohistory \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
ANTH 428 & (3) & Saints and Mediation in Latin America
\end{tabular}

\section*{Canadian Studies}
CANS 412
(3)
Canada and Americas Seminar

\section*{Economics}

ECON 313
(3)

Economic Development 1
ECON 314
(3)
Economic Development 2

\section*{English}
* when given under a topic related to Latin American \& Caribbean Studies
ENGL 431
(3)
Studies in Drama

\section*{Geography}
* Note: GEOG 404 may only count toward the requirements for this program when the topic is related to Panama.
\begin{tabular}{lll} 
GEOG 310 & (3) & Development and Livelihoods \\
GEOG 404* & \((3)\) & Environmental Management 2 \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 498 & \((3)\) & Humans in Tropical Environments \\
GEOG 510 & \((3)\) & Humid Tropical Environments
\end{tabular}

\section*{Hispanic Studies}
\begin{tabular}{|c|c|c|}
\hline HISP 202 & (6) & Portuguese Language: Beginners \\
\hline HISP 210D1 & (3) & Spanish Language: Beginners \\
\hline HISP 210D2 & (3) & Spanish Language: Beginners \\
\hline HISP 218 & (6) & Spanish Language Intensive - Elementary \\
\hline HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
\hline HISP 220D1 & (3) & Spanish Language: Intermediate \\
\hline HISP 220D2 & (3) & Spanish Language: Intermediate \\
\hline HISP 225 & (3) & Hispanic Civilization 1 \\
\hline HISP 226 & (3) & Hispanic Civilization 2 \\
\hline HISP 301 & (3) & Hispanic Literature and Culture in English 1 \\
\hline HISP 320 & (3) & Contemporary Brazilian Literature and Film \\
\hline HISP 328 & (3) & Literature of Ideas: Latin America \\
\hline HISP 332 & (3) & Latin American Literature of 19th Century \\
\hline HISP 333 & (3) & Theatre, Performance and Politics in Latin America \\
\hline HISP 352 & (3) & Latin American Novel \\
\hline HISP 356 & (3) & Latin American Short Story \\
\hline HISP 358 & (3) & Gender and Textualities \\
\hline HISP 437 & (3) & Colonial / Postcolonial Latin America \\
\hline HISP 439 & (3) & Topics: Latin American Literature \\
\hline HISP 453 & (3) & 20th Century Latin American Poetry \\
\hline HISP 505 & (3) & Seminar in Hispanic Studies 01 \\
\hline
\end{tabular}

\section*{History}
\begin{tabular}{lll} 
HIST 197 & (3) & FYS: Race in Latin America \\
HIST 223 & (3) & Indigenous Peoples and Empires \\
HIST 366 & (3) & Themes in Latin American History
\end{tabular}
\begin{tabular}{lcl} 
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 564D1 & (3) & Seminar: Latin American History \\
HIST 564D2 & (3) & Seminar: Latin American History \\
HIST 580D1 & (3) & European and Native-American Encounters \\
HIST 580D2 & (3) & European and Native-American Encounters
\end{tabular}

\section*{Latin American and Caribbean Studies}
\begin{tabular}{lll} 
LACS 480 & (3) & Latin American and Caribbean Studies Reading Course \\
LACS 499 & (3) & Internship: Latin America and Caribbean Studies
\end{tabular}

\section*{Political Science}

POLI 227
(3)

Developing Areas/Introduction

\subsection*{3.9.23.29.6 Bachelor of Arts (B.A.) - Honours Latin American and Caribbean Studies ( 60 credits)}

The Honours Latin American and Caribbean Studies is designed to meet the needs of students who plan to attend graduate or professional school upon completion of the B.A. This programs provides a comprehensive interdisciplinary understanding of Latin America and the Caribbean, upon which more specialized coursework and research may be based. This program is recommended for students who envision graduate study in a specific discipline, such as History or Political Science.
While the Faculty of Arts regulations require a minimum CGPA of 3.0 for Honours programs, in addition, students pursuing the Honours Latin American and Caribbean Studies must normally maintain a B+ (3.30) average in all program courses. Students must also meet all additional Faculty of Arts requirements for graduation with Honours.

\section*{Required Courses (21 credits)}
* Note: Successful completion of intermediate-level Spanish (HISP 220D1/D2 or HISP 219 or equivalent) is a prerequisite for the required courses HISP 243 and HISP 244.
\begin{tabular}{lll} 
HISP 243* & (3) & Survey of Latin American Literature and Culture 1 \\
HISP \(244^{*}\) & \((3)\) & Survey of Latin American Literature and Culture 2 \\
HIST 309 & (3) & History of Latin America to 1825 \\
HIST 360 & (3) & Latin America since 1825 \\
LACS 497 & (3) & Research Seminar: Latin America and the Caribbean \\
LACS 498 & (3) & Honours Thesis \\
POLI 319 & (3) & Politics of Latin America
\end{tabular}

\section*{Complementary Courses (39 credits)}

39 credits selected from the Complementary Course List in consultation with the Program Adviser with the following requirements.
1) 12 credits must be taken in Spanish or Portuguese.
2) 27 additional credits on Latin America and the Caribbean (exclusive of language courses).
3) A minimum of 15 of these 27 credits must be taken in one of the following disciplinary clusters, which may also include up to 6 credits of theoretical and/or methodological courses of particular relevance to the student's research interests: Cluster 1-Literature and Culture; Cluster 2 - Economics, History, and Political Science; Cluster 3 - Anthropology and Geography.

\section*{Complementary Course List}

\section*{Hispanic Studies - Languages}
\begin{tabular}{lll} 
HISP 210D1 & (3) & Spanish Language: Beginners \\
HISP 210D2 & (3) & Spanish Language: Beginners \\
HISP 218 & (6) & Spanish Language Intensive - Elementary
\end{tabular}
\begin{tabular}{lll} 
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220D1 & (3) & Spanish Language: Intermediate \\
HISP 220D2 & (3) & Spanish Language: Intermediate
\end{tabular}

\section*{Latin American and Caribbean Studies}
LACS 499
(3)
Internship: Latin America and Caribbean Studies

\section*{Cluster 1: Literature and Culture - Hispanic Studies}
\begin{tabular}{lll} 
HISP 225 & \((3)\) & Hispanic Civilization 1 \\
HISP 226 & \((3)\) & Hispanic Civilization 2 \\
HISP 328 & (3) & Literature of Ideas: Latin America \\
HISP 332 & (3) & Latin American Literature of 19th Century \\
HISP 333 & \((3)\) & Theatre, Performance and Politics in Latin America \\
HISP 352 & (3) & Latin American Novel \\
HISP 356 & (3) & Latin American Short Story \\
HISP 358 & (3) & Gender and Textualities \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 453 & (3) & 20th Century Latin American Poetry \\
HISP 505 & (3) & Seminar in Hispanic Studies 01
\end{tabular}

\section*{Cluster 2: Economics, History, and Political Science}
\begin{tabular}{lll} 
ECON 313 & \((3)\) & Economic Development 1 \\
ECON 314 & \((3)\) & Economic Development 2 \\
HIST 197 & \((3)\) & FYS: Race in Latin America \\
HIST 223 & \((3)\) & Indigenous Peoples and Empires \\
HIST 366 & \((3)\) & Themes in Latin American History \\
HIST 409 & \((3)\) & Topics in Latin American History \\
HIST 419 & \((3)\) & Central America \\
HIST 564D1 & \((3)\) & Seminar: Latin American History \\
HIST 564D2 & (3) & Seminar: Latin American History \\
HIST 580D1 & European and Native-American Encounters \\
HIST 580D2 & (3) & European and Native-American Encounters \\
POLI 227 & Developing Areas/Introduction
\end{tabular}

\section*{Cluster 3: Anthropology and Geography}
* Note: GEOG 404 may only count toward the requirements for this program when the topic is related to Panama.
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 307 & (3) & Andean Prehistory \\
ANTH 319 & (3) & Inka Archaeology and Ethnohistory \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
GEOG 310 & (3) & Development and Livelihoods
\end{tabular}
\begin{tabular}{lll} 
GEOG 404* & (3) & Environmental Management 2 \\
GEOG 408 & (3) & Geography of Development \\
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 498 & \((3)\) & Humans in Tropical Environments \\
GEOG 510 & (3) & Humid Tropical Environments
\end{tabular}

\subsection*{3.9.23.29.7 Bachelor of Arts (B.A.) - Joint Honours Component Latin American and Caribbean Studies (36 credits)}

The B.A.; Joint Honours Latin American and Caribbean Studies Component provides students with an interdisciplinary approach to the study of the Latin American and Caribbean region. Students wishing to study at the Honours level in two disciplines can combine Joint Honours programs in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs." Joint Honours students should consult an adviser in each department to discuss their course selection and their research project. Joint Honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Program Requirements}

At least 9 of the 36 credits must be at the 400 level or above.

\section*{Required Courses ( \(\mathbf{2 1}\) credits)}
\begin{tabular}{lll} 
HISP 243 & \((3)\) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & \((3)\) & Survey of Latin American Literature and Culture 2 \\
HIST 309 & \((3)\) & History of Latin America to 1825 \\
HIST 360 & \((3)\) & Latin America since 1825 \\
LACS 497 & (3) & Research Seminar: Latin America and the Caribbean \\
LACS 498 & (3) & Honours Thesis \\
POLI 319 & (3) & Politics of Latin America
\end{tabular}

\section*{Complementary Courses ( 15 credits)}

No more than 9 courses in one field.

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 307 & (3) & Andean Prehistory \\
ANTH 319 & (3) & Inka Archaeology and Ethnohistory \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
ANTH 428 & (3) & Saints and Mediation in Latin America
\end{tabular}

\section*{Canadian Studies}
CANS 412
(3)
Canada and Americas Seminar

\section*{Economics}
\begin{tabular}{lll} 
ECON 313 & (3) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2
\end{tabular}

\section*{English}

ENGL 431*
Studies in Drama
* When given under a topic related to Latin American and Caribbean studies.
Geography
GEOG 310
GEOG \(404^{* *}\)
GEOG 408
GEOG 410
GEOG 498
GEOG 510
** When the topic is related to Panama.

\section*{Hispanic Studies}
\begin{tabular}{lll} 
HISP 219 & \((6)\) & Spanish Language Intensive - Intermediate \\
HISP 220 & \((6)\) & Spanish Language: Intermediate \\
HISP 225 & \((3)\) & Hispanic Civilization 1 \\
HISP 226 & \((3)\) & Hispanic Civilization 2 \\
HISP 301 & \((3)\) & Hispanic Literature and Culture in English 1 \\
HISP 320 & \((3)\) & Contemporary Brazilian Literature and Film \\
HISP 328 & \((3)\) & Literature of Ideas: Latin America \\
HISP 332 & \((3)\) & Latin American Literature of 19th Century \\
HISP 333 & \((3)\) & Theatre, Performance and Politics in Latin America \\
HISP 352 & (3) & Latin American Novel \\
HISP 356 & (3) & Latin American Short Story \\
HISP 358 & (3) & Gender and Textualities \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 439 & (3) & Topics: Latin American Literature \\
HISP 453 & (3) & 20th Century Latin American Poetry \\
HISP 505 & (3) & Seminar in Hispanic Studies 01
\end{tabular}

\section*{History}
\begin{tabular}{lcl} 
HIST 197 & \((3)\) & FYS: Race in Latin America \\
HIST 223 & \((3)\) & Indigenous Peoples and Empires \\
HIST 366 & (3) & Themes in Latin American History \\
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 580D1 & (3) & European and Native-American Encounters \\
HIST 580D2 & (3) & European and Native-American Encounters
\end{tabular}

\section*{Political Science}

POLI 227 (3) Developing Areas/Introduction

\subsection*{3.9.23.30 Liberal Arts \\ 3.9.23.30.1 About Liberal Arts}

The Liberal Arts program represents a contemporary approach to the traditional concept of a broad, non-specialist undergraduate education in the humanities that is tailored to the environment of a research-intensive university. The program recognizes the value of a classical liberal arts education, yet approaches the liberal arts from a global perspective, emphasizing diversity and difference, and providing new ways of engaging the liberal arts.
The program exposes students to texts from, and histories of a wide range of cultures and societies. Students will be able to choose from three intellectual streams:
- Literature and the arts (including theatre and architecture)
- History, culture, and society
- Philosophy and religion

Students will be expected to satisfy distribution requirements across geographical regions of the world and historical periods.
Students in the program will also be required to develop a working knowledge of, and take courses in, a language other than English. Students who are native speakers of a language other than English will be strongly encouraged to develop a working knowledge of, and take courses in, a third language.
The Liberal Arts program is designed to provide students with tools for critical inquiry and effective communication skills. It affirms in an innovative way the Faculty of Arts' commitment to the humanities and its core mission to foster cross-disciplinary perspectives; diverse and engaged communities; and critical thinking.

For further information, please contact the Director, Liberal Arts Program:
Prof. Matteo Soranzo
Email: matteo.soranzo@mcgill.ca
or visit mcgill.ca/langlitcultures/programs/liberal-arts-program.

\subsection*{3.9.23.30.2 Liberal Arts Faculty}

\section*{Program Chair/Director}
M. Soranzo - Languages, Literatures, and Cultures

\section*{Program Committee}
E. Bolongaro - Languages, Literatures, and Cultures; I. Daunais - Département des littératures de langue française, de traduction et de création; S.

Posthumus - Languages, Literatures, and Cultures.

\subsection*{3.9.23.30.3 Bachelor of Arts (B.A.) - Major Concentration Liberal Arts ( 36 credits)}

The Major Concentration in Liberal Arts exposes students to texts from and histories of a suitably wide range of cultures and societies. Students are able to choose among three intellectual streams: literature and the arts (including theatre and architecture); history, culture and society; and philosophy and religion. Students in each stream must satisfy distribution requirements in relation to minimum number of 300/400+ level courses; maximum number of courses in one discipline; geographical areas and historical periods.

All students majoring in Liberal Arts are also required to complete a Minor Concentration in a language program (other than English). Students who are native speakers of a language other than English are strongly encouraged to fulfill this requirement in a third language.

The approved language minors are:
Minor Concentration in Classics (Language Stream)
Minor Concentration in East Asian Language and Literature or Supplementary East Asian Language
Minor Concentration in German Language
Minor Concentration in Hispanic Languages
Minor Concentration in Italian Studies
Minor Concentration in Jewish Studies
Minor Concentration in French Language and Literature - French Language
Minor Concentration in World Islamic \& Middle East Studies
Minor Concentration in Russian
Minor Concentration in Scriptural Languages

\section*{Required Courses}

Liberal Arts students are required to take two courses designed to help them reflect on the contemporary significance of a Liberal Arts education and on their experience in the Liberal Arts program.
LIBA 202
(3)
Introduction to Liberal Arts
LIBA 402
Seminar in Liberal Arts

\section*{Complementary Courses (30 credits)}

Students must complete 30 credits in one of the three specialized streams set out below.
The distribution requirements for all streams are the following:
(a) at least 6 credits from the 200-level introductory courses within one stream;
(b) at least 15 credits must be from courses at the 300 level or above; at least 6 credits must be at the 400 level or above (language courses cannot count toward satisfying this requirement);
(c) no more than 18 credits can be from a single discipline;
(d) geographical area: at least 6 credits in coursework primarily emphasizing Africa and/or Asia, and at least 6 credits in coursework emphasizing Europe and/or the Americas or Australasia, and
(e) historical periods: at least 6 credits in coursework primarily emphasizing texts or history from before 1500 , and at least 6 credits in coursework primarily emphasizing texts or history from 1500-1900 (a given course may satisfy both the geographical area and the historical period requirement).

\section*{Stream 1: Literature and the Arts (including Theatre \& Architecture)}

This stream is designed for students whose primary interests lie in the study of literature and the arts across geographical boundaries and historical traditions.
Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.

The additional courses may be substituted with the approval of the Program Director.
Students must choose 30 credits as follows:
6 credits from the courses in List A
24 credits from the courses in List B

\section*{List A (6 credits)}
\begin{tabular}{|c|c|c|}
\hline ARTH 204 & (3) & Introduction to Medieval Art and Architecture \\
\hline ARTH 205 & (3) & Introduction to Modern Art \\
\hline ARTH 207 & (3) & Introduction Early Modern Art 1400-1700 \\
\hline ARTH 209 & (3) & Introduction to Ancient Art and Architecture \\
\hline CLAS 203 & (3) & Greek Mythology \\
\hline CLAS 301 & (3) & Ancient Greek Literature and Society \\
\hline CLAS 302 & (3) & Roman Literature and Society \\
\hline EAST 211 & (3) & Introduction: East Asian Culture: China \\
\hline EAST 212 & (3) & Introduction: East Asian Culture: Japan \\
\hline EAST 213 & (3) & Introduction: East Asian Culture: Korea \\
\hline EAST 215 & (3) & Introduction to East Asian Art \\
\hline ENGL 202 & (3) & Departmental Survey of English Literature 1 \\
\hline ENGL 203 & (3) & Departmental Survey of English Literature 2 \\
\hline ENGL 215 & (3) & Introduction to Shakespeare \\
\hline ENGL 230 & (3) & Introduction to Theatre Studies \\
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline GERM 259 & (3) & Introduction to German Literature 1 \\
\hline HISP 225 & (3) & Hispanic Civilization 1 \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
HISP 241 & \((3)\) & Survey of Spanish Literature and Culture 1 \\
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ITAL 230 & \((3)\) & Understanding Italy \\
ITAL 295 & (3) & Italian Cultural Studies \\
LLCU 220 & \((3)\) & Introduction to Literary Analysis \\
RELG 203 & (3) & Bible and Western Culture \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2
\end{tabular}

Music: up to 6 credits of Music courses (labelled MUAR) can be selected in consultation with the Program Director.

\section*{List B (24 credits)}

Students in the Literature and the Arts (including Theatre and Architecture) stream may choose from:
- any course (other than a course dedicated to teaching a language) at the 200 level or above in the following departments and programs: Architecture (ARCH), Art History and Communication Studies (labelled ARTH), Classics (CLAS), English (ENGL), French (FREN), German Studies (GERM), Hispanic Studies (HISP), Italian Studies (ITAL), Languages, Literatures, and Cultures (LLCU), and Russian Studies (RUSS); and
- any course (other than a course dedicated to teaching a language) at the 200 level or above in Jewish Studies (JWST) listed in the eCalendar under the headings "Biblical Studies," "Languages and Literatures - Hebrew" and "Language and Literature - Yiddish."

Students in this stream may also choose a maximum of 9 credits from the following list:
\begin{tabular}{|c|c|c|}
\hline AFRI 401 & (3) & Swahili Language and Culture \\
\hline ARCH 250 & (3) & Architectural History 1 \\
\hline ARCH 251 & (3) & Architectural History 2 \\
\hline ARCH 354 & (3) & Architectural History 3 \\
\hline ARCH 355 & (3) & Architectural History 4 \\
\hline ARCH 531 & (3) & Architectural Intentions Vitruvius - Renaissance \\
\hline ARCH 532 & (3) & Origins of Modern Architecture \\
\hline ARTH 352 & (3) & Feminism in Art and Art History \\
\hline EAST 307 & (3) & Topics: East Asian Language and Literature 1 \\
\hline EAST 308 & (3) & Topics: East Asian Language and Literature 2 \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 352 & (3) & Critical Approaches to Chinese Literature \\
\hline EAST 353 & (3) & Approaches to Chinese Cinema \\
\hline EAST 356 & (3) & Modern and Contemporary Chinese Art \\
\hline EAST 362 & (3) & Japanese Cinema \\
\hline EAST 453 & (3) & Topics: Chinese Literature \\
\hline EAST 454 & (3) & Topics: Chinese Cinema \\
\hline EAST 461 & (3) & Inventing Modern Japanese Novel \\
\hline EAST 464 & (3) & Image, Text, Performance \\
\hline EAST 467 & (3) & Topics: Japanese Cinema \\
\hline EAST 550 & (3) & Classical Chinese Poetry Themes and Genres \\
\hline EAST 562 & (3) & Japanese Literary Theory and Practice \\
\hline EAST 569 & (3) & Advanced Topics: Japanese Literature \\
\hline HIST 345 & (3) & History of Italian Renaissance \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline HIST 405 & (3) & Topics in Intellectual History \\
\hline HIST 411 & (3) & Topics in African History \\
\hline HIST 426 & (3) & Topics: British Cultural History \\
\hline ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
\hline ISLA 388 & (3) & Persian Literature \\
\hline ISLA 392 & (3) & Arabic Literature as World Literature \\
\hline ISLA 488 & (3) & Tales of Wonder-Islamic World \\
\hline ISLA 585 & (3) & Arab Women's Literature \\
\hline LIBA 395 & (3) & Individual Reading Course \\
\hline PHIL 336 & (3) & Aesthetics \\
\hline PHIL 436 & (3) & Aesthetics 2 \\
\hline RELG 210 & (3) & Jesus of Nazareth \\
\hline RELG 302 & (3) & Literature of Ancient Israel 1 \\
\hline RELG 303 & (3) & Literature of Ancient Israel 2 \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 311 & (3) & Formation of the New Testament \\
\hline RELG 312 & (3) & The Gospels \\
\hline RELG 313 & (3) & Topics in Biblical Studies 1 \\
\hline RELG 455 & (3) & Religion and the Performing Arts in South India \\
\hline
\end{tabular}

\section*{Stream 2: History, Culture, and Society}

This stream is designed for students whose primary interests lie in the study of history, culture, and society across geographical boundaries and historical traditions.

Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.
The additional courses may be substituted with the approval of the Program Director.
Students must choose 30 credits as follows:
6 credits from the courses in List A
24 credits from the courses in List B

\section*{List A (6 credits)}
\begin{tabular}{|c|c|c|}
\hline CATH 200 & (3) & Introduction to Catholicism \\
\hline COMS 200 & (3) & History of Communication \\
\hline COMS 210 & (3) & Introduction to Communication Studies \\
\hline COMS 230 & (3) & Communication and Democracy \\
\hline EAST 211 & (3) & Introduction: East Asian Culture: China \\
\hline EAST 212 & (3) & Introduction: East Asian Culture: Japan \\
\hline EAST 213 & (3) & Introduction: East Asian Culture: Korea \\
\hline EAST 215 & (3) & Introduction to East Asian Art \\
\hline HIST 200 & (3) & Introduction to African History \\
\hline HIST 201 & (3) & Modern African History \\
\hline HIST 202 & (3) & Survey: Canada to 1867 \\
\hline HIST 203 & (3) & Survey: Canada since 1867 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline HIST 205 & (3) & Ancient Mediterranean History \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 208 & (3) & Introduction to East Asian History \\
\hline HIST 213 & (3) & World History, 600-2000 \\
\hline HIST 214 & (3) & Early Modern Europe \\
\hline HIST 215 & (3) & Modern Europe \\
\hline ISLA 200 & (3) & Islamic Civilization \\
\hline ISLA 210 & (3) & Muslim Societies \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 231 & (3) & Introduction to Political Theory \\
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline SOCI 210 & (3) & Sociological Perspectives \\
\hline SOCI 211 & (3) & Sociological Inquiry \\
\hline
\end{tabular}

\section*{List B (24 credits)}

Students in the History and Culture stream may choose from any course at the 200 level or above in the following departments and programs: History (HIST), Political Science (POLI), Sociology (SOCI) and Art History and Communication Studies (labelled COMS).
Students in this stream may also choose a maximum of 9 credits from the following list:
\begin{tabular}{|c|c|c|}
\hline ANTH 202 & (3) & Socio-Cultural Anthropology \\
\hline ANTH 206 & (3) & Environment and Culture \\
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline ANTH 318 & (3) & Globalization and Religion \\
\hline ANTH 322 & (3) & Social Change in Modern Africa \\
\hline ANTH 327 & (3) & Anthropology of South Asia \\
\hline ANTH 338 & (3) & Indigenous Studies of Anthropology \\
\hline ANTH 355 & (3) & Theories of Culture and Society \\
\hline ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
\hline ARTH 310 & (3) & Postcolonialism \\
\hline CATH 315 & (3) & Catholicism and Ethics \\
\hline CATH 340 & (3) & Catholicism and Public Policy \\
\hline CLAS 203 & (3) & Greek Mythology \\
\hline CLAS 308 & (3) & Gender in the Ancient World \\
\hline CLAS 404 & (3) & Classical Tradition \\
\hline CLAS 406 & (3) & Greek and Roman Historiography \\
\hline EAST 303 & (3) & Current Topics: Chinese Studies 1 \\
\hline EAST 304 & (3) & Current Topics: Chinese Studies 2 \\
\hline EAST 305 & (3) & Current Topics: Japanese Studies 1 \\
\hline EAST 306 & (3) & Current Topics: Japanese Studies 2 \\
\hline EAST 313 & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 314 & (3) & Current Topics: Korean Studies 2 \\
\hline EAST 364 & (3) & Mass Culture and Postwar Japan \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 385 & (3) & Global Korea \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 462 & (3) & Japan in Asia \\
\hline EAST 493 & (3) & Special Topics: East Asian Studies 1 \\
\hline EAST 494 & (3) & Special Topics: East Asian Studies 2 \\
\hline FREN 336 & (3) & Histoire de la langue française \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline HISP 437 & (3) & Colonial / Postcolonial Latin America \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 325 & (3) & Introduction to Shi'i Islam \\
\hline ISLA 345 & (3) & Science and Civilization in Islam \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 360 & (3) & Islam and Politics \\
\hline ISLA 365 & (3) & Middle East Since the 1970's \\
\hline ISLA 410 & (3) & History: Middle-East 1798-1918 \\
\hline ISLA 411 & (3) & History: Middle-East 1918-1945 \\
\hline ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
\hline ISLA 420 & (3) & Indo-Islamic Civilization: Medieval \\
\hline ISLA 421 & (3) & Islamic Culture - Indian Subcontinent \\
\hline ITAL 230 & (3) & Understanding Italy \\
\hline ITAL 295 & (3) & Italian Cultural Studies \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 362 & (3) & Post-World War 2 Literature and Society \\
\hline ITAL 363 & (3) & Gender, Literature and Society \\
\hline ITAL 365 & (3) & The Italian Renaissance \\
\hline ITAL 371 & (3) & The Italian Baroque \\
\hline ITAL 400 & (3) & Italian Regional Identities \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 306 & (3) & The American Jewish Community \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline LIBA 395 & (3) & Individual Reading Course \\
\hline LLCU 212 & (3) & Understanding Digital and Social Media \\
\hline
\end{tabular}
\begin{tabular}{lll} 
LLCU 250 & (3) & History and Future of the Book \\
RELG 201 & (3) & Religions of the Ancient Near East \\
RELG 203 & (3) & Bible and Western Culture \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 270 & (3) & Religious Ethics and the Environment \\
RELG 322 & (3) & Church and Empire to 1300 \\
RELG 323 & (3) & Church and State since 1300 \\
RELG 326 & (3) & Christians in the Roman World \\
RELG 331 & (3) & Religion and Globalization \\
RELG 334 & (3) & Theology of History \\
RELG 338 & (3) & Women and the Christian Tradition \\
RELG 375 & (3) & Religion, Politics and Society \\
RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
RUSS 217 & (3) & Russia's Eternal Questions \\
RUSS 229 & (3) & Introduction to Russian Folklore \\
RUSS 427 & (3) & Russian Fin de Siècle \\
RUSS 428 & (3) & Russian Avantgarde \\
RUSS 430 & High Stalinist Culture 1 \\
RUSS 454 & Narratives of Desire
\end{tabular}

\section*{Stream 3: Philosophy and Religion}

This stream is designed for students whose primary interests lie in the study of philosophy and religion across geographical boundaries and historical traditions.
Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.

The additional courses may be substituted with the approval of the Program Director.
Students must choose 30 credits as follows:
6 credits from the courses in List A
24 credits from the courses in List B

\section*{List A (6 credits)}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
JWST 211 & \((3)\) & Jewish Studies 1: Biblical Period \\
JWST 216 & \((3)\) & Jewish Studies 2: 400 B.C.E. - 1000 \\
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 240 & (3) & Political Philosophy 1 \\
POLI 231 & (3) & Introduction to Political Theory \\
RELG 201 & (3) & Religions of the Ancient Near East \\
RELG 203 & (3) & Bible and Western Culture \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 252 & (3) & Hinduism and Buddhism \\
RELG 253 & &
\end{tabular}
\begin{tabular}{lll} 
RELG 321 & \((3)\) & Western Intellectual Tradition \\
RELG 334 & \((3)\) & Theology of History \\
RELG 341 & \((3)\) & Introduction: Philosophy of Religion \\
RELG 373 & \((3)\) & Christian Ethics of Love \\
RELG 380 & \((3)\) & Religion, Philosophy, Modernity
\end{tabular}

\section*{List B (24 credits)}

Students in the Philosophy and Religion stream may choose from:
- any course (other than a course dedicated to teaching a language) at the 200 level or above in the following departments and programs: Philosophy (PHIL), Religious Studies (RELG), Catholic Studies (CATH), Islamic Studies (ISLA), and Jewish Studies (JWST); and
- any course in Political Science (POLI) listed in the eCalendar under the heading "Political Theory."

Students in this stream may also choose a maximum of 9 credits from the following list:
\begin{tabular}{|c|c|c|}
\hline ANTH 209 & (3) & Anthropology of Religion \\
\hline ANTH 318 & (3) & Globalization and Religion \\
\hline CLAS 203 & (3) & Greek Mythology \\
\hline CLAS 303 & (3) & Ancient Greek Religion \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline ENVR 400* & (3) & Environmental Thought \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 367 & (3) & Topics in German Thought \\
\hline HIST 320 & (3) & Themes in Intellectual History \\
\hline HIST 350 & (3) & Science and the Enlightenment \\
\hline HIST 440 & (3) & Fiction and History \\
\hline ITAL 355 & (3) & Dante and the Middle Ages \\
\hline ITAL 465 & (3) & Religious Identities in Italy \\
\hline LIBA 395 & (3) & Individual Reading Course \\
\hline LLCU 301 & (3) & Topics in Culture and Thought \\
\hline
\end{tabular}
* ENVR 203 is a prerequisite for ENVR 400.

\subsection*{3.9.23.30.4 Bachelor of Arts (B.A.) - Honours Liberal Arts (60 credits)}

The Honours in Liberal Arts exposes students to texts from and histories of a suitably wide range of cultures and societies. Students are able to choose among three intellectual streams: literature and the arts (including theatre and architecture); history, culture and society; and philosophy and religion. Students in each stream must satisfy a language requirement as well as distribution requirements in relation to minimum number of 300/400+ level courses; maximum number of courses in one discipline; geographical areas and historical periods.

Honours student must maintain a program GPA of 3.30 and an overall GPA of 3.00.
All students in the Honours Liberal Arts are also required to complete a Minor Concentration in a language program (other than English). Students who are native speakers of a language other than English are strongly encouraged to fulfill this requirement in a third language.
The approved language minors are:
Minor Concentration in Classics (Language Stream)
Minor Concentration in East Asian Language and Literature or Supplementary East Asian Language
Minor Concentration in German Language
Minor Concentration in Hispanic Languages
Minor Concentration in Italian Studies
Minor Concentration in Jewish Studies
Minor Concentration in French Language and Literature - French Language
Minor Concentration in World Islamic \& Middle East Studies

\section*{Minor Concentration in Russian}

Minor Concentration in Scriptural Languages

\section*{Required Courses (9 credits)}

Honours Liberal Arts students are required to take three courses designed to help them reflect on the contemporary significance of a Liberal Arts education and on their experience in the Liberal Arts program.
\begin{tabular}{lll} 
LIBA 202 & (3) & Introduction to Liberal Arts \\
LIBA 402 & (3) & Seminar in Liberal Arts \\
LIBA 490 & (3) & Honours Thesis
\end{tabular}

\section*{Complementary Courses (51 credits)}

Honours students must complete 51 credits in one of the three specialized streams set out below.
The distribution requirements for all streams are the following:
(a) at least 9 credits from the 200-level introductory courses within one stream;
(b) at least 24 credits must be from courses at the 300 level or above; at least 6 credits must be at the 400 level or above (language courses cannot count toward satisfying this requirement);
(c) no more than 21 credits can be from a single discipline;
(d) geographical area: at least 6 credits in coursework primarily emphasizing Africa and/or Asia, and at least 6 credits in coursework emphasizing Europe and/or the Americas or Australasia, and
(e) historical periods: at least 6 credits in coursework primarily emphasizing texts or history from before 1500 , and at least 6 credits in coursework primarily emphasizing texts or history from 1500-1900 (a given course may satisfy both the geographical area and the historical period requirement).

\section*{Stream 1: Literature and the Arts (including Theatre \& Architecture)}

This stream is designed for students whose primary interests lie in the study of literature and the arts across geographical boundaries and historical traditions.
Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.
The additional courses may be substituted with the approval of the Program Director.
Students must choose 51 credits as follows:
9 credits from the courses in List A
42 credits from the courses in List B

\section*{List A (9 credits)}
\begin{tabular}{lll} 
ARTH 204 & \((3)\) & Introduction to Medieval Art and Architecture \\
ARTH 205 & (3) & Introduction to Modern Art \\
ARTH 207 & (3) & Introduction Early Modern Art 1400-1700 \\
ARTH 209 & (3) & Introduction to Ancient Art and Architecture \\
CLAS 203 & (3) & Greek Mythology \\
CLAS 301 & (3) & Ancient Greek Literature and Society \\
CLAS 302 & (3) & Roman Literature and Society \\
EAST 211 & (3) & Introduction: East Asian Culture: China \\
EAST 212 & (3) & Introduction: East Asian Culture: Japan \\
EAST 213 & (3) & Introduction: East Asian Culture: Korea \\
EAST 215 & (3) & Introduction to East Asian Art \\
ENGL 202 & (3) & Departmental Survey of English Literature 1 \\
ENGL 203 & (3) & Departmental Survey of English Literature 2 \\
ENGL 215 & (3) & Introduction to Shakespeare
\end{tabular}
\begin{tabular}{lcl} 
ENGL 230 & \((3)\) & Introduction to Theatre Studies \\
FREN 250 & \((3)\) & Littérature française avant 1800 \\
FREN 251 & \((3)\) & Littérature française depuis 1800 \\
FREN 252 & \((3)\) & Littérature québécoise \\
GERM 259 & \((3)\) & Introduction to German Literature 1 \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 241 & (3) & Survey of Spanish Literature and Culture 1 \\
ISLA 200 & (3) & Islamic Civilization \\
ISLA 210 & (3) & Muslim Societies \\
ITAL 230 & (3) & Understanding Italy \\
ITAL 295 & (3) & Italian Cultural Studies \\
LLCU 220 & (3) & Introduction to Literary Analysis \\
RELG 203 & (3) & Bible and Western Culture \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & Russian 19th Century: Literary Giants 2
\end{tabular}

Music: up to 9 credits of Music courses (labelled MUAR) can be selected in consultation with the Program Director.

\section*{List B (42 credits)}

Students in the Literature and the Arts (including Theatre and Architecture) stream may choose from:
- any course (other than a course dedicated to teaching a language) at the 200 level or above in the following departments and programs: Architecture (ARCH), Art History and Communication Studies (labelled ARTH), Classics (CLAS), English (ENGL), French (FREN), German Studies (GERM), Hispanic Studies (HISP), Italian Studies (ITAL), Languages, Literatures, and Cultures (LLCU), and Russian Studies (RUSS); and
- any course (other than a course dedicated to teaching a language) at the 200 level or above in Jewish Studies (JWST) listed in the eCalendar under the headings "Biblical Studies," "Languages and Literatures - Hebrew" and "Language and Literature - Yiddish."

Students in this stream may also choose a maximum of 12 credits from the following list:
\begin{tabular}{|c|c|c|}
\hline AFRI 401 & (3) & Swahili Language and Culture \\
\hline ARCH 250 & (3) & Architectural History 1 \\
\hline ARCH 251 & (3) & Architectural History 2 \\
\hline ARCH 354 & (3) & Architectural History 3 \\
\hline ARCH 355 & (3) & Architectural History 4 \\
\hline ARCH 531 & (3) & Architectural Intentions Vitruvius - Renaissance \\
\hline ARCH 532 & (3) & Origins of Modern Architecture \\
\hline ARTH 352 & (3) & Feminism in Art and Art History \\
\hline EAST 307 & (3) & Topics: East Asian Language and Literature 1 \\
\hline EAST 308 & (3) & Topics: East Asian Language and Literature 2 \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 352 & (3) & Critical Approaches to Chinese Literature \\
\hline EAST 353 & (3) & Approaches to Chinese Cinema \\
\hline EAST 356 & (3) & Modern and Contemporary Chinese Art \\
\hline EAST 362 & (3) & Japanese Cinema \\
\hline EAST 453 & (3) & Topics: Chinese Literature \\
\hline EAST 454 & (3) & Topics: Chinese Cinema \\
\hline EAST 461 & (3) & Inventing Modern Japanese Novel \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 464 & (3) & Image, Text, Performance \\
\hline EAST 467 & (3) & Topics: Japanese Cinema \\
\hline EAST 550 & (3) & Classical Chinese Poetry Themes and Genres \\
\hline EAST 562 & (3) & Japanese Literary Theory and Practice \\
\hline EAST 569 & (3) & Advanced Topics: Japanese Literature \\
\hline HIST 345 & (3) & History of Italian Renaissance \\
\hline HIST 405 & (3) & Topics in Intellectual History \\
\hline HIST 411 & (3) & Topics in African History \\
\hline HIST 426 & (3) & Topics: British Cultural History \\
\hline ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
\hline ISLA 388 & (3) & Persian Literature \\
\hline ISLA 392 & (3) & Arabic Literature as World Literature \\
\hline ISLA 488 & (3) & Tales of Wonder-Islamic World \\
\hline ISLA 585 & (3) & Arab Women's Literature \\
\hline LIBA 395 & (3) & Individual Reading Course \\
\hline PHIL 336 & (3) & Aesthetics \\
\hline PHIL 436 & (3) & Aesthetics 2 \\
\hline RELG 210 & (3) & Jesus of Nazareth \\
\hline RELG 302 & (3) & Literature of Ancient Israel 1 \\
\hline RELG 303 & (3) & Literature of Ancient Israel 2 \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 311 & (3) & Formation of the New Testament \\
\hline RELG 312 & (3) & The Gospels \\
\hline RELG 313 & (3) & Topics in Biblical Studies 1 \\
\hline RELG 455 & (3) & Religion and the Performing Arts in South India \\
\hline
\end{tabular}

\section*{Stream 2: History, Culture, and Society}

This stream is designed for students whose primary interests lie in the study of history, culture, and society across geographical boundaries and historical traditions.
Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.
The additional courses may be substituted with the approval of the Program Director.
Students must choose 51 credits as follows:
9 credits from the courses in List A
42 credits from the courses in List B

\section*{List A (9 credits)}
\begin{tabular}{lll} 
CATH 200 & \((3)\) & Introduction to Catholicism \\
COMS 200 & (3) & History of Communication \\
COMS 210 & (3) & Introduction to Communication Studies \\
COMS 230 & (3) & Communication and Democracy \\
EAST 211 & (3) & Introduction: East Asian Culture: China \\
EAST 212 & \((3)\) & Introduction: East Asian Culture: Japan
\end{tabular}
\begin{tabular}{lcl} 
EAST 213 & \((3)\) & Introduction: East Asian Culture: Korea \\
EAST 215 & \((3)\) & Introduction to East Asian Art \\
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
HIST 202 & (3) & Survey: Canada to 1867 \\
HIST 203 & (3) & Survey: Canada since 1867 \\
HIST 205 & (3) & Ancient Mediterranean History \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 208 & (3) & Introduction to East Asian History \\
HIST 213 & (3) & Earld History, 600-2000 Modern Europe \\
HIST 214 & (3) & Modern Europe \\
HIST 215 & (3) & Islamic Civilization \\
ISLA 200 & (3) & Muslim Societies \\
ISLA 210 & (3) & Government and Politics - Developed World \\
POLI 212 & (3) & Developing Areas/Introduction \\
POLI 227 & (3) & Introduction to Political Theory \\
POLI 231 & (3) & International Politics of Economic Relations \\
POLI 243 & (3) & International Politics: State Behaviour \\
POLI 244 & (3) & Sociological Perspectives \\
SOCI 210 & (3) & Sociological Inquiry \\
SOCI 211 & &
\end{tabular}

\section*{List B (42 credits)}

Students in the History and Culture stream may choose from any course at the 200 level or above in the following departments and programs: History (HIST), Political Science (POLI), Sociology (SOCI) and Art History and Communication Studies (labelled COMS).
Students in this stream may also choose a maximum of 12 credits from the following list:
\begin{tabular}{lll} 
ANTH 202 & (3) & Socio-Cultural Anthropology \\
ANTH 206 & (3) & Environment and Culture \\
ANTH 212 & (3) & Anthropology of Development \\
ANTH 318 & (3) & Globalization and Religion \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 338 & (3) & Indigenous Studies of Anthropology \\
ANTH 355 & (3) & Theories of Culture and Society \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
ARTH 310 & (3) & Postcolonialism \\
CATH 315 & (3) & Catholicism and Ethics \\
CATH 340 & (3) & Catholicism and Public Policy \\
CLAS 203 & (3) & Greek Mythology \\
CLAS 308 & (3) & Gender in the Ancient World \\
CLAS 404 & (3) & Classical Tradition \\
CLAS 406 & (3) & Greek and Roman Historiography \\
EAST 303 & (3) & Current Topics: Chinese Studies 1
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 304 & (3) & Current Topics: Chinese Studies 2 \\
\hline EAST 305 & (3) & Current Topics: Japanese Studies 1 \\
\hline EAST 306 & (3) & Current Topics: Japanese Studies 2 \\
\hline EAST 313 & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 314 & (3) & Current Topics: Korean Studies 2 \\
\hline EAST 364 & (3) & Mass Culture and Postwar Japan \\
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 385 & (3) & Global Korea \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 462 & (3) & Japan in Asia \\
\hline EAST 493 & (3) & Special Topics: East Asian Studies 1 \\
\hline EAST 494 & (3) & Special Topics: East Asian Studies 2 \\
\hline FREN 336 & (3) & Histoire de la langue française \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline HISP 437 & (3) & Colonial / Postcolonial Latin America \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 325 & (3) & Introduction to Shi'i Islam \\
\hline ISLA 345 & (3) & Science and Civilization in Islam \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 360 & (3) & Islam and Politics \\
\hline ISLA 365 & (3) & Middle East Since the 1970's \\
\hline ISLA 410 & (3) & History: Middle-East 1798-1918 \\
\hline ISLA 411 & (3) & History: Middle-East 1918-1945 \\
\hline ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
\hline ISLA 420 & (3) & Indo-Islamic Civilization: Medieval \\
\hline ISLA 421 & (3) & Islamic Culture - Indian Subcontinent \\
\hline ITAL 230 & (3) & Understanding Italy \\
\hline ITAL 295 & (3) & Italian Cultural Studies \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 362 & (3) & Post-World War 2 Literature and Society \\
\hline ITAL 363 & (3) & Gender, Literature and Society \\
\hline ITAL 365 & (3) & The Italian Renaissance \\
\hline ITAL 371 & (3) & The Italian Baroque \\
\hline ITAL 400 & (3) & Italian Regional Identities \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline JWST 306 & (3) & The American Jewish Community \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline LIBA 395 & (3) & Individual Reading Course \\
\hline LLCU 212 & (3) & Understanding Digital and Social Media \\
\hline LLCU 250 & (3) & History and Future of the Book \\
\hline RELG 201 & (3) & Religions of the Ancient Near East \\
\hline RELG 203 & (3) & Bible and Western Culture \\
\hline RELG 204 & (3) & Judaism, Christianity and Islam \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 322 & (3) & Church and Empire to 1300 \\
\hline RELG 323 & (3) & Church and State since 1300 \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline RELG 331 & (3) & Religion and Globalization \\
\hline RELG 334 & (3) & Theology of History \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 375 & (3) & Religion, Politics and Society \\
\hline RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
\hline RUSS 217 & (3) & Russia's Eternal Questions \\
\hline RUSS 229 & (3) & Introduction to Russian Folklore \\
\hline RUSS 427 & (3) & Russian Fin de Siècle \\
\hline RUSS 428 & (3) & Russian Avantgarde \\
\hline RUSS 430 & (3) & High Stalinist Culture 1 \\
\hline RUSS 454 & (3) & Narratives of Desire \\
\hline
\end{tabular}

\section*{Stream 3: Philosophy and Religion}

This stream is designed for students whose primary interests lie in the study of philosophy and religion across geographical boundaries and historical traditions.
Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.

The additional courses may be substituted with the approval of the Program Director.
Students must choose 51 credits as follows:
9 credits from the courses in List A
42 credits from the courses in List B

\section*{List A (9 credits)}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
JWST 211 & \((3)\) & Jewish Studies 1: Biblical Period \\
JWST 216 & \((3)\) & Jewish Studies 2: 400 B.C.E. - 1000 \\
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 240 & (3) & Political Philosophy 1 \\
POLI 231 & \((3)\) & Introduction to Political Theory
\end{tabular}
\begin{tabular}{lll} 
RELG 201 & (3) & Religions of the Ancient Near East \\
RELG 203 & (3) & Bible and Western Culture \\
RELG 204 & \((3)\) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 252 & (3) & Hinduism and Buddhism \\
RELG 253 & (3) & Religions of East Asia \\
RELG 321 & (3) & Western Intellectual Tradition \\
RELG 334 & (3) & Theology of History \\
RELG 341 & (3) & Introduction: Philosophy of Religion \\
RELG 373 & (3) & Christian Ethics of Love \\
RELG 380 & (3) & Religion, Philosophy, Modernity
\end{tabular}

\section*{List B (42 credits)}

Students in the Philosophy and Religion stream may choose from:
- any course (other than a course dedicated to teaching a language) at the 200 level or above in the following departments and programs: Philosophy (PHIL), Religious Studies (RELG), Catholic Studies (CATH), Islamic Studies (ISLA), and Jewish Studies (JWST); and
- any course in Political Science (POLI) listed in the eCalendar under the heading "Political Theory."

Students in this stream may also choose a maximum of 12 credits from the following list:
\begin{tabular}{|c|c|c|}
\hline ANTH 209 & (3) & Anthropology of Religion \\
\hline ANTH 318 & (3) & Globalization and Religion \\
\hline CLAS 203 & (3) & Greek Mythology \\
\hline CLAS 303 & (3) & Ancient Greek Religion \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline ENVR 400* & (3) & Environmental Thought \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 367 & (3) & Topics in German Thought \\
\hline HIST 320 & (3) & Themes in Intellectual History \\
\hline HIST 350 & (3) & Science and the Enlightenment \\
\hline HIST 440 & (3) & Fiction and History \\
\hline ITAL 355 & (3) & Dante and the Middle Ages \\
\hline ITAL 465 & (3) & Religious Identities in Italy \\
\hline LIBA 395 & (3) & Individual Reading Course \\
\hline LLCU 301 & (3) & Topics in Culture and Thought \\
\hline
\end{tabular}
* ENVR 203 is a prerequisite for ENVR 400.

\subsection*{3.9.24 Linguistics}

\subsection*{3.9.24.1 Location}

Department of Linguistics
1085 Dr. Penfield Avenue, Room 111
Montreal QC H3A 1A7
Telephone: 514-398-4222
Website: mcgill.ca/linguistics

\subsection*{3.9.24.2 About Linguistics}

Linguistics is the scientific study of human language. Topics covered at McGill University include: the structure of the world's languages at the level of sounds (phonetics and phonology), words (morphology), sentences (syntax), and meaning (semantics); how people learn languages (acquisition); how people use two languages (bilingualism); how to model and process linguistic data using computational methods (computational linguistics); how languages change over time (historical linguistics); and how languages vary in relation to region and social identity (dialectology and sociolinguistics). In addition to preparing students for advanced academic work in linguistics and related disciplines (e.g., anthropology, cognitive neuroscience, computer science, philosophy, or psychology), courses in linguistics provide a useful background for many careers, for example, language teaching, translation, child psychology, speech-language pathology, communication, and speech technology.

The Linguistics department offers a minor concentration, a major concentration, an honours program, and a joint honours program with other departments in the Faculty of Arts.

\subsection*{3.9.24.3 Requirements}

Linguistics students must do at least two-thirds of their Linguistics courses at McGill. Honours students must also do their Honours thesis at McGill. Inquiries may be addressed to the Departmental office or the advisors for undergraduate studies.

\subsection*{3.9.24.4 Bachelor of Arts (B.A.) - Minor Concentration Linguistics (18 credits)}

This program may be expanded to the Major Concentration Linguistics.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 330 & (3) & Phonetics \\
LING 371 & (3) & Syntax 1
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits in Linguistics chosen according to the student's interests. At least 3 of these credits must be at the 400 or 500 level. Only 3 credits at the 200 level may count towards complementary credits. The complementary courses may include (but not limited to) the following:
\begin{tabular}{lll} 
COMP 230 & (3) & Logic and Computability \\
LING 360 & (3) & Introduction to Semantics \\
MATH 318 & (3) & Mathematical Logic \\
PHIL 210 & (3) & Introduction to Deductive Logic 1
\end{tabular}

\subsection*{3.9.24.5 Bachelor of Arts (B.A.) - Major Concentration Linguistics (36 credits)}

\section*{Required Courses (18 credits)}
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 330 & (3) & Phonetics \\
LING 331 & (3) & Phonology 1 \\
LING 360 & (3) & Introduction to Semantics \\
LING 371 & (3) & Syntax 1 \\
PHIL 210 & \((3)\) & Introduction to Deductive Logic 1
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits in Linguistics (LING) chosen according to the student's interests. At least 9 of these credits must be at the 400/500 level.
Only 3 credits at the 200 level may count towards complementary credits.

\subsection*{3.9.24.6 Bachelor of Arts (B.A.) - Honours Linguistics ( 60 credits)}

Honours students must maintain a GPA of 3.30 (B+average) in their program courses and a minimum grade of B+ must be obtained in three out of four of the following courses: LING 330, LING 331, LING 360, LING 371, as well as in the Honours Thesis, LING 480D1/D2. According to Faculty of Arts regulations, Honours students must also maintain a minimum CGPA of 3.00 in general.

The requirement for First Class Honours is a CGPA of 3.50 and a minimum grade of A- in the Honours Thesis. Inquiries may be addressed to the departmental office or to the Adviser for Undergraduate Studies.

\section*{Required Courses (24 credits)}
\begin{tabular}{lcl} 
LING 201 & \((3)\) & Introduction to Linguistics \\
LING 330 & \((3)\) & Phonetics \\
LING 331 & \((3)\) & Phonology 1 \\
LING 360 & (3) & Introduction to Semantics \\
LING 371 & \((3)\) & Syntax 1 \\
LING 480D1 & \((3)\) & Honours Thesis \\
LING 480D2 & \((3)\) & Honours Thesis \\
PHIL 210 & \((3)\) & Introduction to Deductive Logic 1
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits in Linguistics including 12 credits in related fields. At least 15 of the credits in Linguistics must be at the \(400 / 500\) level.
Only 3 credits at the 200 level may count towards complementary credits.

\section*{Other Fields}

12 credits in related fields selected from the following list.

\section*{Computer Science}
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 230 & (3) & Logic and Computability \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

\section*{French Language and Literature}
\begin{tabular}{lll} 
FREN 231 & (3) & Linguistique française \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 434 & (3) & Sociolinguistique du français
\end{tabular}

\section*{Language}

Any course in language (other than the student's native language) - literature courses are not acceptable.

\section*{Mathematics}
MATH 240
(3)
Discrete Structures

\section*{Philosophy}
\begin{tabular}{lll} 
PHIL 304 & (3) & Chomsky \\
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 415 & (3) & Philosophy of Language
\end{tabular}

\section*{Psychology}
\begin{tabular}{lll} 
PSYC 311 & (3) & Human Cognition and the Brain \\
PSYC 340 & (3) & Psychology of Language
\end{tabular}
\begin{tabular}{lll} 
PSYC 341 & (3) & The Psychology of Bilingualism \\
PSYC 433 & (3) & Cognitive Science \\
PSYC 530 & (3) & Applied Topics in Deafness
\end{tabular}

\section*{Statistics}

Any course in statistics (from any department).

\subsection*{3.9.24.7 Bachelor of Arts (B.A.) - Joint Honours Component Linguistics (36 credits)}

Students who wish to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).
Joint Honours students must maintain a GPA of 3.30 ( \(B+\) average) in their program courses and a minimum grade of B+ must be obtained in three out of four of the following courses: LING 330, LING 331, LING 360, LING 371, as well as in the Joint Honours Thesis, LING 481D1/D2. According to Faculty of Arts regulations, Joint Honours students must also maintain a minimum CGPA of 3.00 in general.

The requirement for First Class Honours is a CGPA of 3.50 and a minimum grade of A- in the Joint Honours Thesis. Inquiries may be addressed to the departmental office or to the Adviser for Undergraduate Studies.

\section*{Required Courses (21 credits)}
\begin{tabular}{lll} 
LING 201 & \((3)\) & Introduction to Linguistics \\
LING 330 & \((3)\) & Phonetics \\
LING 331 & (3) & Phonology 1 \\
LING 360 & (3) & Introduction to Semantics \\
LING 371 & (3) & Syntax 1 \\
LING 481D1 & (1.5) & Joint Honours Thesis \\
LING 481D2 & (1.5) & Joint Honours Thesis \\
PHIL 210 & \((3)\) & Introduction to Deductive Logic 1
\end{tabular}

\section*{Complementary Courses (15 credits)}

15 credits in Linguistics (LING) chosen according to the student's interests. At least 9 of these credits must be at the 400/500 level.
Only 3 credits at the 200 level may count towards complementary credits.

\subsection*{3.9.24.8 Linguistics Related Programs}
3.9.24.8.1 Minor in Cognitive Science

Students following major or honours programs in Linguistics with an interest in cognition may want to consider the Minor in Cognitive Science. For more information, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.8: Cognitive Science.

\subsection*{3.9.25 Littératures de langue française, de traduction et de création}

\subsection*{3.9.25.1 Coordonnées}

Pavillon des Arts, bureau 155
853, rue Sherbrooke ouest
Montréal QC H3A 0G5
Téléphone : 514-398-4933
Courriel : info.dltc@mcgill.ca
Site web : mcgill.ca/litterature/fr

\subsection*{3.9.25.2 Généralités: Langue et littérature françaises}

Le Département des littératures de langue française, de traduction et de création offre un programme de cours qui couvre l'ensemble des littératures de langue française (France, Québec, Espaces francophones) ainsi que d'autres aspects des études françaises: théorie, langue, traduction, et création littéraire.

Le français est la seule langue de travail au Département. Tous les cours sont donnés en français. Les francophones constituent une proportion importante de notre clientèle, ce qui représente un avantage appréciable pour les étudiants qui ne sont pas de langue française, leur permettant de faire leurs études dans un milieu essentiellement français.
Pour ce qui est de la traduction (principalement de l'anglais vers le français), le programme offert à McGill a comme principale caractéristique de comporter un grand nombre de cours de littérature.
La plupart des cours peuvent être suivis par tous les étudiants ayant les connaissances et les capacités voulues: le professeur jugera en dernier ressort. Il existe toutefois quelques restrictions.
1. L'admission aux cours pratiques de langue (Composition 1 et 2 , ainsi que Traduction) est subordonnée à la réussite d'un test qui a pour but de déterminer le niveau de connaissance de l'étudiant et d'assurer que celui-ci sera dirigé vers un cours correspondant à ses besoins. Si la préparation de l'étudiant s'avère insuffisante pour lui permettre de suivre un cours au Département, un cours au Centre d'enseignement du français (French as a Second Language) lui sera conseillé.
2. Les étudiants extérieurs au Département peuvent s'inscrire à tous les cours offerts au Département sauf exceptions indiquées dans le descriptif des cours.

\subsection*{3.9.25.3 Association générale des étudiants de langue et littérature françaises (AGELF)}

Association regroupant les étudiants de 1er cycle (inscrits à au moins 6 crédits en français) qui a pour but de promouvoir les intérêts de tous ses membres.

\subsection*{3.9.25.4 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue \& littérature françaises - Langue française (18 crédits)}

Le programme «Concentration mineure en Langue et littérature françaises (option «Langue française») » est offert en collaboration avec le Centre
d'enseignement du français. Il s'adresse à des étudiant(e)s de français langue seconde qui ont déjà une bonne connaissance de la langue. Il vise l'acquisition d'un niveau de français équivalent au niveau B2 («utilisateur expérimenté») du Cadre européen de référence pour les langues dans les sphères universitaire, professionnelle, publique et personnelle.
Cette concentration mineure ne peut pas être convertie en concentration majeure. Pour être admis(e), l'étudiant(e) doit passer un test de classement au Centre d'enseignement du français.

\section*{COURS COMPLÉMENTAIRES (18 crédits)}

De 3 à 15 crédits de cours FRSL (Centre d'enseignement du français) répartis de la façon suivante+ :

De 0 à 6 crédits choisis parmi les cours ci-dessous:
\begin{tabular}{lcl} 
FRSL 321D1 & (3) & Oral and Written French 2 \\
FRSL 321D2 & (3) & Oral and Written French 2 \\
FRSL 325 & (6) & Oral and Written French 2 - Intensive \\
FRSL 332 & \((3)\) & Intermediate French: Grammar 01 \\
FRSL 333 & \((3)\) & Intermediate French: Grammar 02 \\
FRSL 407 & (3) & Compréhension et expression orales \\
FRSL 408 & \((3)\) & Français oral: Textes et expressions
\end{tabular}

De 0 à 6 crédits choisis parmi les cours ci-dessous :
FRSL 431
Français fonctionnel avancé

De 3 à 12 crédits choisis parmi les cours ci-dessous :
\begin{tabular}{lll} 
FRSL 445 & (3) & Français fonctionnel, écrit 1 \\
FRSL 446 & (3) & Français fonctionnel, écrit 2 \\
FRSL 449 & (3) & Le français des médias \\
FRSL 455 & (3) & Grammaire et création
\end{tabular}

\footnotetext{
+ Le cours QCST 336 («Quebec Studies Summer Seminar ») ( 6 cr.) peut être suivi en remplacement de 6 crédits de cours FRSL. La substitution nécessite cependant l'autorisation préalable du conseiller ou de la conseillère académique du Centre d'enseignement du français.
}

De 3 à 15 crédits choisis parmi les cours FREN suivants (ou leurs équivalents) ++ :
\begin{tabular}{lll} 
CCTR \(219 * 1\) & \((3)\) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(225 * 2\) & \((3)\) & Introduction to Translation (English to French) \\
CCTR \(325 * 3\) & (3) & Semi-Specialized Translation (English to French) \\
CCTR \(326 * 4\) & (3) & Semi-Specialized Translation (French to English) \\
FREN 201 & (3) & Le français littéraire (français langue seconde) \\
FREN 203 & (3) & Analyse de textes (français langue seconde) \\
FREN 231 & (3) & Linguistique française \\
FREN \(239 * 1\) & (3) & Stylistique comparée \\
FREN \(244 * 2\) & (3) & Traduction générale \\
FREN 245 & (3) & Grammaire normative \\
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800 \\
FREN 252 & (3) & Littérature québécoise \\
FREN \(346 * 3\) & (3) & Traduction avancée \\
FREN \(441 * 5\) & Traduction français-anglais
\end{tabular}
++ Pour s'inscrire aux cours FREN 201 ou FREN 203, l'étudiant(e) s'assurera d'avoir réussi le FRSL 431 ou d'avoir réussi ou être inscrit(e) à au moins un des cours suivants : FRSL 445, FRSL 446, FRSL 449 ou FRSL 455.
*1 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.
*2 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.
*3 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.
*4 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

\subsection*{3.9.25.5 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et littérature françaises - Études et pratiques littéraires (18 crédits)}

Ce programme offre une introduction aux études littéraires de langue française et aux différentes pratiques littéraires que sont la création, la traduction et l'édition. Il vise également à fournir à chaque étudiant(e) les moyens de bien maîtriser l'écriture critique et les ressources de la langue. Il est possible de s'inscrire d'abord à ce programme et de le convertir par la suite en concentration majeure, moyennant l'ajout des cours requis pour répondre aux exigences de ce dernier programme. L'admission au programme nécessite une bonne connaissance du français lu, écrit et parlé.

\section*{COURS COMPLÉMENTAIRES (18 crédits)}

3 crédits choisis parmi les cours d'introduction suivants :
\begin{tabular}{lll} 
FREN 222 & (3) & Introduction aux études littéraires \\
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800 \\
FREN 252 & (3) & Littérature québécoise
\end{tabular}

15 crédits répartis de la façon suivante, selon l’orientation choisie («A : Études littéraires » ou «B : Pratiques littéraires ») :

\section*{ORIENTATION A : «Etudes littéraires»}

12 crédits choisis parmi les cours du bloc «Études» (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800) ;

3 crédits choisis parmi les cours du bloc « Pratiques».

\section*{ORIENTATION B : «Pratiques littéraires »}

12 crédits choisis parmi les cours d'au moins deux séries différentes du bloc «Pratiques» ;
3 crédits choisis parmi les cours du bloc «Études».

\section*{I) BLOC: ÉTUDES}

Liste de cours
(a) Série « Euvres et courants»
\begin{tabular}{|c|c|c|}
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline FREN 310 & (3) & Cinéma français \\
\hline FREN 311 & (3) & Cinéma francophone \\
\hline FREN 315 & (3) & Cinéma québécois \\
\hline FREN 329 & (3) & Civilisation québécoise \\
\hline FREN 355 & (3) & Littérature du 20e siècle 1 \\
\hline FREN 360 & (3) & La littérature du 19e siècle 1 \\
\hline FREN 362 & (3) & La littérature du 17e siècle 1 \\
\hline FREN 364 & (3) & La littérature du 18e siècle 1 \\
\hline FREN 366 & (3) & Littérature de la Renaissance 1 \\
\hline FREN 372 & (3) & Littérature québécoise 1 \\
\hline FREN 380 & (3) & Littératures francophones 1 \\
\hline FREN 381 & (3) & Littératures francophones 2 \\
\hline FREN 382 & (3) & Littérature québécoise 2 \\
\hline FREN 453 & (3) & Littérature du 20e siècle 2 \\
\hline FREN 455 & (3) & La littérature médiévale 1 \\
\hline FREN 456 & (3) & La littérature médiévale 2 \\
\hline FREN 457 & (3) & La littérature de la Renaissance 2 \\
\hline FREN 458 & (3) & La littérature du 17e siècle 2 \\
\hline FREN 459 & (3) & La littérature du 18e siècle 2 \\
\hline FREN 461 & (3) & Enjeux littéraires et culturels 1 \\
\hline FREN 472 & (3) & Enjeux littéraires et culturels 2 \\
\hline FREN 480 & (3) & Littérature québécoise contemporaine \\
\hline FREN 482 & (3) & La littérature du 19e siècle 2 \\
\hline FREN 485 & (3) & Littérature française contemporaine \\
\hline FREN 498 & (3) & Questions de littérature 3 \\
\hline FREN 499 & (3) & Questions de littérature 4 \\
\hline
\end{tabular}
(b) Série «Langue française»
\begin{tabular}{lcl} 
FREN 231 & (3) & Linguistique française \\
FREN 245 & (3) & Grammaire normative \\
FREN 313 & (3) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & (3) & Grammaire du texte littéraire \\
FREN 434 & (3) & Sociolinguistique du français \\
FREN 491 & (3) & Langage et littérature 2
\end{tabular}
(c) Série «Théorie»
\begin{tabular}{lcl} 
CCTR 331 *1 & (3) & Current Trends in Translation Studies \\
FREN 334 & (3) & L'oeuvre au miroir de la critique \\
FREN 335 & (3) & Théories littéraires 1 \\
FREN 337 & (3) & Textes, imaginaires, sociétés \\
FREN 375 & (3) & Théories littéraires 2 \\
FREN 391 & (3) & Savoirs de la littérature 1 \\
FREN 394 *1 & (3) & Théories de la traduction \\
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e \\
FREN 425 *1 & (3) & Traduction et culture \\
FREN 496 & Savoirs de la littérature 2 \\
*1 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331. \\
II) BLOC: PRATIQUES &
\end{tabular}

Liste des cours
(a) Série «Création»
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & (3) & Atelier d'écriture
\end{tabular}
\begin{tabular}{lll} 
(b) Série «Édition» & & \\
FREN 376 & \((3)\) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & \((3)\) & Le livre
\end{tabular}
(c) Série «Traduction»
\begin{tabular}{lll} 
CCTR \(219 * 2\) & \((3)\) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(225 * 3\) & \((3)\) & Introduction to Translation (English to French) \\
CCTR \(325 * 4\) & \((3)\) & Semi-Specialized Translation (English to French) \\
CCTR \(326 * 5\) & \((3)\) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 6\) & \((3)\) & Traduction Littéraire-Français \\
CCTR \(453 * 7\) & (1.5) & Technical Translation: Information Technology (English to French) \\
CCTR \(455 * 7\) & (1.5) & Technical Translation: Transportation (English to French) \\
CCTR \(457 * 7\) & (1.5) & Financial Translation: Investments (English to French) \\
CCTR \(459 * 7\) & (3) & Transcreation (English to French) \\
CCTR \(507 * 8\) & (3) & Editing and Revising (French) \\
CCTR \(535 * 9\) & (3) & Introduction to Language Technologies \\
FREN \(239 * 2\) & (3) & Stylistique comparée \\
FREN \(244 * 3\) & (3) & Traduction générale \\
FREN 320 & Traduire, écrire, expérimenter.
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline FREN 324 * & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 346 * 4 & (3) & Traduction avancée \\
\hline FREN 347 *9 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *8 & (3) & Traduction et révision \\
\hline FREN 441 *5 & (3) & Traduction français-anglais \\
\hline FREN 443 *6 & (3) & Traduction littéraire 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline FREN 494 * & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*2 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline \multicolumn{3}{|l|}{NOTE : Les chiffres 1 et 2 n'indiquent pas des séquences ; ils servent à désigner des cours à contenu variable.} \\
\hline
\end{tabular}

\subsection*{3.9.25.6 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et litt. françaises - Traduction (18 crédits)}

Le programme de «Concentration mineure en Langue et littérature françaises (option «Traduction ») » offre une introduction à la traduction de l'anglais vers le français. Il favorise l'amélioration de la compréhension de l'anglais et des compétences rédactionnelles en français. Il est possible de s'inscrire d'abord à ce programme et de le convertir par la suite en concentration majeure, moyennant l'ajout des cours requis pour répondre aux exigences de ce dernier programme. L'admission nécessite une bonne connaissance du français et de l'anglais lus et écrits, ainsi que du français parlé; cette connaissance est vérifiée à l'aide d'un test de classement, à la suite duquel l'étudiant(e) peut se voir imposer de suivre le cours FREN 239 («Stylistique comparée») ou son équivalent, le CCTR 219 («Fundamentals of Comparative Stylistics \& Writing (French) »), à la session d'automne de U1.

\section*{COURS OBLIGATOIRES ( 6 crédits)}
\begin{tabular}{lll} 
CCTR \(225 * 1\) & (3) & Introduction to Translation (English to French) \\
CCTR \(325 * 2\) & (3) & Semi-Specialized Translation (English to French) \\
FREN \(244 * 1\) & (3) & Traduction générale \\
FREN \(346 * 2\) & \((3)\) & Traduction avancée
\end{tabular}
*1 L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.
*2 L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

\section*{COURS COMPLÉMENTAIRES (12 crédits)}

6 à 9 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
CCTR \(219 * 3\) & \((3)\) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(326 * 4\) & (3) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 5\) & \((3)\) & Traduction Littéraire-Français \\
CCTR \(453 * 6\) & \((1.5)\) & Technical Translation: Information Technology (English to French) \\
CCTR \(455 * 6\) & \((1.5)\) & Technical Translation: Transportation (English to French) \\
CCTR \(457 * 6\) & \((1.5)\) & Financial Translation: Investments (English to French) \\
CCTR \(459 * 6\) & \((1.5)\) & Transcreation (English to French) \\
CCTR \(507 * 7\) & \((3)\) & Editing and Revising (French)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CCTR 535 *8 & (3) & Introduction to Language Technologies \\
\hline FREN 239 *3 & (3) & Stylistique comparée \\
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN \(324 * 5\) & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 347 *8 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *7 & (3) & Traduction et révision \\
\hline FREN 441 * & (3) & Traduction français-anglais \\
\hline FREN 443 *5 & (3) & Traduction littéraire 2 \\
\hline FREN 494 *6 & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline
\end{tabular}

3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{|c|c|c|}
\hline CCTR 331 *9 & (3) & Current Trends in Translation Studies \\
\hline FREN 201 & (3) & Le français littéraire (français langue seconde) \\
\hline FREN 203 & (3) & Analyse de textes (français langue seconde) \\
\hline FREN 231 & (3) & Linguistique française \\
\hline FREN 245 & (3) & Grammaire normative \\
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline FREN 313 & (3) & Langage et littérature 1 \\
\hline FREN 336 & (3) & Histoire de la langue française \\
\hline FREN 356 & (3) & Grammaire du texte littéraire \\
\hline FREN 394 *9 & (3) & Théories de la traduction \\
\hline FREN 425 *9 & (3) & Traduction et culture \\
\hline FREN 434 & (3) & Sociolinguistique du français \\
\hline FREN 491 & (3) & Langage et littérature 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline
\end{tabular}
*9 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
NOTE: les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.

\subsection*{3.9.25.7 Baccalauréat ès Arts (B.A.) - Spécialisation enrichie Langue \& littérature françaises - Études et pratiques littéraires (72 crédits)}

Ce programme, qui prépare aux études supérieures, offre une formation spécialisée incluant l'histoire des littératures d'expression française, l'analyse critique des œuvres et la théorie littéraire. La formation vise également à fournir aux étudiant(e)s une initiation à la recherche et les moyens de bien maîtriser l'écriture critique et les ressources de la langue. Les étudiant(e)s suivent aussi bien des cours portant sur les études littéraires que des cours portant sur les pratiques littéraires. Ils et elles doivent en outre se spécialiser dans l'un ou l'autre grand domaine en choisissant entre trois orientations : «Études littéraires », «

Création littéraire» et «Traduction littéraire». L'inscription au programme présuppose une très bonne connaissance du français lu, écrit et parlé. Moyennes minimales requises : 3,00 pour l'ensemble des cours du programme et un CGPA de 3,00.

\section*{COURS OBLIGATOIRES (21 crédits)}

Le Baccalauréat ès Arts compte normalement 90 crédits (ou 120 crédits pour les étudiant(e)s admis en U0). L'étudiant(e) qui s'inscrit au programme «B.A. ; Spécialisation enrichie en Langue \& littérature françaises ; option «Études et pratiques littéraires » s'assurera de cumuler, en plus des 72 crédits de spécialisation enrichie, une balance de 18 crédits. L'étudiant(e) peut mobiliser ces 18 crédits comme il ou elle le souhaite. Il ou elle peut cumuler ces crédits au DLLF ou ailleurs, en respectant les limites fixées par l'Université. Il ou elle n'a pas l'obligation de compléter une concentration mineure dans un autre programme mais il ou elle a la possibilité de le faire (auquel cas on s'assurera de respecter les exigences fixées par le département visé).
\begin{tabular}{lll} 
FREN 222 & (3) & Introduction aux études littéraires \\
FREN 333 & (3) & Questions de littérature du Moyen Âge et de l'Ancien Régime \\
FREN 444 & (3) & Questions de littérature moderne \\
FREN 450 & (3) & Questions de littérature québécoise \\
FREN 464D1 & (3) & Mémoire de spécialisation \\
FREN 464D2 & (3) & Mémoire de spécialisation \\
FREN 595 & (3) & Séminaire avancé de recherche
\end{tabular}

\section*{COURS COMPLÉMENTAIRES (51 crédits)}

De 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
FREN 245 & (3) & Grammaire normative \\
FREN 356 & (3) & Grammaire du texte littéraire
\end{tabular}

L'étudiant(e) doit choisir entre trois orientations - «A : Études littéraires », «B:Création littéraire» ou « C : Traduction littéraire»-et répartir les 45 à 48 crédits restants de la façon suivante :

\section*{ORIENTATION A - Études littéraires}
au moins 3 crédits choisis parmi tous les cours de la série «Langue française »;
au moins 9 crédits choisis parmi les cours de la série « Euvres et courants » portant sur la littérature d'avant 1800 ;
au moins 9 crédits choisis parmi les cours de la série «Euvres et courants» portant sur la littérature depuis 1800 ;
de 3 à 6 crédits choisis parmi les cours suivants :
FREN 335
(3) Théories littéraires 1
FREN 375
(3)
Théories littéraires 2
au moins 3 crédits choisis parmi tous les cours de la série «Théorie»;
au moins 3 crédits choisis parmi les cours du bloc «Pratiques »;
de 0 à 12 crédits choisis parmi les cours du bloc «Cours hors département »;
les crédits restants (de 3 à 18) seront choisis parmi les blocs «Études» ou «Pratiques ».

\section*{ORIENTATION B - Création littéraire}
au moins 3 crédits choisis parmi tous les cours de la série «Langue française »;
au moins 6 crédits choisis parmi les cours de la série «Euvres et courants » portant sur la littérature d'avant 1800 ;
au moins 6 crédits choisis parmi les cours de la série «Euvres et courants» portant sur la littérature depuis 1800 ;
de 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e
\end{tabular}
au moins 3 crédits choisis parmi tous les cours de la série «Théorie»;
au moins 12 crédits choisis parmi les cours de la série «Création»;
au moins 3 crédits choisis parmi les cours des séries «Édition» et «Traduction»;

0 à 12 crédits choisis parmi les cours du bloc «Cours hors département»;
les crédits restants (de 0 à 12) seront choisis parmi les blocs «Études» ou «Pratiques».

\section*{ORIENTATION C - Traduction littéraire}
au moins 3 crédits choisis parmi tous les cours de la série «Langue française »;
au moins 3 crédits choisis parmi les cours de la série «Euvres et courants » portant sur la littérature d'avant 1800 ;
au moins 3 crédits choisis parmi les cours de la série «Euvres et courants » portant sur la littérature depuis 1800 ;
de 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
CCTR \(331 * 1\) & (3) & Current Trends in Translation Studies \\
FREN \(394 * 1\) & (3) & Théories de la traduction \\
FREN \(425 * 1\) & (3) & Traduction et culture \\
*1 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
\end{tabular}
au moins 3 crédits choisis parmi tous les cours de la série «Théorie»;
au moins 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lcl} 
CCTR \(219 * 2\) & (3) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(225 * 3\) & (3) & Introduction to Translation (English to French) \\
CCTR \(325 * 4\) & (3) & Semi-Specialized Translation (English to French) \\
FREN \(239 * 2\) & (3) & Stylistique comparée \\
FREN \(244 * 3\) & Traduction générale \\
FREN \(346 * 4\) & Traduction avancée \\
*2 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219. \\
*3 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225. \\
*4 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.
\end{tabular}
au moins 6 crédits choisis parmi les cours suivants :
\begin{tabular}{|c|c|c|}
\hline CCTR 326 *5 & (3) & Semi-Specialized Translation (French to English) \\
\hline CCTR 441 *6 & (3) & Traduction Littéraire-Français \\
\hline CCTR 507 *7 & (3) & Editing and Revising (French) \\
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *6 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *7 & (3) & Traduction et révision \\
\hline FREN 441* 5 & (3) & Traduction français-anglais \\
\hline FREN 443 *6 & (3) & Traduction littéraire 2 \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{au moins 3 crédits choisis parmi les cours des séries «Création » et « Édition»;} \\
\hline \multicolumn{3}{|l|}{de 0 à 12 crédits choisis parmi les cours du bloc «Cours hors département» ;} \\
\hline \multicolumn{3}{|l|}{les crédits restants (de 3 à 18) seront choisis parmi les cours des blocs «Études» ou « Pratiques » ou encore parmi les autres cours pratiques de traduction de l'ÉÉP.} \\
\hline Liste de cours & & \\
\hline
\end{tabular}

\section*{I) BLOC: ÉTUDES}

\section*{(a) Série « ©uvres et courants»}
\begin{tabular}{|c|c|c|}
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline FREN 253 & (3) & Oeuvres culture occidentale \\
\hline FREN 310 & (3) & Cinéma français \\
\hline FREN 311 & (3) & Cinéma francophone \\
\hline FREN 315 & (3) & Cinéma québécois \\
\hline FREN 329 & (3) & Civilisation québécoise \\
\hline FREN 355 & (3) & Littérature du 20e siècle 1 \\
\hline FREN 360 & (3) & La littérature du 19e siècle 1 \\
\hline FREN 362 & (3) & La littérature du 17e siècle 1 \\
\hline FREN 364 & (3) & La littérature du 18 e siècle 1 \\
\hline FREN 366 & (3) & Littérature de la Renaissance 1 \\
\hline FREN 372 & (3) & Littérature québécoise 1 \\
\hline FREN 380 & (3) & Littératures francophones 1 \\
\hline FREN 381 & (3) & Littératures francophones 2 \\
\hline FREN 382 & (3) & Littérature québécoise 2 \\
\hline FREN 453 & (3) & Littérature du 20e siècle 2 \\
\hline FREN 455 & (3) & La littérature médiévale 1 \\
\hline FREN 456 & (3) & La littérature médiévale 2 \\
\hline FREN 457 & (3) & La littérature de la Renaissance 2 \\
\hline FREN 458 & (3) & La littérature du 17e siècle 2 \\
\hline FREN 459 & (3) & La littérature du 18e siècle 2 \\
\hline FREN 461 & (3) & Enjeux littéraires et culturels 1 \\
\hline FREN 472 & (3) & Enjeux littéraires et culturels 2 \\
\hline FREN 480 & (3) & Littérature québécoise contemporaine \\
\hline FREN 482 & (3) & La littérature du 19e siècle 2 \\
\hline FREN 485 & (3) & Littérature française contemporaine \\
\hline FREN 498 & (3) & Questions de littérature 3 \\
\hline FREN 499 & (3) & Questions de littérature 4 \\
\hline
\end{tabular}

\section*{b) Série «Langue française »}
\begin{tabular}{lcl} 
FREN 231 & (3) & Linguistique française \\
FREN 245 & (3) & Grammaire normative \\
FREN 313 & (3) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & (3) & Grammaire du texte littéraire \\
FREN 434 & (3) & Sociolinguistique du français \\
FREN 491 & (3) & Langage et littérature 2
\end{tabular}

\section*{(c) Série «Théorie»}
\begin{tabular}{lcl} 
CCTR \(331 * 1\) & (3) & Current Trends in Translation Studies \\
FREN 334 & \((3)\) & L'oeuvre au miroir de la critique \\
FREN 335 & \((3)\) & Théories littéraires 1 \\
FREN 337 & \((3)\) & Textes, imaginaires, sociétés \\
FREN 375 & \((3)\) & Théories littéraires 2 \\
FREN 391 & (3) & Savoirs de la littérature 1 \\
FREN \(394 * 1\) & (3) & Théories de la traduction \\
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e \\
FREN \(425 * 1\) & (3) & Traduction et culture \\
FREN 496 & Savoirs de la littérature 2
\end{tabular}
*1 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
II) BLOC : PRATIQUES
(a) Série «Création»
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & (3) & Atelier d'écriture
\end{tabular}

\section*{(b) Série «Édition»}
\begin{tabular}{lll} 
FREN 376 & (3) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & (3) & Le livre
\end{tabular}

\section*{(c) Série «Traduction»}
\begin{tabular}{lll} 
CCTR \(219 * 2\) & \((3)\) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(225 * 3\) & \((3)\) & Introduction to Translation (English to French) \\
CCTR \(325 * 4\) & \((3)\) & Semi-Specialized Translation (English to French) \\
CCTR \(326 * 5\) & \((3)\) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 6\) & \((3)\) & Traduction Littéraire-Français \\
CCTR \(453 * 8\) & \((1.5)\) & Technical Translation: Information Technology (English to French) \\
CCTR \(455 * 8\) & (1.5) & Technical Translation: Transportation (English to French) \\
CCTR \(457 * 8\) & (1.5) & Financial Translation: Investments (English to French) \\
CCTR \(459 * 8\) & (1.5) & Transcreation (English to French) \\
CCTR \(507 * 7\) & (3) & Editing and Revising (French) \\
CCTR \(535 * 9\) & (3) & Introduction to Language Technologies \\
FREN \(239 * 2\) & (3) & Stylistique comparée \\
FREN \(244 * 3\) & (3) & Traduction générale
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *6 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 346 * 4 & (3) & Traduction avancée \\
\hline FREN 347 *9 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *7 & (3) & Traduction et révision \\
\hline FREN 441*5 & (3) & Traduction français-anglais \\
\hline FREN 443 *6 & (3) & Traduction littéraire 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline FREN 494 *8 & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*2 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.} \\
\hline \multicolumn{3}{|l|}{*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline \multicolumn{3}{|l|}{NOTE : Les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.} \\
\hline
\end{tabular}

\section*{II) BLOC : COURS HORS DÉPARTEMENT}

Seuls les cours offerts par les unités d'enseignement ou dans le cadre des programmes ci-dessous sont autorisés et reconnus par le DLLF comme cours complémentaires. Pour tous les cours qui portent un sigle n'apparaissant pas dans la liste, on consultera la direction des études de premier cycle du DLLF.

African Studies (AFRI)
Anthropology (ANTH)
Art History and Communication Studies (ARTH) (COMS)
Classical Studies (CLAS)
East Asian Studies (EAST)
English (ENGL)
German Studies (GERM)
Hispanic Studies (HISP)
History (HIST)
Institute for Gender, Sexuality and Feminist Studies (GSFS)
Institute of Islamic Studies (ISLA)
Italian Studies (ITAL)
Jewish Studies (JWST)
Languages, Literatures and Cultures (LLCU)
Linguistics (LING)
McGill Institute for the Study of Canada / Institut d'études canadiennes de McGill (Canadian Studies: CANS) (Indigenous Studies: INDG)
Philosophy (PHIL)
Quebec Studies / Programme d'études sur le Québec (QCST)
Russian Studies (RUSS)
School of Religious Studies/Études religieuses (RELG)
Sexual Diversity Studies (SDST)
Sociology (SOCI)

Women's Studies (WMST)
World Cinemas (FILM)

\subsection*{3.9.25.8 Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)}

Ce programme offre une formation générale qui inclut l'histoire des littératures d'expression française, l'analyse critique des œuvres et la théorie littéraire Cette formation vise également à fournir aux étudiant(e)s les moyens de bien maîtriser l'écriture critique et les ressources de la langue. L'étude de la littérature s'y fait à travers les différentes pratiques que sont la création, la traduction et l'édition. Tou(te)s les étudiant(e)s sont amené(e)s à suivre aussi bien des cours portant sur les études littéraires que des cours portant sur les pratiques littéraires ; ils et elles doivent cependant choisir une majorité de cours dans l'un ou l'autre grand domaine. L'inscription au programme présuppose une très bonne connaissance du français lu, écrit et parlé.

\section*{COURS OBLIGATOIRES (12 crédits)}
\begin{tabular}{lll} 
FREN 222 & (3) & Introduction aux études littéraires \\
FREN 333 & (3) & Questions de littérature du Moyen Âge et de l'Ancien Régime \\
FREN 444 & (3) & Questions de littérature moderne \\
FREN 450 & (3) & Questions de littérature québécoise
\end{tabular}

\section*{COURS COMPLÉMENTAIRES (24 crédits)}

24 crédits répartis de la façon suivante, selon l'orientation choisie («A : Études littéraires» ou «B : Pratiques littéraires ») :

\section*{ORIENTATION A - «Études littéraires »}
de 3 à 9 crédits choisis parmi les cours de la série «Langue française» avec l'obligation de suivre au moins l'un des deux cours suivants :
\begin{tabular}{lll} 
FREN 245 & (3) & Grammaire normative \\
FREN 356 & (3) & Grammaire du texte littéraire
\end{tabular}
de 9 à 15 crédits choisis parmi les cours de la série « Euvres et courants» (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800) ;
de 3 à 9 crédits choisis parmi les cours de la série « Théorie » ;
de 3 à 9 crédits choisis parmi les cours du bloc «Pratiques».

\section*{ORIENTATION B - «Pratiques littéraires »}
de 3 à 6 crédits choisis parmi les cours de la série «Langue française» avec l'obligation de suivre l'un des cours suivants :
FREN 245
Grammaire normative
FREN 356
(3)
Grammaire du texte littéraire
au moins 6 crédits choisis parmi les cours du bloc «Études »;
de 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e
\end{tabular}
au moins 6 crédits choisis parmi les cours de la série «Création »;
0 à 6 crédits choisis parmi les cours du bloc « Pratiques».

\section*{I) BLOC : ÉTUDES}

Liste de cours

\section*{(a) Série « CEuvres et courants »}
\begin{tabular}{lll} 
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800
\end{tabular}
\begin{tabular}{lll} 
FREN 252 & (3) & Littérature québécoise \\
FREN 253 & (3) & Oeuvres culture occidentale \\
FREN 310 & (3) & Cinéma français \\
FREN 311 & (3) & Cinéma francophone \\
FREN 315 & (3) & Cinéma québécois \\
FREN 329 & (3) & Civilisation québécoise \\
FREN 355 & (3) & Littérature du 20e siècle 1 \\
FREN 360 & (3) & La littérature du 19e siècle 1 \\
FREN 362 & (3) & La littérature du 17e siècle 1 \\
FREN 364 & (3) & La littérature du 18e siècle 1 \\
FREN 366 & (3) & Littérature de la Renaissance 1 \\
FREN 372 & (3) & Littérature québécoise 1 \\
FREN 380 & (3) & Littératures francophones 1 \\
FREN 381 & (3) & Littératures francophones 2 \\
FREN 382 & (3) & Littérature québécoise 2 \\
FREN 453 & (3) & Littérature du 20e siècle 2 \\
FREN 498 & (3) & (3) fanançaise contemporaine de littérature 3 de littérature 4 \\
FREN 455 & (3) 499 & (3)
\end{tabular}

\section*{(b) Série « Langue française »}
\begin{tabular}{lcl} 
FREN 231 & (3) & Linguistique française \\
FREN 245 & (3) & Grammaire normative \\
FREN 313 & (3) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & (3) & Grammaire du texte littéraire \\
FREN 434 & (3) & Sociolinguistique du français \\
FREN 491 & (3) & Langage et littérature 2
\end{tabular}

\section*{(c) Série «Théorie»}
\begin{tabular}{lll} 
CCTR \(331 * 1\) & (3) & Current Trends in Translation Studies \\
FREN 334 & (3) & L'oeuvre au miroir de la critique \\
FREN 335 & (3) & Théories littéraires 1
\end{tabular}
\begin{tabular}{lcl} 
FREN 337 & \((3)\) & Textes, imaginaires, sociétés \\
FREN 375 & \((3)\) & Théories littéraires 2 \\
FREN 391 & (3) & Savoirs de la littérature 1 \\
FREN \(394 * 1\) & (3) & Théories de la traduction \\
FREN 420 & \((3)\) & Enjeux de l'écriture littéraire \\
FREN 422 & \((3)\) & Le métier d'écrivain-e \\
FREN \(425 * 1\) & (3) & Traduction et culture \\
FREN 496 & \((3)\) & Savoirs de la littérature 2
\end{tabular}
*1 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
II) BLOC : PRATIQUES

\section*{(a) Série «Création»}
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & (3) & Atelier d'écriture
\end{tabular}

\section*{(b) Série « Édition»}
\begin{tabular}{lll} 
FREN 376 & (3) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & (3) & Le livre
\end{tabular}

\section*{(c) Série « Traduction»}
\begin{tabular}{|c|c|c|}
\hline CCTR 219 *2 & (3) & Fundamentals of Comparative Stylistics and Writing (French) \\
\hline CCTR 225 *3 & (3) & Introduction to Translation (English to French) \\
\hline CCTR 325 * & (3) & Semi-Specialized Translation (English to French) \\
\hline CCTR 326 *5 & (3) & Semi-Specialized Translation (French to English) \\
\hline CCTR 441 *6 & (3) & Traduction Littéraire-Français \\
\hline CCTR 453 *7 & (1.5) & Technical Translation: Information Technology (English to French) \\
\hline CCTR 455 *7 & (1.5) & Technical Translation: Transportation (English to French) \\
\hline CCTR 457 *7 & (1.5) & Financial Translation: Investments (English to French) \\
\hline CCTR 459 *7 & (1.5) & Transcreation (English to French) \\
\hline CCTR 507 *8 & (3) & Editing and Revising (French) \\
\hline CCTR 535 *9 & (3) & Introduction to Language Technologies \\
\hline FREN 239 *2 & (3) & Stylistique comparée \\
\hline FREN 244 *3 & (3) & Traduction générale \\
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *6 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 346 * 4 & (3) & Traduction avancée \\
\hline FREN 347 *9 & (3) & Terminologie générale \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
FREN 349 & (3) & Traduction et recherche 2 \\
FREN \(431 * 8\) & (3) & Traduction et révision \\
FREN \(441 * 5\) & (3) & Traduction français-anglais \\
FREN 443 *6 & Traduction littéraire 2 \\
FREN 492 & Histoire de la traduction \\
FREN 494 *7 & Traduction spécialisée \\
*2 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219. \\
*3 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225. \\
*4 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325. \\
*5 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326. \\
*6 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441. \\
*7 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459. \\
*8 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507. \\
*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535. \\
NOTE : Les chiffres 1 et 2 n'indiquent pas des séquences ; ils servent à désigner des cours à contenu variable.
\end{tabular}

\subsection*{3.9.25.9 Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)}

Le programme de «Concentration majeure en Langue et littérature françaises (option «Traduction») » offre une formation générale en traduction de l'anglais vers le français. D'abord pratique, cette formation fournit également des assises théoriques sur le fonctionnement de la langue ou les enjeux de la traduction. Elle favorise l'amélioration de la compréhension de l'anglais et des compétences rédactionnelles en français, compétences que l'étude de la littérature de langue française viendra renforcer. L'admission au programme nécessite une bonne connaissance du français et de l'anglais lus et écrits, de même que du français parlé ; cette connaissance est vérifiée à l'aide d'un test de classement, à la suite duquel l'étudiant(e) peut se voir imposer de suivre le cours FREN 239 («Stylistique comparée») ou son équivalent, le CCTR 310 («Comparative Stylistics 2 ») à la session d'automne de U1.

\section*{COURS OBLIGATOIRES ( 12 crédits)}
\begin{tabular}{lcl} 
CCTR \(225 * 1\) & \((3)\) & Introduction to Translation (English to French) \\
CCTR \(325 * 2\) & (3) & Semi-Specialized Translation (English to French) \\
FREN 222 & \((3)\) & Introduction aux études littéraires \\
FREN \(244 * 1\) & (3) & Traduction générale \\
FREN 245 & \((3)\) & Grammaire normative \\
FREN \(346 * 2\) & \((3)\) & Traduction avancée
\end{tabular}
*1 L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.
*2 L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

\section*{COURS COMPLÉMENTAIRES (24 crédits)}

De 12 à 15 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
CCTR \(219 * 3\) & \((3)\) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(326 * 4\) & \((3)\) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 5\) & \((3)\) & Traduction Littéraire-Français \\
CCTR \(453 * 6\) & \((1.5)\) & Technical Translation: Information Technology (English to French) \\
CCTR \(455 * 6\) & \((1.5)\) & Technical Translation: Transportation (English to French) \\
CCTR \(457 * 6\) & \((1.5)\) & Financial Translation: Investments (English to French) \\
CCTR \(459 * 6\) & \((1.5)\) & Transcreation (English to French) \\
CCTR \(507 * 7\) & (3) & Editing and Revising (French) \\
CCTR 535*8 & (3) & Introduction to Language Technologies \\
FREN \(239 * 3\) & (3) & Stylistique comparée
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *5 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 347 *8 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *7 & (3) & Traduction et révision \\
\hline FREN 441 * 4 & (3) & Traduction français-anglais \\
\hline FREN 443 *5 & (3) & Traduction littéraire 2 \\
\hline FREN 494 *6 & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cou} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline \multicolumn{3}{|l|}{De 3 à 6 crédits choisis parmi les cours suivants:} \\
\hline CCTR 331 *9 & (3) & Current Trends in Translation Studies \\
\hline FREN 231 & (3) & Linguistique française \\
\hline FREN 313 & (3) & Langage et littérature 1 \\
\hline FREN 336 & (3) & Histoire de la langue française \\
\hline FREN 356 & (3) & Grammaire du texte littéraire \\
\hline FREN 394 *9 & (3) & Théories de la traduction \\
\hline FREN 425 *9 & (3) & Traduction et culture \\
\hline FREN 434 & (3) & Sociolinguistique du français \\
\hline FREN 491 & (3) & Langage et littérature 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline
\end{tabular}

6 à 9 crédits choisis parmi les cours du bloc «Études » (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800).

0 à 3 crédits choisis parmi les séries «Création» et «Édition» du bloc «Pratiques».

\section*{I) BLOC: ÉTUDES}

Liste de cours
(a) Série « Euvres et courants»
\begin{tabular}{lcl} 
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800 \\
FREN 252 & \((3)\) & Littérature québécoise \\
FREN 253 & \((3)\) & Oeuvres culture occidentale \\
FREN 310 & \((3)\) & Cinéma français \\
FREN 311 & (3) & Cinéma francophone \\
FREN 315 & (3) & Cinéma québécois \\
FREN 329 & & Civilisation québécoise
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline FREN 355 & (3) & Littérature du 20e siècle 1 \\
\hline FREN 360 & (3) & La littérature du 19e siècle 1 \\
\hline FREN 362 & (3) & La littérature du 17e siècle 1 \\
\hline FREN 364 & (3) & La littérature du 18e siècle 1 \\
\hline FREN 366 & (3) & Littérature de la Renaissance 1 \\
\hline FREN 372 & (3) & Littérature québécoise 1 \\
\hline FREN 380 & (3) & Littératures francophones 1 \\
\hline FREN 381 & (3) & Littératures francophones 2 \\
\hline FREN 382 & (3) & Littérature québécoise 2 \\
\hline FREN 453 & (3) & Littérature du 20e siècle 2 \\
\hline FREN 455 & (3) & La littérature médiévale 1 \\
\hline FREN 456 & (3) & La littérature médiévale 2 \\
\hline FREN 457 & (3) & La littérature de la Renaissance 2 \\
\hline FREN 458 & (3) & La littérature du 17e siècle 2 \\
\hline FREN 459 & (3) & La littérature du 18e siècle 2 \\
\hline FREN 461 & (3) & Enjeux littéraires et culturels 1 \\
\hline FREN 472 & (3) & Enjeux littéraires et culturels 2 \\
\hline FREN 480 & (3) & Littérature québécoise contemporaine \\
\hline FREN 482 & (3) & La littérature du 19e siècle 2 \\
\hline FREN 485 & (3) & Littérature française contemporaine \\
\hline FREN 498 & (3) & Questions de littérature 3 \\
\hline FREN 499 & (3) & Questions de littérature 4 \\
\hline
\end{tabular}

\section*{II) BLOC: PRATIQUES}
(a) Série «Création»
\begin{tabular}{lll} 
FREN 240 & \((3)\) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & \((3)\) & Atelier d'écriture
\end{tabular}
(b) Série: «Édition»
\begin{tabular}{lll} 
FREN 376 & \((3)\) & Correction et révision \\
FREN 377 & \((3)\) & Pratiques de l'édition littéraire \\
FREN 476 & \((3)\) & Le livre
\end{tabular}

Note : les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.

\subsection*{3.9.25.10 Baccalauréat ès Arts (B.A.) - Double Spécialisation Langue \& littérature françaises - Études et pratiques littéraires ( \(\mathbf{3 6}\) crédits)}

Ce programme, qui prépare aux études supérieures, offre une formation spécialisée incluant l'histoire des littératures d'expression française, l'analyse critique des œuvres et la théorie littéraire. La formation vise également à fournir aux étudiant(e)s les moyens de bien maitriser l'écriture critique et les ressources de la langue. Les étudiant(e)s suivent aussi bien des cours portant sur les études littéraires que des cours portant sur les pratiques littéraires. Ils et elles doivent en outre se spécialiser dans l'un ou l'autre grand domaine en choisissant entre trois orientations : «Études littéraires », «Création littéraire» et «Traduction littéraire». L'inscription au programme présuppose une très bonne connaissance du français lu, écrit et parlé. Moyennes minimales requises : 3,00 pour l'ensemble des cours du programme et un CGPA de 3,00 . Pour les détails quant aux jumelages possibles, consulter le site Web de la Faculté des Arts.

\section*{COURS OBLIGATOIRES (18 crédits)}
\begin{tabular}{lll} 
FREN 222 & (3) & Introduction aux études littéraires \\
FREN 333 & (3) & Questions de littérature du Moyen Âge et de l'Ancien Régime \\
FREN 444 & (3) & Questions de littérature moderne \\
FREN 450 & (3) & Questions de littérature québécoise \\
FREN 464D1 & (3) & Mémoire de spécialisation \\
FREN 464D2 & (3) & Mémoire de spécialisation
\end{tabular}

\section*{COURS COMPLÉMENTAIRES (18 crédits)}

L'étudiant(e) doit choisir entre trois orientations :
«A : Études littéraires», «B : Création littéraire» ou «C : Traduction littéraire» :

\section*{ORIENTATION A - Études littéraires}
de 6 à 9 crédits choisis parmi les cours de la série «Euvres et courants» (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800) ;
au moins 3 crédits choisis parmi les cours de la série «Langue française»;
au moins 3 crédits choisis parmi les cours de la série «Théorie»;
au moins 3 crédits choisis parmi les cours du bloc «Pratiques».

\section*{ORIENTATION B - Création littéraire}
de 6 à 9 crédits choisis parmi les cours de la série «Création»;
au moins 3 crédits choisis parmi les cours de la série «Langue française »;
au moins 3 crédits choisis parmi les cours de la série «Théorie»;
Au moins 3 crédits choisis parmi les séries «Édition» et «Traduction» du bloc «Pratiques».

\section*{ORIENTATION C - Traduction littéraire}
de 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lcl} 
CCTR \(225 * 1\) & (3) & Introduction to Translation (English to French) \\
CCTR \(325 * 2\) & (3) & Semi-Specialized Translation (English to French) \\
FREN \(244 * 1\) & (3) & Traduction générale \\
FREN \(346 * 2\) & Traduction avancée \\
*1 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225. \\
*2 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.
\end{tabular}

De 6 à 12 crédits choisis parmi les cours suivants :
\begin{tabular}{lcl} 
CCTR \(326 * 3\) & (3) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 5\) & (3) & Traduction Littéraire-Français \\
CCTR \(507 * 4\) & (3) & Editing and Revising (French) \\
FREN 320 & \((3)\) & Traduire, écrire, expérimenter. \\
FREN \(324 * 5\) & (3) & Traduction littéraire 1 \\
FREN 341 & (3) & Traduction et recherche 1 \\
FREN 349 & (3) & Traduction et recherche 2 \\
FREN \(431 * 4\) & (3) & Traduction et révision \\
FREN \(441 * 3\) & & Traduction français-anglais
\end{tabular}
*3 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.
*4 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.
*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

De 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lcl} 
CCTR \(331 * 6\) & \((3)\) & Current Trends in Translation Studies \\
FREN 231 & \((3)\) & Linguistique française \\
FREN 245 & \((3)\) & Grammaire normative \\
FREN 313 & \((3)\) & Langage et littérature 1 \\
FREN 336 & \((3)\) & Histoire de la langue française \\
FREN 356 & \((3)\) & Grammaire du texte littéraire \\
FREN \(394 * 6\) & \((3)\) & Théories de la traduction \\
FREN \(425 * 6\) & (3) & Traduction et culture \\
FREN 434 & (3) & Sociolinguistique du français \\
FREN 491 & & Langage et littérature 2
\end{tabular}
*6 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

\section*{I) BLOC : ÉTUDES}

Liste de cours
(a) Série « Euvres et courants»
\begin{tabular}{|c|c|c|}
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline FREN 253 & (3) & Oeuvres culture occidentale \\
\hline FREN 310 & (3) & Cinéma français \\
\hline FREN 311 & (3) & Cinéma francophone \\
\hline FREN 315 & (3) & Cinéma québécois \\
\hline FREN 329 & (3) & Civilisation québécoise \\
\hline FREN 355 & (3) & Littérature du 20e siècle 1 \\
\hline FREN 360 & (3) & La littérature du 19e siècle 1 \\
\hline FREN 362 & (3) & La littérature du 17e siècle 1 \\
\hline FREN 364 & (3) & La littérature du 18e siècle 1 \\
\hline FREN 366 & (3) & Littérature de la Renaissance 1 \\
\hline FREN 372 & (3) & Littérature québécoise 1 \\
\hline FREN 380 & (3) & Littératures francophones 1 \\
\hline FREN 381 & (3) & Littératures francophones 2 \\
\hline FREN 382 & (3) & Littérature québécoise 2 \\
\hline FREN 453 & (3) & Littérature du 20e siècle 2 \\
\hline FREN 455 & (3) & La littérature médiévale 1 \\
\hline FREN 456 & (3) & La littérature médiévale 2 \\
\hline FREN 457 & (3) & La littérature de la Renaissance 2 \\
\hline
\end{tabular}
\begin{tabular}{lll} 
FREN 458 & (3) & La littérature du 17e siècle 2 \\
FREN 459 & (3) & La littérature du 18e siècle 2 \\
FREN 461 & (3) & Enjeux littéraires et culturels 1 \\
FREN 472 & (3) & Enjeux littéraires et culturels 2 \\
FREN 480 & (3) & Littérature québécoise contemporaine \\
FREN 482 & (3) & La littérature du 19e siècle 2 \\
FREN 485 & (3) & Littérature française contemporaine \\
FREN 498 & (3) & Questions de littérature 3 \\
FREN 499 & (3) & Questions de littérature 4
\end{tabular}
(b) Série « Langue française »
\begin{tabular}{lcl} 
FREN 231 & \((3)\) & Linguistique française \\
FREN 245 & \((3)\) & Grammaire normative \\
FREN 313 & (3) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & (3) & Grammaire du texte littéraire \\
FREN 434 & \((3)\) & Sociolinguistique du français \\
FREN 491 & (3) & Langage et littérature 2
\end{tabular}

\section*{(c) Série «Théorie»}
\begin{tabular}{lcl} 
CCTR \(331 * 6\) & (3) & Current Trends in Translation Studies \\
FREN 334 & (3) & L'oeuvre au miroir de la critique \\
FREN 335 & \((3)\) & Théories littéraires 1 \\
FREN 337 & \((3)\) & Textes, imaginaires, sociétés \\
FREN 375 & \((3)\) & Théories littéraires 2 \\
FREN 391 & (3) & Savoirs de la littérature 1 \\
FREN \(394 * 6\) & (3) & Théories de la traduction \\
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e \\
FREN \(425 * 6\) & (3) & Traduction et culture \\
FREN 496 & Savoirs de la littérature 2
\end{tabular}
*6 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
II) BLOC : PRATIQUES
(a) Série «Création»
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & \((3)\) & Atelier d'écriture
\end{tabular}
(b) Série «Édition»
\begin{tabular}{lll} 
FREN 376 & (3) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & \((3)\) & Le livre
\end{tabular}

\section*{(c) Série «Traduction»}
\begin{tabular}{|c|c|c|}
\hline CCTR 219 *7 & (3) & Fundamentals of Comparative Stylistics and Writing (French) \\
\hline CCTR 225 * 1 & (3) & Introduction to Translation (English to French) \\
\hline CCTR 325 *2 & (3) & Semi-Specialized Translation (English to French) \\
\hline CCTR 326 *3 & (3) & Semi-Specialized Translation (French to English) \\
\hline CCTR 441 *5 & (3) & Traduction Littéraire-Français \\
\hline CCTR 453 *8 & (1.5) & Technical Translation: Information Technology (English to French) \\
\hline CCTR 455 *8 & (1.5) & Technical Translation: Transportation (English to French) \\
\hline CCTR 457 *8 & (1.5) & Financial Translation: Investments (English to French) \\
\hline CCTR 459 *8 & (1.5) & Transcreation (English to French) \\
\hline CCTR 507 * & (3) & Editing and Revising (French) \\
\hline CCTR 535 *9 & (3) & Introduction to Language Technologies \\
\hline FREN 239 * 7 & (3) & Stylistique comparée \\
\hline FREN 244 * 1 & (3) & Traduction générale \\
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *5 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 346 *2 & (3) & Traduction avancée \\
\hline FREN 347 *9 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 * 4 & (3) & Traduction et révision \\
\hline FREN 441 * 3 & (3) & Traduction français-anglais \\
\hline FREN 443 *5 & (3) & Traduction littéraire 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline FREN 494 *8 & (3) & Traduction spécialisée \\
\hline
\end{tabular}
* 1 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.
*2 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.
*3 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.
*4 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.
*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.
*7 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.
*8 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants: CCTR 453, CCTR 455, CCTR 457 et CCTR 459.
*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.
NOTE : Les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.

\subsection*{3.9.26 Mathematics and Statistics}

\subsection*{3.9.26.1 Location}

Department of Mathematics and Statistics

\author{
Burnside Hall, Room 1005 \\ 805 Sherbrooke Street West \\ Montreal QC H3A 0B9 \\ Telephone: 514-398-3800 \\ Website: mcgill.ca/mathstat
}

\subsection*{3.9.26.2 About Mathematics and Statistics}

The Department of Mathematics and Statistics offers programs in both Arts and Science. For a list of teaching staff and an outline of the nature of the discipline, refer to Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.22: Mathematics and Statistics (MATH).

A Desautels Faculty of Management B.Com. degree with a Major Concentration in Mathematics is also available.
Students entering a Mathematics program are normally expected to have completed MATH 133; MATH 139 or MATH 140; MATH 141; or their equivalents. Otherwise, they will be required to make up any deficiencies in these courses over and above the program credits.

The following programs are specifically for Arts students:
- Minor Concentration Mathematics
- Supplementary Minor Concentration Mathematics
- Major Concentration Statistics
- Minor Concentration Statistics
- Supplementary Minor Concentration Statistics
- Major Concentration Mathematics
- Joint Honours Component Mathematics

The following programs may be taken by students in either Arts or Science:
- Honours in Applied Mathematics
- Honours in Mathematics
- Joint Honours in Mathematics and Computer Science
- Honours in Statistics

Students entering one of the Minor or Major Concentrations listed below who have successfully completed a course equivalent to MATH 222 (Calculus 3 ) prior to coming to McGill are given exemption from taking MATH 222, but must replace it with a Complementary Mathematics course in the program of at least 3 credits. For more information, consult an advisor.

\subsection*{3.9.26.3 Bachelor of Arts (B.A.) - Minor Concentration Mathematics (18 credits)}

The Minor Concentration Mathematics is offered in two versions: an expandable version, for students who wish to leave open the option of expanding the program into a Major Concentration Mathematics, and a non-expandable version for students who know on entry into the Minor that they do not wish to expand it into a major concentration.

The Minor Concentration Mathematics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System. Students planning on taking the Major Concentration Mathematics and the Minor Concentration Mathematics as part of Multi-track option C should select the Supplementary Minor Concentration in Mathematics in place of this Minor concentration.

Under option C, it is not possible to combine the Minor Concentration Mathematics and the Minor Concentration Statistics. Students wishing to do this should instead take the Major Concentration Mathematics under option B (two major concentrations) and select a large number of statistics complementaries.

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".

No overlap is permitted with other programs.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 18 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Expandable Version: Required Courses (12 credits)}

\footnotetext{
* Note: Credit cannot be received for both MATH 236 and MATH 223 (listed as a required course in the non-expandable version of this Minor concentration).
}
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 235 & (3) & Algebra 1 \\
MATH 236* & (3) & Algebra 2 \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Expandable Version: Complementary Courses ( 6 credits)}

Students selecting the expandable version of this program complete 6 credits of complementary courses from the Complementary Course List.
It is strongly recommended that students take MATH 323 as a complementary course.

\section*{Non-Expandable Version: Required Courses (9 credits)}
* Note: Credit cannot be received for both MATH 223 and MATH 236 (listed as a required course in the expandable version of this Minor concentration).
\begin{tabular}{lll} 
MATH 222 & \((3)\) & Calculus 3 \\
MATH \(223^{*}\) & \((3)\) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Non-Expandable Version: Complementary Courses (9 credits)}

Students selecting the non-expandable version of this program complete 9 credits of complementary courses from the Complementary Course List.
It is strongly recommended that students take MATH 323 as a complementary course.

\section*{Complementary Course List}
* Note: Either MATH 249 or MATH 316 may be taken but not both.
\begin{tabular}{lcl} 
MATH 249* & (3) & Honours Complex Variables \\
MATH 314 & (3) & Advanced Calculus \\
MATH 316* & (3) & Complex Variables \\
MATH 317 & (3) & Numerical Analysis \\
MATH 318 & (3) & Mathematical Logic \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 346 & (3) & Number Theory \\
MATH 348 & (3) & Linear Optimization \\
MATH 417 & () & Introduction to General Topology
\end{tabular}

\subsection*{3.9.26.4 Bachelor of Arts (B.A.) - Supplementary Minor Concentration in Mathematics ( \(\mathbf{1 8}\) credits)}

This Minor concentration is open only to students registered in the Major Concentration Mathematics. Taken together, these two concentrations constitute a program equivalent to the Major in Mathematics offered by the Faculty of Science.

No course overlap between the Major Concentration Mathematics and the Supplementary Minor Concentration in Mathematics is permitted.
Note that according to the Faculty of Arts Multi-track System degree requirements, option C, students registered in the Supplementary Minor Concentration in Mathematics must also complete another minor concentration in a discipline other than Mathematics.

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".

\section*{Required Course (3 credits)}
* Note: If Math 315 has already been taken as part of the Major Concentration Mathematics, an additional 3-credit complementary course must be taken to replace it.
MATH \(315^{*}\)
(3)
Ordinary Differential Equations

\section*{Complementary Courses ( 15 credits)}

15 credits selected as follows:

3 credits from:
* Note: If either of MATH 249 or MATH 316 has been taken as part of the Major Concentration Mathematics, another 3-credit complementary course must be taken.
\begin{tabular}{lll} 
MATH 249* & (3) & Honours Complex Variables \\
MATH 316* & (3) & Complex Variables
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{12 credits from:} \\
\hline MATH 204 & (3) & Principles of Statistics 2 \\
\hline MATH 308 & (3) & Fundamentals of Statistical Learning \\
\hline MATH 317 & (3) & Numerical Analysis \\
\hline MATH 318 & (3) & Mathematical Logic \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline MATH 324 & (3) & Statistics \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 327 & (3) & Matrix Numerical Analysis \\
\hline MATH 329 & (3) & Theory of Interest \\
\hline MATH 335 & (3) & Groups, Tilings and Algorithms \\
\hline MATH 338 & (3) & History and Philosophy of Mathematics \\
\hline MATH 340 & (3) & Discrete Mathematics \\
\hline MATH 346 & (3) & Number Theory \\
\hline MATH 348 & (3) & Euclidean Geometry \\
\hline MATH 352 & (1) & Problem Seminar \\
\hline MATH 378 & (3) & Nonlinear Optimization \\
\hline MATH 410 & (3) & Majors Project \\
\hline MATH 417 & (3) & Linear Optimization \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 430 & (3) & Mathematical Finance \\
\hline MATH 447 & (3) & Introduction to Stochastic Processes \\
\hline MATH 463 & () & Convex Optimization \\
\hline MATH 523 & (4) & Generalized Linear Models \\
\hline MATH 524 & (4) & Nonparametric Statistics \\
\hline MATH 525 & (4) & Sampling Theory and Applications \\
\hline
\end{tabular}

\subsection*{3.9.26.5 Bachelor of Arts (B.A.) - Minor Concentration Statistics (18 credits)}

The Minor Concentration Statistics is offered only in a non-expandable version, that is, one that cannot be expanded into the Major Concentration Mathematics.

The Minor Concentration Statistics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System, or together with the Major Concentration Mathematics and a minor concentration (which must be in some other discipline than Mathematics) under option C.
Under option C, it is not possible to combine the Minor Concentration Statistics and the Minor Concentration Mathematics. Students wishing to do this should instead take the Major Concentration Mathematics under option B (two major concentrations) and select a large number of statistics complementaries.
For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".
No overlap is permitted with other programs.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 18 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Required Courses (15 credits)}
* Note: If the Minor Concentration Statistics is combined with the Major Concentration Mathematics, the required courses MATH 222, MATH 223 and MATH 323 must be replaced by courses selected from the Complementary Courses. Credit cannot be received for both MATH 223 and MATH 236 (listed as a required course in the Major Concentration Mathematics).
\begin{tabular}{lll} 
MATH 222* & (3) & Calculus 3 \\
MATH 223* & (3) & Linear Algebra \\
MATH 323* & \((3)\) & Probability \\
MATH 324 & (3) & Statistics \\
MATH 423 & \((3)\) & Applied Regression
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits from:
\begin{tabular}{lcl} 
MATH 204 & \((3)\) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & \((3)\) & Fundamentals of Statistical Learning \\
MATH 317 & \((3)\) & Numerical Analysis \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods
\end{tabular}

\subsection*{3.9.26.6 Bachelor of Arts (B.A.) - Supplementary Minor Concentration Statistics (18 credits)}

Students may complete this program with a minimum of 18 credits or a maximum of 20 credits.
Taken together with the B.A.; Major Concentration in Statistics, this program constitutes an equivalent of the B.Sc.; Major in Statistics program offered by the Faculty of Science. It provides training in statistics, with a mathematical core and basic training in computing. With satisfactory performance in an appropriate selection of courses, these two programs can lead to the accreditation "A.Stat" from the Statistical Society of Canada, which is regarded as the entry level requirement for a statistician practicing in Canada.

This supplementary minor concentration is open only to students registered in the B.A.; Major Concentration in Statistics. Taken together, these two programs constitute a program equivalent to the B.Sc.; Major in Statistics offered by the Faculty of Science. No course overlap between the B.A.; Major Concentration in Statistics and the B.A.; Supplementary Minor Concentration in Statistics is permitted.

Note that according to the Faculty of Arts Multi-Track System degree requirements, option C, students registered in the B.A.; Supplementary Minor Concentration in Statistics must also complete another minor concentration in a discipline other than Mathematics and Statistics. For more information about the Multi-Track System options, please refer to Faculty of Arts regulations under "Faculty Degree Requirements," "About Program Requirements," and "Departmental Programs."

This supplementary minor concentration is open only to students registered in the B.A.; Major Concentration in Statistics. Taken together, these two programs constitute a program equivalent to the B.Sc.; Major in Statistics offered by the Faculty of Science. No course overlap between the B.A.; Major Concentration in Statistics and the B.A.; Supplementary Minor Concentration in Statistics is permitted.

Note that according to the Faculty of Arts Multi-Track System degree requirements, option C, students registered in the B.A.; Supplementary Minor Concentration in Statistics must also complete another minor concentration in a discipline other than Mathematics and Statistics. For more information about the Multi-Track System options, please refer to Faculty of Arts regulations under "Faculty Degree Requirements," "About Program Requirements," and "Departmental Programs."

\section*{Guidelines for Course Selection}

Students are strongly advised to complete all required courses and all Part I and Part II complementary courses
by the end of U2, except for MATH 423.
Where appropriate, Honours courses may be substituted for equivalent courses. Students planning to pursue graduate studies are encouraged to make such substitutions, and to take MATH 556 and MATH 557 as complementary courses.

\section*{Required Courses (6 credits)}
* If MATH 423 has been taken as part of the B.A.; Major Concentration in Statistics, another 3-credit complementary course from Part II must be taken.
\begin{tabular}{lll} 
MATH 243 & (3) & Analysis 2 \\
MATH 423* & (3) & Applied Regression
\end{tabular}

\section*{Complementary Courses (12-14 credits)}

Part I: 3 credits selected from **:
** Students who have sufficient knowledge in programming are encouraged to take COMP 250.
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

Part II: 3 credits selected from:
*** Students can take either MATH 317 or COMP 350, but not both.
\begin{tabular}{|c|c|c|}
\hline COMP 350*** & (3) & Numerical Computing \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 315 & (3) & Ordinary Differential Equations \\
\hline MATH 316 & (3) & Complex Variables \\
\hline MATH 317*** & (3) & Numerical Analysis \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 327 & (3) & Matrix Numerical Analysis \\
\hline MATH 329 & (3) & Theory of Interest \\
\hline MATH 340 & (3) & Discrete Mathematics \\
\hline MATH 350 & (3) & Honours Discrete Mathematics \\
\hline
\end{tabular}
\begin{tabular}{lll} 
MATH 378 & (3) & Nonlinear Optimization \\
MATH 417 & (3) & Linear Optimization \\
MATH 430 & (3) & Mathematical Finance \\
MATH 463 & (3) & Convex Optimization
\end{tabular}

Part III: 6-8 credits selected from:
+ Students can take at most one of MATH 410, MATH 420, MATH 527D1/D2 and WCOM 314.
\begin{tabular}{lcl} 
COMP 551 & (4) & Applied Machine Learning \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 410+ & (3) & Majors Project \\
MATH 420+ & \((3)\) & Independent Study \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 527D1+ & (3) & Statistical Data Science Practicum \\
MATH 527D2+ & (3) & Statistical Data Science Practicum \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 556 & (4) & Mathematical Statistics 1 \\
MATH 557 & (4) & Mathematical Statistics 2 \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MATH 598 & (4) & Topics in Probability and Statistics \\
WCOM 314+ & (3) & Communicating Science
\end{tabular}

\subsection*{3.9.26.7 Bachelor of Arts (B.A.) - Major Concentration Statistics (36 credits)}

The program provides training in statistics with a mathematical core. Taken together with the B.A.; Supplementary Minor Concentration in Statistics, these two programs constitute an equivalent of the B.Sc.; Major in Statistics program offered by the Faculty of Science. With satisfactory performance in an appropriate selection of courses, these two programs can lead to the accreditation "A.Stat" from the Statistical Society of Canada, which is regarded as the entry level requirement for a statistician practicing in Canada. Students interested in this accreditation should consult an academic adviser.

\section*{Program Prerequisites}

Students entering the B.A.; Major Concentration Statistics program are normally expected to have completed the courses below or their equivalent. Otherwise, they will be required to make up any deficiencies in these courses over and above the 36 credits of courses.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

According to the Faculty of Arts Multi-Track System degree requirements, option C, students registered in this program may also register in the B.A.; Supplementary Minor Concentration in Statistics; they must also then complete another minor concentration in a discipline other than Mathematics and Statistics.

For more information about the Multi-Track System options, please refer to Faculty of Arts regulations under "Faculty Degree Requirements," "About Program Requirements," and "Departmental Programs."

\section*{Guidelines for Course Selection}

Students are strongly advised to complete all required courses by the end of U2.

Where appropriate, Honours courses may be substituted for equivalent courses. Students planning to pursue graduate studies are encouraged to make such substitutions.

\section*{Required Courses ( \(\mathbf{2 4}\) credits)}
* Students who have taken an equivalent of MATH 203 at CEGEP or elsewhere must replace it by another course from the Complementary course list.
** Students must take MATH 204 before taking MATH 324.
\begin{tabular}{lcl} 
MATH 203* & (3) & Principles of Statistics 1 \\
MATH 204** & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & \((3)\) & Linear Algebra \\
MATH 242 & (3) & Analysis 1 \\
MATH 323 & (3) & Probability \\
MATH \(324^{* *}\) & \((3)\) & Statistics
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits from the following:
* Students can take at most one of MATH 410, MATH 420, MATH 527D1/D2 and WCOM 314.
\begin{tabular}{lll} 
COMP 551 & (4) & Applied Machine Learning \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 410* & (3) & Majors Project \\
MATH 420* & (3) & Independent Study \\
MATH 423 & (3) & Applied Regression \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 527D1* & (3) & Statistical Data Science Practicum \\
MATH 527D2* & (3) & Statistical Data Science Practicum \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 556 & (4) & Mathematical Statistics 1 \\
MATH 557 & (4) & Mathematical Statistics 2 \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MATH 598 & (4) & Topics in Probability and Statistics \\
WCOM 314* & (3) & Communicating Science
\end{tabular}

\subsection*{3.9.26.8 Bachelor of Arts (B.A.) - Major Concentration Mathematics (36 credits)}

Students who have done well in MATH 242 and MATH 235 at the end of their first term should consider, in consultation with their adviser and the instructors of the courses involved, the possibility of entering into an Honours program in Mathematics, in Applied Mathematics, in Probability and Statistics, or a Joint Honours program in Mathematics and another discipline.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 36 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Guidelines for Course Selection}

Where appropriate, Honours-level courses may be substituted for their Majors-level counterparts. Students planning to undertake graduate studies in mathematics are urged to make such substitutions.

Students interested in computer science should consider the courses MATH 317, MATH 318, MATH 327, MATH 340, MATH 417, and take the Minor Concentration Computer Science.

Students interested in probability and statistics should consider either taking the Minor Concentration Statistics under option C, or else including some or all of the courses MATH 423, MATH 447, MATH 523, MATH 524, and MATH 525.

Students interested in applied mathematics should consider the courses MATH 317, MATH 319, MATH 324, MATH 326, MATH 327, and MATH 417.
Students interested in careers in business, industry or government should consider the courses MATH 317, MATH 319, MATH 327, MATH 417, MATH 423, MATH 447, MATH 523, and MATH 525.

\section*{Required Courses (21 credits)}
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 235 & (3) & Algebra 1 \\
MATH 236 & (3) & Algebra 2 \\
MATH 242 & (3) & Analysis 1 \\
MATH 243 & (3) & Analysis 2 \\
MATH 314 & (3) & Advanced Calculus \\
MATH 323 & (3) & Probability
\end{tabular}

\section*{Complementary Courses (15 credits)}

15 credits selected as follows:

At least 9 credits from:
* Note: Either MATH 249 or MATH 316 may be taken but not both.
\begin{tabular}{lcl} 
MATH \(249^{*}\) & \((3)\) & Honours Complex Variables \\
MATH 315 & \((3)\) & Ordinary Differential Equations \\
MATH \(316^{*}\) & (3) & Complex Variables \\
MATH 317 & \((3)\) & Numerical Analysis \\
MATH 324 & (3) & Statistics \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 423 & (3) & Applied Regression \\
MATH 451 & () & Introduction to General Topology
\end{tabular}

Remaining credits from:
\begin{tabular}{lll} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 318 & (3) & Mathematical Logic \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos
\end{tabular}
\begin{tabular}{lcl} 
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 346 & (3) & Number Theory \\
MATH 348 & (3) & Euclidean Geometry \\
MATH 352 & (1) & Problem Seminar \\
MATH 410 & (3) & Majors Project \\
MATH 417 & (3) & Linear Optimization \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 478 & (3) & Computational Methods in Applied Mathematics \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications
\end{tabular}

\subsection*{3.9.26.9 Bachelor of Arts (B.A.) - Joint Honours Component Mathematics (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

To remain in the Joint Honours program and receive the Joint Honours degree, a student must maintain the standards set by each discipline, as well as by the Faculty. In the Mathematics courses of the program a GPA of 3.00 and a CGPA of 3.00 must be maintained. Students who have difficulty in maintaining the required level should change to another program before entering their final year.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 36 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 222 & (3) & Calculus 3
\end{tabular}

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH 251 & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2
\end{tabular}

\section*{Complementary Courses (27 credits)}

3 credits selected from:
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH 254* & (3) & Honours Analysis 1
\end{tabular}
* It is strongly recommended that students take MATH 254.

3 credits selected from:
MATH 248
(3) Honours Vector Calculus

MATH 358
()

Honours Advanced Calculus
** It is strongly recommended that students take MATH 358.


\subsection*{3.9.26.10 Bachelor of Science (B.Sc.) - Honours Applied Mathematics ( 63 credits)}

The B.Sc.; Honours in Applied Mathematics provides an in-depth training, at the honours level, in "discrete" or "continuous" applied mathematics. It gives the foundations and necessary tools to explore some areas such as numerical analysis, continuous and discrete optimization, graph theory, discrete probability. The program also provides the background required to pursue interdisciplinary research at the interface between mathematics and other fields such as biology, physiology, and the biomedical sciences. This program may be completed with a minimum of 60 credits or a maximum of 63 credits.

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from MATH 222.

\section*{Program Prerequisites}

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

\section*{In particular, MATH 150/MATH 151 and MATH 140/MATH 222 are considered equivalent.}

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63 . Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.

Note: COMP 202-or an equivalent introduction to computer programming course-is a program prerequisite. U0 students may take COMP 202 as a Freshman Science course; new U1 students should take it as an elective in their first semester.

Students who transfer to Honours in Applied Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.

To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

\section*{Required Courses}
(36-39 credits)
* Students with limited programming experience should take COMP 202 or COMP 204 or COMP 208 or equivalent before COMP 250.
** Students select either MATH 251 or MATH 247, but not both.
*** Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.
\begin{tabular}{lcl} 
COMP 250* & (3) & Introduction to Computer Science \\
COMP 252 & (3) & Honours Algorithms and Data Structures \\
MATH 222*** & (3) & Calculus 3 \\
MATH 247** & (3) & Honours Applied Linear Algebra \\
MATH 251** & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2 \\
MATH 325 & (3) & Honours Ordinary Differential Equations \\
MATH 350 & (3) & Honours Discrete Mathematics \\
MATH 356 & (3) & Honours Probability \\
MATH 357 & (3) & Honours Statistics \\
MATH 358 & (3) & Honours Advanced Calculus \\
MATH 376 & (3) & Honours Nonlinear Dynamics \\
MATH 470 & (3) & Honours Research Project \\
MATH 475 & (3) & Honours Partial Differential Equations
\end{tabular}

\section*{Complementary Courses (24 credits)}

3 credits selected from:
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH 254+ & (3) & Honours Analysis 1
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH 245+ & (3) & Honours Algebra 1
\end{tabular}
+ It is strongly recommended that students take both MATH 245 and MATH 254. Advising Notes: Students interested in continuous applied mathematics are urged to choose these as part of their Complementary Courses: MATH 454, MATH 455 and MATH 478, and are advised to choose additional courses from MATH 387, MATH 397, MATH 555, MATH 574, MATH 578, MATH 579, MATH 580, MATH 581. Students interested in discrete applied mathematics are advised to choose from these as part of their Complementary Courses: COMP 362, COMP 490, MATH 456, MATH 457, MATH 517, MATH 547, MATH 550, MATH 552.

3 credits selected from:
\begin{tabular}{lll} 
MATH 249 & (3) & Honours Complex Variables \\
MATH 466 & (3) & Honours Complex Analysis
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
MATH 387 & (3) & Honours Numerical Analysis \\
MATH 397 & (3) & Honours Matrix Numerical Analysis
\end{tabular}

0-6 credits from the following courses for which no Honours equivalent exists.
\begin{tabular}{lll} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 329 & (3) & Theory of Interest
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MATH 338 & (3) & History and Philosophy of Mathematics \\
\hline MATH 430 & (3) & Mathematical Finance \\
\hline MATH 451 & (3) & Introduction to General Topology \\
\hline MATH 478 & (3) & Computational Methods in Applied Mathematics \\
\hline 0-12 credits sele & & \\
\hline COMP 362 & (3) & Honours Algorithm Design \\
\hline MATH 352 & (1) & Problem Seminar \\
\hline MATH 365 & (3) & Honours Groups, Tilings and Algorithms \\
\hline MATH 377 & (3) & Honours Number Theory \\
\hline MATH 398 & (3) & Honours Euclidean Geometry \\
\hline MATH 454++ & (3) & Honours Analysis 3 \\
\hline MATH 455 & (3) & Honours Analysis 4 \\
\hline MATH 456 & (3) & Honours Algebra 3 \\
\hline MATH 457 & (3) & Honours Algebra 4 \\
\hline MATH 458 & (3) & Honours Differential Geometry \\
\hline MATH 462 & (3) & Honours Mathematics for Machine Learning \\
\hline MATH 480 & (3) & Honours Independent Study \\
\hline MATH 488 & (3) & Honours Set Theory \\
\hline \multicolumn{3}{|l|}{++ Not open to students who have taken MATH 354.} \\
\hline \multicolumn{3}{|l|}{All MATH 500-level courses.} \\
\hline Other courses wit & ssion & rtment. \\
\hline
\end{tabular}

\subsection*{3.9.26.11 Bachelor of Science (B.Sc.) - Honours Mathematics ( 63 credits)}

The B.Sc.; Honours in Mathematics provides an in-depth training, at the honours level, in mathematics. It gives the foundations and tools needed to explore diverse areas of mathematics such as analysis, number theory, geometry, geometric group theory, and probability. This program may be completed with a minimum of 60 credits or a maximum of 63 credits.

\section*{Program Prerequisites}

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

In particular, MATH 150/MATH 151 and MATH 140/MATH 141/MATH 222 are considered equivalent.
Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63 . Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.

Students who transfer to Honours in Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.
To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

\section*{Required Courses ( 45 credits)}

\section*{45 credits}
+ Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.
* Not open to students who have taken MATH 354.
\begin{tabular}{lcl} 
MATH 222+ & (3) & Calculus 3 \\
MATH 251 & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2 \\
MATH 325 & (3) & Honours Ordinary Differential Equations \\
MATH 356 & (3) & Honours Probability \\
MATH 357 & (3) & Honours Statistics \\
MATH 358 & (3) & Honours Advanced Calculus \\
MATH 454* & (3) & Honours Analysis 3 \\
MATH 455 & (3) & Honours Analysis 4 \\
MATH 456 & (3) & Honours Algebra 3 \\
MATH 457 & (3) & Honours Algebra 4 \\
MATH 458 & (3) & Honours Differential Geometry \\
MATH 466 & (3) & Honours Complex Analysis \\
MATH 470 & (3) & Honours Research Project \\
MATH 475 & (3) & Honours Partial Differential Equations
\end{tabular}

\section*{Complementary Courses ( 15 credits)}

3 credits selected from:
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH \(254^{* *}\) & (3) & Honours Analysis 1
\end{tabular}
** It is strongly recommended that students take MATH 254.

3 credits selected from:
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH \(245^{* *}\) & (3) & Honours Algebra 1
\end{tabular}
** It is strongly recommended that students take both MATH 245 and MATH 254.

0-6 credits from the following courses for which no Honours equivalent exists:
\begin{tabular}{lcl} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 329 & (3) & Theory of Interest \\
MATH 338 & \((3)\) & History and Philosophy of Mathematics \\
MATH 378 & (3) & Nonlinear Optimization \\
MATH 430 & (3) & Mathematical Finance \\
MATH 463 & \((3)\) & Convex Optimization
\end{tabular}

6-12 credits selected from:
\begin{tabular}{lll} 
COMP 250++ & (3) & Introduction to Computer Science \\
COMP 252 & (3) & Honours Algorithms and Data Structures
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MATH 350 & (3) & Honours Discrete Mathematics \\
\hline MATH 352 & (1) & Problem Seminar \\
\hline MATH 365 & (3) & Honours Groups, Tilings and Algorithms \\
\hline MATH 376 & (3) & Honours Nonlinear Dynamics \\
\hline MATH 377 & (3) & Honours Number Theory \\
\hline MATH 387 & (3) & Honours Numerical Analysis \\
\hline MATH 397 & (3) & Honours Matrix Numerical Analysis \\
\hline MATH 398 & (3) & Honours Euclidean Geometry \\
\hline MATH 462 & (3) & Honours Mathematics for Machine Learning \\
\hline MATH 480 & (3) & Honours Independent Study \\
\hline MATH 488 & (3) & Honours Set Theory \\
\hline
\end{tabular}
all MATH 500-level courses.
++ Students with limited programming experience should take COMP 202 or COMP 204 or COMP 208 or equivalent before COMP 250.
Students may select other courses with the permission of the Department.

\subsection*{3.9.26.12 Bachelor of Science (B.Sc.) - Honours Mathematics and Computer Science (78 credits)}

The B.Sc.; Honours in Mathematics and Computer Science provides a rigorous training, at the honours level, in mathematics and computer science, while exploring the interaction between the two fields. This program may be completed with a minimum of 72 credits or a maximum of 78 credits.

\section*{Program Prerequisites}

Students must consult an Honours adviser in both departments to ensure that they have sufficient background to enter the program. The minimum requirements are the following courses or their equivalencies:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

In particular, MATH 150/MATH151 and MATH 140/MATH 141/MATH 222 are considered equivalent.
To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

\section*{Required Courses}
(33-36 credits)
* Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.
\begin{tabular}{lcl} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 252 & (3) & Honours Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 310 & (3) & Operating Systems \\
COMP 330 & (3) & Theory of Computation \\
COMP 362 & (3) & Honours Algorithm Design \\
MATH 222* & (3) & Calculus 3 \\
MATH 251 & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2 \\
MATH 350 & (3) & Honours Discrete Mathematics
\end{tabular}

\section*{Complementary Courses}

39-42 credits
0-3 credits selected from:
\begin{tabular}{lll} 
COMP 202** & (3) & Foundations of Programming \\
COMP 204** & (3) & Computer Programming for Life Sciences \\
COMP \(208^{* *}\) & (3) & Computer Programming for Physical Sciences and Engineering \\
** Students who have sufficient knowledge of computer programming are not required to take COMP 202/COMP 204/COMP 208.
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH \(254^{* * *}\) & (3) & Honours Analysis 1
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH \(245^{* * *}\) & (3) & Honours Algebra 1
\end{tabular}
*** It is strongly recommended that students take both MATH 245 and MATH 254.

3 credits selected from:
\begin{tabular}{lll} 
MATH 248 & (3) & Honours Vector Calculus \\
MATH 358 & (3) & Honours Advanced Calculus
\end{tabular}

9-18 credits selected from:
+ Not open to students who have taken MATH 354.
\begin{tabular}{lll} 
MATH 356 & \((3)\) & Honours Probability \\
MATH 357 & \((3)\) & Honours Statistics \\
MATH 387 & \((3)\) & Honours Numerical Analysis \\
MATH 454+ & (3) & Honours Analysis 3 \\
MATH 455 & (3) & Honours Analysis 4 \\
MATH 456 & (3) & Honours Algebra 3 \\
MATH 457 & (3) & Honours Algebra 4
\end{tabular}
\(0-9\) credits should be selected from honours courses and 500-level courses given by the Department of Mathematics and Statistics.
12 credits in Computer Science, selected from Computer Science courses at the 300 level or above excluding COMP 364 and COMP 396. ECSE 508 may also be taken.

\subsection*{3.9.26.13 Bachelor of Science (B.Sc.) - Honours Statistics ( 63 credits)}

The B.Sc.: Honours in Statistics provides training, at the honours level, in statistics, with a solid mathematical core, and basic training in computing. With a suitable selection of complementary courses, the program can focus on probability, mathematical statistics, applied statistics, actuarial science and finance, or data science. With satisfactory performance in an appropriate selection of courses, this program can lead to the professional accreditation A.Stat from the Statistical Society of Canada, which is regarded as the entry level requirement for a Statistician practicing in Canada.

\section*{Program Requirements ( 63 credits)}

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending on whether or not they are required to take MATH 222.

\section*{Program Prerequisites}

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses or their equivalents:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

In particular, MATH 150/MATH 151 and MATH 140/MATH 141/MATH 222 are considered equivalent.

\section*{Required Courses ( \(\mathbf{2 8 - 3 1}\) credits)}
* Students with limited programming experience should take COMP 202/COMP 204/COMP 208 or equivalent before COMP 250.
** Students select either MATH 251 or MATH 247, but not both.
\(*^{* *}\) Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63. Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.

Note: Students with limited knowledge of computer programming should take COMP 202/COMP 204/COMP 208 or equivalent before COMP 250 . U0 students may take COMP 202 as a Freshman Science course; new U1 students should take one of these courses as an elective in their first semester.
Note: Students who wish to take MATH 204 as a complementary course are strongly advised to take MATH 203 beforehand, in their first semester or their first year.
Students who transfer to Honours in Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.
To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.
\begin{tabular}{lcl} 
COMP 250* & (3) & Introduction to Computer Science \\
MATH 208 & \((3)\) & Introduction to Statistical Computing \\
MATH 222*** & \((3)\) & Calculus 3 \\
MATH 235 & \((3)\) & Algebra 1 \\
MATH 247** & \((3)\) & Honours Applied Linear Algebra \\
MATH 251** & \((3)\) & Honours Algebra 2 \\
MATH 255 & \((3)\) & Honours Analysis 2 \\
MATH 356 & \((3)\) & Honours Probability \\
MATH 357 & \((3)\) & Honours Statistics \\
MATH 470 & (3) & Honours Research Project \\
MATH 533 & (4) & Regression and Analysis of Variance
\end{tabular}

\section*{Complementary Courses (32 credits)}

\section*{Advising notes:}
- Students wishing to pursue mathematical statistics in graduate school are advised to take MATH 587 and recommended to take honours mathematics courses as complementary courses in Part II, in particular MATH 358, MATH 454 (preferably prior to MATH 587), and MATH 455.
- Students wishing to pursue applied statistics and/or careers as statisticians in industry or government are advised to take MATH 523, MATH 524, MATH 547, at least one of MATH 525 and MATH 558, and as many courses as possible from Part III of the list of Complementary Courses below. Students interested in obtaining the A-Stat accreditation from the Statistical Society of Canada should discuss their course selection with the academic adviser.
-Students with interest in probability are advised to choose from the following as part of their Complementary Courses: MATH 547, MATH 587, MATH 589.
- Students with interest in actuarial science are advised to choose from the following as part of their Complementary Courses: MATH 329, MATH 430, MATH 524, MATH 545, MATH 547.
- Students with interest in data science and machine learning are advised to choose from the following as part of their Complementary Courses: COMP 206, COMP 251, COMP 370, COMP 424, COMP 551, MATH 308, MATH 350, MATH 378, MATH 462 and MATH 517,MATH 562, and MATH 563.

Part I: 3 credits selected from:
* It is strongly recommended that students take MATH 254.
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH 254* & (3) & Honours Analysis 1
\end{tabular}

Part II: 6-11 credits in mathematics and computer science selected from:
+ Students can select either MATH 248 or MATH 358, but not both.
++ Students may obtain credit for both MATH 455 and MATH 587.
\begin{tabular}{lcl} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 252 & (3) & Honours Algorithms and Data Structures \\
MATH 248+ & (3) & Honours Vector Calculus \\
MATH 325 & (3) & Honours Ordinary Differential Equations \\
MATH 350 & (3) & Honours Discrete Mathematics \\
MATH 352 & (1) & Problem Seminar \\
MATH 358+ & (3) & Honours Advanced Calculus \\
MATH 376 & (3) & Honours Nonlinear Dynamics \\
MATH 387 & (3) & Honours Numerical Analysis \\
MATH 397 & (3) & Honours Matrix Numerical Analysis \\
MATH 398 & (3) & Honours Euclidean Geometry \\
MATH 454 & (3) & Honours Analysis 4 \\
MATH 455++ & (3) & Honours Differential Geometry \\
MATH 458 & (3) & Honours Complex Analysis \\
MATH 466 & (3) & Honours Partial Differential Equations \\
MATH 475 & (3) & Computational Methods in Applied Mathematics \\
MATH 478 & (3) & Honours Independent Study \\
MATH 480 & (3) & Statistical Data Science Practicum Data Science Practicum \\
MATH 527D1 & (3) &
\end{tabular}
and any 500-level course offered by the Department of Mathematics and Statistics not listed in Part III below.

Part III: 18-23 credits in probability and statistics selected as follows:
15-23 credits selected from:
+++ Students must take MATH 204 before taking MATH 357 or MATH 533. Moreover, it is strongly advised to take MATH 203 before taking MATH 204.
\begin{tabular}{lll} 
MATH 204+++ & (3) & Principles of Statistics 2 \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 547 & (4) & Stochastic Processes \\
MATH 556 & (4) & Mathematical Statistics 1
\end{tabular}
\begin{tabular}{lll} 
MATH 557 & (4) & Mathematical Statistics 2 \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MATH 587 & (4) & Advanced Probability Theory 1 \\
MATH 589 & (4) & Advanced Probability Theory 2
\end{tabular}

0-3 credits from the following courses for which no Honours equivalent exists:
\begin{tabular}{lll} 
MATH 329 & (3) & Theory of Interest \\
MATH 378 & (3) & Nonlinear Optimization \\
MATH 427 & (3) & Statistical Quality Control
\end{tabular}
\(0-8\) credits selected from:
+++ Students may select either MATH 594 or MATH 598 but not both.
\begin{tabular}{lll} 
COMP 370 & \((3)\) & Introduction to Data Science \\
COMP 424 & \((3)\) & Artificial Intelligence \\
COMP 451 & \((3)\) & Fundamentals of Machine Learning \\
COMP 551 & \((4)\) & Applied Machine Learning \\
COMP 579 & \((4)\) & Reinforcement Learning \\
COMP 588 & \((4)\) & Probabilistic Graphical Models \\
MATH 430 & \((3)\) & Mathematical Finance \\
MATH 462 & (3) & Honours Mathematics for Machine Learning \\
MATH 562 & (4) & Theory of Machine Learning \\
MATH 594+++ & (4) & Topics in Mathematics and Statistics \\
MATH 598+++ & (4) & Topics in Probability and Statistics
\end{tabular}

\subsection*{3.9.27 Management for Arts Students}

The Desautels Faculty of Management offers a minor program for non-Management students open for application to students in the Faculty of Arts. Please refer to Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.7: Minor for Non-Management Students for detailed information regarding applying to the following programs.
- : Minor Management (For Non-Management Students) (18 credits)

\subsection*{3.9.28 McGill Writing Centre}

Refine your academic writing and communication skills in English with courses offered by the McGill Writing Centre mcgill.ca/mwc. As a student in one of our courses, you'll learn essential strategies and techniques that will help you to communicate effectively both at university and beyond the Roddick Gates.

Academic writing and communication in English courses (formerly CCOM prefix), English as a Second Language courses (formerly ESLN and CESL prefixes), and English for Academic Purposes (formerly EAPR and CEAP prefixes) are offered by the McGill Writing Centre under the WCOM prefix.

For a list of WCOM courses that can be taken for credit in the Faculty of Arts, consult the McGill Writing Centre website: mcgill.ca/mwc/courses/undergraduate. WCOM courses are also on the list of approved courses for the BA Foundation Year Program:
mcgill.ca/oasis/students/new/freshmanfoundation-u0/approved-freshmanfoundation-courses.
Note: Up to a maximum of 12 credits of English as a Second Language courses, including academic writing courses for non-anglophones (WCOM ESL courses), are open to you if your primary language is not English and you have studied for fewer than five (5) years in an English-language secondary institution. Placement tests are required for all WCOM ESL courses. For more information on WCOM ESL placement tests, see the McGill Writing Centre mcgill.ca/mwc/courses/placement-tests.

\subsection*{3.9.28.1 Location}

McLennan-Redpath Library, Main Floor, Room 2
3459 McTavish Street
Montreal, Quebec, H3A 0C9
Telephone: 514-398-7109
Email: mailto:mwc@mcgill.ca
Website: mcgill.ca/mwc

\subsection*{3.9.28.2 About the McGill Writing Centre}

Currently located in the McLennan-Redpath Library, the McGill Writing Centre (MWC) is the University's central resource for written communication. The Centre offers credit courses mcgill.ca/mwc/courses in academic writing, science communication, creative writing, digital communication, professional communication, and a tutorial service mcgill.ca/mwc/tutorial-service open to McGill students. In addition, the Centre offers a number of non-credit writing courses in business communication and scientific writing mcgill.ca/mwc/special-interest-courses open to the public.

\subsection*{3.9.28.3 McGill Writing Centre Faculty}

\section*{Director}

Yvonne Hung

\section*{Academic Staff}

Mehdi Babaei; Aaron Bartels-Swindells; Donetta Hines; Kyle Kubler; Ross Sundberg

\subsection*{3.9.28.4 WCOM (Written and Oral Communication in English) Courses}

\section*{Academic Writing}
- WCOM 150: Critical Analysis and Composition
- WCOM 250: Research Essay and Rhetoric

Academic Skills and Communication - tailored for English Language Learners (placement test required; please see mcgill.ca/mwc/courses/placement-tests)
- WCOM 235: ESL Academic English 2
- WCOM 245: ESL: Essay and Critical Thinking
- WCOM 255: ESL: Research Essay and Rhetoric
- WCOM 295: ESL: Academic Skills

\section*{Creative Writing}
- WCOM 203: Introduction to Creative Writing
- WCOM 333: Writing Creative Nonfiction

Science Communication
- WCOM 314: Communicating Science
- WCOM 414: Advanced Communicating Science

Digital Genres
- WCOM 317: Writing the Internet
- WCOM 417: Digital Storytelling (coming)

Business Communication (required for certain SCS certificate programs; other undergraduate students can request permission from the MWC)
- WCOM 202: Communication in Management 1

Communication for Engineers
- WCOM 206: Communication in Engineering

Special Topics
- WCOM 371: Selected Communication Topic 1
- WCOM 372: Selected Communication Topic 2

\subsection*{3.9.29 Music}

\subsection*{3.9.29.1 Location}

Strathcona Music Building
555 Sherbrooke Street West
Montreal QC H3A 1E3
Email: studentaffairs.music@mcgill.ca
Website: mcgill.ca/music

\subsection*{3.9.29.2 About Music Programs in Arts}

Available within the Faculty of Arts are a Major and a Minor Concentration in Music.
Program details and registration instructions for the music major and minor programs for B.A. students are found on this website: mcgill.ca/music/programs/ba.
B.A. students may also apply to the other music minors (such as Musical Applications of Technology and Musical Science and Technology, and more) provided they have the necessary music prerequisites. Visit the Music Minor web page mcgill.ca/music/programs/minor for more informaton.
B.A. students should consult with a B.A. Music Program Advisor to ensure that they have the necessary prerequisites prior to applying to one or more of these music programs.

Admission to the B.A. program is granted according to criteria established by the Faculty of Arts. For more information, see:
- section 3.9.29.5: Bachelor of Arts (B.A.) - Minor Concentration Music (18 credits);
- section 3.9.29.6: Bachelor of Arts (B.A.) - Major Concentration Music (36 credits).

Undergraduate students interested in a more intensive music program, including practical instruction on an instrument or in voice and additional ensemble participation, should consider the Bachelor of Music (B.Mus.) degree or the Licentiate program (L.Mus.) offered by the Schulich School of Music; see Schulich School of Music \(>\) Undergraduate \(>\) Overview of Programs \(>\) section 10.3.1: Degrees and Diplomas Offered.


Note: Students in the Faculty of Arts may not complete both a Major Concentration in Music and a Minor Concentration in Music.

\subsection*{3.9.29.3 Music Ensembles}

All McGill students enrolled in a degree program may audition for a variety of ensembles offered through the Schulich School of Music. The majority of the ensemble auditions take place only once a year, generally during the first week of September. If you pass the audition, you may participate in the assigned ensemble(s). Consult with your home faculty advisor to determine if you may apply the ensemble credits toward your degree. The schedule and requirements for ensemble auditions are available on the Ensemble website.
\begin{tabular}{lcl} 
Music Ensembles & & \\
MUEN 496 & \((2)\) & Opera Studio \\
MUEN 563 & \((2)\) & Jazz Vocal Workshop \\
MUEN 567 & \((1)\) & Beethoven Orchestra \\
MUEN 569 & \((1)\) & Tabla Ensemble \\
MUEN 572 & \((2)\) & Cappella Antica \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 (section 001) & (2) & Choral Ensembles (Schulich Singers) \\
MUEN 593 (section 002) & (2) & Choral Ensembles (Concert Choir) \\
MUEN 593 (section 003) & (2) & Choral Ensembles (University Chorus) \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\subsection*{3.9.29.4 Courses Offered by the Schulich School of Music open to Bachelor of Arts students}

The courses offered by the Schulich School of Music below are open to BA students. Students from other faculties may also enrol in these, provided they have the necessary prerequisites or co-requisites and/or permission from the instructor. Consult with your home faculty advisor to see how these courses may fit into your program.

Courses with a MUAR prefix are considered Arts courses. Accordingly, they do not count against the limit of 12 credits that BA students may take from outside the Faculties of Arts and Science unless required for a BA program. Note that MUAR courses are general interest courses, and do not count toward the B.Mus., L.Mus., or B.A. Major or Minor Concentration in Music programs.

Courses with prefixes MUHL, MUTH, and MUMT are considered as Faculty of Music courses. Accordingly, they count against the limit of 12 credits that BA students may take outside the Faculties of Arts and Science unless required for a BA program. More details regarding the policy for credits outside Arts and Science can be found here: mcgill.ca/oasis/academic/courses/courses-outside-faculties-arts-or-science.

\subsection*{3.9.29.5 Bachelor of Arts (B.A.) - Minor Concentration Music (18 credits)}

Students in the Music Minor concentration must consult the Music Adviser prior to registration. Questions regarding the general requirements of the B.A. program and especially elective courses should be addressed to the Office of Advising and Student Information Services (OASIS) at the Arts Faculty.
Completion of the diagnostic placement exams for music theory and musicianship is mandatory. Students should refer to the placement exam website for more details: https://www.mcgill.ca/music/student-resources/new-students/placement-exams.

\section*{Prerequisite Courses}

Students must complete the diagnostic placement exams for music theory and musicianship. Depending on the results, they may be asked to register for one or more of the prerequisite courses listed below. These prerequisite courses cannot be counted toward the 18 credits of the program requirements.
\begin{tabular}{lll} 
MUHL 186 & (3) & Western Musical Traditions \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUTH 100 & (3) & Music Theory Fundamentals \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses (9 credits)}

Prior to registering for each required course, students must either have completed the pre-requisite course or have successfully passed the diagnostic placement exam.
\begin{tabular}{lll} 
MUHL 286 & (3) & Critical Thinking About Music \\
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4
\end{tabular}

\section*{Complementary Courses (9 credits)}

Students may select from courses in the Schulich School of Music except for courses with a MUAR subject code. Students must meet all prerequisite and/or corequisite requirements before registering.

\subsection*{3.9.29.6 Bachelor of Arts (B.A.) - Major Concentration Music (36 credits)}

This Major Concentration studies music as a vital art form in contemporary society and in the history of Western civilization. Its central purpose emphasizes music within broader intellectual and cultural contexts; the Major concentration's premise is that, as a product of culture, music must be considered in relation to the other humanistic disciplines. This program could be an excellent preparation for graduate work in music (musicology, music theory, music librarianship, music journalism, arts administration) or for professional studies in other fields.

Students in the Music Major Concentration must consult the Music Adviser prior to registration. Questions regarding the general requirements of the B.A. program and especially elective courses should be addressed to the Office of Advising and Student Information Services (OASIS) at the Faculty of Arts.

Completion of the diagnostic placement exams for music theory and musicianship is mandatory. Students should refer to the placement exam website for more details: https://www.mcgill.ca/music/student-resources/undergraduates/new-students/placement-exams.

\section*{Prerequisite Courses}

Students must complete the diagnostic placement exams for music theory and musicianship. Depending on the results, they may be asked to register for one or more of the prerequisite courses listed below. These prerequisite courses cannot be counted toward the 36 credits of the program requirements.
MUHL 186
Western Musical Traditions
\begin{tabular}{lll} 
MUSP 140 & \((2)\) & Musicianship Training 1 \\
MUSP 141 & \((2)\) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 100 & (3) & Music Theory Fundamentals \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses ( 13 credits)}

Prior to registering for each required course, students must either have completed the pre-requisite course or have successfully passed the diagnostic placement exam.
\begin{tabular}{lll} 
MUHL 286 & (3) & Critical Thinking About Music \\
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4 \\
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4
\end{tabular}

\section*{Complementary Courses (23 credits)}

Students select from courses offered by the Schulich School of Music except for courses with a MUAR subject code. Students must include 3 credits from a MUHL or MUPP subject code at the 300 level or higher.

\subsection*{3.9.29.7 Music Related Programs}
3.9.29.7.1 Minor in Musical Applications of Technology
(18 credits) (Non-Expandable)
[Program registration cannot be done via Minerva.]
Detailed information about this program is found in Schulich School of Music \(>\) Undergraduate \(>\) Browse Academic Units \& Programs \(>\) Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program > section 10.6.1.12: Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology (18 credits).

\subsection*{3.9.29.7.2 Minor in Musical Science and Technology}
(18 credits) (Non-Expandable)
[Program registration cannot be done via Minerva.]
Detailed information about this program is found in Schulich School of Music \(>\) Undergraduate \(>\) Browse Academic Units \& Programs \(>\) Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program > section 10.6.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits).

\subsection*{3.9.30 Philosophy}

\subsection*{3.9.30.1 Location}

Stephen Leacock Building, 9th Floor
855 Sherbrooke Street West
Montreal QC H3A 2T7
Email: info.philosophy@mcgill.ca
Website: mcgill.ca/philosophy

\subsection*{3.9.30.2 About Philosophy}

Broadly speaking, the principal aim of philosophy is to increase our understanding of ourselves, the world, and our place in it. Philosophy differs from the empirical and social sciences in important respects. Different areas of philosophy are characterized by the questions they address. For example:
- Epistemology inquires into the nature of knowledge;
- Metaphysics is concerned with the fundamental nature of the world and of the types of things that it contains;
- Ethics investigates the nature of moral judgment and moral reasoning;
- Political Philosophy examines such matters as justice, freedom, rights, democracy, and power;
- Logic is broadly the analysis of the structure of correct reasoning.

In addition, there are the various "Philosophies of..." e.g., Philosophy of Science, Philosophy of Language, Philosophy of Mind, and Philosophy of Religion.
Some of the courses in the Department are explicitly devoted to these specific areas of philosophy, each exploring one or several ways of construing and answering the questions it poses. Other courses explore some period or individual figure in the history of philosophy, approaching philosophical questions through the work of past thinkers, and often exploring connections between the different areas of philosophy.

The discipline of Philosophy, as a particular way of thinking, emphasizes clarity in expression, both written and oral, and rigour in argument. Philosophical questions are intriguing and complex, and so philosophical method stresses thoroughness and intellectual generosity-the willingness and ability to grasp another's arguments and respond to them.

The Department requires that all students in the Honours and Joint Honours programs take a special 3-credit course (PHIL 301), the principal aim of which is to equip students with the distinctively philosophical skills required for advanced work in the field. The course is not available to students in the Major or Minor programs.

The B.A. in Philosophy is not a professional qualification. It prepares students for graduate work in philosophy and for study in other disciplines, e.g., Law. As the interdisciplinary discipline par excellence, philosophy also maintains and encourages ties with other fields, so many students will find that certain classes in philosophy are directly relevant to their major area of study. The Department has a strong commitment to providing an intensive yet broad-based philosophical education. The research interests of members of the Department are wide-ranging.
See also the separate listing for section 3.9.30.7: History and Philosophy of Science (HPSC).
Note: Philosophy students may use only one of the following courses towards their program requirements: PHIL 200, PHIL 201 or PHIL 202.

\subsection*{3.9.30.3 Bachelor of Arts (B.A.) - Minor Concentration Philosophy (18 credits)}

\section*{Complementary Courses (18 credits)}

18 credits, of which no more than 9 credits may be at the 200 level and at least 3 credits must be at the 400 or 500 level, distributed as follows:
15 credits from Groups A, B , C, D, and E with one course from at least four of the five groups.
3 additional credits from Groups A, B, C, D, and E or from other Philosophy (PHIL) courses.

\section*{Group A}
\begin{tabular}{lcl} 
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 240 & (3) & Political Philosophy 1 \\
PHIL 242 & (3) & Introduction to Feminist Theory \\
PHIL 334 & (3) & Ethical Theory \\
PHIL 343 & (3) & Biomedical Ethics \\
PHIL 348 & (3) & Philosophy of Law 1 \\
PHIL 427 & (3) & Topics in Critical Philosophy of Race \\
PHIL 434 & (3) & Metaethics \\
PHIL 442 & (3) & Topics in Feminist Theory
\end{tabular}

\section*{Group B}
\begin{tabular}{lll} 
PHIL 210 & \((3)\) & Introduction to Deductive Logic 1 \\
PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 311 & (3) & Philosophy of Mathematics \\
PHIL 341 & (3) & Philosophy of Science 1
\end{tabular}
\begin{tabular}{lll} 
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & (3) & Philosophy of Language \\
PHIL 419 & (3) & Epistemology \\
PHIL 421 & (3) & Metaphysics \\
PHIL 441 & (3) & Philosophy of Science 2 \\
PHIL 470 & (3) & Topics in Contemporary Analytic Philosophy
\end{tabular}

\section*{Group C}

PHIL 375
PHIL 474
PHIL 475

Group D
\begin{tabular}{lll} 
PHIL 344 & (3) & Medieval and Renaissance Political Theory \\
PHIL 345 & (3) & Greek Political Theory \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 353 & (3) & The Presocratic Philosophers \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 356 & (3) & Early Medieval Philosophy \\
PHIL 452 & (3) & Later Greek Philosophy \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy \\
PHIL 454 & (3) & Ancient Moral Theory
\end{tabular}

\section*{Group E}

PHIL 360
PHIL 361
PHIL 366
PHIL 367
PHIL 444
PHIL 445
(3)

17th Century Philosophy 18th Century Philosophy 18th and Early 19th Century German Philosophy 19th Century Philosophy

Early Modern Political Theory
19th Century Political Theory

\subsection*{3.9.30.4 Bachelor of Arts (B.A.) - Major Concentration Philosophy (36 credits)}

\section*{Required Course (3 credits)}

PHIL 210
Introduction to Deductive Logic 1

\section*{Complementary Courses ( \(\mathbf{3 3}\) credits)}

33 credits, of which no more than 9 may be at the 200 level and at least 9 must be at the 400 or 500 level, distributed as follows:
18 credits from Groups A, B, C, D, E, and F:
3 credits from Group A
3 credits from Group B
6 credits, two courses from either Group C or Group D

3 credits from Group E
3 credits from Group F
15 additional credits from Groups A, B, C, D, E or F or from other Philosophy (PHIL) courses. Only one of PHIL 200 or PHIL 201 may be included in the program.

\section*{Group A}

3 credits from:
\begin{tabular}{lcl} 
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 311 & (3) & Philosophy of Mathematics \\
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 411 & \((3)\) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & (3) & Philosophy of Language \\
PHIL 419 & (3) & Epistemology \\
PHIL 421 & \((3)\) & Metaphysics \\
PHIL 441 & (3) & Philosophy of Science 2 \\
PHIL 470 & (3) & Topics in Contemporary Analytic Philosophy
\end{tabular}

\section*{Group B}

3 credits from:
\begin{tabular}{lll} 
PHIL 375 & \((3)\) & Existentialism \\
PHIL 474 & (3) & Phenomenology \\
PHIL 475 & (3) & Topics in Contemporary European Philosophy
\end{tabular}

\section*{Group C}

6 credits (two courses) from Group C OR Group D:
\begin{tabular}{lll} 
PHIL 344 & (3) & Medieval and Renaissance Political Theory \\
PHIL 345 & (3) & Greek Political Theory \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 353 & (3) & The Presocratic Philosophers \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 356 & (3) & Early Medieval Philosophy \\
PHIL 452 & (3) & Later Greek Philosophy \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy \\
PHIL 454 & (3) & Ancient Moral Theory
\end{tabular}

\section*{Group D}

6 credits (two courses) from Group C OR Group D:
\begin{tabular}{lll} 
PHIL 360 & (3) & 17th Century Philosophy \\
PHIL 361 & (3) & 18th Century Philosophy \\
PHIL 366 & (3) & 18th and Early 19th Century German Philosophy \\
PHIL 367 & (3) & 19th Century Philosophy
\end{tabular}
\begin{tabular}{lll} 
PHIL 444 & (3) & Early Modern Political Theory \\
PHIL 445 & (3) & 19th Century Political Theory
\end{tabular}

\section*{Group E}

3 credits from:
\begin{tabular}{lll} 
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 240 & (3) & Political Philosophy 1 \\
PHIL 242 & (3) & Introduction to Feminist Theory
\end{tabular}

\section*{Group F}

3 credits from:
\begin{tabular}{lll} 
PHIL 334 & (3) & Ethical Theory \\
PHIL 343 & (3) & Biomedical Ethics \\
PHIL 348 & (3) & Philosophy of Law 1 \\
PHIL 427 & (3) & Topics in Critical Philosophy of Race \\
PHIL 434 & (3) & Metaethics \\
PHIL 442 & (3) & Topics in Feminist Theory
\end{tabular}

\subsection*{3.9.30.5 Bachelor of Arts (B.A.) - Honours Philosophy (60 credits)}

According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00. Admission to Honours: Students must attain a 3.00 CGPA and have a 3.00 GPA in Philosophy courses.

\section*{Required Courses (15 credits)}
\begin{tabular}{lll} 
PHIL 210 & (3) & Introduction to Deductive Logic 1 \\
PHIL 301 & (3) & Philosophical Fundamentals \\
PHIL 334 & (3) & Ethical Theory \\
PHIL 499 & (6) & Tutorial 06
\end{tabular}

\section*{Complementary Courses (45 credits)}

45 credits distributed as follows:

3 credits from:
\begin{tabular}{lcl} 
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & \((3)\) & Intermediate Logic \\
PHIL 370 & \((3)\) & Problems in Analytic Philosophy \\
PHIL 410 & (3) & Advanced Topics in Logic 1 \\
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & (3) & Philosophy of Language \\
PHIL 419 & (3) & Epistemology \\
PHIL 421 & (3) & Metaphysics \\
PHIL 470 & (3) & Topics in Contemporary Analytic Philosophy
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 240 & (3) & Political Philosophy 1 \\
PHIL 242 & (3) & Introduction to Feminist Theory
\end{tabular}

6 credits from:
\begin{tabular}{lcl} 
PHIL 345 & (3) & Greek Political Theory \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 353 & (3) & The Presocratic Philosophers \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 452 & (3) & Later Greek Philosophy \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy \\
PHIL 454 & (3) & Ancient Moral Theory
\end{tabular}

6 credits from:

PHIL 360
(3)

PHIL 361
PHIL 366
(3)

PHIL 444
PHIL 445
(3)
(3)

17th Century Philosophy
18th Century Philosophy
18th and Early 19th Century German Philosophy
19th Century Philosophy
Early Modern Political Theory
19th Century Political Theory

3 credits from:
\begin{tabular}{lll} 
PHIL 375 & (3) & Existentialism \\
PHIL 474 & (3) & Phenomenology \\
PHIL 475 & (3) & Topics in Contemporary European Philosophy
\end{tabular}

24 additional credits in Philosophy (PHIL) with 12 credits at the 400 and 500 levels (not including the Honours tutorial PHIL 499) at least 3 credits of which must be at the 500 level.

A maximum of 15 credits from 200-level courses may be used toward the Honours program. Only one of PHIL 200 or PHIL 201 may be counted toward the program.

\subsection*{3.9.30.6 Bachelor of Arts (B.A.) - Joint Honours Component Philosophy (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Prior to registering for each Joint Honours component, students should consult an adviser in each department for approval of their course selection and their interdisciplinary research project (if applicable).
According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00.
Admission to Joint Honours: Students must attain a 3.00 CGPA and have a 3.00 GPA in Philosophy courses.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
PHIL 210 & (3) & Introduction to Deductive Logic 1 \\
PHIL 301 & (3) & Philosophical Fundamentals \\
PHIL 334 & (3) & Ethical Theory
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits distributed as follows:

3 credits from:
\begin{tabular}{lcl} 
PHIL 306 & \((3)\) & Philosophy of Mind \\
PHIL 310 & \((3)\) & Intermediate Logic \\
PHIL 370 & \((3)\) & Problems in Analytic Philosophy \\
PHIL 410 & \((3)\) & Advanced Topics in Logic 1 \\
PHIL 411 & \((3)\) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & \((3)\) & Philosophy of Language \\
PHIL 419 & \((3)\) & Epistemology \\
PHIL 421 & (3) & Metaphysics \\
PHIL 470 & & Topics in Contemporary Analytic Philosophy
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 240 & (3) & Political Philosophy 1 \\
PHIL 242 & (3) & Introduction to Feminist Theory
\end{tabular}

\section*{Group A}

6 credits from Group A or Group B.
\begin{tabular}{lcl} 
PHIL 345 & (3) & Greek Political Theory \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 353 & (3) & The Presocratic Philosophers \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 452 & (3) & Later Greek Philosophy \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy \\
PHIL 454 & (3) & Ancient Moral Theory
\end{tabular}

\section*{Group B}

6 credits from Group A or Group B.
\begin{tabular}{lll} 
PHIL 360 & (3) & 17th Century Philosophy \\
PHIL 361 & (3) & 18th Century Philosophy \\
PHIL 366 & (3) & 18th and Early 19th Century German Philosophy \\
PHIL 367 & (3) & 19th Century Philosophy \\
PHIL 444 & (3) & Early Modern Political Theory
\end{tabular}
PHIL 445
(3)
19th Century Political Theory

3 credits from:
\begin{tabular}{lll} 
PHIL 375 & (3) & Existentialism \\
PHIL 474 & (3) & Phenomenology \\
PHIL 475 & (3) & Topics in Contemporary European Philosophy
\end{tabular}

9 credits of Philosophy (PHIL) at the 400 and 500 level (not including the Joint Honours tutorial), at least 3 credits of which must be at the 500 level.

\section*{Joint Honours Tutorial with Thesis}

3 credits of Joint Honours tutorial with thesis, which can take either of two forms: a 6-credit interdisciplinary thesis, or a 3-credit thesis in Philosophy, i.e., PHIL 498 below.
PHIL 498 (3) Tutorial 05

\subsection*{3.9.30.7 History and Philosophy of Science (HPSC)}

\subsection*{3.9.30.7.1 About History and Philosophy of Science}

History and Philosophy of Science at McGill is an interdisciplinary program that aims to provide students with an understanding of science through the study of both its historical development and of some of the fundamental philosophical principles upon which it rests. In addition to attending lecture courses, students can also count independent research courses towards the program.

Further information for new and returning students is available at mcgill.ca/hpsc.

\subsection*{3.9.30.7.2 Bachelor of Arts (B.A.) - Minor Concentration History and Philosophy of Science (18 credits)}

History and Philosophy of Science at McGill is an interdisciplinary program that aims to provide students with an understanding of science through the study of both its historical development and of some of the fundamental philosophical principles upon which it rests. For more information about the program and events, please visit http://www.mcgill.ca/hpsc.

\section*{Complementary Courses (18 credits)}

18 credits with a maximum of 9 credits at the 200 level selected as follows:

\section*{Philosophy of Science}

6-12 credits of courses focused on the Philosophy of Science with no more than 6 credits at the 200 level chosen from the following:

\section*{Communication Studies (COMS)}
COMS 210 (3) Introduction to Communication Studies

\section*{History and Philosophy of Science (HPSC)}
\begin{tabular}{lll} 
HPSC 300 & (3) & Independent Studies: History and Philosophy of Science \\
HPSC 500 & (3) & Interdisciplinary Seminar: History \& Philosophy of Science
\end{tabular}

\section*{Philosophy (PHIL)}
\begin{tabular}{lcl} 
PHIL 210 & (3) & Introduction to Deductive Logic 1 \\
PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 311 & (3) & Philosophy of Mathematics \\
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 350 & (3) & History and Philosophy of Ancient Science
\end{tabular}
\begin{tabular}{lll} 
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 441 & (3) & Philosophy of Science 2 \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy
\end{tabular}

\section*{History of Science}

6-12 credits of courses focused on the History of Science with no more than 6 credits at the 200 level chosen from the following:

\section*{Anthropology (ANTH)}
ANTH 359
(3)
History of Archaeological Theory

\section*{Biology (BIOL)}
BIOL 210 (3) Perspectives of Science

History (HIST)
\begin{tabular}{lcl} 
HIST 249 & (3) & Health and the Healer in Western History \\
HIST 319 & (3) & The Scientific Revolution \\
HIST 335 & (3) & Science and Medicine in Canada \\
HIST 350 & (3) & Science and the Enlightenment \\
HIST 356 & (3) & Medicine in the Medieval West \\
HIST 410 & (3) & Topics in History of Science \\
HIST 452 & (3) & Topics in Pre-Modern Medicine \\
HIST 457 & (3) & Modern Medicine: Seminar in Medical History \\
HIST 558 & (3) & Modern Medicine: Research \\
HIST 559 & (3) & Seminar: Medieval Medicine \\
HIST 567D1 & (3) & Seminar: Medieval Medicine \\
HIST 567D2 &
\end{tabular}

\section*{History and Philosophy of Science (HPSC)}
\begin{tabular}{lll} 
HPSC 300 & (3) & Independent Studies: History and Philosophy of Science \\
HPSC 500 & (3) & Interdisciplinary Seminar: History \& Philosophy of Science
\end{tabular}

\section*{Islamic Studies (ISLA)}
ISLA 345
(3)
Science and Civilization in Islam

\section*{Mathematics (MATH)}
MATH 338
(3)
History and Philosophy of Mathematics

\section*{Psychology (PSYC)}

PSYC 403
(3)

Modern Psychology in Historical Perspective

\subsection*{3.9.30.8 Philosophy (PHIL) Related Programs \\ 3.9.30.8.1 Minor in Cognitive Science}

Students following Major or Honours programs in Philosophy with an interest in cognition may consider the Minor in Cognitive Science. For more information, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.8: Cognitive Science.

\subsection*{3.9.31 Political Science}

\subsection*{3.9.31.1 Location}

Stephen Leacock Building, 4th Floor
855 Sherbrooke Street West
Montreal QC H3A 2T7
Website: mcgill.ca/politicalscience

\subsection*{3.9.31.2 About Political Science}

Students wishing to do an honours degree or a major or minor concentration in Political Science should consult a Political Science departmental advisor each year in order to devise a suitable program. Proper selection of courses is required if a student wants to graduate on time.

\subsection*{3.9.31.3 Procedure for New Students}

All new students entering the Political Science program (including minor concentrations) are strongly urged to attend an information meeting scheduled at the end of August; the date and location of the meeting will be posted on the web. Attendance will help students prepare for their session with an advisor. It is the student's responsibility to be in Montreal for the meeting. The Political Science Programs Guide is an important resource for new students; it is essential to read the guide prior to attending the information meeting.

\subsection*{3.9.31.4 For All Political Science Students}

The Political Science Programs Guide is available in the Department as well as on the Political Science website. Students wishing to have courses taken at other universities counted as satisfying program requirements must bring copies of their transcripts and course syllabi to the Director of the Major or Honours program or the Director of Undergraduate Studies. Students are not accepted into the Honours program in Political Science until their second year in Political Science; an exception is made for those in joint honours programs.
As course and personnel changes may have occurred after this publication was prepared, students should not use it to plan their program of studies without first consulting the Department office for updated information.

\subsection*{3.9.31.5 Bachelor of Arts (B.A.) - Minor Concentration Political Science (18 credits)}

This program may be expanded to the Major Concentration Political Science.

\section*{Complementary Courses (18 credits)}

18 credits selected as follows:
6-9 POLI credits at the 200 level. These courses should be in different groups, the relevant groups being Canadian Politics, International Relations, Comparative Politics, Political Theory, and Methods.
9-12 POLI credits at the 300 level or above.
No more than 6 POLI transfer credits can be used toward the program requirements.
POLI 490, POLI 499, and POLI 599 cannot be used towards the Minor program.
Course lists for each group of political science courses are provided below.

\section*{Canadian Politics}
\begin{tabular}{lcl} 
POLI 221 & (3) & Government of Canada \\
POLI 222 & (3) & Political Process and Behaviour in Canada \\
POLI 226 & (3) & La vie politique québécoise \\
POLI 318 & (3) & Comparative Local Government \\
POLI 320 & \((3)\) & Issues in Canadian Democracy \\
POLI 321 & (3) & Issues: Canadian Public Policy \\
POLI 326 & (3) & Provincial Politics
\end{tabular}
\begin{tabular}{lcl} 
POLI 336 & \((3)\) & Le Québec et le Canada \\
POLI 342 & \((3)\) & Canadian Foreign Policy \\
POLI 348 & \((3)\) & Gender and Canadian Politics \\
POLI 371 & \((3)\) & Challenge of Canadian Federalism \\
POLI 372 & \((3)\) & Indigenous Peoples and the Canadian State \\
POLI 378 & \((3)\) & The Canadian Judicial Process \\
POLI 379 & \((3)\) & Topics in Canadian Politics \\
POLI 410 & (3) & Canadian Political Parties \\
POLI 412 & (3) & Canadian Voting/Public Opinion \\
POLI 417 & (3) & Health Care in Canada \\
POLI 424 & (3) & Media and Politics \\
POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
POLI 427 & (3) & Selected Topics: Canadian Politics \\
POLI 436 & (3) & Aboriginal Rights in the Canadian Constitution \\
POLI 478 & (3) & The Canadian Constitution \\
POLI 521 & (3) & Seminar: Canadian Politics and Government
\end{tabular}

\section*{Comparative Politics - Developed Areas}
\begin{tabular}{|c|c|c|}
\hline GEOG 420* & (3) & Memory, Place, and Power \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 316 & (3) & Black Lives Matter and American Democracy \\
\hline POLI 318 & (3) & Comparative Local Government \\
\hline POLI 325 & (3) & U.S. Politics \\
\hline POLI 328 & (3) & Comparing European Democracies \\
\hline POLI 329 & (3) & Russian and Soviet Politics \\
\hline POLI 330 & (3) & Law and Courts in Europe \\
\hline POLI 331 & (3) & Politics in East Central Europe \\
\hline POLI 339 & (3) & Comparative Developed: Topics 1 \\
\hline POLI 357 & (3) & Politics: Contemporary Europe \\
\hline POLI 361 & (3) & Political Participation in Comparative Perspective \\
\hline POLI 419 & (3) & Transitions from Communism \\
\hline POLI 420* & (3) & Memory, Place, and Power \\
\hline POLI 421 & (3) & The Politics of Misinformation \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 425 & (3) & Topics in American Politics \\
\hline POLI 430 & (3) & Politics of Art \\
\hline POLI 431 & (3) & Nations and States/Developed World \\
\hline POLI 432 & (3) & Selected Topics: Comparative Politics \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 475 & (3) & Social Capital in Comparative Perspective \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline
\end{tabular}

POLI 524
(3)

Seminar: Developed Areas
* Either POLI 420 or GEOG 420 but not both.

\section*{Comparative Politics - Developing Areas}
\begin{tabular}{lll} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 319 & \((3)\) & Politics of Latin America \\
POLI 322 & \((3)\) & Political Change in South Asia \\
POLI 324 & \((3)\) & Developing Areas/Africa \\
POLI 338 & \((3)\) & Developing Areas/Topics 1 \\
POLI 340 & (3) & Developing Areas/Middle East \\
POLI 369 & (3) & Politics of Southeast Asia \\
POLI 380 & (3) & Contemporary Chinese Politics \\
POLI 381 & (3) & Politics in Japan and South Korea \\
POLI 422 & (3) & Developing Areas/Topics 2 \\
POLI 423 & (3) & Politics of Ethno-Nationalism \\
POLI 435 & (3) & Identity and Inequality \\
POLI 450 & (3) & Peacebuilding \\
POLI 473 & (3) & Democracy and the Market \\
POLI 474 & (3) & Inequality and Development \\
POLI 476 & (3) & Religion and Politics \\
POLI 480 & (3) & Contentious Politics \\
POLI 522 & (3) & Seminar: Developing Areas \\
\hline
\end{tabular}

\section*{International Relations}
\begin{tabular}{lll} 
POLI 243 & \((3)\) & International Politics of Economic Relations \\
POLI 244 & \((3)\) & International Politics: State Behaviour \\
POLI 341 & \((3)\) & Foreign Policy: The Middle East \\
POLI 342 & (3) & Canadian Foreign Policy \\
POLI 345 & (3) & International Organizations \\
POLI 346 & (3) & American Foreign Policy \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
POLI 349 & (3) & Foreign Policy: Asia \\
POLI 350 & (3) & Global Environmental Politics \\
POLI 351 & (3) & The Causes of Major Wars \\
POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
POLI 353 & (3) & Politics of the International Refugee Regime \\
POLI 354 & (3) & Approaches to International Political Economy \\
POLI 355 & (3) & The Politics of International Law \\
POLI 358 & (3) & Political Economy of International Organizations \\
POLI 359 & (3) & Topics in International Politics 1 \\
POLI 360 & (3) & Security: War and Peace \\
POLI 362 & (3) & Political Theory and International Relations
\end{tabular}
\begin{tabular}{lcl} 
POLI 441 & \((3)\) & IPE: Trade \\
POLI 442 & \((3)\) & International Relations of Ethnic Conflict \\
POLI 443 & \((3)\) & Intervention in World Politics \\
POLI 444 & \((3)\) & Topics in International Politics 2 \\
POLI 445 & \((3)\) & International Political Economy: Monetary Relations \\
POLI 447 & (3) & Political Economy of Multinationals \\
POLI 448 & (3) & Gender and International Relations \\
POLI 449 & (3) & Diplomacy in Practice \\
POLI 450 & (3) & Peacebuilding \\
POLI 451 & (3) & The European Union \\
POLI 452 & (3) & Conflict Simulation \\
POLI 575 & (3) & Seminar: International Politics
\end{tabular}

\section*{Political Theory}
\begin{tabular}{|c|c|c|}
\hline POLI 231 & (3) & Introduction to Political Theory \\
\hline POLI 333 & (3) & Western Political Theory 1 \\
\hline POLI 334 & (3) & Western Political Theory 2 \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 363 & (3) & Contemporary Political Theory \\
\hline POLI 364 & (3) & Radical Political Thought \\
\hline POLI 365 & (3) & Democratic Theory \\
\hline POLI 366 & (3) & Topics in Political Theory 1 \\
\hline POLI 367 & (3) & Liberal Political Theory \\
\hline POLI 368 & (3) & Political Theory and Indigeneity. \\
\hline POLI 433 & (3) & History of Political/Social Theory 3 \\
\hline POLI 434 & (3) & History of Political/Social Theory 4 \\
\hline POLI 459 & (3) & Topics in Political Theory 2 \\
\hline POLI 470 & (3) & Philosophy, Economy and Society \\
\hline POLI 561 & (3) & Seminar: Political Theory \\
\hline
\end{tabular}

\section*{Methods}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 311 & (3) & Introduction to Quantitative Political Science \\
POLI 312 & (3) & Intermediate Quantitative Political Science \\
POLI 313 & (3) & Introduction to Qualitative Methods in Political Science \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\subsection*{3.9.31.6 Bachelor of Arts (B.A.) - Major Concentration Political Science ( \(\mathbf{3 6}\) credits)}

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits of courses selected from the four main fields of political science (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas), International Relations, and Political Theory) with the following specifications.

No more than one-half of the credits ( 18 credits) may be taken in a single field of political science, unless the field is Comparative Politics in which case the maximum is 21 credits, provided courses are taken in both Developed Areas and Developing Areas.

No more than 12 of the 36 credits may be at the 200 level. No more than 3 credits at the 200 level may be in any given group.
3 credits should be taken at the 400 level at McGill rather than as transfer credits.
In the final year, no course used toward the program requirements may be below the 300 level.
No more than 12 POLI transfer credits can be used toward the program requirements.

\section*{Advising Information}

In the first year of the program (U1), students are advised to select their courses from at least three of the five main groups of courses in political science. U1 students should normally take courses at the 200 level only. However, those who have already completed the 200-level prerequisite for courses may take 300-level courses.
Course lists for each group of political science courses are provided below.
NOTE: POLI 200, 210, 311 and 461 can also be used towards this program.

\section*{Canadian Politics}
\begin{tabular}{|c|c|c|}
\hline POLI 221 & (3) & Government of Canada \\
\hline POLI 222 & (3) & Political Process and Behaviour in Canada \\
\hline POLI 226 & (3) & La vie politique québécoise \\
\hline POLI 317 & (3) & The Politics of Race in Canada \\
\hline POLI 318 & (3) & Comparative Local Government \\
\hline POLI 320 & (3) & Issues in Canadian Democracy \\
\hline POLI 321 & (3) & Issues: Canadian Public Policy \\
\hline POLI 326 & (3) & Provincial Politics \\
\hline POLI 336 & (3) & Le Québec et le Canada \\
\hline POLI 342 & (3) & Canadian Foreign Policy \\
\hline POLI 348 & (3) & Gender and Canadian Politics \\
\hline POLI 371 & (3) & Challenge of Canadian Federalism \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 378 & (3) & The Canadian Judicial Process \\
\hline POLI 379 & (3) & Topics in Canadian Politics \\
\hline POLI 410 & (3) & Canadian Political Parties \\
\hline POLI 412 & (3) & Canadian Voting/Public Opinion \\
\hline POLI 417 & (3) & Health Care in Canada \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
\hline POLI 427 & (3) & Selected Topics: Canadian Politics \\
\hline POLI 436 & (3) & Aboriginal Rights in the Canadian Constitution \\
\hline POLI 478 & (3) & The Canadian Constitution \\
\hline POLI 521 & (3) & Seminar: Canadian Politics and Government \\
\hline
\end{tabular}

\section*{Comparative Politics - Developed Areas}
\begin{tabular}{lll} 
GEOG \(420^{*}\) & (3) & Memory, Place, and Power \\
POLI 212 & (3) & Government and Politics - Developed World \\
POLI 316 & (3) & Black Lives Matter and American Democracy \\
POLI 318 & (3) & Comparative Local Government \\
POLI 325 & (3) & U.S. Politics \\
POLI 328 & \((3)\) & Comparing European Democracies
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline POLI 329 & (3) & Russian and Soviet Politics \\
\hline POLI 330 & (3) & Law and Courts in Europe \\
\hline POLI 331 & (3) & Politics in East Central Europe \\
\hline POLI 339 & (3) & Comparative Developed: Topics 1 \\
\hline POLI 357 & (3) & Politics: Contemporary Europe \\
\hline POLI 361 & (3) & Political Participation in Comparative Perspective \\
\hline POLI 419 & (3) & Transitions from Communism \\
\hline POLI 420* & (3) & Memory, Place, and Power \\
\hline POLI 421 & (3) & The Politics of Misinformation \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 425 & (3) & Topics in American Politics \\
\hline POLI 430 & (3) & Politics of Art \\
\hline POLI 431 & (3) & Nations and States/Developed World \\
\hline POLI 432 & (3) & Selected Topics: Comparative Politics \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 475 & (3) & Social Capital in Comparative Perspective \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 524 & (3) & Seminar: Developed Areas \\
\hline
\end{tabular}
* Either POLI 420 or GEOG 420 but not both.

\section*{Comparative Politics - Developing Areas}
\begin{tabular}{|c|c|c|}
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 422 & (3) & Developing Areas/Topics 2 \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 473 & (3) & Democracy and the Market \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 480 & (3) & Contentious Politics \\
\hline POLI 522 & (3) & Seminar: Developing Areas \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 342 & (3) & Canadian Foreign Policy \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 346 & (3) & American Foreign Policy \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 351 & (3) & The Causes of Major Wars \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 354 & (3) & Approaches to International Political Economy \\
\hline POLI 355 & (3) & The Politics of International Law \\
\hline POLI 358 & (3) & Political Economy of International Organizations \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 443 & (3) & Intervention in World Politics \\
\hline POLI 444 & (3) & Topics in International Politics 2 \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 446 & (3) & International Law and Politics of Human Rights \\
\hline POLI 447 & (3) & Political Economy of Multinationals \\
\hline POLI 448 & (3) & Gender and International Relations \\
\hline POLI 449 & (3) & Diplomacy in Practice \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 575 & (3) & Seminar: International Politics \\
\hline
\end{tabular}

\section*{Political Theory}
\begin{tabular}{lcl} 
POLI 231 & \((3)\) & Introduction to Political Theory \\
POLI 333 & \((3)\) & Western Political Theory 1 \\
POLI 334 & \((3)\) & Western Political Theory 2 \\
POLI 362 & \((3)\) & Political Theory and International Relations \\
POLI 363 & \((3)\) & Contemporary Political Theory \\
POLI 364 & \((3)\) & Radical Political Thought \\
POLI 365 & \((3)\) & Democratic Theory \\
POLI 366 & \((3)\) & Topics in Political Theory 1 \\
POLI 367 & \((3)\) & Liberal Political Theory
\end{tabular}
\begin{tabular}{lcl} 
POLI 368 & (3) & Political Theory and Indigeneity. \\
POLI 433 & (3) & History of Political/Social Theory 3 \\
POLI 434 & (3) & History of Political/Social Theory 4 \\
POLI 459 & (3) & Topics in Political Theory 2 \\
POLI 470 & (3) & Philosophy, Economy and Society \\
POLI 561 & (3) & Seminar: Political Theory
\end{tabular}

\section*{Methods}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 311 & (3) & Introduction to Quantitative Political Science \\
POLI 312 & (3) & Intermediate Quantitative Political Science \\
POLI 313 & (3) & Introduction to Qualitative Methods in Political Science \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\subsection*{3.9.31.7 Bachelor of Arts (B.A.) - Honours Political Science (54 credits)}

The Honours Political Science program consists of 54 credits, of which 48 must be in Political Science. The remaining 6 credits must be in related social studies disciplines and must be taken at the 300 or 400 level.

To enter, remain and graduate in Honours, students must achieve/maintain a 3.3 average in their political science courses and more than half of the political science grades must be at the B+ level or higher. According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 in general.

To be awarded First Class Honours at graduation, in addition to the Faculty requirement of a 3.50 CGPA, students must achieve a 3.6 average in their political science courses and more than half of political science grades must be at the A- level or higher. All political science courses taken at McGill are counted in determining a student's standing. (The specific criteria are given in the brochure "Major and Honours Program Guide," which may be found on the Department website http://www.mcgill.ca/politicalscience/.) To be awarded Honours at graduation, students must be registered in the Honours program in their final year. At graduation, students' Honours standing will be determined by their overall record in the Honours program.
Students may enter the Honours program at the start of U2.

\section*{Required Course (3 credits)}
POLI 210* (3) Political Science Research Methods
* The POLI 210 requirement is waived for students admitted to McGill BEFORE Fall 2017. The POLI 210 requirement is waived for students who have taken SOCI 211.

NOTE: If the POLI 210 requirement is waived, students must still fulfill the 54 -credit program requirement.

\section*{Complementary Courses ( 51 credits)}

51 credits of complementary courses selected with the following specifications:
45 credits of Political Science (POLI) and 6 credits at the 300 or 400 level in related disciplines* (e.g., Anthropology (ANTH), Canadian Studies (CANS), East Asian Studies (EAST), Economics (ECON), Geography (GEOG), History (HIST), Middle East Studies (MEST), Philosophy (PHIL), Psychology (PSYC), Quebec Studies (QCST), Sociology (SOCI), World Islamic and Middle East Studies (WIMES)). This 6-credit requirement is waived for students who have completed, in addition to the Political Science Honours program, 2 minor programs or 1 major program in Arts but outside the discipline of Political Science.
Note: Students who believe that a case can be made for certain courses not included above, may request approval from the Honours Adviser by submitting a written appeal. With respect to Interdisciplinary programs (Canadian Studies, East Asian Studies, Quebec Studies, World Islamic and Middle East Studies etc.) only courses with the program's subject code (CANS, EAST, QCST, WIMES) are eligible to be counted toward the Honours program.

6 credits in methods courses at the 300 or 400 level.
3 credits at the 200 level in each of four fields - Political Theory, Comparative Politics, International Relations, Canadian Politics.
A maximum of 15 credits may be at the 200 level, including POLI 210.
No more than one-half of a student's political science credits may be in any one field (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas), International Relations, Political Theory). However, if the field is Comparative Politics and if courses are taken in both Developed Areas and Developing Areas, the maximum is 30 credits. Refer to the lists below for course choices in each field.
One quarter ( 12 credits) of political science courses must be at the 400 level or above including one 500-level Honours Seminar. Refer to the lists below for course choices at the 400 and 500 levels in each field.

No more than 15 Political Science transfer credits can be used toward the program requirements, and no more than 3 non-Political Science transfer credits (at the 300 level or greater in a social science field) can be used toward the non-Political Science complementary program requirements.

Course lists for each group of political science courses are provided below.

\section*{Canadian Politics}
\begin{tabular}{|c|c|c|}
\hline POLI 221 & (3) & Government of Canada \\
\hline POLI 222 & (3) & Political Process and Behaviour in Canada \\
\hline POLI 226 & (3) & La vie politique québécoise \\
\hline POLI 318 & (3) & Comparative Local Government \\
\hline POLI 320 & (3) & Issues in Canadian Democracy \\
\hline POLI 321 & (3) & Issues: Canadian Public Policy \\
\hline POLI 326 & (3) & Provincial Politics \\
\hline POLI 336 & (3) & Le Québec et le Canada \\
\hline POLI 342 & (3) & Canadian Foreign Policy \\
\hline POLI 348 & (3) & Gender and Canadian Politics \\
\hline POLI 371 & (3) & Challenge of Canadian Federalism \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 378 & (3) & The Canadian Judicial Process \\
\hline POLI 379 & (3) & Topics in Canadian Politics \\
\hline POLI 410 & (3) & Canadian Political Parties \\
\hline POLI 412 & (3) & Canadian Voting/Public Opinion \\
\hline POLI 417 & (3) & Health Care in Canada \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
\hline POLI 427 & (3) & Selected Topics: Canadian Politics \\
\hline POLI 436 & (3) & Aboriginal Rights in the Canadian Constitution \\
\hline POLI 478 & (3) & The Canadian Constitution \\
\hline POLI 521 & (3) & Seminar: Canadian Politics and Government \\
\hline
\end{tabular}

\section*{Comparative Politics - Developed Areas}
\begin{tabular}{lll} 
GEOG 420* & (3) & Memory, Place, and Power \\
POLI 212 & \((3)\) & Government and Politics - Developed World \\
POLI 316 & (3) & Black Lives Matter and American Democracy \\
POLI 318 & (3) & Comparative Local Government \\
POLI 325 & (3) & U.S. Politics \\
POLI 328 & (3) & Comparing European Democracies \\
POLI 329 & (3) & Russian and Soviet Politics \\
POLI 330 & (3) & Law and Courts in Europe \\
POLI 331 & (3) & Politics in East Central Europe \\
POLI 339 & (3) & Comparative Developed: Topics 1 \\
POLI 357 & (3) & Politics: Contemporary Europe \\
POLI 361 & (3) & Political Participation in Comparative Perspective \\
POLI 419 & (3) & Transitions from Communism \\
POLI 420* & (3) & Memory, Place, and Power
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline POLI 421 & (3) & The Politics of Misinformation \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 425 & (3) & Topics in American Politics \\
\hline POLI 430 & (3) & Politics of Art \\
\hline POLI 431 & (3) & Nations and States/Developed World \\
\hline POLI 432 & (3) & Selected Topics: Comparative Politics \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 475 & (3) & Social Capital in Comparative Perspective \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 524 & (3) & Seminar: Developed Areas \\
\hline \multicolumn{3}{|l|}{* Either POLI 420 or GEOG 420 but not both.} \\
\hline Comparat & evel & \\
\hline
\end{tabular}
\begin{tabular}{lll} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 319 & (3) & Politics of Latin America \\
POLI 322 & (3) & Political Change in South Asia \\
POLI 324 & (3) & Developing Areas/Africa \\
POLI 338 & \((3)\) & Developing Areas/Topics 1 \\
POLI 340 & (3) & Developing Areas/Middle East \\
POLI 369 & (3) & Politics of Southeast Asia \\
POLI 380 & (3) & Contemporary Chinese Politics \\
POLI 381 & (3) & Politics in Japan and South Korea \\
POLI 422 & (3) & Developing Areas/Topics 2 \\
POLI 423 & (3) & Politics of Ethno-Nationalism \\
POLI 435 & (3) & Identity and Inequality \\
POLI 450 & (3) & Peacebuilding \\
POLI 473 & (3) & Democracy and the Market \\
POLI 474 & (3) & Inequality and Development \\
POLI 476 & (3) & Religion and Politics \\
POLI 480 & (3) & Contentious Politics \\
POLI 522 & (3) & Seminar: Developing Areas
\end{tabular}

\section*{International Relations}
\begin{tabular}{lcl} 
POLI 243 & \((3)\) & International Politics of Economic Relations \\
POLI 244 & \((3)\) & International Politics: State Behaviour \\
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 342 & (3) & Canadian Foreign Policy \\
POLI 345 & \((3)\) & International Organizations \\
POLI 346 & (3) & American Foreign Policy \\
POLI 347 & \((3)\) & Arab-Israel Conflict, Crisis, Peace \\
POLI 349 & (3) & Foreign Policy: Asia
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 351 & (3) & The Causes of Major Wars \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 354 & (3) & Approaches to International Political Economy \\
\hline POLI 355 & (3) & The Politics of International Law \\
\hline POLI 358 & (3) & Political Economy of International Organizations \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 443 & (3) & Intervention in World Politics \\
\hline POLI 444 & (3) & Topics in International Politics 2 \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 446 & (3) & International Law and Politics of Human Rights \\
\hline POLI 447 & (3) & Political Economy of Multinationals \\
\hline POLI 448 & (3) & Gender and International Relations \\
\hline POLI 449 & (3) & Diplomacy in Practice \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 575 & (3) & Seminar: International Politics \\
\hline
\end{tabular}

\section*{Political Theory}
\begin{tabular}{|c|c|c|}
\hline POLI 231 & (3) & Introduction to Political Theory \\
\hline POLI 333 & (3) & Western Political Theory 1 \\
\hline POLI 334 & (3) & Western Political Theory 2 \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 363 & (3) & Contemporary Political Theory \\
\hline POLI 364 & (3) & Radical Political Thought \\
\hline POLI 365 & (3) & Democratic Theory \\
\hline POLI 366 & (3) & Topics in Political Theory 1 \\
\hline POLI 367 & (3) & Liberal Political Theory \\
\hline POLI 368 & (3) & Political Theory and Indigeneity. \\
\hline POLI 433 & (3) & History of Political/Social Theory 3 \\
\hline POLI 434 & (3) & History of Political/Social Theory 4 \\
\hline POLI 459 & (3) & Topics in Political Theory 2 \\
\hline POLI 470 & (3) & Philosophy, Economy and Society \\
\hline POLI 561 & (3) & Seminar: Political Theory \\
\hline
\end{tabular}

\section*{Methods}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 311 & (3) & Introduction to Quantitative Political Science \\
POLI 312 & (3) & Intermediate Quantitative Political Science \\
POLI 313 & (3) & Introduction to Qualitative Methods in Political Science \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\subsection*{3.9.31.8 Bachelor of Arts (B.A.) - Joint Honours Component Political Science ( \(\mathbf{3 6}\) credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours Program components from two Arts disciplines.
Prior to registering for each Joint Honours component, students should consult an adviser in each department for approval of their course selection and their interdisciplinary research project (if applicable).

To enter, remain and graduate in Joint Honours, students must achieve/maintain a 3.3 average in their political science courses and more than half of the political science grades must be at the B+ level or higher. According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 in general. In addition to meeting these Political Science requirements, students must meet the requirements set forth by the other department.

To be awarded First Class Joint Honours at graduation, in addition to the Faculty requirement of a 3.50 CGPA, students must achieve a 3.6 average in their political science courses and more than half of political science grades must be at the A- level or higher. All political science courses taken at McGill are counted in determining a student's standing. (The specific criteria are given in the brochure "Major and Honours Program Guide", which may be found on the Department website http://www.mcgill.ca/politicalscience/.) To be awarded Joint Honours at graduation, students must be registered in the Joint Honours program in their final year. At graduation, students' Joint Honours standing will be determined by their overall record in the Joint Honours program. In addition to meeting these Political Science requirements, students must meet the requirements set forth by the other department.
Students may enter the Joint Honours program in U1.

\section*{Required Course (3 credits)}

\section*{POLI 210* (3) Political Science Research Methods}
* The POLI 210 requirement is waived for students admitted to McGill BEFORE Fall 2017. The POLI 210 requirement is waived for students who have taken SOCI 211.
NOTE: If the POLI 210 requirement is waived, students must still fulfill the 36 -credit program requirement.

\section*{Complementary Courses ( 33 credits)}

33 credits of complementary courses selected with the following specifications.
3 credits in methods courses at the 300 or 400 level.
No more than one-half ( 18 credits) of a student's political science credits may be in any one field (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas), International Relations, Political Theory). However, if the field is Comparative Politics and if courses are taken in both Developed Areas and Developing Areas, the maximum is 21 credits. Refer to the lists below for course choices in each field.
One quarter ( 9 credits) of political science credits must be at the 400 -level or above including one 500 -level Honours Seminar. Refer to the lists below for course choices at the 400 and 500 levels in each field.
No more than 12 credits of political science courses (including POLI 210) may be at the 200 level. No more than 3 credits may be taken at the 200 level in each of the five groups of courses (Canadian Politics, International Relations, Comparative Politics (Developed Areas and Developing Areas), Political Theory, Methods). Students may not take 200-level political science courses in their final year.

No more than 12 POLI transfer credits can be used toward the program requirements.
Course lists for each group of political science courses are provided below.

\section*{Canadian Politics}
\begin{tabular}{lcl} 
POLI 221 & (3) & Government of Canada \\
POLI 222 & (3) & Political Process and Behaviour in Canada \\
POLI 226 & (3) & La vie politique québécoise \\
POLI 318 & (3) & Comparative Local Government \\
POLI 320 & \((3)\) & Issues in Canadian Democracy \\
POLI 321 & (3) & Issues: Canadian Public Policy \\
POLI 326 & (3) & Provincial Politics \\
POLI 336 & \((3)\) & Le Québec et le Canada
\end{tabular}
\begin{tabular}{lcl} 
POLI 342 & \((3)\) & Canadian Foreign Policy \\
POLI 348 & (3) & Gender and Canadian Politics \\
POLI 371 & (3) & Challenge of Canadian Federalism \\
POLI 372 & \((3)\) & Indigenous Peoples and the Canadian State \\
POLI 378 & \((3)\) & The Canadian Judicial Process \\
POLI 379 & \((3)\) & Topics in Canadian Politics \\
POLI 410 & (3) & Canadian Political Parties \\
POLI 412 & (3) & Canadian Voting/Public Opinion \\
POLI 417 & (3) & Health Care in Canada \\
POLI 424 & (3) & Media and Politics \\
POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
POLI 427 & (3) & Selected Topics: Canadian Politics \\
POLI 436 & (3) & Aboriginal Rights in the Canadian Constitution \\
POLI 478 & (3) & The Canadian Constitution \\
POLI 521 & (3) & Seminar: Canadian Politics and Government
\end{tabular}

\section*{Comparative Politics - Developed Areas}
\begin{tabular}{|c|c|c|}
\hline GEOG 420* & (3) & Memory, Place, and Power \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 316 & (3) & Black Lives Matter and American Democracy \\
\hline POLI 318 & (3) & Comparative Local Government \\
\hline POLI 325 & (3) & U.S. Politics \\
\hline POLI 328 & (3) & Comparing European Democracies \\
\hline POLI 329 & (3) & Russian and Soviet Politics \\
\hline POLI 330 & (3) & Law and Courts in Europe \\
\hline POLI 331 & (3) & Politics in East Central Europe \\
\hline POLI 339 & (3) & Comparative Developed: Topics 1 \\
\hline POLI 357 & (3) & Politics: Contemporary Europe \\
\hline POLI 361 & (3) & Political Participation in Comparative Perspective \\
\hline POLI 419 & (3) & Transitions from Communism \\
\hline POLI 420* & (3) & Memory, Place, and Power \\
\hline POLI 421 & (3) & The Politics of Misinformation \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 425 & (3) & Topics in American Politics \\
\hline POLI 430 & (3) & Politics of Art \\
\hline POLI 431 & (3) & Nations and States/Developed World \\
\hline POLI 432 & (3) & Selected Topics: Comparative Politics \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 475 & (3) & Social Capital in Comparative Perspective \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 524 & (3) & Seminar: Developed Areas \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Comparative Politics - Developing Areas} \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 422 & (3) & Developing Areas/Topics 2 \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 473 & (3) & Democracy and the Market \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 480 & (3) & Contentious Politics \\
\hline POLI 522 & (3) & Seminar: Developing Areas \\
\hline
\end{tabular}

\section*{International Relations}
\begin{tabular}{|c|c|c|}
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 342 & (3) & Canadian Foreign Policy \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 346 & (3) & American Foreign Policy \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 351 & (3) & The Causes of Major Wars \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 354 & (3) & Approaches to International Political Economy \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 443 & (3) & Intervention in World Politics \\
\hline POLI 444 & (3) & Topics in International Politics 2 \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
POLI 446 & \((3)\) & International Law and Politics of Human Rights \\
POLI 447 & (3) & Political Economy of Multinationals \\
POLI 448 & (3) & Gender and International Relations \\
POLI 449 & (3) & Diplomacy in Practice \\
POLI 450 & (3) & Peacebuilding \\
POLI 451 & (3) & The European Union \\
POLI 452 & (3) & Conflict Simulation \\
POLI 575 & (3) & Seminar: International Politics
\end{tabular}

\section*{Political Theory}
\begin{tabular}{lll} 
POLI 231 & \((3)\) & Introduction to Political Theory \\
POLI 333 & \((3)\) & Western Political Theory 1 \\
POLI 334 & \((3)\) & Western Political Theory 2 \\
POLI 362 & \((3)\) & Political Theory and International Relations \\
POLI 363 & \((3)\) & Contemporary Political Theory \\
POLI 364 & \((3)\) & Radical Political Thought \\
POLI 365 & \((3)\) & Democratic Theory \\
POLI 366 & \((3)\) & Topics in Political Theory 1 \\
POLI 367 & (3) & Liberal Political Theory \\
POLI 368 & (3) & Political Theory and Indigeneity. \\
POLI 433 & (3) & History of Political/Social Theory 3 \\
POLI 434 & (3) & History of Political/Social Theory 4 \\
POLI 459 & (3) & Topics in Political Theory 2 \\
POLI 470 & (3) & Philosophy, Economy and Society \\
POLI 561 & (3) & Seminar: Political Theory
\end{tabular}

\section*{Methods}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 311 & (3) & Introduction to Quantitative Political Science \\
POLI 312 & (3) & Intermediate Quantitative Political Science \\
POLI 313 & (3) & Introduction to Qualitative Methods in Political Science \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\subsection*{3.9.32 Psychology}

\subsection*{3.9.32.1 Location}

Department of Psychology
2001 McGill College, Room 740
Montreal QC H3A 1G1
Telephone: 514-398-6100
Email: undergrad.psych@mcgill.ca
Website: mcgill.ca/psychology

\subsection*{3.9.32.2 About Psychology}

The Psychology Department offers programs in both Arts and Science. For a list of teaching staff and an outline of the nature of Psychology, refer to Faculty of Science > Undergraduate >Browse Academic Units \& Programs > section 11.12.33: Psychology (PSYC). Programs that may be taken by Arts students are described in this section, while those listed under the Faculty of Science may be taken by Science students only.

Note: The B.A. or B.Sc. with a major concentration or honours degree in Psychology is not a professional qualification. It does not qualify the individual to carry on professional work in psychology.

\subsection*{3.9.32.3 Information Meetings for New Students}

All new students entering the Psychology undergraduate program should attend an information meeting prior to registration. Newly admitted students from CEGEPs should attend the information session in June. There will be an identical information session in August for all other students, and for any CEGEP students who could not attend the earlier meeting. Please check the Department of Psychology's website for the specific dates. Students accepted into the Bachelor of Science program must attend a different information meeting from those in the Faculty of Arts, (for details, see Faculty of Science > Undergraduate \(>\) Browse Academic Units \& Programs > section 11.12.33: Psychology (PSYC)). At this meeting, the Psychology undergraduate advising team will explain the requirements of the Department's programs. Incoming students will have an opportunity to ask questions and receive advice on how to plan their courses.
Entering students can bring a copy of their collegiate transcript(s). They should also consult this publication and a preliminary class schedule before this advising session.
Students entering the Psychology program in January are strongly encouraged to make an appointment with an academic advisor in the Department of Psychology in early December to clarify their course selection.

\subsection*{3.9.32.4 Bachelor of Arts (B.A.) - Minor Concentration Psychology (18 credits)}

Psychology is the scientific study of the mind and behaviour. The B.A. Minor Concentration Psychology ( 18 credits) is intended to compliment the student's primary field of study by providing a focused introduction to specialized topics in psychology. .

\section*{Program Requirements}

Students registered in a Bachelor of Arts program in another department may pursue the Minor Concentration Psychology. This minor concentration is expandable for students who may wish to transfer into the Major Concentration Psychology at a later date.

\section*{Program Prerequisites ( \(0-3\) credits)}

Students planning to enter the Minor Concentration Psychology program should have completed an introductory course in general psychology in CEGEP. Otherwise, they can complete it in their first year of study at McGill University (see below).
Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.
McGill Freshman students are recommended to complete the following course in their U0 year:
PSYC 100
(3)
Introduction to Psychology

\section*{Complementary Courses (18 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
PSYC 204 & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & (3) & Social Psychology
\end{tabular}

12 credits in Psychology at the 300 level or above.

\subsection*{3.9.32.5 Bachelor of Arts (B.A.) - Minor Concentration Behavioural Science (18 credits)}

Psychology is the scientific study of the mind and behaviour. The B.A. Minor Concentration Behavioural Science (18 credits) is available only to Arts Majors in Psychology. This minor is a specialization option that allows Arts Majors in Psychology to complete additional credits in Psychology, allowing for a more specialized degree than the Major Concentration alone (see Program Requirements below).
Program Requirements

Restricted to students registered in the Bachelor of Arts, Major Concentration Psychology.
For B.A. Psychology Major Concentration students only; this program provides students with the space to take the additional courses they may need for applying to graduate school in psychology and for completing the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs).

Note that this counts as a second minor concentration and is open only to students registered in the Bachelor of Arts, Major Concentration Psychology. A first minor concentration must also be completed in a discipline other than Psychology. Please note that a Minor Concentration in Educational Psychology does not fulfill this requirement as it is considered to be within the Psychology discipline.

\section*{Complementary Courses (18 credits)}

18 credits selected as follows:
3 credits in Psychology from List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)
3 credits in Psychology from List B - (Social, Health and Developmental Psychology)
3 credits in Psychology at the 400 or 500 level
9 credits at the 300 level or above from one or more of the following disciplines: Psychology (PSYC), Anthropology (ANTH), Linguistics (LING), or Sociology (SOCI).

List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)
\begin{tabular}{|c|c|c|}
\hline NSCI 201 & (3) & Introduction to Neuroscience 2 \\
\hline PSYC 301 & (3) & Animal Learning and Theory \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 306 & (3) & Research Methods in Psychology \\
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 329 & (3) & Introduction to Auditory Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 353 & (3) & Research Methods and Laboratory in Human Perception \\
\hline PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
PSYC 513 & (3) & Human Decision-Making \\
PSYC 514 & (3) & Neurobiology of Memory \\
PSYC 522 & (3) & Neurochemistry and Behaviour \\
PSYC 526 & (3) & Advances in Visual Perception \\
PSYC 529 & (3) & Music Cognition \\
PSYC 531 & (3) & Structural Equation Models \\
PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
PSYC 538 & (3) & Categorization, Communication and Consciousness \\
PSYC 541 & (3) & Multilevel Modelling \\
PSYC 545 & (3) & Mapics in Language Acquisition \\
PSYC \(560 *\) & Measurement of Psychological Processes \\
PSYC 562 &
\end{tabular}

List B - (Social, Health and Developmental Psychology)
\begin{tabular}{|c|c|c|}
\hline PSYC 304 & (3) & Child Development \\
\hline PSYC 328 & (3) & Health Psychology \\
\hline PSYC 331 & (3) & Inter-Group Relations \\
\hline PSYC 332 & (3) & Introduction to Personality \\
\hline PSYC 333 & (3) & Personality and Social Psychology \\
\hline PSYC 337 & (3) & Introduction to Psychopathology \\
\hline PSYC 351 & (3) & Research Methods and Laboratory in Social Psychology \\
\hline PSYC 408 & (3) & Principles and Applications of Psychotherapy \\
\hline PSYC 409 & (3) & Positive Psychology \\
\hline PSYC 411 & (3) & Discrimination \& Wellbeing in Marginalized Communities \\
\hline PSYC 412 & (3) & Child Development: Psychopathology \\
\hline PSYC 414 & (3) & Social Development \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline PSYC 471 & (3) & Human Motivation \\
\hline PSYC 473 & (3) & Social Cognition and the Self \\
\hline PSYC 474 & (3) & Interpersonal Relationships \\
\hline PSYC 475 & (3) & Neuroscience of Social Psychology \\
\hline PSYC 483 & (3) & Seminar in Experimental Psychopathology \\
\hline PSYC 491D1 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 491D2 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 507 & (3) & Emotions, Stress, and Illness \\
\hline PSYC 509 & (3) & Diverse Clinical Populations \\
\hline PSYC 512 & (3) & Advanced Personality Seminar \\
\hline PSYC 528 & (3) & Vulnerability to Depression and Anxiety \\
\hline PSYC 530 & (3) & Applied Topics in Deafness \\
\hline PSYC 535 & (3) & Advanced Topics in Social Psychology \\
\hline PSYC 539 & (3) & Advanced Topics in Social Psychology 2 \\
\hline
\end{tabular}

\section*{Unclassified Courses}

Students may also select complementary courses from the research and topics courses below:
\begin{tabular}{lll} 
PSYC 385 & (3) & Independent Research Project 1 \\
PSYC 450D1 & \((4.5)\) & Research Project and Seminar \\
PSYC 450D2 & \((4.5)\) & Research Project and Seminar \\
PSYC 484D1 & (3) & Independent Research Project 2 \\
PSYC 484D2 & \((3)\) & Independent Research Project 2 \\
PSYC 485 & (3) & Independent Research Project 3 \\
PSYC 492 & (3) & Special Topics Seminar 1 \\
PSYC 493 & (3) & Special Topics Seminar 2 \\
PSYC 499 & (1) & Reading Project
\end{tabular}

\subsection*{3.9.32.6 Bachelor of Arts (B.A.) - Major Concentration Psychology (36 credits)}

Psychology is the scientific study of the mind and behavior. The B.A. Major Concentration in Psychology ( 36 credits) provides students with a basic overview, covering the core areas of psychological science as well as more advanced courses in specialized content areas. Students also have the option to complete a research course(s) (see Program Requirements for details). Note: this program may not provide sufficient undergraduate background preparation for certain graduate programs. Students who wish to go on to graduate training in psychology, and those who wish to complete the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs), are advised to take the supplementary Minor Concentration Behavioural Science. This specialization option will give students the space to take the additional courses they may need for such applications.

\section*{Program Prerequisites ( \(0-6\) credits)}

Students planning to enter the Major Concentration Psychology program should have completed an introductory course in general psychology and biology in CEGEP. Otherwise, they can complete them in their first year of study at McGill University (see below).
Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.

Students who have completed Human Biology or General Biology 1 or 2 in CEGEP would have the recommended biology background. Students who have not completed one of those courses are advised to complete BIOL 115 or BIOL 111 or BIOL 112 during their first year.

McGill Freshman students are recommended to complete the following courses in their U0 year:
PSYC 100
(3)
Introduction to Psychology

\section*{And}

3 credits from:
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
BIOL 112 & (3) & Cell and Molecular Biology \\
BIOL 115 & (3) & Essential Biology
\end{tabular}

\section*{Required Courses (18 credits)}

U1
\begin{tabular}{lcl} 
PSYC 204* & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & (3) & Social Psychology
\end{tabular}

U 1 or U 2
PSYC \(305^{* *}\) (3) Statistics for Experimental Design

Advising note for PSYC 204: CEGEP students are exempt from PSYC 204 if they have completed, with a minimum grade of \(75 \%\), the following two courses: 1) Quantitative Methods and either 2a) Advanced Quantitative Methods or 2b) Statistics for Social Science. CEGEP students are also exempt from PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\).
Bachelor of Arts students exempt from PSYC 204 replace this course with 3 credits at the 300 level or above in Psychology (PSYC), Anthropology (ANTH), Linguistics (LING), or Sociology (SOCI).
**Note: Students who wish to apply to the Honours program in Psychology must complete the required courses above, including PSYC 305 in their U1 year to be eligible for admission. Also, all students must complete a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms). For additional information about applying to Honours, please refer to the Honours program description.

\section*{Complementary Courses (18 credits)}

3 credits in Psychology from List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)
3 credits in Psychology from List B - (Social, Health and Developmental Psychology)
6 credits in Psychology at the 300 level or above.
6 credits in Psychology at the 400 or 500 level.

List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)
\begin{tabular}{|c|c|c|}
\hline NSCI 201 & (3) & Introduction to Neuroscience 2 \\
\hline PSYC 301 & (3) & Animal Learning and Theory \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 306 & (3) & Research Methods in Psychology \\
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 329 & (3) & Introduction to Auditory Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 353 & (3) & Research Methods and Laboratory in Human Perception \\
\hline PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
PSYC 502 & (3) & Psychoneuroendocrinology \\
PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
PSYC 513 & (3) & Human Decision-Making \\
PSYC 514 & (3) & Neurobiology of Memory \\
PSYC 522 & (3) & Neurochemistry and Behaviour \\
PSYC 526 & (3) & Advances in Visual Perception \\
PSYC 529 & (3) & Music Cognition \\
PSYC 531 & (3) & Structural Equation Models \\
PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
PSYC 538 & (3) & Categorization, Communication and Consciousness \\
PSYC 541 & (3) & Multilevel Modelling \\
PSYC 545 & (3) & Topics in Language Acquisition \\
PSYC 560* & (3) & Machine Learning Tools in Psychology \\
PSYC 562 & (3) & Measurement of Psychological Processes
\end{tabular}
* 1. Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.
2. Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

List B - (Social, Health and Developmental Psychology)
\begin{tabular}{|c|c|c|}
\hline PSYC 304 & (3) & Child Development \\
\hline PSYC 309 & (3) & Positive Psychology: Science of Well-Being \\
\hline PSYC 328 & (3) & Health Psychology \\
\hline PSYC 331 & (3) & Inter-Group Relations \\
\hline PSYC 332 & (3) & Introduction to Personality \\
\hline PSYC 333 & (3) & Personality and Social Psychology \\
\hline PSYC 337 & (3) & Introduction to Psychopathology \\
\hline PSYC 351 & (3) & Research Methods and Laboratory in Social Psychology \\
\hline PSYC 408 & (3) & Principles and Applications of Psychotherapy \\
\hline PSYC 409 & (3) & Positive Psychology \\
\hline PSYC 411 & (3) & Discrimination \& Wellbeing in Marginalized Communities \\
\hline PSYC 412 & (3) & Child Development: Psychopathology \\
\hline PSYC 414 & (3) & Social Development \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline PSYC 471 & (3) & Human Motivation \\
\hline PSYC 473 & (3) & Social Cognition and the Self \\
\hline PSYC 474 & (3) & Interpersonal Relationships \\
\hline PSYC 475 & (3) & Neuroscience of Social Psychology \\
\hline PSYC 483 & (3) & Seminar in Experimental Psychopathology \\
\hline PSYC 491D1 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 491D2 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 507 & (3) & Emotions, Stress, and Illness \\
\hline PSYC 509 & (3) & Diverse Clinical Populations \\
\hline PSYC 512 & (3) & Advanced Personality Seminar \\
\hline PSYC 528 & (3) & Vulnerability to Depression and Anxiety \\
\hline
\end{tabular}
\begin{tabular}{lll} 
PSYC 530 & (3) & Applied Topics in Deafness \\
PSYC 535 & (3) & Advanced Topics in Social Psychology \\
PSYC 539 & (3) & Advanced Topics in Social Psychology 2
\end{tabular}

\section*{Unclassified Courses}

Students may also select complementary courses from the research and topics courses below:
\begin{tabular}{lll} 
PSYC 385 & \((3)\) & Independent Research Project 1 \\
PSYC 450D1 & \((4.5)\) & Research Project and Seminar \\
PSYC 450D2 & \((4.5)\) & Research Project and Seminar \\
PSYC 484D1 & \((3)\) & Independent Research Project 2 \\
PSYC 484D2 & \((3)\) & Independent Research Project 2 \\
PSYC 485 & \((3)\) & Independent Research Project 3 \\
PSYC 492 & \((3)\) & Special Topics Seminar 1 \\
PSYC 493 & \((3)\) & Special Topics Seminar 2 \\
PSYC 499 & \((1)\) & Reading Project
\end{tabular}

\subsection*{3.9.32.7 Bachelor of Arts (B.A.) - Honours Psychology ( 60 credits)}

Psychology is the scientific study of the mind and behavior. The B.A. Honours in Psychology ( 60 credits) is a specialized program that provides students with an in-depth overview of psychological science, covering the core areas as well as more advanced courses. Students are required to take a 2 -term research course and seminar; students also have the option to complete additional research course(s) and/or gain additional training in arts related disciplines (see Program Requirements for details). This program emphasizes practice in the research techniques and statistics used in graduate school and professionally later on. It also provides students with the space to take the additional courses they may need for applying to graduate school in psychology and for completing the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs). Students must apply to the Honours program; admission is selective.

Typically, students apply to the Honours program at the end of \(U 1\); students may apply at the end of \(U 2\), although there are often fewer seats for students applying in U2 (also the Honours program requirements must be completed within the remaining terms). To be eligible to apply to the BA Honours in Psychology, students must have completed a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms only). All applicants must have taken PSYC 204, PSYC 211, PSYC 212, PSYC 213,

PSYC 215 and PSYC 305. Exceptional performance in these courses is a primary criterion for acceptance into the Honours program. In addition to performance in these psychology courses, a minimum cumulative grade point average (CGPA) of 3.50 is required to apply. However, since enrolment is limited, the typical CGPA cut-off is
\(\sim 3.75\), although this varies from year to year depending on the applicant pool. Once in the Honours program, students must obtain a GPA of 3.00 in the U2 year to continue in the Honours program for U3. Students are also encouraged to continue to complete a minimum of 27 graded credits in their U2 and U3 academic years. This is also the minimum number of credits required to be eligible for fellowships and awards.

The application is available on the Psychology Department website at: https://www.mcgill.ca/psychology/undergraduate/current-students/research-opportunities/research-courses. The deadline is specified on the website. Candidates will be informed of the Department's decision via email before classes begin in September.
Awarding of the Honours degree will depend on both CGPA and a minimum grade of B in PSYC 380D1/PSYC 380D2 and PSYC 306. "First Class Honours" is awarded to students who obtain a minimum CGPA of 3.50 and
a minimum grade of A- in PSYC 380D1/PSYC 380D2 and PSYC 306. "Honours" is awarded to students with a minimum CGPA of 3.00 and a minimum grade of B in PSYC 380D1/PSYC 380D2 and PSYC 306.

\section*{Program Prerequisites ( \(0-6\) credits)}

Students planning to enter the BA Honours Psychology program, should have completed an introductory course in general psychology, biology and statistics at the CEGEP level. Otherwise, they can complete them in their first year of study at McGill University (see below).
Students who have completed Human Biology or General Biology 1 or 2 in CEGEP would have the recommended biology background. Students who have not completed one of those courses are advised to complete BIOL 115 or BIOL 111 or BIOL 112 during their first year.
McGill Freshman students are recommended to complete the following courses in their U0 year:
PSYC 100
Introduction to Psychology

3 credits from:
BIOL 111
(3)
Principles: Organismal Biology
BIOL 112
(3)
Cell and Molecular Biology
BIOL 115
(3)
Essential Biology

\section*{Required Courses (33 credits)}

U1
\begin{tabular}{lcl} 
PSYC 204* & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & \((3)\) & Social Psychology
\end{tabular}

\footnotetext{
*Advising note for PSYC 204: CEGEP students are exempt from PSYC 204 if they have completed, with a minimum grade of \(75 \%\), the following two courses: 1) Quantitative Methods and either 2a) Advanced Quantitative Methods or 2b) Statistics for Social Science. CEGEP students are also exempt from PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\).
**Note: Students who wish to apply to the Honours program in Psychology must complete the required courses above, including PSYC 305 in their U1 year to be eligible for admission. Also, all students must complete a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms only). For additional information about applying to Honours, please refer to the Honours program description.
Bachelor of Arts students will replace this requirement with 3 credits at the 300 level in one of the following disciplines: Psychology (PSYC), Anthropology (ANTH), Linguistics (LING), or Sociology (SOCI).

Bachelor of Arts and Science students will replace this requirement with 3 credits in Psychology at the 300 level or above.
}

\section*{U 1 or U 2}
\begin{tabular}{lll} 
PSYC 305** & (3) & Statistics for Experimental Design \\
U2 & (3) & Research Methods in Psychology \\
PSYC 306 & \((4.5)\) & Honours Research Project Seminar \\
PSYC 380D1 & \((4.5)\) & Honours Research Project Seminar
\end{tabular}

U2 or U3
PSYC 439
(3)

Correlational Techniques

\section*{Complementary Courses (27 credits)}

3-9 credits must be completed with the following course(s):
Any 500-level Psychology course
\begin{tabular}{lll} 
PSYC 486 & (3) & Independent Honours Research 1 \\
PSYC 487 & (3) & Independent Honours Research 2 \\
PSYC 488D1 & (3) & Independent Honours Research 3 \\
PSYC 488D2 & (3) & Independent Honours Research 3 \\
PSYC 492 & (3) & Special Topics Seminar 1
\end{tabular}

If the 9 credits are not fulfilled with the above courses, the remaining 3-6 credits are to be completed with any 400 -level Psychology course.

Note: Students entering Honours in U3 who previously took PSYC 385, PSYC 484 D1/D2 and/or PSYC 485 may use these courses to fulfill the Honours Complementary course

18 credits of Honours courses are to be completed with the following courses:
\begin{tabular}{lll} 
PSYC 403 & \((3)\) & Modern Psychology in Historical Perspective \\
PSYC 483 & \((3)\) & Seminar in Experimental Psychopathology \\
PSYC 495 & (6) & Psychology Research Project 2 \\
PSYC 496 & (6) & Senior Honours Research 1 \\
PSYC 497 & \((6)\) & Senior Honours Research 2 \\
PSYC 498D1 & \((4.5)\) & Senior Honours Research \\
PSYC 498D2 & \((4.5)\) & Senior Honours Research
\end{tabular}

\section*{List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)}

6 credits in Psychology from the following:
\begin{tabular}{|c|c|c|}
\hline NSCI 201 & (3) & Introduction to Neuroscience 2 \\
\hline PSYC 301 & (3) & Animal Learning and Theory \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 306 & (3) & Research Methods in Psychology \\
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 329 & (3) & Introduction to Auditory Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 353 & (3) & Research Methods and Laboratory in Human Perception \\
\hline PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
PSYC 513 & \((3)\) & Human Decision-Making \\
PSYC 514 & (3) & Neurobiology of Memory \\
PSYC 522 & (3) & Neurochemistry and Behaviour \\
PSYC 526 & (3) & Advances in Visual Perception \\
PSYC 529 & (3) & Music Cognition \\
PSYC 531 & (3) & Structural Equation Models \\
PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
PSYC 538 & (3) & Categorization, Communication and Consciousness \\
PSYC 541 & (3) & Multilevel Modelling \\
PSYC 545 & (3) & Topics in Language Acquisition \\
PSYC 560* & (3) & Machine Learning Tools in Psychology \\
PSYC 562 & (3) & Measurement of Psychological Processes
\end{tabular}
* 1. Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.
2. Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

\section*{List B - (Social, Health and Developmental Psychology)}

6 credits in Psychology from the following:
\begin{tabular}{|c|c|c|}
\hline PSYC 304 & (3) & Child Development \\
\hline PSYC 309 & (3) & Positive Psychology: Science of Well-Being \\
\hline PSYC 328 & (3) & Health Psychology \\
\hline PSYC 331 & (3) & Inter-Group Relations \\
\hline PSYC 332 & (3) & Introduction to Personality \\
\hline PSYC 333 & (3) & Personality and Social Psychology \\
\hline PSYC 337 & (3) & Introduction to Psychopathology \\
\hline PSYC 351 & (3) & Research Methods and Laboratory in Social Psychology \\
\hline PSYC 408 & (3) & Principles and Applications of Psychotherapy \\
\hline PSYC 409 & (3) & Positive Psychology \\
\hline PSYC 411 & (3) & Discrimination \& Wellbeing in Marginalized Communities \\
\hline PSYC 412 & (3) & Child Development: Psychopathology \\
\hline PSYC 414 & (3) & Social Development \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline PSYC 471 & (3) & Human Motivation \\
\hline PSYC 473 & (3) & Social Cognition and the Self \\
\hline PSYC 474 & (3) & Interpersonal Relationships \\
\hline PSYC 475 & (3) & Neuroscience of Social Psychology \\
\hline PSYC 483 & (3) & Seminar in Experimental Psychopathology \\
\hline PSYC 491D1 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 491D2 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 507 & (3) & Emotions, Stress, and Illness \\
\hline PSYC 509 & (3) & Diverse Clinical Populations \\
\hline PSYC 512 & (3) & Advanced Personality Seminar \\
\hline PSYC 528 & (3) & Vulnerability to Depression and Anxiety \\
\hline PSYC 530 & (3) & Applied Topics in Deafness \\
\hline
\end{tabular}
PSYC 535
Advanced Topics in Social Psychology
PSYC 539
Advanced Topics in Social Psychology 2

6 credits at the 300 level or above selected from the following disciplines:
Anthropology (ANTH), Linguistics (LING), Psychology (PSYC), or Sociology (SOCI).

\subsection*{3.9.32.8 Bachelor of Arts (B.A.) - Joint Honours Component Psychology (36 credits)}

Psychology is the scientific study of the mind and behavior. The B.A.; Joint Honours Psychology Component ( 36 credits) provides students with an overview of psychological science, covering the core areas as well as select advanced courses. Students are required to take a 2 -term research course and seminar; students also have the option to complete an additional research course (see Program Requirements for details). This program emphasizes practice in the research techniques and statistics used in graduate school and professionally later on. However, the Joint Honours Program is not as comprehensive as the B.A. or B.Sc. Honours Program, and does not give students the space to take the additional courses they may need for certain graduate programs in psychology or to complete the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs). Students must apply to the Joint Honours program; admission is selective.

\section*{Program Requirements}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection.
Admission to the B.A. Joint Honours Component Psychology is highly selective. Typically, students apply to the B.A Joint Honours program at the end of U ; students may apply at the end of U2, although there are often fewer seats for students applying in U 2 (also the B.A. Joint Honours program requirements must be completed within the remaining terms). To be eligible to apply to the B.A. Joint Honours in Psychology, students must have completed a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms only). All applicants must have taken PSYC 204, PSYC 211, PSYC 212, PSYC 213, PSYC 215 and PSYC 305. Exceptional performance in these courses is a primary criterion for acceptance into the B.A. Joint Honours program. In addition to performance in these psychology courses, a minimum cumulative grade point average (CGPA) of 3.50 is required to apply. However, since enrolment is limited, the typical CGPA cut-off is \(\sim 3.75\), although this varies from year to year depending on the applicant pool. Once in the B.A. Joint Honours program, students must obtain a GPA of 3.00 in the U2 year to continue in the B.A. Joint Honours program for U3. Students are also encouraged to continue to complete a minimum of 27 graded credits in their U 2 and U 3 academic years. This is also the minimum number of credits required to be eligible for fellowships and awards.
The application is available on the Psychology Department website at: https://www.mcgill.ca/psychology/undergraduate/current-students/research-opportunities/research-courses. The deadline is specified on the website. Candidates will be informed of the Department's decision via email before classes begin in September.

Awarding of the B.A. Joint Honours program will depend on both CGPA and a minimum grade of B in PSYC 380D1/PSYC 380D2 and PSYC 306. "First Class Honours" is awarded to students who obtain a minimum CGPA of 3.50 and a minimum grade of A- in PSYC 380D1/PSYC 380 D 2 and PSYC 306. "Joint Honours" is awarded to students with a minimum CGPA of 3.00 and a minimum grade of B in PSYC 380D1/PSYC 380 D 2 and PSYC 306.
In addition to the requirements of the B.A. Joint Honours Component Psychology, students must also complete all requirements of their other Joint Honours component.

\section*{Program Prerequisites (0-6 credits)}

Students planning to enter the B.A. Joint Honours Psychology program, should have completed an introductory course in general psychology, biology and statistics at the CEGEP level. Otherwise, they can complete them in their first year of study at McGill University (see below).

Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.

Students who have completed Human Biology or General 1or 2 in CEGEP would have the recommended biology background.
Student who have not completed ones of those courses are advised to complete BIOL 115 or BIOL 111 or 112 during their first year.
McGill Freshman students are recommended to complete the following courses in their U0 year:
PSYC 100 (3) Introduction to Psychology

3 credits from:

BIOL 111

Principles: Organismal Biology
Cell and Molecular Biology
Essential Biology

\section*{Required Courses (33 credits)}

U1
\begin{tabular}{lll} 
PSYC 204* & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & (3) & Social Psychology
\end{tabular}

\section*{U1 or U2}

PSYC \(305^{* *}\)
(3)

Statistics for Experimental Design

U2
\begin{tabular}{lll} 
PSYC 306 & (3) & Research Methods in Psychology \\
PSYC 380D1 & \((4.5)\) & Honours Research Project Seminar \\
PSYC 380D2 & \((4.5)\) & Honours Research Project Seminar
\end{tabular}

U2 or U3
PSYC 439
(3)

Correlational Techniques
*Advising note for PSYC 204: CEGEP students are exempt from PSYC 204 if they have completed, with a minimum grade of \(75 \%\), the following two courses: 1) Quantitative Methods and either 2a) Advanced Quantitative Methods or 2b) Statistics for Social Science. CEGEP students are also exempt from PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\).
Bachelor of Arts students exempt from PSYC 204 replace this course with 3 credits at the 300 level or above in Psychology (PSYC), Anthropology (ANTH), Linguistics (LING), or Sociology (SOCI).
**Note: Students who wish to apply to the Joint Honours program in Psychology must complete the required courses above, including PSYC 305 in their U1 year to be eligible for admission. Also, all students must complete a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms only). For additional information about applying to Joint Honours, please refer to the Joint Honours program description.

\section*{Complementary Course ( \(\mathbf{3}\) credits)}

3 credits in Psychology at the 400 or 500 level.

\subsection*{3.9.3 \(R\) Religious Studies}

\subsection*{3.9.33.1 Location}

School of Religious Studies
William and Henry Birks Building
3520 University Street
Montreal QC H3A 2A7
Telephone: 514-398-4121
Email: web.relgstud@mcgill.ca
Website: mcgill.ca/religiousstudies

\subsection*{3.9.33.2 About the School of Religious Studies}

Cultivating a thorough understanding of the world's religions and the roles of religion throughout history and in contemporary society is at the heart of the School of Religious Studies' teaching at the undergraduate and graduate levels. The School takes a multidisciplinary approach to scholarship on a plurality of religions, and incorporates a broad range of perspectives and methods. In studying the world's religious traditions, we emphasize the ways in which religious expression and practices are embedded in culture, politics, aesthetics, and social change.

The School of Religious Studies has enjoyed a long history at McGill providing a wide range of programs, including B.A. programs, theological programs, and several specialized graduate degree programs. The School's expertise in world religions engages many methods and disciplines, combining the rigorous and historically-focused study of religious traditions and contexts with approaches that explore contemporary expressions of religions.

The School is affiliated with the Montreal Diocesan Theological College of the Anglican Church of Canada, the Presbyterian College Montreal, and the United Church Studies at Montreal Diocesan College (United Church of Canada). Each of these colleges is located close to campus.
The School of Religious Studies is located in the handsome William and Henry Birks Building, erected in 1931, formerly known as Divinity Hall, at 3520 University Street. Besides the usual classrooms, offices, and common rooms, this building accommodates the Birks Heritage Chapel and the Birks Reading Room.

\section*{History of the School}

During the 19th century, several Theological Colleges in Montreal became affiliated with McGill. In 1912, they formed a Joint Board for the academic study of Theology, leaving each denominational College to provide its own professional training for Christian ministry. This relationship between the Colleges and the University led naturally to the creation in 1948 of a Faculty of Divinity, which assumed the academic functions of the Joint Board. In keeping with this goal the School offers the Bachelor of Theology and several graduate degree programs.

The original Faculty of Divinity taught theological courses for ordinands and also engaged in teaching undergraduates in other faculties a selection of courses of more general interest, such as philosophy and psychology of religion, and comparative religion. This selection grew over the years into the present B.A. Honours, Major, and Minor programs in Religious Studies within the Faculty of Arts. In 1970, the name of the Faculty was changed to the Faculty of Religious Studies in order to reflect the new emphasis on the academic study of religion.
By reason of its close collaboration with the Faculty of Arts, the faculty formally became the School of Religious Studies, within the Faculty of Arts, in 2016. The School offers the Bachelor of Theology (B.Th.) degree, Bachelor of Arts (B.A.) degree programs, and several graduate degree programs.

\subsection*{3.9.33.3 Religious Studies Programs}

The School of Religious Studies offers programs leading to the following degrees:
- section 3.9.33.6: Bachelor of Arts (B.A.) in Religious Studies
- section 3.9.33.7: Bachelor of Theology
- section 3.9.33.8: Master of Divinity

Prospective students seeking advice should contact an advisor from the School of Religious Studies.

\subsection*{3.9.33.4 Birks Lectures}

An annual series was established in 1950 through the generosity of the late William M. Birks. The lectures are given by distinguished visitors, usually in late September or early October.
The first lecturer was the Right Reverend Leslie Hunter. Subsequent lecturers have included Huston Smith, Northrop Frye, Wilfred Cantwell Smith, Gregory Baum, Robert McAfee Brown, Krister Stendahl, Charles Adams, Jon Levenson, David Little, Azim Nanji, Paul Griffiths, Bernadette J. Brooten, Harvey Cox, John S. Hawley, Gabriel Vahanian, Oliver O'Donovan, Jan Assmann, Donald Lopez, Rémi Brague, David Fergusson, John J. Collins, David Shulman, Talal Asad, Robert L. Wilken, Jens Schröter, Rachel Fell McDermott, Tomoko Masuzawa, and Thomas Joseph White, O.P.

\subsection*{3.9.33.5 Numata Visiting Professor in Buddhist Studies}

In recognition of the strong Buddhist Studies program in the School of Religious Studies, the Numata Foundation has given a 20-year grant to the School to bring a visiting scholar in Buddhist Studies to McGill each year.

The visiting professor teaches one course at the 500 level, gives a public lecture, and is available to students for conferences and consultation.
The first Numata Professor, in 1999-2000, was Dr. Mahinda Deegalle (Ph.D., Chicago), a Theravada Buddhist Sri Lankan monk. Subsequent visiting professors have included John Pettit, Robert Morrison, Thupten Jinpa, Kate Crosby, Ven. Yifa, Robert Kritzer, Andrew Skilton, Joel Tatelman, Miriam Levering, Hiroko Kawanami, Dorji Wangchuk, Martin Adam, Jin Park, Roger Jackson, Burkhard Scherer, Andre van der Braak, Rinpoche Sherpa, Gregory Samuel, Martin Seeger, Robert Rhodes, Lawrence Y.K. Lau, Martina Draszczyk, and Ann Gleig.
The visiting professor for 2024-2025 will be Pamela Winfield.

\subsection*{3.9.33.6 Bachelor of Arts (B.A.) in Religious Studies}

\section*{Bachelor of Arts (B.A.)}

Bachelor of Arts programs in the School of Religious Studies explore the many cultural, historical, and political issues related to both Eastern and Western religions, and to religion in comparative perspective. Major and Minor concentrations in Religious Studies are available, as well as Honours and Joint Honours programs in Religious Studies.
The B.A. program in religious studies is highly flexible, allowing you to design the selection of courses to your intellectual interests and future career objectives. The program introduces you to different theories as well as a wide variety of courses on diverse religious cultures around the world, from ancient to contemporary times. A student can also explore thematic areas across diverse religious traditions at the intersections of politics, philosophy, gender, colonialism, conflict, and transregional networks.
Many of our graduates use the degree as a foundation for careers in law, development work, human rights advocacy, research/public policy advisory, education, medicine, and social work, to name a few. A degree in religious studies can open up opportunities to work in the religious sector, a massive but
often overlooked sector in terms of career opportunities. In addition to careers in specifically religious institutions (churches, mosques, retreat centres, etc.), this sector also includes careers in faith-based organizations such as the major faith-based NGOs in development and relief, human rights, healthcare, chaplaincy, and the immense array of educational institutions from primary schools to universities.

Courses available to students pursuing the B.A. in Religious Studies (partial listing):
```

RELG 252 - Hinduism and Buddhism
RELG 311 - Formation of the New Testament
RELG 309 - World Religions and the Cultures They Create
RELG 456 - Theories of Religion

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Students can add a complementary minor to their degree. Several possibilities are: International Development Studies, Indigenous Studies, African Studies, Jewish Studies, Anthropology. Students can also add a major or honours. The related joint major or honours possibilities are: Philosophy, East Asian Studies, Islamic Studies, Political Science.

\subsection*{3.9.33.7 Bachelor of Theology}

The Bachelor of Theology program offers academic instruction in the disciplines of Theology, Biblical Studies, and Church History, and provides a more intensive study of Christianity than is available in the Bachelor of Arts degree programs.

Students interested in completing a Major Concentration, Minor Concentration, Honours, or Joint Honours in the broader field of Religious Studies should pursue a Bachelor of Arts program.

The Bachelor of Theology (B.Th.) may be taken as a first or second baccalaureate degree.
As a first degree ( 90 or 120 credits), it offers a more intensive study of Christianity than is available within the Bachelor of Arts (B.A.) programs, while also permitting the student to combine this specialization with other academic or professional interests, whether in Religious Studies or in other faculties and schools of the University.

As a second bachelor's degree ( 60 credits), the Bachelor of Theology (B.Th.) program is designed primarily for those who intend to qualify for the ordained ministry in a Christian denomination, although here too, some students pursue the degree out of an interest in the academic study of theology for its own sake, or with a view to combining these studies with proficiency gained in other disciplines. The 60-credit program forms the core of the Bachelor of Theology (B.Th.) degree.

The Bachelor of Theology program can be pursued independently, or in affiliation with one of the three Theological Colleges affiliated with McGill University in the Montreal School of Theology. Those studying for the ordained ministry normally pursue the Bachelor of Theology (B.Th.) as part of the Master of Divinity (M.Div.) program offered by the colleges of the Montreal School of Theology:
- Montreal Diocesan Theological College (Anglican Church of Canada)
- Presbyterian College (Presbyterian Church in Canada)
- The United Church Studies at Montreal DIocesan College (United Church of Canada)

\section*{Tuition Fees and Funding}

Information concerning current tuition fees can be found at mcgill.ca/student-accounts. Applicants for admission to one of the affiliated Colleges should contact the institution concerned for information regarding College-related fees.

\section*{ATS Accreditation}

The B.Th. program offered by McGill is applicable to the M.Div. program offered by the Theological Colleges. The M.Div. is fully accredited by the Association of Theological Schools in the U.S. and Canada (ATS).

\section*{Evaluation}

Competence in a course may be determined by examinations and/or essays, or by other means chosen by the instructor and approved by the Director.

\section*{Graduation Requirements}
1. The B.Th. is either a 120-credit program (if you were admitted from outside Quebec and without a prior bachelor's degree), a 90 -credit program (if you were admitted on the basis of a Quebec DCS/DEC or equivalent), or a 60-credit program (if you were admitted on the basis of a recognized bachelor's degree).
2. Qualification for the degree must include Satisfactory Standing (a grade of C or better) in all required courses and the complementary courses specified in Year 3, and the accumulation of enough acceptable credits to make a total of either 60, 90, or 120 credits. It should be noted that if you take the B.Th. program as part of the M.Div. program, you need to maintain a minimum CGPA of 2.5 to be eligible for the M.Div. degree.
3. Normally, the program credits must be earned within five years from the date of entrance.

\subsection*{3.9.33.7.1 Admission Requirements and Application Procedures}

The B.Th. program has three points of entry:
1. To enter the 120 -credit degree program from outside Quebec, you must hold a high school diploma, unless you qualify as a mature student. A maximum of 60 credits from another institution of higher learning can be considered for transfer into the 120-credit program.
2. To enter the 90 -credit first-degree program, you are expected to have completed the Diploma of College Studies (DCS) from a Quebec CEGEP with a minimum average Cote R of 24 , or the equivalent elsewhere. A maximum of 30 credits from another institution of higher learning can be considered for transfer into this program.
3. To enter the 60 -credit program, you must have completed a B.A. or other bachelor's degree with a minimum CGPA of 2.7 (B-). No credits can be transferred from another institution of higher learning into the 60 -credit program.

Any McGill student in Good Standing, with a minimum of 30 credits, may apply for transfer from their current degree program into the B.Th. program. B.Th. students entering the 120- or 90 -credit program are free to pursue minors in other departments, schools, or faculties, in consultation with their B.Th. advisor(s).

The B.Th. program extends over three academic years of full time studies for those admitted with a Diploma of College Studies and over two academic years for those admitted with a bachelor's degree. For all other students it requires four years. The normal load consists of five 3-credits courses ( 15 credits) each term.

\section*{Mature Students Admissions Policy}

Prerequisite courses and McGill's competitive admission process:
- two courses appropriate to the proposed area of study, each with a minimum grade of B or equivalent.

The Mature Student category is available to applicants who:
- do not possess a conventional basis of admission such as a high school or CEGEP diploma; or
- have academic credentials that do not meet the minimum requirements and have no academic studies within the last five years that would constitute a basis for admission.

Applicants with regular academic studies completed during the last five years must apply under the regular high school, CEGEP, or university transfer categories.
Conditions for eligibility:
- Canadian citizenship or Canadian permanent residency;
- 23 years of age or older at time of registration (21 years of age for the Faculties of Management and Music);
- No college- or university-level studies within the last five years that would constitute a basis for admission;
- Two letters of reference;
- Letter of intent, including description of previous educational experiences;
- Complete record of employment and personal history, highlighting points relevant to the application;
- Demonstrate academic potential by successfully completing a minimum number of appropriate courses within the three-year period prior to admission. These courses, which may be completed at CEGEP or university, will also fulfill prerequisites for the intended program.

Each student is assessed individually, considering all the factors in their file.

\subsection*{3.9.33.7.1.1 Application Procedures}

The online application process should take about 20 minutes and a credit card is required for payment of the application fee. Once completed, the online application form may be printed for your own records.

\section*{Required Documents}
- Transcript(s) of all previous post-secondary academic work. Applicants to the B.Th. program as a first degree must submit high school and/or CEGEP transcripts. Copies of your unofficial transcript(s) can be uploaded to complete your application. Official transcript(s) are required only if you are admitted, and must be mailed directly from the institution to the mailing address below or e-mailed to officialschooldocs@mcgill.ca.
- Personal Statement, according to the directions in the application. Please download and use the Personal Statement Form (available at mcgill.ca/religiousstudies/theology/bth).
After your application has been received, you will be given access to your Minerva account, where you will be able to upload your unofficial transcripts and personal statement to complete your application. You can find full instructions on how to prepare, upload, and submit relevant documents at mcgill.calapplying/nextsteps/documents.
- Two letters of recommendation including at least one from an instructor in an academic institution previously attended. Your referee must download and use the B.Th. Reference Form (available at mcgill.ca/religiousstudies/theology/bth).
The two letters of recommendation can be mailed to the address below or e-mailed to studaffairs.relg@mcgill.ca:
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Bachelor of Theology Program
Enrolment Services
Student Records
McGill University
3415 McTavish Street, Room MS-13
Montreal QC H3A 0C8
Canada

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If you are applying to one of the Theological Colleges, another complete set of these required documents must also be sent to the College concerned.
Please note that your file will not be considered by the Admissions Committee until all the required documents have been received.

\subsection*{3.9.33.7.1.2 Application Deadlines}

Applicants to the B.Th. program may be accepted into the Fall or Winter term. The online application deadlines are:

\section*{September admission (Fall term)}

Canadian and International applicants:
January 15

\section*{January admission (Winter term)}

Canadian and International applicants:

\section*{November 1}

Please note that all required documents listed in section 3.9.33.7.1.1: Application Procedures must be received by the School of Religious Studies prior to these deadlines in order for the applicant to be considered by the Admissions Committee.

\subsection*{3.9.33.7.1.3 Admissions Review Procedure}

An unsuccessful applicant-or a School of Religious Studies Council member acting on behalf of an unsuccessful applicant-who believes that not all factors having a bearing on the application have been fully considered, may submit a request for a review of the decision.

The request must be made in writing and directed to the Chair of the B.Th. Admissions and Awards Committee. A CAD \(\$ 40\) certified cheque or money order made payable to McGill University must accompany the request. The request must include information in support of reconsideration, such as a description of significant change in the applicant's circumstances since the initial consideration, correction of any missing or erroneous information in the application, or information that the applicant believes may have been overlooked when the original decision was made.

Requests for reconsideration must be received at McGill no more than two weeks after notification of refusal.
The review procedure will be carried out by the B.Th. Admissions and Awards Committee. Please note that the original admission decision will stand unless the Committee is persuaded that admissions standards have been misapplied or that an applicant's academic record has been misapprehended.

Decisions on Special, Visiting, and Exchange applications are final; requests for reconsideration will not be considered.

\subsection*{3.9.33.7.2 Registration Procedures}

All students register using Minerva, McGill's web-based registration system. Minerva provides web access to registration, class schedules, course descriptions, and address changes. Further information regarding registration is available at University Regulations \& Resources > Undergraduate >section 1.3: Registration or mcgill.ca/accepted.

\section*{Withdrawal Procedures}

Dropping or adding courses must be done via Minerva, prior to the deadline listed at University Regulations \& Resources \(>\) Undergraduate \(>\) Registration \(>\) section 1.3.1: Registration Periods. Permission of the advisor is required for all changes to course selection. In case of withdrawal from the University prior to the published course withdrawal deadline, you must withdraw from all courses via Minerva. In addition, you must contact the Chair of the Bachelor of Theology (B.Th.) Committee and complete the necessary withdrawal form.

\section*{Course Selection}

You are to seek the guidance of your advisor(s) when registering for courses. You must have your courses approved and your B.Th. Audit Sheet signed by the Chair of the Bachelor of Theology (B.Th.) Committee before classes begin. If you are affiliated with one of the Theological Colleges, your B.Th. Audit Sheet must first be approved and signed by your College advisor.

\subsection*{3.9.33.7.3 Academic Standing and Course Loads}

\section*{Satisfactory Standing}

You enter the University in Satisfactory Standing and remain in this Standing unless your grade point average (GPA) or cumulative grade point average (CGPA) for any year drops below 2.00. The normal course load in any academic session is five courses per term ( 15 credits per term). If you have a high GPA (at least 3.00), you may take more than the normal five courses per term.

\section*{Probationary Standing}

You are placed in Probationary Standing if either your CGPA or your term GPA falls between 1.50 and 1.99. If you are a part-time student, your GPA is calculated on the basis of your last 9 credits. While in Probationary Standing, you may take a minimum of 6 credits and a maximum of 12 credits per term.
While in Probationary Standing, you may return to Satisfactory Standing by completing 12 additional credits with a GPA of at least 2.50 , or by completing 12 credits with a GPA and a CGPA of 2.00 or greater.
As a student in Probationary Standing, if you fail to achieve the levels of performance specified above, you will be placed in Unsatisfactory Standing, unless you obtain a GPA of \(1.50-1.99\) while continuing to have a CGPA of 2.00 or greater.

\section*{Unsatisfactory Standing}

You are placed in Unsatisfactory Standing if you have a GPA of less than 1.50.
As a student in Unsatisfactory Standing, you will have to withdraw, or seek readmission as a probationary student with special permission from the B.Th. Committee and the Director. If you are a student who is readmitted on Probationary Standing, you may have additional restrictions or conditions to meet over and above those required of students referred to above under "Probationary Standing".
In the event that you are placed in Unsatisfactory Standing for a second time, you must withdraw permanently.

\section*{Incomplete Standing}

If, in any year, your record shows a mark of \(\mathrm{K}, \mathrm{K}^{*}, \mathrm{~L}, \mathrm{~L}^{*}\), or \(\& \&\), you will have no GPA or CGPA calculated for that year, and your record will show "Standing Incomplete". After completing the appropriate course requirements, your GPA and CGPA will be calculated and your Standing determined as described above.
If your Standing is still "Incomplete" at the time of registration for the next academic year, you must obtain a Letter of Permission to Register from the Chair of the B.Th. Committee.

\subsection*{3.9.33.8 Master of Divinity}

The Master of Divinity (M.Div.) degree is offered by the Colleges affiliated with the School of Religious Studies through the Montreal School of Theology.
Students who have completed a first degree prior to the B.Th. with a minimum CGPA of 2.7 are eligible to apply the B.Th. degree toward the Master of Divinity (M.Div.) degree conferred by the Theological Colleges.
The Master of Divinity Program is divided into two years of foundational studies at McGill's School of Religious Studies (i.e., the Bachelor of Theology degree) and a year of professional studies, known as the "In-Ministry Year", offered jointly by the three affiliated theological Colleges under the auspices of the Montreal School of Theology. The program is supervised by the Academic Committee of the Montreal School of Theology, on which all three Colleges and McGill's School of Religious Studies are represented.
Students from the affiliated colleges may be eligible for bursary assistance if they are properly registered candidates for the ministry. Information about church requirements and the professional year should be sought from the principals of the appropriate colleges.
One biblical language, usually Greek, is required by some of the colleges. Ministerial candidates should consult with the College advisors regarding biblical language requirements.
Prospective candidates for ordination with a B.A. Honours or Major in Religious Studies and a CGPA of 3.3 (B+) may apply for the Master of Sacred Theology (S.T.M.) degree upon completion of the professional In-Ministry Year (IMY).
Applicants for the M.Div. program must apply to the McGill B.Th. program, as well as to one of the Theological Colleges. College application forms should be requested from the Colleges themselves.

The Montreal School of Theology
(formerly the Joint Board of Theological Colleges)
École théologique de Montréal (affiliée à l'Université McGill)
3475 University Street
Montreal QC H3A 2A8
Montreal Diocesan Theological College
Séminaire Diocésain de Montréal
3475 University Street
Montreal QC H3A 2A8
The Presbyterian College
Le Collège Presbytérien
3495 University Street
Montreal QC H3A 2A8
The United Church Studies at Montreal Diocesan College (United Church of Canada)/Le séminaire Uni
at Montreal Diocesan Collegelau Collège Diocésain de Montréal
3475 University Street
Montreal QC H3A 2A8

\subsection*{3.9.33.9 Bachelor of Arts (B.A.) - Minor Concentration Religious Studies (18 credits)}

The B.A; Minor Concentration in Religious Studies focuses on the methodological approaches to the study of religious traditions, including the languages, teachings, and history of those traditions.

\section*{Required Course (3 credits)}

RELG 207 (3) Introduction to the Study of Religions

\section*{Complementary Courses (15 credits)}

6 credits of Introductory Courses at the 200 level.
\begin{tabular}{lll} 
ANTH 209 & (3) & Anthropology of Religion \\
CATH 200 & (3) & Introduction to Catholicism \\
CATH 220 & (3) & Selected Topics in Catholic Studies
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline ISLA 200 & (3) & Islamic Civilization \\
\hline ISLA 210 & (3) & Muslim Societies \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 245 & (3) & Jewish Life in the Islamic World \\
\hline JWST 254 & (3) & The Jewish Holy Days \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline RELG 201 & (3) & Religions of the Ancient Near East \\
\hline RELG 202 & (3) & Religion of Ancient Israel \\
\hline RELG 203 & (3) & Bible and Western Culture \\
\hline RELG 204 & (3) & Judaism, Christianity and Islam \\
\hline RELG 205 & (3) & Death and Dying \\
\hline RELG 210 & (3) & Jesus of Nazareth \\
\hline RELG 211 & (3) & Theology through Fiction \\
\hline RELG 252 & (3) & Hinduism and Buddhism \\
\hline RELG 253 & (3) & Religions of East Asia \\
\hline RELG 254 & (3) & Introduction to Yoga Traditions \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 271 & (3) & Religion and Sexuality \\
\hline RELG 288 & (3) & Introduction to Sikhism \\
\hline
\end{tabular}

9 credits of Advanced Courses at the 300 level or higher.
\begin{tabular}{|c|c|c|}
\hline CATH 310 & (3) & Catholic Intellectual Traditions \\
\hline CATH 315 & (3) & Catholicism and Ethics \\
\hline CATH 320 & (3) & Catholicism and Modernity \\
\hline CATH 325 & (3) & Mystery and the Imagination \\
\hline CATH 330 & (3) & Catholicism in a Global Context \\
\hline CATH 335 & (3) & Confessions of Saint Augustine \\
\hline CATH 340 & (3) & Catholicism and Public Policy \\
\hline CATH 370 & (3) & Topics in Catholic Studies \\
\hline CATH 375 & (3) & Topics in Catholic Theology \\
\hline CATH 460 & (3) & Catholic Studies Seminar \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline JWST 334 & (3) & Jews and Muslims: A Modern History \\
\hline JWST 382 & (3) & Jews, Judaism and Social Justice \\
\hline RELG 300 & (3) & Second Temple Judaism \\
\hline RELG 302 & (3) & Literature of Ancient Israel 1 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RELG 303 & (3) & Literature of Ancient Israel 2 \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 309 & (3) & World Religions and Cultures They Create \\
\hline RELG 310 & (3) & Canadian Church History \\
\hline RELG 311 & (3) & Formation of the New Testament \\
\hline RELG 312 & (3) & The Gospels \\
\hline RELG 313 & (3) & Topics in Biblical Studies 1 \\
\hline RELG 315 & (3) & Special Topics in Religion 1 \\
\hline RELG 316 & (3) & New Religious Movements \\
\hline RELG 317 & (3) & Special Topics in Religion 2 \\
\hline RELG 318 & (3) & Special Topics in Religion 3 \\
\hline RELG 319 & (3) & Special Topics in Religion 4 \\
\hline RELG 322 & (3) & Church and Empire to 1300 \\
\hline RELG 323 & (3) & Church and State since 1300 \\
\hline RELG 325 & (3) & Varieties Religious Experience in Christianity \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline RELG 331 & (3) & Religion and Globalization \\
\hline RELG 332 & (3) & Conversations Across World Religions \\
\hline RELG 333 & (3) & Principles of Theology \\
\hline RELG 334 & (3) & Theology of History \\
\hline RELG 336 & (3) & Contemporary Theological Issues \\
\hline RELG 337 & (3) & Themes in Buddhist Studies \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 341 & (3) & Introduction: Philosophy of Religion \\
\hline RELG 344 & (3) & Mahayana Buddhism \\
\hline RELG 348 & (3) & Classical Hinduism \\
\hline RELG 350 & (3) & Bhakti Hinduism \\
\hline RELG 352 & (3) & Japanese Religions: History and Thought \\
\hline RELG 354 & (3) & Chinese Religions \\
\hline RELG 358 & (3) & Religion and Cinema in India \\
\hline RELG 366 & (3) & Rivers, Religion, and Environment in South Asia \\
\hline RELG 368 & (3) & Japanese Religions in Pop Culture \\
\hline RELG 369 & (3) & Tibetan Buddhism \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline RELG 371 & (3) & Ethics of Violence/Non-Violence \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 373 & (3) & Christian Ethics of Love \\
\hline RELG 375 & (3) & Religion, Politics and Society \\
\hline RELG 376 & (3) & Religious Ethics \\
\hline RELG 378 & (3) & Pilgrimage, Heritage, and Tourism \\
\hline RELG 379 & (3) & Eastern Orthodox Christianity \\
\hline RELG 380 & (3) & Religion, Philosophy, Modernity \\
\hline RELG 382 & (3) & Contemporary Theory of Religion \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RELG 384 & (3) & Religion and Public Policy \\
\hline RELG 398 & (3) & North American Christianity \\
\hline RELG 399 & (3) & Christian Spirituality \\
\hline RELG 407 & (3) & The Writings \\
\hline RELG 408 & (3) & The Prophets \\
\hline RELG 419 & (3) & Religious Heritage and Tourism \\
\hline RELG 422 & (3) & Medieval Religious Texts \\
\hline RELG 423 & (3) & Reformation Thought \\
\hline RELG 434 & (3) & Advanced Theology \\
\hline RELG 440 & (3) & Global Islam \\
\hline RELG 442 & (3) & Pure Land Buddhism \\
\hline RELG 444 & (3) & Indian Ocean Religious Networks \\
\hline RELG 445 & (3) & Modern Buddhism \\
\hline RELG 449 & (3) & The Religion of the Samurai \\
\hline RELG 450 & (3) & The Way of the Kami \\
\hline RELG 451 & (3) & Zen Buddhism: Poetry and Art \\
\hline RELG 453 & (3) & Vajrayana Buddhism \\
\hline RELG 454 & (3) & Modern Hindu Thought \\
\hline RELG 455 & (3) & Religion and the Performing Arts in South India \\
\hline RELG 470 & (3) & Theological Ethics \\
\hline RELG 479 & (3) & Christianity in Global Perspective \\
\hline RELG 502 & (3) & Greco-Roman Judaism \\
\hline RELG 532 & (3) & History of Christian Thought 1 \\
\hline RELG 533 & (3) & History of Christian Thought 2 \\
\hline RELG 544 & (3) & Ethnography as Method in Religious Studies \\
\hline RELG 545 & (3) & Ramayana: Multiple Lives \\
\hline RELG 546 & (3) & Indian Philosophy \\
\hline RELG 547 & (3) & Special Topics in Hinduism \\
\hline RELG 548 & (3) & Indian Buddhist Philosophy \\
\hline RELG 549 & (3) & Japanese Buddhism in Historical Context \\
\hline RELG 551 & (3) & Special Topics in Buddhism \\
\hline RELG 552 & (3) & Advaita Vedanta \\
\hline RELG 556 & (3) & Issues in Buddhist Studies \\
\hline RELG 558 & (3) & Indian Tantric Traditions \\
\hline RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
\hline RELG 560 & (3) & Buddhist Poetry \\
\hline RELG 570 & (3) & Research in Interfaith Studies \\
\hline RELG 571 & (3) & Ethics, Medicine and Religion \\
\hline RELG 572 & (3) & Religion and Global Politics \\
\hline RELG 573 & (3) & Religions in Global Society \\
\hline
\end{tabular}

\subsection*{3.9.33.10 Bachelor of Arts (B.A.) - Major Concentration Religious Studies (36 credits)}

The B.A; Major Concentration in Religious Studies focuses on the methodological approaches to the study of religious traditions, including the languages, teachings, and history of those traditions.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 456 & (3) & Theories of Religion
\end{tabular}

\section*{Complementary Courses (30 credits)}

3-9 credits of Introductory Courses at the 200 level.
\begin{tabular}{|c|c|c|}
\hline ANTH 209 & (3) & Anthropology of Religion \\
\hline CATH 200 & (3) & Introduction to Catholicism \\
\hline CATH 220 & (3) & Selected Topics in Catholic Studies \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline ISLA 200 & (3) & Islamic Civilization \\
\hline ISLA 210 & (3) & Muslim Societies \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 245 & (3) & Jewish Life in the Islamic World \\
\hline JWST 254 & (3) & The Jewish Holy Days \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline RELG 201 & (3) & Religions of the Ancient Near East \\
\hline RELG 202 & (3) & Religion of Ancient Israel \\
\hline RELG 203 & (3) & Bible and Western Culture \\
\hline RELG 204 & (3) & Judaism, Christianity and Islam \\
\hline RELG 205 & (3) & Death and Dying \\
\hline RELG 210 & (3) & Jesus of Nazareth \\
\hline RELG 211 & (3) & Theology through Fiction \\
\hline RELG 252 & (3) & Hinduism and Buddhism \\
\hline RELG 253 & (3) & Religions of East Asia \\
\hline RELG 254 & (3) & Introduction to Yoga Traditions \\
\hline RELG 257D1 & (3) & Introductory Sanskrit \\
\hline RELG 257D2 & (3) & Introductory Sanskrit \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 271 & (3) & Religion and Sexuality \\
\hline RELG 279 & (3) & New Testament Greek 1 \\
\hline RELG 280 & (3) & New Testament Greek 2 \\
\hline RELG 288 & (3) & Introduction to Sikhism \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CLAS 210 & (3) & Introductory Latin 1 \\
\hline CLAS 212 & (3) & Introductory Latin 2 \\
\hline CLAS 215 & (6) & Intensive Introductory Latin \\
\hline CLAS 220 & (3) & Introductory Ancient Greek 1 \\
\hline CLAS 222 & (3) & Introductory Ancient Greek 2 \\
\hline CLAS 225 & (6) & Intensive Introductory Ancient Greek \\
\hline CLAS 310 & (3) & Intermediate Latin 1 \\
\hline CLAS 312 & (3) & Intermediate Latin 2 \\
\hline CLAS 315 & (3) & Intermediate Latin 2: Selections \\
\hline CLAS 320 & (3) & Intermediate Ancient Greek 1 \\
\hline CLAS 322 & (3) & Intermediate Ancient Greek 2 \\
\hline CLAS 326 & (3) & Intermediate Ancient Greek 2: Selections \\
\hline ISLA 322D1 & (3) & Lower Intermediate Arabic \\
\hline ISLA 322D2 & (3) & Lower Intermediate Arabic \\
\hline RELG 257D1 & (3) & Introductory Sanskrit \\
\hline RELG 257D2 & (3) & Introductory Sanskrit \\
\hline RELG 264 & (3) & Introductory Tibetan 1 \\
\hline RELG 265 & (3) & Introductory Tibetan 2 \\
\hline RELG 357D1 & (3) & Sanskrit 2 \\
\hline RELG 357D2 & (3) & Sanskrit 2 \\
\hline RELG 364 & (3) & Intermediate Tibetan 1 \\
\hline RELG 365 & (3) & Intermediate Tibetan 2 \\
\hline RELG 381 & (3) & Advanced New Testament Greek \\
\hline RELG 390D1 & (3) & Elementary Biblical Hebrew \\
\hline RELG 390D2 & (3) & Elementary Biblical Hebrew \\
\hline RELG 457D1 & (3) & Advanced Sanskrit \\
\hline RELG 457D2 & (3) & Advanced Sanskrit \\
\hline RELG 464 & (3) & Advanced Tibetan 1 \\
\hline RELG 465 & (3) & Advanced Tibetan 2 \\
\hline RELG 491 & (3) & Biblical Hebrew Narratives \\
\hline RELG 492 & (3) & Biblical Hebrew Poetry \\
\hline
\end{tabular}

15-21 credits of Advanced Courses at the 300 level or higher.
\begin{tabular}{lll} 
CATH 310 & \((3)\) & Catholic Intellectual Traditions \\
CATH 315 & (3) & Catholicism and Ethics \\
CATH 320 & (3) & Catholicism and Modernity \\
CATH 325 & (3) & Mystery and the Imagination \\
CATH 330 & (3) & Catholicism in a Global Context \\
CATH 335 & (3) & Confessions of Saint Augustine \\
CATH 340 & (3) & Catholicism and Public Policy \\
CATH 370 & (3) & Topics in Catholic Studies \\
CATH 375 & (3) & Topics in Catholic Theology
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CATH 460 & (3) & Catholic Studies Seminar \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline JWST 334 & (3) & Jews and Muslims: A Modern History \\
\hline JWST 382 & (3) & Jews, Judaism and Social Justice \\
\hline RELG 300 & (3) & Second Temple Judaism \\
\hline RELG 302 & (3) & Literature of Ancient Israel 1 \\
\hline RELG 303 & (3) & Literature of Ancient Israel 2 \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 309 & (3) & World Religions and Cultures They Create \\
\hline RELG 310 & (3) & Canadian Church History \\
\hline RELG 311 & (3) & Formation of the New Testament \\
\hline RELG 312 & (3) & The Gospels \\
\hline RELG 313 & (3) & Topics in Biblical Studies 1 \\
\hline RELG 315 & (3) & Special Topics in Religion 1 \\
\hline RELG 316 & (3) & New Religious Movements \\
\hline RELG 317 & (3) & Special Topics in Religion 2 \\
\hline RELG 318 & (3) & Special Topics in Religion 3 \\
\hline RELG 319 & (3) & Special Topics in Religion 4 \\
\hline RELG 322 & (3) & Church and Empire to 1300 \\
\hline RELG 323 & (3) & Church and State since 1300 \\
\hline RELG 325 & (3) & Varieties Religious Experience in Christianity \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline RELG 331 & (3) & Religion and Globalization \\
\hline RELG 332 & (3) & Conversations Across World Religions \\
\hline RELG 333 & (3) & Principles of Theology \\
\hline RELG 334 & (3) & Theology of History \\
\hline RELG 336 & (3) & Contemporary Theological Issues \\
\hline RELG 337 & (3) & Themes in Buddhist Studies \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 341 & (3) & Introduction: Philosophy of Religion \\
\hline RELG 344 & (3) & Mahayana Buddhism \\
\hline RELG 348 & (3) & Classical Hinduism \\
\hline RELG 350 & (3) & Bhakti Hinduism \\
\hline RELG 352 & (3) & Japanese Religions: History and Thought \\
\hline RELG 353 & (3) & Gandhi: His Life and Thought \\
\hline RELG 354 & (3) & Chinese Religions \\
\hline RELG 358 & (3) & Religion and Cinema in India \\
\hline RELG 366 & (3) & Rivers, Religion, and Environment in South Asia \\
\hline RELG 368 & (3) & Japanese Religions in Pop Culture \\
\hline RELG 369 & (3) & Tibetan Buddhism \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline RELG 371 & (3) & Ethics of Violence/Non-Violence \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 373 & (3) & Christian Ethics of Love \\
\hline RELG 375 & (3) & Religion, Politics and Society \\
\hline RELG 376 & (3) & Religious Ethics \\
\hline RELG 378 & (3) & Pilgrimage, Heritage, and Tourism \\
\hline RELG 379 & (3) & Eastern Orthodox Christianity \\
\hline RELG 380 & (3) & Religion, Philosophy, Modernity \\
\hline RELG 382 & (3) & Contemporary Theory of Religion \\
\hline RELG 398 & (3) & North American Christianity \\
\hline RELG 399 & (3) & Christian Spirituality \\
\hline RELG 407 & (3) & The Writings \\
\hline RELG 408 & (3) & The Prophets \\
\hline RELG 410 & (3) & Paul and His Legacy \\
\hline RELG 419 & (3) & Religious Heritage and Tourism \\
\hline RELG 422 & (3) & Medieval Religious Texts \\
\hline RELG 423 & (3) & Reformation Thought \\
\hline RELG 434 & (3) & Advanced Theology \\
\hline RELG 440 & (3) & Global Islam \\
\hline RELG 442 & (3) & Pure Land Buddhism \\
\hline RELG 444 & (3) & Indian Ocean Religious Networks \\
\hline RELG 445 & (3) & Modern Buddhism \\
\hline RELG 449 & (3) & The Religion of the Samurai \\
\hline RELG 450 & (3) & The Way of the Kami \\
\hline RELG 451 & (3) & Zen Buddhism: Poetry and Art \\
\hline RELG 453 & (3) & Vajrayana Buddhism \\
\hline RELG 454 & (3) & Modern Hindu Thought \\
\hline RELG 455 & (3) & Religion and the Performing Arts in South India \\
\hline RELG 459 & (3) & Bhagavadgita and Mahabharata \\
\hline RELG 470 & (3) & Theological Ethics \\
\hline RELG 479 & (3) & Christianity in Global Perspective \\
\hline RELG 502 & (3) & Greco-Roman Judaism \\
\hline RELG 532 & (3) & History of Christian Thought 1 \\
\hline RELG 533 & (3) & History of Christian Thought 2 \\
\hline RELG 544 & (3) & Ethnography as Method in Religious Studies \\
\hline RELG 545 & (3) & Ramayana: Multiple Lives \\
\hline RELG 546 & (3) & Indian Philosophy \\
\hline RELG 547 & (3) & Special Topics in Hinduism \\
\hline RELG 548 & (3) & Indian Buddhist Philosophy \\
\hline RELG 549 & (3) & Japanese Buddhism in Historical Context \\
\hline RELG 551 & (3) & Special Topics in Buddhism \\
\hline RELG 552 & (3) & Advaita Vedanta \\
\hline RELG 556 & (3) & Issues in Buddhist Studies \\
\hline RELG 558 & (3) & Indian Tantric Traditions \\
\hline
\end{tabular}
\begin{tabular}{lll} 
RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
RELG 560 & (3) & Buddhist Poetry \\
RELG 570 & (3) & Research in Interfaith Studies \\
RELG 571 & (3) & Ethics, Medicine and Religion \\
RELG 572 & (3) & Religion and Global Politics \\
RELG 573 & (3) & Religions in Global Society
\end{tabular}

\subsection*{3.9.33.11 Bachelor of Arts (B.A.) - Honours Religious Studies ( 60 credits)}

The B.A.; Honours in Religious Studies focuses on the methodological approaches to the study of religious traditions, including the languages, teachings, and history of those traditions. A 6-credit Honours thesis related to the student's area of focus must be submitted. The Honours thesis topic must be approved by a Religious Studies adviser. A supervisor will be appointed to guide the student.
Students must maintain a program GPA and a CGPA of 3.00 (or 3.50 for First Class Honours).

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 456 & (3) & Theories of Religion \\
RELG 490 & (6) & Honours Thesis
\end{tabular}

\section*{Complementary Courses (48 credits)}

3-9 credits from Introductory Courses at the 200 level.
\begin{tabular}{|c|c|c|}
\hline ANTH 209 & (3) & Anthropology of Religion \\
\hline CATH 200 & (3) & Introduction to Catholicism \\
\hline CATH 220 & (3) & Selected Topics in Catholic Studies \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline ISLA 200 & (3) & Islamic Civilization \\
\hline ISLA 210 & (3) & Muslim Societies \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 245 & (3) & Jewish Life in the Islamic World \\
\hline JWST 254 & (3) & The Jewish Holy Days \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline RELG 201 & (3) & Religions of the Ancient Near East \\
\hline RELG 202 & (3) & Religion of Ancient Israel \\
\hline RELG 203 & (3) & Bible and Western Culture \\
\hline RELG 204 & (3) & Judaism, Christianity and Islam \\
\hline RELG 205 & (3) & Death and Dying \\
\hline RELG 210 & (3) & Jesus of Nazareth \\
\hline RELG 211 & (3) & Theology through Fiction \\
\hline RELG 252 & (3) & Hinduism and Buddhism \\
\hline RELG 253 & (3) & Religions of East Asia \\
\hline
\end{tabular}
\begin{tabular}{lll} 
RELG 254 & (3) & Introduction to Yoga Traditions \\
RELG 270 & (3) & Religious Ethics and the Environment \\
RELG 271 & (3) & Religion and Sexuality \\
RELG 288 & (3) & Introduction to Sikhism
\end{tabular}
\(0-12\) credits of Classical language courses.
\begin{tabular}{|c|c|c|}
\hline CLAS 210 & (3) & Introductory Latin 1 \\
\hline CLAS 212 & (3) & Introductory Latin 2 \\
\hline CLAS 215 & (6) & Intensive Introductory Latin \\
\hline CLAS 220 & (3) & Introductory Ancient Greek 1 \\
\hline CLAS 222 & (3) & Introductory Ancient Greek 2 \\
\hline CLAS 225 & (6) & Intensive Introductory Ancient Greek \\
\hline CLAS 310 & (3) & Intermediate Latin 1 \\
\hline CLAS 312 & (3) & Intermediate Latin 2 \\
\hline CLAS 315 & (3) & Intermediate Latin 2: Selections \\
\hline CLAS 320 & (3) & Intermediate Ancient Greek 1 \\
\hline CLAS 322 & (3) & Intermediate Ancient Greek 2 \\
\hline CLAS 326 & (3) & Intermediate Ancient Greek 2: Selections \\
\hline ISLA 322D1 & (3) & Lower Intermediate Arabic \\
\hline ISLA 322D2 & (3) & Lower Intermediate Arabic \\
\hline RELG 257D1 & (3) & Introductory Sanskrit \\
\hline RELG 257D2 & (3) & Introductory Sanskrit \\
\hline RELG 264 & (3) & Introductory Tibetan 1 \\
\hline RELG 265 & (3) & Introductory Tibetan 2 \\
\hline RELG 357D1 & (3) & Sanskrit 2 \\
\hline RELG 357D2 & (3) & Sanskrit 2 \\
\hline RELG 364 & (3) & Intermediate Tibetan 1 \\
\hline RELG 365 & (3) & Intermediate Tibetan 2 \\
\hline RELG 381 & (3) & Advanced New Testament Greek \\
\hline RELG 390D1 & (3) & Elementary Biblical Hebrew \\
\hline RELG 390D2 & (3) & Elementary Biblical Hebrew \\
\hline RELG 457D1 & (3) & Advanced Sanskrit \\
\hline RELG 457D2 & (3) & Advanced Sanskrit \\
\hline RELG 464 & (3) & Advanced Tibetan 1 \\
\hline RELG 465 & (3) & Advanced Tibetan 2 \\
\hline RELG 491 & (3) & Biblical Hebrew Narratives \\
\hline RELG 492 & (3) & Biblical Hebrew Poetry \\
\hline
\end{tabular}
\(33-39\) credits of Advanced courses at the 300 level or higher.
\begin{tabular}{lll} 
CATH 310 & (3) & Catholic Intellectual Traditions \\
CATH 315 & (3) & Catholicism and Ethics \\
CATH 320 & (3) & Catholicism and Modernity
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CATH 325 & (3) & Mystery and the Imagination \\
\hline CATH 330 & (3) & Catholicism in a Global Context \\
\hline CATH 335 & (3) & Confessions of Saint Augustine \\
\hline CATH 340 & (3) & Catholicism and Public Policy \\
\hline CATH 370 & (3) & Topics in Catholic Studies \\
\hline CATH 375 & (3) & Topics in Catholic Theology \\
\hline CATH 460 & (3) & Catholic Studies Seminar \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 334 & (3) & Jews and Muslims: A Modern History \\
\hline JWST 382 & (3) & Jews, Judaism and Social Justice \\
\hline RELG 300 & (3) & Second Temple Judaism \\
\hline RELG 302 & (3) & Literature of Ancient Israel 1 \\
\hline RELG 303 & (3) & Literature of Ancient Israel 2 \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 310 & (3) & Canadian Church History \\
\hline RELG 311 & (3) & Formation of the New Testament \\
\hline RELG 312 & (3) & The Gospels \\
\hline RELG 313 & (3) & Topics in Biblical Studies 1 \\
\hline RELG 315 & (3) & Special Topics in Religion 1 \\
\hline RELG 316 & (3) & New Religious Movements \\
\hline RELG 317 & (3) & Special Topics in Religion 2 \\
\hline RELG 318 & (3) & Special Topics in Religion 3 \\
\hline RELG 319 & (3) & Special Topics in Religion 4 \\
\hline RELG 322 & (3) & Church and Empire to 1300 \\
\hline RELG 323 & (3) & Church and State since 1300 \\
\hline RELG 325 & (3) & Varieties Religious Experience in Christianity \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline RELG 331 & (3) & Religion and Globalization \\
\hline RELG 332 & (3) & Conversations Across World Religions \\
\hline RELG 333 & (3) & Principles of Theology \\
\hline RELG 334 & (3) & Theology of History \\
\hline RELG 336 & (3) & Contemporary Theological Issues \\
\hline RELG 337 & (3) & Themes in Buddhist Studies \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 341 & (3) & Introduction: Philosophy of Religion \\
\hline RELG 344 & (3) & Mahayana Buddhism \\
\hline RELG 348 & (3) & Classical Hinduism \\
\hline RELG 350 & (3) & Bhakti Hinduism \\
\hline RELG 352 & (3) & Japanese Religions: History and Thought \\
\hline RELG 353 & (3) & Gandhi: His Life and Thought \\
\hline RELG 354 & (3) & Chinese Religions \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RELG 358 & (3) & Religion and Cinema in India \\
\hline RELG 366 & (3) & Rivers, Religion, and Environment in South Asia \\
\hline RELG 368 & (3) & Japanese Religions in Pop Culture \\
\hline RELG 369 & (3) & Tibetan Buddhism \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline RELG 371 & (3) & Ethics of Violence/Non-Violence \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 373 & (3) & Christian Ethics of Love \\
\hline RELG 375 & (3) & Religion, Politics and Society \\
\hline RELG 376 & (3) & Religious Ethics \\
\hline RELG 378 & (3) & Pilgrimage, Heritage, and Tourism \\
\hline RELG 380 & (3) & Religion, Philosophy, Modernity \\
\hline RELG 382 & (3) & Contemporary Theory of Religion \\
\hline RELG 384 & (3) & Religion and Public Policy \\
\hline RELG 398 & (3) & North American Christianity \\
\hline RELG 399 & (3) & Christian Spirituality \\
\hline RELG 407 & (3) & The Writings \\
\hline RELG 408 & (3) & The Prophets \\
\hline RELG 410 & (3) & Paul and His Legacy \\
\hline RELG 419 & (3) & Religious Heritage and Tourism \\
\hline RELG 422 & (3) & Medieval Religious Texts \\
\hline RELG 423 & (3) & Reformation Thought \\
\hline RELG 434 & (3) & Advanced Theology \\
\hline RELG 440 & (3) & Global Islam \\
\hline RELG 442 & (3) & Pure Land Buddhism \\
\hline RELG 444 & (3) & Indian Ocean Religious Networks \\
\hline RELG 445 & (3) & Modern Buddhism \\
\hline RELG 449 & (3) & The Religion of the Samurai \\
\hline RELG 450 & (3) & The Way of the Kami \\
\hline RELG 451 & (3) & Zen Buddhism: Poetry and Art \\
\hline RELG 453 & (3) & Vajrayana Buddhism \\
\hline RELG 454 & (3) & Modern Hindu Thought \\
\hline RELG 455 & (3) & Religion and the Performing Arts in South India \\
\hline RELG 459 & (3) & Bhagavadgita and Mahabharata \\
\hline RELG 470 & (3) & Theological Ethics \\
\hline RELG 479 & (3) & Christianity in Global Perspective \\
\hline RELG 502 & (3) & Greco-Roman Judaism \\
\hline RELG 532 & (3) & History of Christian Thought 1 \\
\hline RELG 533 & (3) & History of Christian Thought 2 \\
\hline RELG 544 & (3) & Ethnography as Method in Religious Studies \\
\hline RELG 545 & (3) & Ramayana: Multiple Lives \\
\hline RELG 546 & (3) & Indian Philosophy \\
\hline RELG 547 & (3) & Special Topics in Hinduism \\
\hline
\end{tabular}
\begin{tabular}{lll} 
RELG 548 & \((3)\) & Indian Buddhist Philosophy \\
RELG 549 & \((3)\) & Japanese Buddhism in Historical Context \\
RELG 551 & (3) & Special Topics in Buddhism \\
RELG 552 & (3) & Advaita Vedanta \\
RELG 556 & (3) & Issues in Buddhist Studies \\
RELG 558 & (3) & Indian Tantric Traditions \\
RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
RELG 560 & (3) & Buddhist Poetry \\
RELG 570 & (3) & Research in Interfaith Studies \\
RELG 571 & (3) & Ethics, Medicine and Religion \\
RELG 572 & (3) & Religion and Global Politics \\
RELG 573 & (3) & Religions in Global Society
\end{tabular}

\subsection*{3.9.33.12 Bachelor of Arts (B.A.) - Joint Honours Component Religious Studies ( \(\mathbf{3 6}\) credits)}

The B.A.; Joint Honours - Religious Studies Component focuses on the methodological approaches to the study of religious traditions, including the teachings, and history of those traditions.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). A 3-credit Joint Honours thesis related to the student's area of focus must be submitted. The Joint Honours thesis topic must be approved by a Religious Studies adviser. A supervisor will be appointed to guide the student.
Students in Joint Honours program must maintain a program GPA and a CGPA of 3.00 ( 3.50 for First Class Honours) and attain a B- or higher in each program course. No overlap is allowed between the courses forming each component of the Joint Honours program.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 456 & (3) & Theories of Religion \\
RELG 489 & (3) & Joint Honours Thesis
\end{tabular}

\section*{Complementary Courses (27 credits)}

6 credits from core courses:
\begin{tabular}{lcl} 
CATH 220 & \((3)\) & Selected Topics in Catholic Studies \\
RELG 201 & \((3)\) & Religions of the Ancient Near East \\
RELG 202 & \((3)\) & Religion of Ancient Israel \\
RELG 203 & \((3)\) & Bible and Western Culture \\
RELG 204 & \((3)\) & Judaism, Christianity and Islam \\
RELG 210 & (3) & Jesus of Nazareth \\
RELG 252 & (3) & Hinduism and Buddhism \\
RELG 253 & (3) & Religions of East Asia \\
RELG 254 & (3) & Introduction to Yoga Traditions \\
RELG 270 & (3) & Religious Ethics and the Environment \\
RELG 271 & Religion and Sexuality
\end{tabular}
\(0-6\) credits of Classical language courses:
\begin{tabular}{|c|c|c|}
\hline CLAS 210 & (3) & Introductory Latin 1 \\
\hline CLAS 212 & (3) & Introductory Latin 2 \\
\hline CLAS 215 & (6) & Intensive Introductory Latin \\
\hline CLAS 220 & (3) & Introductory Ancient Greek 1 \\
\hline CLAS 222 & (3) & Introductory Ancient Greek 2 \\
\hline CLAS 225 & (6) & Intensive Introductory Ancient Greek \\
\hline CLAS 310 & (3) & Intermediate Latin 1 \\
\hline CLAS 312 & (3) & Intermediate Latin 2 \\
\hline CLAS 315 & (3) & Intermediate Latin 2: Selections \\
\hline CLAS 320 & (3) & Intermediate Ancient Greek 1 \\
\hline CLAS 322 & (3) & Intermediate Ancient Greek 2 \\
\hline CLAS 326 & (3) & Intermediate Ancient Greek 2: Selections \\
\hline ISLA 322D1 & (3) & Lower Intermediate Arabic \\
\hline ISLA 322D2 & (3) & Lower Intermediate Arabic \\
\hline RELG 257D1 & (3) & Introductory Sanskrit \\
\hline RELG 257D2 & (3) & Introductory Sanskrit \\
\hline RELG 264 & (3) & Introductory Tibetan 1 \\
\hline RELG 265 & (3) & Introductory Tibetan 2 \\
\hline RELG 357D1 & (3) & Sanskrit 2 \\
\hline RELG 357D2 & (3) & Sanskrit 2 \\
\hline RELG 364 & (3) & Intermediate Tibetan 1 \\
\hline RELG 365 & (3) & Intermediate Tibetan 2 \\
\hline RELG 381 & (3) & Advanced New Testament Greek \\
\hline RELG 390D1 & (3) & Elementary Biblical Hebrew \\
\hline RELG 390D2 & (3) & Elementary Biblical Hebrew \\
\hline RELG 457D1 & (3) & Advanced Sanskrit \\
\hline RELG 457D2 & (3) & Advanced Sanskrit \\
\hline RELG 464 & (3) & Advanced Tibetan 1 \\
\hline RELG 465 & (3) & Advanced Tibetan 2 \\
\hline RELG 491 & (3) & Biblical Hebrew Narratives \\
\hline RELG 492 & (3) & Biblical Hebrew Poetry \\
\hline
\end{tabular}

15-21 credits from advanced courses at the 300 level or higher:
\begin{tabular}{lll} 
CATH 335 & \((3)\) & Confessions of Saint Augustine \\
CATH 375 & \((3)\) & Topics in Catholic Theology \\
RELG 300 & \((3)\) & Second Temple Judaism \\
RELG 302 & \((3)\) & Literature of Ancient Israel 1 \\
RELG 303 & \((3)\) & Literature of Ancient Israel 2 \\
RELG 307 & (3) & Bible, Quran and Interpretations \\
RELG 309 & (3) & World Religions and Cultures They Create \\
RELG 311 & (3) & Formation of the New Testament \\
RELG 312 & (3) & The Gospels
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RELG 313 & (3) & Topics in Biblical Studies 1 \\
\hline RELG 315 & (3) & Special Topics in Religion 1 \\
\hline RELG 316 & (3) & New Religious Movements \\
\hline RELG 317 & (3) & Special Topics in Religion 2 \\
\hline RELG 318 & (3) & Special Topics in Religion 3 \\
\hline RELG 319 & (3) & Special Topics in Religion 4 \\
\hline RELG 322 & (3) & Church and Empire to 1300 \\
\hline RELG 323 & (3) & Church and State since 1300 \\
\hline RELG 325 & (3) & Varieties Religious Experience in Christianity \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline RELG 331 & (3) & Religion and Globalization \\
\hline RELG 332 & (3) & Conversations Across World Religions \\
\hline RELG 333 & (3) & Principles of Theology \\
\hline RELG 334 & (3) & Theology of History \\
\hline RELG 336 & (3) & Contemporary Theological Issues \\
\hline RELG 337 & (3) & Themes in Buddhist Studies \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 341 & (3) & Introduction: Philosophy of Religion \\
\hline RELG 344 & (3) & Mahayana Buddhism \\
\hline RELG 348 & (3) & Classical Hinduism \\
\hline RELG 350 & (3) & Bhakti Hinduism \\
\hline RELG 352 & (3) & Japanese Religions: History and Thought \\
\hline RELG 353 & (3) & Gandhi: His Life and Thought \\
\hline RELG 354 & (3) & Chinese Religions \\
\hline RELG 358 & (3) & Religion and Cinema in India \\
\hline RELG 366 & (3) & Rivers, Religion, and Environment in South Asia \\
\hline RELG 368 & (3) & Japanese Religions in Pop Culture \\
\hline RELG 369 & (3) & Tibetan Buddhism \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline RELG 371 & (3) & Ethics of Violence/Non-Violence \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 373 & (3) & Christian Ethics of Love \\
\hline RELG 375 & (3) & Religion, Politics and Society \\
\hline RELG 376 & (3) & Religious Ethics \\
\hline RELG 378 & (3) & Pilgrimage, Heritage, and Tourism \\
\hline RELG 380 & (3) & Religion, Philosophy, Modernity \\
\hline RELG 382 & (3) & Contemporary Theory of Religion \\
\hline RELG 399 & (3) & Christian Spirituality \\
\hline RELG 407 & (3) & The Writings \\
\hline RELG 408 & (3) & The Prophets \\
\hline RELG 419 & (3) & Religious Heritage and Tourism \\
\hline RELG 422 & (3) & Medieval Religious Texts \\
\hline RELG 423 & (3) & Reformation Thought \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RELG 434 & (3) & Advanced Theology \\
\hline RELG 440 & (3) & Global Islam \\
\hline RELG 442 & (3) & Pure Land Buddhism \\
\hline RELG 444 & (3) & Indian Ocean Religious Networks \\
\hline RELG 449 & (3) & The Religion of the Samurai \\
\hline RELG 451 & (3) & Zen Buddhism: Poetry and Art \\
\hline RELG 453 & (3) & Vajrayana Buddhism \\
\hline RELG 454 & (3) & Modern Hindu Thought \\
\hline RELG 455 & (3) & Religion and the Performing Arts in South India \\
\hline RELG 459 & (3) & Bhagavadgita and Mahabharata \\
\hline RELG 470 & (3) & Theological Ethics \\
\hline RELG 479 & (3) & Christianity in Global Perspective \\
\hline RELG 502 & (3) & Greco-Roman Judaism \\
\hline RELG 532 & (3) & History of Christian Thought 1 \\
\hline RELG 533 & (3) & History of Christian Thought 2 \\
\hline RELG 544 & (3) & Ethnography as Method in Religious Studies \\
\hline RELG 545 & (3) & Ramayana: Multiple Lives \\
\hline RELG 546 & (3) & Indian Philosophy \\
\hline RELG 547 & (3) & Special Topics in Hinduism \\
\hline RELG 548 & (3) & Indian Buddhist Philosophy \\
\hline RELG 549 & (3) & Japanese Buddhism in Historical Context \\
\hline RELG 551 & (3) & Special Topics in Buddhism \\
\hline RELG 552 & (3) & Advaita Vedanta \\
\hline RELG 556 & (3) & Issues in Buddhist Studies \\
\hline RELG 558 & (3) & Indian Tantric Traditions \\
\hline RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
\hline RELG 560 & (3) & Buddhist Poetry \\
\hline RELG 570 & (3) & Research in Interfaith Studies \\
\hline RELG 571 & (3) & Ethics, Medicine and Religion \\
\hline RELG 572 & (3) & Religion and Global Politics \\
\hline RELG 573 & (3) & Religions in Global Society \\
\hline
\end{tabular}

\subsection*{3.9.33.13 Bachelor of Theology (B.Th.) - Religious Studies ( 120 credits)}

The Bachelor of Theology (B.Th.) degree requires 120 credits. Many students enter the program with advanced standing, and their credit requirement for the degree is adjusted accordingly. All students must discuss their course selection with their program adviser.

Students admitted on the basis of a bachelor degree will have advanced standing and should consult their program adviser to determine any course equivalencies completed during their first degree and how these affect their program requirements for the Bachelor of Theology.

The Bachelor of Theology degree serves three types of students: those seeking a classically oriented undergraduate program in the humanities that allows them to focus eventually on theology and related disciplines ( \(90 / 120\) credits); those who already have a degree but desire to add this competency, whether out of personal interest or with a view to graduate research in a theological discipline ( 60 credits); and those who not only desire but require it for the sake of a subsequent professional degree such as the Master of Divinity.

The Bachelor of Theology engages students in some of life's biggest questions and some of the world's most influential literature. Those doing 90 or more credits can (schedules permitting) add a Minor Concentration program in some other desired discipline or field; those who enter the program at Year 0 can add two Minor Concentrations offered by the Faculty of Arts and the Faculty of Science.

The normal course load in the degree for full-time students is 15 credits per term, five 3-credit courses. By permission of the Chair of the B.Th. Committee, students may also enroll for courses at any university in the province of Quebec. For further information, see University Regulations and Resources > Registration > Quebec Inter-University Transfer Agreement > Quebec Inter-University Transfer Agreement: McGill Students.
Professional and vocational courses (e.g., leading to ordination) are available through the In-Ministry Year (Master of Divinity (M.Div.)) upon the completion of the B.Th. degree.

\section*{Required Courses (33 credits)}
\begin{tabular}{lcl} 
RELG 302 & (3) & Literature of Ancient Israel 1 \\
RELG 303 & (3) & Literature of Ancient Israel 2 \\
RELG 309 & (3) & World Religions and Cultures They Create \\
RELG 311 & (3) & Formation of the New Testament \\
RELG 312 & (3) & The Gospels \\
RELG 322 & (3) & Church and Empire to 1300 \\
RELG 323 & (3) & Church and State since 1300 \\
RELG 333 & (3) & Principles of Theology \\
RELG 341 & (3) & Introduction: Philosophy of Religion \\
RELG 434 & (3) & Advanced Theology \\
RELG 470 & (3) & Theological Ethics
\end{tabular}

\section*{Complementary Courses (12-51 Credits)}

Students with advanced standing take the minimum number of complementary credits, which must be at the 300 level or above from the following.

\section*{Philosophy}

0-6 credits from:
\begin{tabular}{lll} 
PHIL 200 & (3) & Introduction to Philosophy 1 \\
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
RELG 321 & (3) & Western Intellectual Tradition \\
RELG 380 & (3) & Religion, Philosophy, Modernity
\end{tabular}

\section*{Theology}

3-6 credits from:
\begin{tabular}{lll} 
CATH 310 & (3) & Catholic Intellectual Traditions \\
RELG 211 & (3) & Theology through Fiction \\
RELG 334 & (3) & Theology of History \\
RELG 336 & \((3)\) & Contemporary Theological Issues
\end{tabular}

\section*{Bible (Old Testament)}

3-6 credits from:
\begin{tabular}{lll} 
RELG 201 & \((3)\) & Religions of the Ancient Near East \\
RELG 202 & \((3)\) & Religion of Ancient Israel \\
RELG 407 & \((3)\) & The Writings \\
RELG 408 & \((3)\) & The Prophets \\
RELG 491 & (3) & Biblical Hebrew Narratives \\
RELG 492 & \((3)\) & Biblical Hebrew Poetry
\end{tabular}

\section*{Bible (New Testament)}

3-6 credits from:
\begin{tabular}{lcl} 
CLAS 220 & (3) & Introductory Ancient Greek 1 \\
CLAS 222 & (3) & Introductory Ancient Greek 2 \\
RELG 210 & (3) & Jesus of Nazareth \\
RELG 279 & \((3)\) & New Testament Greek 1 \\
RELG 280 & \((3)\) & New Testament Greek 2 \\
RELG 326 & \((3)\) & Christians in the Roman World \\
RELG 381 & (3) & Advanced New Testament Greek \\
RELG 410 & (3) & Paul and His Legacy \\
RELG 411 & (3) & New Testament Exegesis \\
RELG 482 & (3) & Exegesis of Greek New Testament
\end{tabular}

\section*{Church History}

3-6 credits from:
\begin{tabular}{lll} 
CATH 330 & \((3)\) & Catholicism in a Global Context \\
RELG 310 & (3) & Canadian Church History \\
RELG 338 & (3) & Women and the Christian Tradition \\
RELG 399 & (3) & Christian Spirituality \\
RELG 423 & (3) & Reformation Thought \\
RELG 498 & (3) & Special Studies
\end{tabular}

\section*{Comparative Religion}
\(0-6\) credits from:
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 370 & \((3)\) & The Qur'an: History and Interpretation \\
ISLA 380 & \((3)\) & Islamic Philosophy and Theology \\
JWST 382 & \((3)\) & Jews, Judaism and Social Justice \\
RELG 204 & \((3)\) & Judaism, Christianity and Islam \\
RELG 207 & \((3)\) & Introduction to the Study of Religions \\
RELG 252 & \((3)\) & Hinduism and Buddhism \\
RELG 253 & \((3)\) & Religions of East Asia \\
RELG 288 & \((3)\) & Introduction to Sikhism \\
RELG 348 & \((3)\) & Classical Hinduism \\
RELG 352 & (3) & Japanese Religions: History and Thought \\
RELG 353 & (3) & Gandhi: His Life and Thought \\
RELG 354 & (3) & Chinese Religions
\end{tabular}

\section*{Ethics}
\(0-3\) credits from:
\begin{tabular}{lll} 
CATH 340 & (3) & Catholicism and Public Policy \\
CATH 370 & (3) & Topics in Catholic Studies
\end{tabular}
\begin{tabular}{lll} 
RELG 370 & (3) & Religion and Human Rights \\
RELG 371 & (3) & Ethics of Violence/Non-Violence \\
RELG 373 & (3) & Christian Ethics of Love \\
RELG 376 & \((3)\) & Religious Ethics
\end{tabular}

0-12 credits of undergraduate RELG or CATH courses (for students who do not have advanced standing that enter program at Year 0).

\section*{Elective Courses (15-36)}

15-36 credits chosen from Arts or Science disciplines.
Students with advanced standing take the minimum number of elective credits.
Elective credits may be applied to any Minor Concentration available in Arts or Science other than Religious Studies (see specific Minor Concentration regulations)

\subsection*{3.9.33.14 Bachelor of Theology (B.Th.) - Honours Religious Studies ( 120 credits)}

Students who have achieved a CGPA of 3.30 at the end of B.Th. Year 2 (U2) may apply to the B.Th. Committee for permission to enter the Honours program. They will be required to complete the normal requirements for the B.Th. degree and the honours courses RELG 494 and RELG 495 in the B.Th. Year 3 (U3) with a grade of \(B\) or better.
\begin{tabular}{lll} 
Year 3 (U3) - Required Courses - Honours (6 credits) \\
RELG 494 & (3) & B.Th. Honours Seminar 1 \\
RELG 495 & (3) & B.Th. Honours Seminar 2
\end{tabular}

\subsection*{3.9.34 Science for Arts Students}

\subsection*{3.9.34.1 Location}

Prof. Alanna Watt
Life Sciences Complex, Room 265
Telephone: 514-398-2806
Email: alanna.watt@mcgill.ca
Nancy Nelson
Stewart Biology Building, Room N7/9B
Telephone: 514-398-4109
Email: nancy.nelson@mcgill.ca

\subsection*{3.9.34.2 About Science for Arts Students}

Students in the Faculty of Arts who have an interest in science can choose a minor program consisting of one 3-credit required course, BIOL 210 , plus 15 complementary credits in the area of Science. Alternatively, they can take Science electives in lieu of a minor program, as long as they have the necessary prerequisites.
This minor concentration is administered by the Department of Biology. For more information, consult section 3.9.34.3: Bachelor of Arts (B.A.) - Minor Concentration Science for Arts Students (18 credits).

\subsection*{3.9.34.3 Bachelor of Arts (B.A.) - Minor Concentration Science for Arts Students (18 credits)}

Freshman students interested in this Minor Concentration should contact the Program Adviser to ensure that they are taking appropriate prerequisite courses. Students should declare their intention to obtain this Minor Concentration during their U1 year and consult the Program Adviser regarding approval of courses to meet the requirements.
Students select one of the following disciplinary areas as their area of specialization for the program:
Atmospheric and Oceanic Sciences; Biochemistry; Biology - Cell and Molecular Stream, Organismal Stream; Chemistry; Earth and Planetary Sciences; Geography; Mathematics and Statistics; Microbiology and Immunology; Pathology; Physics; Physiology; Psychology.

This Minor Concentration is coordinated by the Department of Biology. For more information contact the Undergraduate Program Adviser in the Biology Department, N7/9B, Stewart Biology Building, 514-398-4109.

\section*{Required Course (3 credits)}
BIOL 210
(3)
Perspectives of Science

\section*{Complementary Courses ( \(\mathbf{1 5}\) credits)}

15 credits taken in one of the disciplinary areas given below. Where suggested courses have prerequisites at the 200 or 300 level associated with them, credit for the associated prerequisites may also be counted as part of the 15 credits.

Prerequisites at the 100 level cannot be counted toward the Minor concentration.
With the prior written approval of the Program Adviser, an appropriate alternative set of courses may be substituted.

\section*{Disciplinary Areas}

\section*{Atmospheric and Oceanic Sciences}

Prerequisites which cannot be counted toward the Minor concentration: MATH 140 and MATH 141 or equivalents; PHYS 101 or PHYS 131 and PHYS 102 or PHYS 142 or equivalents recommended.
\begin{tabular}{lll} 
ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
ATOC 215 & (3) & Oceans, Weather and Climate \\
ATOC 219 & (3) & Introduction to Atmospheric Chemistry \\
ATOC 309 & (3) & Weather Radars and Satellites \\
ATOC 315 & (3) & Thermodynamics and Convection \\
ATOC 357 & (3) & Atmospheric and Oceanic Science Laboratory \\
MATH 222 & (3) & Calculus 3
\end{tabular}

\section*{Biochemistry}

Prerequisites which cannot be counted toward the Minor concentration: BIOL 111 and BIOL 112, CHEM 110 and CHEM 120, or their equivalents.
\begin{tabular}{lll} 
ANAT 262 & (3) & Introductory Molecular and Cell Biology \\
BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
BIOL 200 & (3) & Molecular Biology \\
CHEM 212 & (4) & Introductory Organic Chemistry 1
\end{tabular}
* Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

Students who have completed CHEM 212 and CHEM 222 or their equivalents may take one or both of the following:
BIOC 311
Metabolic Biochemistry
BIOC 312
Biochemistry of Macromolecules

\section*{Biology}

Students interested in Biology can choose between two streams. Cell and molecular biology leads to upper-level courses in developmental biology, human genetics, molecular biology, or allied fields. Organismal biology leads to upper-level courses in biodiversity, ecology, neurobiology, behaviour, or conservation biology. See the Undergraduate Program Adviser in the Biology Department, N7/9B, Stewart Biology Building, to arrange a counselling session on the choice of courses above the 200 level.

Prerequisites which cannot be counted toward the Minor concentration: BIOL 111 and BIOL 112, plus CHEM 110 and CHEM 120 or their equivalents; in addition, for the Organismal Stream, PHYS 101 or PHYS 131; and MATH 140 and PHYS 102 or PHYS 142 if taking BIOL 306.

\section*{Biology - Cell and Molecular Stream}
\begin{tabular}{lll} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics
\end{tabular}
CHEM 212
(4)
Introductory Organic Chemistry 1
* Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

Plus a selected subset of these or related upper-level courses:
\begin{tabular}{lll} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 303 & (3) & Developmental Biology \\
BIOL 313 & (3) & Eukaryotic Cell Biology \\
BIOL 314 & (3) & Molecular Biology of Cancer \\
BIOL 370 & (3) & Human Genetics Applied
\end{tabular}

\section*{Biology - Organismal Stream}
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 215 & (3) & Introduction to Ecology and Evolution \\
CHEM 212 & (4) & Introductory Organic Chemistry 1
\end{tabular}
* Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

Plus one or more of these or related upper-level courses:
\begin{tabular}{lcl} 
BIOL 304 & (3) & Evolution \\
BIOL 305 & (3) & Animal Diversity \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 307 & (3) & Behavioural Ecology \\
BIOL 308 & (3) & Ecological Dynamics \\
BIOL 310 & (3) & Biodiversity and Ecosystems \\
BIOL 465 & \((3)\) & Conservation Biology
\end{tabular}

\section*{Chemistry}

Prerequisites which cannot be counted toward the Minor concentration: BIOL 112, and CHEM 110 and CHEM 120, or their equivalents; MATH 140, and PHYS 101 or PHYS 131, and PHYS 102 or PHYS 142, or their equivalents if taking CHEM 334.

The Department also strongly encourages students to take one or more courses involving a laboratory because the science of chemistry is rooted in laboratory experience.

Students select 15 credits from the following courses and their associated prerequisites:
Note: CHEM 212 or its equivalent is prerequisite to all 200-level or higher courses.
\begin{tabular}{lll} 
CHEM 212 & \((4)\) & Introductory Organic Chemistry 1 \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 281 & (3) & Inorganic Chemistry 1 \\
CHEM 302 & \((3)\) & Introductory Organic Chemistry 3 \\
CHEM 334 & (3) & Advanced Materials \\
CHEM 381 & \((3)\) & Inorganic Chemistry 2
\end{tabular}

One of:
CHEM 203
(3)
Survey of Physical Chemistry
CHEM 204
(3)
Physical Chemistry/Biological Sciences 1

\section*{Earth and Planetary Sciences}

A combination of EPSC 201 or EPSC 233, together with EPSC 210 and EPSC 212 provides a grounding in Earth and Planetary Sciences and preparation for more specialized courses.
Students should meet with an EPSC departmental adviser prior to selecting their courses, as some 200-level courses have specific prerequisites.
Prerequisites which cannot be counted toward the Minor concentration: CHEM 110 and CHEM 120, and MATH 140 or equivalents.
Students select 15 credits from the following courses and their associated prerequisites:
\begin{tabular}{lcl} 
EPSC 201* & (3) & Understanding Planet Earth \\
EPSC 210 & \((3)\) & Introductory Mineralogy \\
EPSC 212 & \((3)\) & Introductory Petrology \\
EPSC 220 & \((3)\) & Principles of Geochemistry \\
EPSC 231 & \((3)\) & Field School 1 \\
EPSC \(233^{*}\) & \((3)\) & Earth and Life History \\
EPSC 240 & \((3)\) & Geology in the Field \\
EPSC 303 & \((3)\) & Structural Geology \\
EPSC 320 & \((3)\) & Elementary Earth Physics \\
EPSC 334 & (3) & Invertebrate Paleontology \\
EPSC 355 & (3) & Sedimentary Geology \\
EPSC 549 & & Hydrogeology
\end{tabular}
* Note: Students select either EPSC 201 or EPSC 233.

Other EPSC credits at the 300 level or higher may be used with the approval of an Earth and Planetary Science advisor, by a student who meets the pre-requisites.

\section*{Geography}
(Students in any Minor or Major concentration or Honours program in Geography cannot choose this disciplinary area.)
Geography advisers recommend including some preparation in chemistry, statistics, and calculus for study in this area even if formal prerequisites are not in place.
Students select 15 credits from the following courses and their associated prerequisites:
\begin{tabular}{lcl} 
GEOG 203 & \((3)\) & Environmental Systems \\
GEOG 205 & \((3)\) & Global Change: Past, Present and Future \\
GEOG 272 & \((3)\) & Earth's Changing Surface \\
GEOG 305 & \((3)\) & Soils and Environment \\
GEOG 321 & \((3)\) & Climatic Environments \\
GEOG 322 & \((3)\) & Environmental Hydrology \\
GEOG 372 & \((3)\) & Running Water Environments \\
GEOG 470 & \((3)\) & Wetlands
\end{tabular}

\section*{Mathematics and Statistics}
(Students in any Minor or Major concentration or Honours program in Mathematics and Statistics cannot choose this disciplinary area.)
Prerequisites which cannot be counted toward the Minor: MATH 133, MATH 140, and MATH 141 or equivalents.
Suggested courses:
\begin{tabular}{lll} 
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 338 & (3) & History and Philosophy of Mathematics
\end{tabular}

\section*{Microbiology and Immunology}

Prerequisites which cannot be counted toward the Minor concentration: BIOL 111 and BIOL 112, CHEM 110 and 120 or their equivalents.
Note: CHEM 212 or its equivalent is prerequisite, or corequisite, to these courses.
Students select 15 credits from the following courses and their associated prerequisites:
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
MIMM 211 & (3) & Introductory Microbiology \\
MIMM 314 & (3) & Intermediate Immunology \\
MIMM 323 & (3) & Microbial Physiology \\
MIMM 324 & (3) & Fundamental Virology
\end{tabular}
* Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

\section*{Pathology}

Prerequisites which cannot be counted toward the Minor concentration: BIOL 111 and BIOL 112, plus CHEM 110 and CHEM 120, MATH 140, and PHYS 101 or PHYS 131 and PHYS 102 or PHYS 142, or their equivalents.
PATH 300, together with its associate prerequisites, is well suited to students with an interest in medicine.
Students select 15 credits from the following courses and their associated prerequisites:
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
PATH 300 & (3) & Human Disease \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}
* Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

\section*{Physics}

Prerequisites which cannot be counted toward the Minor concentration: PHYS 131, PHYS 142, MATH 140, MATH 141, MATH 222 or their equivalents.
Honours courses may be substituted for their Major equivalents only with the permission of the Department.
Students select 15 credits from the following courses and their associated prerequisites:
\begin{tabular}{lcl} 
PHYS 224 & \((3)\) & Physics of Music \\
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 232 & (3) & Heat and Waves \\
PHYS 241 & (3) & Signal Processing \\
PHYS 242 & (2) & Electricity and Magnetism \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2
\end{tabular}

\section*{Physiology}

Prerequisites which cannot be counted towards the Minor concentration: BIOL 111 and BIOL 112, CHEM 110 and CHEM 120, MATH 140, PHYS 101 or PHYS 131, and PHYS 102 or PHYS 142, or their equivalents.

Students should select:
\begin{tabular}{lll} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
CHEM 212 & (4) & Introductory Organic Chemistry 1
\end{tabular}
* Note: Students select BIOL 201 or BIOC 212.

Both:
\begin{tabular}{lll} 
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

And, if credits permit, one or more of these intermediate-level Physiology courses:
\begin{tabular}{lll} 
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}

\section*{Psychology}
(Students in any Minor or Major concentration or Honours program in Psychology cannot choose this disciplinary area.)
Prerequisites which cannot be counted toward the Minor concentration: PSYC 100 (or equivalent).
Students in the Minor concentration take 15 credits of Psychology selected as follows:
PSYC 204
(3)
Introduction to Psychological Statistics

Plus 6 credits from the following core courses:
\begin{tabular}{lll} 
PSYC 211 & \((3)\) & Introductory Behavioural Neuroscience \\
PSYC 212 & \((3)\) & Perception \\
PSYC 213 & \((3)\) & Cognition \\
PSYC 215 & \((3)\) & Social Psychology
\end{tabular}

Plus 6 credits Psychology courses at the 300 level or higher (excluding PSYC 305).

\subsection*{3.9.35 Social Entrepreneurship}

\subsection*{3.9.35.1 Location}

Social Entrepreneurship
Dawson Hall
853 Sherbrooke Street West
Montreal QC H3A 0G5

Telephone: 514-396-1821
Website: mcgill.ca/socent

\section*{Student Affairs Administrator and Program Advisor: Tara Alward}

Please email interdisciplinary.arts@mcgill.ca to make an appointment

\subsection*{3.9.35.2 About Social Entrepreneurship}

The Minor Concentration in Social Entrepreneurship is a collaboration of the Faculty of Arts and Desautels Faculty of Management. It is designed to provide Arts (B.A.) students with an understanding of how to conceptualize, develop, and manage successful new ventures, including social enterprises, not-for-profit organizations, and cooperatives. The program is interdisciplinary and integrative. Many courses will therefore include students from multiple McGill faculties.

Students who pursue this program will acquire the skills necessary to take on issues of social responsibility, environmental sustainability, and the know-how to develop products and services to alleviate social problems. The minor concentration will impart a comprehensive set of management skills through targeted coursework in the Faculty of Management, complemented by an array of related courses in the Faculty of Arts.
The minor concentration also involves hands-on experience, either through an experiential learning course requiring students to create an entrepreneurial business plan, or through an internship at an NGO or other social enterprise. All Arts students in existing majors and minors with a minimum GPA of 3.0 may apply for the Minor Concentration in Social Entrepreneurship after completing at least one year of academic studies at the university.

Further information is available at mcgill.ca/socent.

\subsection*{3.9.35.3 Bachelor of Arts (B.A.) - Minor Concentration Social Entrepreneurship ( 18 credits)}

This Minor Concentration is a collaboration of the Faculty of Arts and the Desautels Faculty of Management and is designed to provide Arts (B.A.) students with an understanding of how to conceptualize, develop, and manage successful new ventures-including social enterprises, not-for-profit organizations, and cooperatives. The program covers the essentials of management and is interdisciplinary and integrative. Many courses in the Minor Concentration will address a mix of students from across multiple McGill faculties.

This Minor Concentration is restricted to students who have completed one year of university studies with a minimum CGPA of 3.0. The Minor Concentration Social Entrepreneurship has limited enrolment; students should contact the Program Director to apply for admission.

Students in this Minor Concentration are not permitted to take the Joint Honours Economics/Finance, Joint Honours Economics/Accounting or Desautels Minors in Management, Marketing, Finance, or Operations Management (for Non-Management Students).

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
INTG 201 & (3) & Integrated Management Essentials 1 \\
INTG 202 & (3) & Integrated Management Essentials 2 \\
MGPO 362 & (3) & Fundamentals of Entrepreneurship \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

\section*{3-6 credits from the following:}
\begin{tabular}{lcl} 
MGPO 364 & \((3)\) & Entrepreneurship in Practice \\
SENT 499 & \((3)\) & Internship: Social Entrepreneurship \\
& \\
0 - 3 credits from the following: & \\
COMS 355 & \((3)\) & Media Governance \\
COMS 492 & (3) & Power, Difference and Justice \\
ECON 310 & (3) & Introduction to Behavioural Economics \\
ECON 447 & (3) & Economics of Information and Uncertainty \\
HIST 312 & (3) & History of Consumption in Canada \\
LLCU 212 & (3) & Understanding Digital and Social Media \\
PHIL 237 & (3) & Contemporary Moral Issues \\
POLI 318 & (3) & Comparative Local Government \\
POLI 473 & (3) & Democracy and the Market
\end{tabular}
SOCI 307
(3)
Globalization
SOCI 386
Contemporary Social Movements

\subsection*{3.9.36 Social Studies of Medicine}

\subsection*{3.9.36.1 Location}

Department of Social Studies of Medicine
3647 Peel Street
Montreal QC H3A 1X1
Telephone: 514-398-6033
Email: ssom@mcgill.ca
Website: mcgill.ca/ssom

\subsection*{3.9.36.2 About Social Studies of Medicine}

The Minor Concentration in Social Studies of Medicine is an interdisciplinary concentration of courses designed to address the needs of:
1. undergraduates preparing for one of the health professions; and
2. social sciences and humanities undergraduates who want to gain a broader interdisciplinary understanding of medicine and health issues.

The Minor Concentration in Social Studies of Medicine presents medicine as a complex network of institutions, cultures, and political relations embedded in the institutions, cultures, and political relations of the larger society. Courses are divided into three groups: History of Medicine, Anthropology of Medicine, and Sociology of Medicine.

The Minor Concentration consists of 18 credits. Students are required to take at least one course in each of the three groups.
Note: No overlap is permitted with courses counting toward the student's Major Concentration.

\subsection*{3.9.36.3 Bachelor of Arts (B.A.) - Minor Concentration Social Studies of Medicine (18 credits)}

The Minor Concentration in Social Studies of Medicine presents as a complex network of institutions, cultures, and political relations embedded in the institutions, cultures and political relations of the larger society. Courses are divided into three groups: History of Medicine, Anthropology of Medicine, and Sociology of Medicine. The Minor consists of 18 credits. Students are required to take at least one course in each of the three groups.

Note: No overlap is permitted with courses counting towards the student's major concentration.

\section*{Complementary Courses (18 credits)}

18 credits from the following (at least 3 credits from each of the three groups):

\section*{History of Medicine}
\begin{tabular}{lll} 
HIST 249 & (3) & Health and the Healer in Western History \\
HIST 319 & (3) & The Scientific Revolution \\
HIST 335 & (3) & Science and Medicine in Canada \\
HIST 356 & (3) & Medicine in the Medieval West \\
HIST 381 & (3) & Colonial Africa \\
HIST 424 & (3) & Gender, Sexuality and Medicine \\
HIST 430 & (3) & Topics in Modern Medicine \\
HIST 449 & (3) & Medicine in the Ancient World \\
HIST 452 & (3) & Topics in Pre-Modern Medicine \\
HIST 457 & (3) & Topics in Medical History \\
HIST 558 & (3) & Modern Medicine: Seminar \\
HIST 559 & (3) & Seminar: Medieval Medicine \\
HIST 567D1 &
\end{tabular}

Seminar: Medieval Medicine

\section*{Anthropology of Medicine}
\begin{tabular}{lcl} 
ANTH 227 & \((3)\) & Medical Anthropology \\
ANTH 302 & (3) & New Horizons in Medical Anthropology \\
ANTH 314 & (3) & Psychological Anthropology 01 \\
ANTH 325 & (3) & Anthropology of the Self \\
ANTH 407 & (3) & Anthropology of the Body \\
ANTH 408 & (3) & Sensory Ethnography \\
ANTH 423 & \((3)\) & Mind, Brain and Psychopathology \\
ANTH 438 & \((3)\) & Topics in Medical Anthropology \\
ANTH 480 & \((3)\) & Special Topic 5 \\
ANTH 481 & (3) & Special Topic 6
\end{tabular}

\section*{Sociology of Medicine}
\begin{tabular}{lcl} 
SOCI 225 & \((3)\) & Medicine and Health in Modern Society \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI 310 & \((3)\) & Sociology of Mental Health \\
SOCI 365 & (3) & Health and Development \\
SOCI 390 & \((3)\) & Gender and Health \\
SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
SOCI 515 & (3) & Medicine and Society \\
SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
SOCI 588 & Biosociology/Biodemography
\end{tabular}

\subsection*{3.9.37 Social Work}

\subsection*{3.9.37.1 Location}

School of Social Work
550 Sherbrooke Ouest, Suite 100
Montreal QC H3A 1B9
Telephone: 514-398-7070
Fax: 514-398-4760
Email: undergraduate.socialwork@mcgill.ca
Website: mcgill.ca/socialwork

\subsection*{3.9.37.2 About Social Work}

The School of Social Work offers an undergraduate program leading to a Bachelor of Social Work (B.S.W.) degree. The B.S.W. program:
1. prepares students for generalist social work practice in a range of health and social service positions (the B.S.W. represents the point of admission into the Ordre des travailleurs sociaux et des thérapeutes conjugaux et familiaux du Québec (OTSTCFQ) and the Canadian Association of Social Workers); and
2. prepares students for entry into specialized professional studies at the graduate level.

A 90-credit program is offered to students entering from CEGEP or equivalent, students who transfer from within McGill or other universities, and mature students. For more information, refer to the School's website.

For Graduates intending to practice social work in Quebec, please note that Quebec law requires candidates seeking admission to the professional social work order of Quebec (OTSTCFQ) to demonstrate a working knowledge of the French language. For more information, please see our Working in Quebec page.
The objectives of the B.S.W. program are to provide an academic environment where students can develop:
- integrated social work knowledge pertaining to history, theory, research, practice modalities, and policies that influence the delivery of health and social services;
- professional skills in well-established methods of practice with individuals, families, and community organizations;
- understanding of the factors, processes, and forces that form and govern social policy in Canada, and the skills to work toward policy improvement and change;
- awareness of various dimensions of diversity and how they intersect in an increasingly heterogeneous society;
- a sense of identity as an intervening agent in social work practice and a sense of responsibility that accompanies acts of intervention; and
- a commitment to advancing knowledge and improving skills within ethical social work practice that are the prerequisites for more advanced studies at the graduate level.

\subsection*{3.9.37.3 Bachelor of Social Work (B.S.W.) - Three-Year Program - Admission}

The BSW program aims to ensure that social workers are as diverse as the communities with which we work. First Nations, Inuit, Métis, people with disabilities, racialized people, visible minorities, ethnic minorities, gender non-conforming and LGBTQ+ people, and women are strongly encouraged to apply. Applications from CEGEP, French and International Baccalaureate, transfer, and mature students are welcome. Admission to the BSW program is limited and competitive. All candidates are expected to have better than average grades, significant socialwork-related experience, paid or volunteer, and also to demonstrate personal suitability for the social work profession. Classes are offered in English, but French proficiency (comprehension, spoken, and written) is needed for local field placements and for securing admission to the OTSTCFQ.

\subsection*{3.9.37.4 Bachelor of Social Work (B.S.W.) - Social Work (Three-Year Program) (90 credits)}

The School of Social Work offers an undergraduate program leading to a Bachelor of Social Work (BSW) degree. The BSW focuses on generalist social work practice in a range of health and social service settings locally, nationally and internationally. Drawing on principles of diversity and equity consistent with anti-oppressive frameworks, the BSW examines theoretical foundations and practice skills to assess and respond to social problems affecting individuals, families, groups and communities. Core objectives include: exploration of an identity consistent with the values and ethics of the profession; promoting human rights and social justice; addressing historical and contemporary systemic and structural sources of oppression and marginalization; and, engaging in critical thinking in relation to client populations and in response to inequitable policies and their implications for disadvantaged groups. The BSW includes essential training through field practice.

\section*{Field Practicum}

Students in the three-year B.S.W. program complete a field placement during their second and third years, two days per week, in different settings each year. Students must have completed a minimum of 24 credits to begin the second year (U2) field placement, comprised of all U1 required SWRK courses and any combination of SWRK complementary, non-SWRK complementary and/or elective courses totaling 24 credits. Students must have completed a minimum number of 54 credits to begin the third year (U3) field placement, comprised of all U1 and U2 required SWRK courses, and any combination of SWRK complementary, non-SWRK complementary and/or elective courses totaling 54 credits.

\section*{Required Courses (63 credits)}

U1
\begin{tabular}{lll} 
SWRK 219 & (3) & Anti-Oppression Social Work Practice \\
SWRK 220 & (3) & History and Philosophy of Social Work \\
SWRK 221 & (3) & Public Social Services in Canada \\
SWRK 222 & (3) & Introduction to Practicum \\
SWRK 224 & \((3)\) & Human Development Across the Lifespan
\end{tabular}

U2
SWRK 319
SWRK 320
SWRK 321
SWRK 322
SWRK 323
SWRK 326
Critical Thought and Ethics in Social Work
Practice with Individuals and Families 1
Introduction to Practice with Groups
Field Practice 1
Field Practice 2
Practice with Individuals and Families 2
\begin{tabular}{lll} 
SWRK 327 & (3) & Approaches to Community Practice \\
SWRK 344 & (3) & Integrative Seminar 1
\end{tabular}

U3
\begin{tabular}{lll} 
SWRK 420 & (3) & Advanced Field Practice 1 \\
SWRK 421 & (3) & Advanced Field Practice 2 \\
SWRK 422 & (3) & Integrative Seminar 2 \\
SWRK 423 & (3) & Social Work Research \\
SWRK 424 & (3) & Mental Health and Illness \\
SWRK 425 & (3) & Advanced Social Work Practice in Quebec \\
SWRK 428 & (3) & Social Policy and Administration \\
SWRK 445 & (3) & First Peoples and Social Work
\end{tabular}

\section*{Complementary Courses (21 credits)}

Complementary courses comprise 21 credits of the program. These are selected with the following specifications.
9 credits of Social Work (SWRK) courses.
12 credits of non-social work complementary courses taken in Anthropology (ANTH), Economics (ECON), Gender, Sexuality, Feminist \& Social Justice Studies (GSFS), Geography (GEOG), History (HIST), Linguistics (LING), Political Science (POLI), Psychology (PSYC), or Sociology (SOCI) or humanities courses taken in Art History \& Communication Studies (ARTH), English (ENGL), Gender, Sexuality, Feminist \& Social Justice Studies (GSFS), Music (MUAR), Philosophy (PHIL), or Religious Studies (RELG) or literature and civilization courses taken in Classics (CLAS), East Asian Studies (EAST), French Studies (FREN), German Studies (GERM), Hispanic Studies (HISP), Islamic Studies (ISLA), Jewish Studies (JWST), Russian Studies (RUSS), Spanish Studies (HISP), or Canadian Studies (CANS), Indigenous Studies (INDG), African Studies (AFRI), International Development Studies (INTD), or Latin American and Caribbean Studies (LACS). At least 6 of these credits must be taken at the 300 level or higher or at least 9 of these credits must be taken within one discipline.
Please note from "literature and civilization" programs and departments, students are permitted to select any course except any language courses to fulfill the 12 complementary credits. Language courses can be taken as electives.

\section*{Elective Courses (6 credits)}

6 credits of electives may be chosen from a discipline other than Social Work.

\subsection*{3.9.38 Sociology}

\subsection*{3.9.38.1 Location}

\author{
Stephen Leacock Building, Room 712 \\ 855 Sherbrooke Street West \\ Montreal QC H3A 2T7 \\ Undergraduate Program Information: 514-398-6868 \\ Fax: 514-398-7476 \\ Email: giovanna.terrasi@mcgill.ca \\ Website: mcgill.ca/sociology
}

\subsection*{3.9.38.2 About Sociology}

Sociology is commonly defined as the scientific study of society. It offers the student an educational experience which is both intellectually rewarding and practically useful as a preparation for future career opportunities. It provides the student with the theoretical and analytical tools to better understand the complex social forces which affect our lives, contributing in this way to personal enrichment and more effective citizenship. It is also valuable preparation for advanced study in the social sciences, as well as for careers in management; education; law; medicine and health-related areas; social work; and communications in both the public sector and private industry.
The Department offers a Minor Concentration, a Major Concentration, an Honours, and a Joint Honours program in Sociology. Although a student from outside the Department may take courses in the Department without having taken SOCI 210 Sociological Perspectives (except where noted otherwise), the course is recommended. The purpose of the Minor Concentration is to give the student a basic understanding of the field of Sociology, while the Major Concentration will provide a more comprehensive coverage of the field. The purpose of the Honours program is to permit a student to study the field in
depth, and to do an Honours Project-a research paper under the supervision of a faculty member-whose topic and supervisor are chosen by mutual agreement between the student and the professor.

A list of academic advisors and their schedules are available at mcgill.ca/sociology/undergrad/advising.

\subsection*{3.9.38.3 Orientation Session for New Students}

The Sociology Department Orientation Session will be held in late August. For more information, please refer to mcgill.ca/sociology/undergrad.

\subsection*{3.9.38.4 Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)}

The purpose of the Minor Concentration Sociology is to give the student a basic understanding of the field of sociology. This Minor concentration may be expanded to the Major Concentration Sociology.

\section*{U1 Required Courses (6 credits)}
\begin{tabular}{lll} 
SOCI 210 & (3) & Sociological Perspectives \\
SOCI 211 & (3) & Sociological Inquiry
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits from the following:
\begin{tabular}{lll} 
SOCI 330 & (3) & Sociological Theory \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

9 credits of complementary courses chosen from the list of courses offered by the Sociology Department. At least 3 credits must be taken at the 300 -level or higher.

\section*{Areas of Sociology}

The Department of Sociology offers courses in four substantive areas of study:
Institutions, Deviance, and Culture
Politics and Social Change
Social Stratification: Class, Ethnicity, and Gender
Work, Organizations, and the Economy
The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.

The 500-level seminars in each substantive area are open to social science major concentration students in their final year and to Honours students. Minor concentration students may only register for these with the permission of the instructor.

\section*{Institutions, Deviance, and Culture}
\begin{tabular}{lll} 
SOCI 213 & \((3)\) & Deviance \\
SOCI 225 & \((3)\) & Medicine and Health in Modern Society \\
SOCI 247 & \((3)\) & Family and Modern Society \\
SOCI 250 & \((3)\) & Social Problems \\
SOCI 305 & \((3)\) & Socialization \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI 310 & \((3)\) & Sociology of Mental Health \\
SOCI 318 & \((3)\) & Sociology of the Media \\
SOCI 322 & (3) & Sociology of Literature \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 388 & (3) & Crime \\
SOCI 430 & Sociology of Citizenship
\end{tabular}
\begin{tabular}{lcl} 
SOCI 488 & \((3)\) & Punishment and Prisons \\
SOCI 489 & \((3)\) & Gender, Deviance and Social Control \\
SOCI 495 & \((3)\) & Social Problems and Conflicts \\
SOCI 503 & (3) & Surveillance in Modern Society \\
SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
SOCI 515 & (3) & Medicine and Society \\
SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
SOCI 535 & (3) & Sociology of the Family \\
SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
SOCI 571 & (3) & Deviance and Social Control
\end{tabular}

\section*{Politics and Social Change}
\begin{tabular}{|c|c|c|}
\hline SOCI 212 & (3) & International Migration \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 245 & (3) & The Sociology of Emotions \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 255 & (3) & Gender and the State \\
\hline SOCI 265 & (3) & War, States and Social Change \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 326 & (3) & Political Sociology 01 \\
\hline SOCI 345 & (3) & Topics in Sociology \\
\hline SOCI 354 & (3) & Dynamics of Industrial Societies \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 400 & (3) & Comparative Migration and Citizenship \\
\hline SOCI 424 & (3) & Networks and Social Structures \\
\hline SOCI 430 & (3) & Sociology of Citizenship \\
\hline SOCI 446 & (3) & Colonialism and Society \\
\hline SOCI 455 & (3) & Post-Socialist Societies \\
\hline SOCI 484 & (3) & Emerging Democratic States \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 507 & (3) & Social Change \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 545 & (3) & Sociology of Population \\
\hline SOCI 550 & (3) & Developing Societies \\
\hline
\end{tabular}

\section*{Social Stratification: Class, Ethnicity, and Gender}
SOCI 227
Jews in North America
\begin{tabular}{lll} 
SOCI 230 & \((3)\) & Sociology of Ethnic Relations \\
SOCI 255 & \((3)\) & Gender and the State \\
SOCI 270 & (3) & Sociology of Gender \\
SOCI 321 & (3) & Gender and Work \\
SOCI 333 & (3) & Social Stratification \\
SOCI 335 & (3) & Sociology of Aging and the Life Course \\
SOCI 355 & (3) & Rural Life in a Global Society \\
SOCI 366 & (3) & Neighborhoods and Inequality \\
SOCI 375 & (3) & Suspect Minorities in Canada \\
SOCI 410 & (3) & Urban Ethnography \\
SOCI 415 & (3) & Education and Inequality \\
SOCI 430 & (3) & Cociology of Citizenship \\
SOCI 475 & (3) & Seminar in Social Stratification \\
SOCI 510 & (3) & Ethnicity and Public Policy \\
SOCI 512 & (3) & Migration and Immigrant Groups \\
SOCI 520 & (3) & Indigenous Women's Health and Healthcare \\
SOCI 526 & (3) & Sex and Gender \\
SOCI 530 & (3) & Comparative Historical Sociology \\
SOCI 555 & &
\end{tabular}

\section*{Work, Organizations, and the Economy}
\begin{tabular}{lll} 
SOCI 235 & \((3)\) & Technology and Society \\
SOCI 304 & \((3)\) & Sociology of the Welfare State \\
SOCI 312 & \((3)\) & Sociology of Work and Industry \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 420 & (3) & Organizations \\
SOCI 470 & (3) & Topics in Economic Sociology
\end{tabular}

\subsection*{3.9.38.5 Bachelor of Arts (B.A.) - Major Concentration Sociology (36 credits)}

The purpose of the Major Concentration Sociology is to give the student a comprehensive understanding of the field of sociology.

\section*{U1 Required Courses (6 credits)}
\begin{tabular}{lll} 
SOCI 210 & (3) & Sociological Perspectives \\
SOCI 211 & (3) & Sociological Inquiry
\end{tabular}

\section*{U2 Required Courses (6 credits)}

Note: Students who are exempted from SOCI 350 must replace it with another 300-level or higher sociology course.
\begin{tabular}{lll} 
SOCI 330 & (3) & Sociological Theory \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

\section*{Complementary Courses (24 credits)}

24 credits of complementary courses selected with the following specifications:
3 credits minimum at the 400 level or higher

9 credits maximum at the 200 level
500-Level Seminars:
Seminars at the 500 level are open to Major concentration students in their final year.
No more than 6 credits of the current problems, independent study and/or reading courses listed below may count toward the Major concentration.
\begin{tabular}{lcl} 
SOCI 341 & (3) & Current Problems in Sociology 02 \\
SOCI 342 & (3) & Independent Study 1 \\
SOCI 343 & (3) & Independent Study 2 \\
SOCI 441 & (3) & Current Problems in Sociology 03 \\
SOCI 442 & (3) & Independent Reading and Research 01 \\
SOCI 443 & (3) & Independent Reading and Research 02
\end{tabular}

\section*{Areas of Sociology}

The Department of Sociology offers courses in four substantive areas of study:
Institutions, Deviance, and Culture
Politics and Social Change
Social Stratification: Class, Ethnicity, and Gender
Work, Organizations, and the Economy
The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.

The 500-level seminars in each substantive area are open to social science Major concentration students in their final year and to Honours students. Minor concentration students may only register for these with the permission of the instructor.

\section*{Institutions, Deviance, and Culture}
\begin{tabular}{|c|c|c|}
\hline SOCI 213 & (3) & Deviance \\
\hline SOCI 225 & (3) & Medicine and Health in Modern Society \\
\hline SOCI 247 & (3) & Family and Modern Society \\
\hline SOCI 250 & (3) & Social Problems \\
\hline SOCI 305 & (3) & Socialization \\
\hline SOCI 309 & (3) & Health and Illness \\
\hline SOCI 310 & (3) & Sociology of Mental Health \\
\hline SOCI 318 & (3) & Sociology of the Media \\
\hline SOCI 322 & (3) & Sociology of Literature \\
\hline SOCI 325 & (3) & Sociology of Science \\
\hline SOCI 388 & (3) & Crime \\
\hline SOCI 430 & (3) & Sociology of Citizenship \\
\hline SOCI 488 & (3) & Punishment and Prisons \\
\hline SOCI 489 & (3) & Gender, Deviance and Social Control \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 503 & (3) & Surveillance in Modern Society \\
\hline SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
\hline SOCI 515 & (3) & Medicine and Society \\
\hline SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
\hline SOCI 535 & (3) & Sociology of the Family \\
\hline SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
\hline SOCI 571 & (3) & Deviance and Social Control \\
\hline
\end{tabular}

SOCI 595
(3)

Immigration Control and The State

\section*{Politics and Social Change}
\begin{tabular}{|c|c|c|}
\hline SOCI 212 & (3) & International Migration \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 245 & (3) & The Sociology of Emotions \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 255 & (3) & Gender and the State \\
\hline SOCI 265 & (3) & War, States and Social Change \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 326 & (3) & Political Sociology 01 \\
\hline SOCI 345 & (3) & Topics in Sociology \\
\hline SOCI 354 & (3) & Dynamics of Industrial Societies \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 400 & (3) & Comparative Migration and Citizenship \\
\hline SOCI 424 & (3) & Networks and Social Structures \\
\hline SOCI 430 & (3) & Sociology of Citizenship \\
\hline SOCI 446 & (3) & Colonialism and Society \\
\hline SOCI 455 & (3) & Post-Socialist Societies \\
\hline SOCI 484 & (3) & Emerging Democratic States \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 507 & (3) & Social Change \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 545 & (3) & Sociology of Population \\
\hline SOCI 550 & (3) & Developing Societies \\
\hline SOCI 595 & (3) & Immigration Control and The State \\
\hline
\end{tabular}

\section*{Social Stratification: Class, Ethnicity, and Gender}
\begin{tabular}{lcl} 
SOCI 227 & \((3)\) & Jews in North America \\
SOCI 230 & \((3)\) & Sociology of Ethnic Relations \\
SOCI 255 & \((3)\) & Gender and the State \\
SOCI 270 & \((3)\) & Sociology of Gender \\
SOCI 321 & \((3)\) & Gender and Work \\
SOCI 333 & \((3)\) & Social Stratification \\
SOCI 335 & \((3)\) & Sociology of Aging and the Life Course \\
SOCI 355 & \((3)\) & Rural Life in a Global Society \\
SOCI 366 & \((3)\) & Neighborhoods and Inequality
\end{tabular}
\begin{tabular}{lcl} 
SOCI 375 & \((3)\) & Suspect Minorities in Canada \\
SOCI 410 & (3) & Urban Ethnography \\
SOCI 415 & (3) & Education and Inequality \\
SOCI 430 & (3) & Sociology of Citizenship \\
SOCI 475 & (3) & Canadian Ethnic Studies Seminar \\
SOCI 510 & (3) & Seminar in Social Stratification \\
SOCI 512 & (3) & Ethnicity and Public Policy \\
SOCI 520 & (3) & Migration and Immigrant Groups \\
SOCI 526 & (3) & Indigenous Women's Health and Healthcare \\
SOCI 530 & (3) & Sex and Gender \\
SOCI 555 & (3) & Comparative Historical Sociology \\
SOCI 595 & (3) & Immigration Control and The State
\end{tabular}

\section*{Work, Organizations, and the Economy}
\begin{tabular}{lll} 
SOCI 235 & (3) & Technology and Society \\
SOCI 304 & (3) & Sociology of the Welfare State \\
SOCI 312 & (3) & Sociology of Work and Industry \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 420 & (3) & Organizations \\
SOCI 470 & (3) & Topics in Economic Sociology
\end{tabular}

\subsection*{3.9.38.6 Bachelor of Arts (B.A.) - Honours Sociology (51 credits)}

The B.A.; Honours in Sociology provides a greater focus on Sociology with substantial breadth and depth. The completion of an Honours program is an asset when applying to graduate or professional schools.

Students may register for the Honours program at the beginning of their second year (U2).
To remain in the Honours program and receive an Honours degree, students must maintain a GPA of 3.50 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 .

\section*{Required Courses ( \(\mathbf{2 1}\) credits)}

Note: Students who are exempted from SOCI 350 must replace it with another 300-level or higher sociology course.
\begin{tabular}{lcl} 
SOCI 210 & \((3)\) & Sociological Perspectives \\
SOCI 211 & \((3)\) & Sociological Inquiry \\
SOCI 330 & \((3)\) & Sociological Theory \\
SOCI 350 & \((3)\) & Statistics in Social Research \\
SOCI 461 & \((3)\) & Quantitative Data Analysis \\
SOCI 477 & \((3)\) & Qualitative Methods in Sociology \\
SOCI 480 & \((3)\) & Honours Project
\end{tabular}

\section*{Complementary Courses (30 credits)}

30 credits of complementary sociology (SOCI) courses selected with the following specifications:
9 credits minimum at the 400 level or higher
9 credits maximum at the 200 level
500-Level Seminars:
Seminars at the 500 level are open to Honours students in their final year.

\section*{Areas of Sociology}

The Department of Sociology offers courses in four substantive areas of study:
Institutions, Deviance, and Culture
Politics and Social Change
Social Stratification: Class, Ethnicity, and Gender
Work, Organizations, and the Economy
The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.
The 500-level seminars in each substantive area are open to social science major concentration students in their final year and to Honours students. Minor concentration students may only register for these with the permission of the instructor.

\section*{Institutions, Deviance, and Culture}
\begin{tabular}{|c|c|c|}
\hline SOCI 213 & (3) & Deviance \\
\hline SOCI 225 & (3) & Medicine and Health in Modern Society \\
\hline SOCI 247 & (3) & Family and Modern Society \\
\hline SOCI 250 & (3) & Social Problems \\
\hline SOCI 305 & (3) & Socialization \\
\hline SOCI 309 & (3) & Health and Illness \\
\hline SOCI 310 & (3) & Sociology of Mental Health \\
\hline SOCI 318 & (3) & Sociology of the Media \\
\hline SOCI 322 & (3) & Sociology of Literature \\
\hline SOCI 325 & (3) & Sociology of Science \\
\hline SOCI 388 & (3) & Crime \\
\hline SOCI 488 & (3) & Punishment and Prisons \\
\hline SOCI 489 & (3) & Gender, Deviance and Social Control \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 503 & (3) & Surveillance in Modern Society \\
\hline SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
\hline SOCI 515 & (3) & Medicine and Society \\
\hline SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
\hline SOCI 535 & (3) & Sociology of the Family \\
\hline SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
\hline SOCI 571 & (3) & Deviance and Social Control \\
\hline SOCI 595 & (3) & Immigration Control and The State \\
\hline
\end{tabular}

\section*{Politics and Social Change}
\begin{tabular}{lll} 
SOCI 212 & \((3)\) & International Migration \\
SOCI 222 & \((3)\) & Urban Sociology \\
SOCI 234 & \((3)\) & Population and Society \\
SOCI 245 & \((3)\) & The Sociology of Emotions \\
SOCI 254 & \((3)\) & Development and Underdevelopment \\
SOCI 255 & (3) & Gender and the State \\
SOCI 265 & \((3)\) & War, States and Social Change \\
SOCI 307 & (3) & Globalization
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline SOCI 326 & (3) & Political Sociology 01 \\
\hline SOCI 345 & (3) & Topics in Sociology \\
\hline SOCI 354 & (3) & Dynamics of Industrial Societies \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 400 & (3) & Comparative Migration and Citizenship \\
\hline SOCI 424 & (3) & Networks and Social Structures \\
\hline SOCI 446 & (3) & Colonialism and Society \\
\hline SOCI 455 & (3) & Post-Socialist Societies \\
\hline SOCI 484 & (3) & Emerging Democratic States \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 507 & (3) & Social Change \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 545 & (3) & Sociology of Population \\
\hline SOCI 550 & (3) & Developing Societies \\
\hline SOCI 588 & (3) & Biosociology/Biodemography \\
\hline SOCI 595 & (3) & Immigration Control and The State \\
\hline
\end{tabular}

\section*{Social Stratification: Class, Ethnicity, and Gender}
\begin{tabular}{|c|c|c|}
\hline SOCI 227 & (3) & Jews in North America \\
\hline SOCI 230 & (3) & Sociology of Ethnic Relations \\
\hline SOCI 255 & (3) & Gender and the State \\
\hline SOCI 270 & (3) & Sociology of Gender \\
\hline SOCI 321 & (3) & Gender and Work \\
\hline SOCI 333 & (3) & Social Stratification \\
\hline SOCI 335 & (3) & Sociology of Aging and the Life Course \\
\hline SOCI 355 & (3) & Rural Life in a Global Society \\
\hline SOCI 366 & (3) & Neighborhoods and Inequality \\
\hline SOCI 375 & (3) & Suspect Minorities in Canada \\
\hline SOCI 410 & (3) & Urban Ethnography \\
\hline SOCI 415 & (3) & Education and Inequality \\
\hline SOCI 475 & (3) & Canadian Ethnic Studies Seminar \\
\hline SOCI 510 & (3) & Seminar in Social Stratification \\
\hline SOCI 512 & (3) & Ethnicity and Public Policy \\
\hline SOCI 520 & (3) & Migration and Immigrant Groups \\
\hline SOCI 526 & (3) & Indigenous Women's Health and Healthcare \\
\hline SOCI 530 & (3) & Sex and Gender \\
\hline SOCI 555 & (3) & Comparative Historical Sociology \\
\hline SOCI 595 & (3) & Immigration Control and The State \\
\hline
\end{tabular}

\section*{Work, Organizations, and the Economy}
\begin{tabular}{lll} 
SOCI 235 & \((3)\) & Technology and Society \\
SOCI 304 & \((3)\) & Sociology of the Welfare State \\
SOCI 312 & \((3)\) & Sociology of Work and Industry \\
SOCI 325 & \((3)\) & Sociology of Science \\
SOCI 420 & (3) & Organizations \\
SOCI 445 & (3) & Readings: Sociological Theory \\
SOCI 470 & (3) & Topics in Economic Sociology
\end{tabular}

\subsection*{3.9.38.7 Bachelor of Arts (B.A.) - Joint Honours Component Sociology (36 credits)}

The Joint Honours Component Sociology provides a greater focus on Sociology with substantial breadth and depth. The completion of a Joint Honours program is an asset when applying to graduate or profession schools.
Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Students may register for Joint Honours at the beginning of their second year (U2).
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.50 in their program courses, and according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses (18 credits)}

Note: Students who are exempted from SOCI 350 must replace it with another 300-level or higher sociology course.
\begin{tabular}{lcl} 
SOCI 210 & \((3)\) & Sociological Perspectives \\
SOCI 211 & \((3)\) & Sociological Inquiry \\
SOCI 330 & \((3)\) & Sociological Theory \\
SOCI 350 & \((3)\) & Statistics in Social Research \\
SOCI 461 & \((3)\) & Quantitative Data Analysis \\
SOCI 480 & \((3)\) & Honours Project
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits of complementary sociology (SOCI) courses approved by the Departmental Honours Adviser.
500-Level Seminars:
Seminars at the 500 level are open to Honours/Joint Honours students in their final year.

\section*{Areas of Sociology}

The Department of Sociology offers courses in four substantive areas of study:
Institutions, Deviance, and Culture
Politics and Social Change
Social Stratification: Class, Ethnicity, and Gender
Work, Organizations, and the Economy
The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.

The 500-level seminars in each substantive area are open to social science major concentration students in their final year and to Honours/Joint Honours students. Minor concentration students may only register for these with the permission of the instructor.

\section*{Institutions, Deviance, and Culture}
\begin{tabular}{lll} 
SOCI 213 & (3) & Deviance \\
SOCI 225 & (3) & Medicine and Health in Modern Society
\end{tabular}
\begin{tabular}{lll} 
SOCI 247 & \((3)\) & Family and Modern Society \\
SOCI 250 & \((3)\) & Social Problems \\
SOCI 305 & \((3)\) & Socialization \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI 310 & (3) & Sociology of Mental Health \\
SOCI 318 & (3) & Sociology of the Media \\
SOCI 322 & (3) & Sociology of Literature \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 388 & (3) & Crime \\
SOCI 488 & (3) & Punishment and Prisons \\
SOCI 489 & (3) & Social Problems and Conflicts Deviance and Social Control \\
SOCI 495 & (3) & Surveillance in Modern Society \\
SOCI 503 & (3) & Medical Sociology and Social Psychiatry \\
SOCI 508 & (3) & Medicine and Society \\
SOCI 515 & (3) & Health Care Systems in Comparative Perspective \\
SOCI 525 & (3) & Sociology of the Family \\
SOCI 535 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
SOCI 538 & (3) & Immigration Control and The State \\
SOCI 571 & SOCI 595 &
\end{tabular}

\section*{Politics and Social Change}
\begin{tabular}{|c|c|c|}
\hline SOCI 212 & (3) & International Migration \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 245 & (3) & The Sociology of Emotions \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 255 & (3) & Gender and the State \\
\hline SOCI 265 & (3) & War, States and Social Change \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 326 & (3) & Political Sociology 01 \\
\hline SOCI 345 & (3) & Topics in Sociology \\
\hline SOCI 354 & (3) & Dynamics of Industrial Societies \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 400 & (3) & Comparative Migration and Citizenship \\
\hline SOCI 424 & (3) & Networks and Social Structures \\
\hline SOCI 446 & (3) & Colonialism and Society \\
\hline SOCI 455 & (3) & Post-Socialist Societies \\
\hline SOCI 484 & (3) & Emerging Democratic States \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
SOCI 495 & \((3)\) & Social Problems and Conflicts \\
SOCI 507 & \((3)\) & Social Change \\
SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
SOCI 519 & \((3)\) & Gender and Globalization \\
SOCI 545 & (3) & Sociology of Population \\
SOCI 550 & (3) & Developing Societies \\
SOCI 595 & \((3)\) & Immigration Control and The State
\end{tabular}

\section*{Social Stratification: Class, Ethnicity, and Gender}
\begin{tabular}{lll} 
SOCI 227 & \((3)\) & Jews in North America \\
SOCI 230 & \((3)\) & Sociology of Ethnic Relations \\
SOCI 255 & (3) & Gender and the State \\
SOCI 270 & (3) & Sociology of Gender \\
SOCI 321 & (3) & Gender and Work \\
SOCI 333 & (3) & Social Stratification \\
SOCI 335 & (3) & Sociology of Aging and the Life Course \\
SOCI 355 & (3) & Rural Life in a Global Society \\
SOCI 366 & (3) & Neighborhoods and Inequality \\
SOCI 375 & (3) & Suspect Minorities in Canada \\
SOCI 415 & (3) & Education and Inequality \\
SOCI 475 & (3) & Canadian Ethnic Studies Seminar \\
SOCI 510 & (3) & Seminar in Social Stratification \\
SOCI 512 & (3) & Ethnicity and Public Policy \\
SOCI 520 & (3) & Migration and Immigrant Groups \\
SOCI 526 & (3) & Indigenous Women's Health and Healthcare \\
SOCI 530 & (3) & Comparative Historical Sociology \\
SOCI 555 & (3) & Immigration Control and The State \\
SOCI 595 & &
\end{tabular}

\section*{Work, Organizations, and the Economy}
\begin{tabular}{lll} 
SOCI 235 & (3) & Technology and Society \\
SOCI 304 & (3) & Sociology of the Welfare State \\
SOCI 312 & (3) & Sociology of Work and Industry \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 420 & (3) & Organizations \\
SOCI 470 & (3) & Topics in Economic Sociology
\end{tabular}

\subsection*{4.1 About the Faculties}

To learn more about the Faculty of Arts, see Faculty of Arts > The Faculty > section 3.1: About the Faculty of Arts. To learn more about the Faculty of Science, see Faculty of Science > The Faculty > section 11.1: About the Faculty of Science.

\subsection*{4.2 Programs and Teaching in Arts and in Science}

Programs and teaching in Arts are described in Faculty of Arts \(>\) The Faculty >section 3.2: Programs and Teaching in Arts. Those in Science are described in Faculty of Science > The Faculty > section 11.2: Programs and Teaching in Science. The two faculties jointly offer the B.A. \& Sc., so students pursuing that degree are at home in both Arts and Science.

\subsection*{4.3 About the Bachelor of Arts and Science (Undergraduate)}

In September 2005, the Faculties of Arts and of Science, McGill's two largest faculties, introduced the Bachelor of Arts and Science degree (B.A.Sc.).
The programs in the B.A. \& Sc. are rooted in both Arts and Science and carry roughly equal course weight in these faculties. The B.A.Sc. is an interdisciplinary degree intended for students who want to pursue simultaneously a program offered by the Faculty of Arts and one offered by the Faculty of Science, or a program offered jointly by both faculties. In the case of some disciplines, such as Sustainability or Cognitive Science, this duality is inherent to the discipline. In other cases, the student may choose to join equal measures of an arts discipline and science discipline into a coherent interdisciplinary package. Examples might be Anthropology and Physical Geography, or Philosophy and Mathematics. The central objective of the B.A. \& Sc. is to provide students with a broad education that includes study of disciplines in both faculties. This degree gives students a unique opportunity to achieve a diverse knowledge base, to gain competence in different methods of scholarship, to hone intellectual flexibility, and to integrate material across disciplines.
Students who earn a B.A.Sc. degree can prepare themselves for a wide range of career paths and further studies by selecting the right programs. The diverse intellectual skills they acquire make them highly desirable candidates for employers, professional programs in fields like business, law, and medicine, and graduate programs in both traditional and interdisciplinary departments.
This is the right degree for students who are firmly committed to such a disciplinary duality. By the same token, it is the wrong choice for students who are undecided between arts or science disciplines. Because the B.A.Sc. is intended for students with well-defined interdisciplinary interests, it is not meant as a "compromise" between a B.A. and a B.Sc. degree. If students are more interested in arts, but would like to study some science, you they can do so within the B.A. degree. Similarly, if students are more interested in science, but would like to study some arts, they can do so within the B.A.Sc. degree.

\subsection*{4.3.1 Location}

Bachelor of Arts \& Science
Dawson Hall
853 Sherbrooke Street West
Montreal QC H3A 0G5
Telephone: 514-398-7179
Website: mcgill.ca/basc
The Science Office for Undergraduate Student Advising (SOUSA) is responsible for advising students pursuing the B.A.Sc. degree.

\section*{SOUSA}

Dawson Hall
853 Sherbrooke Street West, Room 405
Telephone: 514-398-5442
Website: mcgill.ca/science/undergraduate/advice/sousa

\subsection*{4.3.2 Administrative Officers}

For a listing of administrative officers in the Faculty of Arts, refer to Faculty of Arts \(>\) Undergraduate \(>\) About Arts (Undergraduate) \(>\) section 3.3.2: Administrative Officers and for those in the Faculty of Science, refer to Faculty of Science > Undergraduate \(>\) About the Faculty of Science (Undergraduate) >: Administrative Officers. Note that the Director of Advising Services, Science, is responsible for students pursuing a B.A.Sc. degree.

\section*{B.A. \& Sc. Program Administration Committee (PAC)}
\begin{tabular}{ll} 
Axel Hundemer & Associate Dean (Academic), Faculty of Science \\
Peter Barry & Chief Advisor, Science Office for Undergraduate Student Advising \\
Andrew Piper & Director B.A. \& Sc. Program \\
Tania Raggo & Student Advisor/Administrator \\
Michael Fronda & Chair, Associate Dean (Academic Administration and Oversight), Faculty of Arts \\
Alanna Watt & Biology \\
Graham MacDonald & Geography
\end{tabular}

\section*{Student Representatives}

Shirley Xu
Lisa Pennel

Major Concentration in Biology, Major Concentration in Economics
Honours in Cognitive Science, Minor Concentration in Psychology

\subsection*{4.3.3 Science Office for Undergraduate Student Advising (SOUSA)}

The Science Office for Undergraduate Student Advising (SOUSA) provides ongoing advice and guidance on academic issues related to programs, degree requirements, registration, course change, withdrawal, deferred exams, supplemental exams, Academic Standing, interfaculty transfer, year or term away, transfer credits, second programs, second degrees, and graduation.

Every student pursuing the B.A. \& Sc. degree is assigned to Tania Raggo, B.A. \& Sc. Student Advisor. You can contact her directly by email tania.raggo@mcgill.ca.
The B.A. \& Sc. advisor provides assistance with degree planning and is a valuable referral source if you are not sure where to address your question. She also offers help managing academic situations during periods of personal, financial, or medical problems, by working with you to identify various possibilities and strategies for making informed decisions.

Special requests can be made in writing to the Associate Dean (Student Affairs) Science, who is responsible for students pursuing a B.A. \& Sc. degree.
The Committee on Student Standing (CSS) of the Faculty of Science will consider appeals of the Associate Dean (Student Affairs), Science's decisions. For information about CSS, see the assistant for Associate Dean (Student Affairs) Science.
For more information, refer to the SOUSA website: mcgill.ca/science/undergraduate/advice/sousa.

\subsection*{4.4 Degree Admission Requirements}

For information about admission requirements to the B.A. \& Sc., refer to the Undergraduate Admissions Guide, found at mcgill.ca/undergraduate-admissions/apply.

For information about interfaculty transfers, refer to University Regulations and Resources > Undergraduate > Registration > section 1.3.6: Interfaculty Transfer, as well as to the relevant information posted on the Science Office for Undergraduate Student Advising (SOUSA) website at mcgill.ca/science/undergraduate/handbook\#degree-transfers.

\subsection*{4.5 Degree Requirements}

Each student pursuing a B.A. \& Sc. degree must be aware of the regulations as stated in this section of this publication, on the McGill website, and on the Science Office for Undergraduate Student Advising (SOUSA) website.

While departmental and faculty advisors and staff are always available to give advice and guidance, the ultimate responsibility for completeness and correctness of course selection and registration, for compliance with, and completion of, program and degree requirements, and for the observance of regulations and deadlines rests with you. It is the student's responsibility to seek guidance from the SOUSA if in any doubt; misunderstanding or misapprehension will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.

To be eligible for a B.A. \& Sc. degree, students must fulfil all Faculty degree and program requirements as indicated in the following sections:
- section 4.5.1: Minimum Credit Requirement
- section 4.5.2: Residency Requirement
- University Regulations and Resources > Undergraduate \(>\) Student Records \(>\) section 1.5.3: Grading and Grade Point Averages (GPA)
- section 4.5.3: Time and Credit Limit for Completion of the Degree
- section 4.6: Course Requirements

\subsection*{4.5.1 Minimum Credit Requirement}

You must complete the minimum credit requirement for the degree as specified in your letter of admission.
Students are normally admitted to a four-year degree requiring the completion of 120 credits, but Advanced Standing of up to 30 credits may be granted if you obtain satisfactory results in the Diploma of Collegial Studies, International Baccalaureate, French Baccalaureate, Advanced Levels, and Advanced Placement tests.

If you are readmitted after interrupting your studies for a period of five consecutive years or more, you may be required to complete a minimum of 60 credits and satisfy the requirements of a program. In this case, a new GPA will be calculated. The Associate Dean, Student Affairs, Science, in consultation with the appropriate department, may approve a lower minimum for students who had completed 60 credits or more before interrupting their studies.
If you are readmitted after a period of absence, you are normally subject to the program and degree requirements in effect at the time of readmission.

\subsection*{4.5.2 Residency Requirement}

To obtain a B.A. \& Sc., you must satisfy the following residency requirements: a minimum of 60 credits of courses used to satisfy the B.A. \& Sc. requirements must be taken and passed at McGill, exclusive of any courses completed as part of the math and science requirements of the B.A. \& Sc. Freshman/Foundation Year program. At least two-thirds of all departmental program requirements (Multi-track, Honours, Interfaculty) must normally be completed at McGill, not including courses completed in a prior McGill degree. Exceptionally, students in major concentrations or interfaculty or honours programs who pursue an approved Study Away or Exchange program may, with prior approval from both their department and the Associate Dean, Student Affairs, Faculty of Science, be exempted from the two-thirds rule. In addition, some departments may require that their students complete specific components of their program at McGill.

\subsection*{4.5.3 Time and Credit Limit for Completion of the Degree}

If a student needs 96 or fewer credits to complete their degree requirements, that student is expected to complete their degree in no more than eight terms after their initial registration. If a student is in the Freshman/Foundation Year program, they become subject to these regulations one year after the initial registration. If a student needs or wants to exceed this time limit, they must receive permission from the Associate Dean, Student Affairs, Science, to continue their studies.

If a student is registered in the B.A. \& Sc., they are expected to complete the requirements of their program and degree within 120 credits. Students will receive credit for all courses (subject to degree regulations) taken up to and including the semester in which they obtain 120 credits. If a student wants to remain at McGill beyond that semester, they must also seek permission of the Associate Dean, Student Affairs, Science. Permission for exceeding the time and/or credit limits will normally be granted only for valid academic reasons, such as a change of program (subject to departmental approval) and part-time status. If permission is granted, that student will receive credit only for required and complementary courses necessary to complete program requirements.

\subsection*{4.5.4 Departmental Programs}

If students are pursuing a B.A. \& Sc., other than those registered in the Freshman/Foundation Year program, they are required to have an approved program (multi-track, joint honours, interfaculty, honours), and to select their courses in each term with a view to timely completion of your degree and program requirements. Students must complete one of the program streams described below.

\subsection*{4.5.4.1 Multi-Track}

To recognize the diversity of student backgrounds and interests, and the multiple routes to understanding provided by a modern university, the Faculties of Arts and of Science offer a 90-credit multi-track program that includes a major concentration in one faculty complemented by a major concentration in the other faculty (see below):

\section*{Option}
- Arts Major Concentration (36 credits) + Science Major Concentration (36-38 credits) (see section 4.10: Overview of Programs Offered for a list of programs open to students in the B.A. \& Sc.)
- The required integrative course BASC 201 (3 credits)

\section*{Regulations}
- Programs offered by Computer Science, Mathematics and Statistics, and Psychology are considered Science programs for the purpose of the B.A. \& Sc. Exceptionally, you may take a Geography program in both Arts and Science.
- Students will include within the 36 credits of their major concentrations any university-level ( 200 or above) prerequisites to required courses within their programs.
- No course may fulfil the requirements for more than one program.

\section*{Definitions}
- Units: academic departments or administrative equivalents

\section*{Definitions}
- Programs: lists of required and complementary courses (including university-level prerequisites for required courses) prepared and maintained by units
- Major Concentration: a program of 36-38 credits taken from a unit's course offerings

\subsection*{4.5.4.2 Joint Honours Program}

If students want to study at the honours level in two disciplines, they can combine a joint honours program component from an Arts discipline with one from a Science discipline; see section 4.10.4: Joint Honours Programs for a list of available programs. Each joint honours component consists of a maximum of 36 required and complementary credits (not including program prerequisites). In cases where a minimum of 24 credits are in courses normally restricted to honours students, the total of required and complementary credits may be as few as 30 .
To choose the joint honours option, students must meet the GPA/cGPA requirements set out in University Regulations and Resources > Undergraduate > Graduation > Graduation Honours > section 1.9.3.4: Honours and First-Class Honours for Faculties of Arts and Science (including B.A. \& Sc.).

\section*{Option}
- Arts Joint Honours (36 credits) + Science Joint Honours (36 credits). (see section 4.10: Overview of Programs Offered for a list of programs open to students in the B. A. \& Sc.)
- The required integrative course BASC 201 (3 credits)
- 13-15 credits of electives

\section*{Regulations}
- Programs offered by Mathematics and Statistics, and Psychology are considered Science programs for the purpose of the B.A. \& Sc.
- Students will include within the 36 credits of their major concentrations any university-level ( 200 or above) prerequisites to required courses within their programs.
- No course may fulfil the requirements for more than one program.

\subsection*{4.5.4.3 Interfaculty Program}

An interfaculty program is an approved selection of courses constituting a concentration in an intellectually coherent and interfaculty field of studies. These courses must include approved selections from the Faculties of Arts and of Science and possibly other faculties. See section 4.10.5: Interfaculty Programs for a list of approved programs. Students in the B.A. \& Sc. who complete an approved interfaculty program must also complete an approved minor concentration or a minor in the Faculties of Arts or of Science. Students must complete at least 21 credits in the Faculty of Arts and at least 21 credits in the Faculty of Science as part of the interfaculty program and the minor concentration or minor program.

\section*{Option}
- Interfaculty Program (54 credits) + Minor or Minor Concentration (18 to 24 credits) (see section 4.10: Overview of Programs Offered for a list of programs open to students in the B.A. \& Sc.)
- The integrative course BASC 201 ( 3 credits) is recommended
- 12-18 credits of electives

\section*{Regulations}
- Students must complete at least 21 credits in the Faculty of Arts and at least 21 credits in the Faculty of Science as part of the interfaculty program and minor concentration or minor program
- No course may fulfil the requirements for more than one program

\subsection*{4.5.4.4 Honours Program}

Honours programs demand a high degree of specialization and require students to satisfy specific departmental and faculty honours requirements while maintaining good Academic Standing. They are designed to prepare students for graduate study. Students in the B.A. \& Sc. who complete an approved honours program must also complete an approved minor concentration or a minor in the Faculties of Arts or of Science. Students must complete at least 21 credits in the Faculty of Arts and at least 21 credits in the Faculty of Science as part of the honours program, minor concentration, or minor program. See section 4.10.3: Honours Programs for a list of available programs.

\section*{Option}
- Honours Program ( 60 credits) + Minor or Minor Concentration (18 to 24 credits) (see section 4.10: Overview of Programs Offered for a list of programs open to students in the B.A. \& Sc.)
- The integrative course BASC 201 ( 3 credits) is recommended
- Minimum cGPA at graduation of 3.00 (minimum cGPA at graduation of 3.50 for first-class honours)
- Some departments have additional requirements which must be met before students are recommended for honours or first-class honours
- 6-12 credits of electives

\section*{Regulations}
- Students must complete at least 21 credits in the Faculty of Arts and at least 21 credits in the Faculty of Science as part of the interfaculty program and minor concentration or minor program
- No course may fulfil the requirements for more than one program

To choose the honours option, students must meet the GPA/cGPA requirements set out in University Regulations and Resources > Undergraduate \(>\) Graduation > Graduation Honours > section 1.9.3.4: Honours and First-Class Honours for Faculties of Arts and Science (including B.A. \& Sc.).

\subsection*{4.6 Course Requirements}

All required and complementary courses used to fulfil program requirements, including the Freshman/Foundation Year program, must be completed with a grade of C or better. If you fail to obtain a satisfactory grade in a required course, you must either pass the supplemental examination in the course or do additional work for a supplemental grade, if these options are available, or repeat the course. Course substitution will be allowed only in special cases; students should consult their academic advisor by phone number or email found atmcgill.ca/science/undergraduate/advice/sousa.
Normally, you are permitted to repeat a failed course only once. Failure is considered to be a grade of less than C or the administrative failures of J and KF. If a required course is failed a second time, you must appeal to the Associate Dean, Student Affairs, Science, for permission to take the course a third time. If permission is denied by the Associate Dean and/or by the Committee on Student Standing of the Faculty of Science, on appeal, you must withdraw from the program. If the failed course is a complementary course required by the program, you may choose to replace it with another appropriate complementary course. If you choose to substitute another complementary course for a complementary course in which a D was received, credit for the first course will still be given, but as an elective. If you repeat a required course in which a grade D was received, credit will be given only once.

In addition, if you are in the multi-track program or the joint honours program, you must complete the integrative course BASC 201 ( 3 credits).
For a complete list of programs available to B.A. \& Sc. students, and full details of the course requirements for all programs as well as the locations of departmental advisory offices, program directors, and telephone numbers for further information, see section 4.10: Overview of Programs Offered.

\subsection*{4.6.1 Course Overlap}

You will not receive additional credit towards your degree for any course that overlaps in content with a course for which you have already received credit at McGill, CEGEP, at another university, or Advanced Placement exams, Advanced Level results, International Baccalaureate Diploma, or French Baccalaureate. It is your responsibility to consult with a faculty advisor in Arts Academic Advising (OASIS), the Science Office for Undergraduate Student Advising (SOUSA), or the department offering the course as to whether or not credit can be obtained and to be aware of exclusion clauses specified in the course description in this publication. Please refer to the following website for specific information about Advanced Standing credits and McGill course exemptions: mcgill.ca/transfercredit.

Sometimes, the same course is offered by two different departments. Such courses are called "double-prefix" courses. When such courses are offered simultaneously, you should take the course offered by the department in which you are obtaining your degree. For example, in the case of double-prefix courses CHEM XYZ and PHYS XYZ, Chemistry students take CHEM XYZ and the Physics students take PHYS XYZ. If a double-prefix course is offered by different departments in alternate years, you may take whichever course best fits your schedule.

Note for Arts students: Credit for computer courses offered by the School of Computer Science is governed by rules specified in each individual course description.

Note for Science, and Bachelor of Arts and Science students: Credit for statistics courses offered by faculties other than Arts and Science requires the permission of the Associate Dean (Student Affairs), Science, except for students in the B.Sc. Major in Environment, who may take required statistics courses in the Faculty of Agricultural and Environmental Sciences necessary to satisfy their program requirements. Credit for computer courses offered by faculties other than Science requires the permission of the Associate Dean (Student Affairs) Science, and will be granted only under exceptional circumstances.

Credit for statistics courses for Arts, Science, and Bachelor of Arts and Science students will be given with the following stipulations:
- Credit will be given for only one of the following introductory statistics courses: AEMA 310, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, EDPE 375, GEOG 202, MATH 203, MGCR 271, MGCR 273, POTH 204, SOCI 350.
- Students who have already received credit for PSYC 204 will not receive credit for any of the following: AEMA 310, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, EDPE 375, GEOG 202, MATH 203, MGCR 271, MGCR 273, POTH 204, SOCI 350.
- Credit will be given for only one of the following intermediate statistics courses: AEMA 411, ECON 227D1/D2, ECON 257D1/D2, GEOG 351, MATH 204, PSYC 305, SOCI 461, with the exception that you may receive credit for both PSYC 305 and ECON 227D1/D2 or ECON 257D1/D2.
- Students who have already received credit for MATH 324 or MATH 357 will not receive credit for any of the following: AEMA 310, AEMA 411, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, GEOG 202, GEOG 351, MATH 203, MATH 204, MGCR 271, MGCR 273, PSYC 204, PSYC 305, SOCI 350.
- For 500-level statistics courses not listed above, students must consult a program/department advisor to ensure that no significant overlap exists. Where such overlap exists with a course for which the student has already received credit, credit for the 500 -level course will not be allowed.

\subsection*{4.6.2 Courses Outside the Faculties of Arts and of Science}

The following regulations apply to students in the B.A. \& Sc. who want to take courses outside the Faculties of Arts and of Science:
- Regardless of your minimum credit requirement toward your B.A. \& Sc., you are allowed a maximum of 12 credits in ELECTIVE and/or COMPLEMENTARY courses taken in faculties other than the Faculties of Arts and of Science.
- Students in certain designated programs that include a number of REQUIRED and COMPLEMENTARY courses in other faculties are permitted a maximum of 30 credits outside the Faculties of Arts and of Science. These programs are the Interfaculty and Honours programs in Environment, the Minor concentration in Environment, the Interfaculty and Honours programs in Sustainability, Science and Society, and the Major concentration in Geography (Urban Studies).
- Any courses taught at McGill University may be used toward the maximum allowed, except for courses taught by the School of Continuing Studies, for which you receive credits only in Continuing Studies (see the SOUSA website for a list of approved courses: mcgill.ca/science/undergraduate/handbook\#basc-continuing).
- For the purpose of this policy, courses taught in other faculties and specifically listed in Faculty of Arts > Undergraduate or Faculty of Science > Undergraduate are considered as courses taught in the Faculties of Arts and of Science.
- The maximum number of credits allowed will be strictly enforced.

\subsection*{4.6.3 Distance Education Courses}
- A maximum of 6 credits of courses taught through distance education may be used as electives toward the B.A. \& Sc. degree at McGill.
- Courses taught through distance education from institutions other than McGill will be approved as transfer credits under the following conditions:
- the course is given by a government-accredited, degree-granting institution acceptable to McGill;
- the course counts for credit toward degrees granted at the institution giving the course;
- prior approval for the course is obtained from the Science Office for Undergraduate Student Advising (SOUSA).
- The combined total of regular course credits and distance education course credits may not exceed the permitted maximum number of credits per term according to the regulations for the B.A. \& Sc. (see University Regulations and Resources > Undergraduate >Registration > section 1.3.2.4: Course Load).
- Courses taught through distance education may not be used to complete program requirements, except on an individual basis when serious, documented circumstances warrant it. In such cases, prior approval must be obtained from your program advisor and the Associate Dean (Student Affair), Science.

\subsection*{4.6.4 Courses in English as a Second Language (ESL)}

ESL courses are only open to students whose primary language is not English and who have studied for fewer than five years in English-language secondary institutions. As a student in the B.A. \& Sc., you may take a maximum of 12 credits-including academic writing courses for non-anglophones-from the list of ESL courses published at the McGill Writing Centre at mcgill.ca/mwc/courses/undergraduate.

\subsection*{4.6.5 Registration for First-Year Seminars}

Registration for First-Year Seminars is limited to students in their first year of study at McGill, i.e., newly admitted students in U0 or U1. These courses are designed to provide a closer interaction with professors and better working relations with peers than is available in large introductory courses. These seminars endeavour to teach the latest scholarly developments and expose participants to advanced research methods. Registration is on a first-come, first-served basis. The maximum number of students in any seminar is 25 , although some are limited to even fewer than that.

Students may take only one First-Year Seminar during the first year at McGill. If students register for more than one, they will be obliged to withdraw from all but one of them.

A list of First-Year Seminars is available at Faculty of Arts > Undergraduate \(>\) Faculty of Arts Degree Requirements \(>\) Course Requirements \(>\) section 3.5.5.9: First-Year Seminar Courses and Faculty of Science > Undergraduate \(>\) Faculty Degree Requirements \(>\) Course Requirements \(>\) section 11.5.5.5: First-Year Seminars: Registration.

\section*{Advising}

If you need 96 or fewer credits to complete your degree requirements, you must consult an academic advisor in your proposed department of study to obtain advice and approval of your course selection (please see section 4.5.4: Departmental Programs). To facilitate program planning, you must present your transcript(s) and letter of admission. If you have not fulfilled the B.A. \& Sc. Freshman/Foundation Year program requirements, you should also seek advice from an advisor in the Science Office for Undergraduate Student Advising (SOUSA). For a detailed description of advising and registration procedures, refer to University Regulations and Resources > Undergraduate > section 1.11: Undergraduate Advising, section 1.3: Registration, and to the website for newly admitted undergraduate students, as well as the SOUSA website, and finally your department's website.
If you need \(97-120\) credits to complete your degree requirements, you will normally be registered in a Freshman/Foundation Year program until you complete your first year. You must consult an advisor in the Science Office for Undergraduate Student Advising (SOUSA) to obtain advice and approval of your course selection. For a detailed description of advising and registration procedures, you should refer to mcgill.ca/accepted, and to the information on the SOUSA website.
Advising for all returning students takes place in March for the upcoming academic year. For more information, refer to mcgill.ca/science/undergraduate/academic-advising.

\subsection*{4.7.1 Choosing a B.A. \& Sc. Program}

The B.A. \& Sc. program is intended for students with well-defined interdisciplinary interests. There are several options for the main program, all of which specify \(75-80\) of the 90 credits, leaving only \(10-15\) credits for electives. Since there are relatively few electives, students entering a program in the B.A.Sc. degree should have a clear idea of their objectives, goals, and intended areas of study, so that they can plan their curriculum carefully.
It should be noted that there also exists considerable flexibility within the Bachelor of Arts and Bachelor of Science programs. If you are more interested in Arts, but would like to study some Science, you can do so within the B.A. degree. Similarly, if you are more interested in Science but would like to study some Arts, you can do so within the B.Sc. degree. For example, B.Sc. students may complete minor concentrations in Arts and vice versa.

There are four ways to complete programs in the B.A.Sc. degree:

\section*{Multi-Track System}

The multi-track system is intended for students who want a program that includes significant components from both Arts and from Science.
You complete 36 credits of Arts courses, 36-38 credits of Science courses, and the required integrative course BASC 201 ( 3 credits). You can combine an Arts major concentration with a Science major concentration ( \(36-38\) credits each). Additional guidelines for the multi-track system can be found in section 4.5.4: Departmental Programs. You will find the program descriptions for the major concentrations in Science, which are unique to the B.A. \& Sc. within this section of this publication.
Descriptions of programs offered in Arts are located in Faculty of Arts > Undergraduate.

\section*{Interfaculty Programs}

Interfaculty programs are interdisciplinary in nature. There are currently three such programs: Environment; Cognitive Science; and Sustainability, Science and Society. In these programs, you complete 54 credits of the interfaculty program, a minor of 18 credits, and the recommended integrative course BASC 201 ( 3 credits). You must complete at least 21 credits in the Faculty of Arts and at least 21 credits in the Faculty of Science as part of your interfaculty program and your minor concentration or program.

\section*{Environment}

The growth of technology, globalization of economies, and rapid increases in population and per capita consumption have all had dramatic environmental impacts. The interfaculty program in Environment for the Bachelor of Arts and Science is designed to provide students with a broad "Liberal Arts/Science" training. In combination with careful mentoring, this program offers a great degree of flexibility, allowing students to develop the skills and knowledge base required to address the myriad of environmental problems that exist today. Further information about Environment programs and academic advising can be found at mcgill.ca/environment.

\section*{Cognitive Science}

The interfaculty program in Cognitive Science offered within the B.A.Sc. degree is the only major program currently offered at McGill for students interested in this discipline. The requirements encourage you to choose courses in two of the five subject areas in Cognitive Science (Computer Science, Linguistics, Neuroscience, Philosophy, Psychology) as the focus of your program. In addition, if you are interested in research in this field, you may include up to 12 credits of research courses within your program. Further information can be found at mcgill.ca/cogsci.

\section*{Sustainability, Science, and Society}

Food security, access to clean water, poverty, climate change, biodiversity loss, sustainable energy production-a long list of challenges face human societies in the 21 st century. In the face of these multiple challenges, the grand imperative of the 21 st century is Sustainable Well-being-in other words, how can we provide for a world population that could stabilize at \(9-10\) billion, while also maintaining the Earth's life support systems. Find out more about this interdisciplinary program at mcgill.ca/sss.

\section*{Joint Honours}

The Joint Honours option is similar to the multi-track system except that you complete two joint honours components, one in Arts and one in Science Currently, the choice of Science component is restricted to either Math or Psychology, and a required integrative course BASC 201 (3 credits). However, there is a great range of choices for the Arts component.

To choose the Joint Honours option, you must meet the GPA/CGPA requirements set out in University Regulations and Resources \(>\) Undergraduate \(>\) Graduation > Graduation Honours > section 1.9.3.4: Honours and First-Class Honours for Faculties of Arts and Science (including B.A. \& Sc.).

\section*{Honours}

There are three B.A. \& Sc. honours programs. The Honours programs in Environment, in Cognitive Science, and in Sustainability, Science, and Society are similar to their relevant interfaculty programs, but each has additional GPA requirements and an additional required 6-credit research course. If you are completing an honours program, you must also complete a minor concentration or program, and the recommended integrative course BASC 201 ( 3 credits). You must complete at least 21 credits in the Faculty of Arts and at least 21 credits in the Faculty of Science as part of your honours program and your minor concentration or program.

To choose the honours option, you must meet the GPA/CGPA requirements set out in University Regulations and Resources > Undergraduate > Graduation > Graduation Honours > section 1.9.3.4: Honours and First-Class Honours for Faculties of Arts and Science (including B.A. \& Sc.).

\subsection*{4.7.2 Preparation for Graduate School}

Any choice of undergraduate degree and program constrains options for graduate school. The B.A. \& Sc. provides good preparation for graduate degrees in integrated disciplines such as Cognitive or Environmental Science as well as in the Sustainability, Science and Society program. Depending on the Arts or Science specific program you want to enter in graduate school, the B.A. \& Sc. may or may not be adequate preparation. If you intend to pursue an arts or science-specific program at the graduate level, you should consult academic advisors in that discipline at McGill and at universities where you intend to apply in order to find out whether the B.A. \& Sc. will prepare you adequately. If you are considering continuing on in a specific science graduate program, you should examine the difference between the preparation provided by the 36 -credit major concentrations in the B.A. \& Sc. program versus the significantly more specialized major and honours programs offered in the B.Sc. programs.

\subsection*{4.8 Freshman/Foundation Year Interest Groups}

Freshman/Foundation Year Interest Groups (FIGs) are groups of approximately 25 newly-admitted (U0) students in the B.Sc. or B.A. \& Sc., led by a Faculty of Science staff member and an upper-year undergraduate student. They meet once every two weeks in the Fall semester to discuss a wide range of topics, such as science in the news, program choices, undergraduate research opportunities, and various aspects of life in Montreal. The purpose of a FIG is to ease the transition to McGill and Montreal and to provide you an opportunity to interact with a professor and with other U0 students in a small group. FIGs carry no credit and there is no charge. For more information and to see how to register, refer to
mcgill.ca/science/undergraduate/accepted/checklist/firstyear/foundation\#figs.

\section*{4.9}

\section*{Examinations}

You should see University Regulations and Resources > Undergraduate > section 1.6: Examinations: General Information for information about final examinations and deferred examinations.

The exam schedules are posted on the McGill website, mcgill.ca/exams, normally one month after the start of classes for the tentative Examination Schedule, and two months after the start of classes for the final Examination Schedule.

Students are warned not to make travel arrangements to leave Montreal prior to the scheduled end of any examination period.

\subsection*{4.10 Overview of Programs Offered}
- section 4.10.1: Minor Concentrations or Minors
- section 4.10.2: Major Concentrations
- section 4.10.3: Honours Programs
- section 4.10.4: Joint Honours Programs
- section 4.10.5: Interfaculty Programs

\subsection*{4.10.1 Minor Concentrations or Minors}

\subsection*{4.10.1.1 Faculty of Arts}

The Arts minor concentrations available to B.A. \& Sc. students are listed here. Since the B.A.Sc. degree requires a certain number of credits in the arts and in the sciences, there are special requirements for B.A. \& Sc. students. To be counted as an arts minor or minor concentration, the program must include at least 15 credits of arts courses. Similarly, to be counted as a science minor or minor concentration, the program must include at least 15 credits of science courses.

For example, a student completing the 18-credit African Studies Minor Concentration in Arts must complete at least 15 of those credits in arts courses and at most 3 credits in science courses. As another example, a student completing a 24 -credit Science Minor in Interdisciplinary Life Sciences must complete at least 15 credits in science courses and at most 9 credits in arts courses.

\section*{Faculty of Arts Minor Concentrations or Minors}

African Studies - section 4.11.35.1: Bachelor of Arts (B.A.) - Minor Concentration African Studies (18 credits)
Anthropology - section 4.11.3.1: Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)
Art History - section 4.11.4.1: Bachelor of Arts (B.A.) - Minor Concentration Art History (18 credits)
Canadian Studies - section 3.9.19.6: Bachelor of Arts (B.A.) - Minor Concentration Canadian Studies (18 credits)
Classics - section 4.11.18.1: Bachelor of Arts (B.A.) - Minor Concentration Classics (18 credits)
Communication Studies - section 4.11.4.2: Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)
East Asian Language and Literature - section 4.11.11.2: Bachelor of Arts (B.A.) - Minor Concentration East Asian Language and Literature (18 credits)
East Asian Cultural Studies - section 4.11.11.1: Bachelor of Arts (B.A.) - Minor Concentration East Asian Cultural Studies (18 credits)
East Asian Studies, Supplementary - section 4.11.11.3: Bachelor of Arts (B.A.) - Supplementary Minor Concentration East Asian Language (18 credits)
Economics - section 4.11.12.1: Bachelor of Arts (B.A.) - Minor Concentration Economics (18 credits)
English - Cultural Studies - section 4.11.13.1: Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)
English - Drama and Theatre - section 4.11.13.2: Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)
English - Literature - section 4.11.13.3: Bachelor of Arts (B.A.) - Minor Concentration English - Literature (18 credits)
Environment - section 4.11.14.1: Bachelor of Arts (B.A.) - Minor Concentration Environment (18 credits)
European Literature and Culture - section 4.11.24.1: Bachelor of Arts (B.A.) - Minor Concentration European Literature and Culture (18 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies - section 4.11.16.1: Bachelor of Arts (B.A.) - Minor Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (18 credits)

Geographic Information Systems and Remote Sensing - section 4.11.17.3: Bachelor of Arts (B.A.) - Minor Concentration GIS \& Remote Sensing (18 credits)

Geography - section 4.11.17.1: Bachelor of Arts (B.A.) - Minor Concentration Geography (18 credits)
Geography - Urban Studies - section 4.11.17.2: Bachelor of Arts (B.A.) - Minor Concentration Geography (Urban Studies) (18 credits)
German Language - section 4.11.24.2: Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits)
German Studies - section 4.11.24.8: Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)
Health Geography - section 4.11.17.4: Bachelor of Arts (B.A.) - Minor Concentration Health Geography (18 credits)
Hispanic Studies - section 4.11.24.3: Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)
History - section 4.11.18.2: Bachelor of Arts (B.A.) - Minor Concentration History (18 credits)
History and Philosophy of Science - section 4.11.27.1: Bachelor of Arts (B.A.) - Minor Concentration History and Philosophy of Science (18 credits)
Indigenous Studies - section 4.11.19.2: Bachelor of Arts (B.A.) - Minor Concentration Indigenous Studies (18 credits)
International Development Studies - section 4.11.21.1: Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)
Italian Studies - section 4.11.24.4: Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits)
Jewish Studies - section 4.11.23.1: Bachelor of Arts (B.A.) - Minor Concentration Jewish Studies (18 credits)
Langue et littérature françaises - Études et pratiques littéraires - section 4.11.15.1: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et littérature françaises - Études et pratiques littéraires (18 crédits)

Langue et littérature françaises - Langue française - section 4.11.15.2: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue \& littérature
françaises - Langue française (18 crédits)

\section*{Faculty of Arts Minor Concentrations or Minors}

Langue et littérature françaises - Traduction - section 4.11.15.3: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et litt. françaises Traduction (18 crédits)

Latin American \& Caribbean Studies - section 4.11.24.5: Bachelor of Arts (B.A.) - Minor Concentration Latin American \& Caribbean Studies (18 credits)

Linguistics - section 4.11.25.1: Bachelor of Arts (B.A.) - Minor Concentration Linguistics (18 credits)
Medieval Studies - section 3.9.12.17.2: Bachelor of Arts (B.A.) - Minor Concentration Medieval Studies (18 credits)
Philosophy - section 4.11.27.2: Bachelor of Arts (B.A.) - Minor Concentration Philosophy ( 18 credits)
Political Science - section 4.11.29.1: Bachelor of Arts (B.A.) - Minor Concentration Political Science (18 credits)
Quebec Studies - section 4.11.19.3: Bachelor of Arts (B.A.) - Minor Concentration Quebec Studies \& Community-Engaged Learning/ La concentration Mineure en Etudes sur le Québec et apprentissage par engagement communautaire (18 credits)

Religious Studies - section 3.9.33.9: Bachelor of Arts (B.A.) - Minor Concentration Religious Studies (18 credits)
Russian - section 4.11.24.6: Bachelor of Arts (B.A.) - Minor Concentration Russian (18 credits)
Russian Culture - section 4.11.24.7: Bachelor of Arts (B.A.) - Minor Concentration Russian Culture (18 credits)
Social Studies of Medicine - section 4.11.32.1: Bachelor of Arts (B.A.) - Minor Concentration Social Studies of Medicine (18 credits)
Sociology - section 4.11.33.1: Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)
South Asian Studies - section 3.9.17.11: Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)
World Cinemas - section 4.11.13.11: Bachelor of Arts (B.A.) - Minor Concentration World Cinemas (18 credits)
World Islamic and Middle East Studies - section 4.11.35.3: Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits), section 4.11.35.4: Bachelor of Arts (B.A.) - Minor Concentration Persian Language ( 18 credits), section 4.11.35.5: Bachelor of Arts (B.A.) - Minor Concentration Turkish Language (18 credits), section 4.11.35.6: Bachelor of Arts (B.A.) - Minor Concentration Urdu Language (18 credits), section 4.11.35.7: Bachelor of Arts (B.A.) - Minor Concentration World Islamic \& Middle East Studies (18 credits)

\subsection*{4.10.1.2 Faculty of Science}

The science minors or minor concentrations available to B.A. \& Sc. students are listed here.

\section*{Faculty of Science Minor Concentrations or Minors}

Atmospheric Science - section 4.11.5.1: Bachelor of Science (B.Sc.) - Minor Atmospheric Science (18 credits)
Biology - Cell/Molecular - section 4.11.6.1: Bachelor of Arts and Science (B.A. \& Sc.) - Minor Concentration Biology - Cell/Molecular (19 credits)
Biology - Organismal - section 4.11.6.2: Bachelor of Arts and Science (B.A. \& Sc.) - Minor Concentration Biology - Organismal (19 credits)
Chemistry - section 4.11.7.1: Bachelor of Science (B.Sc.) - Minor Chemistry (20 credits)
Computer Science - section 4.11.9.1: Bachelor of Arts (B.A.) - Minor Concentration Computer Science (18 credits)
Environment - section 7.5.1.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) Minor Environment (18 credits)

Geographic Information Systems and Remote Sensing - section 4.11.17.6: Bachelor of Science (B.Sc.) - Minor GIS \& Remote Sensing (18 credits)
Geography - section 4.11.17.5: Bachelor of Science (B.Sc.) - Minor Geography (18 credits)
Geology - section 4.11.10.1: Bachelor of Science (B.Sc.) - Minor Geology (18 credits) (previously named Earth and Planetary Sciences)
Interdisciplinary Life Sciences - section 4.11.20.1: Bachelor of Science (B.Sc.) - Minor Interdisciplinary Life Sciences (24 credits)
Mathematics - section 4.11.26.1: Bachelor of Arts (B.A.) - Minor Concentration Mathematics (18 credits)
Physics - section 4.11.28.1: Bachelor of Science (B.Sc.) - Minor Physics (18 credits)
Psychology - section 4.11.30.1: Bachelor of Arts (B.A.) - Minor Concentration Psychology (18 credits)
Statistics - section 3.9.26.5: Bachelor of Arts (B.A.) - Minor Concentration Statistics (18 credits)

\subsection*{4.10.2 Major Concentrations}

\subsection*{4.10.2.1 Faculty of Arts}

Since the B.A. \& Sc. degree requires a certain number of credits in the Arts and in the Sciences, there are special requirements for B.A. \& Sc. students. To be counted as an Arts major concentration, the program must include at least 30 credits of Arts courses. Similarly, to be counted as a Science major concentration, the program must include at least 30 credits of Science courses.

For example, a student completing the 36-credit African Studies Major concentration in Arts must complete at least 30 of those credits in Arts courses and at most 6 credits in Science courses.

The Arts major concentrations available to B.A. \& Sc. students are listed here.

\section*{Faculty of Arts Major Concentrations}

African Studies - section 4.11.35.2: Bachelor of Arts (B.A.) - Major Concentration African Studies (36 credits)
Anthropology - section 4.11.3.2: Bachelor of Arts (B.A.) - Major Concentration Anthropology (36 credits)
Art History - section 4.11.4.3: Bachelor of Arts (B.A.) - Major Concentration Art History (36 credits)
Classics - section 4.11.18.3: Bachelor of Arts (B.A.) - Major Concentration Classics (36 credits)
East Asian Studies - section 4.11.11.4: Bachelor of Arts (B.A.) - Major Concentration East Asian Studies (36 credits)
Economics - section 4.11.12.2: Bachelor of Arts (B.A.) - Major Concentration Economics (36 credits)
English - Cultural Studies - section 4.11.13.4: Bachelor of Arts (B.A.) - Major Concentration English - Cultural Studies (36 credits)
English - Drama and Theatre - section 4.11.13.5: Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre (36 credits)
English - Literature - section 4.11.13.6: Bachelor of Arts (B.A.) - Major Concentration English - Literature (36 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies - section 4.11.16.2: Bachelor of Arts (B.A.) - Major Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)

Geography - section 4.11.17.8: Bachelor of Arts (B.A.) - Major Concentration Geography (37 credits)
Geography (Urban Studies) - section 4.11.17.9: Bachelor of Arts (B.A.) - Major Concentration Geography (Urban Studies) (36 credits)
German Studies - section 4.11.24.9: Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)
Hispanic Studies - section 4.11.24.10: Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)
History - section 4.11.18.4: Bachelor of Arts (B.A.) - Major Concentration History (36 credits)
International Development Studies - section 4.11.21.2: Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)
Italian Studies - section 4.11.24.11: Bachelor of Arts (B.A.) - Major Concentration Italian Studies ( 36 credits)
Jewish Studies - section 4.11.23.2: Bachelor of Arts (B.A.) - Major Concentration Jewish Studies (36 credits)
Langue et littérature françaises - Études et pratiques littéraires - section 4.11.15.4: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)

Langue et littérature françaises - Traduction - section 4.11.15.5: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)

Latin American \& Caribbean Studies - section 3.9.23.29.5: Bachelor of Arts (B.A.) - Major Concentration Latin American \& Caribbean Studies (36 credits)

Linguistics - section 4.11.25.2: Bachelor of Arts (B.A.) - Major Concentration Linguistics (36 credits)
Philosophy - section 4.11.27.3: Bachelor of Arts (B.A.) - Major Concentration Philosophy (36 credits)
Political Science - section 4.11.29.2: Bachelor of Arts (B.A.) - Major Concentration Political Science (36 credits)
Religious Studies - section 3.9.33.10: Bachelor of Arts (B.A.) - Major Concentration Religious Studies ( 36 credits)
Russian - section 4.11.24.13: Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)
Sociology - section 4.11.33.2: Bachelor of Arts (B.A.) - Major Concentration Sociology (36 credits)
World Islamic and Middle East Studies - section 4.11.35.8: Bachelor of Arts (B.A.) - Major Concentration World Islamic \& Middle East Studies (36 credits)

\subsection*{4.10.2.2 Faculty of Science}

The Science major concentrations available to B.A. \& Sc. students are listed here.

\section*{Faculty of Science Major Concentrations}

Biology - section 4.11.6.3: Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Biology (36 credits)
Chemistry - section 4.11.7.2: Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Chemistry (36 credits)
Computer Science - section 4.11.9.2: Bachelor of Arts (B.A.) - Major Concentration Computer Science (36 credits)
Geography - Physical Geography Option - section 4.11.17.7: Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Geography - Physical Geography (36 credits)

Mathematics - section 4.11.26.3: Bachelor of Arts (B.A.) - Major Concentration Mathematics (36 credits)
Physics - section 4.11.28.2: Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Physics (36 credits)
Psychology - section 4.11.30.2: Bachelor of Arts (B.A.) - Major Concentration Psychology (36 credits)
Software Engineering - section 4.11.9.3: Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Software Engineering (37 credits)
Statistics - section 3.9.26.7: Bachelor of Arts (B.A.) - Major Concentration Statistics (36 credits)

\subsection*{4.10.3 Honours Programs}

The Honours programs available to B.A. \& Sc. students are listed here.
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Honours Programs open to B.A. \& Sc. students
section 4.11.8: Cognitive Science - section 4.11.8.3: Bachelor of Arts and Science (B.A. \& Sc.) - Honours Cognitive Science (60 credits)
Environment - see Bieler School of Environment > Undergraduate > Browse Academic Programs > Honours Program in Environment > section
7.5.5.3: Bachelor of Arts and Science (B.A. \& Sc.) - Honours Environment (60 credits)
section 4.11.34: Sustainability, Science, and Society - section 4.11.34.4: Bachelor of Arts and Science (B.A. \& Sc.) - Honours in Sustainability, Science
and Society (60 credits)

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Students interested in an Honours degree should also consider the section 4.10.4: Joint Honours Programs.

\subsection*{4.10.4 Joint Honours Programs}

Joint Honours programs in the B.A. \& Sc. are created by combining a Joint Honours program component from an Arts discipline with one from a Science discipline. Students must register for both Joint Honours program components. Joint Honours students should consult an advisor in each department to discuss their course selection and their interdisciplinary research project (if applicable).

\subsection*{4.10.4.1 Faculty of Arts}

The Arts Joint Honours components available to B.A. \& Sc. students are listed here.

\section*{Faculty of Arts Joint Honours Programs}

Anthropology - section 4.11.3.3: Bachelor of Arts (B.A.) - Joint Honours Component Anthropology (36 credits)
Art History - section 4.11.4.4: Bachelor of Arts (B.A.) - Joint Honours Component Art History (36 credits)
Classics - section 4.11.18.5: Bachelor of Arts (B.A.) - Joint Honours Component Classics (36 credits)
East Asian Studies - section 4.11.11.5: Bachelor of Arts (B.A.) - Joint Honours Component East Asian Studies (36 credits)
Economics - section 4.11.12.3: Bachelor of Arts (B.A.) - Joint Honours Component Economics (30 credits)
English - Cultural Studies - section 4.11.13.7: Bachelor of Arts (B.A.) - Joint Honours Component English - Cultural Studies (36 credits)
English - Drama and Theatre - section 4.11.13.8: Bachelor of Arts (B.A.) - Joint Honours Component English - Drama and Theatre (36 credits)
English - Literature - section 4.11.13.9: Bachelor of Arts (B.A.) - Joint Honours Component English - Literature (36 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies - section 4.11.16.3: Bachelor of Arts (B.A.) - Jt Honours Component Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)

Geography - section 4.11.17.10: Bachelor of Arts (B.A.) - Joint Honours Component Geography ( 37 credits)
German Studies - section 4.11.24.14: Bachelor of Arts (B.A.) - Joint Honours Component German Studies (36 credits)
Hispanic Studies - section 4.11.24.15: Bachelor of Arts (B.A.) - Joint Honours Component Hispanic Studies (36 credits)
History - section 4.11.18.6: Bachelor of Arts (B.A.) - Joint Honours Component History (36 credits)

\section*{Faculty of Arts Joint Honours Programs}

International Development Studies - section 4.11.21.3: Bachelor of Arts (B.A.) - Joint Honours Component International Development Studies (36 credits)

Italian Studies - section 4.11.24.16: Bachelor of Arts (B.A.) - Joint Honours Component Italian Studies (36 credits)
Jewish Studies - section 4.11.23.3: Bachelor of Arts (B.A.) - Joint Honours Component Jewish Studies (36 credits)
Langue et littérature françaises - Études et pratiques littéraires - section 4.11.15.6: Baccalauréat ès Arts (B.A.) - Double Spécialisation Langue \& littérature françaises - Études et pratiques littéraires (36 crédits)

Linguistics - section 4.11.25.3: Bachelor of Arts (B.A.) - Joint Honours Component Linguistics (36 credits)
Philosophy - section 4.11.27.4: Bachelor of Arts (B.A.) - Joint Honours Component Philosophy (36 credits)
Political Science - section 4.11.29.3: Bachelor of Arts (B.A.) - Joint Honours Component Political Science (36 credits)
Russian - section 4.11.24.17: Bachelor of Arts (B.A.) - Joint Honours Component Russian (36 credits)
Sociology - section 4.11.33.3: Bachelor of Arts (B.A.) - Joint Honours Component Sociology (36 credits)
World Islamic and Middle East Studies - section 4.11.35.9: Bachelor of Arts (B.A.) - Joint Honours Component World Islamic \& Middle East Studies (36 credits)

\subsection*{4.10.4.2 Faculty of Science}

There are currently only two Science Joint Honours components available to B.A. \& Sc. students, which are listed here.

\section*{Faculty of Science Joint Honours Programs}

Mathematics - section 4.11.26.4: Bachelor of Arts (B.A.) - Joint Honours Component Mathematics (36 credits)
Psychology - section 4.11.30.3: Bachelor of Arts (B.A.) - Joint Honours Component Psychology (36 credits)

\subsection*{4.10.5 Interfaculty Programs}

The Interfaculty programs available to B.A. \& Sc. students are listed here.

\section*{Interfaculty programs open to B.A. \& Sc. students}

Cognitive Science - section 4.11.8.4: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program Cognitive Science (54 credits)
Environment - see Bieler School of Environment > Undergraduate > Browse Academic Programs > Bachelor of Arts and Science (B.A. \& Sc.) -
Interfaculty Programs \(>\) section 7.5.3.1: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program Environment (54 credits)
Sustainability, Science and Society - section 4.11.34.3: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program in Sustainability, Science and Society (54 credits)

\subsection*{4.11 Browse Academic Units \& Programs}

The B.A.Sc. is an interdisciplinary degree intended for students who want to pursue simultaneously a program offered by the Faculty of Arts and one offered by the Faculty of Science. The overall objective is to provide a broad, liberal education spanning substantive areas in the two faculties so that students can learn diverse content and varied methods of inquiry.

\subsection*{4.11.1 Programs in Arts or in Science}
B.A. \& Sc. programs include:
- B.A. \& Sc. Arts programs
- B.A. \& Sc. Science programs that are open to B.A. students (i.e., programs in Computer Science, Mathematics and Statistics, and Psychology as well as some in Geography)
- Science Minors that are open to B.A. \& Sc. students
- B.A. \& Sc. Science programs that are open only to B.A. \& Sc. students

For a list of B.A. \& Sc. programs, see section 4.10: Overview of Programs Offered.

\subsection*{4.11.2 B.A. \& Sc. Freshman/Foundation Year Program}

Students who need to complete \(97-120\) credits to fulfil their degree requirements are admitted to the Freshman/Foundation Year Program. Students with specific career goals should consult an academic advisor about their choice of program within the B.A. \& Sc. However, students intending to pursue further studies following the B.A.Sc. should refer to the admission requirements of particular programs for the appropriate prerequisite courses.
In particular, students should note the following:
- The minimum Freshman/Foundation Year science requirements in the B.A. \& Sc. may not satisfy the introductory science requirements of all medical/dental schools;
- The Major Concentration in Psychology may not provide a sufficiently focused background for admission to many graduate programs in psychology;
- The Major Concentration in Chemistry is not certified by the Ordre des Chimistes du Québec. Students interested in pursuing a career in chemistry in Quebec are advised to take an appropriate B.Sc. program in chemistry.

For further details about the B.A. \& Sc. Freshman/Foundation Year Program, refer to the Faculty of Science's web page Your first year courses \(>\) B.A. \& Sc. Freshman/Foundation Year (UO) course selection.

\subsection*{4.11.2.1 Bachelor of Arts and Science (B.A. \& Sc.) - Freshman/Foundation Year (30 credits)}

Students who need to complete \(97-120\) credits to fulfil their degree requirements are admitted to the Freshman/Foundation Year. Students with specific career goals should consult an academic adviser about their choice of program within the B.A. \& Sc. However, students intending to pursue further studies following the B.A. \& Sc. should refer to the admissions requirements of particular programs for the appropriate prerequisite courses.

\section*{Foundational Courses}

The Freshman/Foundation Year requirements include foundational courses in both Science and Arts which must be selected as follows:

\section*{MATH}

At least two mathematics courses:
At most one of a First Calculus:
\begin{tabular}{lll} 
MATH 139 & (4) & Calculus 1 with Precalculus \\
MATH 140 & (3) & Calculus 1 \\
MATH 150 & (4) & Calculus A
\end{tabular}

At most one of a Second Calculus:
\begin{tabular}{lll} 
MATH 141 & (4) & Calculus 2 \\
MATH 151 & (4) & Calculus B
\end{tabular}

At most one of a Linear Algebra course:
MATH 133
Linear Algebra and Geometry

\section*{SCIENCE}

At least three foundational science courses:
Any number of:
\begin{tabular}{lcl} 
BIOL 111 & (3) & Principles: Organismal Biology \\
BIOL 112 & (3) & Cell and Molecular Biology \\
CHEM 110 & (4) & General Chemistry 1 \\
CHEM \(120^{*}\) & (4) & General Chemistry 2
\end{tabular}
* Note: CHEM 120 is not open to students who have taken CHEM 115.

At most one of a First Physics:
\begin{tabular}{lll} 
PHYS 101 & (4) & Introductory Physics - Mechanics \\
PHYS 131 & (4) & Mechanics and Waves
\end{tabular}

\section*{At most one of a Second Physics:}

Note: PHYS 101 is a prerequisite for PHYS 102; and PHYS 131 is a prerequisite for PHYS 142.
\begin{tabular}{lll} 
PHYS 102 & (4) & Introductory Physics - Electromagnetism \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

At most two of another Foundational Science:
\begin{tabular}{lll} 
COMP 202* & (3) & Foundations of Programming \\
ESYS 104 & (3) & The Earth System \\
PSYC 100* & (3) & Introduction to Psychology
\end{tabular}
* Note: Students in a minor or major concentration where COMP 202 or PSYC 100 is a required course will need to take an alternative COMP or PSYC course if using COMP 202 or PSYC 100 to satisfy the Freshman/Foundation Year requirement.

\section*{ARTS}

At least three Arts courses (or 9 credits) to be chosen in two of the following three categories: Humanities, Languages, and Social Sciences.
A maximum of two courses (or 6 credits) may be chosen from one category, and no more than two courses (or 6 credits) can be taken in any one department. Note: No course may fulfil the requirements for more than one program, including the B.A. \& Sc. Freshman/Foundation Year.

\section*{Humanities (Literature and Civilization):}

Courses selected from the following subjects:
- Art History and Communications Studies (ARTH and COMS)
- Classics (CLAS)
- East Asian Studies (EAST)
- English (ENGL)
- French Language and Literature (FREN)
- German Studies (GERM)
- Hispanic Studies (HISP)
- Islamic Studies (ISLA)
- Italian studies (ITAL)
- Jewish Studies (JWST)
- Music for Arts (MUAR only)
- Philosophy (PHIL)
- Religious Studies (RELG)
- Russian Studies (RUSS)

\section*{Languages:}

Courses may be taken in this category to improve language skills.
Languages include:
- Classics (Latin, Ancient Greek, Modern Greek) (CLAS)
- East Asian Studies (Chinese, Japanese, Korean) (EAST)
- English as a Second Language (CEAP, CESL)
- French as a Second Language (FRSL)
- French Language and Literature (FREN)

\section*{- German Studies (GERM)}
- Hispanic Studies (Spanish) (HISP)
- Islamic Studies (Arabic, Persian, Turkish, Urdu) (ISLA)
- Italian (ITAL)
- Jewish Studies (Hebrew, Yiddish) (JWST)
- Russian and Slavic Studies (Polish, Russian, Armenian, Czech) (RUSS)

\section*{Social Sciences:}

Courses selected from the following subjects:
- Anthropology (ANTH)
- Economics (ECON)
- History (HIST)
- Linguistics (LING)
- Political Science (POLI)
- Sociology (SOCI)

\section*{Advanced Standing/Transfer Credits}

Students who have completed the Diploma of Collegial Studies, Advanced Placement exams, Advanced Levels, the International Baccalaureate, the French Baccalaureate, or McGill placement examinations may receive exemption and/or credit for all or part of the Mathematics and foundational science courses as well as exemption from all or part of the Arts courses requirement of the Freshman/Foundation Year. Similarly, students who have completed courses at other universities or colleges may receive exemptions and/or credits.

Advanced Placement Examination results with a score of 4 or 5 must be declared by the student at the time of initial registration at the University.
For more information about advanced standing, please consult: http://www.mcgill.ca/students/transfercredit/. Students must carefully select their mathematics and science Freshman/Foundation Year courses so that they have all the required prerequisites for their intended departmental programs.

\subsection*{4.11.3 Anthropology}

The Department of Anthropology, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.4: Anthropology.

\subsection*{4.11.3.1 Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)}

The Minor Concentration Anthropology permits students to explore the development and diversity of human beings and human society and culture through courses in human evolution, prehistoric archaeology, and socio-cultural anthropology. Students may include courses in all of these fields, or may focus on one or two.

This program may be expanded to the Major Concentration Anthropology.

\section*{Complementary Courses (18 credits)}

6-9 credits from 200-level courses in Anthropology.
\(9-12\) credits from any 300-, or 400-, or 500-level courses in Anthropology (only 3 credits of which can be at the 400 or 500 level. Only 1 Special Topic course can be taken.)

\subsection*{4.11.3.2 Bachelor of Arts (B.A.) - Major Concentration Anthropology (36 credits)}

The Major concentration is especially appropriate for students who aim to take courses across several sub-disciplinary or topical concentrations, and for whom specialization is premature. There are no prerequisites for admission to the Major Concentration Anthropology. Students are encouraged to take a course in quantitative methods (listed under the Honours program), but this course cannot count as part of this concentration.

\section*{Complementary Courses (36 credits)}

\section*{200 Level}

6 credits selected from 200-level courses in Anthropology (ANTH).

\section*{Core (350 Level)}

6 credits, from the following Core courses ( 350 level):
(Note: These are restricted to students in any Anthropology program with U2 standing or above.)
\begin{tabular}{lll} 
ANTH 352 & (3) & History of Anthropological Theory \\
ANTH 355 & (3) & Theories of Culture and Society \\
ANTH 357 & (3) & Archaeological Methods \\
ANTH 358 & (3) & The Process of Anthropological Research \\
ANTH 359 & (3) & History of Archaeological Theory
\end{tabular}

\section*{400 Level}

6 credits, two 400-level Anthropology (ANTH) courses.

\section*{Undergraduate Level}

18 credits of additional undergraduate-level Anthropology courses of which no more than 6 credits may be at the 200 level.

\subsection*{4.11.3.3 Bachelor of Arts (B.A.) - Joint Honours Component Anthropology (36 credits)}

Students interested in Joint Honours should consult an adviser in the other department for specific course requirements. A form will be supplied by the Anthropology Department to keep track of courses required by both departments for the programs selected.
Students who wish to study at the Honours level in two disciplines can combine the Joint Honours Program component in Anthropology with one in any other Arts discipline.
The Joint Honours thesis topic should be arranged by consultation with an adviser in Anthropology and the other discipline, and supervisors should be appointed in each department who will work together to guide the student.

Joint Honours students must maintain a GPA of 3.50 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Course ( 3 credits)}

The Joint Honours thesis should be determined in consultation with advisers from both Joint Honours components programs. Normally, the thesis is 6 credits of coursework with 3 credits applying to each Joint Honours component.
ANTH 491
(3)
Joint Honours Thesis

\section*{Complementary Courses (33 credits)}

\section*{200 Level}

A maximum of 12 credits of Anthropology (ANTH) courses at the 200 level.

\section*{300 Level}

A minimum of 6 credits of Anthropology (ANTH) courses at the 300 level (only one 3-credit Special Topic course at the 300 level is permitted).

\section*{Core (350 Level)}

A minimum of 9 credits of core courses at the 350 level selected from:
\begin{tabular}{lll} 
ANTH 352 & (3) & History of Anthropological Theory \\
ANTH 355 & (3) & Theories of Culture and Society \\
ANTH 357 & (3) & Archaeological Methods \\
ANTH 358 & (3) & The Process of Anthropological Research \\
ANTH 359 & (3) & History of Archaeological Theory
\end{tabular}

\section*{400/500 Level}

A minimum of 6 credits of Anthropology (ANTH) courses at the 400 or 500 level (maximum of one 3-credit Special Topic course at the 400 level).

\subsection*{4.11.4 Art History and Communication Studies}

The Department of Art History and Communication Studies, the programs, and specific courses are described in Faculty of Arts \(>\) Undergraduate \(>\) Browse Academic Units \& Programs > section 3.9.5: Art History and Communication Studies.

\subsection*{4.11.4.1 Bachelor of Arts (B.A.) - Minor Concentration Art History (18 credits)}

The Minor Concentration in Art History provides an introduction to the study of diverse artistic traditions from ancient to contemporary times. It is expandable to the Major Concentration Art History.

\section*{Complementary Courses (18 credits)}

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline.
\begin{tabular}{lcl} 
ARTH 302 & (3) & Aspects of Canadian Art \\
ARTH 305 & (3) & Methods in Art History \\
ARTH 315 & (3) & Indigenous Art and Culture \\
ARTH 339 & (3) & Critical Issues - Contemporary Art \\
ARTH 357 & (3) & Early Chinese Art
\end{tabular}

3-15 complementary courses chosen from among departmental course offerings. At least 9 of these credits must be at the 300 level or above.
Note: Courses in studio practice cannot be counted towards the Minor Concentration.
\begin{tabular}{lll} 
ARTH 200 & (3) & Introduction to Art History 1 \\
ARTH 202 & (3) & Introduction to Contemporary Art \\
ARTH 204 & (3) & Introduction to Medieval Art and Architecture \\
ARTH 205 & (3) & Introduction to Modern Art \\
ARTH 207 & (3) & Introduction Early Modern Art 1400-1700 \\
ARTH 209 & (3) & Introduction to Ancient Art and Architecture \\
ARTH 215 & (3) & Introduction to East Asian Art \\
ARTH 223 & (3) & Introduction Italian Renaissance Art 1300-1500 \\
ARTH 225 & (3) & Introduction to Seventeenth - Century Art \\
ARTH 226 & (3) & Introduction to Eighteenth-Century Art and Architecture \\
ARTH 300 & (3) & Canadian Art to 1914 \\
ARTH 302 & (3) & Aspects of Canadian Art \\
ARTH 305 & (3) & Methods in Art History \\
ARTH 310 & (3) & Postcolonialism \\
ARTH 314 & (3) & The \\
ARTH 339 & (3) & The Medieval City \\
ARTH 315 & (3) 351 & (3)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ARTH 352 & (3) & Feminism in Art and Art History \\
\hline ARTH 353 & (3) & Selected Topics in Art History 1 \\
\hline ARTH 354 & (3) & Selected Topics Art History 2 \\
\hline ARTH 356 & (3) & Modern and Contemporary Chinese Art \\
\hline ARTH 357 & (3) & Early Chinese Art \\
\hline ARTH 358 & (3) & Later Chinese Art (960-1911) \\
\hline ARTH 360 & (3) & Studies in the Photographic \\
\hline ARTH 366 & (3) & Italian Renaissance Art 1 \\
\hline ARTH 367 & (3) & Italian Renaissance Art 2 \\
\hline ARTH 368 & (3) & Studies in Northern Renaissance Art 01 \\
\hline ARTH 411 & (3) & Canadian Art and Race \\
\hline ARTH 420 & (3) & Selected Topics in Art and Architecture 1 \\
\hline ARTH 421 & (3) & Selected Topics in Art and Architecture 2 \\
\hline ARTH 422 & (3) & Selected Topics in Art and Architecture 3 \\
\hline ARTH 425 & (3) & Arts of Medieval Spain \\
\hline ARTH 430 & (3) & Concepts - Discipline Art History \\
\hline ARTH 435 & (3) & Early Modern Visual Culture \\
\hline ARTH 440 & (3) & The Body and Visual Culture \\
\hline ARTH 447 & (3) & Independent Research Course \\
\hline ARTH 457 & (3) & Brushwork in Chinese Painting \\
\hline ARTH 466 & (3) & Studies in Italian Renaissance Art 01 \\
\hline ARTH 473 & (3) & Studies in 17th and Early 18th Century Art 04 \\
\hline ARTH 474 & (3) & Studies in Later 18th and 19th Century Art 03 \\
\hline ARTH 479 & (3) & Studies: Modern Art and Theoretical Problems 04 \\
\hline ARTH 490 & (3) & Museum Internship \\
\hline ARTH 501 & (3) & Advanced Topics in Art History and Visual Culture \\
\hline ARTH 502 & (3) & Advanced Topics in Art and Architectural History \\
\hline
\end{tabular}

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the Departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.
\begin{tabular}{lll} 
ARCH 250 & (3) & Architectural History 1 \\
ARCH 251 & (3) & Architectural History 2 \\
PHIL 336 & (3) & Aesthetics \\
PHIL 436 & (3) & Aesthetics 2
\end{tabular}

\subsection*{4.11.4.2 Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)}

The Minor Concentration Communication Studies provides undergraduate students with a critical understanding of the role that communications media and communication technologies play in a society. It offers students intellectually challenging and innovative instruction in key traditions of Communications and Media Studies and new theoretical and methodological practices being developed in the field. The courses included in the program focus on issues of the relationship between communication, democracy and urban life, the social life of communication technologies, the historical development and transformation of media and communication forms, institutions, practices and technologies, and the mass media representation and mobilization of social difference.

\section*{Required Course (3 credits)}
COMS 210
(3)
Introduction to Communication Studies

\section*{Complementary Courses ( 15 credits)}

Five courses in Communication Studies selected from:
\begin{tabular}{|c|c|c|}
\hline COMS 200 & (3) & History of Communication \\
\hline COMS 230 & (3) & Communication and Democracy \\
\hline COMS 300 & (3) & Media and Modernity in the 20th Century \\
\hline COMS 301 & (3) & Core Concepts in Critical Theory \\
\hline COMS 310 & (3) & Media and Feminist Studies \\
\hline COMS 320 & (3) & Media and Empire \\
\hline COMS 330 & (3) & Media in Cultural Life \\
\hline COMS 340 & (3) & New Media \\
\hline COMS 350 & (3) & Sound Culture \\
\hline COMS 354 & (3) & Media Studies of Crime \\
\hline COMS 355 & (3) & Media Governance \\
\hline COMS 361 & (3) & Selected Topics Communication Studies 1 \\
\hline COMS 362 & (3) & Selected Topics Communication Studies 2 \\
\hline COMS 400 & (3) & Critical Theory Seminar \\
\hline COMS 410 & (3) & Cultures in Visualization \\
\hline COMS 411 & (3) & Disability, Technology and Communication \\
\hline COMS 425 & (3) & Urban Culture and Everyday Life \\
\hline COMS 435 & (3) & Advanced Issues in Media Governance \\
\hline COMS 490 & (3) & Special Topics in History and Theory of Media \\
\hline COMS 491 & (3) & Special Topics in Communications Studies \\
\hline COMS 492 & (3) & Power, Difference and Justice \\
\hline COMS 495 & (3) & Directed Reading \\
\hline COMS 497 & (3) & Independent Study \\
\hline COMS 510 & (3) & Canadian Broadcasting Policy \\
\hline
\end{tabular}

\subsection*{4.11.4.3 Bachelor of Arts (B.A.) - Major Concentration Art History ( \(\mathbf{3 6}\) credits)}

The Major Concentration in Art History concentrates on analysis of forms of visual and material culture from ancient to contemporary times. It provides a grounding in diverse fields and methods of the discipline.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline:
\begin{tabular}{lll} 
ARTH 302 & \((3)\) & Aspects of Canadian Art \\
ARTH 305 & (3) & Methods in Art History \\
ARTH 315 & (3) & Indigenous Art and Culture \\
ARTH 339 & (3) & Critical Issues - Contemporary Art \\
ARTH 357 & (3) & Early Chinese Art
\end{tabular}

21-33 complementary credits chosen from among departmental course offerings as follows:
-A maximum of 12 credits may be at the 200 level.
-A minimum of 3 credits must be at the 400 level or above (excluding ARTH 490 Museum Internship)
Note: Courses in studio practice cannot be counted toward the Major concentration.
\begin{tabular}{|c|c|c|}
\hline ARTH 200 & (3) & Introduction to Art History 1 \\
\hline ARTH 202 & (3) & Introduction to Contemporary Art \\
\hline ARTH 204 & (3) & Introduction to Medieval Art and Architecture \\
\hline ARTH 205 & (3) & Introduction to Modern Art \\
\hline ARTH 207 & (3) & Introduction Early Modern Art 1400-1700 \\
\hline ARTH 209 & (3) & Introduction to Ancient Art and Architecture \\
\hline ARTH 215 & (3) & Introduction to East Asian Art \\
\hline ARTH 223 & (3) & Introduction Italian Renaissance Art 1300-1500 \\
\hline ARTH 225 & (3) & Introduction to Seventeenth - Century Art \\
\hline ARTH 226 & (3) & Introduction to Eighteenth-Century Art and Architecture \\
\hline ARTH 300 & (3) & Canadian Art to 1914 \\
\hline ARTH 302 & (3) & Aspects of Canadian Art \\
\hline ARTH 310 & (3) & Postcolonialism \\
\hline ARTH 314 & (3) & The Medieval City \\
\hline ARTH 315 & (3) & Indigenous Art and Culture \\
\hline ARTH 321 & (3) & Visual Culture of the Dutch Republic \\
\hline ARTH 323 & (3) & Realism and Impressionism \\
\hline ARTH 324 & (3) & Sixteenth-Century Art in Italy \\
\hline ARTH 325 & (3) & Visual Culture Renaissance Venice \\
\hline ARTH 326 & (3) & Studies in Manuscript and Print Culture \\
\hline ARTH 334 & (3) & Eighteenth Century European Art \\
\hline ARTH 335 & (3) & Art in the Age of Revolution \\
\hline ARTH 336 & (3) & Art Now \\
\hline ARTH 337 & (3) & Modern Art and Theory to WWI \\
\hline ARTH 338 & (3) & Modern Art and Theory: WWI - WWII \\
\hline ARTH 339 & (3) & Critical Issues - Contemporary Art \\
\hline ARTH 340 & (3) & The Gothic Cathedral \\
\hline ARTH 351 & (3) & Vision and Visuality in Art History \\
\hline ARTH 352 & (3) & Feminism in Art and Art History \\
\hline ARTH 353 & (3) & Selected Topics in Art History 1 \\
\hline ARTH 354 & (3) & Selected Topics Art History 2 \\
\hline ARTH 356 & (3) & Modern and Contemporary Chinese Art \\
\hline ARTH 357 & (3) & Early Chinese Art \\
\hline ARTH 358 & (3) & Later Chinese Art (960-1911) \\
\hline ARTH 360 & (3) & Studies in the Photographic \\
\hline ARTH 366 & (3) & Italian Renaissance Art 1 \\
\hline ARTH 367 & (3) & Italian Renaissance Art 2 \\
\hline ARTH 368 & (3) & Studies in Northern Renaissance Art 01 \\
\hline ARTH 411 & (3) & Canadian Art and Race \\
\hline ARTH 420 & (3) & Selected Topics in Art and Architecture 1 \\
\hline ARTH 421 & (3) & Selected Topics in Art and Architecture 2 \\
\hline ARTH 422 & (3) & Selected Topics in Art and Architecture 3 \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
ARTH 425 & (3) & Arts of Medieval Spain \\
ARTH 430 & (3) & Concepts - Discipline Art History \\
ARTH 435 & (3) & Early Modern Visual Culture \\
ARTH 440 & (3) & The Body and Visual Culture \\
ARTH 447 & (3) & Independent Research Course \\
ARTH 457 & (3) & Brushwork in Chinese Painting \\
ARTH 466 & (3) & Studies in Italian Renaissance Art 01 \\
ARTH 473 & (3) & Studies in 17th and Early 18th Century Art 04 \\
ARTH 474 & (3) & Studies in Later 18th and 19th Century Art 03 \\
ARTH 479 & (3) & Studies: Modern Art and Theoretical Problems 04 \\
ARTH 490 & (3) & Museum Internship \\
ARTH 501 & (3) & Advanced Topics in Art History and Visual Culture \\
ARTH 502 & Advanced Topics in Art and Architectural History
\end{tabular}

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.
\begin{tabular}{lll} 
ARCH 250 & (3) & Architectural History 1 \\
ARCH 251 & (3) & Architectural History 2 \\
PHIL 336 & (3) & Aesthetics \\
PHIL 436 & (3) & Aesthetics 2
\end{tabular}

\subsection*{4.11.4.4 Bachelor of Arts (B.A.) - Joint Honours Component Art History (36 credits)}

The Joint Honours Component Art History is a flexible program that emphasizes breadth, depth as well as art historical methods and research. It is designed especially for students who anticipate pursuing graduate studies and careers in art history or related disciplines.

Students are encouraged to apply for admission to the Joint Honours program after their first year of study at the University and after completion of no less than 12 credits in Art History. Admission is on a competitive basis. While the Faculty of Arts regulations require a minimum CGPA of 3.0 for Honours programs, the Department requires in addition a program GPA of 3.50 for admission into the program and the awarding of Honours

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
ARTH 400 & (3) & Selected Methods in Art History \\
ARTH 401 & (3) & Honours Research Paper
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 0}\) credits)}

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline:
\begin{tabular}{lll} 
ARTH 302 & (3) & Aspects of Canadian Art \\
ARTH 305 & (3) & Methods in Art History \\
ARTH 315 & (3) & Indigenous Art and Culture \\
ARTH 339 & (3) & Critical Issues - Contemporary Art \\
ARTH 357 & (3) & Early Chinese Art
\end{tabular}

15-27 credits chosen from among departmental course offerings as follows:
-A maximum of 12 credits may be at the 200 level.
-A minimum of 3 credits must be at the 400 level or above (other than ARTH 490 Museum Internship).
ARTH 200
Introduction to Art History 1
\begin{tabular}{|c|c|c|}
\hline ARTH 202 & (3) & Introduction to Contemporary Art \\
\hline ARTH 204 & (3) & Introduction to Medieval Art and Architecture \\
\hline ARTH 205 & (3) & Introduction to Modern Art \\
\hline ARTH 207 & (3) & Introduction Early Modern Art 1400-1700 \\
\hline ARTH 209 & (3) & Introduction to Ancient Art and Architecture \\
\hline ARTH 215 & (3) & Introduction to East Asian Art \\
\hline ARTH 223 & (3) & Introduction Italian Renaissance Art 1300-1500 \\
\hline ARTH 225 & (3) & Introduction to Seventeenth - Century Art \\
\hline ARTH 226 & (3) & Introduction to Eighteenth-Century Art and Architecture \\
\hline ARTH 300 & (3) & Canadian Art to 1914 \\
\hline ARTH 302 & (3) & Aspects of Canadian Art \\
\hline ARTH 305 & (3) & Methods in Art History \\
\hline ARTH 310 & (3) & Postcolonialism \\
\hline ARTH 314 & (3) & The Medieval City \\
\hline ARTH 315 & (3) & Indigenous Art and Culture \\
\hline ARTH 321 & (3) & Visual Culture of the Dutch Republic \\
\hline ARTH 323 & (3) & Realism and Impressionism \\
\hline ARTH 324 & (3) & Sixteenth-Century Art in Italy \\
\hline ARTH 325 & (3) & Visual Culture Renaissance Venice \\
\hline ARTH 326 & (3) & Studies in Manuscript and Print Culture \\
\hline ARTH 334 & (3) & Eighteenth Century European Art \\
\hline ARTH 335 & (3) & Art in the Age of Revolution \\
\hline ARTH 336 & (3) & Art Now \\
\hline ARTH 337 & (3) & Modern Art and Theory to WWI \\
\hline ARTH 338 & (3) & Modern Art and Theory: WWI - WWII \\
\hline ARTH 339 & (3) & Critical Issues - Contemporary Art \\
\hline ARTH 340 & (3) & The Gothic Cathedral \\
\hline ARTH 351 & (3) & Vision and Visuality in Art History \\
\hline ARTH 352 & (3) & Feminism in Art and Art History \\
\hline ARTH 353 & (3) & Selected Topics in Art History 1 \\
\hline ARTH 354 & (3) & Selected Topics Art History 2 \\
\hline ARTH 356 & (3) & Modern and Contemporary Chinese Art \\
\hline ARTH 357 & (3) & Early Chinese Art \\
\hline ARTH 358 & (3) & Later Chinese Art (960-1911) \\
\hline ARTH 360 & (3) & Studies in the Photographic \\
\hline ARTH 366 & (3) & Italian Renaissance Art 1 \\
\hline ARTH 367 & (3) & Italian Renaissance Art 2 \\
\hline ARTH 368 & (3) & Studies in Northern Renaissance Art 01 \\
\hline ARTH 411 & (3) & Canadian Art and Race \\
\hline ARTH 420 & (3) & Selected Topics in Art and Architecture 1 \\
\hline ARTH 421 & (3) & Selected Topics in Art and Architecture 2 \\
\hline ARTH 422 & (3) & Selected Topics in Art and Architecture 3 \\
\hline ARTH 425 & (3) & Arts of Medieval Spain \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
ARTH 430 & (3) & Concepts - Discipline Art History \\
ARTH 435 & (3) & Early Modern Visual Culture \\
ARTH 440 & (3) & The Body and Visual Culture \\
ARTH 447 & (3) & Independent Research Course \\
ARTH 457 & (3) & Brushwork in Chinese Painting \\
ARTH 466 & (3) & Studies in Italian Renaissance Art 01 \\
ARTH 473 & (3) & Studies in 17th and Early 18th Century Art 04 \\
ARTH 474 & (3) & Studies in Later 18th and 19th Century Art 03 \\
ARTH 479 & (3) & Studies: Modern Art and Theoretical Problems 04 \\
ARTH 490 & (3) & Museum Internship \\
ARTH 501 & (3) & Advanced Topics in Art History and Visual Culture \\
ARTH 502 & (3) & Advanced Topics in Art and Architectural History
\end{tabular}

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the Departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.
\begin{tabular}{lll} 
ARCH 250 & (3) & Architectural History 1 \\
ARCH 251 & (3) & Architectural History 2 \\
PHIL 336 & (3) & Aesthetics \\
PHIL 436 & (3) & Aesthetics 2
\end{tabular}

\subsection*{4.11.5 Atmospheric and Oceanic Sciences}

The Department of Atmospheric and Oceanic Sciences, the programs, and specific courses are described in Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.3: Atmospheric and Oceanic Sciences (ATOC).

\subsection*{4.11.5.1 Bachelor of Science (B.Sc.) - Minor Atmospheric Science (18 credits)}

The B.Sc.; Minor in Atmospheric Science is intended to provide the basics of the atmospheric and oceanic properties and circulation, in connection with weather phenomena and the climate system.

\section*{Complementary Courses (18 credits)}

9-15 selected from:
\begin{tabular}{lcl} 
ATOC 214 & \((3)\) & Introduction: Physics of the Atmosphere \\
ATOC 215 & \((3)\) & Oceans, Weather and Climate \\
ATOC \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
ATOC 309 & (3) & Weather Radars and Satellites \\
ATOC 312 & (3) & Rotating Fluid Dynamics \\
ATOC 315 & (3) & Thermodynamics and Convection \\
ATOC 357 & (3) & Atmospheric and Oceanic Science Laboratory \\
ATOC \(404^{* *}\) & (3) & Climate Physics \\
CHEM \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
PHYS \(404^{* *}\) & (3) & Climate Physics
\end{tabular}

\footnotetext{
* Note: Students may select ATOC 219 or CHEM 219 but not both.
**Note: Students may select ATOC 404 or PHYS 404 but not both.
}

3-9 credits selected from:
\begin{tabular}{lcl} 
ATOC 512 & \((3)\) & Atmospheric and Oceanic Dynamics \\
ATOC 513 & \((3)\) & Waves and Stability \\
ATOC 515 & \((3)\) & Turbulence in Atmosphere and Oceans \\
ATOC 517 & \((3)\) & Boundary Layer Meteorology \\
ATOC 519 & \((3)\) & Advances in Chemistry of Atmosphere \\
ATOC 521 & (3) & Cloud Physics \\
ATOC 525 & (3) & Atmospheric Radiation \\
ATOC 531 & (3) & Dynamics of Current Climates \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 548 & (3) & Mesoscale Meteorology \\
ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
ATOC 558 & (3) & Numerical Methods and Laboratory \\
ATOC 568 & (3) & Ocean Physics
\end{tabular}

\subsection*{4.11.6 Biology}

The Department of Biology, the discipline, and specific courses are described in Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.5: Biology (BIOL).

The minimum foundation year (U0) science requirements in the B.A. \& Sc. may not satisfy the introductory science requirements of all medical/dental schools. Please see your departmental advisor for more information.

\subsection*{4.11.6.1 Bachelor of Arts and Science (B.A. \& Sc.) - Minor Concentration Biology - Cell/Molecular (19 credits)}

The Minor Concentration Biology - Cell/Molecular, is restricted to students in the B.A. \& Sc. It is a sequence of courses designed to yield a broad introduction to cell/molecular biology.

Advising Note: Students interested in a Biology minor concentration must choose either the Cell/Molecular option or the Organismal option, but may not take both. Students interested in a more in-depth program in Biology should consider the Major concentration.

Students may complete this program with a minimum of 18 credits or a maximum of 19 credits depending if they are exempt from taking CHEM 212 and their choice of complementary courses.

\section*{Required Courses* (13 credits)}
* Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. \& Sc. must be replaced by approved complementary courses. Regardless of the substitution, students must take at least 18 credits in this program.
** Students who have already taken CHEM 212 or its equivalent will choose another appropriate complementary course, to be approved by the Biology Adviser.
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 212** & (4) & Introductory Organic Chemistry 1
\end{tabular}

\section*{Complementary Courses (6 credits)}

Any 6 credits of biology courses at the 300 level or higher approved by the Biology Adviser.

\subsection*{4.11.6.2 Bachelor of Arts and Science (B.A. \& Sc.) - Minor Concentration Biology - Organismal (19 credits)}

The Minor Concentration Biology - Organismal, is restricted to students in the B.A. \& Sc. It is a sequence of courses designed to yield a broad introduction to organismal biology.

Advising Note: Students interested in a Biology minor concentration must choose either the Cell/Molecular option or the Organismal option, but may not take both. Students interested in a more in-depth program in Biology should consider the Major concentration.

Students may complete this program with a minimum of 18 credits or a maximum of 19 credits depending if they are exempt from taking CHEM 212 and their choice of complementary course.

\section*{Required Courses* (16 credits)}
* Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. \& Sc. must be replaced by approved complementary courses. Regardless of the substitution, students must take at least 18 credits in this program.
** Students who have already taken CHEM 212 or its equivalent will choose another appropriate complementary course, to be approved by the adviser.
\begin{tabular}{lll} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 215 & (3) & Introduction to Ecology and Evolution \\
CHEM 212** & (4) & Introductory Organic Chemistry 1
\end{tabular}

\section*{Complementary Course (3 credits)}

Any 3-credit biology course at the 300 level or higher approved by the Biology Adviser.

\subsection*{4.11.6.3 Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Biology (36 credits)}

The B.A. \& Sc.; Major Concentration in Biology is a planned sequence of courses designed to promote a basic grounding in biology. Topics include a range of fundamental biological concepts spanning molecules and cells to organisms and ecosystems, including development, behaviour and evolution

Advising Note: Freshman students should be aware that PHYS 101 and/or PHYS 102 are required for some of the courses in the major and minor concentrations in Biology.

\section*{Required Courses ( \(\mathbf{1 8}\) credits)}

Students must take at least 36 new credits in this program.
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 206 & (3) & Methods in Biology \\
BIOL 215 & (3) & Introduction to Ecology and Evolution \\
BIOL 216 & (3) & Biology of Behaviour
\end{tabular}

\section*{Complementary Courses (18 credits)}

3-4 credits from CHEM block:
\begin{tabular}{lll} 
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1
\end{tabular}
*Students who have already taken CHEM 212 or its equivalent as advance credits may choose to substitute CHEM 204, or CHEM 222, or a 300-500 levels complementary Biology course, to be approved by the Biology Adviser.

3-4 credits from:
\begin{tabular}{lll} 
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 311 & (3) & Advanced Methods in Organismal Biology
\end{tabular}

3 credits from:
BIOL 202
(3)
Basic Genetics
BIOL 302
Fundamentals of Genetics and Genomics

3 credits from:
\begin{tabular}{lcl} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 303 & (3) & Developmental Biology \\
BIOL 304 & (3) & Evolution \\
BIOL 305 & (3) & Animal Diversity \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 307 & (3) & Behavioural Ecology \\
BIOL 308 & (3) & Ecological Dynamics \\
BIOL 313 & (3) & Eukaryotic Cell Biology
\end{tabular}

4-6 credits from Biology courses at the 300-500 levels.

\subsection*{4.11.7 Chemistry}

The Department of Chemistry, the discipline, and specific courses are described in Faculty of Science > Undergraduate >Browse Academic Units \& Programs > section 11.12.7: Chemistry (CHEM).
The Major Concentration Chemistry is not certified by the Ordre des Chimistes du Québec. Students interested in pursuing a career in Chemistry in Quebec are advised to take an appropriate B.Sc. program in Chemistry. The minimum foundation year (U0) science requirements in the B.A. \& Sc. may not satisfy the introductory science requirements of all medical/dental schools (see section 4.11.2.1: Bachelor of Arts and Science (B.A. \& Sc.) - Freshman/Foundation Year (30 credits)).

\subsection*{4.11.7.1 Bachelor of Science (B.Sc.) - Minor Chemistry ( 20 credits)}

The goal of this minor program is to provide interested B.Sc. students with a good grounding in chemistry through an introduction to one of the traditional sub-disciplines in chemistry (analytical, inorganic, organic, and physical).

\section*{Required Courses ( 13 credits)}
* Denotes courses with CEGEP equivalents.

If any of the required courses are part of your primary program or were taken at CEGEP, then they must be substituted by courses from the minor options list that are not part of your primary program. The total number of credits exclusive to the minor is at least 19 .
\begin{tabular}{lll} 
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 281 & (3) & Inorganic Chemistry 1
\end{tabular}

\section*{Complementary Courses}

6-7 credits **
\begin{tabular}{|c|c|c|}
\hline CHEM 214 & (3) & Physical Chemistry/Biological Sciences 2 \\
\hline CHEM 219 & (3) & Introduction to Atmospheric Chemistry \\
\hline CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 319 & (3) & Chemistry of Energy, Storage and Utilization \\
\hline CHEM 334 & (3) & Advanced Materials \\
\hline CHEM 381 & (3) & Inorganic Chemistry 2 \\
\hline CHEM 462 & (3) & Green Chemistry \\
\hline
\end{tabular}

\subsection*{4.11.7.2 Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Chemistry (36 credits)}

The Major Concentration Chemistry is not certified by the Ordre des Chimistes du Québec. Students interested in pursuing a career in Chemistry in Quebec are advised to take an appropriate B.Sc. program in Chemistry.

The Major Concentration Chemistry, which is restricted to students in the B.A. \& Sc. or B.Sc./B.Ed., is a planned sequence of courses designed to permit a degree of specialization in this discipline.

\section*{Required Courses* (21 credits)}
* Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. \& Sc. or B.Sc./B.Ed. must be replaced by courses from the Complementary Course List equal to or exceeding their credit value. Regardless of the substitution, students must take at least 36 credits in this program.
\begin{tabular}{lll} 
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
CHEM 214 & (3) & Physical Chemistry/Biological Sciences 2 \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
CHEM 253 & (1) & Introductory Physical Chemistry Laboratory \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 281 & (3) & Inorganic Chemistry 1
\end{tabular}

\section*{Complementary Courses (15 credits)}

15 credits selected from:
\begin{tabular}{lcl} 
CHEM 219 & \((3)\) & Introduction to Atmospheric Chemistry \\
CHEM 302 & \((3)\) & Introductory Organic Chemistry 3 \\
CHEM 332 & \((3)\) & Biological Chemistry \\
CHEM 334 & \((3)\) & Advanced Materials \\
CHEM 367 & \((3)\) & Instrumental Analysis 1 \\
CHEM 381 & \((3)\) & Inorganic Chemistry 2 \\
Chemistry courses at the \(400+\) level. &
\end{tabular}

\subsection*{4.11.8 Cognitive Science}

\subsection*{4.11.8.1 About Cognitive Science}

Cognitive Science is the interdisciplinary study of intelligent behaviour cognition in humans, animals, and machines. The goal is to understand the principles of intelligence and thought with the hope that this will lead to a better understanding of the mind and of learning, and to the development of intelligent devices.

An Interfaculty Program in Cognitive Science (54 credits) is offered in partnership with the following departments:
- Computer Science (Science)
- Linguistics (Arts)
- Neuroscience (Science)
- Philosophy (Arts)
- Psychology (Science)

\subsection*{4.11.8.2 Contact Information}

Contact information for the Program Director and the Program Advisor can be found on the Cognitive Science website: mcgill.ca/cogsci.

\section*{Program Director}

Timothy O'Donnell

\section*{Cognitive Science Committee Members}

Morgan Sonderegger (Linguistics)
Blake Richards (Computer Science)
Ian Gold (Philosophy)
Milica Mio evi (Psychology)

\subsection*{4.11.8.3 Bachelor of Arts and Science (B.A. \& Sc.) - Honours Cognitive Science ( 60 credits)}

The Honours Cognitive Science, which is restricted to students in the B.A. \& Sc., is an extension of the Interfaculty program and offers students an opportunity to undertake a research project in close association with professors in their main Arts and Science focus areas. Prior to selecting the Honours program, students should meet with the Cognitive Science Program Adviser https://www.mcgill.ca/science/undergraduate/advice/sousa and review the B.A. \& Sc. academic requirements for Honours and First Class Honours, which can also be found under "University Regulations and Resources," "Graduation," and "Graduation Honours."

To receive an Honours degree, students are required to achieve a minimum overall program GPA of 3.3 at graduation, and attain a grade of B+ (3.3) or better in COGS 444. Students must complete both the 60-credit Honours program and an approved minor concentration or a minor in the Faculties of Arts or of Science.
Note: B.A. \& Sc. students who take interfaculty programs, including the Honours in Cognitive Science, must take at least 21 credits in Arts and 21 credits in Science across their interfaculty program and their minor or minor concentration.

\section*{Required Course (9 credits)}
\begin{tabular}{lll} 
COGS 444 & (6) & Honours Research \\
NSCI 201 & (3) & Introduction to Neuroscience 2
\end{tabular}

\section*{Core Complementary Courses: ( 21 credits)}

3 credits from the following logic courses:
\begin{tabular}{lll} 
COMP 230 & (3) & Logic and Computability \\
MATH 318 & (3) & Mathematical Logic \\
PHIL 210 & (3) & Introduction to Deductive Logic 1
\end{tabular}

3 credits from the following statistics courses:
\begin{tabular}{lll} 
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 323 & (3) & Probability \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

3 credits from the following computer science courses:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

3 credits from the following linguistics courses:
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 210 & (3) & Introduction to Speech Science \\
LING 260 & (3) & Meaning in Language
\end{tabular}

\footnotetext{
3 credits from the following philosophy courses:
}
\begin{tabular}{lll} 
PHIL 200 & (3) & Introduction to Philosophy 1 \\
PHIL 201 & (3) & Introduction to Philosophy 2 \\
PHIL 221 & (3) & Introduction to History and Philosophy of Science 2
\end{tabular}

3 credits from the following neuroscience courses:
\begin{tabular}{lll} 
NSCI 200* & (3) & Introduction to Neuroscience 1 \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience
\end{tabular}

3 credits from the following psychology courses:
PSYC 212
(3)
Perception
PSYC 213
(3)
Cognition

\section*{Complementary Courses (30 credits)}

30 credits selected as follows:
18 credits from one of the following lists: Computer Science, Linguistics, Neuroscience, Philosophy, or Psychology.
12 credits from any of the five lists.
Of the 30 credits Complementary Course credits, 15 credits taken must be at the 400 level or higher.

\section*{Computer Science}
\begin{tabular}{|c|c|c|}
\hline COMP 206 & (3) & Introduction to Software Systems \\
\hline COMP 250 & (3) & Introduction to Computer Science \\
\hline COMP 251 & (3) & Algorithms and Data Structures \\
\hline COMP 280 & (3) & History and Philosophy of Computing \\
\hline COMP 302 & (3) & Programming Languages and Paradigms \\
\hline COMP 330 & (3) & Theory of Computation \\
\hline COMP 345 & (3) & From Natural Language to Data Science \\
\hline COMP 360 & (3) & Algorithm Design \\
\hline COMP 400 & (4) & Project in Computer Science \\
\hline COMP 409 & (3) & Concurrent Programming \\
\hline COMP 417 & (3) & Introduction Robotics and Intelligent Systems \\
\hline COMP 421 & (3) & Database Systems \\
\hline COMP 424 & (3) & Artificial Intelligence \\
\hline COMP 445 & (3) & Computational Linguistics \\
\hline COMP 451 & (3) & Fundamentals of Machine Learning \\
\hline COMP 523 & (3) & Language-based Security \\
\hline COMP 527 & (3) & Logic and Computation \\
\hline COMP 531 & (3) & Advanced Theory of Computation \\
\hline COMP 546 & (4) & Computational Perception \\
\hline COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
\hline COMP 550 & (3) & Natural Language Processing \\
\hline COMP 551 & (4) & Applied Machine Learning \\
\hline COMP 558 & (4) & Fundamentals of Computer Vision \\
\hline
\end{tabular}
\begin{tabular}{lll} 
COMP 562 & (4) & Theory of Machine Learning \\
COMP 579 & (4) & Reinforcement Learning \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Linguistics}

Any course at the 300,400 or 500 level from the department of Linguistics, or from the following list:
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 210 & (3) & Introduction to Speech Science \\
LING 260 & (3) & Meaning in Language
\end{tabular}

\section*{Philosophy}
\begin{tabular}{lcl} 
NSCI 300 & \((3)\) & Neuroethics \\
PHIL 306 & \((3)\) & Philosophy of Mind \\
PHIL 310 & \((3)\) & Intermediate Logic \\
PHIL 311 & \((3)\) & Philosophy of Mathematics \\
PHIL 341 & \((3)\) & Philosophy of Science 1 \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 360 & (3) & 17th Century Philosophy \\
PHIL 361 & (3) & 18th Century Philosophy \\
PHIL 367 & (3) & 19th Century Philosophy \\
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & (3) & Philosophy of Language \\
PHIL 419 & (3) & Metaphysics \\
PHIL 421 & (3) & Philosophy of Science 2 \\
PHIL 441 & (3) & Topics in Contemporary Analytic Philosophy \\
PHIL 470 & (3) & Phenomenology \\
PHIL 474 & &
\end{tabular}

\section*{Psychology}
\begin{tabular}{lcl} 
ANTH 440 & \((3)\) & Cognitive Anthropology \\
MUMT 250 & (3) & Music Perception and Cognition \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & \((3)\) & Cognition \\
PSYC 301 & (3) & Animal Learning and Theory \\
PSYC 302 & (3) & The Psychology of Pain \\
PSYC 304 & (3) & Child Development \\
PSYC 305 & (3) & Statistics for Experimental Design
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 513 & (3) & Human Decision-Making \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYC 531 & (3) & Structural Equation Models \\
\hline PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
\hline PSYC 538 & (3) & Categorization, Communication and Consciousness \\
\hline PSYC 541 & (3) & Multilevel Modelling \\
\hline PSYC 545 & (3) & Topics in Language Acquisition \\
\hline
\end{tabular}

\section*{Neuroscience}
* Students select either NSCI 200 or PHGY 209, but not both.
\begin{tabular}{lll} 
ANAT 321 & \((3)\) & Circuitry of the Human Brain \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 201 & \((3)\) & Cell Biology and Metabolism \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 307 & (3) & Behavioural Ecology \\
BIOL 320 & (3) & Evolution of Brain and Behaviour \\
BIOL 414 & (3) & Invertebrate Brain Circuits and Behaviours \\
BIOL 506 & (3) & Neurobiology of Learning \\
BIOL 507 & (3) & Animal Communication \\
BIOL 517 & (3) & Cognitive Ecology \\
BIOL 530 & (3) & Advances in Neuroethology
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline NEUR 503 & (3) & Computational Neuroscience \\
\hline NEUR 507 & (3) & Topics in Radionuclide Imaging \\
\hline NSCI 200* & (3) & Introduction to Neuroscience 1 \\
\hline NSCI 300 & (3) & Neuroethics \\
\hline PHGY 209* & (3) & Mammalian Physiology 1 \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 314 & (3) & Integrative Neuroscience \\
\hline PHGY 556 & (3) & Topics in Systems Neuroscience \\
\hline PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYT 301 & (3) & Issues in Drug Dependence \\
\hline PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders \\
\hline PSYT 515 & (3) & Advanced Studies in Addiction \\
\hline
\end{tabular}

\section*{Research Course}

COGS 401
Research Cognitive Science 1

\subsection*{4.11.8.4 Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program Cognitive Science (54 credits)}

The Interfaculty Program Cognitive Science, which is restricted to students in the B.A. \& Sc., is designed to allow students to explore the multidisciplinary study of cognition in humans and machines. The goal is to understand the principles of intelligence and thought with the hope that this will lead to a better understanding of the mind and of learning, and to the development of intelligent devices.

Note: B.A. \& Sc. students who take interfaculty programs must take at least 21 credits in Arts and 21 credits in Science across their interfaculty program and their minor or minor concentration.

\section*{Required Course (3 credits)}
NSCI 201
(3)
Introduction to Neuroscience 2

\section*{Core Complementary Courses (21 credits)}

3 credits from the following logic courses:
\begin{tabular}{lll} 
COMP 230 & (3) & Logic and Computability \\
MATH 318 & (3) & Mathematical Logic \\
PHIL 210 & (3) & Introduction to Deductive Logic 1
\end{tabular}

3 credits from the following statistics courses:
\begin{tabular}{lll} 
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 323 & (3) & Probability \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

3 credits from the following computer science courses:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

3 credits from the following linguistics courses:
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 210 & (3) & Introduction to Speech Science \\
LING 260 & (3) & Meaning in Language
\end{tabular}

3 credits from the following philosophy courses:
\begin{tabular}{lll} 
PHIL 200 & (3) & Introduction to Philosophy 1 \\
PHIL 201 & (3) & Introduction to Philosophy 2 \\
PHIL 221 & (3) & Introduction to History and Philosophy of Science 2
\end{tabular}

3 credits from the following neuroscience courses:
\begin{tabular}{lll} 
NSCI 200* & (3) & Introduction to Neuroscience 1 \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience
\end{tabular}

3 credits from the following psychology courses:
PSYC 212
(3)
Perception
PSYC 213
(3)
Cognition

\section*{Complementary Courses}

30 credits are selected as follows

18 credits from one of the following lists: Computer Science, Linguistics, Neuroscience, Philosophy, or Psychology.
12 credits from any of the five lists.
Of the 30 Complementary Course credits, 15 credits taken must be at the 400 level or higher.

\section*{Computer Science}
\begin{tabular}{|c|c|c|}
\hline COMP 206 & (3) & Introduction to Software Systems \\
\hline COMP 250 & (3) & Introduction to Computer Science \\
\hline COMP 251 & (3) & Algorithms and Data Structures \\
\hline COMP 280 & (3) & History and Philosophy of Computing \\
\hline COMP 302 & (3) & Programming Languages and Paradigms \\
\hline COMP 330 & (3) & Theory of Computation \\
\hline COMP 345 & (3) & From Natural Language to Data Science \\
\hline COMP 360 & (3) & Algorithm Design \\
\hline COMP 400 & (4) & Project in Computer Science \\
\hline COMP 409 & (3) & Concurrent Programming \\
\hline COMP 417 & (3) & Introduction Robotics and Intelligent Systems \\
\hline COMP 421 & (3) & Database Systems \\
\hline COMP 424 & (3) & Artificial Intelligence \\
\hline COMP 445 & (3) & Computational Linguistics \\
\hline COMP 451 & (3) & Fundamentals of Machine Learning \\
\hline COMP 523 & (3) & Language-based Security \\
\hline COMP 527 & (3) & Logic and Computation \\
\hline COMP 531 & (3) & Advanced Theory of Computation \\
\hline COMP 546 & (4) & Computational Perception \\
\hline COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
\hline COMP 550 & (3) & Natural Language Processing \\
\hline COMP 551 & (4) & Applied Machine Learning \\
\hline COMP 558 & (4) & Fundamentals of Computer Vision \\
\hline COMP 562 & (4) & Theory of Machine Learning \\
\hline COMP 579 & (4) & Reinforcement Learning \\
\hline MATH 222 & (3) & Calculus 3 \\
\hline MATH 223 & (3) & Linear Algebra \\
\hline MATH 240 & (3) & Discrete Structures \\
\hline
\end{tabular}

\section*{Linguistics}

Any course at the 300, 400 or 500 level from the department of Linguistics, or from the following list:
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 210 & (3) & Introduction to Speech Science \\
LING 260 & (3) & Meaning in Language
\end{tabular}

\section*{Philosophy}
\begin{tabular}{lll} 
NSCI 300 & (3) & Neuroethics \\
PHIL 306 & (3) & Philosophy of Mind
\end{tabular}

PHIL 310
PHIL 311
PHIL 341
PHIL 354
PHIL 355
PHIL 360
PHIL 361
PHIL 367
PHIL 411
PHIL 415
PHIL 419
PHIL 421
PHIL 441
PHIL 470
PHIL 474
(3)
(3)
(3)
(3)
(3)
(3)
(3)
(3)

Intermediate Logic
Philosophy of Mathematics
Philosophy of Science 1
Plato
Aristotle
17th Century Philosophy
18th Century Philosophy
19th Century Philosophy
Topics in Philosophy of Logic and Mathematics
Philosophy of Language
Epistemology
Metaphysics
Philosophy of Science 2
Topics in Contemporary Analytic Philosophy
Phenomenology

\section*{Psychology}
\begin{tabular}{|c|c|c|}
\hline ANTH 440 & (3) & Cognitive Anthropology \\
\hline MUMT 250 & (3) & Music Perception and Cognition \\
\hline PSYC 204 & (3) & Introduction to Psychological Statistics \\
\hline PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
\hline PSYC 212 & (3) & Perception \\
\hline PSYC 213 & (3) & Cognition \\
\hline PSYC 301 & (3) & Animal Learning and Theory \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 304 & (3) & Child Development \\
\hline PSYC 305 & (3) & Statistics for Experimental Design \\
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 513 & (3) & Human Decision-Making \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYC 531 & (3) & Structural Equation Models \\
\hline PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
\hline PSYC 538 & (3) & Categorization, Communication and Consciousness \\
\hline PSYC 541 & (3) & Multilevel Modelling \\
\hline PSYC 545 & (3) & Topics in Language Acquisition \\
\hline
\end{tabular}

\section*{Neuroscience}
* Students select either NSCI 200 or PHGY 209, but not both.
\begin{tabular}{|c|c|c|}
\hline ANAT 321 & (3) & Circuitry of the Human Brain \\
\hline BIOL 200 & (3) & Molecular Biology \\
\hline BIOL 201 & (3) & Cell Biology and Metabolism \\
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 307 & (3) & Behavioural Ecology \\
\hline BIOL 320 & (3) & Evolution of Brain and Behaviour \\
\hline BIOL 414 & (3) & Invertebrate Brain Circuits and Behaviours \\
\hline BIOL 506 & (3) & Neurobiology of Learning \\
\hline BIOL 507 & (3) & Animal Communication \\
\hline BIOL 517 & (3) & Cognitive Ecology \\
\hline BIOL 530 & (3) & Advances in Neuroethology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline NEUR 503 & (3) & Computational Neuroscience \\
\hline NEUR 507 & (3) & Topics in Radionuclide Imaging \\
\hline NSCI 200* & (3) & Introduction to Neuroscience 1 \\
\hline NSCI 300 & (3) & Neuroethics \\
\hline PHGY 209* & (3) & Mammalian Physiology 1 \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 314 & (3) & Integrative Neuroscience \\
\hline PHGY 556 & (3) & Topics in Systems Neuroscience \\
\hline PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYT 301 & (3) & Issues in Drug Dependence \\
\hline PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders \\
\hline PSYT 515 & (3) & Advanced Studies in Addiction \\
\hline
\end{tabular}

\section*{Research Course}
COGS 401
Research Cognitive Science 1

\subsection*{4.11.9 Computer Science}

The School of Computer Science and the discipline are described in Faculty of Science > Undergraduate \(>\) Browse Academic Units \& Programs \(>\) section 11.12.9: Computer Science (COMP).

The following are considered Science programs in the B.A. \& Sc.:
- Minor Concentration in Computer Science
- Major Concentration in Computer Science
- Major Concentration in Software Engineering

\subsection*{4.11.9.1 Bachelor of Arts (B.A.) - Minor Concentration Computer Science (18 credits)}

The Minor Concentration Computer Science is designed for students who want to gain a basic understanding of computer science principles and may be taken in conjunction with any program in the Faculty of Arts.

Students are strongly encouraged to talk to an adviser of the School before choosing their complementary courses to ensure they follow an approved course sequence.

MATH 133, MATH 140, and MATH 141 (or their equivalents) should be completed prior to taking courses in this program.

\section*{Required Courses (9 credits)}
* Students who have sufficient knowledge of programming should not take COMP 202, and instead should replace it with an additional Computer Science complementary course.
\begin{tabular}{lll} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits selected from the following list or from Computer Science (COMP) courses at the 300 level or above excluding COMP 364 and COMP 396.
\begin{tabular}{lll} 
COMP 230 & (3) & Logic and Computability \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 280 & (3) & History and Philosophy of Computing \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\subsection*{4.11.9.2 Bachelor of Arts (B.A.) - Major Concentration Computer Science ( \(\mathbf{3 6}\) credits)}

This Major concentration represents an in-depth introduction to computer science and its sub-areas. Students that are interested in further study in Computer Science can combine the Major Concentration Computer Science with the Supplementary Minor in Computer Science to constitute a program very close to the Major Computer Science offered by the Faculty of Science. For further information, please consult the Program Adviser.
Students with two programs in the same department/unit must have a third program in a different department/unit to be eligible to graduate. Please refer to the Faculty of Arts regulations for "Faculty Degree Requirements," "About Program Requirements," and "Departmental Programs" for the Multi-track System options.

\section*{Required Courses (18 credits)}

MATH 133, MATH 140, and MATH 141 (or their equivalents) should be completed prior to taking courses in this program.
Notes for the list below:
* Students who have sufficient knowledge in programming do not need to take COMP 202 and should replace it with an additional computer science complementary course.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits selected as follows:
3 credits from each of the groups A, B, C, and D:

Group A:
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 323 & (3) & Probability \\
MATH 324 & \((3)\) & Statistics
\end{tabular}

Group B:
\begin{tabular}{lll} 
MATH 223 & (3) & Linear Algebra \\
MATH 318 & (3) & Mathematical Logic \\
MATH 340 & (3) & Discrete Mathematics \\
Group C: & \\
COMP 330 & (3) & Theory of Computation \\
COMP 350 & (3) & Numerical Computing
\end{tabular}
COMP 360
(3)
Algorithm Design

Group D:
\begin{tabular}{lll} 
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design
\end{tabular}

An additional 3 credits may be selected from Group A or B.

The remaining complementary credits must be selected from COMP 230 and COMP courses at the 300 level or above (except COMP 364, COMP 396).

\subsection*{4.11.9.3 Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Software Engineering (37 credits)}

The Major Concentration Software Engineering focuses on the techniques and methodology required to design and develop complex software systems and covers the subject commonly known as "Software Engineering."
MATH 133, MATH 140, and MATH 141 (or their equivalents) must be completed prior to taking courses in this program.
Note: This program does not lead to certification as a Professional Engineer.

\section*{Required Courses ( 30 credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202 and can replace it with additional computer science complementary course credits.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 421 & (3) & Database Systems \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Complementary Courses (7 credits)}

At least 7 credits from:
\begin{tabular}{lcl} 
COMP 322 & (1) & Introduction to C++ \\
COMP 361D1 & (3) & Software Engineering Project \\
COMP 361D2 & (3) & Software Engineering Project \\
COMP 529 & (4) & Software Architecture \\
COMP 533 & (3) & Model-Driven Software Development \\
ECSE 326 & (3) & Software Requirements Engineering \\
ECSE 437 & (3) & Software Delivery \\
ECSE 539 & (4) & Advanced Software Language Engineering
\end{tabular}
or any COMP courses at the 300 level or above, excluding COMP 364 and COMP 396.

\subsection*{4.11.10 Earth and Planetary Sciences}

The Department of Earth and Planetary Sciences, the programs, and specific courses are described in Faculty of Science > Undergraduate \(>\) Browse Academic Units \& Programs > section 11.12.10: Earth and Planetary Sciences (EPSC).

\subsection*{4.11.10.1 Bachelor of Science (B.Sc.) - Minor Geology (18 credits)}

The Minor Geology offers students from other departments the opportunity to obtain exposure to the Earth Sciences.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
EPSC 210 & (3) & Introductory Mineralogy \\
EPSC 212 & (3) & Introductory Petrology
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits, one of:
EPSC 201
(3) Understanding Planet Earth
EPSC 233
(3)
Earth and Life History

9 credits selected from the list below and other 300-level and higher courses in Earth and Planetary Sciences may be substituted with permission.
\begin{tabular}{lcl} 
EPSC 231 & \((3)\) & Field School 1 \\
EPSC 303 & \((3)\) & Structural Geology \\
EPSC 334 & \((3)\) & Invertebrate Paleontology \\
EPSC 350 & \((3)\) & Tectonics \\
EPSC 452 & \((3)\) & Mineral Deposits \\
EPSC 561 & \((3)\) & Ore-forming Processes
\end{tabular}

\subsection*{4.11.11 East Asian Studies}

East Asian Studies, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.8: East Asian Studies.

\subsection*{4.11.11.1 Bachelor of Arts (B.A.) - Minor Concentration East Asian Cultural Studies (18 credits)}

This program may be expanded to the Major Concentration East Asian Studies.

\section*{Introduction to East Asian Culture}

6 credits, two of the following courses:
\begin{tabular}{lll} 
EAST 211 & \((3)\) & Introduction: East Asian Culture: China \\
EAST 212 & \((3)\) & Introduction: East Asian Culture: Japan \\
EAST 213 & \((3)\) & Introduction: East Asian Culture: Korea
\end{tabular}

\section*{East Asian Literature, Culture and Society}

12 credits of courses in East Asian Literature, Culture and Society selected from the list below.

\section*{East Asian Studies (EAST)}
\begin{tabular}{lll} 
EAST 215 & (3) & Introduction to East Asian Art \\
EAST 250 & (3) & Introduction to Asian Media Studies
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 279 & (3) & Introduction to Film History \\
\hline EAST 303 & (3) & Current Topics: Chinese Studies 1 \\
\hline EAST 304 & (3) & Current Topics: Chinese Studies 2 \\
\hline EAST 305 & (3) & Current Topics: Japanese Studies 1 \\
\hline EAST 306 & (3) & Current Topics: Japanese Studies 2 \\
\hline EAST 307 & (3) & Topics: East Asian Language and Literature 1 \\
\hline EAST 308 & (3) & Topics: East Asian Language and Literature 2 \\
\hline EAST 313 & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 314 & (3) & Current Topics: Korean Studies 2 \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 352 & (3) & Critical Approaches to Chinese Literature \\
\hline EAST 353 & (3) & Approaches to Chinese Cinema \\
\hline EAST 356 & (3) & Modern and Contemporary Chinese Art \\
\hline EAST 361 & (3) & Animation and New Media \\
\hline EAST 362 & (3) & Japanese Cinema \\
\hline EAST 363 & (3) & Early and Medieval Japan \\
\hline EAST 364 & (3) & Mass Culture and Postwar Japan \\
\hline EAST 369 & (3) & Gender and Sexuality in Asian Media \\
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 372 & (3) & Topics in Television: Asia \\
\hline EAST 375 & (3) & Korean Media and Popular Culture \\
\hline EAST 377 & (3) & Topics: Transnational Asian Culture \\
\hline EAST 385 & (3) & Global Korea \\
\hline EAST 388 & (3) & Asian Migrations and Diasporas \\
\hline EAST 389 & (3) & Global Cinema and Media Asia \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 453 & (3) & Topics: Chinese Literature \\
\hline EAST 454 & (3) & Topics: Chinese Cinema \\
\hline EAST 461 & (3) & Inventing Modern Japanese Novel \\
\hline EAST 462 & (3) & Japan in Asia \\
\hline EAST 464 & (3) & Image, Text, Performance \\
\hline EAST 467 & (3) & Topics: Japanese Cinema \\
\hline EAST 468 & (3) & Science and Technology: Asia \\
\hline EAST 477 & (3) & Media and Environment in Asia \\
\hline EAST 478 & (3) & Topics: Korean Film and Media \\
\hline EAST 491 & (3) & Tutorial: East Asian Languages and Literatures 1 \\
\hline EAST 492 & (3) & Tutorial: East Asian Languages and Literatures 2 \\
\hline EAST 493 & (3) & Special Topics: East Asian Studies 1 \\
\hline EAST 494 & (3) & Special Topics: East Asian Studies 2 \\
\hline EAST 501 & (3) & Advanced Topics in Japanese Studies 1 \\
\hline EAST 502 & (3) & Advanced Topics in Japanese Studies 2 \\
\hline EAST 503 & (3) & Advanced Topics in Chinese Studies 1 \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
EAST 504 & \((3)\) & Advanced Topics in Chinese Studies 2 \\
EAST 505 & \((3)\) & Advanced Topics in Korean Studies \\
EAST 515 & \((3)\) & Seminar: Beyond Orientalism \\
EAST 525 & (3) & Critical Area Studies in Asia \\
EAST 527 & (3) & Culture and Capital in Asia \\
EAST 550 & (3) & Classical Chinese Poetry Themes and Genres \\
EAST 551 & (3) & Technologies of Self in Early China \\
EAST 559 & (3) & Advanced Topics: Chinese Literature \\
EAST 562 & (3) & Japanese Literary Theory and Practice \\
EAST 564 & (3) & Structures of Modernity: Asia \\
EAST 569 & (3) & Advanced Topics: Japanese Literature \\
LLCU 279 & (3) & Introduction to Film History
\end{tabular}

\section*{Anthropology (ANTH)}

ANTH 331
ANTH 500

\section*{Economics (ECON)}

ECON 335
ECON 411
Prehistory of East Asia
Chinese Diversity and Diaspora

The Japanese Economy
Economic Development: A World Area

\section*{History (HIST)}
\begin{tabular}{lcl} 
HIST 208 & \((3)\) & Introduction to East Asian History \\
HIST 218 & \((3)\) & Modern East Asian History \\
HIST 308 & (3) & Formation of Chinese Tradition \\
HIST 338 & (3) & Twentieth-Century China \\
HIST 358 & (3) & China's Middle Empires \\
HIST 439 & (3) & History of Women in China \\
HIST 441 & (3) & Asian Diaspora: Chinese Overseas \\
HIST 442 & (3) & Topics: Modern Japan \\
HIST 443 & (3) & Late Imperial China \\
HIST 445 & (3) & The Art of War in China \\
HIST 508 & (3) & Topics in Chinese History \\
HIST 568D1 & (3) & Seminar in Japanese History \\
HIST 568D2 & (3) & Seminar in Japanese History \\
HIST 578D1 &
\end{tabular}

\section*{Management (ORGB)}

ORGB 380
(3)

Cross Cultural Management
POLI 349 (3) Foreign Policy: Asia

\section*{Religious Studies (RELG)}
\begin{tabular}{lcl} 
RELG 253 & \((3)\) & Religions of East Asia \\
RELG 264 & \((3)\) & Introductory Tibetan 1 \\
RELG 265 & (3) & Introductory Tibetan 2 \\
RELG 344 & (3) & Mahayana Buddhism \\
RELG 352 & (3) & Japanese Religions: History and Thought \\
RELG 354 & (3) & Chinese Religions \\
RELG 364 & (3) & Intermediate Tibetan 1 \\
RELG 365 & (3) & Intermediate Tibetan 2 \\
RELG 442 & (3) & Pure Land Buddhism \\
RELG 451 & (3) & Zen Buddhism: Poetry and Art \\
RELG 464 & (3) & Advanced Tibetan 1 \\
RELG 465 & (3) & Advanced Tibetan 2 \\
RELG 549 & (3) & Japanese Buddhism in Historical Context
\end{tabular}

\subsection*{4.11.11.2 Bachelor of Arts (B.A.) - Minor Concentration East Asian Language and Literature (18 credits)}

This program may be expanded to the Major Concentration East Asian Studies.

\section*{Complementary Courses (18 credits)}

18 credits selected as specified below.

\section*{Introduction to East Asian Culture}

3 credits from the following:
\begin{tabular}{lll} 
EAST 211 & \((3)\) & Introduction: East Asian Culture: China \\
EAST 212 & (3) & Introduction: East Asian Culture: Japan \\
EAST 213 & \((3)\) & Introduction: East Asian Culture: Korea
\end{tabular}

\section*{East Asian Language}

9 credits of language (see the list below). Students may meet this requirement by passing the first level of Korean, Chinese or Japanese with a grade of "C" or better. Students with prior knowledge of an Asian language may substitute a second level in place of a first level. Or, these students may take 6 credits of language at the 400-level or above from the list and an additional 3 credits of East Asian Studies (EAST) courses.

Note: Admission to language courses is subject to placement tests.
\begin{tabular}{lll} 
EAST 220D1 & \((4.5)\) & First Level Korean \\
EAST 220D2 & \((4.5)\) & First Level Korean \\
EAST 230D1 & \((4.5)\) & First Level Chinese \\
EAST 230D2 & \((4.5)\) & First Level Chinese \\
EAST 240D1 & \((4.5)\) & First Level Japanese \\
EAST 240D2 & \((4.5)\) & First Level Japanese \\
EAST 241 & \((3)\) & Japanese Writing Beginners 1 \\
EAST 242 & (4.5) & Sapanese Writing Beginners 2 \\
EAST 320D1 & \((4.5)\) & Second Level Korean \\
EAST 320D2 &
\end{tabular}
\begin{tabular}{lcl} 
EAST 330D1 & \((4.5)\) & Second Level Chinese \\
EAST 330D2 & \((4.5)\) & Second Level Chinese \\
EAST 340D1 & \((4.5)\) & Second Level Japanese \\
EAST 340D2 & \((4.5)\) & Second Level Japanese \\
EAST 341 & \((3)\) & Japanese Writing Intermediate 1 \\
EAST 342 & \((3)\) & Japanese Writing Intermediate 2 \\
EAST 420 & \((3)\) & Third Level Korean 1 \\
EAST 421 & \((3)\) & Third Level Korean 2 \\
EAST 430D1 & \((3)\) & Third Level Chinese \\
EAST 430D2 & \((3)\) & Third Level Chinese \\
EAST 440D1 & \((3)\) & Third Level Japanese \\
EAST 440D2 & Third Level Japanese \\
EAST 530D1 & \((3)\) & Fourth Level Chinese \\
EAST 530D2 & Fourth Level Chinese \\
EAST 533 & \((3)\) & Classical Chinese 1 \\
EAST 534 & Classical Chinese 2 \\
EAST 535 & \((3)\) & Chinese for Business 1 \\
EAST 536 & Chinese for Business 2 \\
EAST 540D1 & (3) & Fourth Level Japanese \\
EAST 540D2 & \((3)\) & Fourth Level Japanese \\
EAST 543 & \((3)\) & Classical Japanese 1 \\
EAST 544 & &
\end{tabular}

\section*{East Asian Studies (EAST)}

6 credits at the 300 level or above in East Asian Studies (EAST) courses selected from:
\begin{tabular}{lll} 
EAST 303 & (3) & Current Topics: Chinese Studies 1 \\
EAST 304 & \((3)\) & Current Topics: Chinese Studies 2 \\
EAST 305 & \((3)\) & Current Topics: Japanese Studies 1 \\
EAST 306 & (3) & Current Topics: Japanese Studies 2 \\
EAST 307 & (3) & Topics: East Asian Language and Literature 1 \\
EAST 308 & (3) & Topics: East Asian Language and Literature 2 \\
EAST 313 & (3) & Current Topics: Korean Studies 1 \\
EAST 314 & (3) & Current Topics: Korean Studies 2 \\
EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
EAST 351 & (3) & Critical Approaches to Chinese Literature \\
EAST 352 & (3) & Approaches to Chinese Cinema \\
EAST 353 & (3) & Modern and Contemporary Chinese Art \\
EAST 356 & (3) & Animation and New Media \\
EAST 361 & (3) & Japanese Cinema \\
EAST 362 & (3) & Early and Medieval Japan \\
EAST 363 & (3) & Mass Culture and Postwar Japan \\
EAST 364 & (3) & Gender and Sexuality in Asian Media \\
EAST 369 & &
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 372 & (3) & Topics in Television: Asia \\
\hline EAST 375 & (3) & Korean Media and Popular Culture \\
\hline EAST 377 & (3) & Topics: Transnational Asian Culture \\
\hline EAST 385 & (3) & Global Korea \\
\hline EAST 388 & (3) & Asian Migrations and Diasporas \\
\hline EAST 389 & (3) & Global Cinema and Media Asia \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 453 & (3) & Topics: Chinese Literature \\
\hline EAST 454 & (3) & Topics: Chinese Cinema \\
\hline EAST 461 & (3) & Inventing Modern Japanese Novel \\
\hline EAST 462 & (3) & Japan in Asia \\
\hline EAST 464 & (3) & Image, Text, Performance \\
\hline EAST 467 & (3) & Topics: Japanese Cinema \\
\hline EAST 468 & (3) & Science and Technology: Asia \\
\hline EAST 477 & (3) & Media and Environment in Asia \\
\hline EAST 478 & (3) & Topics: Korean Film and Media \\
\hline EAST 491 & (3) & Tutorial: East Asian Languages and Literatures 1 \\
\hline EAST 492 & (3) & Tutorial: East Asian Languages and Literatures 2 \\
\hline EAST 493 & (3) & Special Topics: East Asian Studies 1 \\
\hline EAST 494 & (3) & Special Topics: East Asian Studies 2 \\
\hline EAST 501 & (3) & Advanced Topics in Japanese Studies 1 \\
\hline EAST 502 & (3) & Advanced Topics in Japanese Studies 2 \\
\hline EAST 503 & (3) & Advanced Topics in Chinese Studies 1 \\
\hline EAST 504 & (3) & Advanced Topics in Chinese Studies 2 \\
\hline EAST 505 & (3) & Advanced Topics in Korean Studies \\
\hline EAST 515 & (3) & Seminar: Beyond Orientalism \\
\hline EAST 525 & (3) & Critical Area Studies in Asia \\
\hline EAST 527 & (3) & Culture and Capital in Asia \\
\hline EAST 550 & (3) & Classical Chinese Poetry Themes and Genres \\
\hline EAST 551 & (3) & Technologies of Self in Early China \\
\hline EAST 559 & (3) & Advanced Topics: Chinese Literature \\
\hline EAST 562 & (3) & Japanese Literary Theory and Practice \\
\hline EAST 563 & (3) & Images, Ideograms, Aesthetics \\
\hline EAST 564 & (3) & Structures of Modernity: Asia \\
\hline EAST 569 & (3) & Advanced Topics: Japanese Literature \\
\hline EAST 582 & (3) & Japanese Culture and Society \\
\hline
\end{tabular}

\subsection*{4.11.11.3 Bachelor of Arts (B.A.) - Supplementary Minor Concentration East Asian Language ( \(\mathbf{1 8}\) credits)}

This program may not be expanded to the Major Concentration East Asian Studies.
The program offers students who have a background in an East Asian language the opportunity to study this language at the advanced level (300 level and above), including the classical language.

\section*{Complementary Courses (18 credits)}

There are two options.
18 credits in second, third, or fourth level language courses in a single East Asian language, or a combination of an advanced language and other courses in East Asian culture, literature, or society at the 300 level or above, chosen in consultation with the Departmental Program Adviser.

\subsection*{4.11.11.4 Bachelor of Arts (B.A.) - Major Concentration East Asian Studies (36 credits)}

Complementary Courses ( 36 credits)

\section*{Introduction to East Asian Culture}

3-6 credits from the following courses:
\begin{tabular}{lll} 
EAST 211 & (3) & Introduction: East Asian Culture: China \\
EAST 212 & (3) & Introduction: East Asian Culture: Japan \\
EAST 213 & \((3)\) & Introduction: East Asian Culture: Korea
\end{tabular}

0-3 credits from the following:
\begin{tabular}{lll} 
EAST 215 & (3) & Introduction to East Asian Art \\
EAST 250 & (3) & Introduction to Asian Media Studies
\end{tabular}

\section*{East Asian Language}

6-9 credits of East Asian language courses selected from the list below.
Note: Admission to language courses is subject to placement tests.
\begin{tabular}{|c|c|c|}
\hline EAST 220D1 & (4.5) & First Level Korean \\
\hline EAST 220D2 & (4.5) & First Level Korean \\
\hline EAST 230D1 & (4.5) & First Level Chinese \\
\hline EAST 230D2 & (4.5) & First Level Chinese \\
\hline EAST 240D1 & (4.5) & First Level Japanese \\
\hline EAST 240D2 & (4.5) & First Level Japanese \\
\hline EAST 241 & (3) & Japanese Writing Beginners 1 \\
\hline EAST 242 & (3) & Japanese Writing Beginners 2 \\
\hline EAST 320D1 & (4.5) & Second Level Korean \\
\hline EAST 320D2 & (4.5) & Second Level Korean \\
\hline EAST 330D1 & (4.5) & Second Level Chinese \\
\hline EAST 330D2 & (4.5) & Second Level Chinese \\
\hline EAST 340D1 & (4.5) & Second Level Japanese \\
\hline EAST 340D2 & (4.5) & Second Level Japanese \\
\hline EAST 341 & (3) & Japanese Writing Intermediate 1 \\
\hline EAST 342 & (3) & Japanese Writing Intermediate 2 \\
\hline EAST 420 & (3) & Third Level Korean 1 \\
\hline EAST 421 & (3) & Third Level Korean 2 \\
\hline EAST 430D1 & (3) & Third Level Chinese \\
\hline EAST 430D2 & (3) & Third Level Chinese \\
\hline EAST 440D1 & (3) & Third Level Japanese \\
\hline EAST 440D2 & (3) & Third Level Japanese \\
\hline EAST 530D1 & (3) & Fourth Level Chinese \\
\hline EAST 530D2 & (3) & Fourth Level Chinese \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
EAST 533 & (3) & Classical Chinese 1 \\
EAST 534 & (3) & Classical Chinese 2 \\
EAST 535 & \((3)\) & Chinese for Business 1 \\
EAST 536 & (3) & Chinese for Business 2 \\
EAST 540D1 & \((3)\) & Fourth Level Japanese \\
EAST 540D2 & \((3)\) & Fourth Level Japanese \\
EAST 544 & \((3)\) & Classical Japanese 2
\end{tabular}

\section*{East Asian Literature, Culture and Society}

21-24 credits of courses in East Asian Literature, Culture and Society selected from the list below. At least 6 credits must be taken at the 400 or 500 level.

\section*{East Asian Studies (EAST)}
\begin{tabular}{|c|c|c|}
\hline EAST 215 & (3) & Introduction to East Asian Art \\
\hline EAST 250 & (3) & Introduction to Asian Media Studies \\
\hline EAST 279 & (3) & Introduction to Film History \\
\hline EAST 303 & (3) & Current Topics: Chinese Studies 1 \\
\hline EAST 304 & (3) & Current Topics: Chinese Studies 2 \\
\hline EAST 305 & (3) & Current Topics: Japanese Studies 1 \\
\hline EAST 306 & (3) & Current Topics: Japanese Studies 2 \\
\hline EAST 307 & (3) & Topics: East Asian Language and Literature 1 \\
\hline EAST 308 & (3) & Topics: East Asian Language and Literature 2 \\
\hline EAST 313 & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 314 & (3) & Current Topics: Korean Studies 2 \\
\hline EAST 328 & (3) & Archaeology East Asian Empires \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 352 & (3) & Critical Approaches to Chinese Literature \\
\hline EAST 353 & (3) & Approaches to Chinese Cinema \\
\hline EAST 356 & (3) & Modern and Contemporary Chinese Art \\
\hline EAST 361 & (3) & Animation and New Media \\
\hline EAST 362 & (3) & Japanese Cinema \\
\hline EAST 363 & (3) & Early and Medieval Japan \\
\hline EAST 364 & (3) & Mass Culture and Postwar Japan \\
\hline EAST 369 & (3) & Gender and Sexuality in Asian Media \\
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 372 & (3) & Topics in Television: Asia \\
\hline EAST 375 & (3) & Korean Media and Popular Culture \\
\hline EAST 377 & (3) & Topics: Transnational Asian Culture \\
\hline EAST 385 & (3) & Global Korea \\
\hline EAST 388 & (3) & Asian Migrations and Diasporas \\
\hline EAST 389 & (3) & Global Cinema and Media Asia \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 453 & (3) & Topics: Chinese Literature \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 454 & (3) & Topics: Chinese Cinema \\
\hline EAST 461 & (3) & Inventing Modern Japanese Novel \\
\hline EAST 462 & (3) & Japan in Asia \\
\hline EAST 464 & (3) & Image, Text, Performance \\
\hline EAST 467 & (3) & Topics: Japanese Cinema \\
\hline EAST 468 & (3) & Science and Technology: Asia \\
\hline EAST 477 & (3) & Media and Environment in Asia \\
\hline EAST 478 & (3) & Topics: Korean Film and Media \\
\hline EAST 491 & (3) & Tutorial: East Asian Languages and Literatures 1 \\
\hline EAST 492 & (3) & Tutorial: East Asian Languages and Literatures 2 \\
\hline EAST 493 & (3) & Special Topics: East Asian Studies 1 \\
\hline EAST 494 & (3) & Special Topics: East Asian Studies 2 \\
\hline EAST 501 & (3) & Advanced Topics in Japanese Studies 1 \\
\hline EAST 502 & (3) & Advanced Topics in Japanese Studies 2 \\
\hline EAST 503 & (3) & Advanced Topics in Chinese Studies 1 \\
\hline EAST 504 & (3) & Advanced Topics in Chinese Studies 2 \\
\hline EAST 505 & (3) & Advanced Topics in Korean Studies \\
\hline EAST 515 & (3) & Seminar: Beyond Orientalism \\
\hline EAST 525 & (3) & Critical Area Studies in Asia \\
\hline EAST 527 & (3) & Culture and Capital in Asia \\
\hline EAST 550 & (3) & Classical Chinese Poetry Themes and Genres \\
\hline EAST 551 & (3) & Technologies of Self in Early China \\
\hline EAST 559 & (3) & Advanced Topics: Chinese Literature \\
\hline EAST 562 & (3) & Japanese Literary Theory and Practice \\
\hline EAST 564 & (3) & Structures of Modernity: Asia \\
\hline EAST 569 & (3) & Advanced Topics: Japanese Literature \\
\hline LLCU 279 & (3) & Introduction to Film History \\
\hline
\end{tabular}

\section*{Anthropology (ANTH)}
\begin{tabular}{lll} 
ANTH 331 & (3) & Prehistory of East Asia \\
ANTH 500 & (3) & Chinese Diversity and Diaspora
\end{tabular}

\section*{Economics (ECON)}
\begin{tabular}{lll} 
ECON 335 & (3) & The Japanese Economy \\
ECON 411 & (3) & Economic Development: A World Area
\end{tabular}

\section*{Geography (GEOG)}

GEOG 408
Geography of Development

\section*{History (HIST)}
HIST 208

HIST 218
Introduction to East Asian History
Modern East Asian History
\begin{tabular}{lcl} 
HIST 308 & (3) & Formation of Chinese Tradition \\
HIST 338 & (3) & Twentieth-Century China \\
HIST 358 & (3) & China's Middle Empires \\
HIST 439 & (3) & History of Women in China \\
HIST 441 & Topics: Culture and Ritual in China \\
HIST 442 & (3) & Asian Diaspora: Chinese Overseas \\
HIST 443 & (3) & Topics: Modern Japan \\
HIST 445 & L3) & The Art of War in China \\
HIST 508 & (3) & Topics in Chinese History \\
HIST 568D1 & (3) & Topics in Chinese History \\
HIST 568D2 & (3) & Seminar in Japanese History \\
HIST 578D1 & (3) & Seminar in Japanese History \\
HIST 578D2 &
\end{tabular}

\section*{Management (ORGB)}

ORGB 380
Cross Cultural Management

\section*{Political Science (POLI)}
\[
\begin{equation*}
\text { POLI } 349 \tag{3}
\end{equation*}
\]

Foreign Policy: Asia

\section*{Religious Studies (RELG)}
\begin{tabular}{lcl} 
RELG 253 & \((3)\) & Religions of East Asia \\
RELG 264 & \((3)\) & Introductory Tibetan 1 \\
RELG 265 & \((3)\) & Introductory Tibetan 2 \\
RELG 344 & \((3)\) & Mahayana Buddhism \\
RELG 352 & \((3)\) & Japanese Religions: History and Thought \\
RELG 354 & (3) & Chinese Religions \\
RELG 364 & (3) & Intermediate Tibetan 1 \\
RELG 365 & (3) & Intermediate Tibetan 2 \\
RELG 442 & (3) & Pure Land Buddhism \\
RELG 451 & (3) & Zen Buddhism: Poetry and Art \\
RELG 464 & (3) & Advanced Tibetan 1 \\
RELG 465 & (3) & Advanced Tibetan 2 \\
RELG 549 & (3) & Japanese Buddhism in Historical Context
\end{tabular}

\subsection*{4.11.11.5 Bachelor of Arts (B.A.) - Joint Honours Component East Asian Studies (36 credits)}

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00. In addition, Joint Honours students must maintain a minimum GPA of 3.30 in program courses.

Required Course (3 credits)
EAST 495D1 (1.5) Joint Honours Thesis: East Asian Studies
EAST 495D2 (1.5) Joint Honours Thesis: East Asian Studies

\section*{Complementary Courses (33 credits)}

\section*{Introduction to East Asian Culture}

3-6 credits from:
\begin{tabular}{lcl} 
EAST 211 & \((3)\) & Introduction: East Asian Culture: China \\
EAST 212 & (3) & Introduction: East Asian Culture: Japan \\
EAST 213 & (3) & Introduction: East Asian Culture: Korea \\
& & \\
\(0-3\) credits selected from: & & \\
EAST 215 & (3) & Introduction to East Asian Art \\
EAST 250 & \((3)\) & Introduction to Asian Media Studies
\end{tabular}

\section*{East Asian Language}

18 credits in an East Asian language above the introductory level selected from the following courses:
\begin{tabular}{|c|c|c|}
\hline EAST 320D1 & (4.5) & Second Level Korean \\
\hline EAST 320D2 & (4.5) & Second Level Korean \\
\hline EAST 330D1 & (4.5) & Second Level Chinese \\
\hline EAST 330D2 & (4.5) & Second Level Chinese \\
\hline EAST 340D1 & (4.5) & Second Level Japanese \\
\hline EAST 340D2 & (4.5) & Second Level Japanese \\
\hline EAST 341 & (3) & Japanese Writing Intermediate 1 \\
\hline EAST 342 & (3) & Japanese Writing Intermediate 2 \\
\hline EAST 420 & (3) & Third Level Korean 1 \\
\hline EAST 421 & (3) & Third Level Korean 2 \\
\hline EAST 430D1 & (3) & Third Level Chinese \\
\hline EAST 430D2 & (3) & Third Level Chinese \\
\hline EAST 440D1 & (3) & Third Level Japanese \\
\hline EAST 440D2 & (3) & Third Level Japanese \\
\hline EAST 530D1 & (3) & Fourth Level Chinese \\
\hline EAST 530D2 & (3) & Fourth Level Chinese \\
\hline EAST 533 & (3) & Classical Chinese 1 \\
\hline EAST 534 & (3) & Classical Chinese 2 \\
\hline EAST 540D1 & (3) & Fourth Level Japanese \\
\hline EAST 540D2 & (3) & Fourth Level Japanese \\
\hline EAST 544 & (3) & Classical Japanese 2 \\
\hline
\end{tabular}

\section*{East Asian Studies (EAST)}

9 credits chosen from the following East Asian Studies courses, at least 3 credits must be at the 400 -level or above.
\begin{tabular}{lll} 
EAST 303 & (3) & Current Topics: Chinese Studies 1 \\
EAST 304 & (3) & Current Topics: Chinese Studies 2
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 305 & (3) & Current Topics: Japanese Studies 1 \\
\hline EAST 306 & (3) & Current Topics: Japanese Studies 2 \\
\hline EAST 307 & (3) & Topics: East Asian Language and Literature 1 \\
\hline EAST 308 & (3) & Topics: East Asian Language and Literature 2 \\
\hline EAST 313 & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 314 & (3) & Current Topics: Korean Studies 2 \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 352 & (3) & Critical Approaches to Chinese Literature \\
\hline EAST 353 & (3) & Approaches to Chinese Cinema \\
\hline EAST 356 & (3) & Modern and Contemporary Chinese Art \\
\hline EAST 358 & (3) & Later Chinese Art (960-1911) \\
\hline EAST 361 & (3) & Animation and New Media \\
\hline EAST 362 & (3) & Japanese Cinema \\
\hline EAST 363 & (3) & Early and Medieval Japan \\
\hline EAST 364 & (3) & Mass Culture and Postwar Japan \\
\hline EAST 369 & (3) & Gender and Sexuality in Asian Media \\
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 372 & (3) & Topics in Television: Asia \\
\hline EAST 375 & (3) & Korean Media and Popular Culture \\
\hline EAST 377 & (3) & Topics: Transnational Asian Culture \\
\hline EAST 385 & (3) & Global Korea \\
\hline EAST 388 & (3) & Asian Migrations and Diasporas \\
\hline EAST 389 & (3) & Global Cinema and Media Asia \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 453 & (3) & Topics: Chinese Literature \\
\hline EAST 454 & (3) & Topics: Chinese Cinema \\
\hline EAST 461 & (3) & Inventing Modern Japanese Novel \\
\hline EAST 462 & (3) & Japan in Asia \\
\hline EAST 464 & (3) & Image, Text, Performance \\
\hline EAST 467 & (3) & Topics: Japanese Cinema \\
\hline EAST 468 & (3) & Science and Technology: Asia \\
\hline EAST 477 & (3) & Media and Environment in Asia \\
\hline EAST 478 & (3) & Topics: Korean Film and Media \\
\hline EAST 491 & (3) & Tutorial: East Asian Languages and Literatures 1 \\
\hline EAST 492 & (3) & Tutorial: East Asian Languages and Literatures 2 \\
\hline EAST 493 & (3) & Special Topics: East Asian Studies 1 \\
\hline EAST 494 & (3) & Special Topics: East Asian Studies 2 \\
\hline EAST 501 & (3) & Advanced Topics in Japanese Studies 1 \\
\hline EAST 502 & (3) & Advanced Topics in Japanese Studies 2 \\
\hline EAST 503 & (3) & Advanced Topics in Chinese Studies 1 \\
\hline EAST 504 & (3) & Advanced Topics in Chinese Studies 2 \\
\hline EAST 505 & (3) & Advanced Topics in Korean Studies \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
EAST 515 & (3) & Seminar: Beyond Orientalism \\
EAST 525 & (3) & Critical Area Studies in Asia \\
EAST 527 & (3) & Culture and Capital in Asia \\
EAST 550 & (3) & Classical Chinese Poetry Themes and Genres \\
EAST 551 & (3) & Technologies of Self in Early China \\
EAST 559 & (3) & Advanced Topics: Chinese Literature \\
EAST 562 & (3) & Japanese Literary Theory and Practice \\
EAST 564 & (3) & Structures of Modernity: Asia \\
EAST 569 & (3) & Advanced Topics: Japanese Literature
\end{tabular}

\subsection*{4.11.12 Economics}

The Department of Economics, the programs, and specific courses are described in Faculty of Arts \(>\) Undergraduate \(>\) Browse Academic Units \& Programs > section 3.9.9: Economics.

\subsection*{4.11.12.1 Bachelor of Arts (B.A.) - Minor Concentration Economics (18 credits)}

The Minor Concentration in Economics provides a moderate level of specialization in Economics for students who usually are pursuing Major Concentrations or Honours Programs in other fields of study. It does, however, provide an option to switch to or add a Major Concentration in Economics. There is a special Minor for Management students.

\section*{Program Requirements}

\section*{Complementary Courses (18 credits)}

18 credits, of which 6 credits must be from Group A and 12 credits from Group B.

\section*{Group A}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 209 & (3) & Macroeconomic Analysis and Applications \\
ECON 230D1 & (3) & Microeconomic Theory \\
ECON 230D2 & (3) & Microeconomic Theory
\end{tabular}

\section*{Group B}

Economics courses with course numbers above ECON 208 (excluding ECON 295), at least 6 credits of which must be at the 300,400 or 500 level.
Program Notes:
Only one of ECON 208 or ECON 230D1/D2 or ECON 250D1/D2 can be credited to the Economics Minor. Only one of ECON 209 or the 6 credit combination of (ECON 332 and ECON 333) or (ECON 353 and ECON 354 can be credited to the Economics Minor. The combination of ECON 230D1/D2 and ECON 209 is allowed.

\section*{Special Minor in Economics for Management Students}

Information on this Minor Concentration and its special restrictions is in the Desautels Faculty of Management website at www.mcgill.ca/desautels/programs/bcom/academics/areas-study/economics/minor-concentration-economics. Students should consult with the advisers in both the Faculty of Management and the Department of Economics for advice on this minor concentration.

\subsection*{4.11.12.2 Bachelor of Arts (B.A.) - Major Concentration Economics (36 credits)}

The Major Concentration in Economics is a planned sequence of courses designed to permit the student a degree of specialization in economics. It consists of 36 credits in courses approved by the Economics Department. Students wishing to pursue this concentration need to consult the department's rules and regulations at: www.mcgill.ca/economics/undergraduates/majorminor.

All students who wish to begin (or continue) the Major Concentration Economics should see a majors adviser in the Department of Economics in each of their university years. Further information may be obtained from the Department's website, or from any majors adviser; consult the Department website for a list of advisers and their email addresses.
Students who are registering for the first time with the Department should attend the orientation meeting in August (check the website for details) before seeing an adviser.

A student choosing the Major Concentration Economics must take 36 credits in Economics. The Economics courses will normally be taken at McGill and will be selected from the courses shown below. Major Concentration in Economics students entering University at the U1 year in September should directly proceed to ECON 230D1/ECON 230D2 without taking ECON 208 and ECON 209.

Note: Students who wish to switch from the Major Concentration to Honours Economics must complete all the requirements of the Honours program.
Mathematics: Mastery of high school mathematics is required for all economics courses.
Prerequisites: In general, 200-level courses have no prerequisites and 300-level and 400-level courses have ECON 230D1/ECON 230D2 or ECON 250D1/ECON 250D2 (or ECON 208 and ECON 209, or MGCR 293 and ECON 295) as prerequisites. In addition, 400-level courses have Calculus 1 (or its equivalent) or a course in mathematical techniques for economic analysis (or its equivalent) as a prerequisite.

\section*{Required Courses (18 credits)}

All students must take 6 credits of approved statistics courses. Students should refer to the Department's document "Rules on Stats Courses for Economics Students" available at: http://www.mcgill.ca/economics/undergraduates/courses/.
\begin{tabular}{lcl} 
ECON 227D1 & (3) & Economic Statistics \\
ECON 227D2 & (3) & Economic Statistics \\
ECON 230D1 & (3) & Microeconomic Theory \\
ECON 230D2 & (3) & Microeconomic Theory \\
ECON 332 & (3) & Macroeconomic Theory: Majors 1 \\
ECON 333 & (3) & Macroeconomic Theory - Majors 2
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits in Economics selected from other 200- (with numbers above 209), 300-, 400- and 500-level courses. At least 6 of these credits must be in \(400-\) or 500 -level courses. No more than 6 credits may be at the 200 level.

\subsection*{4.11.12.3 Bachelor of Arts (B.A.) - Joint Honours Component Economics (30 credits)}

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two approved disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs" on the Economics Department webiste.

Joint Honours students should consult an adviser in each of the relevant departments to discuss their course selection and their interdisciplinary research project (if applicable) in each year of their program.

For the Economics component of this program, Joint Honours students should consult: http://www.mcgill.ca/economics/undergraduates/honours. For the current list of advisers in Economics and their advising times, see the website of the Department of Economics.

Continuation in the Economic component of this program from one year to the next requires a minimum grade of B-in ECON 250D1/D2, and a minimum B- average in the required and complementary Honours Economics courses. Students failing to meet these requirements must switch out of the Honours program. If they continue to register in Honours, they will not be allowed to graduate with Honours. Note that graduation with Honours has more stringent requirements (see below) than these.

For graduation with the Economics component, a student must also obtain a 3.00 GPA in the required courses, a 3.00 average in the required and complementary credits in Economics, and a CGPA of 3.00 . For a First Class Honours degree, the minimum requirements are a 3.50 program GPA in the required courses, a 3.50 average in the required and complementary credits in Economics, and a CGPA of 3.50. In cases where a student takes a Supplemental Exam in an Economics course, both the original and the Supplemental Exam grades will be counted in the calculation of the GPA and CGPA averages.

Students also have to meet the requirements of the other component of this program and of the relevant Faculty for Honours and First Class Honours.

\section*{Program Prerequisites ( \(0-10\) credits)}

For entering the program:
\begin{tabular}{lcl} 
MATH \(133^{*}\) & (3) & Linear Algebra and Geometry \\
MATH \(140^{* *}\) & (3) & Calculus 1 \\
MATH \(141^{* *}\) & (4) & Calculus 2 \\
* Or equivalent (to be completed prior to U2) & \\
** Or equivalent &
\end{tabular}

\section*{Required Courses (27 credits)}

Please refer to the Department's document "Rules on Stats Courses for Economics Students" available at: http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics courses may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468.
\begin{tabular}{lll} 
ECON 250D1 & (3) & Introduction to Economic Theory: Honours \\
ECON 250D2 & (3) & Introduction to Economic Theory: Honours \\
ECON 257D1 & (3) & Economic Statistics - Honours \\
ECON 257D2 & (3) & Economic Statistics - Honours \\
ECON 353 & (3) & Macroeconomics - Honours 1 \\
ECON 354 & (3) & Macroeconomics - Honours 2 \\
ECON 450 & (3) & Advanced Economic Theory 1 - Honours \\
ECON 452 & (3) & Advanced Economic Theory 2-Honours \\
ECON 468 & (3) & Econometrics 1-Honours
\end{tabular}

\section*{Complementary Course (3 credits)}

3 credits from:
\begin{tabular}{lll} 
ECON 460 & \((3)\) & History of Thought 1 - Honours \\
ECON 461 & (3) & History of Thought 2 - Honours \\
ECON 469 & (3) & Econometrics 2 - Honours
\end{tabular}

\subsection*{4.11.13 English}

The Department of English, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.12: English.

\subsection*{4.11.13.1 Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)}

The Minor Concentration English - Cultural Studies may be expanded to the Major Concentration English - Cultural Studies.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
ENGL 275 & (3) & Introduction to Cultural Studies \\
ENGL 277 & (3) & Introduction to Film Studies
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

\section*{Major Figures}

3 credits from a list of courses on Major Figures in Cultural Studies:
\begin{tabular}{lll} 
ENGL 315 & \((3)\) & Shakespeare \\
ENGL 381 & \((3)\) & A Film-Maker 1 \\
ENGL 418 & (3) & A Major Modernist Writer \\
ENGL 481 & (3) & A Film-Maker 2
\end{tabular}

\section*{Historical Dimension}

3 credits from a list of courses in Cultural Studies with an historical dimension:
ENGL 350 (3) Studies in the History of Film 1
\begin{tabular}{lll} 
ENGL 351 & \((3)\) & Studies in the History of Film 2 \\
ENGL 363 & (3) & Studies in the History of Film 3 \\
ENGL 374 & (3) & Film Movement or Period \\
ENGL 451 & (3) & A Period in Cinema \\
ENGL 480 & (3) & Studies in History of Film 1
\end{tabular}

\section*{Additional Cultural Studies}

6 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Minor Concentration English Cultural Studies.
\begin{tabular}{lll} 
ENGL 280 & \((3)\) & Introduction to Film as Mass Medium \\
ENGL 354 & (3) & Sexuality and Representation \\
ENGL 366 & (3) & Film Genre \\
ENGL 378 & (3) & Media and Culture \\
ENGL 379 & (3) & Film Theory \\
ENGL 380 & (3) & Non-Fiction Media: Cinema, Television, Radio \\
ENGL 382 & (3) & International Cinema 1 \\
ENGL 383 & (3) & Studies in Communications 1 \\
ENGL 385 & (3) & Topics in Literature and Film \\
ENGL 386 & (3) & Fans, Celebrities, Audiences \\
ENGL 388 & (3) & Studies in Popular Culture \\
ENGL 389 & (3) & Studies in Popular Culture \\
ENGL 390 & (3) & Political and Cultural Theory \\
ENGL 391 & (3) & Special Topics: Cultural Studies 1 \\
ENGL 395 & (3) & Cultural and Theatre Studies \\
ENGL 440 & (3) & First Nations and Inuit Literature and Media \\
ENGL 476 & (3) & Alternative Approaches to Media 1 \\
ENGL 482 & (3) & International Cinema 2
\end{tabular}

\subsection*{4.11.13.2 Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)}

The Minor Concentration English - Drama and Theatre may be expanded to the Major Concentration English - Drama and Theatre.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

\section*{Required Courses ( 3 credits)}

ENGL 230
Introduction to Theatre Studies

\section*{Complementary Courses (15 credits)}

15 credits selected as described below.

\section*{Theatre History Courses}

3 credits from a list of courses in Theatre History:
ENGL 306
(3)
Theatre History: Medieval and Early Modern
ENGL 309
(3)
English Renaissance Drama 2
\begin{tabular}{lcl} 
ENGL 310 & \((3)\) & Restoration and 18th Century Drama \\
ENGL 312 & \((3)\) & Victorian and Edwardian Drama 1 \\
ENGL 370 & \((3)\) & Theatre History: The Long Eighteenth Century \\
ENGL 371 & \((3)\) & Theatre History: 19th to 21st Centuries \\
ENGL 467 & (3) & Advanced Studies in Theatre History \\
ENGL 485 & (3) & Special Topics in Theatre History 1700-1900 \\
ENGL 486 & (3) & Special Topics in Theatre History
\end{tabular}

\section*{Drama and Theatre Courses Before 1900}

3 credits from a list of courses in Drama and Theatre before 1900:
\begin{tabular}{lcl} 
ENGL 306 & (3) & Theatre History: Medieval and Early Modern \\
ENGL 308 & (3) & English Renaissance Drama 1 \\
ENGL 309 & (3) & English Renaissance Drama 2 \\
ENGL 310 & (3) & Restoration and 18th Century Drama \\
ENGL 312 & \((3)\) & Victorian and Edwardian Drama 1 \\
ENGL 315 & (3) & Shakespeare \\
ENGL 370 & (3) & Theatre History: The Long Eighteenth Century \\
ENGL 416 & (3) & Studies in Shakespeare \\
ENGL 485 & (3) & Special Topics in Theatre History 1700-1900
\end{tabular}

\section*{Drama and Theatre Courses at the 400 level}

3 credits from a list of Drama and Theatre courses:
\begin{tabular}{lcl} 
ENGL 407 & \((3)\) & The 20th Century \\
ENGL 413 & \((3)\) & Special Topics in Canadian Drama and Theatre \\
ENGL 430 & \((3)\) & Studies in Drama \\
ENGL 431 & (3) & Studies in Drama \\
ENGL 458 & (3) & Theories of Text and Performance 1 \\
ENGL 459 & (3) & Theories of Text and Performance 2 \\
ENGL 467 & (3) & Advanced Studies in Theatre History \\
ENGL 485 & (3) & Special Topics in Theatre History 1700-1900 \\
ENGL 486 & (3) & Special Topics in Theatre History
\end{tabular}

\section*{Drama and Theatre Option's Offerings - Additional Courses}

6 additional credits from the option's offerings.
This category includes all the courses listed above except required courses, as well as the courses listed below.
Note: Any English course not on the lists specifically for the Drama and Theatre option—such as unlisted courses in Cultural Studies-may not count toward the Drama and Theatre program. Please consult a departmental adviser for guidance on course choices.
\begin{tabular}{lll} 
ENGL 314 & \((3)\) & 20th Century Drama \\
ENGL 369 & \((3)\) & Creative Writing: Playwriting \\
ENGL 375 & \((3)\) & Interpretation Dramatic Text \\
ENGL 434 & \((3)\) & Independent Theatre Project
\end{tabular}

Drama and Theatre - Courses of Interest - Other Departments

Permission to count extra-departmental credits must be obtained in advance of taking any course from outside the Department of English. Students are normally permitted to count 3 credits from other departments towards their Drama and Theatre Minor. Permission is obtained with the signature of a Department of English program adviser on the student's program audit sheet.

This list comprises courses in other departments that might be accepted by an adviser for credit toward the student's Drama and Theatre program. This list applies only to these courses as they are offered in the current academic year.
There might be other courses in the Faculty of Arts for which a student could receive Drama and Theatre program credit. A student who has identified a course not noted below should show their program adviser the course syllabus in advance and, if he or she agrees, get the adviser's initialled approval of the course on their program audit sheet. The Department requires a complete signed audit sheet in the student's file in Arts 155 in order to process the file for graduation.
Included in the list are courses taught in languages other than English and courses that have prerequisites.
* Note: The courses in the list below with an asterisk ("*") have an historical dimension and may count toward this program requirement. Other courses could count toward the "option's offerings" component of the program.
\begin{tabular}{lcl} 
EAST 464 & \((3)\) & Image, Text, Performance \\
HISP \(324^{*}\) & (3) & 20th Century Drama \\
MUAR \(387^{*}\) & (3) & The Opera \\
PHIL 242 & (3) & Introduction to Feminist Theory \\
PSYC 212 & \((3)\) & Perception
\end{tabular}

\subsection*{4.11.13.3 Bachelor of Arts (B.A.) - Minor Concentration English - Literature (18 credits)}

The Minor Concentration English - Literature may be expanded to the Major Concentration English - Literature.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
ENGL 202 & (3) & Departmental Survey of English Literature 1 \\
ENGL 203 & (3) & Departmental Survey of English Literature 2
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

\section*{Major Author}

3 credits on a Major Author:
\begin{tabular}{lll} 
ENGL 315 & \((3)\) & Shakespeare \\
ENGL 316 & \((3)\) & Milton \\
ENGL 357 & \((3)\) & Chaucer \\
ENGL 409 & \((3)\) & Studies in a Canadian Author \\
ENGL 416 & \((3)\) & Studies in Shakespeare \\
ENGL 417 & \((3)\) & A Major English Poet \\
ENGL 418 & \((3)\) & A Major Modernist Writer
\end{tabular}

\section*{Pre-1800}

3 credits from a list of pre-1800 literature courses:
\begin{tabular}{lll} 
ENGL 300 & \((3)\) & The Seventeenth Century \\
ENGL 301 & \((3)\) & Earlier 18th Century Novel \\
ENGL 302 & \((3)\) & Restoration and 18th C. English Literature 1
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ENGL 303 & (3) & Restoration and 18th C. English Literature 2 \\
\hline ENGL 304 & (3) & Later Eighteenth Century Novel \\
\hline ENGL 305 & (3) & Renaissance English Literature 1 \\
\hline ENGL 307 & (3) & Renaissance English Literature 2 \\
\hline ENGL 308 & (3) & English Renaissance Drama 1 \\
\hline ENGL 309 & (3) & English Renaissance Drama 2 \\
\hline ENGL 315 & (3) & Shakespeare \\
\hline ENGL 316 & (3) & Milton \\
\hline ENGL 342 & (3) & Introduction to Old English \\
\hline ENGL 347 & (3) & Great Writings of Europe 1 \\
\hline ENGL 348 & (3) & Great Writings of Europe 2 \\
\hline ENGL 349 & (3) & English Literature and Folklore 1 \\
\hline ENGL 356 & (3) & Middle English \\
\hline ENGL 357 & (3) & Chaucer \\
\hline ENGL 358 & (3) & Chaucer - Troilus and Criseyde \\
\hline ENGL 400 & (3) & Earlier English Renaissance \\
\hline ENGL 401 & (3) & Studies in the 17th Century \\
\hline ENGL 403 & (3) & Studies in the 18th Century \\
\hline ENGL 416 & (3) & Studies in Shakespeare \\
\hline ENGL 452 & (3) & Studies in Old English \\
\hline ENGL 456 & (3) & Middle English \\
\hline
\end{tabular}

\section*{Additional Literature}

6 additional credits from ENGL offerings in Literature which includes all the courses specifically listed in the Literature categories for the Major Concentration in English - Literature program and the courses listed below. Any ENGL course not on these Literature lists, such as courses in Cultural Studies, may not count.
\begin{tabular}{|c|c|c|}
\hline ENGL 199 & (3) & FYS: Form and Representation \\
\hline ENGL 204 & (3) & English Literature and the Bible \\
\hline ENGL 237 & (3) & Introduction to Study of a Literary Form \\
\hline ENGL 297 & (3) & Special Topics of Literary Study \\
\hline ENGL 338 & (3) & Short Story \\
\hline ENGL 343 & (3) & Literature and Science 1 \\
\hline ENGL 345 & (3) & Literature and Society \\
\hline ENGL 354 & (3) & Sexuality and Representation \\
\hline ENGL 364 & (3) & Creative Writing \\
\hline ENGL 369 & (3) & Creative Writing: Playwriting \\
\hline ENGL 385 & (3) & Topics in Literature and Film \\
\hline ENGL 394 & (3) & Popular Literary Forms \\
\hline ENGL 421 & (3) & African Literature \\
\hline ENGL 424 & (3) & Irish Literature \\
\hline ENGL 437 & (3) & Studies in Literary Form \\
\hline ENGL 438 & (3) & Studies in Literary Form \\
\hline ENGL 440 & (3) & First Nations and Inuit Literature and Me \\
\hline
\end{tabular}
\begin{tabular}{lll} 
ENGL 447 & (3) & Crosscurrents/English Literature and European Literature 1 \\
ENGL 460 & (3) & Studies in Literary Theory \\
ENGL 461 & (3) & Studies in Literary Theory 2 \\
ENGL 464 & (3) & Creative Writing: Poetry
\end{tabular}

\subsection*{4.11.13.4 Bachelor of Arts (B.A.) - Major Concentration English - Cultural Studies (36 credits)}

The Cultural Studies option concentrates on analysis of forms of cultural expression and symbolic interaction, and of the various media through which these may be disseminated and transformed. Such study concerns symbolic form, aesthetically based forms of analysis, and the various modes of criticism and theory relevant to media which contain both verbal and non-verbal elements. The aim is above all to hone students' analytical and interpretive skills while introducing them to specific critical approaches to cultural studies. This is not a major in journalism or communications; and while many of our graduates go on to do creative work in a variety of media, instruction in film and video production is not part of the curriculum.

For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

\section*{Required Courses (9 credits)}

These courses should be taken in the first two terms of the program.
\begin{tabular}{lll} 
ENGL 275 & \((3)\) & Introduction to Cultural Studies \\
ENGL 277 & (3) & Introduction to Film Studies \\
ENGL 359 & (3) & The Poetics of the Image
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

\section*{Major Figures}

3 credits from a list of courses on Major Figures in Cultural Studies:
\begin{tabular}{lll} 
ENGL 315 & \((3)\) & Shakespeare \\
ENGL 381 & \((3)\) & A Film-Maker 1 \\
ENGL 418 & \((3)\) & A Major Modernist Writer \\
ENGL 481 & \((3)\) & A Film-Maker 2
\end{tabular}

\section*{Canadian Component}

3 credits from a list of courses in Cultural Studies with a Canadian component:
\begin{tabular}{lll} 
ENGL 393 & \((3)\) & Canadian Cinema \\
ENGL 440 & \((3)\) & First Nations and Inuit Literature and Media \\
ENGL 441 & (3) & Special Topics in Canadian Cultural Studies
\end{tabular}

\section*{Theory or Criticism}

3 credits from a list of courses on Theory or Criticism:
\begin{tabular}{lll} 
ENGL 317 & (3) & Theory of English Studies 1 \\
ENGL 318 & (3) & Theory of English Studies 2 \\
ENGL 319 & (3) & Theory of English Studies 3 \\
ENGL 322 & (3) & Theories of the Text \\
ENGL 346 & (3) & Materiality and Sociology of Text
\end{tabular}
ENGL 352
(3)
Theories of Difference

\section*{400-Level Theory}

3 credits from a list of 400-level courses in Cultural Studies with a theoretical component.

\section*{Historical Dimension}

6 credits from a list of courses in Cultural Studies with an historical dimension:
\begin{tabular}{lll} 
ENGL 350 & (3) & Studies in the History of Film 1 \\
ENGL 351 & (3) & Studies in the History of Film 2 \\
ENGL 363 & (3) & Studies in the History of Film 3 \\
ENGL 374 & (3) & Film Movement or Period \\
ENGL 451 & \((3)\) & A Period in Cinema \\
ENGL 480 & \((3)\) & Studies in History of Film 1
\end{tabular}

\section*{Additional Cultural Studies}

9 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Major Concentration English Cultural Studies.
\begin{tabular}{|c|c|c|}
\hline ENGL 280 & (3) & Introduction to Film as Mass Medium \\
\hline ENGL 354 & (3) & Sexuality and Representation \\
\hline ENGL 366 & (3) & Film Genre \\
\hline ENGL 378 & (3) & Media and Culture \\
\hline ENGL 379 & (3) & Film Theory \\
\hline ENGL 380 & (3) & Non-Fiction Media: Cinema, Television, Radio \\
\hline ENGL 382 & (3) & International Cinema 1 \\
\hline ENGL 383 & (3) & Studies in Communications 1 \\
\hline ENGL 385 & (3) & Topics in Literature and Film \\
\hline ENGL 386 & (3) & Fans, Celebrities, Audiences \\
\hline ENGL 388 & (3) & Studies in Popular Culture \\
\hline ENGL 389 & (3) & Studies in Popular Culture \\
\hline ENGL 390 & (3) & Political and Cultural Theory \\
\hline ENGL 391 & (3) & Special Topics: Cultural Studies 1 \\
\hline ENGL 395 & (3) & Cultural and Theatre Studies \\
\hline ENGL 476 & (3) & Alternative Approaches to Media 1 \\
\hline ENGL 482 & (3) & International Cinema 2 \\
\hline
\end{tabular}

\section*{Other Departments}

Students are normally permitted to count 6 credits from other departments toward their English programs. In exceptional circumstances, an adviser who is approached by a student with strong academic grounds for including a third such course may grant permission (to a maximum of 9 extra-departmental credits) and must so indicate in advance by signing the departmental program audit sheet.

\subsection*{4.11.13.5 Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre ( \(\mathbf{3 6}\) credits)}

The Drama and Theatre option tries to place its subject in as broad a social and philosophical context as possible. The Drama and Theatre program is not designed to provide professional theatre training. The aim is rather to encourage students to explore the subject as a liberal arts discipline.
For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

\section*{Required Courses ( 6 credits)}

6 credits to be taken in the first two terms of the program
ENGL 230
(3)
Introduction to Theatre Studies
ENGL 355
(3)
The Poetics of Performance

\section*{Complementary Courses (30 credits)}

30 credits selected as described below.
3 credits from the following practice-based courses:
\begin{tabular}{lll} 
ENGL 269 & (3) & Introduction to Performance \\
ENGL 365 & (3) & Costuming for the Theatre 1 \\
ENGL 368 & (3) & Stage Scenery and Lighting 1 \\
ENGL 372 & (3) & Stage Scenery and Lighting 2 \\
ENGL 377 & (3) & Costuming for the Theatre 2
\end{tabular}

\section*{Performance-Oriented Courses}

3 credits from the list of Performance-Oriented Courses:
\begin{tabular}{lll} 
ENGL 365 & (3) & Costuming for the Theatre 1 \\
ENGL 367 & (3) & Acting 2 \\
ENGL 368 & (3) & Stage Scenery and Lighting 1 \\
ENGL 372 & (3) & Stage Scenery and Lighting 2 \\
ENGL 376 & (3) & Scene Study \\
ENGL 377 & (3) & Costuming for the Theatre 2 \\
ENGL 396 & (3) & Theatre Practicum 1 \\
ENGL 397 & (4.5) & Theatre Laboratory \\
ENGL 465D1 & (4.5) & Theatre Laboratory \\
ENGL 465D2 & (3) & Directing for the Theatre \\
ENGL 466D1 & (3) & Directing for the Theatre \\
ENGL 466D2 & (3) & Acting 3 \\
ENGL 469 &
\end{tabular}

\section*{Drama and/or Theatre Courses with a Canadian Component}

3 credits from the list of Drama and/or Theatre courses with a Canadian component:
ENGL 313
(3)
Canadian Drama and Theatre
ENGL 413
(3)
Special Topics in Canadian Drama and Theatre

\section*{Theory or Criticism Courses}

3 credits from the list of Theory or Criticism courses:
\begin{tabular}{lll} 
ENGL 317 & (3) & Theory of English Studies 1 \\
ENGL 318 & (3) & Theory of English Studies 2 \\
ENGL 319 & (3) & Theory of English Studies 3 \\
ENGL 322 & (3) & Theories of the Text \\
ENGL 346 & \((3)\) & Materiality and Sociology of Text
\end{tabular}
ENGL 352
(3)
Theories of Difference

\section*{Theatre History Courses}

3 credits from the list of Theatre History courses:
\begin{tabular}{lll} 
ENGL 306 & \((3)\) & Theatre History: Medieval and Early Modern \\
ENGL 310 & \((3)\) & Restoration and 18th Century Drama \\
ENGL 312 & \((3)\) & Victorian and Edwardian Drama 1 \\
ENGL 370 & \((3)\) & Theatre History: The Long Eighteenth Century \\
ENGL 371 & \((3)\) & Theatre History: 19th to 21st Centuries \\
ENGL 467 & \((3)\) & Advanced Studies in Theatre History \\
ENGL 486 & \((3)\) & Special Topics in Theatre History
\end{tabular}

\section*{Drama and Theatre Before 1900 Courses}

3 credits from the list of courses in Drama and Theatre before 1900:
\begin{tabular}{lll} 
ENGL 306 & \((3)\) & Theatre History: Medieval and Early Modern \\
ENGL 308 & \((3)\) & English Renaissance Drama 1 \\
ENGL 310 & (3) & Restoration and 18th Century Drama \\
ENGL 312 & \((3)\) & Victorian and Edwardian Drama 1 \\
ENGL 315 & \((3)\) & Shakespeare \\
ENGL 370 & (3) & Theatre History: The Long Eighteenth Century \\
ENGL 416 & \((3)\) & Studies in Shakespeare
\end{tabular}

\section*{Drama and Theatre Option's Offerings - Additional Courses}

12 additional credits from the option's offerings.
This category includes all the courses listed above except required courses, as well as the courses listed below.
Note: Any English course not on the lists specifically for the Drama and Theatre option-such as unlisted courses in Cultural Studies-may not count toward the Drama and Theatre program. Please consult a departmental adviser for guidance on course choices.
\begin{tabular}{lcl} 
ENGL 314 & \((3)\) & 20th Century Drama \\
ENGL 375 & \((3)\) & Interpretation Dramatic Text \\
ENGL 430 & \((3)\) & Studies in Drama \\
ENGL 431 & \((3)\) & Studies in Drama \\
ENGL 434 & \((3)\) & Independent Theatre Project \\
ENGL 458 & \((3)\) & Theories of Text and Performance 1 \\
ENGL 459 & \((3)\) & Theories of Text and Performance 2
\end{tabular}

\section*{Drama and Theatre - Courses of Interest - Other Departments}

Students are normally permitted to count 6 credits from other departments toward their English programs. In exceptional circumstances, an adviser, approached by a student with strong academic grounds for including a third such course, may grant permission, to a maximum of 9 extra-departmental credits, and must so indicate in advance by signing the departmental program audit sheet.
This list comprises courses in other departments that might be accepted by an adviser for credit toward the student's Drama and Theatre program. This list applies only to these courses as they are offered in the current academic year.
There might be other courses in the Faculty of Arts for which a student could receive Drama and Theatre program credit. A student who has identified a course not noted below, should show their program adviser the course syllabus in advance and, if he or she agrees, get the adviser's initialled approval of the course on their program audit sheet. The Department requires a complete signed audit sheet in the student's file in Arts 155 in order to process the file for graduation.

Included in the list are courses taught in languages other than English and courses that have prerequisites.
* Note: The courses in the list below with an asterisk ("*") have an historical dimension and may count toward this program requirement. Other courses could count toward the "option's offerings" component of the program.
\begin{tabular}{lll} 
EAST 464 & (3) & Image, Text, Performance \\
MUAR \(387^{*}\) & (3) & The Opera \\
PHIL 242 & (3) & Introduction to Feminist Theory \\
PSYC 212 & \((3)\) & Perception
\end{tabular}

\subsection*{4.11.13.6 Bachelor of Arts (B.A.) - Major Concentration English - Literature (36 credits)}

The Literature option provides a grounding in the basic texts and methods of the discipline as well as wide acquaintance with substantial areas of the field. For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

\section*{Required Courses (9 credits)}

These courses should be taken in the first two terms of the program.
\begin{tabular}{lll} 
ENGL 202 & (3) & Departmental Survey of English Literature 1 \\
ENGL 203 & (3) & Departmental Survey of English Literature 2 \\
ENGL 311 & (3) & Poetics
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits selected as described below.
Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

\section*{Canadian Literature}

3 credits from a list of Canadian Literature courses:
\begin{tabular}{lll} 
ENGL 228 & \((3)\) & Canadian Literature 1 \\
ENGL 229 & \((3)\) & Canadian Literature 2 \\
ENGL 327 & \((3)\) & Canadian Prose Fiction 1 \\
ENGL 328 & \((3)\) & Development of Canadian Poetry 1 \\
ENGL 333 & \((3)\) & Development of Canadian Poetry 2 \\
ENGL 339 & \((3)\) & Canadian Prose Fiction 2 \\
ENGL 409 & \((3)\) & Studies in a Canadian Author \\
ENGL 410 & \((3)\) & Theme or Movement Canadian Literature \\
ENGL 411 & \((3)\) & Studies in Canadian Fiction
\end{tabular}

\section*{Theory or Criticism}

3 credits from a list of courses on Theory or Criticism:
\begin{tabular}{lll} 
ENGL 317 & (3) & Theory of English Studies 1 \\
ENGL 318 & (3) & Theory of English Studies 2 \\
ENGL 319 & (3) & Theory of English Studies 3 \\
ENGL 322 & (3) & Theories of the Text \\
ENGL 346 & \((3)\) & Materiality and Sociology of Text \\
ENGL 352 & \((3)\) & Theories of Difference
\end{tabular}

\section*{Areas of English Literature}

6 credits, 3 credits each from two of the following areas: Backgrounds of English Literature, Old English, Medieval, Renaissance:

\section*{Backgrounds of English Literature}
\begin{tabular}{lll} 
ENGL 347 & (3) & Great Writings of Europe 1 \\
ENGL 348 & (3) & Great Writings of Europe 2 \\
ENGL 349 & (3) & English Literature and Folklore 1
\end{tabular}

\section*{Old English}
\begin{tabular}{lll} 
ENGL 342 & \((3)\) & Introduction to Old English \\
ENGL 349 & (3) & English Literature and Folklore 1 \\
ENGL 452 & (3) & Studies in Old English
\end{tabular}

\section*{Medieval}
\begin{tabular}{lcl} 
ENGL 337 & \((3)\) & Theme or Genre in Medieval Literature \\
ENGL 349 & (3) & English Literature and Folklore 1 \\
ENGL 356 & (3) & Middle English \\
ENGL 357 & (3) & Chaucer \\
ENGL 358 & (3) & Chaucer - Troilus and Criseyde \\
ENGL 456 & (3) & Middle English
\end{tabular}

\section*{Renaissance}
\begin{tabular}{lll} 
ENGL 300 & \((3)\) & The Seventeenth Century \\
ENGL 305 & \((3)\) & Renaissance English Literature 1 \\
ENGL 307 & \((3)\) & Renaissance English Literature 2 \\
ENGL 308 & (3) & English Renaissance Drama 1 \\
ENGL 309 & (3) & English Renaissance Drama 2 \\
ENGL 315 & (3) & Shakespeare \\
ENGL 316 & (3) & Milton \\
ENGL 349 & (3) & English Literature and Folklore 1 \\
ENGL 400 & (3) & Earlier English Renaissance \\
ENGL 401 & (3) & Studies in the 17th Century \\
ENGL 416 & (3) & Studies in Shakespeare
\end{tabular}

\section*{Areas of English Literature}

6 credits, 3 credits each from two of the following areas: Restoration, 18th Century, Romantic, Victorian, 19th Century American:

\section*{Restoration}
ENGL 302
Restoration and 18th C. English Literature 1
ENGL 303
Restoration and 18th C. English Literature 2

\section*{18 Century}
\begin{tabular}{lcl} 
ENGL 301 & (3) & Earlier 18th Century Novel \\
ENGL 302 & (3) & Restoration and 18th C. English Literature 1 \\
ENGL 303 & (3) & Restoration and 18th C. English Literature 2 \\
ENGL 304 & (3) & Later Eighteenth Century Novel \\
ENGL 403 & (3) & Studies in the 18th Century
\end{tabular}

\section*{Romantic}
\begin{tabular}{lll} 
ENGL 331 & (3) & Literature Romantic Period 1 \\
ENGL 332 & (3) & Literature Romantic Period 2 \\
ENGL 405 & (3) & Studies in 19th Century Literature 2
\end{tabular}

\section*{Victorian}
\begin{tabular}{lll} 
ENGL 329 & \((3)\) & English Novel: 19th Century 1 \\
ENGL 330 & \((3)\) & English Novel: 19th Century 2 \\
ENGL 334 & \((3)\) & Victorian Poetry \\
ENGL 404 & \((3)\) & Studies in 19th Century Literature 1 \\
ENGL 405 & \((3)\) & Studies in 19th Century Literature 2
\end{tabular}

\section*{19th Century American}
ENGL 326
19th Century American Prose
ENGL 422
(3)
Studies in 19th Century American Literature

\section*{Areas of English Literature}

3 credits from one of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary:

\section*{Early 20th Century}
\begin{tabular}{lll} 
ENGL 361 & (3) & Poetry of the 20th Century 1 \\
ENGL 414 & (3) & Studies in 20th Century Literature 1
\end{tabular}

\section*{Modernist}
\begin{tabular}{lll} 
ENGL 335 & \((3)\) & The 20th Century Novel 1 \\
ENGL 361 & (3) & Poetry of the 20th Century 1 \\
ENGL 414 & (3) & Studies in 20th Century Literature 1 \\
ENGL 418 & (3) & A Major Modernist Writer
\end{tabular}

\section*{Post-modernist}
\begin{tabular}{lll} 
ENGL 320 & \((3)\) & Postcolonial Literature \\
ENGL 339 & \((3)\) & Canadian Prose Fiction 2 \\
ENGL 443 & \((3)\) & Contemporary Women's Fiction
\end{tabular}

\section*{Contemporary}

ENGL 320
Postcolonial Literature
\begin{tabular}{lcl} 
ENGL 333 & \((3)\) & Development of Canadian Poetry 2 \\
ENGL 336 & \((3)\) & The 20th Century Novel 2 \\
ENGL 339 & \((3)\) & Canadian Prose Fiction 2 \\
ENGL 362 & \((3)\) & Poetry of the 20th Century 2 \\
ENGL 407 & \((3)\) & The 20th Century \\
ENGL 408 & \((3)\) & The 20th Century \\
ENGL 419 & \((3)\) & Studies in 20th Century Literature \\
ENGL 443 & & Contemporary Women's Fiction
\end{tabular}

\section*{Additional Literature}

6 additional credits from ENGL offerings in Literature which includes all the courses specifically listed in the Literature categories above and the courses listed below. Any ENGL course not on these Literature lists, such as courses in Cultural Studies, may not count toward the Major Concentration in English - Literature.
\begin{tabular}{lll} 
ENGL 199 & \((3)\) & FYS: Form and Representation \\
ENGL 204 & \((3)\) & English Literature and the Bible \\
ENGL 237 & \((3)\) & Introduction to Study of a Literary Form \\
ENGL 297 & \((3)\) & Special Topics of Literary Study \\
ENGL 338 & \((3)\) & Short Story \\
ENGL 343 & \((3)\) & Literature and Science 1 \\
ENGL 345 & \((3)\) & Literature and Society \\
ENGL 354 & \((3)\) & Sexuality and Representation \\
ENGL 364 & (3) & Creative Writing \\
ENGL 369 & (3) & Creative Writing: Playwriting \\
ENGL 385 & (3) & Topics in Literature and Film \\
ENGL 394 & (3) & Popular Literary Forms \\
ENGL 421 & (3) & African Literature \\
ENGL 424 & (3) & Irish Literature \\
ENGL 437 & (3) & Studies in Literary Form \\
ENGL 438 & (3) & Studies in Literary Form \\
ENGL 440 & (3) & First Nations and Inuit Literature and Media \\
ENGL 447 & (3) & Crosscurrents/English Literature and European Literature 1 \\
ENGL 460 & (3) & Studies in Literary Theory \\
ENGL 461 & (3) & Creative Writing: Poetry \\
ENGL 464 & (3) &
\end{tabular}

\section*{Major Author}

3 credits on a Major Author must be included in the 27 complementary course credits.
\begin{tabular}{lll} 
ENGL 315 & \((3)\) & Shakespeare \\
ENGL 316 & \((3)\) & Milton \\
ENGL 357 & \((3)\) & Chaucer \\
ENGL 409 & \((3)\) & Studies in a Canadian Author \\
ENGL 416 & \((3)\) & Studies in Shakespeare \\
ENGL 417 & \((3)\) & A Major English Poet
\end{tabular}

\subsection*{4.11.13.7 Bachelor of Arts (B.A.) - Joint Honours Component English - Cultural Studies (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs". Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) Applications will be considered by the Department's Honours Committee on the basis of the student's program GPA, at a minimum of 3.50. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00 , a minimum program GPA of 3.50 , and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50 , a minimum program GPA of 3.70 , and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
ENGL 275 & (3) & Introduction to Cultural Studies \\
ENGL 277 & (3) & Introduction to Film Studies \\
ENGL 359 & (3) & The Poetics of the Image
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits selected as described below.
In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. Students are encouraged to take courses at the 300 level and above. In addition to the Advanced Study requirement, 3 of the remaining 21 Complementary Course credits must be completed at the 500 level. A maximum of 9 of the 27 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

\section*{Advanced Study}

6 credits of advanced study, in one of the following two forms A or B, in order of preference:
A) 6 credits of honours essay:
ENGL 491D1
Honours Essay
ENGL 491D2
Honours Essay
B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).
(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formally recommended for the joint subject according to the description of that Joint Honours program found in the Arts section of the eCalendar. For example, Joint Honours with Anthropology allows the option of combining 3 credits of essay work with 3 credits in the joint subject to create a joint essay.)

\section*{Major Figures}

3 credits from a list of courses on Major Figures in Cultural Studies:
\begin{tabular}{lll} 
ENGL 315 & (3) & Shakespeare \\
ENGL 381 & (3) & A Film-Maker 1 \\
ENGL 409 & (3) & Studies in a Canadian Author
\end{tabular}
\begin{tabular}{lll} 
ENGL 416 & (3) & Studies in Shakespeare \\
ENGL 417 & (3) & A Major English Poet \\
ENGL 418 & (3) & A Major Modernist Writer \\
ENGL 481 & \((3)\) & A Film-Maker 2 \\
ENGL 516 & \((3)\) & Shakespeare
\end{tabular}

\section*{Theory}

3 credits from a list of courses on Theory:
\begin{tabular}{lll} 
ENGL 317 & \((3)\) & Theory of English Studies 1 \\
ENGL 318 & \((3)\) & Theory of English Studies 2 \\
ENGL 319 & \((3)\) & Theory of English Studies 3 \\
ENGL 322 & \((3)\) & Theories of the Text \\
ENGL 346 & \((3)\) & Materiality and Sociology of Text \\
ENGL 352 & \((3)\) & Theories of Difference
\end{tabular}

\section*{Historical Dimension}

3 credits from a list of courses in Cultural Studies with an historical dimension:
\begin{tabular}{lll} 
ENGL 350 & \((3)\) & Studies in the History of Film 1 \\
ENGL 351 & \((3)\) & Studies in the History of Film 2 \\
ENGL 363 & \((3)\) & Studies in the History of Film 3 \\
ENGL 374 & \((3)\) & Film Movement or Period \\
ENGL 451 & \((3)\) & A Period in Cinema \\
ENGL 480 & \((3)\) & Studies in History of Film 1
\end{tabular}

\section*{400-Level Theory}

3 credits from a list of 400-level courses in Cultural Studies with a theoretical component:
\begin{tabular}{lll} 
ENGL 454 & \((3)\) & Topics in Cultural Studies and Gender \\
ENGL 479 & (3) & Philosophy of Film \\
ENGL 483 & (3) & Seminar in the Film \\
ENGL 484 & (3) & Seminar in the Film \\
ENGL 488 & \((3)\) & Special Topics / Communications and Mass Media 2 \\
ENGL 489 & \((3)\) & Culture and Critical Theory 1 \\
ENGL 490 & (3) & Culture and Critical Theory 2 \\
ENGL 492 & \((3)\) & Image and Text
\end{tabular}

\section*{Departmental Offerings}

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

\subsection*{4.11.13.8 Bachelor of Arts (B.A.) - Joint Honours Component English - Drama and Theatre (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs." Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) The minimum CGPA for application to the Joint Honours
program is 3.30 . Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3 ) may also consult the Director of the Honours program for special permission to apply. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00 , a minimum program GPA of 3.50, and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50 , a minimum program GPA of 3.70 , and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
ENGL 230 & (3) & Introduction to Theatre Studies \\
ENGL 355 & (3) & The Poetics of Performance
\end{tabular}

\section*{Complementary Courses (30 credits)}

30 credits selected as described below. In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. In addition to the Advanced Study requirement, 3 of the remaining 24 Complementary Course credits must be completed at the 500 level. A maximum of 9 of the 30 credits are allowed at the 200 level, none in the final year of the program.

\section*{Advanced Study}

6 credits of advanced study, in one of the following two forms A or B, in order of preference:
A) 6 credits of honours essay:
\begin{tabular}{lll} 
ENGL 491D1 & (3) & Honours Essay \\
ENGL 491D2 & (3) & Honours Essay
\end{tabular}

OR
B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).
(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formally recommended for the joint subject according to the description of that Joint Honours program found in the Arts section of the eCalendar. For example, Joint Honours with Anthropology allows the option of combining 3 credits of essay work with 3 credits in the joint subject to create a joint essay.)

\section*{3 credits from the following practice-based courses:}
\begin{tabular}{lll} 
ENGL 269 & (3) & Introduction to Performance \\
ENGL 365 & (3) & Costuming for the Theatre 1 \\
ENGL 368 & (3) & Stage Scenery and Lighting 1 \\
ENGL 372 & (3) & Stage Scenery and Lighting 2 \\
ENGL 377 & (3) & Costuming for the Theatre 2 \\
ENGL 396 & (3) & Theatre Practicum 1 \\
ENGL 397 & (3) & Theatre Practicum 2
\end{tabular}

\section*{Theory Courses}

3 credits from a list of theory courses:
\begin{tabular}{lll} 
ENGL 317 & (3) & Theory of English Studies 1 \\
ENGL 318 & (3) & Theory of English Studies 2 \\
ENGL 319 & (3) & Theory of English Studies 3 \\
ENGL 322 & (3) & Theories of the Text
\end{tabular}
ENGL 346
(3)
Materiality and Sociology of Text
ENGL 352
(3)
Theories of Difference

\section*{Dramatic Literature}

3 credits in Dramatic Literature:
For a list of courses for the current academic year, please consult the Department of English web page http://www.mcgill.ca/english/.

\section*{History of the Theatre}

3 credits in History of the Theatre:
\begin{tabular}{lll} 
ENGL 306 & \((3)\) & Theatre History: Medieval and Early Modern \\
ENGL 308 & \((3)\) & English Renaissance Drama 1 \\
ENGL 310 & \((3)\) & Restoration and 18th Century Drama \\
ENGL 312 & \((3)\) & Victorian and Edwardian Drama 1 \\
ENGL 314 & \((3)\) & 20th Century Drama \\
ENGL 315 & \((3)\) & Shakespeare \\
ENGL 370 & \((3)\) & Theatre History: The Long Eighteenth Century \\
ENGL 371 & \((3)\) & Theatre History: 19th to 21st Centuries \\
ENGL 416 & (3) & Studies in Shakespeare \\
ENGL 467 & (3) & Advanced Studies in Theatre History \\
ENGL 486 & (3) & Special Topics in Theatre History \\
ENGL 516 & (3) & Shakespeare \\
ENGL 566 & \((3)\) & Special Studies in Drama 1
\end{tabular}

\section*{Performance-Oriented Courses}

3 credits from the list of Performance-Oriented courses:
\begin{tabular}{lll} 
ENGL 365 & \((3)\) & Costuming for the Theatre 1 \\
ENGL 367 & \((3)\) & Acting 2 \\
ENGL 368 & \((3)\) & Stage Scenery and Lighting 1 \\
ENGL 372 & \((3)\) & Stage Scenery and Lighting 2 \\
ENGL 376 & \((3)\) & Scene Study \\
ENGL 377 & \((3)\) & Costuming for the Theatre 2 \\
ENGL 396 & \((3)\) & Theatre Practicum 1 \\
ENGL 397 & \((3)\) & Theatre Practicum 2 \\
ENGL 465D1* & (4.5) & Theatre Laboratory \\
ENGL 465D2* & (4.5) & Theatre Laboratory \\
ENGL 466D1** & (3) & Directing for the Theatre \\
ENGL 466D2** & (3) & Acting 3 \\
ENGL 469 & (3) & Drama Workshop
\end{tabular}
*, \({ }^{* *}\) Note: Spanned credits. The amount over 3 credits can be attributed to Departmental Offerings credits.

\section*{Departmental Offerings}

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

\subsection*{4.11.13.9 Bachelor of Arts (B.A.) - Joint Honours Component English - Literature (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs." Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) The minimum CGPA for application to the Joint Honours program is 3.30 . Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3 ) may also consult the Director of the Honours program for special permission to apply. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00 , a minimum program GPA of 3.50 , and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50 , a minimum program GPA of 3.70 , and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ENGL 202 & (3) & Departmental Survey of English Literature 1 \\
ENGL 203 & (3) & Departmental Survey of English Literature 2 \\
ENGL 311 & (3) & Poetics \\
ENGL 360 & (3) & Literary Criticism
\end{tabular}

\section*{Complementary Courses (24 credits)}

24 credits selected as described below.
In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. Students are encouraged to take courses at the 300 level and above. At least 3 of the 24 credits must be devoted to a course on a Major Author as indicated under the rubrics dedicated to these offerings in each year's list of Complementary Courses on the Department of English website (http://www.mcgill.ca/english). In addition to the Advanced Study requirement, 3 of the remaining 18 Complementary Courses credits must be completed at the 500 level. A maximum of 9 of the 24 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

\section*{Advanced Study}

6 credits of advanced study, in one of the following two forms A or B, in order of preference:

\section*{A) 6-credits of honours essay:}
ENGL 491D1
Honours Essay
ENGL 491D2
Honours Essay
B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).
(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formally recommended for the joint subject according to the description of that Joint Honours program found in the Arts section of the eCalendar. For example, Joint Honours with Anthropology allows the option of combining 3 credits of essay work with 3 credits in the joint subject to create a joint essay.)

\section*{Areas of English Literature}

3 credits from one of the following areas: Backgrounds of English Literature, Old English, Medieval, Renaissance.

\section*{Backgrounds of English Literature}
\begin{tabular}{lll} 
ENGL 347 & \((3)\) & Great Writings of Europe 1 \\
ENGL 348 & (3) & Great Writings of Europe 2 \\
ENGL 349 & (3) & English Literature and Folklore 1 \\
ENGL 447 & \((3)\) & Crosscurrents/English Literature and European Literature 1
\end{tabular}

\section*{Old English}

ENGL 342
ENGL 452
Introduction to Old English
Studies in Old English
ENGL 553
Old English Literature

\section*{Medieval}

ENGL 337
ENGL 349
(3)
(3)
(3)
(3)
(3)

Theme or Genre in Medieval Literature
English Literature and Folklore 1
ENGL 356
)
Middle English
Chaucer
Chaucer - Troilus and Criseyde
Middle English
Middle English

\section*{Renaissance}
\begin{tabular}{lll} 
ENGL 300 & \((3)\) & The Seventeenth Century \\
ENGL 305 & \((3)\) & Renaissance English Literature 1 \\
ENGL 307 & \((3)\) & Renaissance English Literature 2 \\
ENGL 308 & (3) & English Renaissance Drama 1 \\
ENGL 309 & (3) & English Renaissance Drama 2 \\
ENGL 315 & (3) & Shakespeare \\
ENGL 316 & (3) & Milton \\
ENGL 349 & (3) & English Literature and Folklore 1 \\
ENGL 400 & (3) & Earlier English Renaissance \\
ENGL 401 & (3) & Studies in the 17th Century \\
ENGL 416 & (3) & Studies in Shakespeare \\
ENGL 501 & (3) & 16th Century \\
ENGL 516 & (3) & Shakespeare
\end{tabular}

\section*{Areas of English Literature}

3 credits from one of the following areas: Restoration, 18th Century, Romantic, Victorian, 19th Century American.

\section*{Restoration}
\begin{tabular}{lll} 
ENGL 302 & (3) & Restoration and 18th C. English Literature 1 \\
ENGL 303 & (3) & Restoration and 18th C. English Literature 2 \\
ENGL 310 & (3) & Restoration and 18th Century Drama
\end{tabular}

\section*{18th Century}
\begin{tabular}{lcl} 
ENGL 301 & (3) & Earlier 18th Century Novel \\
ENGL 302 & (3) & Restoration and 18th C. English Literature 1 \\
ENGL 303 & (3) & Restoration and 18th C. English Literature 2 \\
ENGL 304 & (3) & Later Eighteenth Century Novel \\
ENGL 310 & (3) & Restoration and 18th Century Drama \\
ENGL 403 & (3) & Studies in the 18th Century \\
ENGL 503 & (3) & 18th Century
\end{tabular}

\section*{Romantic}
\begin{tabular}{lll} 
ENGL 331 & (3) & Literature Romantic Period 1 \\
ENGL 332 & (3) & Literature Romantic Period 2
\end{tabular}

\section*{Victorian}
\begin{tabular}{lll} 
ENGL 329 & \((3)\) & English Novel: 19th Century 1 \\
ENGL 330 & \((3)\) & English Novel: 19th Century 2 \\
ENGL 334 & \((3)\) & Victorian Poetry \\
ENGL 404 & \((3)\) & Studies in 19th Century Literature 1 \\
ENGL 405 & \((3)\) & Studies in 19th Century Literature 2 \\
ENGL 423 & \((3)\) & Studies in 19th Century Literature \\
ENGL 504 & \((3)\) & 19th Century
\end{tabular}

\section*{19th Century American}
\begin{tabular}{lll} 
ENGL 326 & (3) & 19th Century American Prose \\
ENGL 422 & (3) & Studies in 19th Century American Literature
\end{tabular}

\section*{Areas of English Literature}

3 credits from one of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary.

\section*{Early 20th Century}
\begin{tabular}{lll} 
ENGL 327 & (3) & Canadian Prose Fiction 1 \\
ENGL 328 & (3) & Development of Canadian Poetry 1 \\
ENGL 361 & (3) & Poetry of the 20th Century 1 \\
ENGL 414 & (3) & Studies in 20th Century Literature 1
\end{tabular}

\section*{Modernist}
\begin{tabular}{lll} 
ENGL 327 & \((3)\) & Canadian Prose Fiction 1 \\
ENGL 328 & \((3)\) & Development of Canadian Poetry 1 \\
ENGL 335 & \((3)\) & The 20th Century Novel 1 \\
ENGL 361 & (3) & Poetry of the 20th Century 1 \\
ENGL 414 & \((3)\) & Studies in 20th Century Literature 1 \\
ENGL 418 & (3) & A Major Modernist Writer
\end{tabular}
ENGL 505
(3)
20th Century

\section*{Post-modernist}
\begin{tabular}{lll} 
ENGL 320 & \((3)\) & Postcolonial Literature \\
ENGL 333 & \((3)\) & Development of Canadian Poetry 2 \\
ENGL 339 & (3) & Canadian Prose Fiction 2 \\
ENGL 443 & \((3)\) & Contemporary Women's Fiction
\end{tabular}

\section*{Contemporary}
\begin{tabular}{|c|c|c|}
\hline ENGL 320 & (3) & Postcolonial Literature \\
\hline ENGL 333 & (3) & Development of Canadian Poetry 2 \\
\hline ENGL 336 & (3) & The 20th Century Novel 2 \\
\hline ENGL 339 & (3) & Canadian Prose Fiction 2 \\
\hline ENGL 362 & (3) & Poetry of the 20th Century 2 \\
\hline ENGL 407 & (3) & The 20th Century \\
\hline ENGL 408 & (3) & The 20th Century \\
\hline ENGL 419 & (3) & Studies in 20th Century Literature \\
\hline ENGL 421 & (3) & African Literature \\
\hline ENGL 443 & (3) & Contemporary Women's Fiction \\
\hline
\end{tabular}

\section*{Theory}

3 credits from a list of courses on Theory:
\begin{tabular}{lll} 
ENGL 317 & (3) & Theory of English Studies 1 \\
ENGL 318 & (3) & Theory of English Studies 2 \\
ENGL 319 & (3) & Theory of English Studies 3 \\
ENGL 322 & \((3)\) & Theories of the Text \\
ENGL 346 & \((3)\) & Materiality and Sociology of Text \\
ENGL 352 & \((3)\) & Theories of Difference
\end{tabular}

\section*{Department Offerings}

6 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

\subsection*{4.11.13.10 Bachelor of Arts (B.A.) - Minor Concentration Medieval Studies ( 18 credits)}

The Minor Concentration in Medieval Studies facilitates undergraduate training in the interrelated branches of the discipline (e.g., history, literature, art history, languages, religion, philosophy), providing students with experience working in an inherently interdisciplinary filed and a valuable credential to pursue graduate study in the field (in any area).

\section*{Required Course (3 credits)}

MDST 400 (3) Interdisciplinary Seminar in Medieval Studies

\section*{Complementary Courses (15 credits)}

15 credits from the following list, of which only 9 credits may be taken in any one department. No more than 6 credits may be taken below the 300 level.

\section*{Art History and Communication Studies}
\begin{tabular}{lll} 
ARTH 204 & (3) & Introduction to Medieval Art and Architecture \\
ARTH 314 & (3) & The Medieval City \\
ARTH 425 & (3) & Arts of Medieval Spain
\end{tabular}

\section*{English}
\begin{tabular}{lcl} 
ENGL 306 & \((3)\) & Theatre History: Medieval and Early Modern \\
ENGL 337 & \((3)\) & Theme or Genre in Medieval Literature \\
ENGL 342 & (3) & Introduction to Old English \\
ENGL 348* & (3) & Great Writings of Europe 2 \\
ENGL 349* & (3) & English Literature and Folklore 1 \\
ENGL 356 & (3) & Middle English \\
ENGL 357 & (3) & Chaucer \\
ENGL 452 & (3) & Studies in Old English \\
ENGL 456 & (3) & Middle English \\
ENGL 500 & (3) & Middle English \\
ENGL 553 & (3) & Old English Literature
\end{tabular}
* Note: When content relates to Medieval Studies.

\section*{History and Classical Studies}
\begin{tabular}{lcl} 
CLAS 419 & \((3)\) & Advanced Latin: Post-Classical \\
HIST 194 & \((3)\) & FYS: Jewish Concepts of Others \\
HIST 319 & (3) & The Scientific Revolution \\
HIST 323 & (3) & History and Sexuality 1 \\
HIST 356 & (3) & Medicine in the Medieval West \\
HIST 358 & (3) & China's Middle Empires \\
HIST 380 & (3) & Topics: Medieval Culture and Society \\
HIST 401 & (3) & Seminar: Medieval Medicine \\
HIST 567D1 & (3) & Seminar: Medieval Medicine \\
HIST 567D2 &
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lll} 
ISLA 325 & \((3)\) & Introduction to Shi'i Islam \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 350 & \((3)\) & From Tribe to Dynasty \\
ISLA 420 & \((3)\) & Indo-Islamic Civilization: Medieval \\
ISLA 430 & \((3)\) & Islamdom: Baghdad to Cordoba \\
ISLA 516 & \((3)\) & Medieval Islam, 13th-15th Century
\end{tabular}

\section*{Jewish Studies}
\begin{tabular}{lll} 
JWST 261 & (3) & History of Jewish Philosophy and Thought \\
JWST 337 & (3) & Jewish Philosophy and Thought 1
\end{tabular}

\section*{Languages, Literatures, and Cultures}
\begin{tabular}{lll} 
ITAL 355 & (3) & Dante and the Middle Ages \\
ITAL 356 & (3) & Medieval Discourses on Love \\
ITAL 465 & (3) & Religious Identities in Italy
\end{tabular}

\section*{Langue et littérature françaises}
\begin{tabular}{lll} 
FREN 455* & (3) & La littérature médiévale 1 \\
FREN 456* & (3) & La littérature médiévale 2
\end{tabular}
** Note: Course taught and all coursework done in French.

\section*{Philosophy}
\begin{tabular}{lll} 
PHIL 344 & (3) & Medieval and Renaissance Political Theory \\
PHIL 356 & (3) & Early Medieval Philosophy
\end{tabular}

\section*{Religious Studies}
\begin{tabular}{lll} 
RELG 322 & (3) & Church and Empire to 1300 \\
RELG 532 & (3) & History of Christian Thought 1
\end{tabular}

\subsection*{4.11.13.11 Bachelor of Arts (B.A.) - Minor Concentration World Cinemas (18 credits)}

The Minor Concentration World Cinemas instructs students in film aesthetics, history, and theory by acquainting them with cinematic practices from different national and international traditions. This interdisciplinary program draws on the already existing teaching and research activities in several departments within the Faculty of Arts and will serve as an institutional context for future teaching and research endeavors in film studies.

\section*{Required Courses (6 credits)}
* Take either EAST 279 or LLCU 279.
\begin{tabular}{lcl} 
EAST 279* & (3) & Introduction to Film History \\
ENGL 277 & (3) & Introduction to Film Studies \\
LLCU 279* & (3) & Introduction to Film History
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits selected from the course list below with the following specifications:
a minimum of 6 credits in non-U.S. cinemas;
a maximum of 6 credits from any one department.
No more than 6 credits may be taken from the same discipline as the student's other major or minor concentrations.
\begin{tabular}{lcl} 
CANS 300 & (3) & Topics in Canadian Studies 1 \\
EAST 353 & \((3)\) & Approaches to Chinese Cinema \\
EAST 361 & \((3)\) & Animation and New Media \\
EAST 362 & \((3)\) & Japanese Cinema \\
EAST 368 & \((3)\) & Asian Genre Cinemas \\
EAST 369 & \((3)\) & Gender and Sexuality in Asian Media \\
EAST 454 & \((3)\) & Topics: Chinese Cinema \\
EAST 467 & \((3)\) & Topics: Japanese Cinema \\
EAST 564 & \((3)\) & Structures of Modernity: Asia
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ENGL 279 & (3) & Introduction to Film as Art \\
\hline ENGL 280 & (3) & Introduction to Film as Mass Medium \\
\hline ENGL 350 & (3) & Studies in the History of Film 1 \\
\hline ENGL 351 & (3) & Studies in the History of Film 2 \\
\hline ENGL 354 & (3) & Sexuality and Representation \\
\hline ENGL 363 & (3) & Studies in the History of Film 3 \\
\hline ENGL 366 & (3) & Film Genre \\
\hline ENGL 374 & (3) & Film Movement or Period \\
\hline ENGL 379 & (3) & Film Theory \\
\hline ENGL 381 & (3) & A Film-Maker 1 \\
\hline ENGL 382 & (3) & International Cinema 1 \\
\hline ENGL 385 & (3) & Topics in Literature and Film \\
\hline ENGL 391 & (3) & Special Topics: Cultural Studies 1 \\
\hline ENGL 393 & (3) & Canadian Cinema \\
\hline ENGL 450 & (3) & Film Aesthetics \\
\hline ENGL 451 & (3) & A Period in Cinema \\
\hline ENGL 476 & (3) & Alternative Approaches to Media 1 \\
\hline ENGL 479 & (3) & Philosophy of Film \\
\hline ENGL 480 & (3) & Studies in History of Film 1 \\
\hline ENGL 481 & (3) & A Film-Maker 2 \\
\hline ENGL 482 & (3) & International Cinema 2 \\
\hline ENGL 483 & (3) & Seminar in the Film \\
\hline ENGL 484 & (3) & Seminar in the Film \\
\hline ENGL 492 & (3) & Image and Text \\
\hline ENGL 585 & (3) & Cultural Studies: Film \\
\hline FILM 499 & (3) & Internship: World Cinemas \\
\hline FREN 310 & (3) & Cinéma français \\
\hline FREN 311 & (3) & Cinéma francophone \\
\hline FREN 315 & (3) & Cinéma québécois \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 370 & (3) & Special Topics in German Film \\
\hline GERM 373 & (3) & Weimar German Cinema \\
\hline HISP 340 & (3) & Latin American Cinema \\
\hline HISP 341 & (3) & Spanish Cinema \\
\hline HIST 435 & (3) & Topics in South Asian History \\
\hline ITAL 329 & (3) & Italian Cinematic Tradition \\
\hline ITAL 374 & (3) & Classics of Italian Cinema \\
\hline ITAL 375 & (3) & Cinema and Society in Modern Italy \\
\hline ITAL 477 & (3) & Italian Cinema and Video \\
\hline LLCU 200 & (3) & Topics in Film \\
\hline LLCU 300 & (3) & Cinema and the Visual \\
\hline MUHL 330 & (3) & Music and Film \\
\hline
\end{tabular}
\begin{tabular}{lll} 
PLAI 500 & (3) & Advanced Interdisciplinary Humanities Seminar \\
RUSS 213 & (3) & Introduction to Soviet Film \\
RUSS 395 & (3) & Soviet Cinema: Art and Politics
\end{tabular}

\subsection*{4.11.14 Environment}

The Bieler School of Environment offers programs open to Bachelor of Arts and Science students; please refer to Bieler School of Environment > Undergraduate for more information.
- Minor: section 7.5.1: Minor in Environment
- Interfaculty Programs: section 7.5.3: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Programs
- Honours: section 7.5.5: Honours Environment
- Diploma: section 7.5.7: Diploma Environment

\subsection*{4.11.14.1 Bachelor of Arts (B.A.) - Minor Concentration Environment (18 credits)}

This 18-credit Minor Concentration Environment is intended for Arts students in the multi-track system, Law and Management students. Students in Agricultural \& Environmental Sciences, Engineering, and Science should complete the Minor Environment.

\section*{Advising Note:}

Consultation with the Program Adviser for approval of course selection to meet program requirements is obligatory. No overlap is allowed between this program and the student's major program or concentration, or a second minor program.
For more information, contact:
Ms. Kathy Roulet, Program Adviser
Email: kathy.roulet@mcgill.ca
Telephone: 514-398-4306

\section*{Complementary Courses (18 credits)}

18 credits of complementary courses, all of which must fall outside the discipline or field of the student's major program or concentration, and which must be 200-level or above, selected as follows:

12 credits of MSE core courses:
The core ENVR courses are taught at both campuses. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & \((3)\) & Environmental Thought
\end{tabular}

6 credits of environmentally related courses selected with the approval of the Program Adviser (at least 3 credits must be in natural sciences). A list of Suggested Courses is given below.

\section*{Suggested Course List}

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.
Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.
This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Program Adviser.
Some courses on the Suggested Course List may be subject to other regulations (e.g., the Restricted Courses List for Faculty of Science students. If in doubt, ask the Program Adviser.

\section*{Location Note:}

When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Social Sciences and Policy}
\begin{tabular}{|c|c|c|}
\hline AGEC 231 & (3) & Economic Systems of Agriculture \\
\hline AGEC 333 & (3) & Resource Economics \\
\hline AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
\hline AGEC 442 & (3) & Economics of International Agricultural Development \\
\hline AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
\hline ANTH 206 & (3) & Environment and Culture \\
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline ANTH 339 & (3) & Ecological Anthropology \\
\hline ANTH 418 & (3) & Environment and Development \\
\hline ANTH 512 & (3) & Political Ecology \\
\hline ECON 205 & (3) & An Introduction to Political Economy \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline EDER 494 & (3) & Human Rights and Ethics in Practice \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline ENVR 400 & (3) & Environmental Thought \\
\hline ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 210 & (3) & Global Places and Peoples \\
\hline GEOG 216 & (3) & Geography of the World Economy \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 300 & (3) & Human Ecology in Geography \\
\hline GEOG 301 & (3) & Geography of Nunavut \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 303 & (3) & Health Geography \\
\hline GEOG 310 & (3) & Development and Livelihoods \\
\hline GEOG 370 & (3) & Protected Areas \\
\hline GEOG 403 & (3) & Global Health and Environmental Change \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline GEOG 423 & (3) & Dilemmas of Development \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline HIST 249 & (3) & Health and the Healer in Western History \\
\hline HIST 292 & (3) & History and the Environment \\
\hline NRSC 221 & (3) & Environment and Health \\
\hline PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
\hline PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PHIL 237 & (3) & Contemporary Moral Issues \\
\hline PHIL 334 & (3) & Ethical Theory \\
\hline PHIL 341 & (3) & Philosophy of Science 1 \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline PHIL 348 & (3) & Philosophy of Law 1 \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 412 & (3) & Canadian Voting/Public Opinion \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline PSYC 215 & (3) & Social Psychology \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 235 & (3) & Technology and Society \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 366 & (3) & Neighborhoods and Inequality \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline URBP 201 & (3) & Planning the 21st Century City \\
\hline URBP 504 & (3) & Planning for Active Transportation \\
\hline URBP 506 & (3) & Environmental Policy and Planning \\
\hline URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
\hline URBP 551 & (3) & Urban Design and Planning \\
\hline WCOM 314 & (3) & Communicating Science \\
\hline
\end{tabular}

\section*{Natural Sciences and Technology}
** Note: you may take LSCI 230 or MIMM 211, but not both; you may take ENVB 529 or GEOG 201, but not both; you may take one of BREE 217 , CIVE 323 or GEOG 322; you may take BIOL 308 or ENVB 305, but not both; you may take BIOL 465 or WILD 421, but not both; you make take COMP 202 or COMP 204, but not both; you may take EPSC 201 or EPSC 233, but not both.
\begin{tabular}{lcl} 
AGRI 340 & \((3)\) & Principles of Ecological Agriculture \\
ANSC 326 & \((3)\) & Fundamentals of Population Genetics \\
ANTH 311 & \((3)\) & Primate Behaviour and Ecology \\
ATOC 214 & \((3)\) & Introduction: Physics of the Atmosphere \\
ATOC 215 & \((3)\) & Oceans, Weather and Climate \\
BIOL 240 & \((3)\) & Monteregian Flora \\
BIOL 305 & (3) & Animal Diversity \\
BIOL 308** & (3) & Ecological Dynamics \\
BIOL 310 & \((3)\) & Biodiversity and Ecosystems
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BIOL 342 & (3) & Global Change Biology of Aquatic Ecosystems \\
\hline BIOL 418 & (3) & Freshwater Invertebrate Ecology \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 436 & (3) & Evolution and Society \\
\hline BIOL 465** & (3) & Conservation Biology \\
\hline BREE 217** & (3) & Hydrology and Water Resources \\
\hline BREE 322 & (3) & Organic Waste Management \\
\hline BREE 327 & (3) & Bio-Environmental Engineering \\
\hline BREE 518 & (3) & Ecological Engineering \\
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 281 & (3) & Inorganic Chemistry 1 \\
\hline CIVE 225 & (4) & Environmental Engineering \\
\hline CIVE 323** & (3) & Hydrology and Water Resources \\
\hline CIVE 550 & (3) & Water Resources Management \\
\hline COMP 202** & (3) & Foundations of Programming \\
\hline COMP 204** & (3) & Computer Programming for Life Sciences \\
\hline ENVB 210 & (3) & The Biophysical Environment \\
\hline ENVB 301 & (3) & Meteorology \\
\hline ENVB 305** & (3) & Population and Community Ecology \\
\hline ENVB 410 & (3) & Ecosystem Ecology \\
\hline ENVB 415 & (3) & Ecosystem Management \\
\hline ENVB 529** & (3) & GIS for Natural Resource Management \\
\hline ENVR 200 & (3) & The Global Environment \\
\hline ENVR 202 & (3) & The Evolving Earth \\
\hline ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
\hline EPSC 201** & (3) & Understanding Planet Earth \\
\hline EPSC 233** & (3) & Earth and Life History \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline FDSC 230 & (4) & Organic Chemistry \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 201** & (3) & Introductory Geo-Information Science \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322** & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 470 & (3) & Wetlands \\
\hline GEOG 550 & (3) & Historical Ecology Techniques \\
\hline LSCI 230** & (3) & Introductory Microbiology \\
\hline MICR 331 & (3) & Microbial Ecology \\
\hline MIME 320 & (3) & Extraction of Energy Resources \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
MIMM \(211^{* *}\) & \((3)\) & Introductory Microbiology \\
MIMM 214 & \((3)\) & Introductory Immunology: Elements of Immunity \\
MIMM 323 & \((3)\) & Microbial Physiology \\
NRSC 333 & (3) & Pollution and Bioremediation \\
PARA 410 & (3) & Environment and Infection \\
PARA 515 & (3) & Water, Health and Sanitation \\
PHYS 228 & (3) & Energy and the Environment \\
PLNT 304 & (3) & Biology of Fungi \\
PLNT 305 & (3) & Plant Pathology \\
PLNT 358 & (3) & Flowering Plant Diversity \\
PLNT 460 & (3) & Plant Ecology \\
SOIL 300 & (3) & Geosystems \\
WILD 302 & (3) & Fish Ecology \\
WILD 421** & (3) & Wildlife Conservation
\end{tabular}

\subsection*{4.11.15 French Language and Literature}

Le Département des littératures de langue française, de traduction et de création, les programmes et les cours offerts sont décrits à Faculty of Arts (Faculté des arts) > Undergraduate (programmes de premier cycle) > Browse Academic Units \& Programs (programmes d'études) > section 3.9.25: Littératures de langue française, de traduction et de création (langue et littérature françaises).

\subsection*{4.11.15.1 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et littérature françaises - Études et pratiques littéraires (18 crédits)}

Ce programme offre une introduction aux études littéraires de langue française et aux différentes pratiques littéraires que sont la création, la traduction et l'édition. Il vise également à fournir à chaque étudiant(e) les moyens de bien maîtriser l'écriture critique et les ressources de la langue. Il est possible de s'inscrire d'abord à ce programme et de le convertir par la suite en concentration majeure, moyennant l'ajout des cours requis pour répondre aux exigences de ce dernier programme. L'admission au programme nécessite une bonne connaissance du français lu, écrit et parlé.

\section*{COURS COMPLÉMENTAIRES (18 crédits)}

3 crédits choisis parmi les cours d'introduction suivants :
\begin{tabular}{lll} 
FREN 222 & (3) & Introduction aux études littéraires \\
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800 \\
FREN 252 & (3) & Littérature québécoise
\end{tabular}

15 crédits répartis de la façon suivante, selon l’orientation choisie («A : Études littéraires » ou «B : Pratiques littéraires ») :
ORIENTATION A : «Études littéraires »
12 crédits choisis parmi les cours du bloc «Études» (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800) ;

3 crédits choisis parmi les cours du bloc « Pratiques».

\section*{ORIENTATION B : « Pratiques littéraires »}

12 crédits choisis parmi les cours d'au moins deux séries différentes du bloc «Pratiques»;
3 crédits choisis parmi les cours du bloc «Études».

\section*{I) BLOC: ÉTUDES}

Liste de cours
(a) Série « Euvres et courants»
\begin{tabular}{|c|c|c|}
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline FREN 310 & (3) & Cinéma français \\
\hline FREN 311 & (3) & Cinéma francophone \\
\hline FREN 315 & (3) & Cinéma québécois \\
\hline FREN 329 & (3) & Civilisation québécoise \\
\hline FREN 355 & (3) & Littérature du 20e siècle 1 \\
\hline FREN 360 & (3) & La littérature du 19e siècle 1 \\
\hline FREN 362 & (3) & La littérature du 17e siècle 1 \\
\hline FREN 364 & (3) & La littérature du 18e siècle 1 \\
\hline FREN 366 & (3) & Littérature de la Renaissance 1 \\
\hline FREN 372 & (3) & Littérature québécoise 1 \\
\hline FREN 380 & (3) & Littératures francophones 1 \\
\hline FREN 381 & (3) & Littératures francophones 2 \\
\hline FREN 382 & (3) & Littérature québécoise 2 \\
\hline FREN 453 & (3) & Littérature du 20e siècle 2 \\
\hline FREN 455 & (3) & La littérature médiévale 1 \\
\hline FREN 456 & (3) & La littérature médiévale 2 \\
\hline FREN 457 & (3) & La littérature de la Renaissance 2 \\
\hline FREN 458 & (3) & La littérature du 17e siècle 2 \\
\hline FREN 459 & (3) & La littérature du 18e siècle 2 \\
\hline FREN 461 & (3) & Enjeux littéraires et culturels 1 \\
\hline FREN 472 & (3) & Enjeux littéraires et culturels 2 \\
\hline FREN 480 & (3) & Littérature québécoise contemporaine \\
\hline FREN 482 & (3) & La littérature du 19e siècle 2 \\
\hline FREN 485 & (3) & Littérature française contemporaine \\
\hline FREN 498 & (3) & Questions de littérature 3 \\
\hline FREN 499 & (3) & Questions de littérature 4 \\
\hline
\end{tabular}
(b) Série «Langue française»
\begin{tabular}{lcl} 
FREN 231 & \((3)\) & Linguistique française \\
FREN 245 & \((3)\) & Grammaire normative \\
FREN 313 & \((3)\) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & (3) & Grammaire du texte littéraire \\
FREN 434 & \((3)\) & Sociolinguistique du français \\
FREN 491 & (3) & Langage et littérature 2
\end{tabular}
(c) Série «Théorie»
CCTR 331 *1
(3)
FREN 334
Current Trends in Translation Studies
L'oeuvre au miroir de la critique
\begin{tabular}{lcl} 
FREN 335 & (3) & Théories littéraires 1 \\
FREN 337 & (3) & Textes, imaginaires, sociétés \\
FREN 375 & \((3)\) & Théories littéraires 2 \\
FREN 391 & (3) & Savoirs de la littérature 1 \\
FREN 394 *1 & (3) & Théories de la traduction \\
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e \\
FREN 425 *1 & Traduction et culture \\
FREN 496 & & Savoirs de la littérature 2 \\
*1 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331. \\
II) BLOC: PRATIQUES
\end{tabular}

Liste des cours
(a) Série «Création»
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & \((3)\) & Atelier d'écriture
\end{tabular}
(b) Série «Édition»
\begin{tabular}{lll} 
FREN 376 & (3) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & \((3)\) & Le livre
\end{tabular}
(c) Série «Traduction»
\begin{tabular}{lll} 
CCTR \(219 * 2\) & \((3)\) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(225 * 3\) & \((3)\) & Introduction to Translation (English to French) \\
CCTR \(325 * 4\) & \((3)\) & Semi-Specialized Translation (English to French) \\
CCTR \(326 * 5\) & \((3)\) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 6\) & \((3)\) & Traduction Littéraire-Français \\
CCTR \(453 * 7\) & \((1.5)\) & Technical Translation: Information Technology (English to French) \\
CCTR \(455 * 7\) & (1.5) & Technical Translation: Transportation (English to French) \\
CCTR \(457 * 7\) & Financial Translation: Investments (English to French) \\
CCTR \(459 * 7\) & (3) & Transcreation (English to French) \\
CCTR \(507 * 8\) & (3) & Editing and Revising (French) \\
CCTR \(535 * 9\) & (3) & Introduction to Language Technologies \\
FREN 239*2 & (3) & Trylistique comparée \\
FREN 244 *3 & (3) & Traduction générale \\
FREN 320 & (3) & Traduction littéraire 1 \\
FREN 324 *6 & (3) & Traduction et recherche 1 \\
FREN 341 & &
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline FREN 346 * & (3) & Traduction avancée \\
\hline FREN 347 *9 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *8 & (3) & Traduction et révision \\
\hline FREN 441 *5 & (3) & Traduction français-anglais \\
\hline FREN 443 *6 & (3) & Traduction littéraire 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline FREN 494 *7 & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*2 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 44} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants: CCTR 453, CCTR 455, CCTR 457 et CCTR 459.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline \multicolumn{3}{|l|}{NOTE : Les chiffres 1 et 2 n'indiquent pas des séquences ; ils servent à désigner des cours à contenu variable.} \\
\hline
\end{tabular}

\subsection*{4.11.15.2 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue \& littérature françaises - Langue française (18 crédits)}

Le programme «Concentration mineure en Langue et littérature françaises (option «Langue française ») » est offert en collaboration avec le Centre d'enseignement du français. Il s'adresse à des étudiant(e)s de français langue seconde qui ont déjà une bonne connaissance de la langue. Il vise l'acquisition d'un niveau de français équivalent au niveau B2 («utilisateur expérimenté») du Cadre européen de référence pour les langues dans les sphères universitaire, professionnelle, publique et personnelle.

Cette concentration mineure ne peut pas être convertie en concentration majeure. Pour être admis(e), l'étudiant(e) doit passer un test de classement au Centre d'enseignement du français.

\section*{COURS COMPLÉMENTAIRES ( 18 crédits)}

De 3 à 15 crédits de cours FRSL (Centre d'enseignement du français) répartis de la façon suivante+ :

De 0 à 6 crédits choisis parmi les cours ci-dessous :
\begin{tabular}{lcl} 
FRSL 321D1 & (3) & Oral and Written French 2 \\
FRSL 321D2 & \((3)\) & Oral and Written French 2 \\
FRSL 325 & (6) & Oral and Written French 2 - Intensive \\
FRSL 332 & \((3)\) & Intermediate French: Grammar 01 \\
FRSL 333 & \((3)\) & Intermediate French: Grammar 02 \\
FRSL 407 & (3) & Compréhension et expression orales \\
FRSL 408 & (3) & Français oral: Textes et expressions
\end{tabular}

De 0 à 6 crédits choisis parmi les cours ci-dessous :
FRSL 431
Français fonctionnel avancé

De 3 à 12 crédits choisis parmi les cours ci-dessous :
\begin{tabular}{lll} 
FRSL 445 & (3) & Français fonctionnel, écrit 1 \\
FRSL 446 & (3) & Français fonctionnel, écrit 2 \\
FRSL 449 & (3) & Le français des médias
\end{tabular}

FRSL 455
(3)

Grammaire et création
+ Le cours QCST 336 («Quebec Studies Summer Seminar ») ( 6 cr.) peut être suivi en remplacement de 6 crédits de cours FRSL. La substitution nécessite cependant l'autorisation préalable du conseiller ou de la conseillère académique du Centre d'enseignement du français.

De 3 à 15 crédits choisis parmi les cours FREN suivants (ou leurs équivalents) ++ :
\begin{tabular}{|c|c|c|}
\hline CCTR 219 * 1 & (3) & Fundamentals of Comparative Stylistics and Writing (French) \\
\hline CCTR 225 *2 & (3) & Introduction to Translation (English to French) \\
\hline CCTR 325 *3 & (3) & Semi-Specialized Translation (English to French) \\
\hline CCTR 326 * & (3) & Semi-Specialized Translation (French to English) \\
\hline FREN 201 & (3) & Le français littéraire (français langue seconde) \\
\hline FREN 203 & (3) & Analyse de textes (français langue seconde) \\
\hline FREN 231 & (3) & Linguistique française \\
\hline FREN 239 * 1 & (3) & Stylistique comparée \\
\hline FREN 244 *2 & (3) & Traduction générale \\
\hline FREN 245 & (3) & Grammaire normative \\
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline FREN 346 *3 & (3) & Traduction avancée \\
\hline FREN 441 *5 & (3) & Traduction français-anglais \\
\hline
\end{tabular}
++ Pour s'inscrire aux cours FREN 201 ou FREN 203, l'étudiant(e) s'assurera d'avoir réussi le FRSL 431 ou d'avoir réussi ou être inscrit(e) à au moins un des cours suivants : FRSL 445, FRSL 446, FRSL 449 ou FRSL 455.
*1 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.
*2 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.
*3 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.
*4 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.
4.11.15.3 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et litt. françaises - Traduction (18 crédits)

Le programme de «Concentration mineure en Langue et littérature françaises (option «Traduction») » offre une introduction à la traduction de l'anglais vers le français. Il favorise l'amélioration de la compréhension de l'anglais et des compétences rédactionnelles en français. Il est possible de s'inscrire d'abord à ce programme et de le convertir par la suite en concentration majeure, moyennant l'ajout des cours requis pour répondre aux exigences de ce dernier programme. L'admission nécessite une bonne connaissance du français et de l'anglais lus et écrits, ainsi que du français parlé; cette connaissance est vérifiée à l'aide d'un test de classement, à la suite duquel l'étudiant(e) peut se voir imposer de suivre le cours FREN 239 («Stylistique comparée ») ou son équivalent, le CCTR 219 («Fundamentals of Comparative Stylistics \& Writing (French) »), à la session d'automne de U1.

\section*{COURS OBLIGATOIRES ( 6 crédits)}
\begin{tabular}{lll} 
CCTR \(225 * 1\) & (3) & Introduction to Translation (English to French) \\
CCTR \(325 * 2\) & (3) & Semi-Specialized Translation (English to French) \\
FREN \(244 * 1\) & (3) & Traduction générale \\
FREN \(346 * 2\) & \((3)\) & Traduction avancée
\end{tabular}
*1 L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.
*2 L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

\section*{COURS COMPLÉMENTAIRES (12 crédits)}

6 à 9 crédits choisis parmi les cours suivants :
CCTR 219 *3
(3)
Fundamentals of Comparative Stylistics and Writing (French)
\begin{tabular}{|c|c|c|}
\hline CCTR 326 * 4 & (3) & Semi-Specialized Translation (French to English) \\
\hline CCTR 441 *5 & (3) & Traduction Littéraire-Français \\
\hline CCTR 453 *6 & (1.5) & Technical Translation: Information Technology (English to French) \\
\hline CCTR 455 *6 & (1.5) & Technical Translation: Transportation (English to French) \\
\hline CCTR 457 *6 & (1.5) & Financial Translation: Investments (English to French) \\
\hline CCTR 459* 6 & (1.5) & Transcreation (English to French) \\
\hline CCTR 507 *7 & (3) & Editing and Revising (French) \\
\hline CCTR 535 *8 & (3) & Introduction to Language Technologies \\
\hline FREN 239 *3 & (3) & Stylistique comparée \\
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *5 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 347 *8 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN \(431 * 7\) & (3) & Traduction et révision \\
\hline FREN 441 * 4 & (3) & Traduction français-anglais \\
\hline FREN 443 *5 & (3) & Traduction littéraire 2 \\
\hline FREN 494 *6 & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline * 8 L'étudiant(e) & FREN & CCTR 535. \\
\hline
\end{tabular}

3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{|c|c|c|}
\hline CCTR 331 *9 & (3) & Current Trends in Translation Studies \\
\hline FREN 201 & (3) & Le français littéraire (français langue seconde) \\
\hline FREN 203 & (3) & Analyse de textes (français langue seconde) \\
\hline FREN 231 & (3) & Linguistique française \\
\hline FREN 245 & (3) & Grammaire normative \\
\hline FREN 250 & (3) & Littérature française avant 1800 \\
\hline FREN 251 & (3) & Littérature française depuis 1800 \\
\hline FREN 252 & (3) & Littérature québécoise \\
\hline FREN 313 & (3) & Langage et littérature 1 \\
\hline FREN 336 & (3) & Histoire de la langue française \\
\hline FREN 356 & (3) & Grammaire du texte littéraire \\
\hline FREN 394 *9 & (3) & Théories de la traduction \\
\hline FREN 425 *9 & (3) & Traduction et culture \\
\hline FREN 434 & (3) & Sociolinguistique du français \\
\hline FREN 491 & (3) & Langage et littérature 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline
\end{tabular}
*9 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
NOTE: les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.

\subsection*{4.11.15.4 Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)}

Ce programme offre une formation générale qui inclut l'histoire des littératures d'expression française, l'analyse critique des œuvres et la théorie littéraire. Cette formation vise également à fournir aux étudiant(e)s les moyens de bien maîtriser l'écriture critique et les ressources de la langue. L'étude de la littérature s'y fait à travers les différentes pratiques que sont la création, la traduction et l'édition. Tou(te)s les étudiant(e)s sont amené(e)s à suivre aussi bien des cours portant sur les études littéraires que des cours portant sur les pratiques littéraires; ils et elles doivent cependant choisir une majorité de cours dans l'un ou l'autre grand domaine. L'inscription au programme présuppose une très bonne connaissance du français lu, écrit et parlé.

\section*{COURS OBLIGATOIRES (12 crédits)}
\begin{tabular}{lll} 
FREN 222 & (3) & Introduction aux études littéraires \\
FREN 333 & (3) & Questions de littérature du Moyen Âge et de l'Ancien Régime \\
FREN 444 & (3) & Questions de littérature moderne \\
FREN 450 & (3) & Questions de littérature québécoise
\end{tabular}

\section*{COURS COMPLÉMENTAIRES ( \(\mathbf{2 4}\) crédits)}

24 crédits répartis de la façon suivante, selon l’orientation choisie («A : Études littéraires » ou «B : Pratiques littéraires ») :

\section*{ORIENTATION A - «Études littéraires "}
de 3 à 9 crédits choisis parmi les cours de la série «Langue française» avec l'obligation de suivre au moins l'un des deux cours suivants :
FREN 245
(3) Grammaire normative
FREN 356
(3)
Grammaire du texte littéraire
de 9 à 15 crédits choisis parmi les cours de la série « Euvres et courants » (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800) ;
de 3 à 9 crédits choisis parmi les cours de la série «Théorie»;
de 3 à 9 crédits choisis parmi les cours du bloc « Pratiques ».

\section*{ORIENTATION B - «Pratiques littéraires »}
de 3 à 6 crédits choisis parmi les cours de la série «Langue française » avec l'obligation de suivre l'un des cours suivants :
\begin{tabular}{lll} 
FREN 245 & (3) & Grammaire normative \\
FREN 356 & (3) & Grammaire du texte littéraire
\end{tabular}
au moins 6 crédits choisis parmi les cours du bloc «Études »;
de 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e
\end{tabular}
au moins 6 crédits choisis parmi les cours de la série «Création»;
0 à 6 crédits choisis parmi les cours du bloc «Pratiques».

\section*{I) BLOC : ÉTUDES}

Liste de cours

\section*{(a) Série « CEuvres et courants »}
\begin{tabular}{lll} 
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800
\end{tabular}
\begin{tabular}{lll} 
FREN 252 & (3) & Littérature québécoise \\
FREN 253 & (3) & Oeuvres culture occidentale \\
FREN 310 & (3) & Cinéma français \\
FREN 311 & (3) & Cinéma francophone \\
FREN 315 & (3) & Cinéma québécois \\
FREN 329 & (3) & Civilisation québécoise \\
FREN 355 & (3) & Littérature du 20e siècle 1 \\
FREN 360 & (3) & La littérature du 19e siècle 1 \\
FREN 362 & (3) & La littérature du 17e siècle 1 \\
FREN 364 & (3) & La littérature du 18e siècle 1 \\
FREN 366 & (3) & Littérature de la Renaissance 1 \\
FREN 372 & (3) & Littérature québécoise 1 \\
FREN 380 & (3) & Littératures francophones 1 \\
FREN 381 & (3) & Littératures francophones 2 \\
FREN 382 & (3) & Littérature québécoise 2 \\
FREN 453 & (3) & Littérature du 20e siècle 2 \\
FREN 498 & (3) fanançaise contemporaine de littérature 3 de littérature 4 \\
FREN 455 & (3) 499 & (3)
\end{tabular}

\section*{(b) Série « Langue française »}
\begin{tabular}{lcl} 
FREN 231 & (3) & Linguistique française \\
FREN 245 & (3) & Grammaire normative \\
FREN 313 & (3) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & (3) & Grammaire du texte littéraire \\
FREN 434 & (3) & Sociolinguistique du français \\
FREN 491 & (3) & Langage et littérature 2
\end{tabular}

\section*{(c) Série «Théorie»}
\begin{tabular}{lll} 
CCTR \(331 * 1\) & (3) & Current Trends in Translation Studies \\
FREN 334 & (3) & L'oeuvre au miroir de la critique \\
FREN 335 & (3) & Théories littéraires 1
\end{tabular}
\begin{tabular}{lcl} 
FREN 337 & \((3)\) & Textes, imaginaires, sociétés \\
FREN 375 & \((3)\) & Théories littéraires 2 \\
FREN 391 & \((3)\) & Savoirs de la littérature 1 \\
FREN \(394 * 1\) & (3) & Théories de la traduction \\
FREN 420 & \((3)\) & Enjeux de l'écriture littéraire \\
FREN 422 & \((3)\) & Le métier d'écrivain-e \\
FREN \(425 * 1\) & (3) & Traduction et culture \\
FREN 496 & & Savoirs de la littérature 2
\end{tabular}
*1 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
II) BLOC : PRATIQUES

\section*{(a) Série «Création»}
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & \((3)\) & Atelier d'écriture
\end{tabular}

\section*{(b) Série «Édition»}
\begin{tabular}{lll} 
FREN 376 & (3) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & (3) & Le livre
\end{tabular}

\section*{(c) Série « Traduction»}
\begin{tabular}{|c|c|c|}
\hline CCTR 219*2 & (3) & Fundamentals of Comparative Stylistics and Writing (French) \\
\hline CCTR 225 *3 & (3) & Introduction to Translation (English to French) \\
\hline CCTR 325 * & (3) & Semi-Specialized Translation (English to French) \\
\hline CCTR 326 *5 & (3) & Semi-Specialized Translation (French to English) \\
\hline CCTR 441 *6 & (3) & Traduction Littéraire-Français \\
\hline CCTR 453 *7 & (1.5) & Technical Translation: Information Technology (English to French) \\
\hline CCTR 455 *7 & (1.5) & Technical Translation: Transportation (English to French) \\
\hline CCTR 457 *7 & (1.5) & Financial Translation: Investments (English to French) \\
\hline CCTR 459 *7 & (1.5) & Transcreation (English to French) \\
\hline CCTR 507 *8 & (3) & Editing and Revising (French) \\
\hline CCTR 535 *9 & (3) & Introduction to Language Technologies \\
\hline FREN 239 *2 & (3) & Stylistique comparée \\
\hline FREN 244 * & (3) & Traduction générale \\
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *6 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 346 * 4 & (3) & Traduction avancée \\
\hline FREN 347 *9 & (3) & Terminologie générale \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *8 & (3) & Traduction et révision \\
\hline FREN 441 *5 & (3) & Traduction français-anglais \\
\hline FREN 443 *6 & (3) & Traduction littéraire 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline FREN \(494 * 7\) & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*2 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 44} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline \multicolumn{3}{|l|}{NOTE : Les chiffres 1 et 2 n'indiquent pas des séquences ; ils servent à désigner des cours à contenu variable.} \\
\hline
\end{tabular}

\subsection*{4.11.15.5 Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)}

Le programme de «Concentration majeure en Langue et littérature françaises (option « Traduction ») » offre une formation générale en traduction de l'anglais vers le français. D'abord pratique, cette formation fournit également des assises théoriques sur le fonctionnement de la langue ou les enjeux de la traduction. Elle favorise l'amélioration de la compréhension de l'anglais et des compétences rédactionnelles en français, compétences que l'étude de la littérature de langue française viendra renforcer. L'admission au programme nécessite une bonne connaissance du français et de l'anglais lus et écrits, de même que du français parlé ; cette connaissance est vérifiée à l'aide d'un test de classement, à la suite duquel l'étudiant(e) peut se voir imposer de suivre le cours FREN 239 («Stylistique comparée») ou son équivalent, le CCTR 310 («Comparative Stylistics 2 ») à la session d'automne de U1.

\section*{COURS OBLIGATOIRES (12 crédits)}
\begin{tabular}{lll} 
CCTR \(225 * 1\) & (3) & Introduction to Translation (English to French) \\
CCTR \(325 * 2\) & (3) & Semi-Specialized Translation (English to French) \\
FREN 222 & (3) & Introduction aux études littéraires \\
FREN \(244 * 1\) & (3) & Traduction générale \\
FREN 245 & \((3)\) & Grammaire normative \\
FREN \(346 * 2\) & \((3)\) & Traduction avancée
\end{tabular}
*1 L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.
*2 L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

\section*{COURS COMPLÉMENTAIRES (24 crédits)}

De 12 à 15 crédits choisis parmi les cours suivants :
\begin{tabular}{lll} 
CCTR \(219 * 3\) & \((3)\) & Fundamentals of Comparative Stylistics and Writing (French) \\
CCTR \(326 * 4\) & \((3)\) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 5\) & \((3)\) & Traduction Littéraire-Français \\
CCTR \(453 * 6\) & \((1.5)\) & Technical Translation: Information Technology (English to French) \\
CCTR \(455 * 6\) & \((1.5)\) & Technical Translation: Transportation (English to French) \\
CCTR \(457 * 6\) & \((1.5)\) & Financial Translation: Investments (English to French) \\
CCTR \(459 * 6\) & \((1.5)\) & Transcreation (English to French) \\
CCTR \(507 * 7\) & \((3)\) & Editing and Revising (French) \\
CCTR \(535 * 8\) & \((3)\) & Introduction to Language Technologies \\
FREN \(239 * 3\) & (3) & Stylistique comparée
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 *5 & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 347 *8 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *7 & (3) & Traduction et révision \\
\hline FREN 441 * 4 & (3) & Traduction français-anglais \\
\hline FREN 443 *5 & (3) & Traduction littéraire 2 \\
\hline FREN 494 *6 & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.} \\
\hline \multicolumn{3}{|l|}{*6 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cou} \\
\hline \multicolumn{3}{|l|}{*7 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline \multicolumn{3}{|l|}{De 3 à 6 crédits choisis parmi les cours suivants:} \\
\hline CCTR 331 *9 & (3) & Current Trends in Translation Studies \\
\hline FREN 231 & (3) & Linguistique française \\
\hline FREN 313 & (3) & Langage et littérature 1 \\
\hline FREN 336 & (3) & Histoire de la langue française \\
\hline FREN 356 & (3) & Grammaire du texte littéraire \\
\hline FREN 394 *9 & (3) & Théories de la traduction \\
\hline FREN 425 *9 & (3) & Traduction et culture \\
\hline FREN 434 & (3) & Sociolinguistique du français \\
\hline FREN 491 & (3) & Langage et littérature 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline
\end{tabular}

6 à 9 crédits choisis parmi les cours du bloc «Études » (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800).
0 à 3 crédits choisis parmi les séries «Création» et «Édition» du bloc «Pratiques».

\section*{I) BLOC: ÉTUDES}

Liste de cours
(a) Série « Euvres et courants »
\begin{tabular}{lcl} 
FREN 250 & \((3)\) & Littérature française avant 1800 \\
FREN 251 & \((3)\) & Littérature française depuis 1800 \\
FREN 252 & \((3)\) & Littérature québécoise \\
FREN 253 & \((3)\) & Oeuvres culture occidentale \\
FREN 310 & \((3)\) & Cinéma français \\
FREN 311 & (3) & Cinéma francophone \\
FREN 315 & (3) & Cinéma québécois \\
FREN 329 & & Civilisation québécoise
\end{tabular}
\begin{tabular}{lll} 
FREN 355 & \((3)\) & Littérature du 20e siècle 1 \\
FREN 360 & \((3)\) & La littérature du 19e siècle 1 \\
FREN 362 & \((3)\) & La littérature du 17e siècle 1 \\
FREN 364 & \((3)\) & La littérature du 18e siècle 1 \\
FREN 366 & \((3)\) & Litérature de la Renaissance 1 \\
FREN 372 & \((3)\) & Littérature québécoise 1 \\
FREN 380 & (3) & Littératures francophones 1 \\
FREN 381 & (3) & Littératures francophones 2 \\
FREN 382 & (3) & Littérature québécoise 2 \\
FREN 453 & (3) & Littérature du 20e siècle 2 \\
FREN 455 & (3) & La littérature médiévale 1 \\
FREN 456 & (3) & La littérature médiévale 2 \\
FREN 457 & (3) & La littérature de la Renaissance 2 \\
FREN 458 & (3) & La littérature du 17e siècle 2 \\
FREN 459 & (3) & La littérature du 18e siècle 2 \\
FREN 461 & (3) & Enjeux littéraires et culturels 1 \\
FREN 472 & (3) & Enjeux littéraires et culturels 2 \\
FREN 480 & (3) & Littérature québécoise contemporaine \\
FREN 482 & (3) & La littérature du 19e siècle 2 \\
FREN 485 & (3) & Littérature française contemporaine \\
FREN 498 & (3) & Questions de littérature 3 \\
FREN 499 & (3) & Questions de littérature 4 \\
\hline
\end{tabular}

\section*{II) BLOC: PRATIQUES}
(a) Série «Création»
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & \((3)\) & Atelier d'écriture
\end{tabular}
(b) Série: «Édition»
\begin{tabular}{lll} 
FREN 376 & (3) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & \((3)\) & Le livre
\end{tabular}

Note : les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.
4.11.15.6 Baccalauréat ès Arts (B.A.) - Double Spécialisation Langue \& littérature françaises - Études et pratiques littéraires ( 36 crédits)

Ce programme, qui prépare aux études supérieures, offre une formation spécialisée incluant l'histoire des littératures d'expression française, l'analyse critique des œuvres et la théorie littéraire. La formation vise également à fournir aux étudiant(e)s les moyens de bien maîtriser l'écriture critique et les ressources de la langue. Les étudiant(e)s suivent aussi bien des cours portant sur les études littéraires que des cours portant sur les pratiques littéraires. Ils et elles doivent en outre se spécialiser dans l'un ou l'autre grand domaine en choisissant entre trois orientations : «Études littéraires », «Création littéraire» et «Traduction littéraire». L'inscription au programme présuppose une très bonne connaissance du français lu, écrit et parlé. Moyennes minimales requises : 3,00 pour l'ensemble des cours du programme et un CGPA de 3,00. Pour les détails quant aux jumelages possibles, consulter le site Web de la Faculté des Arts.

\section*{COURS OBLIGATOIRES (18 crédits)}
\begin{tabular}{lll} 
FREN 222 & (3) & Introduction aux études littéraires \\
FREN 333 & (3) & Questions de littérature du Moyen Âge et de l'Ancien Régime \\
FREN 444 & (3) & Questions de littérature moderne \\
FREN 450 & (3) & Questions de littérature québécoise \\
FREN 464D1 & (3) & Mémoire de spécialisation \\
FREN 464D2 & (3) & Mémoire de spécialisation
\end{tabular}

\section*{COURS COMPLÉMENTAIRES (18 crédits)}

L'étudiant(e) doit choisir entre trois orientations :
«A : Études littéraires », «B : Création littéraire » ou «C : Traduction littéraire» :

\section*{ORIENTATION A - Études littéraires}
de 6 à 9 crédits choisis parmi les cours de la série «Euvres et courants» (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800) ;
au moins 3 crédits choisis parmi les cours de la série «Langue française»;
au moins 3 crédits choisis parmi les cours de la série «Théorie»;
au moins 3 crédits choisis parmi les cours du bloc «Pratiques».

\section*{ORIENTATION B - Création littéraire}
de 6 à 9 crédits choisis parmi les cours de la série «Création»;
au moins 3 crédits choisis parmi les cours de la série «Langue française »;
au moins 3 crédits choisis parmi les cours de la série «Théorie»;
Au moins 3 crédits choisis parmi les séries «Édition» et «Traduction» du bloc «Pratiques».

\section*{ORIENTATION C - Traduction littéraire}
de 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lcl} 
CCTR \(225 * 1\) & (3) & Introduction to Translation (English to French) \\
CCTR \(325 * 2\) & (3) & Semi-Specialized Translation (English to French) \\
FREN \(244 * 1\) & \((3)\) & Traduction générale \\
FREN \(346 * 2\) & Traduction avancée \\
*1 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225. \\
*2 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.
\end{tabular}

De 6 à 12 crédits choisis parmi les cours suivants :
\begin{tabular}{lcl} 
CCTR \(326 * 3\) & (3) & Semi-Specialized Translation (French to English) \\
CCTR \(441 * 5\) & (3) & Traduction Littéraire-Français \\
CCTR \(507 * 4\) & (3) & Editing and Revising (French) \\
FREN 320 & \((3)\) & Traduire, écrire, expérimenter. \\
FREN \(324 * 5\) & (3) & Traduction littéraire 1 \\
FREN 341 & (3) & Traduction et recherche 1 \\
FREN 349 & (3) & Traduction et recherche 2 \\
FREN \(431 * 4\) & (3) & Traduction et révision \\
FREN \(441 * 3\) &
\end{tabular}
*3 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.
*4 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.
*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

De 3 à 6 crédits choisis parmi les cours suivants :
\begin{tabular}{lcl} 
CCTR \(331 * 6\) & \((3)\) & Current Trends in Translation Studies \\
FREN 231 & \((3)\) & Linguistique française \\
FREN 245 & \((3)\) & Grammaire normative \\
FREN 313 & \((3)\) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & \((3)\) & Grammaire du texte littéraire \\
FREN \(394 * 6\) & \((3)\) & Théories de la traduction \\
FREN \(425 * 6\) & (3) & Traduction et culture \\
FREN 434 & (3) & Sociolinguistique du français \\
FREN 491 & & Langage et littérature 2
\end{tabular}
*6 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

\section*{I) BLOC : ÉTUDES}

Liste de cours
(a) Série « Euvres et courants»
\begin{tabular}{lll} 
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800 \\
FREN 252 & (3) & Littérature québécoise \\
FREN 253 & (3) & Oeuvres culture occidentale \\
FREN 310 & (3) & Cinéma français \\
FREN 311 & (3) & Cinéma francophone \\
FREN 315 & (3) & Cinéma québécois \\
FREN 329 & (3) & Civilisation québécoise \\
FREN 355 & (3) & Littérature du 20e siècle 1 \\
FREN 360 & (3) littérature du 19e siècle 1 \\
FREN 362 & (3) & La littérature du 17e siècle 1 \\
FREN 364 & (3) & La littérature du 18e siècle 1 \\
FREN 366 & (3) & Littérature de la Renaissance 1 \\
FREN 372 & (3) & Littérature québécoise 1 \\
FREN 380 & (3) & Littératures francophones 1 \\
FREN 381 & (3) & Littératures francophones 2 \\
FREN 382 & (3) & Littérature québécoise 2 \\
FREN 453 & (3) & Littérature du 20e siècle 2 \\
FREN 455 & La littérature médiévale 1 & La littérature médiévale 2 de la Renaissance 2 \\
FREN 456 & FREN 457 & (3)
\end{tabular}
\begin{tabular}{lll} 
FREN 458 & (3) & La littérature du 17e siècle 2 \\
FREN 459 & (3) & La littérature du 18e siècle 2 \\
FREN 461 & (3) & Enjeux littéraires et culturels 1 \\
FREN 472 & (3) & Enjeux littéraires et culturels 2 \\
FREN 480 & (3) & Littérature québécoise contemporaine \\
FREN 482 & (3) & La littérature du 19e siècle 2 \\
FREN 485 & (3) & Littérature française contemporaine \\
FREN 498 & (3) & Questions de littérature 3 \\
FREN 499 & (3) & Questions de littérature 4
\end{tabular}

\section*{(b) Série « Langue française »}
\begin{tabular}{lcl} 
FREN 231 & (3) & Linguistique française \\
FREN 245 & (3) & Grammaire normative \\
FREN 313 & (3) & Langage et littérature 1 \\
FREN 336 & (3) & Histoire de la langue française \\
FREN 356 & (3) & Grammaire du texte littéraire \\
FREN 434 & (3) & Sociolinguistique du français \\
FREN 491 & (3) & Langage et littérature 2
\end{tabular}

\section*{(c) Série «Théorie»}
\begin{tabular}{lcl} 
CCTR \(331 * 6\) & (3) & Current Trends in Translation Studies \\
FREN 334 & (3) & L'oeuvre au miroir de la critique \\
FREN 335 & \((3)\) & Théories littéraires 1 \\
FREN 337 & \((3)\) & Textes, imaginaires, sociétés \\
FREN 375 & \((3)\) & Théories littéraires 2 \\
FREN 391 & (3) & Savoirs de la littérature 1 \\
FREN \(394 * 6\) & (3) & Théories de la traduction \\
FREN 420 & (3) & Enjeux de l'écriture littéraire \\
FREN 422 & (3) & Le métier d'écrivain-e \\
FREN \(425 * 6\) & (3) & Traduction et culture \\
FREN 496 & Savoirs de la littérature 2
\end{tabular}
*6 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.
II) BLOC : PRATIQUES
(a) Série «Création»
\begin{tabular}{lll} 
FREN 240 & (3) & Atelier d'écriture poétique \\
FREN 320 & (3) & Traduire, écrire, expérimenter. \\
FREN 340 & (3) & Atelier d'écriture narrative \\
FREN 440 & (3) & Atelier d'écriture dramatique \\
FREN 460 & \((3)\) & Atelier d'écriture
\end{tabular}
(b) Série «Édition»
\begin{tabular}{lll} 
FREN 376 & (3) & Correction et révision \\
FREN 377 & (3) & Pratiques de l'édition littéraire \\
FREN 476 & (3) & Le livre
\end{tabular}

\section*{(c) Série «Traduction»}
\begin{tabular}{|c|c|c|}
\hline CCTR 219 *7 & (3) & Fundamentals of Comparative Stylistics and Writing (French) \\
\hline CCTR 225 * 1 & (3) & Introduction to Translation (English to French) \\
\hline CCTR 325 *2 & (3) & Semi-Specialized Translation (English to French) \\
\hline CCTR 326 * 3 & (3) & Semi-Specialized Translation (French to English) \\
\hline CCTR 441 *5 & (3) & Traduction Littéraire-Français \\
\hline CCTR 453 * 8 & (1.5) & Technical Translation: Information Technology (English to French) \\
\hline CCTR 455 * 8 & (1.5) & Technical Translation: Transportation (English to French) \\
\hline CCTR 457 *8 & (1.5) & Financial Translation: Investments (English to French) \\
\hline CCTR 459 * 8 & (1.5) & Transcreation (English to French) \\
\hline CCTR 507 * 4 & (3) & Editing and Revising (French) \\
\hline CCTR 535 *9 & (3) & Introduction to Language Technologies \\
\hline FREN 239 *7 & (3) & Stylistique comparée \\
\hline FREN 244 * 1 & (3) & Traduction générale \\
\hline FREN 320 & (3) & Traduire, écrire, expérimenter. \\
\hline FREN 324 * & (3) & Traduction littéraire 1 \\
\hline FREN 341 & (3) & Traduction et recherche 1 \\
\hline FREN 346 *2 & (3) & Traduction avancée \\
\hline FREN 347 *9 & (3) & Terminologie générale \\
\hline FREN 349 & (3) & Traduction et recherche 2 \\
\hline FREN 431 *4 & (3) & Traduction et révision \\
\hline FREN 441 *3 & (3) & Traduction français-anglais \\
\hline FREN 443 *5 & (3) & Traduction littéraire 2 \\
\hline FREN 492 & (3) & Histoire de la traduction \\
\hline FREN 494 *8 & (3) & Traduction spécialisée \\
\hline \multicolumn{3}{|l|}{*1 L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.} \\
\hline \multicolumn{3}{|l|}{*2 L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.} \\
\hline \multicolumn{3}{|l|}{*3 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.} \\
\hline \multicolumn{3}{|l|}{*4 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.} \\
\hline \multicolumn{3}{|l|}{*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.} \\
\hline \multicolumn{3}{|l|}{* 7 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.} \\
\hline \multicolumn{3}{|l|}{*8 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.} \\
\hline \multicolumn{3}{|l|}{*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.} \\
\hline \multicolumn{3}{|l|}{NOTE : Les chiffres 1 et 2 n'indiquent pas des séquences ; ils servent à désigner des cours à contenu varia} \\
\hline
\end{tabular}

\subsection*{4.11.16 Gender, Sexuality, and Feminist Studies}

Institute for Gender, Sexuality, and Feminist Studies, its programs, and specific courses are described in Faculty of Arts > Undergraduate \(>\) Browse Academic Units \& Programs > section 3.9.15: Gender, Sexuality, and Feminist Studies.

\subsection*{4.11.16.1 Bachelor of Arts (B.A.) - Minor Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (18 credits)}

The Minor Concentration in Gender, Sexuality, Feminist, \& Social Justice Studies (GSFS) is an interdisciplinary program that centrally engages contemporary and historical issues centered on gender, sexuality, feminism, and social justice. The program provides students with opportunities to explore the meaning and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine how such categories might inform and reproduce power relationships.

\section*{Complementary Courses (18 credits)}

3 credits from the following:
\begin{tabular}{lll} 
GSFS 200 & (3) & Feminist and Social Justice Studies \\
GSFS 250 & (3) & Sexual and Gender Diversity Studies
\end{tabular}

3 credits Gender, Sexuality Feminist, and Social Justice Studies (GSFS) from the following:
\begin{tabular}{lll} 
GSFS 301 & \((3)\) & Current Topics 1 \\
GSFS 302 & \((3)\) & Current Topics 2 \\
GSFS 303 & \((3)\) & Gender and Disability \\
GSFS 304 & (3) & Postcolonial Feminist Theories \\
GSFS 305 & (3) & Critical Race and Social Justice Theories \\
GSFS 306 & (3) & Queer Theory \\
GSFS 307 & (3) & Indigenous Feminisms \\
GSFS 308 & (3) & Sex and Gender Minority Cultures \\
GSFS 401 & (3) & Special Topics 1 \\
GSFS 402 & (3) & Special Topics 2 \\
GSFS 403 & (3) & Feminisms and the Law \\
GSFS 404 & (3) & Politics of Identity \\
GSFS 405 & (3) & Social Justice and Activism \\
GSFS 406 & (3) & Trans*Feminisms \\
GSFS 407 & (3) & Sexuality and Gender: New Directions
\end{tabular}

Credits may count towards only one program requirement.

12 credits from the following:
Minimum of 6 credits must be at the 300 level or higher. Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.
Maximum of 3 transfer credits may be accepted from approved exchange programs subject to University approval.
\begin{tabular}{lcl} 
ANTH 227 & \((3)\) & Medical Anthropology \\
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 381* & (3) & Special Topic 2 \\
ANTH 407 & (3) & Anthropology of the Body \\
ANTH 413 & (3) & Gender in Archaeology \\
ANTH 480* & (3) & Special Topic 5 \\
ANTH 555* & \((3)\) & Advanced Topics in Ethnology \\
ARCH 533* & \((3)\) & New Approaches to Architectural History \\
ARTH 205* & \((3)\) & Introduction to Modern Art \\
ARTH 353* & \((3)\) & Selected Topics in Art History 1
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ARTH 354* & (3) & Selected Topics Art History 2 \\
\hline ARTH 421* & (3) & Selected Topics in Art and Architecture 2 \\
\hline ARTH 440* & (3) & The Body and Visual Culture \\
\hline CANS 405* & (3) & Canadian Studies Seminar 5 \\
\hline CLAS 308 & (3) & Gender in the Ancient World \\
\hline COMS 310 & (3) & Media and Feminist Studies \\
\hline COMS 400* & (3) & Critical Theory Seminar \\
\hline COMS 411 & (3) & Disability, Technology and Communication \\
\hline COMS 490* & (3) & Special Topics in History and Theory of Media \\
\hline COMS 492 & (3) & Power, Difference and Justice \\
\hline COMS 541* & (3) & Cultural Industries \\
\hline EAST 313* & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 369 & (3) & Gender and Sexuality in Asian Media \\
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 453* & (3) & Topics: Chinese Literature \\
\hline EDPC 503 & (3) & Intersectional Relationships and Sexualities \\
\hline EDPE 515 & (3) & Gender Identity Development \\
\hline ENGL 275 & (3) & Introduction to Cultural Studies \\
\hline ENGL 290 & (3) & Postcolonial and World Literatures in English \\
\hline ENGL 320 & (3) & Postcolonial Literature \\
\hline ENGL 371* & (3) & Theatre History: 19th to 21st Centuries \\
\hline ENGL 388* & (3) & Studies in Popular Culture \\
\hline ENGL 413* & (3) & Special Topics in Canadian Drama and Theatre \\
\hline ENGL 418* & (3) & A Major Modernist Writer \\
\hline ENGL 440* & (3) & First Nations and Inuit Literature and Media \\
\hline ENGL 443 & (3) & Contemporary Women's Fiction \\
\hline ENGL 444 & (3) & Studies in Women Authors \\
\hline ENGL 489* & (3) & Culture and Critical Theory 1 \\
\hline ENGL 516* & (3) & Shakespeare \\
\hline GEOG 331* & (3) & Urban Social Geography \\
\hline GEOG 507* & (3) & Advanced Social Geography \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GSFS 200 & (3) & Feminist and Social Justice Studies \\
\hline GSFS 250 & (3) & Sexual and Gender Diversity Studies \\
\hline GSFS 300 & (3) & Research Inquiry in GSFS \\
\hline GSFS 301 & (3) & Current Topics 1 \\
\hline GSFS 302 & (3) & Current Topics 2 \\
\hline GSFS 303 & (3) & Gender and Disability \\
\hline GSFS 304 & (3) & Postcolonial Feminist Theories \\
\hline GSFS 305 & (3) & Critical Race and Social Justice Theories \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GSFS 306 & (3) & Queer Theory \\
\hline GSFS 307 & (3) & Indigenous Feminisms \\
\hline GSFS 308 & (3) & Sex and Gender Minority Cultures \\
\hline GSFS 400 & (3) & Capstone: Engaging Fields of GSFS \\
\hline GSFS 401 & (3) & Special Topics 1 \\
\hline GSFS 402 & (3) & Special Topics 2 \\
\hline GSFS 403 & (3) & Feminisms and the Law \\
\hline GSFS 404 & (3) & Politics of Identity \\
\hline GSFS 405 & (3) & Social Justice and Activism \\
\hline GSFS 406 & (3) & Trans*Feminisms \\
\hline GSFS 407 & (3) & Sexuality and Gender: New Directions \\
\hline GSFS 450 & (3) & Independent Reading and Research \\
\hline GSFS 499 & (3) & GSFS Internship \\
\hline HISP 340* & (3) & Latin American Cinema \\
\hline HISP 358 & (3) & Gender and Textualities \\
\hline HIST 201* & (3) & Modern African History \\
\hline HIST 323 & (3) & History and Sexuality 1 \\
\hline HIST 343 & (3) & Women in Post-Confederation Canada \\
\hline HIST 344 & (3) & The Chinese Family in History \\
\hline HIST 347 & (3) & History and Sexuality 2 \\
\hline HIST 354 & (3) & Women in Europe 1700-2000 \\
\hline HIST 380 & (3) & The Medieval Mediterranean \\
\hline HIST 382* & (3) & History of South Africa \\
\hline HIST 408 & (3) & Selected Topics in Indigenous History \\
\hline HIST 412 & (3) & Women and Gender in Modern Britain \\
\hline HIST 420 & (3) & Gender and Sexuality in Modern China \\
\hline HIST 424 & (3) & Gender, Sexuality and Medicine \\
\hline HIST 429 & (3) & Topics: Gender/Feminist Histories \\
\hline HIST 433 & (3) & British Queer History \\
\hline HIST 525 & (3) & Women, Work and Family in Global History \\
\hline HIST 526 & (3) & Women and War \\
\hline HSEL 308 & (3) & Issues in Women's Health \\
\hline HSEL 309 & (3) & Women's Reproductive Health \\
\hline INDG 200 & (3) & Introduction to Indigenous Studies \\
\hline INDG 401* & (3) & Interdisciplinary Seminar in Indigenous Studies \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 585 & (3) & Arab Women's Literature \\
\hline ITAL 375* & (3) & Cinema and Society in Modern Italy \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 477* & (3) & Italian Cinema and Video \\
\hline MUAR 250 & (3) & Women Making Music \\
\hline MUAR 399 & (3) & Music and Queer Identity \\
\hline PHIL 242 & (3) & Introduction to Feminist Theory \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PHIL 327 & (3) & Philosophy of Race \\
\hline PHIL 442 & (3) & Topics in Feminist Theory \\
\hline PHIL 446* & (3) & Current Issues in Political Philosophy \\
\hline POLI 348 & (3) & Gender and Canadian Politics \\
\hline POLI 366* & (3) & Topics in Political Theory 1 \\
\hline POLI 422* & (3) & Developing Areas/Topics 2 \\
\hline POLI 423* & (3) & Politics of Ethno-Nationalism \\
\hline POLI 432* & (3) & Selected Topics: Comparative Politics \\
\hline POLI 444* & (3) & Topics in International Politics 2 \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline RELG 271 & (3) & Religion and Sexuality \\
\hline RELG 313* & (3) & Topics in Biblical Studies 1 \\
\hline RELG 336* & (3) & Contemporary Theological Issues \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 399* & (3) & Christian Spirituality \\
\hline SOCI 247 & (3) & Family and Modern Society \\
\hline SOCI 270 & (3) & Sociology of Gender \\
\hline SOCI 321 & (3) & Gender and Work \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 489 & (3) & Gender, Deviance and Social Control \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 530 & (3) & Sex and Gender \\
\hline SOCI 535 & (3) & Sociology of the Family \\
\hline
\end{tabular}

Note: Courses marked with and asterisk \(\left(^{*}\right)\) count toward Gender, Sexuality, Feminist, and Social Justice Studies when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

\subsection*{4.11.16.2 Bachelor of Arts (B.A.) - Major Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)}

The Major Concentration in Gender, Sexuality, Feminist, \& Social Justice Studies (GSFS) is an interdisciplinary program that centrally engages contemporary and historical issues centered on gender, sexuality, feminism, and social justice. The program provides students with opportunities to explore the meaning and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine how such categories might inform and reproduce power relationships. The Major Concentration consists of required GSFS courses that allow for an immersion into this area of study, and complementary courses from a range of departments, disciplines, and faculties. Students must see and adviser in Gender, Sexuality, Feminist, and Social Justice Studies at a minimum upon declaring the GSFS Major Concentration and prior to selecting courses for the final year of study.

Students are advised to take GSFS 200 and 250 in their first year in the program, GSFS 300 in their second year of the program, and GSFS 400 in their final year of the program.
Students must see an adviser in Women's Studies at a minimum upon registering in GSFS and prior to selecting courses for the final year of study.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
GSFS 200 & (3) & Feminist and Social Justice Studies \\
GSFS 250 & (3) & Sexual and Gender Diversity Studies \\
GSFS 300 & (3) & Research Inquiry in GSFS \\
GSFS 400 & (3) & Capstone: Engaging Fields of GSFS
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

9 credits selected from the GSFS Course List, 3 credits of which must be at the 400 or 500 level.
15 credits selected from the Complementary Course List. Three credits minimum must be at the 400 or 500 level and 9 credits maximum may be at the 200 level.

Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.

Maximum of 12 transfer credits may be accepted by approved exchange programs, subject to University approval.
Gender, Sexuality, Feminist, and Social Justice Studies (GSFS)
9 credits from the following:
\begin{tabular}{lll} 
GSFS 301 & \((3)\) & Current Topics 1 \\
GSFS 302 & \((3)\) & Current Topics 2 \\
GSFS 303 & \((3)\) & Gender and Disability \\
GSFS 304 & \((3)\) & Postcolonial Feminist Theories \\
GSFS 305 & (3) & Critical Race and Social Justice Theories \\
GSFS 306 & (3) & Queer Theory \\
GSFS 307 & (3) & Indigenous Feminisms \\
GSFS 308 & (3) & Sex and Gender Minority Cultures \\
GSFS 401 & (3) & Special Topics 1 \\
GSFS 402 & (3) & Special Topics 2 \\
GSFS 403 & (3) & Feminisms and the Law \\
GSFS 404 & (3) & Politics of Identity \\
GSFS 405 & (3) & Social Justice and Activism \\
GSFS 406 & (3) & Trans*Feminisms \\
GSFS 407 & (3) & Sexuality and Gender: New Directions
\end{tabular}

Credits may count towards only one program requirement.
15 credits from the following:
\begin{tabular}{lll} 
ANTH 227 & \((3)\) & Medical Anthropology \\
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 381* & (3) & Special Topic 2 \\
ANTH 407 & (3) & Anthropology of the Body \\
ANTH 413 & (3) & Gender in Archaeology \\
ANTH 480* & (3) & Special Topic 5 \\
ANTH 555* & (3) & Advanced Topics in Ethnology \\
ARCH 533* & (3) & New Approaches to Architectural History \\
ARTH 205* & (3) & Introduction to Modern Art \\
ARTH 353* & (3) & Selected Topics in Art History 1 \\
ARTH 354* & (3) & Selected Topics Art History 2 \\
ARTH 421* & (3) & Selected Topics in Art and Architecture 2 \\
ARTH 440* & (3) & The Body and Visual Culture \\
CANS 405* & (3) & Canadian Studies Seminar 5 \\
CLAS 308 & (3) & Gender in the Ancient World \\
COMS 310 & (3) & Media and Feminist Studies
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline COMS 400* & (3) & Critical Theory Seminar \\
\hline COMS 411 & (3) & Disability, Technology and Communication \\
\hline COMS 490* & (3) & Special Topics in History and Theory of Media \\
\hline COMS 492 & (3) & Power, Difference and Justice \\
\hline COMS 541* & (3) & Cultural Industries \\
\hline EAST 313* & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 369 & (3) & Gender and Sexuality in Asian Media \\
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 453* & (3) & Topics: Chinese Literature \\
\hline EDPC 503 & (3) & Intersectional Relationships and Sexualities \\
\hline EDPE 515 & (3) & Gender Identity Development \\
\hline ENGL 275 & (3) & Introduction to Cultural Studies \\
\hline ENGL 290 & (3) & Postcolonial and World Literatures in English \\
\hline ENGL 320 & (3) & Postcolonial Literature \\
\hline ENGL 371* & (3) & Theatre History: 19th to 21st Centuries \\
\hline ENGL 388* & (3) & Studies in Popular Culture \\
\hline ENGL 413* & (3) & Special Topics in Canadian Drama and Theatre \\
\hline ENGL 418* & (3) & A Major Modernist Writer \\
\hline ENGL 440* & (3) & First Nations and Inuit Literature and Media \\
\hline ENGL 443 & (3) & Contemporary Women's Fiction \\
\hline ENGL 444 & (3) & Studies in Women Authors \\
\hline ENGL 489* & (3) & Culture and Critical Theory 1 \\
\hline ENGL 516* & (3) & Shakespeare \\
\hline GEOG 331* & (3) & Urban Social Geography \\
\hline GEOG 507* & (3) & Advanced Social Geography \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GSFS 200 & (3) & Feminist and Social Justice Studies \\
\hline GSFS 250 & (3) & Sexual and Gender Diversity Studies \\
\hline GSFS 300 & (3) & Research Inquiry in GSFS \\
\hline GSFS 301 & (3) & Current Topics 1 \\
\hline GSFS 302 & (3) & Current Topics 2 \\
\hline GSFS 303 & (3) & Gender and Disability \\
\hline GSFS 304 & (3) & Postcolonial Feminist Theories \\
\hline GSFS 305 & (3) & Critical Race and Social Justice Theories \\
\hline GSFS 306 & (3) & Queer Theory \\
\hline GSFS 307 & (3) & Indigenous Feminisms \\
\hline GSFS 308 & (3) & Sex and Gender Minority Cultures \\
\hline GSFS 400 & (3) & Capstone: Engaging Fields of GSFS \\
\hline GSFS 401 & (3) & Special Topics 1 \\
\hline GSFS 402 & (3) & Special Topics 2 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GSFS 403 & (3) & Feminisms and the Law \\
\hline GSFS 404 & (3) & Politics of Identity \\
\hline GSFS 405 & (3) & Social Justice and Activism \\
\hline GSFS 406 & (3) & Trans*Feminisms \\
\hline GSFS 407 & (3) & Sexuality and Gender: New Directions \\
\hline GSFS 450 & (3) & Independent Reading and Research \\
\hline GSFS 499 & (3) & GSFS Internship \\
\hline HISP 340* & (3) & Latin American Cinema \\
\hline HISP 358 & (3) & Gender and Textualities \\
\hline HIST 201* & (3) & Modern African History \\
\hline HIST 323 & (3) & History and Sexuality 1 \\
\hline HIST 343 & (3) & Women in Post-Confederation Canada \\
\hline HIST 344 & (3) & The Chinese Family in History \\
\hline HIST 347 & (3) & History and Sexuality 2 \\
\hline HIST 354 & (3) & Women in Europe 1700-2000 \\
\hline HIST 380 & (3) & The Medieval Mediterranean \\
\hline HIST 382* & (3) & History of South Africa \\
\hline HIST 408 & (3) & Selected Topics in Indigenous History \\
\hline HIST 412 & (3) & Women and Gender in Modern Britain \\
\hline HIST 420 & (3) & Gender and Sexuality in Modern China \\
\hline HIST 424 & (3) & Gender, Sexuality and Medicine \\
\hline HIST 429 & (3) & Topics: Gender/Feminist Histories \\
\hline HIST 433 & (3) & British Queer History \\
\hline HIST 525 & (3) & Women, Work and Family in Global History \\
\hline HIST 526 & (3) & Women and War \\
\hline HSEL 308 & (3) & Issues in Women's Health \\
\hline HSEL 309 & (3) & Women's Reproductive Health \\
\hline INDG 401* & (3) & Interdisciplinary Seminar in Indigenous Studies \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 585 & (3) & Arab Women's Literature \\
\hline ITAL 375* & (3) & Cinema and Society in Modern Italy \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 477* & (3) & Italian Cinema and Video \\
\hline MUAR 250 & (3) & Women Making Music \\
\hline MUAR 399 & (3) & Music and Queer Identity \\
\hline PHIL 242 & (3) & Introduction to Feminist Theory \\
\hline PHIL 442 & (3) & Topics in Feminist Theory \\
\hline PHIL 446* & (3) & Current Issues in Political Philosophy \\
\hline POLI 366* & (3) & Topics in Political Theory 1 \\
\hline POLI 422* & (3) & Developing Areas/Topics 2 \\
\hline POLI 423* & (3) & Politics of Ethno-Nationalism \\
\hline POLI 432* & (3) & Selected Topics: Comparative Politics \\
\hline POLI 444* & (3) & Topics in International Politics 2 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline RELG 313* & (3) & Topics in Biblical Studies 1 \\
\hline RELG 336* & (3) & Contemporary Theological Issues \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 399* & (3) & Christian Spirituality \\
\hline SOCI 247 & (3) & Family and Modern Society \\
\hline SOCI 270 & (3) & Sociology of Gender \\
\hline SOCI 321 & (3) & Gender and Work \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 489 & (3) & Gender, Deviance and Social Control \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 530 & (3) & Sex and Gender \\
\hline SOCI 535 & (3) & Sociology of the Family \\
\hline
\end{tabular}

Note: Courses marked with and asterisk \(\left(^{*}\right.\) ) count toward Gender, Sexuality, Feminist, and Social Justice Studies when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

\subsection*{4.11.16.3 Bachelor of Arts (B.A.) - Jt Honours Component Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)}

The Joint Honours program offers a significant degree of analysis and depth of study into contemporary and historical critical issues centered on gender, sexuality, feminism, and social justice beyond the Major through required and complementary course work, intensive research, and seminars. The program enables students to explore the meanings and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine how such categories might inform and reproduce power relationships. The Joint Honours program culminates in the completion of an Honours thesis, supervised by a faculty member whose approval is sought the year prior. The Colloquium requires supplemental reading and writing assignments, training in research and thesis writing methods, presentation to the group of theses in progress, and response to the work of others. Joint Honours students must maintain a program GPA of 3.30 and a CGPA of 3.00.

Students are advised to take GSFS 200 and GSFS 250 in their first year in the program, and GSFS 300 in their second year of the program. Students must take GSFS 495D1/D2 and GSFS 497D1/D2 in their last full year of the program.

Students must see and adviser in Women's Studies at a minimum upon registering in GSFS and prior to selecting courses for the final year of study.

\section*{Required Courses (15 credits)}
\begin{tabular}{lll} 
GSFS 200 & (3) & Feminist and Social Justice Studies \\
GSFS 250 & \((3)\) & Sexual and Gender Diversity Studies \\
GSFS 300 & (3) & Research Inquiry in GSFS \\
GSFS 495D1 & \((1.5)\) & Honours/Joint Honours Colloquium \\
GSFS 495D2 & \((1.5)\) & Honours/Joint Honours Colloquium \\
GSFS 497D1 & \((1.5)\) & Joint Honours Thesis \\
GSFS 497D2 & \((1.5)\) & Joint Honours Thesis
\end{tabular}

\section*{Complementary Courses ( 21 credits)}

9 credits selected from the GSFS Course List, 3 credits of which must be at the 400 or 500 level.
12 credits selected from the Complementary Course List. Three credits minimum must be at the 400 or 500 level and 9 credits maximum may be at the 200 level.

Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.

Maximum of 12 transfer credits may be accepted by approved exchange programs, subject to University approval.

\section*{Gender, Sexuality, Feminist, and Social Justice Studies (GSFS)}

9 credits from the following:
\begin{tabular}{lll} 
GSFS 301 & \((3)\) & Current Topics 1 \\
GSFS 302 & \((3)\) & Current Topics 2 \\
GSFS 303 & \((3)\) & Gender and Disability \\
GSFS 304 & \((3)\) & Postcolonial Feminist Theories \\
GSFS 305 & \((3)\) & Critical Race and Social Justice Theories \\
GSFS 306 & (3) & Queer Theory \\
GSFS 307 & (3) & Indigenous Feminisms \\
GSFS 308 & (3) & Sex and Gender Minority Cultures \\
GSFS 401 & (3) & Special Topics 1 \\
GSFS 402 & (3) & Special Topics 2 \\
GSFS 403 & (3) & Feminisms and the Law \\
GSFS 404 & (3) & Politics of Identity \\
GSFS 405 & (3) & Social Justice and Activism \\
GSFS 406 & (3) & Trans*Feminisms \\
GSFS 407 & & Sexuality and Gender: New Directions
\end{tabular}

Credits may count towards only one program requirement.

\section*{12 credits from the following:}
\begin{tabular}{|c|c|c|}
\hline ANTH 227 & (3) & Medical Anthropology \\
\hline ANTH 327 & (3) & Anthropology of South Asia \\
\hline ANTH 381* & (3) & Special Topic 2 \\
\hline ANTH 407 & (3) & Anthropology of the Body \\
\hline ANTH 413 & (3) & Gender in Archaeology \\
\hline ANTH 480* & (3) & Special Topic 5 \\
\hline ANTH 555* & (3) & Advanced Topics in Ethnology \\
\hline ARCH 533* & (3) & New Approaches to Architectural History \\
\hline ARTH 205* & (3) & Introduction to Modern Art \\
\hline ARTH 353* & (3) & Selected Topics in Art History 1 \\
\hline ARTH 354* & (3) & Selected Topics Art History 2 \\
\hline ARTH 421* & (3) & Selected Topics in Art and Architecture 2 \\
\hline ARTH 440* & (3) & The Body and Visual Culture \\
\hline CANS 405* & (3) & Canadian Studies Seminar 5 \\
\hline CLAS 308 & (3) & Gender in the Ancient World \\
\hline COMS 310 & (3) & Media and Feminist Studies \\
\hline COMS 400* & (3) & Critical Theory Seminar \\
\hline COMS 411 & (3) & Disability, Technology and Communication \\
\hline COMS 490* & (3) & Special Topics in History and Theory of Media \\
\hline COMS 492 & (3) & Power, Difference and Justice \\
\hline COMS 541* & (3) & Cultural Industries \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EAST 313* & (3) & Current Topics: Korean Studies 1 \\
\hline EAST 350 & (3) & Gender and Sexuality in Chinese Literature \\
\hline EAST 351 & (3) & Women Writers of China \\
\hline EAST 369 & (3) & Gender and Sexuality in Asian Media \\
\hline EAST 370 & (3) & History of Sexuality in Japan \\
\hline EAST 390 & (3) & The Chinese Family in History \\
\hline EAST 453* & (3) & Topics: Chinese Literature \\
\hline EDPC 503 & (3) & Intersectional Relationships and Sexualities \\
\hline EDPE 515 & (3) & Gender Identity Development \\
\hline ENGL 275 & (3) & Introduction to Cultural Studies \\
\hline ENGL 290 & (3) & Postcolonial and World Literatures in English \\
\hline ENGL 320 & (3) & Postcolonial Literature \\
\hline ENGL 371* & (3) & Theatre History: 19th to 21st Centuries \\
\hline ENGL 388* & (3) & Studies in Popular Culture \\
\hline ENGL 413* & (3) & Special Topics in Canadian Drama and Theatre \\
\hline ENGL 418* & (3) & A Major Modernist Writer \\
\hline ENGL 440* & (3) & First Nations and Inuit Literature and Media \\
\hline ENGL 443 & (3) & Contemporary Women's Fiction \\
\hline ENGL 444 & (3) & Studies in Women Authors \\
\hline ENGL 489* & (3) & Culture and Critical Theory 1 \\
\hline ENGL 516* & (3) & Shakespeare \\
\hline GEOG 331* & (3) & Urban Social Geography \\
\hline GEOG 507* & (3) & Advanced Social Geography \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GSFS 200 & (3) & Feminist and Social Justice Studies \\
\hline GSFS 250 & (3) & Sexual and Gender Diversity Studies \\
\hline GSFS 300 & (3) & Research Inquiry in GSFS \\
\hline GSFS 301 & (3) & Current Topics 1 \\
\hline GSFS 302 & (3) & Current Topics 2 \\
\hline GSFS 303 & (3) & Gender and Disability \\
\hline GSFS 304 & (3) & Postcolonial Feminist Theories \\
\hline GSFS 305 & (3) & Critical Race and Social Justice Theories \\
\hline GSFS 306 & (3) & Queer Theory \\
\hline GSFS 307 & (3) & Indigenous Feminisms \\
\hline GSFS 308 & (3) & Sex and Gender Minority Cultures \\
\hline GSFS 400 & (3) & Capstone: Engaging Fields of GSFS \\
\hline GSFS 401 & (3) & Special Topics 1 \\
\hline GSFS 402 & (3) & Special Topics 2 \\
\hline GSFS 403 & (3) & Feminisms and the Law \\
\hline GSFS 404 & (3) & Politics of Identity \\
\hline GSFS 405 & (3) & Social Justice and Activism \\
\hline GSFS 406 & (3) & Trans*Feminisms \\
\hline GSFS 407 & (3) & Sexuality and Gender: New Directions \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GSFS 450 & (3) & Independent Reading and Research \\
\hline GSFS 499 & (3) & GSFS Internship \\
\hline HISP 340* & (3) & Latin American Cinema \\
\hline HISP 358 & (3) & Gender and Textualities \\
\hline HIST 201* & (3) & Modern African History \\
\hline HIST 323 & (3) & History and Sexuality 1 \\
\hline HIST 343 & (3) & Women in Post-Confederation Canada \\
\hline HIST 344 & (3) & The Chinese Family in History \\
\hline HIST 347 & (3) & History and Sexuality 2 \\
\hline HIST 354 & (3) & Women in Europe 1700-2000 \\
\hline HIST 380 & (3) & The Medieval Mediterranean \\
\hline HIST 382* & (3) & History of South Africa \\
\hline HIST 408 & (3) & Selected Topics in Indigenous History \\
\hline HIST 412 & (3) & Women and Gender in Modern Britain \\
\hline HIST 420 & (3) & Gender and Sexuality in Modern China \\
\hline HIST 424 & (3) & Gender, Sexuality and Medicine \\
\hline HIST 429 & (3) & Topics: Gender/Feminist Histories \\
\hline HIST 433 & (3) & British Queer History \\
\hline HIST 525 & (3) & Women, Work and Family in Global History \\
\hline HIST 526 & (3) & Women and War \\
\hline HSEL 308 & (3) & Issues in Women's Health \\
\hline HSEL 309 & (3) & Women's Reproductive Health \\
\hline INDG 401* & (3) & Interdisciplinary Seminar in Indigenous Studies \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 585 & (3) & Arab Women's Literature \\
\hline ITAL 375* & (3) & Cinema and Society in Modern Italy \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 477* & (3) & Italian Cinema and Video \\
\hline MUAR 250 & (3) & Women Making Music \\
\hline MUAR 399 & (3) & Music and Queer Identity \\
\hline PHIL 242 & (3) & Introduction to Feminist Theory \\
\hline PHIL 442 & (3) & Topics in Feminist Theory \\
\hline PHIL 446* & (3) & Current Issues in Political Philosophy \\
\hline POLI 366* & (3) & Topics in Political Theory 1 \\
\hline POLI 422* & (3) & Developing Areas/Topics 2 \\
\hline POLI 423* & (3) & Politics of Ethno-Nationalism \\
\hline POLI 432* & (3) & Selected Topics: Comparative Politics \\
\hline POLI 444* & (3) & Topics in International Politics 2 \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline RELG 313* & (3) & Topics in Biblical Studies 1 \\
\hline RELG 336* & (3) & Contemporary Theological Issues \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
RELG \(399^{*}\) & \((3)\) & Christian Spirituality \\
SOCI 247 & \((3)\) & Family and Modern Society \\
SOCI 270 & \((3)\) & Sociology of Gender \\
SOCI 321 & \((3)\) & Gender and Work \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 386 & \((3)\) & Contemporary Social Movements \\
SOCI 390 & \((3)\) & Gender and Health \\
SOCI 489 & \((3)\) & Gender, Deviance and Social Control \\
SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
SOCI 519 & (3) & Gender and Globalization \\
SOCI 530 & (3) & Sex and Gender \\
SOCI 535 & (3) & Sociology of the Family
\end{tabular}

Note: Courses marked with and asterisk \(\left({ }^{*}\right)\) are acceptable ONLY when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

\subsection*{4.11.17 Geography (GEOG)}

The Department of Geography information, programs, and courses are described in:
- Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.16: Geography (GEOG)
- Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.17: Geography (GEOG)

Geography also administers the B.A.\& Sc. Interfaculty Programs in Sustainability, Science and Society in partnership with the Bieler School of Environment. These programs are described in Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs > section 4.11.34: Sustainability, Science and Society.

Note: Students pursuing B.A. \& Sc. may take a Geography program either in Arts or in Science, but not both.

The following are considered Arts programs in the B.A. \& Sc.:
Minor Concentration GIS \& Remote Sensing
Minor Concentration Geography
Minor Concentration Geography (Urban Studies)
Minor Concentration Health Geography
Major Concentration Geography
Major Concentration Geography (Urban Studies)
Joint Honours Component Geography
The following are considered Science programs in the B.A. \& Sc.:
Minor GIS \& Remote Sensing
Minor Geography
Major Concentration Geography (Physical Geography)

\subsection*{4.11.17.1 Bachelor of Arts (B.A.) - Minor Concentration Geography (18 credits)}

The B.A.; Minor Concentration in Geography focuses on the interactions among people, places, and the environment, and is an excellent complement to many majors. It includes coursework in methodological techniques, human, and/or physical Geography. This Minor Concentration may be expanded into the Major Concentration Geography, but not into the Major Concentration Geography (Urban Studies).

\section*{Required (3 credits)}

GEOG 216 (3) Geography of the World Economy

\section*{Complementary Courses (15 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
GEOG 201 & \((3)\) & Introductory Geo-Information Science \\
GEOG 203 & \((3)\) & Environmental Systems \\
GEOG 210 & \((3)\) & Global Places and Peoples \\
GEOG 217 & \((3)\) & Cities in the Modern World \\
GEOG 221 & (3) & Environment and Health \\
GEOG 272 & \((3)\) & Earth's Changing Surface
\end{tabular}

9 credits from Geography (GEOG) courses at the 300 level or above.

\subsection*{4.11.17.2 Bachelor of Arts (B.A.) - Minor Concentration Geography (Urban Studies) (18 credits)}

This interdisciplinary program introduces students in the Faculty of Arts to a range of urban dynamics and the challenges facing contemporary cities around the world. Students should observe the levels indicated by course numbers: 200-level are first year (U1); 300-level, second year (U2); 400- or 500-level, third year (U3).

\section*{Required (3 credits)}
GEOG 217
(3)
Cities in the Modern World

\section*{Complementary Courses (15 credits)}

15 credits selected from the following lists. At least 9 credits must be completed at the 300 -level or above:

\section*{Group A}

6-9 credits selected from:
\begin{tabular}{lll} 
GEOG 201 & \((3)\) & Introductory Geo-Information Science \\
GEOG 210 & \((3)\) & Global Places and Peoples \\
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 303 & \((3)\) & Health Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods \\
GEOG 311 & \((3)\) & Economic Geography \\
GEOG 314 & \((3)\) & Geospatial Analysis \\
GEOG 315 & \((3)\) & Urban Transportation Geography \\
GEOG 316 & (3) & Political Geography \\
GEOG 325 & (3) & New Master-Planned Cities \\
GEOG 331 & (3) & Urban Social Geography \\
GEOG 333 & (3) & Introduction to Programming for Spatial Sciences \\
GEOG 408 & (3) & Geography of Development \\
GEOG 409 & (3) & Advanced Geospatial Analysis \\
GEOG 414 & (3) & Urban Geography \\
GEOG 417 & (3) & Geographies of Race \\
GEOG 418 & \((3)\) & Memory, Place, and Power \\
GEOG 420 & &
\end{tabular}

\section*{Group B}

6-9 credits selected from:

\section*{Architecture}

Although Architecture courses have prerequisites, they are waived for Urban Studies students, but courses at the 500-level may not be taken before U3.
ARCH 528
(3)
History of Housing

\section*{Art History and Communication Studies}
\begin{tabular}{lll} 
ARTH 204 & (3) & Introduction to Medieval Art and Architecture \\
COMS 425 & (3) & Urban Culture and Everyday Life
\end{tabular}

\section*{Civil Engineering}

CIVE 540
(3)

Urban Transportation Planning

\section*{History}
\begin{tabular}{lll} 
HIST 353 & (3) & History of Montreal \\
HIST 397 & (3) & Canada: Ethnicity, Migration
\end{tabular}

\section*{Management}

FINE 445
Real Estate Finance

\section*{Political Science}
\begin{tabular}{lll} 
POLI 318 & (3) & Comparative Local Government \\
POLI 321 & (3) & Issues: Canadian Public Policy
\end{tabular}

\section*{Quebec Studies}

QCST 200
(3)

Introduction to the Study of Quebec

\section*{Sociology}
SOCI 222
(3)

Urban Sociology
SOCI 230
(3) Sociology of Ethnic Relations

SOCI 333
(3)

Social Stratification
SOCI 366
(3) Neighborhoods and Inequality

SOCI 388
(3)

Crime

\section*{Urban Planning}
\begin{tabular}{lll} 
URBP 201 & (3) & Planning the 21st Century City \\
URBP 501 & (2) & Principles and Practice 1 \\
URBP 504 & (3) & Planning for Active Transportation \\
URBP 506 & (3) & Environmental Policy and Planning \\
URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
URBP 536 & (2) & Current Issues in Transportation 1 \\
URBP 537 & (2) & Current Issues in Transportation 2
\end{tabular}
\begin{tabular}{lll} 
URBP 551 & (3) & Urban Design and Planning \\
URBP 556 & (3) & Urban Economy: A Spatial Perspective
\end{tabular}

\subsection*{4.11.17.3 Bachelor of Arts (B.A.) - Minor Concentration GIS \& Remote Sensing (18 credits)}

The Minor Concentration in GIS \& Remote Sensing program provides B.A. students with the fundamentals of geospatial tools and technologies.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 314 & (3) & Geospatial Analysis
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits selected from:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
GEOG 333 & (3) & Introduction to Programming for Spatial Sciences
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
ATOC 309* & (3) & Weather Radars and Satellites \\
GEOG 308* & (3) & Remote Sensing for Earth Observation \\
GEOG 414* & (3) & Advanced Geospatial Analysis
\end{tabular}

6 credits selected from:
\begin{tabular}{lll} 
ATOC 309* & (3) & Weather Radars and Satellites \\
ESYS 300 & (3) & Investigating the Earth System \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
GEOG 308* & (3) & Remote Sensing for Earth Observation \\
GEOG 384 & (3) & Principles of Geospatial Web \\
GEOG \(414^{*}\) & (3) & Advanced Geospatial Analysis \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 535 & (3) & Remote Sensing and Interpretation
\end{tabular}
* may be taken in either list of complementary courses, but credits from one group may not be doubled-counted in the other.

\subsection*{4.11.17.4 Bachelor of Arts (B.A.) - Minor Concentration Health Geography (18 credits)}

There is increasing consensus around the idea that health is not just an expression of individual characteristics but an interaction between the characteristics of the individual and the environments, both physical and social, to which one is exposed over a lifetime of daily living and working. Health outcomes vary dramatically by physical and social characteristics of places both within and between countries and these provide a wedge for our understanding of the factors that might be modified to improve the health of large groups of people. The B.A.; Minor Concentration in Health Geography introduces students to both local and global health issues and provides a skill set in spatial and statistical analyses of diverse health outcomes in populations.

\section*{Required Courses ( \(\mathbf{1 2}\) credits)}
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 221 & (3) & Environment and Health \\
GEOG 303 & (3) & Health Geography \\
GEOG 403 & (3) & Global Health and Environmental Change
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

3 credits from:
\begin{tabular}{lcl} 
ENVR 200 & \((3)\) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 210 & (3) & Global Places and Peoples \\
GEOG 217 & (3) & Cities in the Modern World
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
GEOG 503 & (3) & Advanced Topics in Health Geography \\
PPHS 501* & (3) & Population Health and Epidemiology \\
PPHS 511* & (3) & Fundamentals of Global Health \\
PPHS 525*+ & (3) & Health Care Systems in Comparative Perspective \\
PPHS 529* & (3) & Global Environmental Health and Burden of Disease \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI \(365^{*}\) & (3) & Health and Development \\
SOCI \(525^{*}+\) & (3) & Health Care Systems in Comparative Perspective
\end{tabular}
+ Students can take PPHS 525 OR SOCI 525
* These courses may have additional prerequisites or restrictions.

\subsection*{4.11.17.5 Bachelor of Science (B.Sc.) - Minor Geography (18 credits)}

The Minor Geography is expandable into the B.Sc. Major Geography.
The Minor Geography is designed to provide students in the Faculty of Science with an overview of basic elements of geography at the introductory and advanced level.

This Minor permits no overlap with any other programs.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & (3) & Earth's Changing Surface
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits of Geography courses at the 200 level below.
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 210 & (3) & Global Places and Peoples \\
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 217 & (3) & Cities in the Modern World \\
GEOG 221 & (3) & Environment and Health
\end{tabular}

9 credits from any Geography course at the 300 level or above.

\subsection*{4.11.17.6 Bachelor of Science (B.Sc.) - Minor GIS \& Remote Sensing (18 credits)}

The Minor GIS \& Remote Sensing program provides B.Sc. students with the fundamentals of geospatial tools and technologies.

\section*{Required Course (6 credits)}
GEOG 201
(3)
GEOG 314
Introductory Geo-Information Science
(3)
Geospatial Analysis

\section*{Complementary Courses (12 credits)}

3 credits selected from:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
GEOG 333 & (3) & Introduction to Programming for Spatial Sciences
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
ATOC 309* & (3) & Weather Radars and Satellites \\
GEOG 308* & (3) & Remote Sensing for Earth Observation \\
GEOG 414* & (3) & Advanced Geospatial Analysis
\end{tabular}

6 credits selected from:
\begin{tabular}{lcl} 
ATOC 309* & (3) & Weather Radars and Satellites \\
COMP 250 & (3) & Introduction to Computer Science \\
ESYS 300 & (3) & Investigating the Earth System \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
GEOG 308* & (3) & Remote Sensing for Earth Observation \\
GEOG 384* & (3) & Principles of Geospatial Web \\
GEOG 414* & (3) & Advanced Geospatial Analysis \\
GEOG 428 & (3) & Earth System Geographic Information Science \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 535 & (3) & Remote Sensing and Interpretation
\end{tabular}
* may be taken in either list of complementary courses, but credits from one group may not be doubled-counted in the other.

\subsection*{4.11.17.7 Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Geography - Physical Geography ( \(\mathbf{3 6}\) credits)}

The Major Concentration Geography - Physical Geography, which is restricted to students in the B.A. \& Sc., is a planned sequence of courses designed to permit a degree of specialization in this discipline.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
GEOG 201 & \((3)\) & Introductory Geo-Information Science \\
GEOG 202 & \((3)\) & Statistics and Spatial Analysis \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & \((3)\) & Earth's Changing Surface
\end{tabular}

\section*{Complementary Courses (24 credits)}

Courses are selected as follows:

6 credits of analytical techniques are selected from:
GEOG 308
(3) Remote Sensing for Earth Observation
GEOG 314
(3)
Geospatial Analysis
\begin{tabular}{lll} 
GEOG 351 & (3) & Quantitative Methods \\
GEOG 414 & (3) & Advanced Geospatial Analysis
\end{tabular}

3 credits of field courses selected from:
\begin{tabular}{lll} 
GEOG 495 & (3) & Field Studies - Physical Geography \\
GEOG 496 & \((3)\) & Geographical Excursion \\
GEOG 499 & (3) & Subarctic Field Studies
\end{tabular}

9-15 credits in systematic physical geography selected from:
\begin{tabular}{lll} 
GEOG 305 & (3) & Soils and Environment \\
GEOG 321 & (3) & Climatic Environments \\
GEOG 322 & (3) & Environmental Hydrology \\
GEOG 372 & (3) & Running Water Environments \\
GEOG 470 & \((3)\) & Wetlands
\end{tabular}
\(0-6\) credits in integrative and advanced topics selected from:
\begin{tabular}{lll} 
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 401 & (3) & Socio-Environmental Systems: Theory and Simulation \\
GEOG 505 & (3) & Global Biogeochemistry \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 536 & (3) & Geocryology \\
GEOG 537 & (3) & Advanced Fluvial Geomorphology \\
GEOG 550 & (3) & Historical Ecology Techniques \\
GEOG 555 & (3) & Ecological Restoration
\end{tabular}

\subsection*{4.11.17.8 Bachelor of Arts (B.A.) - Major Concentration Geography (37 credits)}

The B.A.; Major Concentration in Geography focuses on the interactions among people, places, and the environment. It includes coursework in human and physical Geography, methodological techniques, and field.

\section*{Required Courses (7 credits)}
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 290 & \((1)\) & Local Geographical Excursion
\end{tabular}

\section*{Complementary Courses (30 credits)}

\section*{Physical Geography}

3 credits from:
\begin{tabular}{lll} 
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & \((3)\) & Earth's Changing Surface
\end{tabular}

\section*{Statistics}

3 credits from:

Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
\begin{tabular}{lcl} 
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

\section*{Field Courses}

3 credits from:
Note: Field course offerings are determined each year in February.
\begin{tabular}{lll} 
GEOG 425 & \((3)\) & Southeast Asia Urban Field Studies \\
GEOG 494 & (3) & Urban Field Studies \\
GEOG 495 & (3) & Field Studies - Physical Geography \\
GEOG 496 & \((3)\) & Geographical Excursion \\
GEOG 499 & (3) & Subarctic Field Studies
\end{tabular}

\section*{Analysis and Methodology}

3 credits from:
\begin{tabular}{lll} 
GEOG 308 & \((3)\) & Remote Sensing for Earth Observation \\
GEOG 314 & \((3)\) & Geospatial Analysis \\
GEOG 333 & \((3)\) & Introduction to Programming for Spatial Sciences \\
GEOG 351 & (3) & Quantitative Methods \\
GEOG 414 & \((3)\) & Advanced Geospatial Analysis \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 512 & (3) & Advanced Quantitative Methods in Social Field Research
\end{tabular}

\section*{Geography}

The remaining 18 credits are to be selected from Geography (GEOG) courses excluding GEOG 200 and GEOG 205. Of these 18 credits, at least 3 credits must be at the 400 level or above.

\subsection*{4.11.17.9 Bachelor of Arts (B.A.) - Major Concentration Geography (Urban Studies) (36 credits)}

This major concentration exposes students to various approaches to the study of the urban world. Urban Studies is an interdisciplinary program that introduces students in the Faculty of Arts to a range of urban dynamics and the challenges facing contemporary cities around the world, and a variety of methodological approaches. Students should observe the levels indicated by course numbers: 200-level are first year (U1); 300-level, second year (U2); 400- or 500-level, third year (U3).
For students majoring in Urban Studies, the total number of credits permitted outside Arts and Science is 30 credits. Faculty of Arts regulations about "Courses Outside the Faculties of Arts and of Science" may be found in the Arts guidelines for "Course Requirements".

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 217 & (3) & Cities in the Modern World \\
GEOG 351 & (3) & Quantitative Methods
\end{tabular}

\section*{Complementary Courses (27 credits)}

\section*{Statistics}

\section*{3 credits from:}

NOTE: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
\begin{tabular}{lll} 
BIOL 373 & \((3)\) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

\section*{Field Course}

3 credits selected from:
*NOTE: Students may take either GEOG 425 or GEOG 494, but not both.
GEOG 425
(3)
Southeast Asia Urban Field Studies
GEOG 494
(3)
Urban Field Studies

\section*{Remaining Courses}

21 credits selected from the course lists below. Of these 21 credits, at least 15 credits must be at the 300 -level or above. At least 6 credits must also be taken outside of Geography.

\section*{Geography}
\begin{tabular}{|c|c|c|}
\hline GEOG 210 & (3) & Global Places and Peoples \\
\hline GEOG 216 & (3) & Geography of the World Economy \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 303 & (3) & Health Geography \\
\hline GEOG 310 & (3) & Development and Livelihoods \\
\hline GEOG 311 & (3) & Economic Geography \\
\hline GEOG 314 & (3) & Geospatial Analysis \\
\hline GEOG 315 & (3) & Urban Transportation Geography \\
\hline GEOG 316 & (3) & Political Geography \\
\hline GEOG 325 & (3) & New Master-Planned Cities \\
\hline GEOG 331 & (3) & Urban Social Geography \\
\hline GEOG 333 & (3) & Introduction to Programming for Spatial Sciences \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline GEOG 409 & (3) & Geographies of Developing Asia \\
\hline GEOG 414 & (3) & Advanced Geospatial Analysis \\
\hline GEOG 417 & (3) & Urban Geography \\
\hline GEOG 418 & (3) & Geographies of Race \\
\hline GEOG 420 & (3) & Memory, Place, and Power \\
\hline GEOG 503 & (3) & Advanced Topics in Health Geography \\
\hline GEOG 504 & (3) & Advanced Economic Geography \\
\hline GEOG 507 & (3) & Advanced Social Geography \\
\hline GEOG 511 & (3) & Advanced Political Geography \\
\hline GEOG 525 & (3) & Asian Cities in the 21st Century \\
\hline
\end{tabular}

\section*{Architecture}

Although Architecture courses have prerequisites, they are waived for Urban Studies students, but 500-level courses may not be taken before the U3.
\begin{tabular}{lll} 
ARCH 517 & (3) & Sustainable Residential Development \\
ARCH 528 & (3) & History of Housing
\end{tabular}

\section*{Art History and Communication Studies}
\begin{tabular}{lll} 
ARTH 204 & (3) & Introduction to Medieval Art and Architecture \\
COMS 425 & (3) & Urban Culture and Everyday Life
\end{tabular}

\section*{Civil Engineering}

CIVE 540

\section*{History}
\begin{tabular}{lll} 
HIST 353 & (3) & History of Montreal \\
HIST 397 & (3) & Canada: Ethnicity, Migration
\end{tabular}

\section*{Management}

FINE 445
Real Estate Finance

\section*{Political Science}

POLI 321
Issues: Canadian Public Policy

\section*{Quebec Studies}

QCST 200
(3)

Introduction to the Study of Quebec

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 222 & (3) & Urban Sociology \\
SOCI 230 & (3) & Sociology of Ethnic Relations \\
SOCI 333 & (3) & Social Stratification \\
SOCI 366 & \((3)\) & Neighborhoods and Inequality \\
SOCI 388 & \((3)\) & Crime
\end{tabular}

\section*{Urban Planning}
\begin{tabular}{lll} 
URBP 201 & (3) & Planning the 21st Century City \\
URBP 501 & (2) & Principles and Practice 1 \\
URBP 504 & (3) & Planning for Active Transportation \\
URBP 506 & (3) & Environmental Policy and Planning \\
URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
URBP 536 & (2) & Current Issues in Transportation 1
\end{tabular}
\begin{tabular}{lll} 
URBP 537 & (2) & Current Issues in Transportation 2 \\
URBP 551 & (3) & Urban Design and Planning \\
URBP 556 & (3) & Urban Economy: A Spatial Perspective
\end{tabular}

\subsection*{4.11.17.10 Bachelor of Arts (B.A.) - Joint Honours Component Geography (37 credits)}

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components of Geography and another Arts discipline. As with the regular Honours program, the Geography component of Joint Honours focuses on the interactions among people, places, and the environment, and requires an Honours project, which entails independent, original research conducted over two semesters, normally in the final year of study, under the supervision of a department faculty member. The requirements for Honours programs vary considerably among units, so students interested in Joint Honours should consult an adviser in each department to discuss their course selection and research project(s).

In addition to the Faculty of Arts requirement that Joint Honours students maintain a CGPA of at least 3.00, students in a Joint Honours Component Geography program must maintain a program GPA of at least 3.30 to remain in the Honours program and receive an Honours degree. In addition to meeting these Geography requirements, students must meet the requirements set forth by the other unit

\section*{Required Courses (13 credits)}
\begin{tabular}{lll} 
GEOG 201 & \((3)\) & Introductory Geo-Information Science \\
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 290 & \((1)\) & Local Geographical Excursion \\
GEOG 351 & \((3)\) & Quantitative Methods \\
GEOG 381 & \((3)\) & Geographic Thought and Practice
\end{tabular}

\section*{Complementary Courses (24 credits)}

\section*{Introductory Physical Geography}

3 credits from:
GEOG 203
(3)
Environmental Systems
GEOG 272
Earth's Changing Surface

\section*{Statistics}

3 credits from:
Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

\section*{Research}

3-6 credits of research courses. Where both departments require an Honours Thesis, the student has the option of submitting the thesis to either department. If the thesis is submitted to the other department, then the student must register for GEOG 492D1/GEOG 492D2. In some cases, it is required that the thesis be jointly supervised by faculty of both departments.
\begin{tabular}{lll} 
GEOG 491D1 & (3) & Honours Research \\
GEOG 491D2 & \((3)\) & Honours Research \\
GEOG 492D1 & \((1.5)\) & Joint Honours Research \\
GEOG 492D2 & \((1.5)\) & Joint Honours Research
\end{tabular}

\section*{Geography}

12-15 credits from a coherent set of Geography (GEOG) courses excluding GEOG 200 and GEOG 205, approved by the Program Adviser. Including a field course is desirable. No more than 6 credits may be taken from 200-level courses.

\subsection*{4.11.18 History and Classical Studies}

History and Classical Studies information, programs, and courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.17: History and Classical Studies.

\subsection*{4.11.18.1 Bachelor of Arts (B.A.) - Minor Concentration Classics (18 credits)}

The Minor Concentration in Classical Studies introduces students to the linguistic, historical and cultural dimensions of Greece and Rome. The Minor Concentration can be expanded to a Major Concentration in Classics.

\section*{Required Course ( 3 credits)}
CLAS 201
(3)
Greece and Rome

\section*{Complementary Courses ( \(\mathbf{1 5}\) credits)}

15 credits of Classics (CLAS) or related courses according to the following stipulations:
6 credits minimum of Ancient Greek or Latin.
\begin{tabular}{lll} 
CLAS 210 & \((3)\) & Introductory Latin 1 \\
CLAS 212 & (3) & Introductory Latin 2 \\
CLAS 215 & (6) & Intensive Introductory Latin \\
CLAS 220 & (3) & Introductory Ancient Greek 1 \\
CLAS 222 & (3) & Introductory Ancient Greek 2 \\
CLAS 225 & (6) & Intensive Introductory Ancient Greek \\
CLAS 310 & (3) & Intermediate Latin 1 \\
CLAS 312 & (3) & Intermediate Latin 2 \\
CLAS 315 & (3) & Intermediate Latin 2: Selections \\
CLAS 320 & (3) & Intermediate Ancient Greek 1 \\
CLAS 322 & (3) & Intermediate Ancient Greek 2 \\
CLAS 326 & (3) & Intermediate Ancient Greek 2: Selections \\
CLAS 410 & (3) & Advanced Latin: Authors \\
CLAS 412 & (3) & Advanced Latin: Themes \\
CLAS 419 & (3) & Advanced Latin: Post-Classical \\
CLAS 420 & (3) & Advanced Ancient Greek: Authors \\
CLAS 422 & (3) & Advanced Ancient Greek: Themes \\
CLAS 429 & (3) & Medieval Greek
\end{tabular}

NOTE: Minimum 3 credits CLAS courses at the 400-level
NOTE: Maximum 9 credits complementary courses at the 200-level
Note: a maximum total of 6 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) may be counted toward the program.

\subsection*{4.11.18.2 Bachelor of Arts (B.A.) - Minor Concentration History (18 credits)}

The Minor Concentration History introduces students to the study of diverse cultures and societies around the world from antiquity to contemporary times. It is an excellent complement to the major concentrations offered in the Faculty of Arts. The Minor Concentration History is expandable to a Major Concentration History.

Students wishing to complete a history program are encouraged to consult a Program Adviser at the beginning of their first year, and to fill out a departmental program advising/audit form. For more information about the undergraduate programs in history, and for advising information and forms, visit the program's website at http://www.mcgill.ca/history/undergraduate.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for history programs.

\section*{Complementary Courses (18 credits)}

18 credits of history courses (HIST or Cognate courses - see list below), of which no more than 6 credits may be at the 100- or 200-level.
All undergraduate-level HIST courses.

\section*{Cognate Courses}

The following non-HIST courses may be counted toward the History minor program (max. 3 credits). Additional courses may be submitted for consideration to the Undergraduate Program Director. Faculty regulations stipulate that a course may not be counted toward more than one program.
\begin{tabular}{|c|c|c|}
\hline CLAS 303 & (3) & Ancient Greek Religion \\
\hline CLAS 304 & (3) & Ancient Greek Democracy \\
\hline CLAS 305 & (3) & Roman Religion \\
\hline CLAS 345 & (3) & Study Tour: Greece \\
\hline CLAS 406 & (3) & Greek and Roman Historiography \\
\hline ISLA 305 & (3) & Topics in Islamic History \\
\hline ISLA 315 & (3) & Ottoman State and Society to 1839 \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 365 & (3) & Middle East Since the 1970's \\
\hline ISLA 410 & (3) & History: Middle-East 1798-1918 \\
\hline ISLA 411 & (3) & History: Middle-East 1918-1945 \\
\hline ISLA 511 & (3) & Medieval Islam, 10th-12th Century \\
\hline ISLA 515 & (3) & The Medieval School in Islam \\
\hline ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 245 & (3) & Jewish Life in the Islamic World \\
\hline JWST 303 & (3) & The Soviet Jewish Experience \\
\hline JWST 312 & (3) & Modern Jewish History \\
\hline JWST 334 & (3) & Jews and Muslims: A Modern History \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 371 & (3) & Jews and the City \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline
\end{tabular}

Notes: 200-level cognate courses count toward the 6-credit limit of 200-level courses allowed for the program.

\subsection*{4.11.18.3 Bachelor of Arts (B.A.) - Major Concentration Classics (36 credits)}

The Major Concentration in Classical Studies is an in-depth study of ancient Greece and Rome. Two Streams are offered. The Classical Languages stream emphasizes ancient Greek and Latin language, requiring advanced coursework in one or both languages. The Classical Studies stream provides a broad foundation in ancient languages and Greek and Roman literature while allowing students greater flexibility to take a variety of courses in translation.

\section*{Required Courses ( 3 credits)}

CLAS 201
(3)

Greece and Rome

\section*{Complementary Courses ( \(\mathbf{3 3}\) credits)}

33 credits from one of the following two streams.

\section*{Classical Languages Stream}

33 credits of classics (CLAS) or related courses according to the following stipulations:
Minimum 6 credits advanced Ancient Greek and/or Latin.
\begin{tabular}{lll} 
CLAS 410 & (3) & Advanced Latin: Authors \\
CLAS 412 & (3) & Advanced Latin: Themes \\
CLAS 419 & (3) & Advanced Latin: Post-Classical \\
CLAS 420 & (3) & Advanced Ancient Greek: Authors \\
CLAS 422 & (3) & Advanced Ancient Greek: Themes \\
CLAS 429 & \((3)\) & Medieval Greek
\end{tabular}

NOTE: Maximum 12 credits of complementary courses at the 200 level.
NOTE: 9 credits maximum of non-CLAS courses may be counted toward the program.

\section*{Classical Studies Stream}

6 credits in the following:
\begin{tabular}{lll} 
CLAS 301 & (3) & Ancient Greek Literature and Society \\
CLAS 302 & (3) & Roman Literature and Society
\end{tabular}

27 credits of classics (CLAS) or related courses according to the following stipulations:
Minimum 6 credits intermediate Ancient Greek and/or Latin.
\begin{tabular}{lll} 
CLAS 310 & (3) & Intermediate Latin 1 \\
CLAS 312 & (3) & Intermediate Latin 2 \\
CLAS 315 & (3) & Intermediate Latin 2: Selections \\
CLAS 320 & (3) & Intermediate Ancient Greek 1 \\
CLAS 322 & (3) & Intermediate Ancient Greek 2 \\
CLAS 326 & (3) & Intermediate Ancient Greek 2: Selections
\end{tabular}

NOTE: Minimum 6 credits 400 -level CLAS courses.
NOTE: Maximum 12 credits of complementary courses at the 200 level.
NOTE: 9 credits maximum of non-CLAS courses may be counted toward the program.

Note: For either stream students may count a maximum total of 12 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) toward the program.

\subsection*{4.11.18.4 Bachelor of Arts (B.A.) - Major Concentration History (36 credits)}

The Major Concentration History is a highly flexible program that emphasizes both breadth and depth, while introducing students to different historical theories and methodologies. Students select from a wide variety of courses on diverse cultures and societies around the world from antiquity to contemporary times, and also on thematic subjects such history and sexuality, imperialism and colonialism, histories of science, environmental history, and the history of thought and ideas. Students design their program to match their geographic, chronological, thematic or methodological interests.
Students wishing to complete a history program should consult a Program Adviser at the beginning of their first year, and fill out a departmental program advising/audit form. For more information, visit the program's website at http://www.mcgill.ca/history/undergraduate.
Important note: Advanced Placement or International Baccalaureate credits may not be included in the credit requirements for history programs.

\section*{Complementary Courses (36 credits)}

36 credits of HIST or cognate courses (see list below) according to the following requirements.

Distribution requirement:
-3 credits from Group A
-3 credits from Group B
-3 credits from Group C
Temporal Breadth requirement:
-At least 3 credits focused on the period before 1800
-At least 3 credits focused on the period after 1800
Notes: The same course may be used to satisfy both a Distribution and Temporal Breadth requirement. HIST 299 may not be used to satisfy Temporal Breadth requirements.

Level requirement:
-Maximum 15 credits of complementary courses at the 200-level.
-Minimum 6 credits of 400- or 500- level courses. Note: students may use at most 3 credits of HIST 498 or HIST 499 to fulfill this requirement.

\section*{Group A:}
\begin{tabular}{lll} 
HIST 202 & \((3)\) & Survey: Canada to 1867 \\
HIST 203 & \((3)\) & Survey: Canada since 1867 \\
HIST 211 & \((3)\) & American History to 1865 \\
HIST 212 & \((3)\) & Medieval Europe \\
HIST 214 & \((3)\) & Early Modern Europe \\
HIST 215 & \((3)\) & Modern Europe \\
HIST 216 & \((3)\) & Introduction to Russian History \\
HIST 221 & \((3)\) & United States since 1865 \\
HIST 226 & \((3)\) & East Central and Southeastern Europe in 20th Century \\
HIST 250 & (3) & Making Great Britain and Ireland
\end{tabular}

\section*{Group B:}
\begin{tabular}{lcl} 
HIST 200 & \((3)\) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
HIST 205 & (3) & Ancient Mediterranean History \\
HIST 206 & (3) & Indian Ocean World History \\
HIST 208 & (3) & Introduction to East Asian History \\
HIST 209 & (3) & Introduction to South Asian History \\
HIST 210 & (3) & Introduction to Latin American History \\
HIST 218 & (3) & Modern East Asian History \\
HIST 275 & (3) & Ancient Roman History
\end{tabular}

\section*{Group C:}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 213 & \((3)\) & World History, 600-2000 \\
HIST 219 & \((3)\) & Jewish History: \(1000-2000\) \\
HIST 222 & \((3)\) & History of Pandemics \\
HIST 223 & \((3)\) & Indigenous Peoples and Empires \\
HIST 224 & \((3)\) & Introduction to the African Diaspora \\
HIST 238 & \((3)\) & Histories of Science
\end{tabular}
\begin{tabular}{lll} 
HIST 240 & (3) & Modern History of Islamic Movements \\
HIST 249 & (3) & Health and the Healer in Western History \\
HIST 262 & (3) & Mediterranean and European Interconnections \\
HIST 292 & (3) & History and the Environment \\
HIST 298 & (3) & Topics in History \\
HIST 299 & (3) & The Historian's Craft
\end{tabular}

\section*{Courses offered by other units}

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.
\begin{tabular}{|c|c|c|}
\hline CLAS 303 & (3) & Ancient Greek Religion \\
\hline CLAS 304 & (3) & Ancient Greek Democracy \\
\hline CLAS 305 & (3) & Roman Religion \\
\hline CLAS 345 & (3) & Study Tour: Greece \\
\hline CLAS 406 & (3) & Greek and Roman Historiography \\
\hline ISLA 305 & (3) & Topics in Islamic History \\
\hline ISLA 315 & (3) & Ottoman State and Society to 1839 \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 410 & (3) & History: Middle-East 1798-1918 \\
\hline ISLA 411 & (3) & History: Middle-East 1918-1945 \\
\hline ISLA 511 & (3) & Medieval Islam, 10th-12th Century \\
\hline ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 245 & (3) & Jewish Life in the Islamic World \\
\hline JWST 303 & (3) & The Soviet Jewish Experience \\
\hline JWST 311 & (3) & Gender in Jewish History \\
\hline JWST 312 & (3) & Modern Jewish History \\
\hline JWST 334 & (3) & Jews and Muslims: A Modern History \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 371 & (3) & Jews and the City \\
\hline
\end{tabular}

\subsection*{4.11.18.5 Bachelor of Arts (B.A.) - Joint Honours Component Classics (36 credits)}

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs". The Joint Honours Component Classics emphasizes the study of ancient Greek and Latin: proficiency in both languages is required, advanced coursework is required in at least one of the classical languages. The program is designed for students who wish to pursue graduate studies in classics or related disciplines (such as ancient History), or for graduate programs that require proficiency in ancient languages.

According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00 .

\section*{Required Courses ( 12 credits)}
\begin{tabular}{lll} 
CLAS 201 & (3) & Greece and Rome \\
CLAS 310 & (3) & Intermediate Latin 1
\end{tabular}
CLAS 320
(3)
Intermediate Ancient Greek 1
CLAS 500
Classics Seminar

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

24 credits of Classics (CLAS) or related courses according to the following stipulations:
Minimum 6 credits advanced Ancient Greek and/or Latin.
\begin{tabular}{lll} 
CLAS 410 & \((3)\) & Advanced Latin: Authors \\
CLAS 412 & (3) & Advanced Latin: Themes \\
CLAS 419 & (3) & Advanced Latin: Post-Classical \\
CLAS 420 & (3) & Advanced Ancient Greek: Authors \\
CLAS 422 & (3) & Advanced Ancient Greek: Themes \\
CLAS 429 & (3) & Medieval Greek
\end{tabular}

NOTE: Maximum 15 credits complementary courses at the 200 level.
NOTE: Maximum 9 credits of non-CLAS courses
Note: students may count a maximum total of 12 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) toward the program.

\subsection*{4.11.18.6 Bachelor of Arts (B.A.) - Joint Honours Component History (36 credits)}

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. The Joint Honours Component History is a flexible program that emphasizes breadth, depth as well as historical methods and research.
Students wishing to complete the Joint Honours History Component should consult a Program Adviser at the beginning of their first year to map out a course of study, and fill out a departmental program advising/audit form. For more information, visit the program's website: http://www.mcgill.ca/history/undergraduate. Students must also fulfill program requirements in the second honours component and should consult an adviser in that program.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for history programs

\section*{Required Course (3 credits)}

HIST 399 (3) History and Historiography

\section*{Complementary Courses (33 credits)}

33 credits of HIST courses or cognate courses (see list below) according to the following requirements.
Distribution requirement:
-3 credits from Group A
-3 credits from Group B
-3 credits from Group C
Temporal Breadth requirement
- At least 3 credits focused on the period before 1800
- At least 3 credits focused on the period after 1800

Notes: The same course may be used to satisfy both a Distribution and Temporal Breadth requirement. HIST 299 and HIST 399 may not be used to satisfy Temporal Breadth requirements.

Level requirement:
- Minimum 6 credits honours seminar (500-level D1/D2 courses)
- Minimum 6 additional credits 400-level or higher HIST courses. A second honours seminar may be used to fulfill this requirement.
- Maximum 18 credits complementary courses at 200-level

GPA requirements - 3.30 in program courses, \(3.0(B)\) or higher in each program course, CGPA 3.0 or higher

\section*{Group A:}
HIST 202
\begin{tabular}{lcl} 
HIST 203 & (3) & Survey: Canada since 1867 \\
HIST 211 & (3) & American History to 1865 \\
HIST 212 & (3) & Medieval Europe \\
HIST 214 & (3) & Early Modern Europe \\
HIST 215 & \((3)\) & Modern Europe \\
HIST 216 & \((3)\) & Introduction to Russian History \\
HIST 221 & (3) & United States since 1865 \\
HIST 226 & (3) & East Central and Southeastern Europe in 20th Century \\
HIST 250 & (3) & Making Great Britain and Ireland
\end{tabular}

\section*{Group B:}
\begin{tabular}{lll} 
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
HIST 205 & (3) & Ancient Mediterranean History \\
HIST 206 & \((3)\) & Indian Ocean World History \\
HIST 208 & \((3)\) & Introduction to East Asian History \\
HIST 209 & \((3)\) & Introduction to South Asian History \\
HIST 210 & \((3)\) & Introduction to Latin American History \\
HIST 218 & \((3)\) & Modern East Asian History \\
HIST 275 & (3) & Ancient Roman History
\end{tabular}

Group C:
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 213 & (3) & World History, 600-2000 \\
HIST 219 & (3) & Jewish History: \(1000-2000\) \\
HIST 222 & (3) & History of Pandemics \\
HIST 223 & (3) & Indigenous Peoples and Empires \\
HIST 224 & (3) & Introduction to the African Diaspora \\
HIST 238 & (3) & Histories of Science \\
HIST 240 & (3) & Modern History of Islamic Movements \\
HIST 249 & (3) & Health and the Healer in Western History \\
HIST 262 & (3) & Mediterranean and European Interconnections \\
HIST 292 & (3) & History and the Environment \\
HIST 298 & (3) & Topics in History \\
HIST 299 & & The Historian's Craft
\end{tabular}

\section*{Courses Offered by Other Units}

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.
\begin{tabular}{lll} 
CLAS 303 & (3) & Ancient Greek Religion \\
CLAS 304 & (3) & Ancient Greek Democracy \\
CLAS 305 & (3) & Roman Religion
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CLAS 345 & (3) & Study Tour: Greece \\
\hline CLAS 406 & (3) & Greek and Roman Historiography \\
\hline ISLA 305 & (3) & Topics in Islamic History \\
\hline ISLA 315 & (3) & Ottoman State and Society to 1839 \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 365 & (3) & Middle East Since the 1970's \\
\hline ISLA 410 & (3) & History: Middle-East 1798-1918 \\
\hline ISLA 411 & (3) & History: Middle-East 1918-1945 \\
\hline ISLA 511 & (3) & Medieval Islam, 10th-12th Century \\
\hline ISLA 515 & (3) & The Medieval School in Islam \\
\hline ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 245 & (3) & Jewish Life in the Islamic World \\
\hline JWST 303 & (3) & The Soviet Jewish Experience \\
\hline JWST 311 & (3) & Gender in Jewish History \\
\hline JWST 312 & (3) & Modern Jewish History \\
\hline JWST 334 & (3) & Jews and Muslims: A Modern History \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 371 & (3) & Jews and the City \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline
\end{tabular}

Notes: 200-level cognate courses count against the 12-credit limit of 200-level courses allowed for the program. Cognate courses may not be used to replace 400 -level or higher requirements.

\subsection*{4.11.18.7 Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)}

The B.A.: Minor Concentration in South Asian Studies offers breadth and depth on the history, literature, languages, politics, religions, cultures, and societies of South Asia. The minor concentration is divided into two streams, "Culture and Civilization" and "Languages." An interdisciplinary curriculum is collaboratively offered by the Department of Anthropology, English, History and Classical Studies, Political Science, and Sociology, the Institute of Islamic Studies, and the School of Religious Studies, and is complemented by language instruction in Persian, Sanskrit, Tibetan, and Urdu-Hindi.

\section*{Complementary Courses (18 credits)}

18 credits from one of the following streams:

\section*{Stream 1: Culture and Civilization}

Note: As course content may change according to the offering unit's yearly curriculum, all classes listed must be approved in consultation with the South Asian Studies adviser as relevant to the Minor Concentration. Students should refer to the eCalendar to confirm any prerequisites for the following courses.

\section*{Introductory Curriculum}

6 credits from the following:
\begin{tabular}{lll} 
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 361 & (3) & Archaeology of South Asia \\
ENGL 297 & (3) & Special Topics of Literary Study \\
HIST 209 & \((3)\) & Introduction to South Asian History \\
ISLA 330 & (3) & Islamic Mysticism: Sufism
\end{tabular}
\begin{tabular}{lll} 
POLI 322 & (3) & Political Change in South Asia \\
RELG 252 & (3) & Hinduism and Buddhism \\
RELG 254 & (3) & Introduction to Yoga Traditions
\end{tabular}

Intermediate and Advanced Curriculum
12 credits from the following:
\begin{tabular}{|c|c|c|}
\hline ANTH 308 & (3) & Political Anthropology 01 \\
\hline ANTH 510 & (3) & Advanced Problems in Anthropology of Religion \\
\hline ENGL 336 & (3) & The 20th Century Novel 2 \\
\hline ENGL 404 & (3) & Studies in 19th Century Literature 1 \\
\hline ENGL 408 & (3) & The 20th Century \\
\hline HIST 341 & (3) & Themes in South Asian History \\
\hline HIST 435 & (3) & Topics in South Asian History \\
\hline HIST 481 & (3) & History of Bangladesh and Pakistan \\
\hline ISLA 305 & (3) & Topics in Islamic History \\
\hline ISLA 420 & (3) & Indo-Islamic Civilization: Medieval \\
\hline ISLA 421 & (3) & Islamic Culture - Indian Subcontinent \\
\hline ISLA 489 & (3) & Special Topics 6 \\
\hline ISLA 555 & (3) & Urdu Poetry \\
\hline ISLA 581 & (3) & Special Topics 1 \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline RELG 288 & (3) & Introduction to Sikhism \\
\hline RELG 344 & (3) & Mahayana Buddhism \\
\hline RELG 348 & (3) & Classical Hinduism \\
\hline RELG 350 & (3) & Bhakti Hinduism \\
\hline RELG 353 & (3) & Gandhi: His Life and Thought \\
\hline RELG 366 & (3) & Rivers, Religion, and Environment in South Asia \\
\hline RELG 369 & (3) & Tibetan Buddhism \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 378 & (3) & Pilgrimage, Heritage, and Tourism \\
\hline RELG 444 & (3) & Indian Ocean Religious Networks \\
\hline RELG 453 & (3) & Vajrayana Buddhism \\
\hline RELG 454 & (3) & Modern Hindu Thought \\
\hline RELG 544 & (3) & Ethnography as Method in Religious Studies \\
\hline RELG 545 & (3) & Ramayana: Multiple Lives \\
\hline RELG 546 & (3) & Indian Philosophy \\
\hline RELG 547 & (3) & Special Topics in Hinduism \\
\hline RELG 548 & (3) & Indian Buddhist Philosophy \\
\hline RELG 551 & (3) & Special Topics in Buddhism \\
\hline RELG 552 & (3) & Advaita Vedanta \\
\hline RELG 556 & (3) & Issues in Buddhist Studies \\
\hline RELG 558 & (3) & Indian Tantric Traditions \\
\hline
\end{tabular}
\begin{tabular}{lll} 
RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
RELG 560 & (3) & Buddhist Poetry \\
SOCI 370 & (3) & Sociology: Gender and Development \\
SOCI 550 & (3) & Developing Societies
\end{tabular}

Additions may be made during a particular calendar year depending on the central focus of the courses, subject to adviser approval.
Maximum of 6 relevant transfer credits may be accepted from approved exchange programs subject to adviser and University approval.
Students may apply up to 6 credits in South Asian language study, with approval from the adviser.

\section*{Stream 2: Language}

Either 18 credits in one of the following languages: Persian, Sanskrit, Tibetan, or Urdu-Hindi, from the courses listed below.
Or 18 credits of combined language study from courses listed below, consisting of 6 credits of one of Persian, Sanskrit, Tibetan, or Urdu-Hindi and 12 credits of another South Asian language from the courses listed below.

Note: Students should refere to the eCalendar to confirm any prerequisites for the following courses.

\section*{PERSIAN}
\begin{tabular}{lcl} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & \((3)\) & Introductory Persian \\
ISLA 342D1 & (3) & Lower Intermediate Persian \\
ISLA 342D2 & (3) & Lower Intermediate Persian \\
ISLA 443D1 & \((3)\) & Upper Intermediate Persian \\
ISLA 443D2 & \((3)\) & Upper Intermediate Persian \\
ISLA 545 & \((3)\) & Advanced Persian 1 \\
ISLA 546 & \((3)\) & Advanced Persian 2
\end{tabular}

\section*{SANSKRIT}
\begin{tabular}{lcl} 
RELG 257D1 & (3) & Introductory Sanskrit \\
RELG 257D2 & (3) & Introductory Sanskrit \\
RELG 357D1 & (3) & Sanskrit 2 \\
RELG 357D2 & (3) & Sanskrit 2 \\
RELG 457D1 & (3) & Advanced Sanskrit \\
RELG 457D2 & \((3)\) & Advanced Sanskrit
\end{tabular}

\section*{TIBETAN}
\begin{tabular}{lll} 
RELG 264 & \((3)\) & Introductory Tibetan 1 \\
RELG 265 & \((3)\) & Introductory Tibetan 2 \\
RELG 364 & \((3)\) & Intermediate Tibetan 1 \\
RELG 365 & \((3)\) & Intermediate Tibetan 2 \\
RELG 464 & (3) & Advanced Tibetan 1 \\
RELG 465 & (3) & Advanced Tibetan 2
\end{tabular}

\section*{URDU-HINDI}
\begin{tabular}{lll} 
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Introductory Urdu-Hindi
\end{tabular}
\begin{tabular}{lll} 
ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
ISLA 553 & (3) & Advanced Urdu-Hindi 1 \\
ISLA 554 & (3) & Advanced Urdu-Hindi 2
\end{tabular}

Additions may be made during a particular calendar year depending on the central focus of the courses, subject to adviser approval.
Maximum of 6 relevant transfer credits may be accepted from approved exchange programs subject to adviser and University approval.

\subsection*{4.11.19 Institute for the Study of Canada}

Institute for the Study of Canada, the programs, and specific courses are described in Faculty of Arts \(>\) Undergraduate \(>\) Browse Academic Units \& Programs \(>\) section 3.9.19: Institute for the Study of Canada.

\subsection*{4.11.19.1 Bachelor of Arts (B.A.) - Minor Concentration Canadian Studies ( 18 credits)}

This interdisciplinary program focuses on different aspects of Canada and its key institutions, with an emphasis on public affairs. The Minor Concentration enables students to take courses about Canada outside the areas of their other major or minor concentrations.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
CANS 200 & (3) & Understanding Canada \\
CANS 420 & (3) & Shaping Public Affairs in Canada
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits chosen from:
\begin{tabular}{lcl} 
ECON 219 & \((3)\) & Current Economic Problems: Topics \\
ENGL 228 & (3) & Canadian Literature 1 \\
ENGL 229 & (3) & Canadian Literature 2 \\
FREN 252 & (3) & Littérature québécoise \\
HIST 202 & (3) & Survey: Canada to 1867 \\
HIST 203 & (3) & Survey: Canada since 1867 \\
INDG 200 & (3) & Introduction to Indigenous Studies \\
POLI 221 & (3) & Government of Canada \\
POLI 222 & (3) & Political Process and Behaviour in Canada \\
QCST 200 & (3) & Introduction to the Study of Quebec \\
SOCI 230 & (3) & Sociology of Ethnic Relations
\end{tabular}

3-9 credits in interdisciplinary Canadian Studies (CANS) courses from the following:
\begin{tabular}{lll} 
CANS 300 & (3) & Topics in Canadian Studies 1 \\
CANS 301 & (3) & Topics in Canadian Studies 2 \\
CANS 306 & (3) & Topics in Indigenous Public Affairs \\
CANS 307 & (3) & Canada in the World \\
CANS 308 & (3) & Sex and Gender in Canada \\
CANS 310 & (3) & Canadian Cultures: Context and Issues \\
CANS 311 & (3) & Topics in Canadian Public Affairs 1 \\
CANS 312 & (3) & Topics in Canadian Public Affairs 2 \\
CANS 315 & (3) & Indigenous Art and Culture \\
CANS 401 & (3) & Canadian Studies Seminar 1
\end{tabular}
\begin{tabular}{lll} 
CANS 402 & (3) & Canadian Studies Seminar 2 \\
CANS 404 & \((3)\) & Canadian Studies Seminar 4 \\
CANS 405 & \((3)\) & Canadian Studies Seminar 5 \\
CANS 406 & \((3)\) & Canadian Studies Seminar 6 \\
CANS 412 & \((3)\) & Canada and Americas Seminar \\
CANS 413 & \((3)\) & Canada and Quebec Seminar \\
CANS 499 & \((3)\) & Internship - Canadian Studies
\end{tabular}

0-6 credits chosen from:
\begin{tabular}{|c|c|c|}
\hline ANTH 338 & (3) & Indigenous Studies of Anthropology \\
\hline ARTH 302 & (3) & Aspects of Canadian Art \\
\hline ECON 303 & (3) & Canadian Economic Policy \\
\hline ECON 305 & (3) & Industrial Organization \\
\hline ECON 308 & (3) & Governmental Policy Towards Business \\
\hline ENGL 313 & (3) & Canadian Drama and Theatre \\
\hline ENGL 393 & (3) & Canadian Cinema \\
\hline FREN 315 & (3) & Cinéma québécois \\
\hline HIST 303 & (3) & History of Quebec \\
\hline HIST 342 & (3) & Canada and the World \\
\hline HIST 343 & (3) & Women in Post-Confederation Canada \\
\hline HIST 357 & (3) & Cultural Diversity in Canada \\
\hline HIST 363 & (3) & Canada 1870-1914 \\
\hline HIST 364 & (3) & Canada 1914-1945 \\
\hline HIST 367 & (3) & Canada since 1945 \\
\hline LING 325 & (3) & Canadian English \\
\hline POLI 336 & (3) & Le Québec et le Canada \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 417 & (3) & Health Care in Canada \\
\hline POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
\hline POLI 478 & (3) & The Canadian Constitution \\
\hline QCST 300 & (3) & Quebec Culture and Society \\
\hline SOCI 375 & (3) & Suspect Minorities in Canada \\
\hline SOCI 475 & (3) & Canadian Ethnic Studies Seminar \\
\hline
\end{tabular}

\subsection*{4.11.19.2 Bachelor of Arts (B.A.) - Minor Concentration Indigenous Studies (18 credits)}

The Minor Concentration in Indigenous Studies provides students with a broad, interdisciplinary view of key issues in the historical, social and cultural dimensions of Indigenous life in Canada. Core courses offered within the program will provide interdisciplinary treatments of Indigenous life. The Program will focus on the history of indigenous populations in Canada, Aboriginal art and culture, the experience of indigeneity and gender, and legacies of Indigenous resistance to the Canadian state.

Required Courses ( 6 credits)
\begin{tabular}{lll} 
INDG 200 & (3) & Introduction to Indigenous Studies \\
INDG 401 & (3) & Interdisciplinary Seminar in Indigenous Studies
\end{tabular}

\section*{Complementary Courses (12 credits)}

A maximum of 3 complementary course credits at the 200 -level. A maximum of 6 credits from any given discipline with the exception of Indigenous Studies (INDG) courses.

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 338 & (3) & Indigenous Studies of Anthropology \\
ANTH 436 & (3) & North American Native Peoples
\end{tabular}

\section*{Canadian Studies}
CANS 306
(3) Topics in Indigenous Public Affairs
CANS 315
Indigenous Art and Culture

\section*{English}
\begin{tabular}{lll} 
ENGL 297 & (3) & Special Topics of Literary Study \\
ENGL 440 & (3) & First Nations and Inuit Literature and Media
\end{tabular}

\section*{Gender, Sexuality, and Feminist Studies}
GSFS 307 (3) Indigenous Feminisms

\section*{Geography}

GEOG 301
(3) Geography of Nunavut

\section*{History}
\begin{tabular}{lcl} 
HIST 202 & \((3)\) & Survey: Canada to 1867 \\
HIST 223 & (3) & Indigenous Peoples and Empires \\
HIST 303 & (3) & History of Quebec \\
HIST 309 & (3) & History of Latin America to 1825 \\
HIST 333 & (3) & Indigenous Peoples and French \\
HIST 361 & (3) & Topics in Canadian Regional History \\
HIST 363 & (3) & Canada 1870-1914 \\
HIST 408 & (3) & Selected Topics in Indigenous History
\end{tabular}

\section*{Indigenous Studies}
\begin{tabular}{lcl} 
INDG 202 & \((3)\) & Topics in Indigenous Studies 1 \\
INDG 300 & (3) & Topics in Indigenous Studies 2 \\
INDG 301 & \((3)\) & Indigenous Contemporary Resistance \\
INDG 302 & (3) & Introduction to Kanien'ké:ha \\
INDG 400 & (3) & Seminar: Indigenous Studies \\
INDG 420 & (3) & Indigenous Food Sovereignty \\
INDG 450 & (3) & Rotinonhsón:ni Land-Based Pedagogy
\end{tabular}

\section*{Interdisciplinary Field Course}
IDFC 500
(3)
Indigenous Field Studies

Law
\begin{tabular}{lll} 
CMPL 500 & (3) & Indigenous Peoples and the State \\
CMPL 500D1 & (1.5) & Indigenous Peoples and the State \\
CMPL 500D2 & (1.5) & Indigenous Peoples and the State
\end{tabular}

\section*{Linguistics}

LING 211
(3)

LING 411

Introduction to Indigenous Languages
Structure of an Indigenous Language

\section*{Political Science}

POLI 372
POLI 436

Indigenous Peoples and the Canadian State
Aboriginal Rights in the Canadian Constitution

\subsection*{4.11.19.3 Bachelor of Arts (B.A.) - Minor Concentration Quebec Studies \& Community-Engaged Learning/ La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire ( 18 credits)}

La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire a pour but de donner à l'étudiant(e) une connaissance interdisciplinaire des réalités historiques et contemporaines du Québec en complémentarité à sa propre discipline de spécialisation tout en misant sur un apprentissage par engagement communautaire en milieu montréalais. En collaboration avec le Social Equity and Diversity Education (SEDE) Office, les étudiants ont ainsi la possibilité, grâce a un stage, de mettre en pratique le contenu d'enseignement des cours au sein d'un organisme communautaire montréalais. Enjeux liés à l'équité, à la diversité et a l'inclusion en contexte montréalais.

The goal of the Minor Concentration Quebec Studies and Community-Engaged Learning is to give students an interdisciplinary overview of Quebec historical and contemporary realities that is complementary to their degree by taking advantage of a community engagement learning approach within the Montreal community. With the collaboration of the Social Equity and Diversity Education (SEDE) Office, students have the possibility to link the academic course content with a hands-on experience within a Montreal community organization. Equity, diversity and inclusion issues within the Montreal context.

\section*{Required Courses / Cours Obligatoires ( 9 credits)}

De façon usuelle, les cours obligatoires ( 9 crédits) sont complétés selon la séquence suivante : QCST 200 ( 3 crédits) en U0 ou U1, QCST 300 ( 3 crédits) en U1 et QCST 440 ( 3 crédits) en U2 ou en U3. Les cours complémentaires ( 9 crédits) peuvent être complétés en U1, U2 ou en U3.
Normally, the required courses ( 9 credits) are completed in the following order: QCST 200 ( 3 credits) in U0 or U1, QCST 300 ( 3 credits) in U1 and QCST 440 ( 3 credits) in U2 or in U3. The complementary courses ( 9 credits) can be completed in U1, U2, or U3.
\begin{tabular}{lll} 
QCST 200 & (3) & Introduction to the Study of Quebec \\
QCST 300 & (3) & Quebec Culture and Society \\
QCST 440 & (3) & Contemporary Issues in Quebec
\end{tabular}

\section*{Complementary Courses / Cours Complémentaires (9 credits)}

De ces 9 crédits, 6 doivent être des cours provenant du tronc commun ou des cours approuvés par la direction du programme.
3 crédits doivent provenir d'un cours dont la langue d'enseignement est le français et peuvent provenir d'un cours de français langue seconde.
Au moins 6 des 9 crédits complémentaires doivent être du niveau 300 ou supérieur.
Le choix de ces cours se fera en consultation avec le directeur du programme et variera selon le domaine de spécialisation de chaque étudiant(e).
Of these 9 credits, 6 credits must be core courses, or courses approved by the Program Director.
3 credits must be taught in the French language and can be chosen from French as a Second Language course offerings.
At least 6 of the 9 complementary credits must be at the 300 level or above.
The selection of courses will be made in consultation with the Program Director and will vary depending on the major concentration or honours program of each student.

\section*{Core Courses / Cours inscrits au tronc commun}
\begin{tabular}{lll} 
FREN 252 & (3) & Littérature québécoise \\
POLI 226 & (3) & La vie politique québécoise \\
POLI 336 & (3) & Le Québec et le Canada \\
QCST 336 & (6) & Quebec Studies Summer Seminar
\end{tabular}

\section*{Anthropology / Anthropologie}
ANTH 436
(3)
North American Native Peoples

\section*{Art History and Communication Studies}
COMS 510
(3)
Canadian Broadcasting Policy

\section*{Canadian Studies / Études sur le Canada}
\begin{tabular}{lll} 
CANS 200 & \((3)\) & Understanding Canada \\
CANS 301 & (3) & Topics in Canadian Studies 2 \\
CANS 306 & (3) & Topics in Indigenous Public Affairs \\
CANS 405 & (3) & Canadian Studies Seminar 5
\end{tabular}

\section*{English / Anglais}
ENGL 313 (3) Canadian Drama and Theatre

\section*{Environment}

ENVR 380
(3)

Topics in Environment 1

\section*{French Language and Literature / Langue et littérature françaises}
\begin{tabular}{lll} 
FREN 252 & (3) & Littérature québécoise \\
FREN 315 & (3) & Cinéma québécois \\
FREN 450 & (3) & Questions de littérature québécoise \\
FREN 595 & (3) & Séminaire avancé de recherche
\end{tabular}

\section*{History / Histoire}
\begin{tabular}{lcl} 
HIST 202 & \((3)\) & Survey: Canada to 1867 \\
HIST 203 & (3) & Survey: Canada since 1867 \\
HIST 223 & (3) & Indigenous Peoples and Empires \\
HIST 333 & (3) & Indigenous Peoples and French \\
HIST 335 & (3) & Science and Medicine in Canada \\
HIST 353 & (3) & History of Montreal \\
HIST 364 & (3) & Canada 1914-1945 \\
HIST 367 & (3) & Canada since 1945 \\
HIST 580D1 & (3) & European and Native-American Encounters \\
HIST 580D2 & European and Native-American Encounters
\end{tabular}

\section*{Political Science / Science politique}
\begin{tabular}{lcl} 
POLI 221 & \((3)\) & Government of Canada \\
POLI 222 & \((3)\) & Political Process and Behaviour in Canada \\
POLI 226 & \((3)\) & La vie politique québécoise \\
POLI 326 & \((3)\) & Provincial Politics \\
POLI 336 & \((3)\) & Le Québec et le Canada \\
POLI 342 & \((3)\) & Canadian Foreign Policy \\
POLI 378 & \((3)\) & The Canadian Judicial Process \\
POLI 417 & (3) & Health Care in Canada \\
POLI 426 & \((3)\) & Partis politiques et comportements électoraux au Québec
\end{tabular}

\section*{Sociology / Sociologie}
\begin{tabular}{lll} 
SOCI 230 & (3) & Sociology of Ethnic Relations \\
SOCI 475 & (3) & Canadian Ethnic Studies Seminar
\end{tabular}

\subsection*{4.11.20 Interdisciplinary Life Sciences Minor}

Interdisciplinary Life Sciences Minor, the program, and specific courses are described in Faculty of Science > Undergraduate > Browse Academic Units \& Programs \(>\) section 11.12.19: Interdisciplinary Life Sciences.

\subsection*{4.11.20.1 Bachelor of Science (B.Sc.) - Minor Interdisciplinary Life Sciences ( 24 credits)}

The Interdisciplinary Life Sciences Minor will allow students from the earth, physical, math, and computational science areas to broaden their studies with some basic life sciences, health social science, and empirical technological science. The Minor is 24 credits and allows students flexibility in their course selections. Students must take 9 credits from an extensive list of basic life science courses, 3 credits from an extensive list of health and social science courses, and 3 credits from an empirical and technological science list. The remaining 9 credits may be taken from courses listed in any of the three categories.

Please note: Students studying in Anatomy and Cell Biology; Biochemistry; Honours Immunology; Microbiology and Immunology; Neuroscience; Pharmacology; and Physiology are not permitted to complete this Minor.

Interested students should contact the Interdisciplinary Programs Adviser.

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

The 24 credits required for this program must satisfy the following criteria:
At least 18 credits must be outside the student's main discipline.
Depth requirement:
at least 6 credits must be at the 300 level or above.
Breadth requirement:
at least 9 credits must be taken from the Basic Life Sciences List,
at least 3 credits from the Health Social Sciences List,
at least 3 credits from the Empirical Science and Technology List.
The remaining 9 credits may be selected from any of the lists.

\section*{Basic Life Sciences}

At least 9 credits from:
* Students take either ANAT 212 or BIOC 212, but not both.
\begin{tabular}{lll} 
ANAT 212* & (3) & Molecular Mechanisms of Cell Function \\
ANAT 214 & (3) & Systemic Human Anatomy \\
ANAT 261 & (4) & Introduction to Dynamic Histology \\
ANAT 262 & \((3)\) & Introductory Molecular and Cell Biology
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ANAT 321 & (3) & Circuitry of the Human Brain \\
\hline ANAT 365 & (3) & Cellular Trafficking \\
\hline ANAT 381 & (3) & Experimental Embryology \\
\hline BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
\hline BIOC 311 & (3) & Metabolic Biochemistry \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOL 200 & (3) & Molecular Biology \\
\hline BIOL 201 & (3) & Cell Biology and Metabolism \\
\hline BIOL 202 & (3) & Basic Genetics \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 301 & (4) & Cell and Molecular Laboratory \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 320 & (3) & Evolution of Brain and Behaviour \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline CHEM 503 & (3) & Drug Discovery \\
\hline EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
\hline MIMM 211 & (3) & Introductory Microbiology \\
\hline MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
\hline MIMM 314 & (3) & Intermediate Immunology \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline MIMM 324 & (3) & Fundamental Virology \\
\hline MIMM 387 & (3) & The Business of Science \\
\hline MIMM 465 & (3) & Bacterial Pathogenesis \\
\hline MIMM 466 & (3) & Viral Pathogenesis \\
\hline NSCI 201 & (3) & Introduction to Neuroscience 2 \\
\hline NUTR 307 & (3) & Metabolism and Human Nutrition \\
\hline PATH 300 & (3) & Human Disease \\
\hline PHAR 300 & (3) & Drug Action \\
\hline PHAR 301 & (3) & Drugs and Disease \\
\hline PHAR 303 & (3) & Principles of Toxicology \\
\hline PHAR 503 & (3) & Drug Discovery and Development 1 \\
\hline PHAR 504 & (3) & Drug Discovery and Development 2 \\
\hline PHGY 209 & (3) & Mammalian Physiology 1 \\
\hline PHGY 210 & (3) & Mammalian Physiology 2 \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
PHGY 313 & \((3)\) & Blood, Gastrointestinal, and Immune Systems Physiology \\
PHGY 314 & \((3)\) & Integrative Neuroscience \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 311 & (3) & Human Cognition and the Brain \\
PSYC 317 & (3) & Genes and Behaviour \\
PSYC 318 & (3) & Behavioural Neuroscience 2 \\
PSYC 342 & (3) & Hormones and Behaviour
\end{tabular}

\section*{Health Social Science}

At least 3 credits from:
\begin{tabular}{|c|c|c|}
\hline ANTH 204 & (3) & Anthropology of Meaning \\
\hline ANTH 227 & (3) & Medical Anthropology \\
\hline ANTH 302 & (3) & New Horizons in Medical Anthropology \\
\hline ANTH 314 & (3) & Psychological Anthropology 01 \\
\hline ECON 440 & (3) & Health Economics \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 303 & (3) & Health Geography \\
\hline HIST 249 & (3) & Health and the Healer in Western History \\
\hline HIST 335 & (3) & Science and Medicine in Canada \\
\hline HIST 350 & (3) & Science and the Enlightenment \\
\hline HIST 381 & (3) & Colonial Africa \\
\hline HIST 424 & (3) & Gender, Sexuality and Medicine \\
\hline HSEL 308 & (3) & Issues in Women's Health \\
\hline HSEL 309 & (3) & Women's Reproductive Health \\
\hline PHIL 237 & (3) & Contemporary Moral Issues \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline POLI 417 & (3) & Health Care in Canada \\
\hline PSYC 215 & (3) & Social Psychology \\
\hline PSYC 304 & (3) & Child Development \\
\hline PSYC 333 & (3) & Personality and Social Psychology \\
\hline PSYC 412 & (3) & Child Development: Psychopathology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 414 & (3) & Social Development \\
\hline SOCI 225 & (3) & Medicine and Health in Modern Society \\
\hline SOCI 309 & (3) & Health and Illness \\
\hline SOCI 310 & (3) & Sociology of Mental Health \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 515 & (3) & Medicine and Society \\
\hline SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
\hline SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
\hline
\end{tabular}

Empirical Science and Technology

At least 3 credits from:
* Students who have already received credit for MATH 324 will NOT receive credit for GEOG 202, MATH 203, PSYC 204, BIOL 373, MATH 204, or PSYC 305.

Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{lcl} 
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 373 & \((3)\) & Biometry \\
COMP 202 & \((3)\) & Foundations of Programming \\
COMP 364 & \((3)\) & Computer Tools for Life Sciences \\
COMP 462 & \((3)\) & Computational Biology Methods \\
GEOG 202 & \((3)\) & Statistics and Spatial Analysis \\
MATH 203 & \((3)\) & Principles of Statistics 1 \\
MATH 204 & \((3)\) & Principles of Statistics 2 \\
MATH 323 & \((3)\) & Probability \\
MATH 324* & (3) & Statistics \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
PSYC 305 & (3) & Statistics for Experimental Design
\end{tabular}

\subsection*{4.11.21 International Development}

McGill's Institute for the Study of International Development (ISID), its programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.20: International Development.

\subsection*{4.11.21.1 Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)}

The B.A.; Minor Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, and key development-related themes.

At least 9 of the 18 credits must be at the 300 level or above.
Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
INTD 200 & (3) & Introduction to International Development
\end{tabular}

\section*{Complementary Courses (9 credits)}

\section*{Thematic}

9 credits from the following:

\section*{Agriculture}
AGRI 411
(3)
Global Issues on Development, Food and Agriculture

\section*{Agricultural Economics}
\begin{tabular}{lll} 
AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
AGEC 442 & (3) & Economics of International Agricultural Development
\end{tabular}

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 202 & \((3)\) & Socio-Cultural Anthropology \\
ANTH 206 & (3) & Environment and Culture \\
ANTH 209 & (3) & Anthropology of Religion \\
ANTH 212 & (3) & Anthropology of Development \\
ANTH 222 & (3) & Legal Anthropology \\
ANTH 227 & (3) & Medical Anthropology \\
ANTH 308 & (3) & Political Anthropology 01 \\
ANTH 318 & (3) & Globalization and Religion \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 338 & (3) & Indigenous Studies of Anthropology \\
ANTH 339 & (3) & Ecological Anthropology \\
ANTH 343 & (3) & Anthropology and the Animal \\
ANTH 418 & (3) & Environment and Development \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
ANTH 436 & (3) & North American Native Peoples \\
ANTH 500 & (3) & Political Ecology \\
ANTH 512 & &
\end{tabular}

\section*{Business Administration}

BUSA 433*
(3)
* When topic is relevant to IDS.

\section*{Canadian Studies}
CANS 315
Indigenous Art and Culture

\section*{East Asian Studies}

EAST 211
(3)

Introduction: East Asian Culture: China
Introduction: East Asian Culture: Korea

\section*{Economics}

ECON 205
(3)

ECON 209
ECON 223
(3)
(3)

ECON 326
(3)

ECON 347
(3)

An Introduction to Political Economy
Macroeconomic Analysis and Applications
Political Economy of Trade Policy
Economic Development 2
Ecological Economics
The Chinese Economy
Economics of Climate Change
Economic Development: A World Area
\begin{tabular}{lll} 
ECON 416 & (3) & Topics in Economic Development 2 \\
ECON 473 & (3) & Income Distribution
\end{tabular}

\section*{English}

ENGL 440 (3) First Nations and Inuit Literature and Media

\section*{Geography}
\begin{tabular}{lcl} 
GEOG 210 & \((3)\) & Global Places and Peoples \\
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 221 & \((3)\) & Environment and Health \\
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 303 & \((3)\) & Health Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods \\
GEOG 325 & \((3)\) & New Master-Planned Cities \\
GEOG 403 & \((3)\) & Global Health and Environmental Change \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 425 & \((3)\) & Southeast Asia Urban Field Studies \\
GEOG 510 & \((3)\) & Humid Tropical Environments
\end{tabular}

\section*{History}

Students may count either HIST 339 or POLI 347 towards their program but not both.
\begin{tabular}{lll} 
HIST 197 & \((3)\) & FYS: Race in Latin America \\
HIST 200 & \((3)\) & Introduction to African History \\
HIST 201 & \((3)\) & Modern African History \\
HIST 208 & \((3)\) & Introduction to East Asian History \\
HIST 209 & \((3)\) & Introduction to South Asian History \\
HIST 213 & \((3)\) & World History, 600-2000 \\
HIST 218 & \((3)\) & Modern East Asian History \\
HIST 223 & \((3)\) & Indigenous Peoples and Empires \\
HIST 309 & History of Latin America to 1825 \\
HIST 317 & (3) & Themes in Indian Ocean World History \\
HIST 333 & (3) & Indigenous Peoples and French \\
HIST 338 & (3) & Twentieth-Century China \\
HIST 340 & (3) & History of Modern Egypt \\
HIST 341 & (3) & Themes in South Asian History \\
HIST 360 & (3) & Latin America since 1825 \\
HIST 361 & (3) & Topics in Canadian Regional History \\
HIST 363 & \((3)\) & Canada 1870-1914 \\
HIST 366 & \((3)\) & Themes in Latin American History \\
HIST 382 & History of South Africa \\
HIST 408 & (3) &
\end{tabular}
\begin{tabular}{lll} 
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 528 & (3) & Indian Ocean World Slave Trade
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 350 & \((3)\) & Culture and Development \\
INTD 352 & \((3)\) & Disasters and Development \\
INTD 354 & \((3)\) & Civil Society and Development \\
INTD 356 & (3) & Quantitative Methods for Development \\
INTD 358 & \((3)\) & Ethnographic Approaches to Development \\
INTD 360 & (3) & Environmental Challenges in Development \\
INTD 397 & (3) & Topics in International Development \\
INTD 398 & \((3)\) & Topics in Conflict and Development \\
INTD 490 & (3) & Development Research Project \\
INTD 499 & (3) & Internship: International Development Studies
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 365 & \((3)\) & Middle East Since the 1970's \\
ISLA 383 & \((3)\) & Central Questions in Islamic Law \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & (3) & Mslamic Culture - Indian Subcontinent
\end{tabular}

\section*{Latin American \& Caribbean Studies}

LACS 497
Research Seminar: Latin America and the Caribbean
* When topic is relevant to IDS.

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 382 & (3) & International Business \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Management, Organizational Behavior}

ORGB 380
(3)

Cross Cultural Management

\section*{Management Policy}

The Origins of Capitalism
MGPO 438
MGPO 440
MGPO 469
MGPO 475
MSUS 402
Nutrition

NUTR 501
(3)

\section*{Political Science}
\begin{tabular}{|c|c|c|}
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 480 & (3) & Contentious Politics \\
\hline
\end{tabular}

\section*{Religious Studies}

RELG 331
(3)

Social Entrepreneurship and Innovation
Strategies for Sustainability
Managing Globalization
Strategies for Developing Countries
Systems Thinking and Sustainability

Nutrition in Developing Countries

Developing Areas/Introduction
International Politics of Economic Relations
International Politics: State Behaviour
Politics of Latin America
Political Change in South Asia
Developing Areas/Africa
Developing Areas/Topics 1
Developing Areas/Middle East
Foreign Policy: The Middle East
International Organizations
Arab-Israel Conflict, Crisis, Peace
Foreign Policy: Asia
Global Environmental Politics
International Policy/Foreign Policy: Africa
Politics of the International Refugee Regime
Topics in International Politics 1
Politics of Southeast Asia

Indigenous Peoples and the Canadian State
Contemporary Chinese Politics
Politics in Japan and South Korea

Identity and Inequality
IPE: Trade
International Relations of Ethnic Conflict
International Political Economy: Monetary Relations
Peacebuilding
Inequality and Development

Contentious Politics

Religion and Globalization
\begin{tabular}{lll} 
RELG 370 & \((3)\) & Religion and Human Rights \\
RELG 371 & \((3)\) & Ethics of Violence/Non-Violence \\
RELG 375 & (3) & Religion, Politics and Society \\
Sociology & & \\
SOCI 234 & (3) & Population and Society \\
SOCI 254 & (3) & Development and Underdevelopment \\
SOCI 265 & (3) & War, States and Social Change \\
SOCI 307 & (3) & Globalization \\
SOCI 309 & (3) & Health and Illness \\
SOCI 365 & (3) & Health and Development \\
SOCI 370 & (3) & Colonialism and Society \\
SOCI 446 & (3) & Social Aspects HIV/AIDS in Africa \\
SOCI 513 & (3) & Gender and Globalization \\
SOCI 519 & (3) & Migration and Immigrant Groups \\
SOCI 520 & (3) & Developing Societies \\
SOCI 550 & (3) & Comparative Historical Sociology \\
SOCI 555 & &
\end{tabular}

\section*{Social Work}

SWRK 400
(3)

Policy and Practice for Refugees

\subsection*{4.11.21.2 Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)}

The B.A.; Major Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

\section*{Course Selection Guidelines for the Overall Program}
1. At least 18 of the 36 credits must be at the 300 level or above.
2. At least 9 credits must be from INTD courses.
3. Students cannot take more than 12 credits in any one discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
INTD 200 & (3) & Introduction to International Development \\
INTD 497 & (3) & Advanced Topics in International Development
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

6 credits from the following two Introductory Categories.

\section*{Culture, Populations and Development}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 202 & (3) & Socio-Cultural Anthropology \\
ANTH 212 & (3) & Anthropology of Development \\
GEOG 210 & (3) & Global Places and Peoples \\
INTD 350 & (3) & Culture and Development
\end{tabular}

\section*{Politics, Society and Development}

3 credits from the following:
\begin{tabular}{lll} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 243 & \((3)\) & International Politics of Economic Relations \\
POLI 244 & \((3)\) & International Politics: State Behaviour \\
SOCI 254 & \((3)\) & Development and Underdevelopment
\end{tabular}

\section*{Thematic}

12-15 credits from the following:

\section*{Agriculture}

AGRI 411
Global Issues on Development, Food and Agriculture

\section*{Agricultural Economics}
AGEC 430

AGEC 442
Agriculture, Food and Resource Policy
Economics of International Agricultural Development

\section*{Anthropology}
\begin{tabular}{|c|c|c|}
\hline ANTH 206 & (3) & Environment and Culture \\
\hline ANTH 209 & (3) & Anthropology of Religion \\
\hline ANTH 222 & (3) & Legal Anthropology \\
\hline ANTH 227 & (3) & Medical Anthropology \\
\hline ANTH 308 & (3) & Political Anthropology 01 \\
\hline ANTH 318 & (3) & Globalization and Religion \\
\hline ANTH 322 & (3) & Social Change in Modern Africa \\
\hline ANTH 326 & (3) & Anthropology of Latin America \\
\hline ANTH 327 & (3) & Anthropology of South Asia \\
\hline ANTH 338 & (3) & Indigenous Studies of Anthropology \\
\hline ANTH 339 & (3) & Ecological Anthropology \\
\hline ANTH 343 & (3) & Anthropology and the Animal \\
\hline ANTH 418 & (3) & Environment and Development \\
\hline ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
\hline ANTH 436 & (3) & North American Native Peoples \\
\hline ANTH 500 & (3) & Chinese Diversity and Diaspora \\
\hline ANTH 512 & (3) & Political Ecology \\
\hline
\end{tabular}

Business Administration

BUSA 433*
(3)
* When topic is relevant to IDS.

\section*{Canadian Studies}

CANS 315
(3)

\section*{East Asian Studies}
EAST 211
(3)

EAST 213
Introduction: East Asian Culture: China
Introduction: East Asian Culture: Korea

\section*{Economics}

ECON 205
(3)

ECON 209
(3)

ECON 314
ECON 326
(3)

ECON 336
ECON 347
(3)

ECON 411
ECON 416
(3)

ECON 473

\section*{English}

ENGL 440
First Nations and Inuit Literature and Media

\section*{Geography}

GEOG 216
(3)

GEOG 221
(3)

GEOG 302
(3)
(3)

GEOG 303
(3)
(3)

GEOG 408
(3)

GEOG 425
(3)

GEOG 510

\section*{History}
\begin{tabular}{lll} 
HIST 197 & (3) & FYS: Race in Latin America \\
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline HIST 208 & (3) & Introduction to East Asian History \\
\hline HIST 209 & (3) & Introduction to South Asian History \\
\hline HIST 213 & (3) & World History, 600-2000 \\
\hline HIST 218 & (3) & Modern East Asian History \\
\hline HIST 223 & (3) & Indigenous Peoples and Empires \\
\hline HIST 309 & (3) & History of Latin America to 1825 \\
\hline HIST 317 & (3) & Themes in Indian Ocean World History \\
\hline HIST 333 & (3) & Indigenous Peoples and French \\
\hline HIST 338 & (3) & Twentieth-Century China \\
\hline HIST 340 & (3) & History of Modern Egypt \\
\hline HIST 341 & (3) & Themes in South Asian History \\
\hline HIST 360 & (3) & Latin America since 1825 \\
\hline HIST 361 & (3) & Topics in Canadian Regional History \\
\hline HIST 363 & (3) & Canada 1870-1914 \\
\hline HIST 366 & (3) & Themes in Latin American History \\
\hline HIST 382 & (3) & History of South Africa \\
\hline HIST 408 & (3) & Selected Topics in Indigenous History \\
\hline HIST 409 & (3) & Topics in Latin American History \\
\hline HIST 419 & (3) & Central America \\
\hline HIST 528 & (3) & Indian Ocean World Slave Trade \\
\hline
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 350 & \((3)\) & Culture and Development \\
INTD 352 & (3) & Disasters and Development \\
INTD 354 & (3) & Civil Society and Development \\
INTD 360 & (3) & Environmental Challenges in Development \\
INTD 397 & \((3)\) & Topics in International Development \\
INTD 398 & \((3)\) & Topics in Conflict and Development \\
INTD 490 & (3) & Development Research Project \\
INTD 499 & (3) & Internship: International Development Studies
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lcl} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 345 & \((3)\) & Science and Civilization in Islam \\
ISLA 355 & \((3)\) & Modern History of the Middle East \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 365 & \((3)\) & Middle East Since the 1970's \\
ISLA 383 & \((3)\) & Central Questions in Islamic Law \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & Modern Iran: Anthropological Approach
\end{tabular}

Islamic Culture - Indian Subcontinent

\section*{Latin American \& Caribbean Studies}

\section*{LACS 497*}
(3)

Research Seminar: Latin America and the Caribbean
* When topic is relevant to IDS.

Management Core
\begin{tabular}{lll} 
MGCR 382 & (3) & International Business \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Management, Organizational Behavior}

ORGB 380
Cross Cultural Management

\section*{Management Policy}
\begin{tabular}{lll} 
MGPO 435 & (3) & The Origins of Capitalism \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MSUS 402 & \((3)\) & Systems Thinking and Sustainability
\end{tabular}

\section*{Nutrition}
NUTR 501
(3)
Nutrition in Developing Countries

\section*{Political Science}
\begin{tabular}{lll} 
POLI 319 & \((3)\) & Politics of Latin America \\
POLI 322 & \((3)\) & Political Change in South Asia \\
POLI 324 & \((3)\) & Developing Areas/Africa \\
POLI 338 & (3) & Developing Areas/Topics 1 \\
POLI 340 & (3) & Developing Areas/Middle East \\
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 345 & (3) & International Organizations \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
POLI 349 & (3) & Foreign Policy: Asia \\
POLI 350 & (3) & Global Environmental Politics \\
POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
POLI 353 & (3) & Politics of the International Refugee Regime \\
POLI 359 & (3) & Topics in International Politics 1 \\
POLI 369 & (3) & Politics of Southeast Asia \\
POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
POLI 380 & (3) & Contemporary Chinese Politics \\
POLI 381 & (3) & Politics in Japan and South Korea
\end{tabular}
\begin{tabular}{lcl} 
POLI 422 & \((3)\) & Developing Areas/Topics 2 \\
POLI 423 & \((3)\) & Politics of Ethno-Nationalism \\
POLI 435 & \((3)\) & Identity and Inequality \\
POLI 441 & \((3)\) & IPE: Trade \\
POLI 442 & \((3)\) & International Relations of Ethnic Conflict \\
POLI 445 & \((3)\) & International Political Economy: Monetary Relations \\
POLI 450 & (3) & Peacebuilding \\
POLI 474 & (3) & Inequality and Development \\
POLI 476 & (3) & Religion and Politics \\
POLI 480 & (3) & Contentious Politics
\end{tabular}

\section*{Religious Studies}

RELG 331
RELG 370
(3)

RELG 371
(3)
(3)

Religion and Globalization
Religion and Human Rights

RELG 375
Ethics of Violence/Non-Violence
Religion, Politics and Society

\section*{Sociology}
\begin{tabular}{|c|c|c|}
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 265 & (3) & War, States and Social Change \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 309 & (3) & Health and Illness \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 446 & (3) & Colonialism and Society \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 520 & (3) & Migration and Immigrant Groups \\
\hline SOCI 550 & (3) & Developing Societies \\
\hline SOCI 555 & (3) & Comparative Historical Sociology \\
\hline
\end{tabular}

\section*{Social Work}

SWRK 400
(3)

Policy and Practice for Refugees

\section*{Methods}

3-6 credits from the following: *

\section*{Anthropology}
ANTH 358
(3)
The Process of Anthropological Research

\section*{Economics}

ECON 227D1
Economic Statistics
ECON 227D2
(3)
Economic Statistics

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 356 & (3) & Quantitative Methods for Development \\
INTD 358 & (3) & Ethnographic Approaches to Development
\end{tabular}

\section*{Political Science}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\section*{Sociology}

SOCI 350
SOCI 461
Statistics in Social Research
Quantitative Data Analysis
Qualitative Methods in Sociology

\footnotetext{
* When selecting their Methods courses, students must consult with the IDS Adviser. They must also consult with the most recent Faculty of Arts policy on course overlap: https://www.mcgill.ca/study/faculties/arts/undergraduate/ug_arts_course_reqs
}

\subsection*{4.11.21.3 Bachelor of Arts (B.A.) - Joint Honours Component International Development Studies (36 credits)}

The B.A.; Joint Honours - International Development Studies component focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.
Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary Honours thesis (if applicable).
Honours students must maintain a CGPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Course Selection Guidelines for the Overall Program}
1. At least 18 of the 36 credits must be at the 300 level or above. Nine credits must be at the 400 level or above.
2. At least 12 credits must be from INTD courses.
3. Students cannot take more than 12 credits in any one discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

NOTE: Students in the Econ-IDS Joint Honours program are required to take ECON 257D1/D2 and therefore cannot also take ECON 227 as part of their IDS program requirements.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
INTD 200 & (3) & Introduction to International Development \\
INTD 498 & (3) & Honours Seminar in International Development
\end{tabular}

\section*{Complementary Courses (24 credits)}

6 credits from the following two Introductory Categories.

\section*{Culture, Populations and Development}

3 credits from the following:
\begin{tabular}{lcl} 
ANTH 202 & (3) & Socio-Cultural Anthropology \\
ANTH 212 & \((3)\) & Anthropology of Development \\
GEOG 210 & \((3)\) & Global Places and Peoples \\
INTD 350 & \((3)\) & Culture and Development
\end{tabular}

\section*{Politics, Society and Development}

3 credits from the following:
\begin{tabular}{lll} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 243 & \((3)\) & International Politics of Economic Relations \\
POLI 244 & \((3)\) & International Politics: State Behaviour \\
SOCI 254 & \((3)\) & Development and Underdevelopment
\end{tabular}

\section*{Thematic (12 credits)}

12 credits from the following:

\section*{Agriculture}

AGRI 411
Global Issues on Development, Food and Agriculture

\section*{Agricultural Economics}
\begin{tabular}{lll} 
AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
AGEC 442 & (3) & Economics of International Agricultural Development
\end{tabular}

Anthropology
\begin{tabular}{lll} 
ANTH 206 & (3) & Environment and Culture \\
ANTH 209 & (3) & Anthropology of Religion \\
ANTH 222 & (3) & Legal Anthropology \\
ANTH 227 & (3) & Medical Anthropology \\
ANTH 308 & (3) & Political Anthropology 01 \\
ANTH 318 & (3) & Globalization and Religion \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 327 & (3) & Anthropology of South Asia \\
ANTH 338 & (3) & Indigenous Studies of Anthropology \\
ANTH 339 & (3) & Ecological Anthropology \\
ANTH 343 & (3) & Anthropology and the Animal \\
ANTH 418 & (3) & Environment and Development \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
ANTH 436 & (3) & (3)
\end{tabular}

Business Administration

BUSA 433*
(3)
* When topic is relevant to IDS.

\section*{Canadian Studies}

CANS 315
(3)

\section*{East Asian Studies}
EAST 211
(3)

EAST 213
Introduction: East Asian Culture: China
Introduction: East Asian Culture: Korea

\section*{Economics}

ECON 205
(3)

ECON 209
(3)

ECON 314
ECON 326
(3)

ECON 336
ECON 347
(3)

ECON 411
ECON 416
(3)

ECON 473

\section*{English}

ENGL 440
First Nations and Inuit Literature and Media

\section*{Geography}

GEOG 216
(3)

GEOG 221
(3)

GEOG 302
(3)
(3)

GEOG 303
(3)
(3)

GEOG 408
(3)

GEOG 425
(3)

GEOG 510

\section*{History}
\begin{tabular}{lll} 
HIST 197 & (3) & FYS: Race in Latin America \\
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline HIST 208 & (3) & Introduction to East Asian History \\
\hline HIST 209 & (3) & Introduction to South Asian History \\
\hline HIST 213 & (3) & World History, 600-2000 \\
\hline HIST 218 & (3) & Modern East Asian History \\
\hline HIST 223 & (3) & Indigenous Peoples and Empires \\
\hline HIST 309 & (3) & History of Latin America to 1825 \\
\hline HIST 317 & (3) & Themes in Indian Ocean World History \\
\hline HIST 333 & (3) & Indigenous Peoples and French \\
\hline HIST 338 & (3) & Twentieth-Century China \\
\hline HIST 340 & (3) & History of Modern Egypt \\
\hline HIST 341 & (3) & Themes in South Asian History \\
\hline HIST 360 & (3) & Latin America since 1825 \\
\hline HIST 361 & (3) & Topics in Canadian Regional History \\
\hline HIST 363 & (3) & Canada 1870-1914 \\
\hline HIST 366 & (3) & Themes in Latin American History \\
\hline HIST 382 & (3) & History of South Africa \\
\hline HIST 408 & (3) & Selected Topics in Indigenous History \\
\hline HIST 409 & (3) & Topics in Latin American History \\
\hline HIST 419 & (3) & Central America \\
\hline HIST 528 & (3) & Indian Ocean World Slave Trade \\
\hline
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 350 & \((3)\) & Culture and Development \\
INTD 352 & \((3)\) & Disasters and Development \\
INTD 354 & \((3)\) & Civil Society and Development \\
INTD 360 & \((3)\) & Environmental Challenges in Development \\
INTD 397 & \((3)\) & Topics in International Development \\
INTD 398 & \((3)\) & Topics in Conflict and Development \\
INTD 490 & (3) & Development Research Project \\
INTD 491 & (3) & Honours Thesis \\
INTD 492 & (3) & Honours Thesis with Field Research \\
INTD 497 & (3) & Advanced Topics in International Development \\
INTD 499 & (3) & Seminar in International Development
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lll} 
ISLA 200 & \((3)\) & Islamic Civilization \\
ISLA 210 & \((3)\) & Muslim Societies \\
ISLA 310 & \((3)\) & Women in Islam \\
ISLA 345 & (3) & Science and Civilization in Islam \\
ISLA 355 & (3) & Modern History of the Middle East \\
ISLA 360 & (3) & Islam and Politics
\end{tabular}
\begin{tabular}{lll} 
ISLA 365 & (3) & Middle East Since the 1970's \\
ISLA 383 & (3) & Central Questions in Islamic Law \\
ISLA 411 & (3) & History: Middle-East 1918-1945 \\
ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
ISLA 421 & (3) & Islamic Culture - Indian Subcontinent
\end{tabular}

\section*{Latin American \& Caribbean Studies}

\section*{LACS 497*}

Research Seminar: Latin America and the Caribbean
* When topic is relevant to IDS.

\section*{Management Core}
MGCR 382
(3)
(3)
International Business
MGCR 460
Social Context of Business.

\section*{Management, Organizational Behavior}

ORGB 380
Cross Cultural Management

\section*{Management Policy}
\begin{tabular}{lll} 
MGPO 435 & (3) & The Origins of Capitalism \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MSUS 402 & (3) & Systems Thinking and Sustainability
\end{tabular}

\section*{Nutrition}
NUTR 501
(3)
Nutrition in Developing Countries

\section*{Political Science}
\begin{tabular}{lll} 
POLI 319 & \((3)\) & Politics of Latin America \\
POLI 322 & \((3)\) & Political Change in South Asia \\
POLI 324 & \((3)\) & Developing Areas/Africa \\
POLI 338 & \((3)\) & Developing Areas/Topics 1 \\
POLI 340 & \((3)\) & Developing Areas/Middle East \\
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 345 & (3) & International Organizations \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
POLI 349 & (3) & Foreign Policy: Asia \\
POLI 350 & (3) & Global Environmental Politics \\
POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
POLI 353 & (3) & Politics of the International Refugee Regime \\
POLI 359 & (3) & Topics in International Politics 1
\end{tabular}
\begin{tabular}{lcl} 
POLI 369 & \((3)\) & Politics of Southeast Asia \\
POLI 372 & \((3)\) & Indigenous Peoples and the Canadian State \\
POLI 380 & \((3)\) & Contemporary Chinese Politics \\
POLI 381 & \((3)\) & Politics in Japan and South Korea \\
POLI 422 & \((3)\) & Developing Areas/Topics 2 \\
POLI 423 & \((3)\) & Politics of Ethno-Nationalism \\
POLI 435 & (3) & Identity and Inequality \\
POLI 441 & (3) & IPE: Trade \\
POLI 442 & (3) & International Relations of Ethnic Conflict \\
POLI 445 & (3) & International Political Economy: Monetary Relations \\
POLI 450 & (3) & Peacebuilding \\
POLI 474 & (3) & Inequality and Development \\
POLI 476 & (3) & Religion and Politics \\
POLI 480 & (3) & Contentious Politics
\end{tabular}

\section*{Religious Studies}
\begin{tabular}{lll} 
RELG 331 & (3) & Religion and Globalization \\
RELG 370 & (3) & Religion and Human Rights \\
RELG 371 & (3) & Ethics of Violence/Non-Violence \\
RELG 375 & \((3)\) & Religion, Politics and Society
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 234 & \((3)\) & Population and Society \\
SOCI 265 & \((3)\) & War, States and Social Change \\
SOCI 307 & \((3)\) & Globalization \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 513 & \((3)\) & Social Aspects HIV/AIDS in Africa \\
SOCI 519 & \((3)\) & Gender and Globalization \\
SOCI 520 & (3) & Migration and Immigrant Groups \\
SOCI 550 & (3) & Developing Societies \\
SOCI 555 & (3) & Comparative Historical Sociology
\end{tabular}

\section*{Social Work}
SWRK 400
(3)
Policy and Practice for Refugees

\section*{Methods (6 credits)}

6 credits from the following:*
* When selecting their Methods courses, students must consult with the IDS Adviser. They must also consult with the most recent Faculty of Arts policy on course overlap: https://www.mcgill.ca/study/faculties/arts/undergraduate/ug_arts_course_reqs

Anthropology
\begin{tabular}{lll} 
ANTH 358 & (3) & The Process of Anthr \\
Economics & & \\
ECON 227D1 & (3) & Economic Statistics \\
ECON 227D2 & (3) & Economic Statistics
\end{tabular}

\section*{International Development Studies}
\begin{tabular}{lll} 
INTD 356 & (3) & Quantitative Methods for Development \\
INTD 358 & (3) & Ethnographic Approaches to Development
\end{tabular}

\section*{Political Science}

POLI 461
Political Science Research Methods
Advanced Quantitative Political Science

Sociology
\begin{tabular}{lll} 
SOCI 350 & (3) & Statistics in Social Research \\
SOCI 461 & (3) & Quantitative Data Analysis \\
SOCI 477 & (3) & Qualitative Methods in Sociology
\end{tabular}

\subsection*{4.11.22 Islamic Studies}

Please see section 4.11.35: World Islamic and Middle East Studies for more information.

\subsection*{4.11.23 Jewish Studies}

The Department of Jewish Studies, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.22: Jewish Studies.

\subsection*{4.11.23.1 Bachelor of Arts (B.A.) - Minor Concentration Jewish Studies (18 credits)}

In order to permit students flexibility within their chosen area, all courses in the Jewish Studies Concentrations are placed into the category "Complementary Courses". There is no language requirement for this minor concentration.

This program may be expanded to the Major Concentration Jewish Studies.

\section*{Complementary Courses (18 credits)}

18 credits in Jewish Studies of which 9 are normally taken at the 300 level or above.
Consultation with an adviser is strongly recommended.

\section*{Areas of Jewish Studies}

At least 9 credits will normally be taken at an advanced level in a single area or theme (e.g., Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies).

\section*{Biblical Studies}
\begin{tabular}{lll} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 310 & (3) & Believers, Heretics and Critics
\end{tabular}

JWST 327
(3)

JWST 330
JWST 510
JWST 511
JWST 520
JWST 538
JWST 581
RELG 307

\section*{East European Studies}
\begin{tabular}{lcl} 
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
JWST 206 & (3) & Introduction to Yiddish Literature \\
JWST 217 & \((3)\) & Jewish Studies 3: 1000-2000 \\
JWST 240 & (3) & The Holocaust \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 445 & (3) & The Poetry of Nationalism \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
JWST 586 & (3) & Tutorial: Eastern European Studies 2
\end{tabular}

\section*{Jewish History}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: \(1000-2000\) \\
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History \\
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & The Holocaust \\
JWST 240 & (3) & The American Jewish Community \\
JWST 306 & (3) & Denominations in North American Judaism \\
JWST 314 & (3) & Modern Liberal Jewish Thought \\
JWST 315 & The Shtetl: 1500-1897
\end{tabular}

JWST 365
(3)

JWST 366

\section*{Jewish Thought}
\begin{tabular}{|c|c|c|}
\hline EDER 318 & (3) & Teaching the Jewish Liturgy \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline JWST 310 & (3) & Believers, Heretics and Critics \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 315 & (3) & Modern Liberal Jewish Thought \\
\hline JWST 337 & (3) & Jewish Philosophy and Thought 1 \\
\hline JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
\hline JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 474 & (3) & Maimonides' Mishneh Torah \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline
\end{tabular}

\section*{Language and Literature - Hebrew}
\begin{tabular}{lcl} 
JWST 199 & (3) & FYS: Images - Jewish Identities \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 225 & (3) & Literature and Society \\
JWST 300 & (3) & Charisma and Social Change \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & The Israeli Novel \\
JWST 325 & (3) & Advaeli Literature in Translation Hebrew \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Hebrew through Israeli Cinema \\
JWST 367 & (3) & A Taste of Hebrew Literature \\
JWST 368 & (3) & History of the Hebrew Language \\
JWST 369 & (3) & Israeli Popular Culture \\
JWST 370 & (3) & Holocaust Literature \\
JWST 383 & (3) & Contemporary Hebrew Literature \\
JWST 403 & &
\end{tabular}

The Poetry of Nationalism

\section*{Language and Literature - Yiddish}
\begin{tabular}{lcl} 
JWST 206 & \((3)\) & Introduction to Yiddish Literature \\
JWST 281 & \((3)\) & Introductory Yiddish 1 \\
JWST 282 & \((3)\) & Introductory Yiddish 2 \\
JWST 351 & \((3)\) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2 \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 530 & (3) & Topics in Yiddish Literature
\end{tabular}

Modern Jewish Studies
\begin{tabular}{|c|c|c|}
\hline EDER 319 & (3) & Teaching the Holocaust \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline HIST 572D1 & (3) & Seminar in Jewish History \\
\hline HIST 572D2 & (3) & Seminar in Jewish History \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 309 & (3) & Jews in Film \\
\hline JWST 346 & (3) & Modern Jewish Studies \\
\hline JWST 347 & (3) & Modern Jewish Studies \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 349 & (3) & Modern Jewish Studies \\
\hline JWST 351 & (3) & Studies in Modern Jewish Literature \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 383 & (3) & Holocaust Literature \\
\hline JWST 386 & (3) & American Jewish Literature \\
\hline JWST 387 & (3) & Modern Jewish Authors \\
\hline JWST 445 & (3) & The Poetry of Nationalism \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
\hline JWST 586 & (3) & Tutorial: Eastern European Studies 2 \\
\hline
\end{tabular}

POLI 347
(3)

Arab-Israel Conflict, Crisis, Peace

Rabbinic Studies
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 316 & (3) & Social and Ethical Issues Jewish Law 1 \\
JWST 345 & (3) & Introduction to Rabbinic Literature \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 538 & (3) & Early Rabbinic Parshanut 1
\end{tabular}

\section*{Other Department Courses - History}

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.
\begin{tabular}{lcl} 
HIST 194 & \((3)\) & FYS: Jewish Concepts of Others \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: \(1000-2000\) \\
HIST 307 & (3) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & &
\end{tabular}

\subsection*{4.11.23.2 Bachelor of Arts (B.A.) - Major Concentration Jewish Studies (36 credits)}

In order to permit students flexibility within their chosen area, all courses in the Jewish Studies concentrations are placed into the category "Complementary Courses".

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits in Jewish Studies of which 24 are normally taken at the 300 level or above, selected as described below. Consultation with an adviser is strongly recommended.

\section*{Jewish History}

6 credits (minimum) in the history of Jewish civilization to be chosen from:
\begin{tabular}{lll} 
HIST 194 & (3) & FYS: Jewish Concepts of Others \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. -1000 \\
JWST 217 & \((3)\) & Jewish Studies 3: 1000-2000
\end{tabular}

\section*{Jewish Language}

6 credits reflecting an advanced level of competence in either Hebrew or Yiddish chosen from the following:
\begin{tabular}{lcl} 
JWST 327 & (3) & A Book of the Bible \\
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Advanced Hebrew \\
JWST 367 & Hebrew through Israeli Cinema \\
JWST 368 & (3) & A Taste of Hebrew Literature \\
JWST 369 & (3) & History of the Hebrew Language \\
JWST 370 &
\end{tabular}

\section*{Areas of Jewish Studies}

24 credits in Jewish Studies of which at least 12 are devoted to a single area of study: Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies.

Students without the background necessary to complete the advanced language requirement may substitute up to 12 credits in language.
Note: Hebrew language courses are found listed under the heading "Language and Literature - Hebrew", and Yiddish language courses are found under the heading "Language and Literature - Yiddish" in the areas of study lists below.

\section*{Biblical Studies}
\begin{tabular}{lcl} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 310 & (3) & Believers, Heretics and Critics \\
JWST 327 & (3) & A Book of the Bible \\
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 510 & (3) & Jewish Bible Interpretation 1 \\
JWST 511 & (3) & Jewish Bible Interpretation 2 \\
JWST 520 & (3) & Bible Interpretation in Antiquity \\
JWST 538 & (3) & Early Rabbinic Parshanut 1 \\
JWST 581 & (3) & Aramaic Language \\
RELG 307 & (3) & Bible, Quran and Interpretations
\end{tabular}

\section*{East European Studies}
\begin{tabular}{lcl} 
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
JWST 206 & \((3)\) & Introduction to Yiddish Literature \\
JWST 217 & \((3)\) & Jewish Studies 3: 1000-2000 \\
JWST 240 & \((3)\) & The Holocaust \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 445 & (3) & The Poetry of Nationalism
\end{tabular}

JWST 485
(3)

JWST 486
JWST 585
JWST 586

\section*{Jewish History}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: \(1000-2000\) \\
HIST 307 & (3) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History \\
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & The Holocaust \\
JWST 240 & (3) & The American Jewish Community \\
JWST 306 & (3) & Denominations in North American Judaism \\
JWST 314 & (3) & Modern Liberal Jewish Thought \\
JWST 315 & (3) & The Shtetl: 1500-1897 \\
JWST 361 & (3) & Modern Jewish Ideologies \\
JWST 365 & (3) & History of Zionism
\end{tabular}

\section*{Jewish Thought}
\begin{tabular}{|c|c|c|}
\hline EDER 318 & (3) & Teaching the Jewish Liturgy \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline JWST 310 & (3) & Believers, Heretics and Critics \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 315 & (3) & Modern Liberal Jewish Thought \\
\hline JWST 337 & (3) & Jewish Philosophy and Thought 1 \\
\hline JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
\hline JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 474 & (3) & Maimonides' Mishneh Torah \\
\hline
\end{tabular}

Topics: Modern Jewish Thought

\section*{Language and Literature - Hebrew}
\begin{tabular}{lcl} 
JWST 199 & (3) & FYS: Images - Jewish Identities \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 225 & (3) & Literature and Society \\
JWST 300 & (3) & Charisma and Social Change \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & The Israeli Novel \\
JWST 325 & (3) & Advanced Hebrew \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & A Taste of Hebrew through Israeli Cinema \\
JWST 367 & (3) & History of the Hebrew Language \\
JWST 368 & (3) & Israeli Popular Culture \\
JWST 369 & (3) & Holocaust Literature \\
JWST 370 & (3) & Contemporary Hebrew Literature \\
JWST 383 & (3) & The Poetry of Nationalism \\
JWST 403 & JWST 445 &
\end{tabular}

\section*{Language and Literature - Yiddish}
\begin{tabular}{lcl} 
JWST 206 & (3) & Introduction to Yiddish Literature \\
JWST 281 & (3) & Introductory Yiddish 1 \\
JWST 282 & (3) & Introductory Yiddish 2 \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2 \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 530 & (3) & Topics in Yiddish Literature
\end{tabular}

\section*{Modern Jewish Studies}
\begin{tabular}{lll} 
EDER 319 & (3) & Teaching the Holocaust \\
HIST 219 & (3) & Jewish History: \(1000-2000\) \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline HIST 572D2 & (3) & Seminar in Jewish History \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 309 & (3) & Jews in Film \\
\hline JWST 346 & (3) & Modern Jewish Studies \\
\hline JWST 347 & (3) & Modern Jewish Studies \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 349 & (3) & Modern Jewish Studies \\
\hline JWST 351 & (3) & Studies in Modern Jewish Literature \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 383 & (3) & Holocaust Literature \\
\hline JWST 386 & (3) & American Jewish Literature \\
\hline JWST 387 & (3) & Modern Jewish Authors \\
\hline JWST 445 & (3) & The Poetry of Nationalism \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
\hline JWST 586 & (3) & Tutorial: Eastern European Studies 2 \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline
\end{tabular}

\section*{Rabbinic Studies}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 316 & (3) & Social and Ethical Issues Jewish Law 1 \\
JWST 345 & (3) & Introduction to Rabbinic Literature \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 538 & (3) & Early Rabbinic Parshanut 1
\end{tabular}

\section*{Other Department Courses - History}

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.
\begin{tabular}{lll} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: 1000-2000 \\
HIST 307 & \((3)\) & Jews in Poland
\end{tabular}
\begin{tabular}{lll} 
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History
\end{tabular}

\subsection*{4.11.23.3 Bachelor of Arts (B.A.) - Joint Honours Component Jewish Studies (36 credits)}

Students who wish to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.00 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 491 & (3) & Honours Thesis 1 \\
JWST 492 & (3) & Honours Thesis 2
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits selected as follows:

\section*{Jewish History}

6 credits of courses on Jewish history.

One of:
\begin{tabular}{lll} 
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. -1000
\end{tabular}

One of:
\begin{tabular}{lll} 
HIST 219 & (3) & Jewish History: 1000-2000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000
\end{tabular}

\section*{Jewish Language}

0-6 credits of a Jewish language. Each Joint Honours student will complete at least one Jewish language at the advanced level of instruction. A student who can demonstrate competence in a Jewish language may be permitted to substitute other courses for all or part of the language requirement.
\begin{tabular}{lll} 
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & Advanced Hebrew \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2
\end{tabular}

\section*{Areas of Jewish Studies}

15-21 credits, planned with an adviser and normally chosen to reflect progress to the advanced level in one of the areas of study: Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies.

\section*{Biblical Studies}
\begin{tabular}{lll} 
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 310 & (3) & Believers, Heretics and Critics \\
JWST 327 & (3) & A Book of the Bible
\end{tabular}
\begin{tabular}{lll} 
JWST 330 & (3) & Topics in the Hebrew Bible \\
JWST 510 & (3) & Jewish Bible Interpretation 1 \\
JWST 511 & (3) & Jewish Bible Interpretation 2 \\
JWST 520 & (3) & Bible Interpretation in Antiquity \\
JWST 538 & (3) & Early Rabbinic Parshanut 1 \\
JWST 581 & (3) & Aramaic Language \\
RELG 307 & (3) & Bible, Quran and Interpretations
\end{tabular}

\section*{East European Studies}
\begin{tabular}{lcl} 
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
JWST 206 & (3) & Introduction to Yiddish Literature \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 240 & (3) & The Holocaust \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 365 & (3) & Modern Jewish Ideologies \\
JWST 366 & (3) & History of Zionism \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 445 & (3) & The Poetry of Nationalism \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
JWST 586 & (3) & Tutorial: Eastern European Studies 2
\end{tabular}

\section*{Jewish History}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: \(1000-2000\) \\
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & \((3)\) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History \\
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000 - 2000 \\
JWST 240 & (3) & The Holocaust \\
JWST 306 & (3) & The American Jewish Community \\
JWST 314 & (3) & Monominations in North American Judaism \\
JWST 315 & (3) & The Shtetl: 1500-1897 \\
JWST 361 & (3) & Modern Jewish Ideologies
\end{tabular}

History of Zionism

\section*{Jewish Thought}
\begin{tabular}{|c|c|c|}
\hline EDER 318 & (3) & Teaching the Jewish Liturgy \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline JWST 310 & (3) & Believers, Heretics and Critics \\
\hline JWST 314 & (3) & Denominations in North American Judaism \\
\hline JWST 315 & (3) & Modern Liberal Jewish Thought \\
\hline JWST 337 & (3) & Jewish Philosophy and Thought 1 \\
\hline JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
\hline JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 474 & (3) & Maimonides' Mishneh Torah \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline
\end{tabular}

\section*{Language and Literature - Hebrew}
\begin{tabular}{lcl} 
JWST 199 & (3) & FYS: Images - Jewish Identities \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 225 & (3) & Literature and Society \\
JWST 300 & (3) & Charisma and Social Change \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & Intermediate Hebrew \\
JWST 323 & (3) & Israeli Literature in Translation \\
JWST 325 & (3) & Advanced Hebrew \\
JWST 340D1 & (3) & Hebrew through Israeli Cinema Hebrew \\
JWST 340D2 & (3) & A Taste of Hebrew Literature \\
JWST 367 & (3) & History of the Hebrew Language \\
JWST 368 & (3) & Israeli Popular Culture \\
JWST 369 & (3) & Holocaust Literature \\
JWST 370 & (3) & Contemporary Hebrew Literature \\
JWST 383 & (3) & The Poetry of Nationalism \\
JWST 403 & &
\end{tabular}

\section*{Language and Literature - Yiddish}
\begin{tabular}{lcl} 
JWST 206 & \((3)\) & Introduction to Yiddish Literature \\
JWST 281 & (3) & Introductory Yiddish 1 \\
JWST 282 & (3) & Introductory Yiddish 2 \\
JWST 351 & (3) & Studies in Modern Jewish Literature \\
JWST 361 & (3) & The Shtetl: 1500-1897 \\
JWST 381 & (3) & God and Devil in Modern Yiddish Literature \\
JWST 383 & (3) & Holocaust Literature \\
JWST 387 & (3) & Modern Jewish Authors \\
JWST 480 & (3) & Advanced Yiddish 1 \\
JWST 481 & (3) & Advanced Yiddish 2 \\
JWST 485 & (3) & Tutorial in Yiddish Literature \\
JWST 486 & (3) & Tutorial in Yiddish Literature \\
JWST 530 & (3) & Topics in Yiddish Literature
\end{tabular}

Modern Jewish Studies
\begin{tabular}{|c|c|c|}
\hline EDER 319 & (3) & Teaching the Holocaust \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline HIST 572D1 & (3) & Seminar in Jewish History \\
\hline HIST 572D2 & (3) & Seminar in Jewish History \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 240 & (3) & The Holocaust \\
\hline JWST 309 & (3) & Jews in Film \\
\hline JWST 346 & (3) & Modern Jewish Studies \\
\hline JWST 347 & (3) & Modern Jewish Studies \\
\hline JWST 348 & (3) & Modern Jewish Studies \\
\hline JWST 349 & (3) & Modern Jewish Studies \\
\hline JWST 351 & (3) & Studies in Modern Jewish Literature \\
\hline JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
\hline JWST 361 & (3) & The Shtetl: 1500-1897 \\
\hline JWST 365 & (3) & Modern Jewish Ideologies \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 383 & (3) & Holocaust Literature \\
\hline JWST 386 & (3) & American Jewish Literature \\
\hline JWST 387 & (3) & Modern Jewish Authors \\
\hline JWST 445 & (3) & The Poetry of Nationalism \\
\hline JWST 558 & (3) & Topics: Modern Jewish Thought \\
\hline JWST 585 & (3) & Tutorial: Eastern European Studies 1 \\
\hline JWST 586 & (3) & Tutorial: Eastern European Studies 2 \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline
\end{tabular}

\section*{Rabbinic Studies}
\begin{tabular}{lcl} 
HIST 207 & \((3)\) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & \((3)\) & Jewish History: 1000-2000 \\
JWST 201 & (3) & Jewish Law \\
JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
JWST 316 & (3) & Social and Ethical Issues Jewish Law 1 \\
JWST 345 & (3) & Introduction to Rabbinic Literature \\
JWST 358 & (3) & Topics in Jewish Philosophy 1 \\
JWST 359 & (3) & Topics in Jewish Philosophy 2 \\
JWST 474 & (3) & Maimonides' Mishneh Torah \\
JWST 538 & (3) & Early Rabbinic Parshanut 1
\end{tabular}

\section*{Other Department Courses - History}

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.
\begin{tabular}{lcl} 
HIST 194 & (3) & FYS: Jewish Concepts of Others \\
HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
HIST 219 & (3) & Jewish History: \(1000-2000\) \\
HIST 307 & \((3)\) & Jews in Poland \\
HIST 427 & (3) & The Hasidic Movement \\
HIST 572D1 & (3) & Seminar in Jewish History \\
HIST 572D2 & (3) & Seminar in Jewish History
\end{tabular}

\subsection*{4.11.24 Languages, Literatures, and Cultures}

The Department of Languages, Literatures, and Cultures, the programs, and specific courses are described in Faculty of Arts \(>\) Undergraduate \(>\) Browse Academic Units \& Programs > section 3.9.23: Languages, Literatures, and Cultures.

\subsection*{4.11.24.1 Bachelor of Arts (B.A.) - Minor Concentration European Literature and Culture (18 credits)}

The Minor Concentration in European Literature and Culture provides students with a broad foundation for understanding the development and interconnectedness of European culture, and its relevance for the comprehension of today's world through the study of literature and the arts from the Middle Ages to modern times. Knowledge of a language other than English is not required to complete the program.

\section*{Required Course ( 3 credits)}

LLCU 210 (3) Introduction to European Literature and Culture

\section*{Complementary Courses (15 credits)}
\(9-15\) credits selected from the list below. At least 6 credits should be at the 300 -level or above.
Students with an advanced knowledge of German, Italian, Russian, or Spanish can count GERM, HISP, ITAL, and RUSS literature courses taught in those languages toward the Minor Concentration. No more than 6 credits in any given area (LLCU, GERM, HISP, ITAL, and RUSS) shall count toward the Minor Concentration (not including LLCU 210).
GERM 355
(3)
Nietzsche and Wagner
\begin{tabular}{|c|c|c|}
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 367 & (3) & Topics in German Thought \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 370 & (3) & Special Topics in German Film \\
\hline HISP 225 & (3) & Hispanic Civilization 1 \\
\hline HISP 226 & (3) & Hispanic Civilization 2 \\
\hline HISP 301 & (3) & Hispanic Literature and Culture in English 1 \\
\hline ITAL 355 & (3) & Dante and the Middle Ages \\
\hline ITAL 365 & (3) & The Italian Renaissance \\
\hline ITAL 374 & (3) & Classics of Italian Cinema \\
\hline ITAL 450 & (3) & Italy and the Visual Age \\
\hline ITAL 464 & (3) & Machiavelli \\
\hline ITAL 465 & (3) & Religious Identities in Italy \\
\hline ITAL 477 & (3) & Italian Cinema and Video \\
\hline LLCU 200 & (3) & Topics in Film \\
\hline LLCU 201 & (3) & Literature and Culture Topics \\
\hline LLCU 220 & (3) & Introduction to Literary Analysis \\
\hline LLCU 230 & (3) & Environmental Imaginations \\
\hline LLCU 279 & (3) & Introduction to Film History \\
\hline LLCU 300 & (3) & Cinema and the Visual \\
\hline LLCU 301 & (3) & Topics in Culture and Thought \\
\hline RUSS 217 & (3) & Russia's Eternal Questions \\
\hline RUSS 218 & (3) & Russian Literature and Revolution \\
\hline RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
\hline RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
\hline RUSS 330 & (3) & Chekhov without Borders \\
\hline RUSS 337 & (3) & Vladimir Nabokov \\
\hline RUSS 340 & (3) & Russian Short Story \\
\hline RUSS 357 & (3) & Leo Tolstoy \\
\hline RUSS 358 & (3) & Fyodor Dostoevsky \\
\hline RUSS 385 & (3) & Staging Russianness: From Pushkin to Chekhov \\
\hline RUSS 427 & (3) & Russian Fin de Siècle \\
\hline RUSS 428 & (3) & Russian Avantgarde \\
\hline RUSS 430 & (3) & High Stalinist Culture 1 \\
\hline RUSS 440 & (3) & Russia and Its Others \\
\hline RUSS 454 & (3) & Narratives of Desire \\
\hline
\end{tabular}
\(0-6\) credits in literature courses offered by Classical Studies (CLAS), English (ENGL), and French (FREN) selected from the following list:
\begin{tabular}{|c|c|c|}
\hline CLAS 203 & (3) & Greek Mythology \\
\hline CLAS 301 & (3) & Ancient Greek Literature and Society \\
\hline CLAS 302 & (3) & Roman Literature and Society \\
\hline CLAS 306 & (3) & Classics in Modern Media \\
\hline CLAS 336 & (3) & Modern Greek Literature \\
\hline ENGL 200 & (3) & Survey of English Literature 1 \\
\hline ENGL 201 & (3) & Survey of English Literature 2 \\
\hline ENGL 215 & (3) & Introduction to Shakespeare \\
\hline ENGL 310 & (3) & Restoration and 18th Century Drama \\
\hline ENGL 314 & (3) & 20th Century Drama \\
\hline ENGL 329 & (3) & English Novel: 19th Century 1 \\
\hline ENGL 337 & (3) & Theme or Genre in Medieval Literature \\
\hline ENGL 347 & (3) & Great Writings of Europe 1 \\
\hline ENGL 349 & (3) & English Literature and Folklore 1 \\
\hline ENGL 356 & (3) & Middle English \\
\hline ENGL 447 & (3) & Crosscurrents/English Literature and European Literature 1 \\
\hline ENGL 456 & (3) & Middle English \\
\hline FREN 355 & (3) & Littérature du 20e siècle 1 \\
\hline FREN 360 & (3) & La littérature du 19e siècle 1 \\
\hline FREN 362 & (3) & La littérature du 17e siècle 1 \\
\hline FREN 364 & (3) & La littérature du 18e siècle 1 \\
\hline FREN 366 & (3) & Littérature de la Renaissance 1 \\
\hline FREN 453 & (3) & Littérature du 20e siècle 2 \\
\hline FREN 455 & (3) & La littérature médiévale 1 \\
\hline FREN 456 & (3) & La littérature médiévale 2 \\
\hline FREN 457 & (3) & La littérature de la Renaissance 2 \\
\hline FREN 458 & (3) & La littérature du 17e siècle 2 \\
\hline FREN 459 & (3) & La littérature du 18e siècle 2 \\
\hline FREN 482 & (3) & La littérature du 19e siècle 2 \\
\hline FREN 485 & (3) & Littérature française contemporaine \\
\hline
\end{tabular}

\subsection*{4.11.24.2 Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits)}

The Minor Concentration in German Language is designed to allow students to achieve linguistic proficiency in German and to introduce students to some of the major aspects of German culture.
This program may be expanded to the Major Concentration German Studies.
Students may begin at the intermediate or advanced level in their first year if they have taken German courses in high school or in CEGEP or through McGill Summer Studies.

Note: Beginners' and Intermediate language levels are offered either as a one-term intensive course or a two-term spanned course. Students choose which version of the level they prefer.

\section*{Complementary Courses (18 credits)}

18 credits of language courses or any course above the 325 level given in the German language, selected from the following:

\section*{Language Courses}

GERM 200
(6)

German Language, Intensive Beginners
\begin{tabular}{lcl} 
GERM 202 & \((6)\) & German Language, Beginners' \\
GERM 202D1 & (3) & German Language, Beginners' \\
GERM 202D2 & (3) & German Language, Beginners \\
GERM 300 & (6) & German Language Intensive Intermediate \\
GERM 307 & (6) & German Language - Intermediate \\
GERM 307D1 & (3) & German Language - Intermediate \\
GERM 307D2 & (3) & German Language - Intermediate \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}

\section*{List of Complementary Courses:}
\begin{tabular}{|c|c|c|}
\hline GERM 326 & (3) & Topics: German Language and Culture \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
\hline GERM 333 & (3) & What is Enlightenment? \\
\hline GERM 335 & (3) & Science and Literature \\
\hline GERM 336 & (3) & German Language, Media and Culture \\
\hline GERM 337 & (3) & Literature and Revolution \\
\hline GERM 340 & (3) & Romanticism \\
\hline GERM 344 & (3) & Realism \\
\hline GERM 348 & (3) & Nature and Ecopoetics \\
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 375 & (3) & German Media Studies \\
\hline GERM 379 & (3) & German Visual Culture \\
\hline GERM 381 & (3) & Topics in German Thought \\
\hline GERM 385 & (3) & Critical Theory \\
\hline GERM 388 & (3) & Post-Wall Culture \\
\hline GERM 390 & (3) & Topics in 21 st Century German Literature and Culture \\
\hline GERM 397 & (3) & Individual Reading Course 01 \\
\hline GERM 398 & (3) & Individual Reading Course 02 \\
\hline GERM 401 & (3) & Advanced Topics in German Literature and Culture \\
\hline
\end{tabular}

\subsection*{4.11.24.3 Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)}

The Minor Concentration in Hispanic Studies provides students with a solid foundation on Spanish language and culture. It can be expanded to the Major Concentration in Hispanic Studies.

\section*{Complementary Courses (18 credits)}
\(0-12\) credits in language courses.
\begin{tabular}{lll} 
HISP 210 & (6) & Spanish Language: Beginners \\
HISP 218 & (6) & Spanish Language Intensive - Elementary \\
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220 & (6) & Spanish Language: Intermediate
\end{tabular}

6-18 credits to be chosen from among Hispanic Studies course offerings other than language courses, of which no more than 6 credits may be courses taught in English.

Note: Advanced Placement (AP) credits cannot be counted towards the Minor.

\subsection*{4.11.24.4 Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits)}

This program may be expanded to the Major Concentration Italian Studies.

\section*{Complementary Courses (18 credits)}

18 credits selected from three Italian course lists as follows:
Group A - Basic Language Courses and Group B - Courses taught in Italian (12-18 credits combined)
Group C - Courses taught in English (0-6 credits)
Group A - Basic Language Courses
\begin{tabular}{lcl} 
ITAL 205D1 & (3) & Italian for Beginners \\
ITAL 205D2 & (3) & Italian for Beginners \\
ITAL 206 & (6) & Beginners Italian Intensive \\
ITAL 210D1 & (3) & Italian for Advanced Beginners \\
ITAL 210D2 & (3) & Italian for Advanced Beginners \\
ITAL 215D1 & (3) & Intermediate Italian \\
ITAL 215D2 & (3) & Intermediate Italian \\
ITAL 216 & (6) & Intermediate Italian Intensive
\end{tabular}

\section*{Group B - Courses Taught in Italian}
* Note: Only one of ITAL 250 or ITAL 255 can count towards the program.
\begin{tabular}{lcl} 
ITAL 250* & (3) & Italian Literary Composition \\
ITAL 255* & (6) & Advanced Reading and Composition \\
ITAL 260 & (3) & Reading Italian Literature \\
ITAL 270 & (3) & Manzoni: Novel and Nationhood \\
ITAL 281 & (3) & Masterpieces of Italian Literature 2 \\
ITAL 290 & (3) & Commedia Dell'Arte \\
ITAL 295 & (3) & Italian Cultural Studies \\
ITAL 310 & (3) & The Invention of Italian Literature \\
ITAL 329 & (3) & Italian Cinematic Tradition \\
ITAL 332 & (3) & Italian Theatrical Traditions
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ITAL 341 & (3) & The Art of Essay Writing \\
\hline ITAL 345 & (3) & Romanticism in Italy \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 360 & (3) & Contemporary Italian Prose \\
\hline ITAL 362 & (3) & Post-World War 2 Literature and Society \\
\hline ITAL 368 & (3) & Literature of the Renaissance \\
\hline ITAL 371 & (3) & The Italian Baroque \\
\hline ITAL 376 & (3) & Italian Epic Poetry \\
\hline ITAL 380 & (3) & Italian Realisms \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 400 & (3) & Italian Regional Identities \\
\hline ITAL 410 & (3) & Italian Modernism \\
\hline ITAL 411 & (3) & Pirandello \\
\hline ITAL 420 & (3) & Leopardi Poet and Philosopher \\
\hline ITAL 435 & (3) & Petrarch and His Legacy \\
\hline ITAL 436 & (3) & Tasso's "Gerusalemme Liberata" \\
\hline ITAL 542 & (3) & History of Italian Language \\
\hline ITAL 551 & (3) & Boccaccio and the Italian Novella \\
\hline ITAL 560 & (3) & Topics in 19th and 20th Century Literature \\
\hline ITAL 563 & (3) & 13th-16th Century Literature \\
\hline
\end{tabular}

\section*{Group C - Courses Taught in English}
\begin{tabular}{lll} 
ITAL 199 & \((3)\) & FYS: Italy's Literature in Context \\
ITAL 230 & \((3)\) & Understanding Italy \\
ITAL 307 & \((3)\) & Topics in Italian Culture \\
ITAL 355 & (3) & Dante and the Middle Ages \\
ITAL 361 & \((3)\) & Modern Italian Literature \\
ITAL 363 & (3) & Gender, Literature and Society \\
ITAL 365 & (3) & The Italian Renaissance \\
ITAL 374 & (3) & Classics of Italian Cinema \\
ITAL 375 & (3) & Cinema and Society in Modern Italy \\
ITAL 385 & (3) & Italian Futurist Movement \\
ITAL 395 & (3) & Interdisciplinary Seminar \\
ITAL 416 & (3) & The Twentieth Century \\
ITAL 450 & (3) & Italy and the Visual Age \\
ITAL 464 & (3) & Machiavelli \\
ITAL 465 & (3) & Religious Identities in Italy \\
ITAL 477 & (3) & Italian Cinema and Video
\end{tabular}

\subsection*{4.11.24.5 Bachelor of Arts (B.A.) - Minor Concentration Latin American \& Caribbean Studies (18 credits)}

The B.A.; Minor Concentration in Latin American and Caribbean Studies focuses on a broad, interdisciplinary view of key aspects of Latin America and the Caribbean. The program may be expanded to the Major Concentration in Latin American and Caribbean Studies.

\section*{Required Course ( 3 credits)}
LACS 497
(3)
Research Seminar: Latin America and the Caribbean

\section*{Complementary Courses ( 15 credits)}

3-6 credits to be chosen from:
\begin{tabular}{lcl} 
HISP 210D1 & (3) & Spanish Language: Beginners \\
HISP 210D2 & (3) & Spanish Language: Beginners \\
HISP 218 & (6) & Spanish Language Intensive - Elementary \\
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220D1 & (3) & Spanish Language: Intermediate \\
HISP 220D2 & (3) & Spanish Language: Intermediate \\
HISP 243 & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & (3) & Survey of Latin American Literature and Culture 2
\end{tabular}

3-6 credits to be chosen from:
\begin{tabular}{lll} 
HIST 309 & (3) & History of Latin America to 1825 \\
HIST 360 & (3) & Latin America since 1825 \\
LACS 480 & (3) & Latin American and Caribbean Studies Reading Course \\
LACS 499 & (3) & Internship: Latin America and Caribbean Studies \\
POLI 319 & (3) & Politics of Latin America
\end{tabular}

3-9 credits to be selected from the following course list in consultation with the Program Adviser. If more than one course is chosen, they must be from at least two different disciplines or departments. At least one course should be at the 300 level or above. No more than 6 credits in Spanish or Portuguese language shall count for the Minor Concentration.

\section*{Courses Offered by Other Units}

Anthropology
\begin{tabular}{lcl} 
ANTH 212 & (3) & Anthropology of Development \\
ANTH 307 & (3) & Andean Prehistory \\
ANTH 319 & (3) & Inka Archaeology and Ethnohistory \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 332 & (3) & Mesoamerican Archaeology \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society
\end{tabular}

\section*{Canadian Studies}
CANS 412
(3)
Canada and Americas Seminar

\section*{Economics}
\begin{tabular}{lll} 
ECON 313 & (3) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2
\end{tabular}

\section*{English}
* when given under a topic related to Latin American \& Caribbean Studies
ENGL 431
(3)
Studies in Drama

\section*{Geography}
* Note: GEOG 404 may only count toward the requirements for this program when the topic is related to Panama.
\begin{tabular}{lll} 
GEOG 310 & \((3)\) & Development and Livelihoods \\
GEOG 404* & (3) & Environmental Management 2 \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & (3) & Geography of Underdevelopment: Current Problems \\
GEOG 498 & (3) & Humans in Tropical Environments \\
GEOG 510 & (3) & Humid Tropical Environments
\end{tabular}

\section*{Hispanic Studies}
\begin{tabular}{lll} 
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220D1 & (3) & Spanish Language: Intermediate \\
HISP 220D2 & \((3)\) & Spanish Language: Intermediate \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & \((3)\) & Hispanic Civilization 2 \\
HISP 301 & (3) & Hispanic Literature and Culture in English 1 \\
HISP 320 & (3) & Contemporary Brazilian Literature and Film \\
HISP 328 & (3) & Literature of Ideas: Latin America \\
HISP 332 & (3) & Latin American Literature of 19th Century \\
HISP 333 & (3) & Theatre, Performance and Politics in Latin America \\
HISP 352 & (3) & Latin American Novel \\
HISP 356 & (3) & Latin American Short Story \\
HISP 358 & (3) & Gender and Textualities \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 439 & (3) & Topics: Latin American Literature \\
HISP 453 & (3) & 20th Century Latin American Poetry \\
HISP 505 & (3) & Seminar in Hispanic Studies 01
\end{tabular}

\section*{History}
\begin{tabular}{lcl} 
HIST 197 & (3) & FYS: Race in Latin America \\
HIST 223 & (3) & Indigenous Peoples and Empires \\
HIST 366 & (3) & Themes in Latin American History \\
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 580D1 & (3) & European and Native-American Encounters \\
HIST 580D2 & (3) & European and Native-American Encounters
\end{tabular}

\section*{Political Science}
POLI 227
(3)
Developing Areas/Introduction

\subsection*{4.11.24.6 Bachelor of Arts (B.A.) - Minor Concentration Russian (18 credits)}

The Minor Concentration in Russian will give students a basic working knowledge of Russian and the tools with which to explore Russian life and culture in the original. Students who can demonstrate to the Department that they have acquired the equivalent competence elsewhere may waive prerequisites for 300-level courses and above.

The Minor Concentration in Russian may be expanded to the Major Concentration in Russian.

\section*{Complementary Courses (18 credits)}

18 credits to be chosen from:
\begin{tabular}{lcl} 
RUSS 210 & (3) & Elementary Russian Language 1 \\
RUSS 211 & (3) & Elementary Russian Language 2 \\
RUSS \(215^{*}\) & (6) & Elementary Russian Language Intensive 1 \\
RUSS 300 & (3) & Russian for Heritage Speakers 1 \\
RUSS 301 & (3) & Russian for Heritage Speakers 2 \\
RUSS 310 & (3) & Intermediate Russian Language 1 \\
RUSS 311 & (3) & Intermediate Russian Language 2 \\
RUSS \(316^{* *}\) & (6) & Intermediate Russian Language Intensive 2 \\
RUSS 327 & (3) & Reading Russian Poetry \\
RUSS 328 & (3) & Readings in Russian \\
RUSS 410 & (3) & Advanced Russian Language 1 \\
RUSS 411 & (3) & Advanced Russian Language 2 \\
RUSS \(415^{* * *}\) & (6) & Advanced Russian Language Intensive 1 \\
RUSS 453 & (3) & Advanced Russian Language and Syntax
\end{tabular}
* RUSS 215 is not open to students who have taken RUSS 210 and RUSS 211.
** RUSS 316 is not open to students who have taken RUSS 310 and RUSS 311.
*** RUSS 415 is not open to students who have taken RUSS 410 and RUSS 411.

\subsection*{4.11.24.7 Bachelor of Arts (B.A.) - Minor Concentration Russian Culture ( 18 credits)}

The Minor Concentration Russian Culture is designed primarily as an adjunct to area studies and/or programs in the humanities or social sciences. There are no Russian language requirements.

This program may be expanded into a Major Concentration in Russian.

\section*{Complementary Courses (18 credits)}

Courses offered by LLC may be accepted subject to approval by the Department.
18 credits selected with the following specifications:
At least 6 credits from Group A
6-12 credits from Group B

\section*{Group A}

At least 6 credits from:
\begin{tabular}{lll} 
RUSS 217 & (3) & Russia's Eternal Questions \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2
\end{tabular}

\section*{Group B}

6-12 credits from:
\begin{tabular}{|c|c|c|}
\hline RUSS 213 & (3) & Introduction to Soviet Film \\
\hline RUSS 229 & (3) & Introduction to Russian Folklore \\
\hline RUSS 250 & (3) & The Central European Novel \\
\hline RUSS 330 & (3) & Chekhov without Borders \\
\hline RUSS 333 & (3) & Petersburg: City of Myth \\
\hline RUSS 337 & (3) & Vladimir Nabokov \\
\hline RUSS 340 & (3) & Russian Short Story \\
\hline RUSS 347 & (3) & Late and Post-Soviet Culture \\
\hline RUSS 350 & (3) & Central European Film \\
\hline RUSS 357 & (3) & Leo Tolstoy \\
\hline RUSS 358 & (3) & Fyodor Dostoevsky \\
\hline RUSS 365 & (3) & Supernatural and Absurd in Russian Literature \\
\hline RUSS 369 & (3) & Narrative and Memory in Russian Culture \\
\hline RUSS 381 & (3) & Russia's Utopia Complex \\
\hline RUSS 382 & (3) & Russian Opera \\
\hline RUSS 385 & (3) & Staging Russianness: From Pushkin to Chekhov \\
\hline RUSS 390 & (3) & Special Topics in Russian \\
\hline RUSS 395 & (3) & Soviet Cinema: Art and Politics \\
\hline RUSS 397 & (3) & Tarkovsky: Cinema and Philosophy \\
\hline RUSS 398 & (3) & Soviet Women Filmmakers \\
\hline RUSS 427 & (3) & Russian Fin de Siècle \\
\hline RUSS 428 & (3) & Russian Avantgarde \\
\hline RUSS 430 & (3) & High Stalinist Culture 1 \\
\hline RUSS 440 & (3) & Russia and Its Others \\
\hline RUSS 454 & (3) & Narratives of Desire \\
\hline RUSS 475 & (3) & Special Topics in Russ Culture \\
\hline RUSS 500 & (3) & Special Topics \\
\hline RUSS 501 & (3) & Topics in Slavic Culture \\
\hline
\end{tabular}

\subsection*{4.11.24.8 Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)}

The Minor Concentration in German Studies provides an introduction to and critical understanding of a variety of aspects of German culture from the eighteenth century to the present day. It is designed to complement other forms of disciplinary and cultural inquiry, such as international studies, the digital humanities, and studies in other languages or geographic areas. Courses include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture.
This program may be expanded to a Major Concentration.

\section*{Complementary Courses (18 credits)}

18 credits of courses in German literature, culture, and film taught in English or German selected from the following list.
A maximum of 6 credits of LLCU courses can be taken, with prior departmental approval.
Beginners' and Intermediate Language courses may not be applied towards this Minor Concentration.
GERM 325 may be applied towards this Minor Concentration.
\begin{tabular}{lll} 
GERM 259 & (3) & Introduction to German Literature 1 \\
GERM 260 & (3) & Introduction to German Literature 2 \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GERM 326 & (3) & Topics: German Language and Culture \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
\hline GERM 333 & (3) & What is Enlightenment? \\
\hline GERM 335 & (3) & Science and Literature \\
\hline GERM 336 & (3) & German Language, Media and Culture \\
\hline GERM 337 & (3) & Literature and Revolution \\
\hline GERM 340 & (3) & Romanticism \\
\hline GERM 344 & (3) & Realism \\
\hline GERM 348 & (3) & Nature and Ecopoetics \\
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 359 & (3) & Bertolt Brecht \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 373 & (3) & Weimar German Cinema \\
\hline GERM 375 & (3) & German Media Studies \\
\hline GERM 379 & (3) & German Visual Culture \\
\hline GERM 381 & (3) & Topics in German Thought \\
\hline GERM 385 & (3) & Critical Theory \\
\hline GERM 388 & (3) & Post-Wall Culture \\
\hline GERM 390 & (3) & Topics in 21st Century German Literature and Culture \\
\hline GERM 397 & (3) & Individual Reading Course 01 \\
\hline GERM 398 & (3) & Individual Reading Course 02 \\
\hline GERM 401 & (3) & Advanced Topics in German Literature and Culture \\
\hline
\end{tabular}

\subsection*{4.11.24.9 Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)}

The Major Concentration in German Studies provides students with a rigorous and broad inquiry into the major features that have defined German cultural life since the eighteenth century. Knowledge of the German language is a core component of the major concentration and normally courses towards the major concentration will be taught in German. Courses will include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture. Students will acquire the skills of critical reading and viewing that allow them to interpret complex works of art and evaluate their social and cultural significance.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

6 credits must be in pre-20th century literature and culture.

A minimum of 9 credits of literature, culture, and film courses taught in German.
A maximum of 6 credits of LLCU courses, with prior departmental approval.

\section*{Language Courses}
\begin{tabular}{lcl} 
GERM 200 & \((6)\) & German Language, Intensive Beginners \\
GERM 202 & (6) & German Language, Beginners' \\
GERM 202D1 & (3) & German Language, Beginners' \\
GERM 202D2 & (3) & German Language, Beginners \\
GERM 300 & (6) & German Language Intensive Intermediate \\
GERM 307 & (6) & German Language - Intermediate \\
GERM 307D1 & (3) & German Language - Intermediate \\
GERM 307D2 & (3) & German Language - Intermediate \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}

\section*{Literature and Culture Courses}
\begin{tabular}{|c|c|c|}
\hline GERM 259 & (3) & Introduction to German Literature 1 \\
\hline GERM 260 & (3) & Introduction to German Literature 2 \\
\hline GERM 326 & (3) & Topics: German Language and Culture \\
\hline GERM 331* & (3) & Germany after Reunification \\
\hline GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
\hline GERM 333 & (3) & What is Enlightenment? \\
\hline GERM 335 & (3) & Science and Literature \\
\hline GERM 336 & (3) & German Language, Media and Culture \\
\hline GERM 337 & (3) & Literature and Revolution \\
\hline GERM 340 & (3) & Romanticism \\
\hline GERM 344 & (3) & Realism \\
\hline GERM 348 & (3) & Nature and Ecopoetics \\
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 359 & (3) & Bertolt Brecht \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 373 & (3) & Weimar German Cinema \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
GERM 375 & \((3)\) & German Media Studies \\
GERM 379 & \((3)\) & German Visual Culture \\
GERM 381 & \((3)\) & Topics in German Thought \\
GERM 385 & \((3)\) & Critical Theory \\
GERM 388 & \((3)\) & Post-Wall Culture \\
GERM 390 & \((3)\) & Topics in 21st Century German Literature and Culture \\
GERM 397 & \((3)\) & Individual Reading Course 01 \\
GERM 398 & \((3)\) & Individual Reading Course 02 \\
GERM 401 & \((3)\) & Advanced Topics in German Literature and Culture \\
GERM 580 & \((3)\) & Topics in German Literature and Culture
\end{tabular}

\subsection*{4.11.24.10 Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies ( 36 credits)}

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.

McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website.

\section*{Complementary Courses}

36 credits selected as follows:

\section*{Language and Civilization}

0-18 credits in Language and Civilization from:
\begin{tabular}{lcl} 
HISP 210D1 & (3) & Spanish Language: Beginners \\
HISP 210D2 & (3) & Spanish Language: Beginners \\
HISP 218 & (6) & Spanish Language Intensive - Elementary \\
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220D1 & \((3)\) & Spanish Language: Intermediate \\
HISP 220D2 & \((3)\) & Spanish Language: Intermediate \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2
\end{tabular}

\section*{Survey of Literature}

6-12 credits in Survey of Literature from:
\begin{tabular}{lll} 
HISP 241 & (3) & Survey of Spanish Literature and Culture 1 \\
HISP 242 & (3) & Survey of Spanish Literature and Culture 2 \\
HISP 243 & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & (3) & Survey of Latin American Literature and Culture 2
\end{tabular}

\section*{300-Level or Above Hispanic Literature}

12-30 credits in Hispanic literature at the 300 level or above, of which at least 6 credits must be in literature of the pre-1800 period, from:
HISP 320 (3) Contemporary Brazilian Literature and Film
\begin{tabular}{lll} 
HISP 321 & \((3)\) & Hispanic Literature of the 18th Century \\
HISP 324 & \((3)\) & 20th Century Drama \\
HISP 325 & \((3)\) & Spanish Novel of the 19th Century \\
HISP 326 & \((3)\) & Spanish Romanticism \\
HISP 327 & \((3)\) & Literature of Ideas: Spain \\
HISP 328 & \((3)\) & Literature of Ideas: Latin America \\
HISP 332 & \((3)\) & Latin American Literature of 19th Century \\
HISP 333 & (3) & Theatre, Performance and Politics in Latin America \\
HISP 340 & (3) & Latin American Cinema \\
HISP 341 & (3) & Spanish Cinema \\
HISP 345 & (3) & Contemporary Hispanic Cultural Studies \\
HISP 347 & (3) & Queer Iberia \\
HISP 350 & (3) & Spanish Literature from 1898 to the Civil War \\
HISP 352 & (3) & Latin American Novel \\
HISP 355 & (3) & Contemporary Spanish Literature and Culture \\
HISP 356 & (3) & Latin American Short Story \\
HISP 357 & (3) & Latin American Digital Literature and Culture \\
HISP 358 & (3) & Gender and Textualities \\
HISP 425 & (3) & Topics in Hispanic and Lusophone Visual Cultures \\
HISP 432 & (3) & Literature - Discovery and Exploration Spain New World \\
HISP 438 & (3) & Topics: Spanish Literature \\
HISP 439 & (3) & Topics: Latin American Literature \\
HISP 453 & (3) & 20th Century Latin American Poetry \\
HISP 454 & (3) & Major Figures: Spanish Literature and Culture \\
HISP 455 & (3) & Major Figures: Latin American Literature and Culture \\
HISP 505 & (3) & Seminar in Hispanic Studies 01 \\
\hline
\end{tabular}

\section*{Pre-1800 Literature}

At least 6 credits from:
\begin{tabular}{lll} 
HISP 432 & (3) & Literature - Discovery and Exploration Spain New World \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 451 & (3) & Don Quixote \\
HISP 458 & (3) & Golden Age Literature: Renaissance \\
HISP 460 & \((3)\) & Golden Age Literature: Baroque
\end{tabular}

Note: No more than 12 credits in courses taught in English shall count towards the Major.

\subsection*{4.11.24.11 Bachelor of Arts (B.A.) - Major Concentration Italian Studies ( 36 credits)}

All students wishing to register for the Major Concentration Italian Studies are strongly urged to meet with a departmental adviser.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits selected from the three Italian course lists as follows:
Group A - Basic Language Courses ( \(0-12\) credits)
- Students with no knowledge of the Italian language must take 12 credits in language.
- Students with some knowledge of the language may take 6 credits only selected from ITAL 210D1/ITAL 210D2, ITAL 215D1/ITAL 215D2, or ITAL 216.
- Students with competency in the language may substitute courses from Groups B and C for Group A - Basic Language courses.

ALL students with some background must consult with the Department for proper placement.
Group B - Courses Taught in Italian (a minimum of 12 credits, of which a maximum of 6 credits may be at the 200 level)
Group C - Courses Taught in English (0-12 credits)

\section*{Group A - Basic Language Courses}
\begin{tabular}{lcl} 
ITAL 205D1 & (3) & Italian for Beginners \\
ITAL 205D2 & (3) & Italian for Beginners \\
ITAL 206 & (6) & Beginners Italian Intensive \\
ITAL 210D1 & (3) & Italian for Advanced Beginners \\
ITAL 210D2 & (3) & Italian for Advanced Beginners \\
ITAL 215D1 & (3) & Intermediate Italian \\
ITAL 215D2 & (3) & Intermediate Italian \\
ITAL 216 & (6) & Intermediate Italian Intensive
\end{tabular}

\section*{Group B - Courses Taught in Italian}
\begin{tabular}{|c|c|c|}
\hline ITAL 250* & (3) & Italian Literary Composition \\
\hline ITAL 255* & (6) & Advanced Reading and Composition \\
\hline ITAL 260 & (3) & Reading Italian Literature \\
\hline ITAL 270 & (3) & Manzoni: Novel and Nationhood \\
\hline ITAL 281 & (3) & Masterpieces of Italian Literature 2 \\
\hline ITAL 290 & (3) & Commedia Dell'Arte \\
\hline ITAL 295 & (3) & Italian Cultural Studies \\
\hline ITAL 310 & (3) & The Invention of Italian Literature \\
\hline ITAL 329 & (3) & Italian Cinematic Tradition \\
\hline ITAL 332 & (3) & Italian Theatrical Traditions \\
\hline ITAL 341 & (3) & The Art of Essay Writing \\
\hline ITAL 345 & (3) & Romanticism in Italy \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 360 & (3) & Contemporary Italian Prose \\
\hline ITAL 362 & (3) & Post-World War 2 Literature and Society \\
\hline ITAL 368 & (3) & Literature of the Renaissance \\
\hline ITAL 371 & (3) & The Italian Baroque \\
\hline ITAL 376 & (3) & Italian Epic Poetry \\
\hline ITAL 380 & (3) & Italian Realisms \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 400 & (3) & Italian Regional Identities \\
\hline ITAL 410 & (3) & Italian Modernism \\
\hline ITAL 411 & (3) & Pirandello \\
\hline ITAL 420 & (3) & Leopardi Poet and Philosopher \\
\hline ITAL 435 & (3) & Petrarch and His Legacy \\
\hline
\end{tabular}
\begin{tabular}{lll} 
ITAL 436 & (3) & Tasso's "Gerusalemme Liberata" \\
ITAL 542 & (3) & History of Italian Language \\
ITAL 551 & (3) & Boccaccio and the Italian Novella \\
ITAL 560 & (3) & Topics in 19th and 20th Century Literature \\
ITAL 563 & (3) & 13th-16th Century Literature
\end{tabular}

\section*{Group C - Courses Taught in English}
\begin{tabular}{|c|c|c|}
\hline ITAL 199 & (3) & FYS: Italy's Literature in Context \\
\hline ITAL 230 & (3) & Understanding Italy \\
\hline ITAL 307 & (3) & Topics in Italian Culture \\
\hline ITAL 355 & (3) & Dante and the Middle Ages \\
\hline ITAL 361 & (3) & Modern Italian Literature \\
\hline ITAL 363 & (3) & Gender, Literature and Society \\
\hline ITAL 365 & (3) & The Italian Renaissance \\
\hline ITAL 374 & (3) & Classics of Italian Cinema \\
\hline ITAL 375 & (3) & Cinema and Society in Modern Italy \\
\hline ITAL 385 & (3) & Italian Futurist Movement \\
\hline ITAL 395 & (3) & Interdisciplinary Seminar \\
\hline ITAL 416 & (3) & The Twentieth Century \\
\hline ITAL 450 & (3) & Italy and the Visual Age \\
\hline ITAL 464 & (3) & Machiavelli \\
\hline ITAL 465 & (3) & Religious Identities in Italy \\
\hline ITAL 477 & (3) & Italian Cinema and Video \\
\hline
\end{tabular}

\subsection*{4.11.24.12 Bachelor of Arts (B.A.) - Major Concentration Latin American \& Caribbean Studies (36 credits) \\ Required Courses (18 credits)}
* Note: Successful completion of intermediate-level Spanish (HISP 220D1/D2 or HISP 219 or equivalent) is a prerequisite for the required courses HISP 243 and HISP 244.
\begin{tabular}{lll} 
HISP 243* & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244* & (3) & Survey of Latin American Literature and Culture 2 \\
HIST 309 & (3) & History of Latin America to 1825 \\
HIST 360 & (3) & Latin America since 1825 \\
LACS 497 & (3) & Research Seminar: Latin America and the Caribbean \\
POLI 319 & (3) & Politics of Latin America
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits selected from the Complementary Course List in consultation with the Program Adviser with the following requirements:
1) Courses from at least two disciplines or departments must be included.
2) At least 6 of the 18 credits must be at the 300 level or above.
3) No more than 6 credits in Spanish or Portuguese language (HISP 210D1/D2, HISP 218, HISP 219, HISP 220D1/D2, HISP 222) shall count for the Major concentration.

\section*{Complementary Course List}

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
ANTH 307 & (3) & Andean Prehistory \\
ANTH 319 & (3) & Inka Archaeology and Ethnohistory \\
ANTH 326 & (3) & Anthropology of Latin America \\
ANTH 422 & (3) & Contemporary Latin American Culture and Society \\
ANTH 428 & (3) & Saints and Mediation in Latin America
\end{tabular}

\section*{Canadian Studies}
CANS 412
(3)
Canada and Americas Seminar

\section*{Economics}
\begin{tabular}{lll} 
ECON 313 & (3) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2
\end{tabular}

\section*{English}
* when given under a topic related to Latin American \& Caribbean Studies
ENGL 431
(3)
Studies in Drama

\section*{Geography}
* Note: GEOG 404 may only count toward the requirements for this program when the topic is related to Panama.
\begin{tabular}{lll} 
GEOG 310 & (3) & Development and Livelihoods \\
GEOG 404* & (3) & Environmental Management 2 \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 498 & (3) & Humans in Tropical Environments \\
GEOG 510 & \((3)\) & Humid Tropical Environments
\end{tabular}

\section*{Hispanic Studies}
\begin{tabular}{lll} 
HISP 202 & (6) & Portuguese Language: Beginners \\
HISP 210D1 & \((3)\) & Spanish Language: Beginners \\
HISP 210D2 & (3) & Spanish Language: Beginners \\
HISP 218 & (6) & Spanish Language Intensive - Elementary \\
HISP 219 & (6) & Spanish Language Intensive - Intermediate \\
HISP 220D1 & (3) & Spanish Language: Intermediate \\
HISP 220D2 & (3) & Spanish Language: Intermediate \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
HISP 301 & (3) & Hispanic Literature and Culture in English 1 \\
HISP 320 & (3) & Contemporary Brazilian Literature and Film \\
HISP 328 & (3) & Literature of Ideas: Latin America
\end{tabular}
\begin{tabular}{lcl} 
HISP 332 & \((3)\) & Latin American Literature of 19th Century \\
HISP 333 & \((3)\) & Theatre, Performance and Politics in Latin America \\
HISP 352 & \((3)\) & Latin American Novel \\
HISP 356 & \((3)\) & Latin American Short Story \\
HISP 358 & \((3)\) & Gender and Textualities \\
HISP 437 & \((3)\) & Colonial / Postcolonial Latin America \\
HISP 439 & (3) & Topics: Latin American Literature \\
HISP 453 & \((3)\) & 20th Century Latin American Poetry \\
HISP 505 & (3) & Seminar in Hispanic Studies 01
\end{tabular}

\section*{History}
\begin{tabular}{lcl} 
HIST 197 & \((3)\) & FYS: Race in Latin America \\
HIST 223 & \((3)\) & Indigenous Peoples and Empires \\
HIST 366 & (3) & Themes in Latin American History \\
HIST 409 & (3) & Topics in Latin American History \\
HIST 419 & (3) & Central America \\
HIST 564D1 & (3) & Seminar: Latin American History \\
HIST 564D2 & (3) & Seminar: Latin American History \\
HIST 580D1 & (3) & European and Native-American Encounters \\
HIST 580D2 & (3) & European and Native-American Encounters
\end{tabular}

\section*{Latin American and Caribbean Studies}
LACS 480
Latin American and Caribbean Studies Reading Course
LACS 499
Internship: Latin America and Caribbean Studies

\section*{Political Science}
POLI 227
(3)
Developing Areas/Introduction

\subsection*{4.11.24.13 Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)}

The Major Concentration in Russian gives students a foundation in the language, literature, and culture of Russia from the 19th century to the present. It incorporates a balance of instruction in the Russian language, the opportunity to read selected texts in the original language, and to explore Russian language and culture through translated texts.

By arrangement with the Department and subject to University approval, transfer credits will be accepted from Department-approved exchange/immersion programs.

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits selected from the following specifications:

\section*{Group A: Russian Language (18 credits)}

Students entering this program with previous knowledge of or exposure to Russian may, with permission of the Department, replace this group with selections from Group B or Group C.
18 credits selected from the following courses or their equivalent:
\begin{tabular}{lll} 
RUSS 210 & (3) & Elementary Russian Language 1 \\
RUSS 211 & (3) & Elementary Russian Language 2 \\
RUSS \(215^{*}\) & (6) & Elementary Russian Language Intensive 1
\end{tabular}
\begin{tabular}{lcl} 
RUSS 300 & \((3)\) & Russian for Heritage Speakers 1 \\
RUSS 301 & \((3)\) & Russian for Heritage Speakers 2 \\
RUSS 310 & \((3)\) & Intermediate Russian Language 1 \\
RUSS 311 & (3) & Intermediate Russian Language 2 \\
RUSS 316** & \((6)\) & Intermediate Russian Language Intensive 2 \\
RUSS 327 & \((3)\) & Reading Russian Poetry \\
RUSS 328 & (3) & Readings in Russian \\
RUSS 410 & (3) & Advanced Russian Language 1 \\
RUSS 411 & \((3)\) & Advanced Russian Language 2 \\
RUSS 415*** & (6) & Advanced Russian Language Intensive 1 \\
RUSS 453 & (3) & Advanced Russian Language and Syntax
\end{tabular}
*RUSS 215 is not open to students who have taken RUSS 210 or RUSS 211.
**RUSS 316 is not open to students who have taken RUSS 310 or RUSS 311.
***RUSS 415 is not open to students who have taken RUSS 410 or RUSS 411.

\section*{Group B (9 credits)}

9 credits selected from the following courses or their equivalent:
\begin{tabular}{lll} 
RUSS 217 & \((3)\) & Russia's Eternal Questions \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
RUSS 229 & (3) & Introduction to Russian Folklore
\end{tabular}

\section*{Group C (9 credits)}

9 credits selected from the following courses or their equivalent:
\begin{tabular}{lcl} 
RUSS 213 & \((3)\) & Introduction to Soviet Film \\
RUSS 250 & \((3)\) & The Central European Novel \\
RUSS 330 & \((3)\) & Chekhov without Borders \\
RUSS 333 & \((3)\) & Petersburg: City of Myth \\
RUSS 337 & (3) & Vladimir Nabokov \\
RUSS 340 & (3) & Russian Short Story \\
RUSS 347 & (3) & Late and Post-Soviet Culture \\
RUSS 350 & (3) & Central European Film \\
RUSS 357 & (3) & Leo Tolstoy \\
RUSS 358 & (3) & Fupdor Dostoevsky \\
RUSS 365 & (3) & Narrative and Memory in Russian Culture \\
RUSS 369 & (3) & Russia's Utopia Complex \\
RUSS 381 & (3) & Russian Opera \\
RUSS 382 & (3) & Staging Russianness: From Pushkin to Chekhov \\
RUSS 385 & (3) & Special Topics in Russian \\
RUSS 390 & (3) & Soviet Cinema: Art and Politics \\
RUSS 395 & (3) & Tarkovsky: Cinema and Philosophy \\
RUSS 397 & &
\end{tabular}
\begin{tabular}{lcl} 
RUSS 398 & \((3)\) & Soviet Women Filmmakers \\
RUSS 427 & \((3)\) & Russian Fin de Siècle \\
RUSS 428 & \((3)\) & Russian Avantgarde \\
RUSS 430 & \((3)\) & High Stalinist Culture 1 \\
RUSS 440 & \((3)\) & Russia and Its Others \\
RUSS 454 & \((3)\) & Narratives of Desire \\
RUSS 475 & \((3)\) & Special Topics in Russ Culture \\
RUSS 500 & \((3)\) & Special Topics \\
RUSS 501 & \((3)\) & Topics in Slavic Culture
\end{tabular}

\subsection*{4.11.24.14 Bachelor of Arts (B.A.) - Joint Honours Component German Studies (36 credits)}

The Joint Honours - German Studies Component provides students with a rigorous and broad inquiry into the major features that have defined German cultural life since the eighteenth century. Knowledge of the German language is a core component of the Joint Honours Component and normally courses towards the Joint Honours Component will be taught in German. Courses will include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture. Students will acquire the skills of critical reading and viewing that allow them to interpret complex works of art and evaluate their social and cultural significance.

Note: Beginners' and intermediate language levels are offered either as a one-term intensive course or a two-term spanned course. Students choose which version of the level they prefer.

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).
Admission to the Joint Honours program requires departmental approval. Joint Honours students must maintain a GPA of 3.30 in their program courses, and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Course ( 3 credits)}
GERM 570
(3)
Joint Honours Thesis

\section*{Complementary Courses ( 33 credits)}

33 credits of complementary courses selected with the following specifications:
Students can elect to take either the German language stream in which most courses must be taught in German or the translation stream in which courses can be taught in either German or English.

6 credits must be in pre-20th Century literature and culture.
Students of the German language stream can take a maximum of 9 credits of LLCU courses or German Studies courses taught in English, only with prior approval.
3 credits at the 400 level (only applies to German language stream).

\section*{Language Courses}
\begin{tabular}{lcl} 
GERM 200 & \((6)\) & German Language, Intensive Beginners \\
GERM 202 & (6) & German Language, Beginners' \\
GERM 202D1 & (3) & German Language, Beginners' \\
GERM 202D2 & (3) & German Language, Beginners \\
GERM 300 & (6) & German Language Intensive Intermediate \\
GERM 307 & (6) & German Language - Intermediate \\
GERM 307D1 & (3) & German Language - Intermediate \\
GERM 307D2 & (3) & German Language - Intermediate \\
GERM 325 & (6) & German Language - Intensive Advanced
\end{tabular}

\section*{Literature and Culture Courses}
*NOTE: Students can take either GERM 331 or GERM 336 but not both.
\begin{tabular}{|c|c|c|}
\hline GERM 259 & (3) & Introduction to German Literature 1 \\
\hline GERM 260 & (3) & Introduction to German Literature 2 \\
\hline GERM 331 & (3) & Germany after Reunification \\
\hline GERM 332 & (3) & Topics in Eighteenth-Century German Literature and Culture \\
\hline GERM 333 & (3) & What is Enlightenment? \\
\hline GERM 336 & (3) & German Language, Media and Culture \\
\hline GERM 337 & (3) & Literature and Revolution \\
\hline GERM 340 & (3) & Romanticism \\
\hline GERM 344 & (3) & Realism \\
\hline GERM 348 & (3) & Nature and Ecopoetics \\
\hline GERM 350 & (3) & Modernism and the Avant-Garde \\
\hline GERM 351 & (3) & Berlin \\
\hline GERM 355 & (3) & Nietzsche and Wagner \\
\hline GERM 357 & (3) & German Culture in European Context \\
\hline GERM 358 & (3) & Franz Kafka \\
\hline GERM 359 & (3) & Bertolt Brecht \\
\hline GERM 360 & (3) & German Drama \\
\hline GERM 362 & (3) & 20th Century Literature Topics \\
\hline GERM 364 & (3) & Gender and Society in German Literature and Culture \\
\hline GERM 365 & (3) & Modern Short Fiction \\
\hline GERM 366 & (3) & Lyric Poetry \\
\hline GERM 368 & (3) & Fin-de-Siècle Vienna \\
\hline GERM 369 & (3) & The German Novel \\
\hline GERM 371 & (3) & German Cinema \\
\hline GERM 372 & (3) & Topics in German Cinema \\
\hline GERM 375 & (3) & German Media Studies \\
\hline GERM 379 & (3) & German Visual Culture \\
\hline GERM 381 & (3) & Topics in German Thought \\
\hline GERM 385 & (3) & Critical Theory \\
\hline GERM 388 & (3) & Post-Wall Culture \\
\hline GERM 390 & (3) & Topics in 21 st Century German Literature and Culture \\
\hline GERM 397 & (3) & Individual Reading Course 01 \\
\hline GERM 398 & (3) & Individual Reading Course 02 \\
\hline GERM 401 & (3) & Advanced Topics in German Literature and Culture \\
\hline GERM 580 & (3) & Topics in German Literature and Culture \\
\hline
\end{tabular}

\subsection*{4.11.24.15 Bachelor of Arts (B.A.) - Joint Honours Component Hispanic Studies (36 credits)}

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.
McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student
and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).
Joint Honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses (9 credits)}
\begin{tabular}{lcl} 
HISP 451 & (3) & Don Quixote \\
HISP 490D1 & (3) & Honours Thesis \\
HISP 490D2 & (3) & Honours Thesis
\end{tabular}

\section*{Complementary Courses (27 credits)}

27 credits selected as follows:

\section*{Survey of Literature}

At least 6-12 credits from the following:
\begin{tabular}{lll} 
HISP 241 & (3) & Survey of Spanish Literature and Culture 1 \\
HISP 242 & (3) & Survey of Spanish Literature and Culture 2 \\
HISP 243 & (3) & Survey of Latin American Literature and Culture 1 \\
HISP 244 & (3) & Survey of Latin American Literature and Culture 2
\end{tabular}

\section*{400-Level}

At least 6 credits from the 400 -level courses below:
\begin{tabular}{lll} 
HISP 432 & (3) & Literature - Discovery and Exploration Spain New World \\
HISP 437 & (3) & Colonial / Postcolonial Latin America \\
HISP 458 & (3) & Golden Age Literature: Renaissance \\
HISP 460 & (3) & Golden Age Literature: Baroque
\end{tabular}

All remaining credits may be selected from courses given in Spanish in the Department above the Intermediate Spanish language level (HISP 219 OR HISP 220D1/HISP 220D2).

No more than 12 credits in courses taught in English shall count towards this program.

\subsection*{4.11.24.16 Bachelor of Arts (B.A.) - Joint Honours Component Italian Studies (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

Admission to Joint Honours requires departmental approval. Students wishing to register in the program should consult with the Department as early as possible. Students may register for Joint Honours in the first year, instead of the second year, if in the opinion of the departments they are found to be qualified.

\section*{Required Courses (6 credits)}
ITAL 355
(3) Dante and the Middle Ages
ITAL 470
Joint Honours Thesis

\section*{Complementary Courses ( 30 credits)}

30 credits, 6 of which must be at the 400 level or above, selected from the four Italian course lists as follows:

0-12 credits from Group A - Basic Language Courses.
12-30 credits from Group B - Courses Taught in Italian.
0-18 credits combined from Group C - Courses Taught in English and Group D - Courses Offered in Other Departments.
Note: Students with advanced standing in the language must replace language courses with courses from groups B, C, and D.

\section*{Group A - Basic Language Courses}
\begin{tabular}{lcl} 
ITAL 205D1 & (3) & Italian for Beginners \\
ITAL 205D2 & (3) & Italian for Beginners \\
ITAL 206 & (6) & Beginners Italian Intensive \\
ITAL 210D1 & (3) & Italian for Advanced Beginners \\
ITAL 210D2 & (3) & Italian for Advanced Beginners \\
ITAL 215D1 & (3) & Intermediate Italian \\
ITAL 215D2 & (3) & Intermediate Italian \\
ITAL 216 & (6) & Intermediate Italian Intensive
\end{tabular}

\section*{Group B - Courses Taught in Italian}
* Note: Only one of ITAL 250 or ITAL 255 can count toward the program.
\begin{tabular}{|c|c|c|}
\hline ITAL 250* & (3) & Italian Literary Composition \\
\hline ITAL 255* & (6) & Advanced Reading and Composition \\
\hline ITAL 260 & (3) & Reading Italian Literature \\
\hline ITAL 270 & (3) & Manzoni: Novel and Nationhood \\
\hline ITAL 281 & (3) & Masterpieces of Italian Literature 2 \\
\hline ITAL 290 & (3) & Commedia Dell'Arte \\
\hline ITAL 295 & (3) & Italian Cultural Studies \\
\hline ITAL 307 & (3) & Topics in Italian Culture \\
\hline ITAL 310 & (3) & The Invention of Italian Literature \\
\hline ITAL 332 & (3) & Italian Theatrical Traditions \\
\hline ITAL 356 & (3) & Medieval Discourses on Love \\
\hline ITAL 360 & (3) & Contemporary Italian Prose \\
\hline ITAL 383 & (3) & Women's Writing since 1880 \\
\hline ITAL 400 & (3) & Italian Regional Identities \\
\hline ITAL 410 & (3) & Italian Modernism \\
\hline ITAL 560 & (3) & Topics in 19th and 20th Century Literature \\
\hline
\end{tabular}

\section*{Group C - Courses Taught in English}
\begin{tabular}{lll} 
ITAL 199 & (3) & FYS: Italy's Literature in Context \\
ITAL 355 & (3) & Dante and the Middle Ages \\
ITAL 365 & (3) & The Italian Renaissance \\
ITAL 375 & (3) & Cinema and Society in Modern Italy \\
ITAL 464 & (3) & Machiavelli \\
ITAL 477 & \((3)\) & Italian Cinema and Video
\end{tabular}

Group D - Courses Offered in Other Departments
\begin{tabular}{lcl} 
ARTH 223 & \((3)\) & Introduction Italian Renaissance Art 1300-1500 \\
ARTH 325 & (3) & Visual Culture Renaissance Venice \\
CLAS 302 & (3) & Roman Literature and Society \\
CLAS 404 & (3) & Classical Tradition \\
ENGL 447 & (3) & Crosscurrents/English Literature and European Literature 1 \\
HIST 345 & (3) & History of Italian Renaissance \\
HIST 380 & (3) & The Medieval Mediterranean \\
HIST 398 & (3) & Topics in Italian History \\
HIST 401 & (3) & Topics: Medieval Culture and Society \\
MUHL 387 & (3) & Opera from Mozart to Puccini
\end{tabular}

\subsection*{4.11.24.17 Bachelor of Arts (B.A.) - Joint Honours Component Russian (36 credits)}

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Prior to registering for each Joint Honours component, students must consult with advisers in the respective departments for approval of their course selection.
According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00. Departments may require a higher program GPA. Joint Honours students must meet the requirements of both components of their program.

The specific course requirements for the 36 -credit Joint Honours Component Russian program are determined on an individual basis in consultation with the student's program adviser(s).

The Honours thesis course, RUSS 490, is usually completed in the student's final year and is on a topic in Russian literature or culture agreed upon in consultation with the student's thesis advisor.* It is to be written independently from the thesis that is required by the second program in which the student is pursuing their Joint Honours degree
*Note: Students must submit their Russian thesis project proposals to the Russian Studies departmental adviser by March 15th or November 15th of the preceding term for independent research courses.

\section*{Required Course (3 credits)}
RUSS 490
(3)
Honours Seminar 01

\section*{Complementary Courses ( \(\mathbf{3 3}\) credits)}

33 credits selected from the following specifications:

\section*{Group A:Russian Language}

Students entering this program with previous knowledge of or exposure to Russian may, with permission of the Department, replace this group with selections from Group B or Group C.

18 credits selected from the following courses or their equivalent:
\begin{tabular}{lcl} 
RUSS 210 & \((3)\) & Elementary Russian Language 1 \\
RUSS 211 & \((3)\) & Elementary Russian Language 2 \\
RUSS \(215^{*}\) & (6) & Elementary Russian Language Intensive 1 \\
RUSS 300 & (3) & Russian for Heritage Speakers 1 \\
RUSS 301 & (3) & Russian for Heritage Speakers 2 \\
RUSS 310 & (3) & Intermediate Russian Language 1 \\
RUSS 311 & (3) & Intermediate Russian Language 2 \\
RUSS 316** & (6) & Intermediate Russian Language Intensive 2 \\
RUSS 327 & (3) & Reading Russian Poetry \\
RUSS 328 & (3) & Readings in Russian \\
RUSS 410 & (3) & Advanced Russian Language 1 \\
RUSS 411 & (3) & Advanced Russian Language 2
\end{tabular}
RUSS 415***
(6)
Advanced Russian Language Intensive 1
RUSS 453
(3)
Advanced Russian Language and Syntax
*RUSS 215 is not open to students who have taken RUSS 210 or RUSS 211.
**RUSS 316 is not open to students who have taken RUSS 310 or RUSS 311.
***RUSS 415 is not open to students who have taken RUSS 410 or RUSS 411.

\section*{Group B}

6-9 credits selected from the following courses or their equivalent:
\begin{tabular}{lcl} 
RUSS 217 & (3) & Russia's Eternal Questions \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
RUSS 229 & (3) & Introduction to Russian Folklore \\
RUSS 250 & (3) & The Central European Novel
\end{tabular}

\section*{Group C}

6-9 credits selected from the following courses or their equivalent:
\begin{tabular}{|c|c|c|}
\hline RUSS 213 & (3) & Introduction to Soviet Film \\
\hline RUSS 330 & (3) & Chekhov without Borders \\
\hline RUSS 333 & (3) & Petersburg: City of Myth \\
\hline RUSS 337 & (3) & Vladimir Nabokov \\
\hline RUSS 340 & (3) & Russian Short Story \\
\hline RUSS 347 & (3) & Late and Post-Soviet Culture \\
\hline RUSS 350 & (3) & Central European Film \\
\hline RUSS 357 & (3) & Leo Tolstoy \\
\hline RUSS 358 & (3) & Fyodor Dostoevsky \\
\hline RUSS 365 & (3) & Supernatural and Absurd in Russian Literature \\
\hline RUSS 369 & (3) & Narrative and Memory in Russian Culture \\
\hline RUSS 381 & (3) & Russia's Utopia Complex \\
\hline RUSS 382 & (3) & Russian Opera \\
\hline RUSS 385 & (3) & Staging Russianness: From Pushkin to Chekhov \\
\hline RUSS 390 & (3) & Special Topics in Russian \\
\hline RUSS 395 & (3) & Soviet Cinema: Art and Politics \\
\hline RUSS 397 & (3) & Tarkovsky: Cinema and Philosophy \\
\hline RUSS 398 & (3) & Soviet Women Filmmakers \\
\hline RUSS 427 & (3) & Russian Fin de Siècle \\
\hline RUSS 428 & (3) & Russian Avantgarde \\
\hline RUSS 430 & (3) & High Stalinist Culture 1 \\
\hline RUSS 440 & (3) & Russia and Its Others \\
\hline RUSS 454 & (3) & Narratives of Desire \\
\hline RUSS 475 & (3) & Special Topics in Russ Culture \\
\hline RUSS 500 & (3) & Special Topics \\
\hline RUSS 501 & (3) & Topics in Slavic Culture \\
\hline
\end{tabular}

\begin{abstract}
* Students must submit proposals to their departmental adviser by March 15th or November 15th of the preceding term for individual reading and independent research courses.
\end{abstract}

Group D: Languages, Literatures, and Cultures and Faculty of Arts
\(0-3\) credits to be chosen from the following or their equivalent:
\begin{tabular}{lll} 
ANTH 303 & \((3)\) & Ethnographies of Post-socialism \\
HIST 216 & \((3)\) & Introduction to Russian History \\
HIST 226 & (3) & East Central and Southeastern Europe in 20th Century \\
HIST 306 & (3) & East Central Europe, 1944-2004 \\
HIST 313 & (3) & Habsburg Monarchy, 1618-1918 \\
HIST 316 & (3) & History of the Russian Empire \\
HIST 326 & (3) & History of the Soviet Union \\
HIST 406 & (3) & Topics: Russian History \\
HIST 576D1 & (3) & Seminar: Topics in Russian History \\
HIST 576D2 & (3) & The Soviet Jewish Experience \\
JWST 303 & (3) & Russian and Soviet Politics \\
POLI 329 & (3) & Politics in East Central Europe \\
POLI 331 & (3) & Transitions from Communism \\
POLI 419 & (3) & Post-Socialist Societies \\
SOCI 455 &
\end{tabular}

Note: For pre/corequisites and availability of Anthropology (ANTH), Economics (ECON), History (HIST), Jewish Studies (JWST), Political Science (POLI), and Sociology (SOCI) courses, students should consult the offering department and Class Schedule.

\subsection*{4.11.25 Linguistics}

The Department of Linguistics, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs \(>\) section 3.9.24: Linguistics.

\subsection*{4.11.25.1 Bachelor of Arts (B.A.) - Minor Concentration Linguistics (18 credits)}

This program may be expanded to the Major Concentration Linguistics.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 330 & (3) & Phonetics \\
LING 371 & (3) & Syntax 1
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits in Linguistics chosen according to the student's interests. At least 3 of these credits must be at the 400 or 500 level. Only 3 credits at the 200 level may count towards complementary credits. The complementary courses may include (but not limited to) the following:
\begin{tabular}{lll} 
COMP 230 & (3) & Logic and Computability \\
LING 360 & (3) & Introduction to Semantics \\
MATH 318 & (3) & Mathematical Logic \\
PHIL 210 & (3) & Introduction to Deductive Logic 1
\end{tabular}
4.11.25.2 Bachelor of Arts (B.A.) - Major Concentration Linguistics (36 credits)

Required Courses (18 credits)
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 330 & (3) & Phonetics \\
LING 331 & (3) & Phonology 1 \\
LING 360 & (3) & Introduction to Semantics \\
LING 371 & (3) & Syntax 1 \\
PHIL 210 & (3) & Introduction to Deductive Logic 1
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits in Linguistics (LING) chosen according to the student's interests. At least 9 of these credits must be at the \(400 / 500\) level.
Only 3 credits at the 200 level may count towards complementary credits.

\subsection*{4.11.25.3 Bachelor of Arts (B.A.) - Joint Honours Component Linguistics (36 credits)}

Students who wish to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).
Joint Honours students must maintain a GPA of 3.30 (B+ average) in their program courses and a minimum grade of B+ must be obtained in three out of four of the following courses: LING 330, LING 331, LING 360, LING 371, as well as in the Joint Honours Thesis, LING 481D1/D2. According to Faculty of Arts regulations, Joint Honours students must also maintain a minimum CGPA of 3.00 in general.

The requirement for First Class Honours is a CGPA of 3.50 and a minimum grade of A- in the Joint Honours Thesis. Inquiries may be addressed to the departmental office or to the Adviser for Undergraduate Studies.

\section*{Required Courses ( 21 credits)}
\begin{tabular}{lcl} 
LING 201 & (3) & Introduction to Linguistics \\
LING 330 & (3) & Phonetics \\
LING 331 & (3) & Phonology 1 \\
LING 360 & (3) & Introduction to Semantics \\
LING 371 & (3) & Syntax 1 \\
LING 481D1 & (1.5) & Joint Honours Thesis \\
LING 481D2 & (1.5) & Joint Honours Thesis \\
PHIL 210 & (3) & Introduction to Deductive Logic 1
\end{tabular}

\section*{Complementary Courses ( 15 credits)}

15 credits in Linguistics (LING) chosen according to the student's interests. At least 9 of these credits must be at the 400/500 level.
Only 3 credits at the 200 level may count towards complementary credits.

\subsection*{4.11.26 Mathematics and Statistics}

The Department of Mathematics and Statistics, the discipline, and specific courses are described in Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.22: Mathematics and Statistics (MATH).

\subsection*{4.11.26.1 Bachelor of Arts (B.A.) - Minor Concentration Mathematics (18 credits)}

The Minor Concentration Mathematics is offered in two versions: an expandable version, for students who wish to leave open the option of expanding the program into a Major Concentration Mathematics, and a non-expandable version for students who know on entry into the Minor that they do not wish to expand it into a major concentration.

The Minor Concentration Mathematics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System. Students planning on taking the Major Concentration Mathematics and the Minor Concentration Mathematics as part of Multi-track option C should select the Supplementary Minor Concentration in Mathematics in place of this Minor concentration.
Under option C, it is not possible to combine the Minor Concentration Mathematics and the Minor Concentration Statistics. Students wishing to do this should instead take the Major Concentration Mathematics under option B (two major concentrations) and select a large number of statistics complementaries.

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".

No overlap is permitted with other programs.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 18 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Expandable Version: Required Courses (12 credits)}
* Note: Credit cannot be received for both MATH 236 and MATH 223 (listed as a required course in the non-expandable version of this Minor concentration).
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 235 & (3) & Algebra 1 \\
MATH \(236^{*}\) & (3) & Algebra 2 \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Expandable Version: Complementary Courses ( 6 credits)}

Students selecting the expandable version of this program complete 6 credits of complementary courses from the Complementary Course List.
It is strongly recommended that students take MATH 323 as a complementary course.

\section*{Non-Expandable Version: Required Courses ( 9 credits)}
* Note: Credit cannot be received for both MATH 223 and MATH 236 (listed as a required course in the expandable version of this Minor concentration).
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 223* & (3) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Non-Expandable Version: Complementary Courses (9 credits)}

Students selecting the non-expandable version of this program complete 9 credits of complementary courses from the Complementary Course List. It is strongly recommended that students take MATH 323 as a complementary course.

\section*{Complementary Course List}
* Note: Either MATH 249 or MATH 316 may be taken but not both.
\begin{tabular}{lcl} 
MATH 249* & \((3)\) & Honours Complex Variables \\
MATH 314 & \((3)\) & Advanced Calculus \\
MATH 316* & \((3)\) & Complex Variables \\
MATH 317 & \((3)\) & Numerical Analysis \\
MATH 318 & \((3)\) & Mathematical Logic \\
MATH 319 & \((3)\) & Partial Differential Equations \\
MATH 323 & \((3)\) & Probability \\
MATH 324 & \((3)\) & Statistics \\
MATH 326 & \((3)\) & Nonlinear Dynamics and Chaos \\
MATH 327 & \((3)\) & Matrix Numerical Analysis \\
MATH 340 & \((3)\) & Discrete Mathematics
\end{tabular}
\begin{tabular}{lll} 
MATH 346 & (3) & Number Theory \\
MATH 348 & (3) & Euclidean Geometry \\
MATH 417 & (3) & Linear Optimization \\
MATH 451 & () & Introduction to General Topology
\end{tabular}

\subsection*{4.11.26.2 Bachelor of Arts (B.A.) - Minor Concentration Statistics ( 18 credits)}

The Minor Concentration Statistics is offered only in a non-expandable version, that is, one that cannot be expanded into the Major Concentration Mathematics.
The Minor Concentration Statistics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System, or together with the Major Concentration Mathematics and a minor concentration (which must be in some other discipline than Mathematics) under option C.
Under option C, it is not possible to combine the Minor Concentration Statistics and the Minor Concentration Mathematics. Students wishing to do this should instead take the Major Concentration Mathematics under option B (two major concentrations) and select a large number of statistics complementaries.

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".
No overlap is permitted with other programs.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 18 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Required Courses ( 15 credits)}
* Note: If the Minor Concentration Statistics is combined with the Major Concentration Mathematics, the required courses MATH 222, MATH 223 and MATH 323 must be replaced by courses selected from the Complementary Courses. Credit cannot be received for both MATH 223 and MATH 236 (listed as a required course in the Major Concentration Mathematics).
\begin{tabular}{lll} 
MATH \(222^{*}\) & \((3)\) & Calculus 3 \\
MATH \(223^{*}\) & \((3)\) & Linear Algebra \\
MATH 323* & \((3)\) & Probability \\
MATH 324 & \((3)\) & Statistics \\
MATH 423 & \((3)\) & Applied Regression
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits from:
\begin{tabular}{lcl} 
MATH 204 & \((3)\) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 317 & (3) & Numerical Analysis \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods
\end{tabular}

\subsection*{4.11.26.3 Bachelor of Arts (B.A.) - Major Concentration Mathematics (36 credits)}

Students who have done well in MATH 242 and MATH 235 at the end of their first term should consider, in consultation with their adviser and the instructors of the courses involved, the possibility of entering into an Honours program in Mathematics, in Applied Mathematics, in Probability and Statistics, or a Joint Honours program in Mathematics and another discipline.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 36 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Guidelines for Course Selection}

Where appropriate, Honours-level courses may be substituted for their Majors-level counterparts. Students planning to undertake graduate studies in mathematics are urged to make such substitutions.
Students interested in computer science should consider the courses MATH 317, MATH 318, MATH 327, MATH 340, MATH 417, and take the Minor Concentration Computer Science.
Students interested in probability and statistics should consider either taking the Minor Concentration Statistics under option C, or else including some or all of the courses MATH 423, MATH 447, MATH 523, MATH 524, and MATH 525.

Students interested in applied mathematics should consider the courses MATH 317, MATH 319, MATH 324, MATH 326, MATH 327 , and MATH 417.
Students interested in careers in business, industry or government should consider the courses MATH 317, MATH 319, MATH 327, MATH 417, MATH 423, MATH 447, MATH 523, and MATH 525.

\section*{Required Courses (21 credits)}
\begin{tabular}{lll} 
MATH 222 & \((3)\) & Calculus 3 \\
MATH 235 & \((3)\) & Algebra 1 \\
MATH 236 & \((3)\) & Algebra 2 \\
MATH 242 & \((3)\) & Analysis 1 \\
MATH 243 & \((3)\) & Analysis 2 \\
MATH 314 & \((3)\) & Advanced Calculus \\
MATH 323 & \((3)\) & Probability
\end{tabular}

\section*{Complementary Courses (15 credits)}

15 credits selected as follows:

At least 9 credits from:
* Note: Either MATH 249 or MATH 316 may be taken but not both.
\begin{tabular}{lcl} 
MATH 249* & (3) & Honours Complex Variables \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 316* & (3) & Complex Variables \\
MATH 317 & (3) & Numerical Analysis \\
MATH 324 & (3) & Statistics \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 423 & (3) & Applied Regression \\
MATH 451 & () & Introduction to General Topology
\end{tabular}

Remaining credits from:
\begin{tabular}{lll} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 318 & (3) & Mathematical Logic \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 346 & (3) & Number Theory \\
MATH 348 & (3) & Euclidean Geometry \\
MATH 352 & (1) & Problem Seminar \\
MATH 410 & (3) & Majors Project \\
MATH 417 & (3) & Linear Optimization \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 478 & (3) & Computational Methods in Applied Mathematics \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications
\end{tabular}

\subsection*{4.11.26.4 Bachelor of Arts (B.A.) - Joint Honours Component Mathematics ( \(\mathbf{3 6}\) credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

To remain in the Joint Honours program and receive the Joint Honours degree, a student must maintain the standards set by each discipline, as well as by the Faculty. In the Mathematics courses of the program a GPA of 3.00 and a CGPA of 3.00 must be maintained. Students who have difficulty in maintaining the required level should change to another program before entering their final year.

\section*{Program Prerequisites}

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 36 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 222 & (3) & Calculus 3
\end{tabular}

\section*{Required Courses ( 9 credits)}
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH 251 & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2
\end{tabular}

\section*{Complementary Courses (27 credits)}

3 credits selected from:
MATH 242
(3)

Analysis 1
```

MATH 254* Honours Analysis 1

* It is strongly recommended that students take MATH 254.
3 credits selected from:

| MATH 248 | (3) | Honours Vector Calculus |
| :--- | :--- | :--- |
| MATH 358 | () | Honours Advanced Calculus |

** It is strongly recommended that students take MATH 358.
15 credits selected from the list below. The remaining credits are to be chosen from the full list of available Honours courses in Mathematics and Statistics.

* Not open to students who have taken MATH 354.
** Not open to students who have taken MATH 355.
*** Not open to students who have taken MATH 370.
+ Not open to students who have taken MATH 371.
++ Not open to students who have taken MATH 380.

| MATH 325 | (3) | Honours Ordinary Differential Equations |
| :--- | :---: | :--- |
| MATH 356 | (3) | Honours Probability |
| MATH 357 | (3) | Honours Statistics |
| MATH 454* | (3) | Honours Analysis 3 |
| MATH 455** | (3) | Honours Analysis 4 |
| MATH 456*** | (3) | Honours Algebra 3 |
| MATH 457+ | (3) | Honours Algebra 4 |
| MATH 458++ | (3) | Honours Differential Geometry |
| MATH 466 | (3) | Honours Complex Analysis |

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\subsection*{4.11.27 Philosophy}

The Department of Philosophy, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.30: Philosophy.

\subsection*{4.11.27.1 Bachelor of Arts (B.A.) - Minor Concentration History and Philosophy of Science (18 credits)}

History and Philosophy of Science at McGill is an interdisciplinary program that aims to provide students with an understanding of science through the study of both its historical development and of some of the fundamental philosophical principles upon which it rests. For more information about the program and events, please visit http://www.mcgill.ca/hpsc.

\section*{Complementary Courses (18 credits)}

18 credits with a maximum of 9 credits at the 200 level selected as follows:

\section*{Philosophy of Science}

6-12 credits of courses focused on the Philosophy of Science with no more than 6 credits at the 200 level chosen from the following:

\section*{Communication Studies (COMS)}
COMS 210
(3)
Introduction to Communication Studies

\section*{History and Philosophy of Science (HPSC)}
\begin{tabular}{lll} 
HPSC 300 & (3) & Independent Studies: History and Philosophy of Science \\
HPSC 500 & (3) & Interdisciplinary Seminar: History \& Philosophy of Science
\end{tabular}

\section*{Philosophy (PHIL)}
\begin{tabular}{lcl} 
PHIL 210 & \((3)\) & Introduction to Deductive Logic 1 \\
PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 311 & (3) & Philosophy of Mathematics \\
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 441 & \((3)\) & Philosophy of Science 2 \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy
\end{tabular}

\section*{History of Science}

6-12 credits of courses focused on the History of Science with no more than 6 credits at the 200 level chosen from the following:

\section*{Anthropology (ANTH)}
ANTH 359
(3)
History of Archaeological Theory

\section*{Biology (BIOL)}
BIOL 210
(3)
Perspectives of Science

History (HIST)
\begin{tabular}{lll} 
HIST 249 & (3) & Health and the Healer in Western History \\
HIST 319 & (3) & The Scientific Revolution \\
HIST 335 & (3) & Science and Medicine in Canada \\
HIST 350 & (3) & Science and the Enlightenment \\
HIST 356 & (3) & Medicine in the Medieval West \\
HIST 410 & (3) & Topics in History of Science \\
HIST 452 & (3) & Topics in Pre-Modern Medicine \\
HIST 457 & (3) & Topics in Medical History \\
HIST 558 & (3) & Modern Medicine: Seminar \\
HIST 559 & (3) & Modern Medicine: Research \\
HIST 567D1 & (3) & Seminar: Medieval Medicine \\
HIST 567D2 &
\end{tabular}

\section*{History and Philosophy of Science (HPSC)}
\begin{tabular}{lll} 
HPSC 300 & (3) & Independent Studies: History and Philosophy of Science \\
HPSC 500 & (3) & Interdisciplinary Seminar: History \& Philosophy of Science
\end{tabular}

Islamic Studies (ISLA)

\section*{Mathematics (MATH)}
MATH 338
(3)
History and Philosophy of Mathematics

\section*{Psychology (PSYC)}

PSYC 403
(3)

Modern Psychology in Historical Perspective

\subsection*{4.11.27.2 Bachelor of Arts (B.A.) - Minor Concentration Philosophy (18 credits) \\ Complementary Courses (18 credits)}

18 credits, of which no more than 9 credits may be at the 200 level and at least 3 credits must be at the 400 or 500 level, distributed as follows:
15 credits from Groups A, B, C, D, and E with one course from at least four of the five groups.
3 additional credits from Groups A, B, C, D, and E or from other Philosophy (PHIL) courses.

\section*{Group A}
\begin{tabular}{lcl} 
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 240 & (3) & Political Philosophy 1 \\
PHIL 242 & (3) & Introduction to Feminist Theory \\
PHIL 334 & (3) & Ethical Theory \\
PHIL 343 & (3) & Biomedical Ethics \\
PHIL 348 & (3) & Philosophy of Law 1 \\
PHIL 427 & (3) & Topics in Critical Philosophy of Race \\
PHIL 434 & (3) & Metaethics \\
PHIL 442 & (3) & Topics in Feminist Theory
\end{tabular}

\section*{Group B}
\begin{tabular}{lcl} 
PHIL 210 & (3) & Introduction to Deductive Logic 1 \\
PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 311 & (3) & Philosophy of Mathematics \\
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & (3) & Philosophy of Language \\
PHIL 419 & (3) & Epistemology \\
PHIL 421 & (3) & Metaphysics \\
PHIL 441 & (3) & Philosophy of Science 2 \\
PHIL 470 & (3) & Topics in Contemporary Analytic Philosophy
\end{tabular}

\section*{Group C}
PHIL 375
(3)
Existentialism
\begin{tabular}{lll} 
PHIL 474 & (3) & Phenomenology \\
PHIL 475 & (3) & Topics in Contemporary European Philosophy
\end{tabular}

\section*{Group D}
\begin{tabular}{lcl} 
PHIL 344 & \((3)\) & Medieval and Renaissance Political Theory \\
PHIL 345 & (3) & Greek Political Theory \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 353 & (3) & The Presocratic Philosophers \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 356 & (3) & Early Medieval Philosophy \\
PHIL 452 & (3) & Later Greek Philosophy \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy \\
PHIL 454 & (3) & Ancient Moral Theory
\end{tabular}

\section*{Group E}
\begin{tabular}{lll} 
PHIL 360 & (3) & 17th Century Philosophy \\
PHIL 361 & (3) & 18th Century Philosophy \\
PHIL 366 & (3) & 18th and Early 19th Century German Philosophy \\
PHIL 367 & (3) & 19th Century Philosophy \\
PHIL 444 & (3) & Early Modern Political Theory \\
PHIL 445 & (3) & 19th Century Political Theory
\end{tabular}

\subsection*{4.11.27.3 Bachelor of Arts (B.A.) - Major Concentration Philosophy (36 credits)}

\section*{Required Course (3 credits)}
PHIL 210
(3)
Introduction to Deductive Logic 1

\section*{Complementary Courses ( 33 credits)}

33 credits, of which no more than 9 may be at the 200 level and at least 9 must be at the 400 or 500 level, distributed as follows:
18 credits from Groups A, B, C, D, E, and F:
3 credits from Group A
3 credits from Group B
6 credits, two courses from either Group C or Group D
3 credits from Group E
3 credits from Group F
15 additional credits from Groups A, B, C, D, E or F or from other Philosophy (PHIL) courses. Only one of PHIL 200 or PHIL 201 may be included in the program.

\section*{Group A}

3 credits from:
\begin{tabular}{lll} 
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 311 & (3) & Philosophy of Mathematics
\end{tabular}
\begin{tabular}{lcl} 
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & (3) & Philosophy of Language \\
PHIL 419 & (3) & Epistemology \\
PHIL 421 & (3) & Metaphysics \\
PHIL 441 & (3) & Philosophy of Science 2 \\
PHIL 470 & (3) & Topics in Contemporary Analytic Philosophy
\end{tabular}

\section*{Group B}

3 credits from:
\begin{tabular}{lll} 
PHIL 375 & (3) & Existentialism \\
PHIL 474 & (3) & Phenomenology \\
PHIL 475 & (3) & Topics in Contemporary European Philosophy
\end{tabular}

\section*{Group C}
\begin{tabular}{lll}
6 credits (two courses) from Group C OR Group D: \\
PHIL 344 & (3) & Medieval and Renaissance Political Theory \\
PHIL 345 & (3) & Greek Political Theory \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 353 & (3) & The Presocratic Philosophers \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 356 & (3) & Early Medieval Philosophy \\
PHIL 452 & (3) & Later Greek Philosophy \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy \\
PHIL 454 & (3) & Ancient Moral Theory
\end{tabular}

\section*{Group D}

6 credits (two courses) from Group C OR Group D:
\begin{tabular}{lll} 
PHIL 360 & (3) & 17th Century Philosophy \\
PHIL 361 & (3) & 18th Century Philosophy \\
PHIL 366 & (3) & 18th and Early 19th Century German Philosophy \\
PHIL 367 & (3) & 19th Century Philosophy \\
PHIL 444 & (3) & Early Modern Political Theory \\
PHIL 445 & (3) & 19th Century Political Theory
\end{tabular}

Group E
3 credits from:
\begin{tabular}{lll} 
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 240 & (3) & Political Philosophy 1 \\
PHIL 242 & (3) & Introduction to Feminist Theory
\end{tabular}

\section*{Group F}

3 credits from:
\begin{tabular}{lll} 
PHIL 334 & (3) & Ethical Theory \\
PHIL 343 & (3) & Biomedical Ethics \\
PHIL 348 & (3) & Philosophy of Law 1 \\
PHIL 427 & (3) & Topics in Critical Philosophy of Race \\
PHIL 434 & (3) & Metaethics \\
PHIL 442 & (3) & Topics in Feminist Theory
\end{tabular}

\subsection*{4.11.27.4 Bachelor of Arts (B.A.) - Joint Honours Component Philosophy (36 credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Prior to registering for each Joint Honours component, students should consult an adviser in each department for approval of their course selection and their interdisciplinary research project (if applicable).

According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00 .
Admission to Joint Honours: Students must attain a 3.00 CGPA and have a 3.00 GPA in Philosophy courses.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
PHIL 210 & (3) & Introduction to Deductive Logic 1 \\
PHIL 301 & (3) & Philosophical Fundamentals \\
PHIL 334 & (3) & Ethical Theory
\end{tabular}

\section*{Complementary Courses ( 27 credits)}

27 credits distributed as follows:

3 credits from:
\begin{tabular}{lcl} 
PHIL 306 & \((3)\) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 370 & \((3)\) & Problems in Analytic Philosophy \\
PHIL 410 & \((3)\) & Advanced Topics in Logic 1 \\
PHIL 411 & \((3)\) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & \((3)\) & Philosophy of Language \\
PHIL 419 & (3) & Epistemology \\
PHIL 421 & (3) & Metaphysics \\
PHIL 470 & (3) & Topics in Contemporary Analytic Philosophy
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 240 & (3) & Political Philosophy 1 \\
PHIL 242 & (3) & Introduction to Feminist Theory
\end{tabular}

\section*{Group A}

\section*{6 credits from Group A or Group B.}
\begin{tabular}{lcl} 
PHIL 345 & (3) & Greek Political Theory \\
PHIL 350 & (3) & History and Philosophy of Ancient Science \\
PHIL 353 & (3) & The Presocratic Philosophers \\
PHIL 354 & (3) & Plato \\
PHIL 355 & (3) & Aristotle \\
PHIL 452 & (3) & Later Greek Philosophy \\
PHIL 453 & (3) & Ancient Metaphysics and Natural Philosophy \\
PHIL 454 & (3) & Ancient Moral Theory
\end{tabular}

\section*{Group B}

6 credits from Group A or Group B.
\begin{tabular}{lll} 
PHIL 360 & (3) & 17th Century Philosophy \\
PHIL 361 & (3) & 18th Century Philosophy \\
PHIL 366 & (3) & 18th and Early 19th Century German Philosophy \\
PHIL 367 & (3) & 19th Century Philosophy \\
PHIL 444 & (3) & Early Modern Political Theory \\
PHIL 445 & (3) & 19th Century Political Theory
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
PHIL 375 & \((3)\) & Existentialism \\
PHIL 474 & (3) & Phenomenology \\
PHIL 475 & \((3)\) & Topics in Contemporary European Philosophy
\end{tabular}

9 credits of Philosophy (PHIL) at the 400 and 500 level (not including the Joint Honours tutorial), at least 3 credits of which must be at the 500 level.

\section*{Joint Honours Tutorial with Thesis}

3 credits of Joint Honours tutorial with thesis, which can take either of two forms: a 6-credit interdisciplinary thesis, or a 3-credit thesis in Philosophy, i.e., PHIL 498 below.
PHIL 498
(3)
Tutorial 05

\subsection*{4.11.28 Physics}

The Department of Physics, the discipline, and specific courses are described in Faculty of Science > Undergraduate \(>\) Browse Academic Units \& Programs > section 11.12.30: Physics (PHYS).

\subsection*{4.11.28.1 Bachelor of Science (B.Sc.) - Minor Physics (18 credits)}

The 18-credit Minor permits no overlap with any other programs. It contains no Mathematics courses, although many of the courses in it have Math pre- or corequisites. It will, therefore, be particularly appropriate to students in Mathematics, but it is also available to any Science student with the appropriate mathematical background.

Students in certain programs (e.g., the Major Chemistry) will find that there are courses in the Minor that are already part of their program, or that they may not take for credit because of a substantial overlap of material with a course or courses in their program. After consultation with an adviser, such students may complete the Minor by substituting any other physics course(s) from the Major or Honours Physics programs.

Required Course (3 credits)
PHYS 257 (3) Experimental Methods 1

\section*{Complementary Courses ( 15 credits)}

15 credits to be selected as follows:

One of:
\begin{tabular}{lll} 
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 251 & (3) & Honours Classical Mechanics 1
\end{tabular}

One of:
\begin{tabular}{lll} 
PHYS 232 & (3) & Heat and Waves \\
PHYS 253 & (3) & Thermal Physics
\end{tabular}

One of:
\begin{tabular}{lll} 
PHYS 241 & (3) & Signal Processing \\
PHYS 258 & (3) & Experimental Methods 2
\end{tabular}

One of:
\begin{tabular}{lll} 
PHYS 224 & (3) & Physics of Music \\
PHYS 228 & (3) & Energy and the Environment \\
PHYS 260 & (3) & Modern Physics and Relativity \\
PHYS 320 & (3) & Introductory Astrophysics \\
PHYS 346 & (3) & Majors Quantum Physics
\end{tabular}

One of:
PHYS 340
(3)

Majors Electricity and Magnetism
PHYS 350
(3)

Honours Electricity and Magnetism

\subsection*{4.11.28.2 Bachelor of Arts and Science (B.A. \& Sc.) - Major Concentration Physics (36 credits)}

The Major Concentration Physics, which is restricted to students in the B.A. \& Sc. or B.Sc./B.Ed., is a planned sequence of courses designed to permit a degree of specialization in this discipline. This program is insufficient to prepare a student for professional or graduate work in physics; students interested in pursuing a career in physics are advised to take the appropriate B.Sc. program in physics.

\section*{Required Courses* (30 credits)}
* Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. \& Sc. or B.Sc./B.Ed. must be replaced by courses from the Complementary Course List.
\begin{tabular}{lcl} 
MATH 222 & (3) & Calculus 3 \\
MATH 223 & \((3)\) & Linear Algebra \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations \\
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 232 & (3) & Heat and Waves \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 333 & (3) & Thermal and Statistical Physics
\end{tabular}
\begin{tabular}{lll} 
PHYS 340 & (3) & Majors Electricity and Magnetism \\
PHYS 346 & (3) & Majors Quantum Physics
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits selected from:
\begin{tabular}{lll} 
PHYS 224 & (3) & Physics of Music \\
PHYS 228 & (3) & Energy and the Environment \\
PHYS 241 & (3) & Signal Processing \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 260 & (3) & Modern Physics and Relativity \\
PHYS 320 & (3) & Introductory Astrophysics \\
PHYS 534 & (3) & Nanoscience and Nanotechnology
\end{tabular}
or any 300- or 400-level course approved by an adviser.

\subsection*{4.11.29 Political Science}

The Department of Political Science, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.31: Political Science.

\subsection*{4.11.29.1 Bachelor of Arts (B.A.) - Minor Concentration Political Science (18 credits)}

This program may be expanded to the Major Concentration Political Science.

\section*{Complementary Courses (18 credits)}

18 credits selected as follows:
6-9 POLI credits at the 200 level. These courses should be in different groups, the relevant groups being Canadian Politics, International Relations, Comparative Politics, Political Theory, and Methods.

9-12 POLI credits at the 300 level or above.
No more than 6 POLI transfer credits can be used toward the program requirements.
POLI 490, POLI 499, and POLI 599 cannot be used towards the Minor program.
Course lists for each group of political science courses are provided below.

\section*{Canadian Politics}
\begin{tabular}{lcl} 
POLI 221 & \((3)\) & Government of Canada \\
POLI 222 & \((3)\) & Political Process and Behaviour in Canada \\
POLI 226 & \((3)\) & La vie politique québécoise \\
POLI 318 & \((3)\) & Comparative Local Government \\
POLI 320 & (3) & Issues in Canadian Democracy \\
POLI 321 & (3) & Issues: Canadian Public Policy \\
POLI 326 & (3) & Provincial Politics \\
POLI 336 & (3) & Le Québec et le Canada \\
POLI 342 & (3) & Canadian Foreign Policy \\
POLI 348 & (3) & Gender and Canadian Politics \\
POLI 371 & (3) & Challenge of Canadian Federalism \\
POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
POLI 378 & (3) & The Canadian Judicial Process \\
POLI 379 & (3) & Topics in Canadian Politics
\end{tabular}
\begin{tabular}{lcl} 
POLI 410 & \((3)\) & Canadian Political Parties \\
POLI 412 & \((3)\) & Canadian Voting/Public Opinion \\
POLI 417 & \((3)\) & Health Care in Canada \\
POLI 424 & \((3)\) & Media and Politics \\
POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
POLI 427 & (3) & Selected Topics: Canadian Politics \\
POLI 436 & \((3)\) & Aboriginal Rights in the Canadian Constitution \\
POLI 478 & \((3)\) & The Canadian Constitution \\
POLI 521 & (3) & Seminar: Canadian Politics and Government
\end{tabular}

\section*{Comparative Politics - Developed Areas}
\begin{tabular}{|c|c|c|}
\hline GEOG 420* & (3) & Memory, Place, and Power \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 316 & (3) & Black Lives Matter and American Democracy \\
\hline POLI 318 & (3) & Comparative Local Government \\
\hline POLI 325 & (3) & U.S. Politics \\
\hline POLI 328 & (3) & Comparing European Democracies \\
\hline POLI 329 & (3) & Russian and Soviet Politics \\
\hline POLI 330 & (3) & Law and Courts in Europe \\
\hline POLI 331 & (3) & Politics in East Central Europe \\
\hline POLI 339 & (3) & Comparative Developed: Topics 1 \\
\hline POLI 357 & (3) & Politics: Contemporary Europe \\
\hline POLI 361 & (3) & Political Participation in Comparative Perspective \\
\hline POLI 419 & (3) & Transitions from Communism \\
\hline POLI 420* & (3) & Memory, Place, and Power \\
\hline POLI 421 & (3) & The Politics of Misinformation \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 425 & (3) & Topics in American Politics \\
\hline POLI 430 & (3) & Politics of Art \\
\hline POLI 431 & (3) & Nations and States/Developed World \\
\hline POLI 432 & (3) & Selected Topics: Comparative Politics \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 475 & (3) & Social Capital in Comparative Perspective \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 524 & (3) & Seminar: Developed Areas \\
\hline
\end{tabular}
* Either POLI 420 or GEOG 420 but not both.

\section*{Comparative Politics - Developing Areas}
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 319 & (3) & Politics of Latin America \\
POLI 322 & (3) & Political Change in South Asia
\end{tabular}
\begin{tabular}{lcl} 
POLI 324 & \((3)\) & Developing Areas/Africa \\
POLI 338 & \((3)\) & Developing Areas/Topics 1 \\
POLI 340 & \((3)\) & Developing Areas/Middle East \\
POLI 369 & \((3)\) & Politics of Southeast Asia \\
POLI 380 & \((3)\) & Contemporary Chinese Politics \\
POLI 381 & \((3)\) & Politics in Japan and South Korea \\
POLI 422 & (3) & Developing Areas/Topics 2 \\
POLI 423 & (3) & Politics of Ethno-Nationalism \\
POLI 435 & (3) & Identity and Inequality \\
POLI 450 & (3) & Peacebuilding \\
POLI 473 & (3) & Democracy and the Market \\
POLI 474 & (3) & Inequality and Development \\
POLI 476 & (3) & Religion and Politics \\
POLI 480 & (3) & Contentious Politics \\
POLI 522 & (3) & Seminar: Developing Areas
\end{tabular}

International Relations
\begin{tabular}{lcl} 
POLI 243 & \((3)\) & International Politics of Economic Relations \\
POLI 244 & \((3)\) & International Politics: State Behaviour \\
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 342 & (3) & Canadian Foreign Policy \\
POLI 345 & (3) & International Organizations \\
POLI 346 & (3) & American Foreign Policy \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
POLI 349 & (3) & Foreign Policy: Asia \\
POLI 350 & (3) & Global Environmental Politics \\
POLI 351 & (3) & The Causes of Major Wars \\
POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
POLI 353 & (3) & Politics of the International Refugee Regime \\
POLI 354 & (3) & Approaches to International Political Economy \\
POLI 355 & (3) & The Politics of International Law \\
POLI 358 & (3) & Political Economy of International Organizations \\
POLI 359 & (3) & Topics in International Politics 1 \\
POLI 360 & (3) & Security: War and Peace \\
POLI 362 & (3) & Political Theory and International Relations \\
POLI 441 & (3) & IPE: Trade \\
POLI 442 & (3) & International Relations of Ethnic Conflict \\
POLI 443 & (3) & Intervention in World Politics \\
POLI 444 & (3) & Topics in International Politics 2 \\
POLI 445 & (3) & International Political Economy: Monetary Relations \\
POLI 447 & (3) & Political Economy of Multinationals \\
POLI 448 & (3) & Gender and International Relations \\
\hline
\end{tabular}
\begin{tabular}{lll} 
POLI 449 & (3) & Diplomacy in Practice \\
POLI 450 & (3) & Peacebuilding \\
POLI 451 & (3) & The European Union \\
POLI 452 & (3) & Conflict Simulation \\
POLI 575 & (3) & Seminar: International Politics
\end{tabular}

\section*{Political Theory}
\begin{tabular}{|c|c|c|}
\hline POLI 231 & (3) & Introduction to Political Theory \\
\hline POLI 333 & (3) & Western Political Theory 1 \\
\hline POLI 334 & (3) & Western Political Theory 2 \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 363 & (3) & Contemporary Political Theory \\
\hline POLI 364 & (3) & Radical Political Thought \\
\hline POLI 365 & (3) & Democratic Theory \\
\hline POLI 366 & (3) & Topics in Political Theory 1 \\
\hline POLI 367 & (3) & Liberal Political Theory \\
\hline POLI 368 & (3) & Political Theory and Indigeneity. \\
\hline POLI 433 & (3) & History of Political/Social Theory 3 \\
\hline POLI 434 & (3) & History of Political/Social Theory 4 \\
\hline POLI 459 & (3) & Topics in Political Theory 2 \\
\hline POLI 470 & (3) & Philosophy, Economy and Society \\
\hline POLI 561 & (3) & Seminar: Political Theory \\
\hline
\end{tabular}

\section*{Methods}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 311 & (3) & Introduction to Quantitative Political Science \\
POLI 312 & (3) & Intermediate Quantitative Political Science \\
POLI 313 & (3) & Introduction to Qualitative Methods in Political Science \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\subsection*{4.11.29.2 Bachelor of Arts (B.A.) - Major Concentration Political Science (36 credits)}

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits of courses selected from the four main fields of political science (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas), International Relations, and Political Theory) with the following specifications.

No more than one-half of the credits ( 18 credits) may be taken in a single field of political science, unless the field is Comparative Politics in which case the maximum is 21 credits, provided courses are taken in both Developed Areas and Developing Areas.

No more than 12 of the 36 credits may be at the 200 level. No more than 3 credits at the 200 level may be in any given group.
3 credits should be taken at the 400 level at McGill rather than as transfer credits.
In the final year, no course used toward the program requirements may be below the 300 level.
No more than 12 POLI transfer credits can be used toward the program requirements.

\section*{Advising Information}

In the first year of the program (U1), students are advised to select their courses from at least three of the five main groups of courses in political science. U1 students should normally take courses at the 200 level only. However, those who have already completed the 200-level prerequisite for courses may take 300-level courses.

Course lists for each group of political science courses are provided below.
NOTE: POLI 200, 210, 311 and 461 can also be used towards this program.

\section*{Canadian Politics}
\begin{tabular}{|c|c|c|}
\hline POLI 221 & (3) & Government of Canada \\
\hline POLI 222 & (3) & Political Process and Behaviour in Canada \\
\hline POLI 226 & (3) & La vie politique québécoise \\
\hline POLI 317 & (3) & The Politics of Race in Canada \\
\hline POLI 318 & (3) & Comparative Local Government \\
\hline POLI 320 & (3) & Issues in Canadian Democracy \\
\hline POLI 321 & (3) & Issues: Canadian Public Policy \\
\hline POLI 326 & (3) & Provincial Politics \\
\hline POLI 336 & (3) & Le Québec et le Canada \\
\hline POLI 342 & (3) & Canadian Foreign Policy \\
\hline POLI 348 & (3) & Gender and Canadian Politics \\
\hline POLI 371 & (3) & Challenge of Canadian Federalism \\
\hline POLI 372 & (3) & Indigenous Peoples and the Canadian State \\
\hline POLI 378 & (3) & The Canadian Judicial Process \\
\hline POLI 379 & (3) & Topics in Canadian Politics \\
\hline POLI 410 & (3) & Canadian Political Parties \\
\hline POLI 412 & (3) & Canadian Voting/Public Opinion \\
\hline POLI 417 & (3) & Health Care in Canada \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
\hline POLI 427 & (3) & Selected Topics: Canadian Politics \\
\hline POLI 436 & (3) & Aboriginal Rights in the Canadian Constitution \\
\hline POLI 478 & (3) & The Canadian Constitution \\
\hline POLI 521 & (3) & Seminar: Canadian Politics and Government \\
\hline
\end{tabular}

\section*{Comparative Politics - Developed Areas}
\begin{tabular}{lcl} 
GEOG 420* & (3) & Memory, Place, and Power \\
POLI 212 & \((3)\) & Government and Politics - Developed World \\
POLI 316 & \((3)\) & Black Lives Matter and American Democracy \\
POLI 318 & (3) & Comparative Local Government \\
POLI 325 & (3) & U.S. Politics \\
POLI 328 & (3) & Comparing European Democracies \\
POLI 329 & (3) & Russian and Soviet Politics \\
POLI 330 & (3) & Law and Courts in Europe \\
POLI 331 & (3) & Politics in East Central Europe \\
POLI 339 & (3) & Comparative Developed: Topics 1 \\
POLI 357 & (3) & Politics: Contemporary Europe \\
POLI 361 & (3) & Political Participation in Comparative Perspective \\
POLI 419 & (3) & Transitions from Communism
\end{tabular}
\begin{tabular}{lcl} 
POLI \(420^{*}\) & \((3)\) & Memory, Place, and Power \\
POLI 421 & \((3)\) & The Politics of Misinformation \\
POLI 424 & \((3)\) & Media and Politics \\
POLI 425 & (3) & Topics in American Politics \\
POLI 430 & (3) & Politics of Art \\
POLI 431 & (3) & Nations and States/Developed World \\
POLI 432 & (3) & Selected Topics: Comparative Politics \\
POLI 451 & (3) & The European Union \\
POLI 452 & (3) & Conflict Simulation \\
POLI 475 & (3) & Social Capital in Comparative Perspective \\
POLI 476 & (3) & Religion and Politics \\
POLI 524 & (3) & Seminar: Developed Areas
\end{tabular}
* Either POLI 420 or GEOG 420 but not both.

Comparative Politics - Developing Areas
\begin{tabular}{lll} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 319 & (3) & Politics of Latin America \\
POLI 322 & (3) & Political Change in South Asia \\
POLI 324 & (3) & Developing Areas/Africa \\
POLI 338 & \((3)\) & Developing Areas/Topics 1 \\
POLI 340 & (3) & Developing Areas/Middle East \\
POLI 369 & (3) & Politics of Southeast Asia \\
POLI 380 & (3) & Contemporary Chinese Politics \\
POLI 381 & (3) & Politics in Japan and South Korea \\
POLI 422 & (3) & Developing Areas/Topics 2 \\
POLI 423 & (3) & Politics of Ethno-Nationalism \\
POLI 435 & (3) & Identity and Inequality \\
POLI 450 & (3) & Peacebuilding \\
POLI 473 & (3) & Democracy and the Market \\
POLI 474 & (3) & Inequality and Development \\
POLI 476 & (3) & Religion and Politics \\
POLI 480 & (3) & Contentious Politics \\
POLI 522 & (3) & Seminar: Developing Areas \\
\hline
\end{tabular}

\section*{International Relations}
\begin{tabular}{lcl} 
POLI 243 & \((3)\) & International Politics of Economic Relations \\
POLI 244 & \((3)\) & International Politics: State Behaviour \\
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 342 & (3) & Canadian Foreign Policy \\
POLI 345 & \((3)\) & International Organizations \\
POLI 346 & (3) & American Foreign Policy \\
POLI 347 & \((3)\) & Arab-Israel Conflict, Crisis, Peace
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 351 & (3) & The Causes of Major Wars \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 354 & (3) & Approaches to International Political Economy \\
\hline POLI 355 & (3) & The Politics of International Law \\
\hline POLI 358 & (3) & Political Economy of International Organizations \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 443 & (3) & Intervention in World Politics \\
\hline POLI 444 & (3) & Topics in International Politics 2 \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 446 & (3) & International Law and Politics of Human Rights \\
\hline POLI 447 & (3) & Political Economy of Multinationals \\
\hline POLI 448 & (3) & Gender and International Relations \\
\hline POLI 449 & (3) & Diplomacy in Practice \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 575 & (3) & Seminar: International Politics \\
\hline
\end{tabular}

\section*{Political Theory}
\begin{tabular}{lll} 
POLI 231 & \((3)\) & Introduction to Political Theory \\
POLI 333 & \((3)\) & Western Political Theory 1 \\
POLI 334 & \((3)\) & Western Political Theory 2 \\
POLI 362 & \((3)\) & Political Theory and International Relations \\
POLI 363 & \((3)\) & Contemporary Political Theory \\
POLI 364 & \((3)\) & Radical Political Thought \\
POLI 365 & \((3)\) & Democratic Theory \\
POLI 366 & \((3)\) & Topics in Political Theory 1 \\
POLI 367 & (3) & Liberal Political Theory \\
POLI 368 & (3) & Political Theory and Indigeneity. \\
POLI 433 & (3) & History of Political/Social Theory 3 \\
POLI 434 & (3) & History of Political/Social Theory 4 \\
POLI 459 & (3) & Topics in Political Theory 2 \\
POLI 470 & (3) & Philosophy, Economy and Society \\
POLI 561 & (3) & Seminar: Political Theory
\end{tabular}

\section*{Methods}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 311 & (3) & Introduction to Quantitative Political Science \\
POLI 312 & (3) & Intermediate Quantitative Political Science \\
POLI 313 & (3) & Introduction to Qualitative Methods in Political Science \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\subsection*{4.11.29.3 Bachelor of Arts (B.A.) - Joint Honours Component Political Science ( \(\mathbf{3 6}\) credits)}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours Program components from two Arts disciplines.
Prior to registering for each Joint Honours component, students should consult an adviser in each department for approval of their course selection and their interdisciplinary research project (if applicable).

To enter, remain and graduate in Joint Honours, students must achieve/maintain a 3.3 average in their political science courses and more than half of the political science grades must be at the B+ level or higher. According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 in general. In addition to meeting these Political Science requirements, students must meet the requirements set forth by the other department.

To be awarded First Class Joint Honours at graduation, in addition to the Faculty requirement of a 3.50 CGPA, students must achieve a 3.6 average in their political science courses and more than half of political science grades must be at the A- level or higher. All political science courses taken at McGill are counted in determining a student's standing. (The specific criteria are given in the brochure "Major and Honours Program Guide", which may be found on the Department website http://www.mcgill.ca/politicalscience/.) To be awarded Joint Honours at graduation, students must be registered in the Joint Honours program in their final year. At graduation, students' Joint Honours standing will be determined by their overall record in the Joint Honours program. In addition to meeting these Political Science requirements, students must meet the requirements set forth by the other department.
Students may enter the Joint Honours program in U1.

\section*{Required Course (3 credits)}
POLI 210*
(3)
Political Science Research Methods
* The POLI 210 requirement is waived for students admitted to McGill BEFORE Fall 2017. The POLI 210 requirement is waived for students who have taken SOCI 211.
NOTE: If the POLI 210 requirement is waived, students must still fulfill the 36 -credit program requirement.

\section*{Complementary Courses ( 33 credits)}

33 credits of complementary courses selected with the following specifications.
3 credits in methods courses at the 300 or 400 level.
No more than one-half ( 18 credits) of a student's political science credits may be in any one field (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas), International Relations, Political Theory). However, if the field is Comparative Politics and if courses are taken in both Developed Areas and Developing Areas, the maximum is 21 credits. Refer to the lists below for course choices in each field.
One quarter ( 9 credits) of political science credits must be at the 400 -level or above including one 500 -level Honours Seminar. Refer to the lists below for course choices at the 400 and 500 levels in each field.
No more than 12 credits of political science courses (including POLI 210) may be at the 200 level. No more than 3 credits may be taken at the 200 level in each of the five groups of courses (Canadian Politics, International Relations, Comparative Politics (Developed Areas and Developing Areas), Political Theory, Methods). Students may not take 200-level political science courses in their final year.

No more than 12 POLI transfer credits can be used toward the program requirements.
Course lists for each group of political science courses are provided below.

\section*{Canadian Politics}
\begin{tabular}{lcl} 
POLI 221 & (3) & Government of Canada \\
POLI 222 & (3) & Political Process and Behaviour in Canada \\
POLI 226 & (3) & La vie politique québécoise \\
POLI 318 & (3) & Comparative Local Government \\
POLI 320 & \((3)\) & Issues in Canadian Democracy \\
POLI 321 & (3) & Issues: Canadian Public Policy \\
POLI 326 & (3) & Provincial Politics \\
POLI 336 & \((3)\) & Le Québec et le Canada
\end{tabular}
\begin{tabular}{lcl} 
POLI 342 & \((3)\) & Canadian Foreign Policy \\
POLI 348 & (3) & Gender and Canadian Politics \\
POLI 371 & (3) & Challenge of Canadian Federalism \\
POLI 372 & \((3)\) & Indigenous Peoples and the Canadian State \\
POLI 378 & \((3)\) & The Canadian Judicial Process \\
POLI 379 & \((3)\) & Topics in Canadian Politics \\
POLI 410 & (3) & Canadian Political Parties \\
POLI 412 & (3) & Canadian Voting/Public Opinion \\
POLI 417 & (3) & Health Care in Canada \\
POLI 424 & (3) & Media and Politics \\
POLI 426 & (3) & Partis politiques et comportements électoraux au Québec \\
POLI 427 & (3) & Selected Topics: Canadian Politics \\
POLI 436 & (3) & Aboriginal Rights in the Canadian Constitution \\
POLI 478 & (3) & The Canadian Constitution \\
POLI 521 & (3) & Seminar: Canadian Politics and Government
\end{tabular}

\section*{Comparative Politics - Developed Areas}
\begin{tabular}{|c|c|c|}
\hline GEOG 420* & (3) & Memory, Place, and Power \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 316 & (3) & Black Lives Matter and American Democracy \\
\hline POLI 318 & (3) & Comparative Local Government \\
\hline POLI 325 & (3) & U.S. Politics \\
\hline POLI 328 & (3) & Comparing European Democracies \\
\hline POLI 329 & (3) & Russian and Soviet Politics \\
\hline POLI 330 & (3) & Law and Courts in Europe \\
\hline POLI 331 & (3) & Politics in East Central Europe \\
\hline POLI 339 & (3) & Comparative Developed: Topics 1 \\
\hline POLI 357 & (3) & Politics: Contemporary Europe \\
\hline POLI 361 & (3) & Political Participation in Comparative Perspective \\
\hline POLI 419 & (3) & Transitions from Communism \\
\hline POLI 420* & (3) & Memory, Place, and Power \\
\hline POLI 421 & (3) & The Politics of Misinformation \\
\hline POLI 424 & (3) & Media and Politics \\
\hline POLI 425 & (3) & Topics in American Politics \\
\hline POLI 430 & (3) & Politics of Art \\
\hline POLI 431 & (3) & Nations and States/Developed World \\
\hline POLI 432 & (3) & Selected Topics: Comparative Politics \\
\hline POLI 451 & (3) & The European Union \\
\hline POLI 452 & (3) & Conflict Simulation \\
\hline POLI 475 & (3) & Social Capital in Comparative Perspective \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 524 & (3) & Seminar: Developed Areas \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Comparative Politics - Developing Areas} \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 319 & (3) & Politics of Latin America \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 324 & (3) & Developing Areas/Africa \\
\hline POLI 338 & (3) & Developing Areas/Topics 1 \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 369 & (3) & Politics of Southeast Asia \\
\hline POLI 380 & (3) & Contemporary Chinese Politics \\
\hline POLI 381 & (3) & Politics in Japan and South Korea \\
\hline POLI 422 & (3) & Developing Areas/Topics 2 \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 473 & (3) & Democracy and the Market \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline POLI 476 & (3) & Religion and Politics \\
\hline POLI 480 & (3) & Contentious Politics \\
\hline POLI 522 & (3) & Seminar: Developing Areas \\
\hline
\end{tabular}

\section*{International Relations}
\begin{tabular}{|c|c|c|}
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 342 & (3) & Canadian Foreign Policy \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 346 & (3) & American Foreign Policy \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline POLI 349 & (3) & Foreign Policy: Asia \\
\hline POLI 351 & (3) & The Causes of Major Wars \\
\hline POLI 352 & (3) & International Policy/Foreign Policy: Africa \\
\hline POLI 353 & (3) & Politics of the International Refugee Regime \\
\hline POLI 354 & (3) & Approaches to International Political Economy \\
\hline POLI 359 & (3) & Topics in International Politics 1 \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 441 & (3) & IPE: Trade \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 443 & (3) & Intervention in World Politics \\
\hline POLI 444 & (3) & Topics in International Politics 2 \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
POLI 446 & \((3)\) & International Law and Politics of Human Rights \\
POLI 447 & (3) & Political Economy of Multinationals \\
POLI 448 & (3) & Gender and International Relations \\
POLI 449 & (3) & Diplomacy in Practice \\
POLI 450 & (3) & Peacebuilding \\
POLI 451 & (3) & The European Union \\
POLI 452 & (3) & Conflict Simulation \\
POLI 575 & (3) & Seminar: International Politics
\end{tabular}

Political Theory
\begin{tabular}{|c|c|c|}
\hline POLI 231 & (3) & Introduction to Political Theory \\
\hline POLI 333 & (3) & Western Political Theory 1 \\
\hline POLI 334 & (3) & Western Political Theory 2 \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 363 & (3) & Contemporary Political Theory \\
\hline POLI 364 & (3) & Radical Political Thought \\
\hline POLI 365 & (3) & Democratic Theory \\
\hline POLI 366 & (3) & Topics in Political Theory 1 \\
\hline POLI 367 & (3) & Liberal Political Theory \\
\hline POLI 368 & (3) & Political Theory and Indigeneity. \\
\hline POLI 433 & (3) & History of Political/Social Theory 3 \\
\hline POLI 434 & (3) & History of Political/Social Theory 4 \\
\hline POLI 459 & (3) & Topics in Political Theory 2 \\
\hline POLI 470 & (3) & Philosophy, Economy and Society \\
\hline POLI 561 & (3) & Seminar: Political Theory \\
\hline
\end{tabular}

\section*{Methods}
\begin{tabular}{lll} 
POLI 210 & (3) & Political Science Research Methods \\
POLI 311 & (3) & Introduction to Quantitative Political Science \\
POLI 312 & (3) & Intermediate Quantitative Political Science \\
POLI 313 & (3) & Introduction to Qualitative Methods in Political Science \\
POLI 461 & (3) & Advanced Quantitative Political Science
\end{tabular}

\subsection*{4.11.30 Psychology}

The Department of Psychology information, programs, and courses are described in:
- Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.32: Psychology
- Faculty of Science > Undergraduate > Browse Academic Units \& Programs > section 11.12.33: Psychology (PSYC)

\subsection*{4.11.30.1 Bachelor of Arts (B.A.) - Minor Concentration Psychology (18 credits)}

Psychology is the scientific study of the mind and behaviour. The B.A. Minor Concentration Psychology (18 credits) is intended to compliment the student's primary field of study by providing a focused introduction to specialized topics in psychology. .

\section*{Program Requirements}

Students registered in a Bachelor of Arts program in another department may pursue the Minor Concentration Psychology. This minor concentration is expandable for students who may wish to transfer into the Major Concentration Psychology at a later date.

\section*{Program Prerequisites ( \(0-3\) credits)}

Students planning to enter the Minor Concentration Psychology program should have completed an introductory course in general psychology in CEGEP. Otherwise, they can complete it in their first year of study at McGill University (see below).
Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.
McGill Freshman students are recommended to complete the following course in their U0 year:
PSYC 100
Introduction to Psychology

\section*{Complementary Courses (18 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
PSYC 204 & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & (3) & Social Psychology
\end{tabular}

12 credits in Psychology at the 300 level or above.

\subsection*{4.11.30.2 Bachelor of Arts (B.A.) - Major Concentration Psychology (36 credits)}

Psychology is the scientific study of the mind and behavior. The B.A. Major Concentration in Psychology ( 36 credits) provides students with a basic overview, covering the core areas of psychological science as well as more advanced courses in specialized content areas. Students also have the option to complete a research course(s) (see Program Requirements for details). Note: this program may not provide sufficient undergraduate background preparation for certain graduate programs. Students who wish to go on to graduate training in psychology, and those who wish to complete the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs), are advised to take the supplementary Minor Concentration Behavioural Science. This specialization option will give students the space to take the additional courses they may need for such applications.

\section*{Program Prerequisites (0-6 credits)}

Students planning to enter the Major Concentration Psychology program should have completed an introductory course in general psychology and biology in CEGEP. Otherwise, they can complete them in their first year of study at McGill University (see below).
Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.
Students who have completed Human Biology or General Biology 1 or 2 in CEGEP would have the recommended biology background. Students who have not completed one of those courses are advised to complete BIOL 115 or BIOL 111 or BIOL 112 during their first year.

McGill Freshman students are recommended to complete the following courses in their U0 year:
PSYC 100
(3)
Introduction to Psychology

And

3 credits from:
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
BIOL 112 & (3) & Cell and Molecular Biology \\
BIOL 115 & (3) & Essential Biology
\end{tabular}

\section*{Required Courses (18 credits)}

U1
\begin{tabular}{lll} 
PSYC 204* & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & (3) & Social Psychology
\end{tabular}

U 1 or U 2
PSYC \(305^{* *}\) (3) Statistics for Experimental Design

Advising note for PSYC 204: CEGEP students are exempt from PSYC 204 if they have completed, with a minimum grade of \(75 \%\), the following two courses: 1) Quantitative Methods and either 2a) Advanced Quantitative Methods or 2b) Statistics for Social Science. CEGEP students are also exempt from PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\).

Bachelor of Arts students exempt from PSYC 204 replace this course with 3 credits at the 300 level or above in Psychology (PSYC), Anthropology (ANTH), Linguistics (LING), or Sociology (SOCI).
**Note: Students who wish to apply to the Honours program in Psychology must complete the required courses above, including PSYC 305 in their U1 year to be eligible for admission. Also, all students must complete a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms). For additional information about applying to Honours, please refer to the Honours program description.

\section*{Complementary Courses (18 credits)}

3 credits in Psychology from List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)
3 credits in Psychology from List B - (Social, Health and Developmental Psychology)
6 credits in Psychology at the 300 level or above.
6 credits in Psychology at the 400 or 500 level.

\section*{List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)}
\begin{tabular}{|c|c|c|}
\hline NSCI 201 & (3) & Introduction to Neuroscience 2 \\
\hline PSYC 301 & (3) & Animal Learning and Theory \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 306 & (3) & Research Methods in Psychology \\
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 329 & (3) & Introduction to Auditory Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 353 & (3) & Research Methods and Laboratory in Human Perception \\
\hline PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 513 & (3) & Human Decision-Making \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYC 531 & (3) & Structural Equation Models \\
\hline PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
\hline PSYC 538 & (3) & Categorization, Communication and Consciousness \\
\hline PSYC 541 & (3) & Multilevel Modelling \\
\hline PSYC 545 & (3) & Topics in Language Acquisition \\
\hline PSYC 560* & (3) & Machine Learning Tools in Psychology \\
\hline PSYC 562 & (3) & Measurement of Psychological Processes \\
\hline
\end{tabular}
* 1. Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.
2. Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

List B - (Social, Health and Developmental Psychology)
\begin{tabular}{|c|c|c|}
\hline PSYC 304 & (3) & Child Development \\
\hline PSYC 309 & (3) & Positive Psychology: Science of Well-Being \\
\hline PSYC 328 & (3) & Health Psychology \\
\hline PSYC 331 & (3) & Inter-Group Relations \\
\hline PSYC 332 & (3) & Introduction to Personality \\
\hline PSYC 333 & (3) & Personality and Social Psychology \\
\hline PSYC 337 & (3) & Introduction to Psychopathology \\
\hline PSYC 351 & (3) & Research Methods and Laboratory in Social Psychology \\
\hline PSYC 408 & (3) & Principles and Applications of Psychotherapy \\
\hline PSYC 409 & (3) & Positive Psychology \\
\hline PSYC 411 & (3) & Discrimination \& Wellbeing in Marginalized Communities \\
\hline PSYC 412 & (3) & Child Development: Psychopathology \\
\hline PSYC 414 & (3) & Social Development \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline PSYC 471 & (3) & Human Motivation \\
\hline PSYC 473 & (3) & Social Cognition and the Self \\
\hline PSYC 474 & (3) & Interpersonal Relationships \\
\hline PSYC 475 & (3) & Neuroscience of Social Psychology \\
\hline PSYC 483 & (3) & Seminar in Experimental Psychopathology \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
PSYC 491D1 & (3) & Advanced Study: Behavioural Disorders \\
PSYC 491D2 & (3) & Advanced Study: Behavioural Disorders \\
PSYC 507 & (3) & Emotions, Stress, and Illness \\
PSYC 509 & (3) & Diverse Clinical Populations \\
PSYC 512 & (3) & Advanced Personality Seminar \\
PSYC 528 & (3) & Vulnerability to Depression and Anxiety \\
PSYC 530 & (3) & Applied Topics in Deafness \\
PSYC 535 & (3) & Advanced Topics in Social Psychology \\
PSYC 539 & (3) & Advanced Topics in Social Psychology 2
\end{tabular}

\section*{Unclassified Courses}

Students may also select complementary courses from the research and topics courses below:
\begin{tabular}{lll} 
PSYC 385 & \((3)\) & Independent Research Project 1 \\
PSYC 450D1 & \((4.5)\) & Research Project and Seminar \\
PSYC 450D2 & \((4.5)\) & Research Project and Seminar \\
PSYC 484D1 & \((3)\) & Independent Research Project 2 \\
PSYC 484D2 & \((3)\) & Independent Research Project 2 \\
PSYC 485 & \((3)\) & Independent Research Project 3 \\
PSYC 492 & \((3)\) & Special Topics Seminar 1 \\
PSYC 493 & (1) & Special Topics Seminar 2 \\
PSYC 499 & & Reading Project
\end{tabular}

\subsection*{4.11.30.3 Bachelor of Arts (B.A.) - Joint Honours Component Psychology (36 credits)}

Psychology is the scientific study of the mind and behavior. The B.A.; Joint Honours Psychology Component ( 36 credits) provides students with an overview of psychological science, covering the core areas as well as select advanced courses. Students are required to take a 2 -term research course and seminar; students also have the option to complete an additional research course (see Program Requirements for details). This program emphasizes practice in the research techniques and statistics used in graduate school and professionally later on. However, the Joint Honours Program is not as comprehensive as the B.A. or B.Sc. Honours Program, and does not give students the space to take the additional courses they may need for certain graduate programs in psychology or to complete the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs). Students must apply to the Joint Honours program; admission is selective.

\section*{Program Requirements}

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection.
Admission to the B.A. Joint Honours Component Psychology is highly selective. Typically, students apply to the B.A Joint Honours program at the end of U 1 ; students may apply at the end of U2, although there are often fewer seats for students applying in U2 (also the B.A. Joint Honours program requirements must be completed within the remaining terms). To be eligible to apply to the B.A. Joint Honours in Psychology, students must have completed a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms only). All applicants must have taken PSYC 204, PSYC 211, PSYC 212, PSYC 213, PSYC 215 and PSYC 305. Exceptional performance in these courses is a primary criterion for acceptance into the B.A. Joint Honours program. In addition to performance in these psychology courses, a minimum cumulative grade point average (CGPA) of 3.50 is required to apply. However, since enrolment is limited, the typical CGPA cut-off is \(\sim 3.75\), although this varies from year to year depending on the applicant pool. Once in the B.A. Joint Honours program, students must obtain a GPA of 3.00 in the U2 year to continue in the B.A. Joint Honours program for U3. Students are also encouraged to continue to complete a minimum of 27 graded credits in their U 2 and U 3 academic years. This is also the minimum number of credits required to be eligible for fellowships and awards.

The application is available on the Psychology Department website at: https://www.mcgill.ca/psychology/undergraduate/current-
students/research-opportunities/research-courses. The deadline is specified on the website. Candidates will be informed of the Department's decision via email before classes begin in September.
Awarding of the B.A. Joint Honours program will depend on both CGPA and a minimum grade of B in PSYC 380D1/PSYC 380D2 and PSYC 306. "First Class Honours" is awarded to students who obtain a minimum CGPA of 3.50 and a minimum grade of A- in PSYC 380D1/PSYC 380 D 2 and PSYC 306. "Joint Honours" is awarded to students with a minimum CGPA of 3.00 and a minimum grade of B in PSYC 380D1/PSYC 380D2 and PSYC 306.

In addition to the requirements of the B.A. Joint Honours Component Psychology, students must also complete all requirements of their other Joint Honours component.

\section*{Program Prerequisites ( \(0-6\) credits)}

Students planning to enter the B.A. Joint Honours Psychology program, should have completed an introductory course in general psychology, biology and statistics at the CEGEP level. Otherwise, they can complete them in their first year of study at McGill University (see below).
Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.
Students who have completed Human Biology or General 1or 2 in CEGEP would have the recommended biology background.
Student who have not completed ones of those courses are advised to complete BIOL 115 or BIOL 111 or 112 during their first year.
McGill Freshman students are recommended to complete the following courses in their U0 year:
PSYC 100
(3) Introduction to Psychology

3 credits from:
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
BIOL 112 & (3) & Cell and Molecular Biology \\
BIOL 115 & \((3)\) & Essential Biology
\end{tabular}

\section*{Required Courses (33 credits)}

U1
\begin{tabular}{lcl} 
PSYC 204* & (3) & Introduction to Psychological Statistics \\
PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
PSYC 212 & (3) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & (3) & Social Psychology
\end{tabular}

U1 or U2
\begin{tabular}{lll} 
PSYC 305** & (3) & Statistics for Experimental Design \\
U2 & & \\
PSYC 306 & \((3)\) & Research Methods in Psychology \\
PSYC 380D1 & \((4.5)\) & Honours Research Project Seminar \\
PSYC 380D2 & & \\
& & Honours Research Project Seminar
\end{tabular}

\footnotetext{
*Advising note for PSYC 204: CEGEP students are exempt from PSYC 204 if they have completed, with a minimum grade of \(75 \%\), the following two courses: 1) Quantitative Methods and either 2a) Advanced Quantitative Methods or 2b) Statistics for Social Science. CEGEP students are also exempt from PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\).

Bachelor of Arts students exempt from PSYC 204 replace this course with 3 credits at the 300 level or above in Psychology (PSYC), Anthropology (ANTH), Linguistics (LING), or Sociology (SOCI).
**Note: Students who wish to apply to the Joint Honours program in Psychology must complete the required courses above, including PSYC 305 in their U1 year to be eligible for admission. Also, all students must complete a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms only). For additional information about applying to Joint Honours, please refer to the Joint Honours program description.
}

\section*{Complementary Course ( \(\mathbf{3}\) credits)}

3 credits in Psychology at the 400 or 500 level.

\subsection*{4.11.31 Religious Studies}

Religious Studies information, programs, and courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.33: Religious Studies.

\subsection*{4.11.31.1 Bachelor of Arts (B.A.) - Minor Concentration Religious Studies ( 18 credits)}

The B.A; Minor Concentration in Religious Studies focuses on the methodological approaches to the study of religious traditions, including the languages, teachings, and history of those traditions.

\section*{Required Course (3 credits)}
RELG 207
(3)
Introduction to the Study of Religions

\section*{Complementary Courses ( 15 credits)}

6 credits of Introductory Courses at the 200 level.
\begin{tabular}{|c|c|c|}
\hline ANTH 209 & (3) & Anthropology of Religion \\
\hline CATH 200 & (3) & Introduction to Catholicism \\
\hline CATH 220 & (3) & Selected Topics in Catholic Studies \\
\hline HIST 207 & (3) & Jewish History: 400 B.C.E. to 1000 \\
\hline HIST 219 & (3) & Jewish History: 1000-2000 \\
\hline ISLA 200 & (3) & Islamic Civilization \\
\hline ISLA 210 & (3) & Muslim Societies \\
\hline JWST 201 & (3) & Jewish Law \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline JWST 216 & (3) & Jewish Studies 2: 400 B.C.E. - 1000 \\
\hline JWST 217 & (3) & Jewish Studies 3: 1000-2000 \\
\hline JWST 245 & (3) & Jewish Life in the Islamic World \\
\hline JWST 254 & (3) & The Jewish Holy Days \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline RELG 201 & (3) & Religions of the Ancient Near East \\
\hline RELG 202 & (3) & Religion of Ancient Israel \\
\hline RELG 203 & (3) & Bible and Western Culture \\
\hline RELG 204 & (3) & Judaism, Christianity and Islam \\
\hline RELG 205 & (3) & Death and Dying \\
\hline RELG 210 & (3) & Jesus of Nazareth \\
\hline RELG 211 & (3) & Theology through Fiction \\
\hline RELG 252 & (3) & Hinduism and Buddhism \\
\hline RELG 253 & (3) & Religions of East Asia \\
\hline RELG 254 & (3) & Introduction to Yoga Traditions \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 271 & (3) & Religion and Sexuality \\
\hline RELG 288 & (3) & Introduction to Sikhism \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CATH 310 & (3) & Catholic Intellectual Traditions \\
\hline CATH 315 & (3) & Catholicism and Ethics \\
\hline CATH 320 & (3) & Catholicism and Modernity \\
\hline CATH 325 & (3) & Mystery and the Imagination \\
\hline CATH 330 & (3) & Catholicism in a Global Context \\
\hline CATH 335 & (3) & Confessions of Saint Augustine \\
\hline CATH 340 & (3) & Catholicism and Public Policy \\
\hline CATH 370 & (3) & Topics in Catholic Studies \\
\hline CATH 375 & (3) & Topics in Catholic Theology \\
\hline CATH 460 & (3) & Catholic Studies Seminar \\
\hline HIST 427 & (3) & The Hasidic Movement \\
\hline ISLA 310 & (3) & Women in Islam \\
\hline JWST 334 & (3) & Jews and Muslims: A Modern History \\
\hline JWST 382 & (3) & Jews, Judaism and Social Justice \\
\hline RELG 300 & (3) & Second Temple Judaism \\
\hline RELG 302 & (3) & Literature of Ancient Israel 1 \\
\hline RELG 303 & (3) & Literature of Ancient Israel 2 \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 309 & (3) & World Religions and Cultures They Create \\
\hline RELG 310 & (3) & Canadian Church History \\
\hline RELG 311 & (3) & Formation of the New Testament \\
\hline RELG 312 & (3) & The Gospels \\
\hline RELG 313 & (3) & Topics in Biblical Studies 1 \\
\hline RELG 315 & (3) & Special Topics in Religion 1 \\
\hline RELG 316 & (3) & New Religious Movements \\
\hline RELG 317 & (3) & Special Topics in Religion 2 \\
\hline RELG 318 & (3) & Special Topics in Religion 3 \\
\hline RELG 319 & (3) & Special Topics in Religion 4 \\
\hline RELG 322 & (3) & Church and Empire to 1300 \\
\hline RELG 323 & (3) & Church and State since 1300 \\
\hline RELG 325 & (3) & Varieties Religious Experience in Christianity \\
\hline RELG 326 & (3) & Christians in the Roman World \\
\hline RELG 331 & (3) & Religion and Globalization \\
\hline RELG 332 & (3) & Conversations Across World Religions \\
\hline RELG 333 & (3) & Principles of Theology \\
\hline RELG 334 & (3) & Theology of History \\
\hline RELG 336 & (3) & Contemporary Theological Issues \\
\hline RELG 337 & (3) & Themes in Buddhist Studies \\
\hline RELG 338 & (3) & Women and the Christian Tradition \\
\hline RELG 341 & (3) & Introduction: Philosophy of Religion \\
\hline RELG 344 & (3) & Mahayana Buddhism \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline RELG 348 & (3) & Classical Hinduism \\
\hline RELG 350 & (3) & Bhakti Hinduism \\
\hline RELG 352 & (3) & Japanese Religions: History and Thought \\
\hline RELG 354 & (3) & Chinese Religions \\
\hline RELG 358 & (3) & Religion and Cinema in India \\
\hline RELG 366 & (3) & Rivers, Religion, and Environment in South Asia \\
\hline RELG 368 & (3) & Japanese Religions in Pop Culture \\
\hline RELG 369 & (3) & Tibetan Buddhism \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline RELG 371 & (3) & Ethics of Violence/Non-Violence \\
\hline RELG 372 & (3) & Hindu Goddesses \\
\hline RELG 373 & (3) & Christian Ethics of Love \\
\hline RELG 375 & (3) & Religion, Politics and Society \\
\hline RELG 376 & (3) & Religious Ethics \\
\hline RELG 378 & (3) & Pilgrimage, Heritage, and Tourism \\
\hline RELG 379 & (3) & Eastern Orthodox Christianity \\
\hline RELG 380 & (3) & Religion, Philosophy, Modernity \\
\hline RELG 382 & (3) & Contemporary Theory of Religion \\
\hline RELG 384 & (3) & Religion and Public Policy \\
\hline RELG 398 & (3) & North American Christianity \\
\hline RELG 399 & (3) & Christian Spirituality \\
\hline RELG 407 & (3) & The Writings \\
\hline RELG 408 & (3) & The Prophets \\
\hline RELG 419 & (3) & Religious Heritage and Tourism \\
\hline RELG 422 & (3) & Medieval Religious Texts \\
\hline RELG 423 & (3) & Reformation Thought \\
\hline RELG 434 & (3) & Advanced Theology \\
\hline RELG 440 & (3) & Global Islam \\
\hline RELG 442 & (3) & Pure Land Buddhism \\
\hline RELG 444 & (3) & Indian Ocean Religious Networks \\
\hline RELG 445 & (3) & Modern Buddhism \\
\hline RELG 449 & (3) & The Religion of the Samurai \\
\hline RELG 450 & (3) & The Way of the Kami \\
\hline RELG 451 & (3) & Zen Buddhism: Poetry and Art \\
\hline RELG 453 & (3) & Vajrayana Buddhism \\
\hline RELG 454 & (3) & Modern Hindu Thought \\
\hline RELG 455 & (3) & Religion and the Performing Arts in South India \\
\hline RELG 470 & (3) & Theological Ethics \\
\hline RELG 479 & (3) & Christianity in Global Perspective \\
\hline RELG 502 & (3) & Greco-Roman Judaism \\
\hline RELG 532 & (3) & History of Christian Thought 1 \\
\hline RELG 533 & (3) & History of Christian Thought 2 \\
\hline RELG 544 & (3) & Ethnography as Method in Religious Studies \\
\hline
\end{tabular}
\begin{tabular}{lll} 
RELG 545 & (3) & Ramayana: Multiple Lives \\
RELG 546 & (3) & Indian Philosophy \\
RELG 547 & (3) & Special Topics in Hinduism \\
RELG 548 & (3) & Indian Buddhist Philosophy \\
RELG 549 & (3) & Japanese Buddhism in Historical Context \\
RELG 551 & (3) & Special Topics in Buddhism \\
RELG 552 & (3) & Advaita Vedanta \\
RELG 556 & (3) & Issues in Buddhist Studies \\
RELG 558 & (3) & Indian Tantric Traditions \\
RELG 559 & (3) & Caste and Dalits: Historical and Political Perspectives \\
RELG 560 & (3) & Buddhist Poetry \\
RELG 570 & (3) & Research in Interfaith Studies \\
RELG 571 & (3) & Ethics, Medicine and Religion \\
RELG 572 & (3) & Religion and Global Politics \\
RELG 573 & Religions in Global Society
\end{tabular}

\subsection*{4.11.32 Social Studies of Medicine}

Social Studies of Medicine, the program, and specific courses are described in Faculty of Arts \(>\) Undergraduate \(>\) Browse Academic Units \& Programs \(>\) section 3.9.36: Social Studies of Medicine.

\subsection*{4.11.32.1 Bachelor of Arts (B.A.) - Minor Concentration Social Studies of Medicine (18 credits)}

The Minor Concentration in Social Studies of Medicine presents as a complex network of institutions, cultures, and political relations embedded in the institutions, cultures and political relations of the larger society. Courses are divided into three groups: History of Medicine, Anthropology of Medicine, and Sociology of Medicine. The Minor consists of 18 credits. Students are required to take at least one course in each of the three groups.

Note: No overlap is permitted with courses counting towards the student's major concentration.

\section*{Complementary Courses ( 18 credits)}

18 credits from the following (at least 3 credits from each of the three groups):

\section*{History of Medicine}
\begin{tabular}{lll} 
HIST 249 & \((3)\) & Health and the Healer in Western History \\
HIST 319 & (3) & The Scientific Revolution \\
HIST 335 & (3) & Science and Medicine in Canada \\
HIST 356 & (3) & Medicine in the Medieval West \\
HIST 381 & (3) & Colonial Africa \\
HIST 424 & (3) & Gender, Sexuality and Medicine \\
HIST 430 & (3) & Topics in Modern Medicine \\
HIST 449 & (3) & Medicine in the Ancient World \\
HIST 452 & (3) & Topics in Pre-Modern Medicine \\
HIST 457 & (3) & Topics in Medical History \\
HIST 558 & (3) & Modern Medicine: Seminar \\
HIST 559 & (3) & Seminar: Medieval Medicine \\
HIST 567D1 & (3) & Seminar: Medieval Medicine \\
HIST 567D2 &
\end{tabular}

\section*{Anthropology of Medicine}
\begin{tabular}{lcl} 
ANTH 227 & \((3)\) & Medical Anthropology \\
ANTH 302 & \((3)\) & New Horizons in Medical Anthropology \\
ANTH 314 & \((3)\) & Psychological Anthropology 01 \\
ANTH 325 & \((3)\) & Anthropology of the Self \\
ANTH 407 & (3) & Anthropology of the Body \\
ANTH 408 & \((3)\) & Sensory Ethnography \\
ANTH 423 & \((3)\) & Mind, Brain and Psychopathology \\
ANTH 438 & (3) & Topics in Medical Anthropology \\
ANTH 480 & (3) & Special Topic 5 \\
ANTH 481 & (3) & Special Topic 6
\end{tabular}

\section*{Sociology of Medicine}
\begin{tabular}{lcl} 
SOCI 225 & \((3)\) & Medicine and Health in Modern Society \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI 310 & \((3)\) & Sociology of Mental Health \\
SOCI 365 & (3) & Health and Development \\
SOCI 390 & \((3)\) & Gender and Health \\
SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
SOCI 515 & (3) & Medicine and Society \\
SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
SOCI 588 & (3) & Biosociology/Biodemography
\end{tabular}

\subsection*{4.11.33 Sociology}

The Department of Sociology, the programs, and specific courses are described in Faculty of Arts \(>\) Undergraduate \(>\) Browse Academic Units \& Programs > section 3.9.38: Sociology.

\subsection*{4.11.33.1 Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)}

The purpose of the Minor Concentration Sociology is to give the student a basic understanding of the field of sociology. This Minor concentration may be expanded to the Major Concentration Sociology.

\section*{U1 Required Courses (6 credits)}
\begin{tabular}{lll} 
SOCI 210 & (3) & Sociological Perspectives \\
SOCI 211 & (3) & Sociological Inquiry
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits from the following:
\begin{tabular}{lll} 
SOCI 330 & (3) & Sociological Theory \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

9 credits of complementary courses chosen from the list of courses offered by the Sociology Department. At least 3 credits must be taken at the 300 -level or higher.

\section*{Areas of Sociology}

The Department of Sociology offers courses in four substantive areas of study:
Institutions, Deviance, and Culture
Politics and Social Change
Social Stratification: Class, Ethnicity, and Gender
Work, Organizations, and the Economy
The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.

The 500-level seminars in each substantive area are open to social science major concentration students in their final year and to Honours students. Minor concentration students may only register for these with the permission of the instructor.

\section*{Institutions, Deviance, and Culture}
\begin{tabular}{|c|c|c|}
\hline SOCI 213 & (3) & Deviance \\
\hline SOCI 225 & (3) & Medicine and Health in Modern Society \\
\hline SOCI 247 & (3) & Family and Modern Society \\
\hline SOCI 250 & (3) & Social Problems \\
\hline SOCI 305 & (3) & Socialization \\
\hline SOCI 309 & (3) & Health and Illness \\
\hline SOCI 310 & (3) & Sociology of Mental Health \\
\hline SOCI 318 & (3) & Sociology of the Media \\
\hline SOCI 322 & (3) & Sociology of Literature \\
\hline SOCI 325 & (3) & Sociology of Science \\
\hline SOCI 388 & (3) & Crime \\
\hline SOCI 430 & (3) & Sociology of Citizenship \\
\hline SOCI 488 & (3) & Punishment and Prisons \\
\hline SOCI 489 & (3) & Gender, Deviance and Social Control \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 503 & (3) & Surveillance in Modern Society \\
\hline SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
\hline SOCI 515 & (3) & Medicine and Society \\
\hline SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
\hline SOCI 535 & (3) & Sociology of the Family \\
\hline SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
\hline SOCI 571 & (3) & Deviance and Social Control \\
\hline
\end{tabular}

\section*{Politics and Social Change}
\begin{tabular}{lll} 
SOCI 212 & \((3)\) & International Migration \\
SOCI 222 & \((3)\) & Urban Sociology \\
SOCI 234 & \((3)\) & Population and Society \\
SOCI 245 & \((3)\) & The Sociology of Emotions \\
SOCI 254 & \((3)\) & Development and Underdevelopment \\
SOCI 255 & (3) & Gender and the State \\
SOCI 265 & \((3)\) & War, States and Social Change \\
SOCI 307 & (3) & Globalization
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline SOCI 326 & (3) & Political Sociology 01 \\
\hline SOCI 345 & (3) & Topics in Sociology \\
\hline SOCI 354 & (3) & Dynamics of Industrial Societies \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 400 & (3) & Comparative Migration and Citizenship \\
\hline SOCI 424 & (3) & Networks and Social Structures \\
\hline SOCI 430 & (3) & Sociology of Citizenship \\
\hline SOCI 446 & (3) & Colonialism and Society \\
\hline SOCI 455 & (3) & Post-Socialist Societies \\
\hline SOCI 484 & (3) & Emerging Democratic States \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 507 & (3) & Social Change \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 545 & (3) & Sociology of Population \\
\hline SOCI 550 & (3) & Developing Societies \\
\hline
\end{tabular}

\section*{Social Stratification: Class, Ethnicity, and Gender}
\begin{tabular}{|c|c|c|}
\hline SOCI 227 & (3) & Jews in North America \\
\hline SOCI 230 & (3) & Sociology of Ethnic Relations \\
\hline SOCI 255 & (3) & Gender and the State \\
\hline SOCI 270 & (3) & Sociology of Gender \\
\hline SOCI 321 & (3) & Gender and Work \\
\hline SOCI 333 & (3) & Social Stratification \\
\hline SOCI 335 & (3) & Sociology of Aging and the Life Course \\
\hline SOCI 355 & (3) & Rural Life in a Global Society \\
\hline SOCI 366 & (3) & Neighborhoods and Inequality \\
\hline SOCI 375 & (3) & Suspect Minorities in Canada \\
\hline SOCI 410 & (3) & Urban Ethnography \\
\hline SOCI 415 & (3) & Education and Inequality \\
\hline SOCI 430 & (3) & Sociology of Citizenship \\
\hline SOCI 475 & (3) & Canadian Ethnic Studies Seminar \\
\hline SOCI 510 & (3) & Seminar in Social Stratification \\
\hline SOCI 512 & (3) & Ethnicity and Public Policy \\
\hline SOCI 520 & (3) & Migration and Immigrant Groups \\
\hline SOCI 526 & (3) & Indigenous Women's Health and Healthcare \\
\hline SOCI 530 & (3) & Sex and Gender \\
\hline SOCI 555 & (3) & Comparative Historical Sociology \\
\hline
\end{tabular}

Work, Organizations, and the Economy
\begin{tabular}{lll} 
SOCI 235 & (3) & Technology and Society \\
SOCI 304 & (3) & Sociology of the Welfare State \\
SOCI 312 & (3) & Sociology of Work and Industry \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 420 & (3) & Organizations \\
SOCI 470 & (3) & Topics in Economic Sociology
\end{tabular}

\subsection*{4.11.33.2 Bachelor of Arts (B.A.) - Major Concentration Sociology ( 36 credits)}

The purpose of the Major Concentration Sociology is to give the student a comprehensive understanding of the field of sociology.

\section*{U1 Required Courses (6 credits)}
\begin{tabular}{lll} 
SOCI 210 & (3) & Sociological Perspectives \\
SOCI 211 & (3) & Sociological Inquiry
\end{tabular}

\section*{U2 Required Courses (6 credits)}

Note: Students who are exempted from SOCI 350 must replace it with another 300-level or higher sociology course.
\begin{tabular}{lll} 
SOCI 330 & (3) & Sociological Theory \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

\section*{Complementary Courses (24 credits)}

24 credits of complementary courses selected with the following specifications:
3 credits minimum at the 400 level or higher
9 credits maximum at the 200 level
500-Level Seminars:
Seminars at the 500 level are open to Major concentration students in their final year.
No more than 6 credits of the current problems, independent study and/or reading courses listed below may count toward the Major concentration.
\begin{tabular}{lcl} 
SOCI 341 & (3) & Current Problems in Sociology 02 \\
SOCI 342 & (3) & Independent Study 1 \\
SOCI 343 & (3) & Independent Study 2 \\
SOCI 441 & (3) & Current Problems in Sociology 03 \\
SOCI 442 & (3) & Independent Reading and Research 01 \\
SOCI 443 & (3) & Independent Reading and Research 02
\end{tabular}

\section*{Areas of Sociology}

The Department of Sociology offers courses in four substantive areas of study:
Institutions, Deviance, and Culture
Politics and Social Change
Social Stratification: Class, Ethnicity, and Gender
Work, Organizations, and the Economy
The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.

The 500-level seminars in each substantive area are open to social science Major concentration students in their final year and to Honours students. Minor concentration students may only register for these with the permission of the instructor.

Institutions, Deviance, and Culture
\begin{tabular}{lll} 
SOCI 213 & \((3)\) & Deviance \\
SOCI 225 & \((3)\) & Medicine and Health in Modern Society \\
SOCI 247 & \((3)\) & Family and Modern Society \\
SOCI 250 & \((3)\) & Social Problems \\
SOCI 305 & \((3)\) & Socialization \\
SOCI 309 & (3) & Health and Illness \\
SOCI 310 & (3) & Sociology of Mental Health \\
SOCI 318 & (3) & Sociology of the Media \\
SOCI 322 & (3) & Sociology of Literature \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 388 & (3) & Crime \\
SOCI 430 & (3) & Sociology of Citizenship \\
SOCI 488 & (3) & Punishment and Prisons \\
SOCI 489 & (3) & Gender, Deviance and Social Control \\
SOCI 495 & (3) & Social Problems and Conflicts \\
SOCI 503 & (3) & Surveillance in Modern Society \\
SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
SOCI 515 & (3) & Medicine and Society \\
SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
SOCI 535 & (3) & Sociology of the Family \\
SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
SOCI 571 & (3) & Deviance and Social Control \\
SOCI 595 & (3) & Immigration Control and The State \\
& &
\end{tabular}

\section*{Politics and Social Change}
\begin{tabular}{|c|c|c|}
\hline SOCI 212 & (3) & International Migration \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 245 & (3) & The Sociology of Emotions \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 255 & (3) & Gender and the State \\
\hline SOCI 265 & (3) & War, States and Social Change \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 326 & (3) & Political Sociology 01 \\
\hline SOCI 345 & (3) & Topics in Sociology \\
\hline SOCI 354 & (3) & Dynamics of Industrial Societies \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 400 & (3) & Comparative Migration and Citizenship \\
\hline SOCI 424 & (3) & Networks and Social Structures \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
SOCI 430 & \((3)\) & Sociology of Citizenship \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 455 & \((3)\) & Post-Socialist Societies \\
SOCI 484 & \((3)\) & Emerging Democratic States \\
SOCI 495 & \((3)\) & Social Problems and Conflicts \\
SOCI 507 & (3) & Social Change \\
SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
SOCI 519 & (3) & Gender and Globalization \\
SOCI 545 & (3) & Sociology of Population \\
SOCI 550 & (3) & Developing Societies \\
SOCI 595 & Immigration Control and The State
\end{tabular}

\section*{Social Stratification: Class, Ethnicity, and Gender}
\begin{tabular}{lll} 
SOCI 227 & \((3)\) & Jews in North America \\
SOCI 230 & \((3)\) & Sociology of Ethnic Relations \\
SOCI 255 & (3) & Gender and the State \\
SOCI 270 & (3) & Sociology of Gender \\
SOCI 321 & (3) & Gender and Work \\
SOCI 333 & (3) & Social Stratification \\
SOCI 335 & (3) & Sociology of Aging and the Life Course \\
SOCI 355 & (3) & Rural Life in a Global Society \\
SOCI 366 & (3) & Neighborhoods and Inequality \\
SOCI 375 & (3) & Suspect Minorities in Canada \\
SOCI 410 & (3) & Urban Ethnography \\
SOCI 415 & (3) & Education and Inequality \\
SOCI 430 & (3) & Sociology of Citizenship \\
SOCI 475 & (3) & Canadian Ethnic Studies Seminar \\
SOCI 510 & (3) & Seminar in Social Stratification \\
SOCI 512 & (3) & Ethnicity and Public Policy \\
SOCI 520 & (3) & Migration and Immigrant Groups \\
SOCI 526 & (3) & Indigenous Women's Health and Healthcare \\
SOCI 530 & Sex and Gender \\
SOCI 555 & Comparative Historical Sociology \\
SOCI 595 & (3) &
\end{tabular}

\section*{Work, Organizations, and the Economy}
\begin{tabular}{lll} 
SOCI 235 & \((3)\) & Technology and Society \\
SOCI 304 & (3) & Sociology of the Welfare State \\
SOCI 312 & \((3)\) & Sociology of Work and Industry \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 420 & (3) & Organizations \\
SOCI 470 & (3) & Topics in Economic Sociology
\end{tabular}

\subsection*{4.11.33.3 Bachelor of Arts (B.A.) - Joint Honours Component Sociology (36 credits)}

The Joint Honours Component Sociology provides a greater focus on Sociology with substantial breadth and depth. The completion of a Joint Honours program is an asset when applying to graduate or profession schools.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Students may register for Joint Honours at the beginning of their second year (U2).
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.50 in their program courses, and according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Courses (18 credits)}

Note: Students who are exempted from SOCI 350 must replace it with another 300-level or higher sociology course.
\begin{tabular}{lcl} 
SOCI 210 & \((3)\) & Sociological Perspectives \\
SOCI 211 & \((3)\) & Sociological Inquiry \\
SOCI 330 & \((3)\) & Sociological Theory \\
SOCI 350 & \((3)\) & Statistics in Social Research \\
SOCI 461 & \((3)\) & Quantitative Data Analysis \\
SOCI 480 & \((3)\) & Honours Project
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits of complementary sociology (SOCI) courses approved by the Departmental Honours Adviser.
500-Level Seminars:
Seminars at the 500 level are open to Honours/Joint Honours students in their final year.

\section*{Areas of Sociology}

The Department of Sociology offers courses in four substantive areas of study:
Institutions, Deviance, and Culture
Politics and Social Change
Social Stratification: Class, Ethnicity, and Gender
Work, Organizations, and the Economy
The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.

The 500-level seminars in each substantive area are open to social science major concentration students in their final year and to Honours/Joint Honours students. Minor concentration students may only register for these with the permission of the instructor.

Institutions, Deviance, and Culture
\begin{tabular}{lcl} 
SOCI 213 & \((3)\) & Deviance \\
SOCI 225 & \((3)\) & Medicine and Health in Modern Society \\
SOCI 247 & \((3)\) & Family and Modern Society \\
SOCI 250 & \((3)\) & Social Problems \\
SOCI 305 & \((3)\) & Socialization \\
SOCI 309 & \((3)\) & Health and Illness \\
SOCI 310 & \((3)\) & Sociology of Mental Health \\
SOCI 318 & \((3)\) & Sociology of the Media \\
SOCI 322 & \((3)\) & Sociology of Literature \\
SOCI 325 & \((3)\) & Sociology of Science \\
SOCI 388 & \((3)\) & Crime
\end{tabular}
\begin{tabular}{lcl} 
SOCI 488 & \((3)\) & Punishment and Prisons \\
SOCI 489 & (3) & Gender, Deviance and Social Control \\
SOCI 495 & (3) & Social Problems and Conflicts \\
SOCI 503 & (3) & Surveillance in Modern Society \\
SOCI 508 & (3) & Medical Sociology and Social Psychiatry \\
SOCI 515 & (3) & Medicine and Society \\
SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
SOCI 535 & (3) & Sociology of the Family \\
SOCI 538 & (3) & Selected Topics in Sociology of Biomedical Knowledge \\
SOCI 571 & (3) & Deviance and Social Control \\
SOCI 595 & (3) & Immigration Control and The State
\end{tabular}

\section*{Politics and Social Change}
\begin{tabular}{|c|c|c|}
\hline SOCI 212 & (3) & International Migration \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 245 & (3) & The Sociology of Emotions \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 255 & (3) & Gender and the State \\
\hline SOCI 265 & (3) & War, States and Social Change \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 326 & (3) & Political Sociology 01 \\
\hline SOCI 345 & (3) & Topics in Sociology \\
\hline SOCI 354 & (3) & Dynamics of Industrial Societies \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 370 & (3) & Sociology: Gender and Development \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline SOCI 390 & (3) & Gender and Health \\
\hline SOCI 400 & (3) & Comparative Migration and Citizenship \\
\hline SOCI 424 & (3) & Networks and Social Structures \\
\hline SOCI 446 & (3) & Colonialism and Society \\
\hline SOCI 455 & (3) & Post-Socialist Societies \\
\hline SOCI 484 & (3) & Emerging Democratic States \\
\hline SOCI 495 & (3) & Social Problems and Conflicts \\
\hline SOCI 507 & (3) & Social Change \\
\hline SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
\hline SOCI 519 & (3) & Gender and Globalization \\
\hline SOCI 545 & (3) & Sociology of Population \\
\hline SOCI 550 & (3) & Developing Societies \\
\hline SOCI 595 & (3) & Immigration Control and The State \\
\hline
\end{tabular}

\section*{Social Stratification: Class, Ethnicity, and Gender}
\begin{tabular}{lll} 
SOCI 227 & \((3)\) & Jews in North America \\
SOCI 230 & (3) & Sociology of Ethnic Relations \\
SOCI 255 & (3) & Gender and the State \\
SOCI 270 & (3) & Sociology of Gender \\
SOCI 321 & (3) & Gender and Work \\
SOCI 333 & (3) & Social Stratification \\
SOCI 335 & (3) & Sociology of Aging and the Life Course \\
SOCI 355 & (3) & Rural Life in a Global Society \\
SOCI 366 & (3) & Neighborhoods and Inequality \\
SOCI 375 & (3) & Suspect Minorities in Canada \\
SOCI 415 & (3) & Education and Inequality \\
SOCI 475 & (3) & Semadian Ethnic Studies Seminar in Social Stratification \\
SOCI 510 & (3) & Ethnicity and Public Policy \\
SOCI 512 & (3) & Migration and Immigrant Groups \\
SOCI 520 & (3) & Indigenous Women's Health and Healthcare \\
SOCI 526 & (3) & Sex and Gender \\
SOCI 530 & (3) & Comparative Historical Sociology \\
SOCI 555 & (3) & Immigration Control and The State \\
SOCI 595 & &
\end{tabular}

\section*{Work, Organizations, and the Economy}
\begin{tabular}{lll} 
SOCI 235 & \((3)\) & Technology and Society \\
SOCI 304 & \((3)\) & Sociology of the Welfare State \\
SOCI 312 & \((3)\) & Sociology of Work and Industry \\
SOCI 325 & (3) & Sociology of Science \\
SOCI 420 & (3) & Organizations \\
SOCI 470 & (3) & Topics in Economic Sociology
\end{tabular}

\subsection*{4.11.34 Sustainability, Science, and Society}
4.11.34.1 Location

Department of Geography
Burnside Hall building, Room 305
Burnside Hall, McGill University
805 Sherbrooke Street West
Montreal QC H3A 0B9
Website: mcgill.ca/sss
Brian Robinson, Program Director (Associate Professor)
Email: brian.e.robinson@mcgill.ca, website: mcgill.ca/geography/brian-robinson

\subsection*{4.11.34.2 About Sustainability, Science, and Society}

This program is a partnership between the Department of Geography and the Bieler School of Environment and is administered through Department of Geography. B.A. \& Sc. students interested in this program should contact the geography undergraduate advisor at advisor.geog@mcgill.ca.

\subsection*{4.11.34.3 Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program in Sustainability, Science and Society (54 credits)}

The B.A. \& Sc. Interfaculty Program in Sustainability, Science and Society focuses on the interdisciplinary and integrative knowledge and skills required to effectively understand and address challenges in transitioning to a sustainable future. Challenges are often defined by multiple dimensions, including scientific-technological, socio-economic, political-institutional, ethical, and human behavioural. The program is built on three pillars: 1) science and technology - to provide an in-depth understanding of the biophysical basis for current issues and challenges; 2) economics, policy, and governance - to understand how we can make the sustainability transition; 3) ethics, equity, and justice - to discuss why we need change, and the issues of equity and justice associated with taking action. This program is offered in collaboration with the Bieler School of Environment.

\section*{Required Courses ( 27 credits)}

27 credits selected as follows:

\section*{Foundations of Sustainability}
\begin{tabular}{lll} 
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 360 & (3) & Analyzing Sustainability \\
GEOG 401 & (3) & Socio-Environmental Systems: Theory and Simulation \\
GEOG 460 & \((3)\) & Research in Sustainability
\end{tabular}

\section*{Biophysical, Societal, Cultural, Institutional, and Ethical}
\begin{tabular}{lll} 
ENVR 200 & \((3)\) & The Global Environment \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 408 & (3) & Geography of Development
\end{tabular}

\section*{Complementary Courses (27 credits)}

\section*{Statistics}

3 credits of Statistics from the following:
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & \((3)\) & Introduction to Psychological Statistics
\end{tabular}

\section*{Economics}

3 credits of Economics from the following:
\begin{tabular}{lcl} 
AGEC 200 & (3) & Principles of Microeconomics \\
AGEC 201 & (3) & Principles of Macroeconomics \\
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 209 & (3) & Macroeconomic Analysis and Applications \\
ECON 225 & (3) & Economics of the Environment \\
ECON 230D1 & (3) & Microeconomic Theory \\
ECON 230D2 & \((3)\) & Microeconomic Theory
\end{tabular}

\footnotetext{
Sustainability in Business
}

3 credits of Management from the following:
\begin{tabular}{lll} 
INSY 455 & (3) & Technology and Innovation for Sustainability \\
MGCR 460 & (3) & Social Context of Business. \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 475 & (3) & Strategies for Developing Countries
\end{tabular}

18 additional credits chosen from three areas listed below, of which at least 9 credits must be at the 300 level or higher, students must choose at least 6 credits from each area (1, 2, and 3)

AREA 1: Methods: Observation, Analysis, Modelling, and Management
\begin{tabular}{|c|c|c|}
\hline AGRI 435 & (3) & Soil and Water Quality Management \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVB 529* & (3) & GIS for Natural Resource Management \\
\hline ENVR 544 & (3) & Environmental Measurement and Modelling \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline ESYS 500 & (3) & Earth System Applications \\
\hline GEOG 201* & (3) & Introductory Geo-Information Science \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 314 & (3) & Geospatial Analysis \\
\hline GEOG 333 & (3) & Introduction to Programming for Spatial Sciences \\
\hline GEOG 351 & (3) & Quantitative Methods \\
\hline GEOG 404 & (3) & Environmental Management 2 \\
\hline GEOG 414 & (3) & Advanced Geospatial Analysis \\
\hline GEOG 495 & (3) & Field Studies - Physical Geography \\
\hline GEOG 509 & (3) & Qualitative Methods \\
\hline GEOG 512 & (3) & Advanced Quantitative Methods in Social Field Research \\
\hline URBP 506 & (3) & Environmental Policy and Planning \\
\hline
\end{tabular}
* Students may select either GEOG 201 or ENVB 529, but not both.

AREA 2: Society, Economics, Policy, Ethics, and Equity
2A: Society, Economics, and Policy
3 credits from the following:
\begin{tabular}{lll} 
AGEC 333 & \((3)\) & Resource Economics \\
AGEC 430 & \((3)\) & Agriculture, Food and Resource Policy \\
AGEC 442 & \((3)\) & Economics of International Agricultural Development \\
ANTH 206 & (3) & Environment and Culture \\
ANTH 212 & (3) & Anthropology of Development \\
ANTH 339 & \((3)\) & Ecological Anthropology \\
ECON 313 & (3) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2 \\
ECON 326 & \((3)\) & Ecological Economics
\end{tabular}
\begin{tabular}{lll} 
ECON 347 & \((3)\) & Economics of Climate Change \\
ECON 405 & \((3)\) & Natural Resource Economics \\
ENVR 519 & \((3)\) & Global Environmental Politics \\
GEOG 210 & \((3)\) & Global Places and Peoples \\
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 303 & \((3)\) & Health Geography \\
GEOG 310 & (3) & Development and Livelihoods \\
GEOG 316 & (3) & Political Geography \\
GEOG 409 & (3) & Geographies of Developing Asia \\
HIST 292 & (3) & History and the Environment \\
INDG 200 & (3) & Introduction to Indigenous Studies \\
POLI 350 & (3) & Global Environmental Politics \\
URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
URBP 553 & & Urban Governance
\end{tabular}

\section*{2B: Ethics and Equity}

3 credits from the following:
\begin{tabular}{lcl} 
ENVR 400 & (3) & Environmental Thought \\
MGPO 450 & (3) & Ethics in Management \\
PHIL 349 & (3) & Environmental Philosophy \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 325 & (3) & Sociology of Science
\end{tabular}

AREA 3: Sustainability and Biophysical Processes
Note:
* Students may select either BREE 217 or GEOG 322, but not both.
** Students may select either BIOL 540 or ENVR 540, but not both.
\begin{tabular}{|c|c|c|}
\hline ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
\hline ATOC 215 & (3) & Oceans, Weather and Climate \\
\hline BIOL 308 & (3) & Ecological Dynamics \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 465 & (3) & Conservation Biology \\
\hline BIOL 540** & (3) & Ecology of Species Invasions \\
\hline BREE 217* & (3) & Hydrology and Water Resources \\
\hline CHEM 462 & (3) & Green Chemistry \\
\hline ENVB 305 & (3) & Population and Community Ecology \\
\hline ENVB 410 & (3) & Ecosystem Ecology \\
\hline ENVR 540** & (3) & Ecology of Species Invasions \\
\hline ESYS 200 & (3) & Earth System Processes \\
\hline ESYS 300 & (3) & Investigating the Earth System \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 305 & (3) & Soils and Environment \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
GEOG 321 & \((3)\) & Climatic Environments \\
GEOG \(322^{*}\) & \((3)\) & Environmental Hydrology \\
GEOG 372 & \((3)\) & Running Water Environments \\
GEOG 403 & \((3)\) & Global Health and Environmental Change \\
GEOG 470 & \((3)\) & Wetlands \\
GEOG 530 & \((3)\) & Global Land and Water Resources \\
GEOG 555 & \((3)\) & Ecological Restoration \\
NRSC 333 & \((3)\) & Pollution and Bioremediation
\end{tabular}

\subsection*{4.11.34.4 Bachelor of Arts and Science (B.A. \& Sc.) - Honours in Sustainability, Science and Society ( 60 credits)}

The grand challenge of the 21st century is sustainable well-being; that is, to improve human well-being while maintaining the Earth's life-support systems. This B.A. \& Sc. program provides the interdisciplinary and integrative knowledge and skills required to effectively understand and address this challenge in its multiple dimensions-scientific-technological, socio-economic, political-institutional, ethical, and human behavioural - and to chart a transition to sustainability. It is built upon three pillars: 1) Science and Technology, to provide an in-depth understanding of the underpinnings of the problems of concern along these dimensions; 2) Economics, Policy, and Governance, to understand how we can make the sustainability transition; and 3) Ethics, Equity, and Justice, to discuss why we need change, and the issues of equity and justice associated with taking action. This program is a partnership between Geography and the Bieler School of Environment and will be administered through Geography.

The Honours program allows students to pursue a research project with the supervision of a McGill University faculty member, leading to an honours thesis. Applicants must have a minimum program GPA (GPA of all required and complementary courses taken at McGill) of 3.3 to enter the Honours program. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495, 6 credits). Students are required to achieve a minimum overall CGPA of 3.0 at graduation, and a minimum Program GPA of 3.3 to obtain Honours. Honours students need to identify a supervisor, an honours project, and register in ENVR 495. Honours students are encouraged to participate in 500-level seminars with graduate students.

\section*{Required Courses (33 credits)}

33 credits selected as follows:

\section*{Foundations of Sustainability}
\begin{tabular}{lll} 
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 360 & (3) & Analyzing Sustainability \\
GEOG 401 & (3) & Socio-Environmental Systems: Theory and Simulation \\
GEOG 460 & (3) & Research in Sustainability
\end{tabular}

\section*{Honours Required Courses}

Note: Students either take ENVR 495D1 and ENVR 495D2 (6 credits over consecutive terms) or ENVR 495N1 and ENVR 495N2 (6 credits over non-consecutive terms).
\begin{tabular}{lcl} 
ENVR 495D1 & (3) & Honours Research \\
ENVR 495D2 & (3) & Honours Research \\
ENVR 495N1 & (3) & Honours Research \\
ENVR 495N2 & (3) & Honours Research
\end{tabular}

\section*{Biophysical, Societal, Cultural, Institutional, and Ethical}
\begin{tabular}{lll} 
ENVR 200 & \((3)\) & The Global Environment \\
ENVR 202 & \((3)\) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 408 & (3) & Geography of Development
\end{tabular}

\section*{Complementary Courses (27 credits)}

\section*{Statistics}

3 credits of Statistics from the following:
\begin{tabular}{lcl} 
AEMA 310 & (3) & Statistical Methods 1 \\
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{Economics}

3 credits from the following:
\begin{tabular}{lcl} 
AGEC 200 & (3) & Principles of Microeconomics \\
AGEC 201 & (3) & Principles of Macroeconomics \\
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 209 & (3) & Macroeconomic Analysis and Applications \\
ECON 225 & (3) & Economics of the Environment \\
ECON 230D1 & (3) & Microeconomic Theory \\
ECON 230D2 & (3) & Microeconomic Theory
\end{tabular}

\section*{Sustainability in Business}

3 credits of Management from the following:
\begin{tabular}{lll} 
INSY 455 & (3) & Technology and Innovation for Sustainability \\
MGCR 460 & (3) & Social Context of Business. \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 475 & (3) & Strategies for Developing Countries
\end{tabular}

18 additional credits of complementary courses chosen from three areas listed below. At east 9 credits must be at the 300 level or higher; students must choose at least 6 credits from each area ( 1,2 , and 3 ).

\section*{AREA 1: Methods: Observation, Analysis, Modelling, and Management}

Note:
* Students may select either GEOG 201 or ENVB 529, but not both.
\begin{tabular}{|c|c|c|}
\hline AGRI 435 & (3) & Soil and Water Quality Management \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVB 529* & (3) & GIS for Natural Resource Management \\
\hline ENVR 544 & (3) & Environmental Measurement and Modelling \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline ESYS 500 & (3) & Earth System Applications \\
\hline GEOG 201* & (3) & Introductory Geo-Information Science \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 314 & (3) & Geospatial Analysis \\
\hline GEOG 333 & (3) & Introduction to Programming for Spatial Sciences \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
GEOG 351 & \((3)\) & Quantitative Methods \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 414 & \((3)\) & Advanced Geospatial Analysis \\
GEOG 495 & \((3)\) & Field Studies - Physical Geography \\
GEOG 509 & (3) & Qualitative Methods \\
URBP 506 & (3) & Environmental Policy and Planning
\end{tabular}

\section*{AREA 2: Society, Economics, Policy, Ethics, and Equity}

\section*{2A: Society, Economics, and Policy}

3 credits from the following:
\begin{tabular}{|c|c|c|}
\hline AGEC 333 & (3) & Resource Economics \\
\hline AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
\hline AGEC 442 & (3) & Economics of International Agricultural Development \\
\hline ANTH 206 & (3) & Environment and Culture \\
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline ANTH 339 & (3) & Ecological Anthropology \\
\hline ECON 313 & (3) & Economic Development 1 \\
\hline ECON 314 & (3) & Economic Development 2 \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline ENVR 519 & (3) & Global Environmental Politics \\
\hline GEOG 210 & (3) & Global Places and Peoples \\
\hline GEOG 216 & (3) & Geography of the World Economy \\
\hline GEOG 303 & (3) & Health Geography \\
\hline GEOG 310 & (3) & Development and Livelihoods \\
\hline GEOG 316 & (3) & Political Geography \\
\hline GEOG 409 & (3) & Geographies of Developing Asia \\
\hline HIST 292 & (3) & History and the Environment \\
\hline INDG 200 & (3) & Introduction to Indigenous Studies \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
\hline URBP 553 & (3) & Urban Governance \\
\hline
\end{tabular}

\section*{2B: Ethics and Equity}

3 credits from the following:
\begin{tabular}{lll} 
ENVR 400 & (3) & Environmental Thought \\
MGPO 450 & (3) & Ethics in Management \\
PHIL 349 & (3) & Environmental Philosophy \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 325 & (3) & Sociology of Science
\end{tabular}

\section*{AREA 3: Sustainability and Biophysical Processes}

\section*{Note:}
* Students select either BREE 217 or GEOG 322, but not both.
** Students select either BIOL 540 or ENVR 540, but not both.
\begin{tabular}{|c|c|c|}
\hline ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
\hline ATOC 215 & (3) & Oceans, Weather and Climate \\
\hline BIOL 308 & (3) & Ecological Dynamics \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 465 & (3) & Conservation Biology \\
\hline BIOL 540** & (3) & Ecology of Species Invasions \\
\hline BREE 217* & (3) & Hydrology and Water Resources \\
\hline CHEM 462 & (3) & Green Chemistry \\
\hline ENVB 305 & (3) & Population and Community Ecology \\
\hline ENVB 410 & (3) & Ecosystem Ecology \\
\hline ENVR 540** & (3) & Ecology of Species Invasions \\
\hline ESYS 200 & (3) & Earth System Processes \\
\hline ESYS 300 & (3) & Investigating the Earth System \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 305 & (3) & Soils and Environment \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322* & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 403 & (3) & Global Health and Environmental Change \\
\hline GEOG 470 & (3) & Wetlands \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline GEOG 555 & (3) & Ecological Restoration \\
\hline NRSC 333 & (3) & Pollution and Bioremediation \\
\hline
\end{tabular}

\subsection*{4.11.35 World Islamic and Middle East Studies}

World Islamic and Middle East Studies, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs \(>\) section 3.9.21.2: World Islamic and Middle East Studies.

\subsection*{4.11.35.1 Bachelor of Arts (B.A.) - Minor Concentration African Studies ( 18 credits)}

The Minor Concentration African Studies is available for those students majoring in a discipline of the Faculty of Arts who wish to acquire interdisciplinary knowledge of Africa.

This program may be expanded to the Major Concentration African Studies.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
AFRI 200 & (3) & Introduction to African Studies \\
AFRI 598 & (3) & Research Seminar in African Studies
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits selected as follows:

3 credits from the Group A or "core" course list and
9 credits from the Group B course list drawn from at least 2 disciplines with no more than 6 credits from any one discipline.
If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the program adviser.
Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

\section*{Group A}

3 credits from:
\begin{tabular}{lll} 
ANTH 322 & \((3)\) & Social Change in Modern Africa \\
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
POLI 324 & (3) & Developing Areas/Africa
\end{tabular}

\section*{Group B}

9 credits from the Group B course lists below drawn from at least 2 disciplines with no more than 6 credits from any one discipline.

\section*{African Studies}
\begin{tabular}{lcl} 
AFRI 401 & (3) & Swahili Language and Culture \\
AFRI 480 & (3) & Honours Thesis \\
AFRI 481 & (3) & Special Topics 1 \\
AFRI 499 & (3) & Arts Internships: African Studies \\
HIST 579D1 & (3) & Seminar: African History \\
HIST 579D2 & \((3)\) & Seminar: African History
\end{tabular}

Anthropology
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
ANTH 301 & (3) & Nomadic Pastoralists \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 411 & (3) & Primate Studies and Conservation \\
ANTH 416 & (3) & Environment/Development: Africa
\end{tabular}

\section*{Economics}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
ECON 416 & (3) & Topics in Economic Development 2
\end{tabular}

\section*{English}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lll} 
ENGL 320* & (3) & Postcolonial Literature \\
ENGL 352* & (3) & Theories of Difference \\
ENGL 421 & (3) & African Literature
\end{tabular}

\section*{Geography}

GEOG 216
(3)

Geography of the World Economy
\begin{tabular}{lll} 
GEOG 403 & \((3)\) & Global Health and Environmental Change \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 416 & (3) & Africa South of the Sahara
\end{tabular}

\section*{History}
\begin{tabular}{lcl} 
HIST 200 & \((3)\) & Introduction to African History \\
HIST 201 & \((3)\) & Modern African History \\
HIST 381 & \((3)\) & Colonial Africa \\
HIST 382 & \((3)\) & History of South Africa \\
HIST 498 & \((3)\) & Independent Research \\
HIST 528 & (3) & Indian Ocean World Slave Trade
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 410 & \((3)\) & History: Middle-East 1798-1918
\end{tabular}

\section*{Political Science}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 324 & (3) & Developing Areas/Africa \\
POLI 522* & (3) & Seminar: Developing Areas
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 484 & \((3)\) & Emerging Democratic States \\
SOCI 513 & \((3)\) & Social Aspects HIV/AIDS in Africa \\
SOCI 550 & \((3)\) & Developing Societies
\end{tabular}

\subsection*{4.11.35.2 Bachelor of Arts (B.A.) - Major Concentration African Studies (36 credits)}

The Major Concentration African Studies provides students with an interdisciplinary approach to the study of the African continent.
Students wishing to major in African Studies should consult the Program Adviser at the beginning of their first academic year. In the African Studies Major concentration, students will be encouraged to identify an area within a discipline of the Faculty, taking as many relevant courses as possible in that field.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
AFRI 200 & (3) & Introduction to African Studies \\
AFRI 598 & (3) & Research Seminar in African Studies
\end{tabular}

\section*{Complementary Courses (30 credits)}

30 credits selected as follows:
9 credits from the Group A or "core" course list and
21 credits from the Group B course list drawn from at least 3 disciplines with no more than 9 credits from any one discipline.
If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the Program Adviser.
Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

\section*{Group A}

9 credits from:
\begin{tabular}{lll} 
ANTH 322 & (3) & Social Change in Modern Africa \\
HIST 200 & (3) & Introduction to African History \\
HIST 201 & (3) & Modern African History \\
POLI 324 & (3) & Developing Areas/Africa
\end{tabular}

\section*{Group B}

21 credits from the Group B course lists below drawn from at least 3 disciplines with no more than 9 credits from any one discipline.

\section*{African Studies}
\begin{tabular}{lcl} 
AFRI 401 & \((3)\) & Swahili Language and Culture \\
AFRI 480 & (3) & Honours Thesis \\
AFRI 481 & (3) & Special Topics 1 \\
AFRI 499 & (3) & Arts Internships: African Studies \\
HIST 579D1 & (3) & Seminar: African History \\
HIST 579D2 & (3) & Seminar: African History
\end{tabular}

\section*{Anthropology}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 301 & (3) & Nomadic Pastoralists \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 411 & (3) & Primate Studies and Conservation \\
ANTH 416 & (3) & Environment/Development: Africa
\end{tabular}

\section*{Economics}
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 313 & (3) & Economic Development 1 \\
ECON 416 & (3) & Topics in Economic Development 2
\end{tabular}

\section*{English}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lcl} 
ENGL 320* & (3) & Postcolonial Literature \\
ENGL 352* & (3) & Theories of Difference \\
ENGL 421 & (3) & African Literature
\end{tabular}

\section*{Geography}
\begin{tabular}{lll} 
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 403 & \((3)\) & Global Health and Environmental Change \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 408 & \((3)\) & Geography of Development \\
GEOG 410 & \((3)\) & Geography of Underdevelopment: Current Problems \\
GEOG 416 & \((3)\) & Africa South of the Sahara
\end{tabular}

\section*{History}
\begin{tabular}{lcl} 
HIST 200 & \((3)\) & Introduction to African History \\
HIST 201 & \((3)\) & Modern African History \\
HIST 381 & (3) & Colonial Africa \\
HIST 382 & \((3)\) & History of South Africa \\
HIST 498 & \((3)\) & Independent Research \\
HIST 528 & (3) & Indian Ocean World Slave Trade
\end{tabular}

\section*{Islamic Studies}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 360 & \((3)\) & Islam and Politics \\
ISLA 410 & \((3)\) & History: Middle-East \(1798-1918\)
\end{tabular}

\section*{Political Science}
* Note: Course is counted only when African materials are taught.
\begin{tabular}{lll} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 324 & (3) & Developing Areas/Africa \\
POLI 522* & (3) & Seminar: Developing Areas
\end{tabular}

\section*{Sociology}
\begin{tabular}{lll} 
SOCI 365 & \((3)\) & Health and Development \\
SOCI 370 & \((3)\) & Sociology: Gender and Development \\
SOCI 446 & \((3)\) & Colonialism and Society \\
SOCI 484 & \((3)\) & Emerging Democratic States \\
SOCI 513 & (3) & Social Aspects HIV/AIDS in Africa \\
SOCI 550 & (3) & Developing Societies
\end{tabular}

\subsection*{4.11.35.3 Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits)}

The Minor Concentration in Arabic Language provides students with comprehensive training in listening, speaking, reading, and writing in Arabic.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Arabic language ( 3 levels) from the list below.
In the case of Introductory Arabic ( 9 credits), the extra 3 credits will be counted as electives.
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 322 & \((6)\) & Lower Intermediate Arabic \\
ISLA 322D1 & \((3)\) & Lower Intermediate Arabic \\
ISLA 322D2 & \((3)\) & Lower Intermediate Arabic \\
ISLA 423D1 & \((3)\) & Higher Intermediate Arabic \\
ISLA 423D2 & \((3)\) & Higher Intermediate Arabic \\
ISLA 524 & \((3)\) & Advanced Arabic 1 \\
ISLA 525 & \((3)\) & Advanced Arabic 2 \\
ISLA 526 & \((3)\) & Colloquial Arabic
\end{tabular}

\subsection*{4.11.35.4 Bachelor of Arts (B.A.) - Minor Concentration Persian Language ( 18 credits)}

The Minor Concentration in Persian Language provides students with comprehensive training in listening, speaking, reading, and writing in Persian.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Persian language ( 3 levels) from the list below.
\begin{tabular}{lcl} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & \((3)\) & Introductory Persian \\
ISLA 342D1 & (3) & Lower Intermediate Persian \\
ISLA 342D2 & (3) & Lower Intermediate Persian \\
ISLA 443D1 & \((3)\) & Upper Intermediate Persian \\
ISLA 443D2 & \((3)\) & Upper Intermediate Persian \\
ISLA 545 & \((3)\) & Advanced Persian 1 \\
ISLA 546 & \((3)\) & Advanced Persian 2
\end{tabular}

\subsection*{4.11.35.5 Bachelor of Arts (B.A.) - Minor Concentration Turkish Language (18 credits)}

The Minor Concentration in Turkish Language provides students with comprehensive training in listening, speaking, reading, and writing in Turkish.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Turkish language (3 levels) from the list below.
\begin{tabular}{lcl} 
ISLA 232D1 & (3) & Introductory Turkish \\
ISLA 232D2 & (3) & Introductory Turkish \\
ISLA 333D1 & (3) & Lower Intermediate Turkish \\
ISLA 333D2 & (3) & Lower Intermediate Turkish \\
ISLA 434D1 & (3) & Higher Intermediate Turkish \\
ISLA 434D2 & (3) & Higher Intermediate Turkish \\
ISLA 535D1 & (3) & Advanced Turkish \\
ISLA 535D2 & (3) & Advanced Turkish
\end{tabular}

\subsection*{4.11.35.6 Bachelor of Arts (B.A.) - Minor Concentration Urdu Language (18 credits)}

The Minor Concentration in Urdu Language provides students with comprehensive training in listening, speaking, reading, and writing in Urdu.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.
This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

\section*{Complementary Courses}

18 credits of Urdu language (3 levels) from the list below.
\begin{tabular}{lcl} 
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Introductory Urdu-Hindi \\
ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
ISLA 553 & (3) & Advanced Urdu-Hindi 1 \\
ISLA 554 & (3) & Advanced Urdu-Hindi 2 \\
ISLA 555 & (3) & Urdu Poetry
\end{tabular}

\subsection*{4.11.35.7 Bachelor of Arts (B.A.) - Minor Concentration World Islamic \& Middle East Studies ( 18 credits)}

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the languages, textual traditions, and social life of Muslims across different times and places.
For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

\section*{Complementary Courses (18 credits)}

18 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:
3 credits at the 100-/200 level, in non-language ISLA courses;
6 credits at the 300 level, in non-language ISLA courses;
9 credits at any level. If non-language courses are selected, no more than 6 credits overall at the 100-200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{ISLA 100/200-Level}

3 credits from:
\begin{tabular}{lll} 
ISLA 199 & \((3)\) & FYS: Narrations of the Middle East \\
ISLA 200 & (3) & Islamic Civilization \\
ISLA 210 & (3) & Muslim Societies \\
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 232D1 & \((3)\) & Introductory Turkish \\
ISLA 232D2 & \((3)\) & Introductory Turkish \\
ISLA 241D1 & \((3)\) & Introductory Persian \\
ISLA 241D2 & (3) & Introductory Persian \\
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Introductory Urdu-Hindi
\end{tabular}

\section*{ISLA 300 Level and Higher}

6 credits from:
ISLA 310
Women in Islam
\begin{tabular}{|c|c|c|}
\hline ISLA 315 & (3) & Ottoman State and Society to 1839 \\
\hline ISLA 322D1 & (3) & Lower Intermediate Arabic \\
\hline ISLA 322D2 & (3) & Lower Intermediate Arabic \\
\hline ISLA 325 & (3) & Introduction to Shi'i Islam \\
\hline ISLA 330 & (3) & Islamic Mysticism: Sufism \\
\hline ISLA 333D1 & (3) & Lower Intermediate Turkish \\
\hline ISLA 333D2 & (3) & Lower Intermediate Turkish \\
\hline ISLA 340 & (3) & Islamic Law and Human Rights \\
\hline ISLA 342D1 & (3) & Lower Intermediate Persian \\
\hline ISLA 342D2 & (3) & Lower Intermediate Persian \\
\hline ISLA 345 & (3) & Science and Civilization in Islam \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
\hline ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 360 & (3) & Islam and Politics \\
\hline ISLA 370 & (3) & The Qur'an: History and Interpretation \\
\hline ISLA 380 & (3) & Islamic Philosophy and Theology \\
\hline ISLA 383 & (3) & Central Questions in Islamic Law \\
\hline ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
\hline ISLA 388 & (3) & Persian Literature \\
\hline ISLA 392 & (3) & Arabic Literature as World Literature \\
\hline ISLA 423D1 & (3) & Higher Intermediate Arabic \\
\hline ISLA 423D2 & (3) & Higher Intermediate Arabic \\
\hline
\end{tabular}

\section*{ISLA Courses}
\begin{tabular}{lll} 
ISLA 199 & (3) & FYS: Narrations of the Middle East \\
ISLA 200 & (3) & Islamic Civilization \\
ISLA 210 & (3) & Muslim Societies \\
ISLA 325 & (3) & Introduction to Shi'i Islam \\
ISLA 330 & (3) & Islamic Mysticism: Sufism \\
ISLA 340 & (3) & Islamic Law and Human Rights \\
ISLA 345 & (3) & Science and Civilization in Islam \\
ISLA 350 & (3) & From Tribe to Dynasty \\
ISLA 355 & (3) & Modern History of the Middle East \\
ISLA 360 & (3) & Islam and Politics \\
ISLA 370 & (3) & The Qur'an: History and Interpretation \\
ISLA 380 & (3) & Islamic Philosophy and Theology \\
ISLA 383 & (3) & Central Questions in Islamic Law \\
ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
ISLA 388 & (3) & Persian Literature \\
ISLA 392 & Arabic Literature as World Literature
\end{tabular}
\begin{tabular}{lll} 
ISLA 410 & \((3)\) & History: Middle-East 1798-1918 \\
ISLA 411 & \((3)\) & History: Middle-East 1918-1945 \\
ISLA 415 & \((3)\) & Modern Iran: Anthropological Approach \\
ISLA 420 & \((3)\) & Indo-Islamic Civilization: Medieval \\
ISLA 421 & \((3)\) & Islamic Culture - Indian Subcontinent \\
ISLA 430 & \((3)\) & Islamdom: Baghdad to Cordoba \\
ISLA 488 & \((3)\) & Tales of Wonder-Islamic World \\
ISLA 499 & \((3)\) & World Islamic and Middle East Studies Internship \\
ISLA 502 & \((3)\) & Art in the Age of Empires \\
ISLA 505 & (3) & Islam: Origin and Early Development \\
ISLA 506 & (3) & Art of the Ottoman Empire \\
ISLA 512 & (3) & The Medieval School in Islam \\
ISLA 515 & (3) & Medieval Islam, 13th-15th Century \\
ISLA 516 & (3) & Urdu Poetry \\
ISLA 555 & (3) & Arab Women's Literature \\
ISLA 585 & &
\end{tabular}

\section*{Non-ISLA Courses}
\begin{tabular}{lcl} 
ANTH 327 & \((3)\) & Anthropology of South Asia \\
HIST 240 & (3) & Modern History of Islamic Movements \\
HIST 341 & \((3)\) & Themes in South Asian History \\
HIST 435 & (3) & Topics in South Asian History \\
HIST 591D1 & (3) & Modern Middle East History \\
HIST 591D2 & (3) & Modern Middle East History \\
JWST 261 & (3) & History of Jewish Philosophy and Thought \\
JWST 323 & (3) & The Israeli Novel \\
JWST 338 & (3) & History of Zionism Philosophy and Thought 2 \\
JWST 366 & (3) & Early Medieval Philosophy \\
PHIL 356 & (3) & Developing Areas/Middle East \\
POLI 340 & (3) & Foreign Policy: The Middle East \\
POLI 341 & (3) & Arab-Israel Conflict, Crisis, Peace \\
POLI 347 & (3) & Judaism, Christianity and Islam \\
RELG 204 & (3) & Bible, Quran and Interpretations \\
RELG 307 & (3) & World Religions and Cultures They Create \\
RELG 309 & (3) & Religions in Global Society \\
RELG 573 & &
\end{tabular}

\subsection*{4.11.35.8 Bachelor of Arts (B.A.) - Major Concentration World Islamic \& Middle East Studies (36 credits)}

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

\section*{Complementary Courses (36 credits)}
\(12-15\) credits (2 levels) in one language: Arabic, Persian, Turkish, or Urdu. In the case of Arabic, the first two levels involve 15 credits. The extra 3 credits will be counted toward the remainder of the complementary courses requirement.

21-24 credits (21 if Introductory Arabic has been chosen), of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:

3 credits of 100-/200-level non-language ISLA courses;
6 credits of 300 -level non-language ISLA courses;
6 credits of 400-/500-level non-language ISLA courses;
6-9 credits at any level, including more language courses, but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{Languages (12-15 credits)}

\section*{Arabic}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 322 & \((6)\) & Lower Intermediate Arabic \\
ISLA 322D1 & \((3)\) & Lower Intermediate Arabic \\
ISLA 322D2 & \((3)\) & Lower Intermediate Arabic \\
ISLA 423D1 & \((3)\) & Higher Intermediate Arabic \\
ISLA 423D2 & Higher Intermediate Arabic \\
ISLA 524 & \((3)\) & Advanced Arabic 1 \\
ISLA 525 & \((3)\) & Advanced Arabic 2
\end{tabular}

\section*{Persian}
\begin{tabular}{lcl} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & (3) & Introductory Persian \\
ISLA 342D1 & (3) & Lower Intermediate Persian \\
ISLA 342D2 & \((3)\) & Lower Intermediate Persian \\
ISLA 443D1 & \((3)\) & Upper Intermediate Persian \\
ISLA 443D2 & \((3)\) & Upper Intermediate Persian \\
ISLA 545 & \((3)\) & Advanced Persian 1 \\
ISLA 546 & \((3)\) & Advanced Persian 2
\end{tabular}

\section*{Turkish}
\begin{tabular}{lcl} 
ISLA 232D1 & (3) & Introductory Turkish \\
ISLA 232D2 & (3) & Introductory Turkish \\
ISLA 333D1 & (3) & Lower Intermediate Turkish \\
ISLA 333D2 & (3) & Lower Intermediate Turkish \\
ISLA 434D1 & (3) & Higher Intermediate Turkish \\
ISLA 434D2 & (3) & Higher Intermediate Turkish \\
ISLA 535D1 & (3) & Advanced Turkish \\
ISLA 535D2 & (3) & Advanced Turkish \\
Urdu & & \\
ISLA 251D1 & (3) & Introductory Urdu-Hindi
\end{tabular}
\begin{tabular}{lll} 
ISLA 251D2 & (3) & Introductory Urdu-Hindi \\
ISLA 352D1 & (3) & Intermediate Urdu-Hindi \\
ISLA 352D2 & (3) & Intermediate Urdu-Hindi \\
ISLA 553 & (3) & Advanced Urdu-Hindi 1 \\
ISLA 554 & (3) & Advanced Urdu-Hindi 2
\end{tabular}

\section*{ISLA 100-/200-Level}

3 credits from:
ISLA 199
ISLA 200
ISLA 210
ISLA 300-Leve
6 credits from:

6 credits from:
\begin{tabular}{|c|c|c|}
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 315 & (3) & Ottoman State and Society to 1839 \\
\hline ISLA 325 & (3) & Introduction to Shi'i Islam \\
\hline ISLA 330 & (3) & Islamic Mysticism: Sufism \\
\hline ISLA 340 & (3) & Islamic Law and Human Rights \\
\hline ISLA 345 & (3) & Science and Civilization in Islam \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 360 & (3) & Islam and Politics \\
\hline ISLA 370 & (3) & The Qur'an: History and Interpretation \\
\hline ISLA 380 & (3) & Islamic Philosophy and Theology \\
\hline ISLA 383 & (3) & Central Questions in Islamic Law \\
\hline ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
\hline ISLA 388 & (3) & Persian Literature \\
\hline ISLA 392 & (3) & Arabic Literature as World Literature \\
\hline
\end{tabular}

\section*{ISLA 400-/500-Level}

6 credits from:
\begin{tabular}{lcl} 
ISLA 410 & \((3)\) & History: Middle-East 1798-1918 \\
ISLA 411 & \((3)\) & History: Middle-East 1918-1945 \\
ISLA 415 & (3) & Modern Iran: Anthropological Approach \\
ISLA 420 & (3) & Indo-Islamic Civilization: Medieval \\
ISLA 421 & \((3)\) & Islamic Culture - Indian Subcontinent \\
ISLA 430 & \((3)\) & Islamdom: Baghdad to Cordoba \\
ISLA 488 & (3) & Tales of Wonder-Islamic World \\
ISLA 502 & \((3)\) & Art in the Age of Empires \\
ISLA 505 & (3) & Islam: Origin and Early Development \\
ISLA 506 & (3) & Revolutions in the Arab World
\end{tabular}
\begin{tabular}{lll} 
ISLA 512 & (3) & Art of the Ottoman Empire \\
ISLA 515 & (3) & The Medieval School in Islam \\
ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
ISLA 526 & (3) & Colloquial Arabic \\
ISLA 555 & (3) & Urdu Poetry \\
ISLA 585 & (3) & Arab Women's Literature
\end{tabular}

6-9 credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{Non-ISLA Courses}
\begin{tabular}{|c|c|c|}
\hline ANTH 327 & (3) & Anthropology of South Asia \\
\hline HIST 240 & (3) & Modern History of Islamic Movements \\
\hline HIST 341 & (3) & Themes in South Asian History \\
\hline HIST 435 & (3) & Topics in South Asian History \\
\hline HIST 591D1 & (3) & Modern Middle East History \\
\hline HIST 591D2 & (3) & Modern Middle East History \\
\hline JWST 220D1 & (3) & Introductory Hebrew \\
\hline JWST 220D2 & (3) & Introductory Hebrew \\
\hline JWST 261 & (3) & History of Jewish Philosophy and Thought \\
\hline JWST 320D1 & (3) & Intermediate Hebrew \\
\hline JWST 320D2 & (3) & Intermediate Hebrew \\
\hline JWST 323 & (3) & The Israeli Novel \\
\hline JWST 338 & (3) & Jewish Philosophy and Thought 2 \\
\hline JWST 340D1 & (3) & Advanced Hebrew \\
\hline JWST 340D2 & (3) & Advanced Hebrew \\
\hline JWST 366 & (3) & History of Zionism \\
\hline JWST 367 & (3) & Hebrew through Israeli Cinema \\
\hline JWST 368 & (3) & A Taste of Hebrew Literature \\
\hline JWST 369 & (3) & History of the Hebrew Language \\
\hline JWST 370 & (3) & Israeli Popular Culture \\
\hline PHIL 356 & (3) & Early Medieval Philosophy \\
\hline POLI 340 & (3) & Developing Areas/Middle East \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
\hline RELG 204 & (3) & Judaism, Christianity and Islam \\
\hline RELG 307 & (3) & Bible, Quran and Interpretations \\
\hline RELG 309 & (3) & World Religions and Cultures They Create \\
\hline RELG 573 & (3) & Religions in Global Society \\
\hline
\end{tabular}

\subsection*{4.11.35.9 Bachelor of Arts (B.A.) - Joint Honours Component World Islamic \& Middle East Studies (36 credits)}

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.
Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs."
Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a program GPA of 3.30 in their World Islamic \& Middle East Studies courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

\section*{Required Course (3 credits)}

ISLA 495 (3) World Islamic and Middle East Studies Research Seminar

\section*{Complementary Courses ( 33 credits)}

33 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:
\(12-15\) credits ( 2 levels) in one language: Arabic, Persian, Turkish, or Urdu (lists below). In the case of Arabic, the first two levels involve 15 credits. The extra 3 credits will be counted toward the remainder of the complementary courses requirement.
18-21 credits (18 if Introductory Arabic has been chosen), distributed as follows:
3 credits of 100-/200-level non-language ISLA courses;
9 credits of 300 -level non-language ISLA courses;
3 credits of 400-/500-level non-language ISLA courses;
3-6 credits at any level, including more language courses, but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.
Languages (12-15 credits)

\section*{Arabic}
\begin{tabular}{lll} 
ISLA 221D1 & \((4.5)\) & Introductory Arabic \\
ISLA 221D2 & \((4.5)\) & Introductory Arabic \\
ISLA 322 & \((6)\) & Lower Intermediate Arabic \\
ISLA 322D1 & \((3)\) & Lower Intermediate Arabic \\
ISLA 322D2 & \((3)\) & Lower Intermediate Arabic \\
ISLA 423D1 & \((3)\) & Higher Intermediate Arabic \\
ISLA 423D2 & \((3)\) & Higher Intermediate Arabic \\
ISLA 524 & \((3)\) & Advanced Arabic 1 \\
ISLA 525 & \((3)\) & Advanced Arabic 2
\end{tabular}

\section*{Persian}
\begin{tabular}{lcl} 
ISLA 241D1 & (3) & Introductory Persian \\
ISLA 241D2 & \((3)\) & Introductory Persian \\
ISLA 342D1 & (3) & Lower Intermediate Persian \\
ISLA 342D2 & (3) & Lower Intermediate Persian \\
ISLA 443D1 & (3) & Upper Intermediate Persian \\
ISLA 443D2 & \((3)\) & Upper Intermediate Persian \\
ISLA 545 & \((3)\) & Advanced Persian 1 \\
ISLA 546 & \((3)\) & Advanced Persian 2
\end{tabular}

\section*{Turkish}
ISLA 232D1
(3)
Introductory Turkish
\begin{tabular}{lcl} 
ISLA 232D2 & (3) & Introductory Turkish \\
ISLA 333D1 & (3) & Lower Intermediate Turkish \\
ISLA 333D2 & (3) & Lower Intermediate Turkish \\
ISLA 434D1 & (3) & Higher Intermediate Turkish \\
ISLA 434D2 & (3) & Higher Intermediate Turkish \\
ISLA 535D1 & (3) & Advanced Turkish \\
ISLA 535D2 & Advanced Turkish \\
& & \\
Urdu & (3) & Introductory Urdu-Hindi \\
ISLA 251D1 & (3) & Introductory Urdu-Hindi \\
ISLA 251D2 & (3) & Intermediate Urdu-Hindi \\
ISLA 352D1 & (3) & Advanced Urdu-Hindi 1 \\
ISLA 352D2 & (3) & Advanced Urdu-Hindi 2
\end{tabular}

\section*{ISLA 100-/200-Level}

3 credits from:
ISLA 199
ISLA 200
ISLA 210
ISLA 300-Leve

9 credits from:
\begin{tabular}{|c|c|c|}
\hline ISLA 310 & (3) & Women in Islam \\
\hline ISLA 315 & (3) & Ottoman State and Society to 1839 \\
\hline ISLA 325 & (3) & Introduction to Shi'i Islam \\
\hline ISLA 330 & (3) & Islamic Mysticism: Sufism \\
\hline ISLA 340 & (3) & Islamic Law and Human Rights \\
\hline ISLA 345 & (3) & Science and Civilization in Islam \\
\hline ISLA 350 & (3) & From Tribe to Dynasty \\
\hline ISLA 355 & (3) & Modern History of the Middle East \\
\hline ISLA 360 & (3) & Islam and Politics \\
\hline ISLA 370 & (3) & The Qur'an: History and Interpretation \\
\hline ISLA 380 & (3) & Islamic Philosophy and Theology \\
\hline ISLA 383 & (3) & Central Questions in Islamic Law \\
\hline ISLA 385 & (3) & Poetics and Politics in Arabic Literature \\
\hline ISLA 388 & (3) & Persian Literature \\
\hline ISLA 392 & (3) & Arabic Literature as World Literature \\
\hline
\end{tabular}

\section*{ISLA 400-/500-Level}

3 credits from:
\begin{tabular}{lll} 
ISLA 410 & \((3)\) & History: Middle-East 1798-1918 \\
ISLA 411 & \((3)\) & History: Middle-East 1918-1945 \\
ISLA 415 & \((3)\) & Modern Iran: Anthropological Approach \\
ISLA 420 & \((3)\) & Indo-Islamic Civilization: Medieval \\
ISLA 421 & (3) & Islamic Culture - Indian Subcontinent \\
ISLA 430 & (3) & Islamdom: Baghdad to Cordoba \\
ISLA 488 & (3) & Tales of Wonder-Islamic World \\
ISLA 502 & (3) & Art in the Age of Empires \\
ISLA 505 & (3) & Islam: Origin and Early Development \\
ISLA 506 & (3) & Revolutions in the Arab World \\
ISLA 512 & (3) & Art of the Ottoman Empire \\
ISLA 515 & (3) & The Medieval School in Islam \\
ISLA 516 & (3) & Medieval Islam, 13th-15th Century \\
ISLA 526 & (3) & Colloquial Arabic \\
ISLA 555 & (3) & Urdu Poetry \\
ISLA 585 & Arab Women's Literature
\end{tabular}

3-6 credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 6 credits overall of at the 200 level. Students may fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

\section*{Non-ISLA Courses}
\begin{tabular}{lcl} 
ANTH 327 & (3) & Anthropology of South Asia \\
HIST 240 & (3) & Modern History of Islamic Movements \\
HIST 341 & (3) & Themes in South Asian History \\
HIST 435 & (3) & Topics in South Asian History \\
HIST 591D1 & (3) & Modern Middle East History \\
HIST 591D2 & (3) & Modern Middle East History \\
JWST 220D1 & (3) & Introductory Hebrew \\
JWST 220D2 & (3) & Introductory Hebrew \\
JWST 261 & (3) & History of Jewish Philosophy and Thought \\
JWST 320D1 & (3) & Intermediate Hebrew \\
JWST 320D2 & (3) & The Israeli Novel \\
JWST 323 & (3) & Jewish Philosophy and Thought 2 Hebrew \\
JWST 338 & (3) & Advanced Hebrew \\
JWST 340D1 & (3) & Advanced Hebrew \\
JWST 340D2 & (3) & History of Zionism \\
JWST 366 & (3) & Hebrew through Israeli Cinema \\
JWST 367 & (3) & A Taste of Hebrew Literature \\
JWST 368 & (3) & History of the Hebrew Language \\
JWST 369 & (3) & Devely Medieval Philosophy \\
JWST 370 & (3) & \\
PHIL 356 & POLI 340 & (3)
\end{tabular}
\begin{tabular}{lll} 
POLI 341 & (3) & Foreign Policy: The Middle East \\
POLI 347 & (3) & Arab-Israel Conflict, Crisis, Peace \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 307 & (3) & Bible, Quran and Interpretations \\
RELG 309 & (3) & World Religions and Cultures They Create \\
RELG 573 & \((3)\) & Religions in Global Society
\end{tabular}

\section*{5 Faculty of Education}

\subsection*{5.1 About the Faculty}

The Faculty of Education serves approximately 2,500 students enrolled in undergraduate, graduate, and professional development programs. The Faculty is organized into three departments, and has a number of research and service centres, including several of an interdisciplinary nature.

The Faculty of Education has a role in the initial training of teachers and leaders in education-allied occupations. It also prepares professionals in the areas of Educational and Counselling Psychology, and Kinesiology and Physical Education. It provides professional development services to the wider educational community and it is concerned with constructing knowledge through research and scholarship.

In recent years, a number of links have been established with counterparts in other countries for teaching, research, and development purposes. Current active projects, some of which involve students as well as staff, include those in Japan, Hong Kong, Indonesia, South Africa, and Mexico.

\subsection*{5.2 Faculty of Education Facilities}

\subsection*{5.2.1 Education Curriculum Resources Centre}

The Education Curriculum Resources Centre, located on the first floor of the Education Building, provides materials and services to support the teaching and research programs of the Faculty. The Centre's collection includes: elementary and secondary school textbooks, teachers' resource guides, videos, DVDs, CDs, kits, and big books.

The Children's and Young Adult Literature Collection contains over 16,000 fiction, non-fiction, poetry, folklore, and picture books. Students can also find course reserve materials for their education classes.

Instructional workshops are offered throughout the year in the Humanities and Social Sciences Library and in Faculty of Education classes. These provide an introduction to library resources and information skills that will help in preparing course assignments and writing research papers. They cover topics such as searching the library catalogue, finding course materials on reserve, and locating articles and other materials. Workshops on EndNote and Zotero can help you create in-text citations, notes, and reference lists.

Liaison librarians hold regular office hours and are available for consultation.
Lending Services for laptops, digital still and video cameras, digital audio recorders, and tripods are now handled by the Education Audiovisual Loan Service.

Visit the McGill Library website at mcgill.ca/library to learn more about library loans, hours, and reserve readings.

\subsection*{5.2.2 Education Undergraduate Society (EdUS)}

The EdUS is the voice for undergraduate students within the Faculty, with its primary purpose being to serve and inform the students. It also seeks to unify students through sponsorship of activities such as:
- career placement;
- student orientation;
- participation in teachers' conventions;
- library donations; and
- the organization of the annual Education Career Fair.

Other activities include assigning lockers to students, selling merchandise at the EdUS office, coordinating the Graduation Ball, as well as fundraising and events throughout the academic year. Students are encouraged to participate and make their opinions known. The Society Office is located in Room B179 of the Education Building.
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Telephone: 514-398-7048
Fax: 514-398-2476
Email: admin.edus@mail.mcgill.ca
Website: edusmcgill.com
Facebook: www.facebook.com/EdUSMcGill

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\subsection*{5.2.3 Education Audiovisual Loan Service}

\section*{Audiovisual Equipment Loan Service}

Audiovisual equipment loans are available with priority access to the Faculty of Education community (Room 136). Students, faculty, and staff may borrow: laptops, data projectors, microphones and cables, adapters, digital cameras and tripods, portable public address (PA) systems, document cameras, and more. You can send in an equipment reservation request using the Reservation Request Form, or call 514-398-6954. Note that the online AV reservation form does not guarantee a reservation; please wait for an email confirmation of the reservation.

For information about our hours of operation, please consult mcgill.ca/education/resources/facilities-equipment-online-tools/audiovisual-equipment.

\section*{ICS McGill Central Audiovisual Equipment Loan Services}

Audiovisual equipment loan services are also available centrally through ICS Audiovisual equipment loans (article \# KB0010873).

\subsection*{5.2.4 McGill Career Planning Service (CaPS)}

Refer to University Regulations and Resources >Undergraduate >Student Services >section 1.13.3: Student Services - Downtown Campus and section 1.13.4: Student Services - Macdonald Campus for further information on this service.
```

Career Advisor: Lara Franko
Telephone: 514-398-2484
Email: career.education@mcgill.ca
Website: mcgill.ca/caps
How to make an appointment: mcgill.ca/caps/contact

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\subsection*{5.2.5 McGill Journal of Education}

The McGill Journal of Education/Revue des sciences de l'éducation de McGill (MJE/RSEM) is an open-access, online journal that is published three times a year: winter, spring, and fall. It includes work in English and French from local, national, and international contexts. The MJE/RSEM publishes peer-reviewed research articles and essays, as well as non-peer-reviewed (editorial) notes from the field, discussion forums, and book reviews. It is concerned with major issues in formal, non-formal, and incidental teaching and learning from a variety of perspectives, practical and theoretical, personal and collective. Its policy is to bring new ideas and research into a context open to teacher educators and scholars, as well as to parents, teachers, popular educators, community workers, and administrators.

Editor-in-Chief: Teresa Strong-Wilson
Associate Editors: Anila Asghar, Alexandre Lanoix, Vander Tavares and Emilie Tremblay-Wragg
Assistant Editors: Patrice-Cyrille Ahehehinnou, Thierry Desjardins, Maggie McDonnell, Kevin Peloquin and Evan Saperstein
Managing Editors: Emma Dollery and Rahema Imtiaz
McGill Journal of Education
Education Building, Faculty of Education
3700 McTavish Street, Room 345
Montreal QC H3A 1 Y2
Telephone: 514-398-4246
Email: mje.education@mcgill.ca
Website: mje.mcgill.ca

\subsection*{5.2.6 A.S. Lamb Learning Centre}

The A.S. Lamb Learning Centre, consisting of the computer laboratory and the reading room, is located on the second floor of the Sir Arthur Currie Memorial Gymnasium. The computer lab houses 28 desktop PCs with audiovisual equipment, connected to the McGill network. The lab is available for courses, workshops, and individual walk-in use by students and staff (except when reserved for classes). To reserve the PC Lab, please email sanjeev.panigrahy@mcgill.ca with dates and times, and be sure to include any special software needs well in advance of reserved class time. There is a charge for laser printing through the uPrint service.

\author{
Chief LAN Tech.: Mr. Sanjeev Panigrahy \\ Location: McGill Sports Complex, Room 207A \\ 475 Pine Avenue West \\ Telephone: 514-398-4184 ext. 0464 \\ Website: mcgill.ca/edu-kpe/facilities/asllc \\ Hours: Monday to Friday 08:00—17:00
}

\subsection*{5.2.7 Internships \& Student Affairs Office (ISA)}

The Internships and Student Affairs Office (ISA) in the Faculty of Education is responsible for the planning and implementation of the practice teaching component of undergraduate (B.Ed) and graduate (MATL) Teacher Education programs, the internship component of the B.A. Education program, as well as career advising and undergraduate student affairs. Student Affairs includes:
- student records;
- registration;
- general academic information and advice on undergraduate program and degree requirements;
- course change;
- withdrawal;
- supplemental and deferred exams;
- rereads;
- academic standing;
- interfaculty transfer;
- readmission;
- study away;
- scholarships and awards;
- graduation; and
- teacher certification.

At McGill, ISA works closely with students, departments, and other faculties, as well as externally in close partnership with schools, boards, and the larger community.

Location: Education Building, Room 243
3700 McTavish Street
Telephone: Student Affairs 514-398-7042
Telephone: Internships 514-398-7046 (Student Teaching Placement Coordinators)
Fax: 514-398-4679
Email: isa.education@mcgill.ca
Website: mcgill.ca/isa
Hours: Monday to Friday 9:30-16:00

\subsection*{5.2.8 Faculty Institutes, Offices, and Centres}

\subsection*{5.2.8.1 The Institute for Human Development and Well-Being}

The Institute for Human Development and Well-Being (IHDW) is a newly formed research institute led by the Faculty of Education that encourages a transdisciplinary and multidisciplinary approach to the study of human development and well-being.
It works across three main axes:
- human development across the life span;
- the role of family, community, and schools in supporting human development and well-being; and
- social policy and planning in relation to children and youth.

Duggan House, Faculty of Education
3740 McTavish, \#303
Director: Dr. Claudia Mitchell (James McGill Professor)
Telephone: 514-398-4527 ext. 09990
Email: claudia.mitchell@mcgill.ca
Website: mcgill.ca/ihdw

\subsection*{5.2.8.2 The International Centre for Youth Gambling Problems and High-Risk Behaviors}

McGill University's International Centre for Youth Gambling Problems and High-Risk Behaviors has been attempting to identify and understand the underlying determinants and critical factors related to youth gambling problems and their relationship with other adolescent addictive and high-risk behaviours. The ongoing research efforts conducted by Drs. Derevensky and Gupta, along with their graduate students, have been crucial in helping to identify the determinants placing youth at risk for gambling problems, and in the development of empirically based treatment and prevention programs. Of importance has been the Centre's role in impacting public health and social policy in an effort to reduce and minimize the harms associated with excessive, problematic gambling.

Director: Dr. Jeffrey Derevensky
Website: youthgambling.com

\subsection*{5.3 About the Faculty of Education (Undergraduate)}

\subsection*{5.3.1 Location}

\author{
Education Building \\ 3700 McTavish Street \\ Montreal QC H3A 1Y2 \\ Telephone: 514-398-7042 \\ Fax: 514-398-4679 \\ Email: info.education@mcgill.ca \\ Website: mcgill.ca/education
}

\subsection*{5.3.2 Department of Integrated Studies in Education}

The Department of Integrated Studies in Education (DISE) offers undergraduate programs that are committed to the preparation of exceptional teachers for work in elementary and secondary schools. We have four-year bachelor of education programs for CEGEP graduates and five-year programs for out-of-province students. In addition, we can accommodate students with completed or partly completed degrees in other disciplines.

The Department offers:
- Bachelor of Education Secondary English
- Bachelor of Education Secondary Mathematics
- Bachelor of Education Secondary Science \& Technology
- Bachelor of Education Secondary Social Sciences
- Concurrent Bachelor of Music and Bachelor of Education in Music (Music Education)
- Bachelor of Education Kindergarten and Elementary Education
- Bachelor of Education Kindergarten and Elementary Education First Nations and Inuit Studies
- Bachelor of Education Kindergarten and Elementary Education Jewish Studies
- Bachelor of Education Kindergarten and Elementary Pédagogie de l'immersion française (PIF) (French Immersion)
- Bachelor of Education Teaching English as a Second Language
- Bachelor of Arts (Education); Major Education in Global Contexts
- Programs for First Nations and Inuit

For more information and full program details, refer to the Department of section 5.7.2: Integrated Studies in Education.

\subsection*{5.3.3 Department of Educational and Counselling Psychology}

The Department of Educational and Counselling Psychology (ECP) is committed to the advancement of scientific knowledge through research and practice in education and psychology. ECP addresses cognition and development in typical and atypical populations across the lifespan. Broadly speaking, researchers examine issues pertaining to assessment and intervention; cognitive processes and developmental neuroscience; and the design and evaluation of learning environments and instructional practices.
The Department offers:
- Minor concentrations for undergraduate students

For more information and full program details, refer to the Department of section 5.7.1: Educational and Counselling Psychology.

\subsection*{5.3.4 Department of Kinesiology and Physical Education}

The mission of the Department of Kinesiology and Physical Education (KPE) is to generate, advance, and disseminate knowledge about human health and physical activity, and to prepare professionals to engage in related employment.

The Department offers:
- Bachelor of Education - Major in Physical and Health Education
- Bachelor of Science Kinesiology - Major and Honours
- Minor in Kinesiology for Bachelor of Science students

For more information and full program details, refer to the Department of section 5.7.4: Kinesiology and Physical Education.

\subsection*{5.4 Overview of Faculty Programs}

The Faculty of Education offers three different kinds of programs.
Undergraduate Programs: The Faculty offers programs leading to the Bachelor of Education (B.Ed.) degree that can lead to teacher certification, a Bachelor of Arts - Education (B.A.(Education)) degree with a Major in Education in Global Contexts, and a Bachelor of Science (B.Sc.) - Kinesiology degree.
Programs of Professional Development: For qualified teachers wishing to enhance their knowledge and skills, the Faculty offers programs of professional development leading to specialized certificates and diplomas. Most courses that are required to complete these programs are offered in the evenings and in the summer.

Graduate Programs: The Faculty offers graduate programs for those already holding a university degree who wish to pursue advanced study and research leading to master's and doctoral degrees in various fields of education and psychology. The Master of Arts in Teaching and Learning, which leads to teacher certification, is also offered; more information is available at mcgill.ca/dise/grad.

Undergraduate programs of initial teacher education are described below in section 5.4.1: Undergraduate Education Programs; programs of professional development are described in the School of Continuing Studies section; and graduate programs are described in the Graduate and Postdoctoral Studies section.

\subsection*{5.4.1 Undergraduate Education Programs}

The Faculty of Education offers the following undergraduate programs. Details of each program may be found in this publication under the headings of the appropriate department.
All Bachelor of Education programs have been accredited by the Comité d'agrément des programmes de formation à l'enseignement (CAPFE).
The credit weights given are for students who have completed a Quebec CEGEP degree, or have been granted 30 credits of Advanced Standing. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing their degree must also complete a minimum of 30 credits of Freshman/Foundation Year courses (in addition to the 90 -credit or 120/137-credit program) for a total of 120 credits (B.A.(Education), B.Sc.(Kinesiology)) or \(150 / 167\) credits (B.Ed.).

\section*{Undergraduate Education Programs Leading to Certification}
section 5.7.2.3.1: Bachelor of Education: Secondary Program (120 credits), offered by the Department of Integrated Studies in Education.
section 5.7.2.3.3: Bachelor of Education (Kindergarten and Elementary) ( 120 credits), offered by the Department of Integrated Studies in Education.
section 5.7.2.12: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies (120 credits), offered by the Department of Integrated Studies in Education.
section 5.7.2.13.1: B.Ed. Kindergarten and Elementary Program (Jewish Studies Option), offered by the Department of Integrated Studies in Education.
section 5.7.2.14: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Pédagogie de l'Immersion Française (120 credits), offered by the Department of Integrated Studies in Education.
section 5.7.2.3.4: Bachelor of Education in Teaching English as a Second Language ( 120 credits), offered by the Department of Integrated Studies in Education.
section 5.7.2.16: Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary:Teaching Greek Language \& Culture ( 120 credits), offered by the Department of Integrated Studies in Education.
section 5.7.4.3: Bachelor of Education (B.Ed.) - Physical and Health Education (120 credits), offered by the Department of Kinesiology and Physical Education.
section 5.7.2.3.2: Concurrent Bachelor of Music (Music Education)/Bachelor of Education in Music program (137 credits), offered jointly by the Department of Integrated Studies in Education and the Schulich School of Music.
See also section 10.6.3.1: Concurrent Bachelor of Music (B.Mus.) - Major Music Education and Bachelor of Education (B.Ed.) - Music Elementary and Secondary (170 credits) under Schulich School of Music.

\section*{Undergraduate Education Programs Leading to Certification}

A student who successfully completes any of the above programs (and meets other requirements set out by the Ministère de l'Éducation), is recommended for certification as a teacher in the province of Quebec; see section 5.4.1.3: Quebec Teacher Certification.

\section*{Other Undergraduate Education Programs}
section 5.7.2.9: Bachelor of Arts(Education) - Major Education in Global Contexts (90 credits), offered by the Department of Integrated Studies in Education.

The program focuses on understanding the role of education in addressing contemporary and emergent global challenges. Students will take the concepts of teaching and learning outside of the classroom environment, exploring subject areas in sociology, psychology, leadership studies, history, philosophy, and public policy. Students will benefit from examining the world through an international scope and learning to problem-solve using the foundation of educational principles and hands-on experiences through a semester-long internship. Designed for anyone who wishes to take on the role of educator in non-traditional contexts: in non-profit, government, business, and other career sectors.
section 5.7.4.5: Bachelor of Science (Kinesiology) (B.Sc.(Kinesiology)) - Kinesiology (90 credits), offered by the Department of Kinesiology and Physical Education.

The program entails a comprehensive understanding of human movement. Kinesiology is a multidisciplinary field viewing human movement from social, historical, psychological, or biological perspectives. The program provides students with a breadth of theoretical knowledge as well as an opportunity to explore related areas in greater depth, including minor programs available elsewhere within the University. An honours program is available for particularly strong students who aspire to continue their studies at the graduate level and offers the opportunity to pursue more advanced coursework and research.

\subsection*{5.4.1.1 General Admission Requirements}

For information about admission requirements to the B.Ed., B.A.(Education), B.Sc.(Kinesiology), or Concurrent B.Mus. and B.Ed. programs, refer to the Undergraduate Admissions Guide, found at mcgill.ca/undergraduate-admissions/apply.
- Specific mathematics and/or science prerequisite courses are required for the B.Ed. Secondary Science and Technology, B.Ed. Secondary Mathematics, and B.Sc.(Kinesiology) programs, described in the Undergraduate Admissions Guide.
- Applicants to the Concurrent B.Mus. and B.Ed. must apply through the Schulich School of Music.
- For information about interfaculty transfers or readmission, see University Regulations and Resources \(>\) Undergraduate \(>\) Registration \(>\) section 1.3.6: Interfaculty Transfer or section 1.3.10: Readmission, as well as information posted on the Internships and Student Affairs Office website: mcgill.ca/isa/student.

\subsection*{5.4.1.1.1 Language Requirement for Applicants to B.Ed. TESL Program}

The application process for the B.Ed. TESL program involves several steps. Students first apply to the University indicating their program choice. Those whose academic record meets minimum program requirements will be informed by the University that they are being considered for admission to the B.Ed TESL program. Some students being considered will need to pass written and oral English language proficiency tests as a further admission requirement, and will be contacted by email with information about how to make arrangements to take the test.

\subsection*{5.4.1.2 Credit Requirements}

The Bachelor of Education (B.Ed.) requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman/Foundation Year courses (in addition to the 120-credit program) for a total of 150 credits. The Bachelor of Arts (Education) (B.A.(Education) - Education in Global Contexts and Bachelor of Science (Kinesiology) (B.Sc.) - Kinesiology are 90-credit programs. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies are normally enrolled in a four-year B.A.(Education) or B.Sc.(Kinesiology) program, which includes a 30-credit Freshman/Foundation Year for a total of 120 credits.

Students entering the five-year B.Ed., or four-year B.A.(Education) degree or B.Sc.(Kinesiology) degree are in Year 0 and are required to complete the Freshman/Foundation Year requirements applicable to their program.

Students who have completed previous university studies may be awarded transfer credits for their coursework. This can only be determined after the formal application and all necessary supporting documents have been received by Enrolment Services. A minimum of 60 credits must be completed while in residence at McGill University in order to be eligible for a degree. Transfer credits for courses taken more than five (5) years before the time of admission are not permitted in subjects where there have been substantial content changes, nor in any pedagogy courses specific to the Quebec K-11 curriculum. Courses more than five (5) years old in other subject areas may be considered on an individual subject basis by the Program Director. It is the student's responsibility to verify their student record to ensure that they have received Advanced Standing. Students must meet with their advisor, in their admitted term, to ensure that the necessary record changes are made before the set deadlines. For more details, see the Undergraduate Admissions Guide, found at mcgill.ca/undergraduate-admissions/apply.

\subsection*{5.4.1.3 Quebec Teacher Certification}

Teacher Certification in Quebec is the responsibility of the Quebec Ministry of Education. Students who complete requirements for the Bachelor of Education degree and who meet the Ministry requirements (specified below) are recommended by the University for certification.

\section*{Language Proficiency}

Fluency (oral and written) in the language of instruction is a requirement for all those seeking certification.

\section*{Confidential Declaration Concerning Judicial Record}

In June 2005, the National Assembly of Quebec adopted an Act amending the Education Act and the Act respective of private education. The amendments concern the verification of judicial antecedents of persons holding or applying for a permit to teach in the youth, adult, and vocational sectors. Anyone seeking teacher certification in the Province of Quebec is required to submit a confidential declaration concerning their judicial record to the Minister of Education. This document is available on the Ministry website at Verification of judicial records of teaching staff \(\mid\) Gouvernement du Québec (quebec.ca).

\section*{Teacher Certification}

All graduates of the Bachelor of Education Teacher Education programs (Canadian citizens, permanent residents or international students) may apply for a permanent Teaching Diploma (Brevet) immediately upon graduation.

All students graduating from a B.Ed. program are required to submit the documents to apply for a provincial Teaching Diploma or Permit by the approved deadline. For more information on how and when to apply for teacher certification, visit the ISA website.
Individuals with a Quebec teaching license who wish to teach in another province or country must first apply for and receive their Teacher Certification in Quebec before applying directly to the Teacher Certification Agency in the other relevant province or country. It is recommended that applicants intending to teach outside of Quebec obtain information beforehand concerning the requirements for certification.

Teachers from other provinces or countries who wish to teach in Quebec must apply to the Ministry of Education. Consult the Ministry's guides and forms, available at Teaching authorizations \(\mid\) Ministère de l'Éducation et Ministère de l'Enseignement supérieur (gouv.qc.ca).

\subsection*{5.4.1.3.1 International Students}

In addition to the CAQ and Study Permit, international students in Bachelor of Education programs and the Bachelor of Arts (Education) program must hold a valid co-op/internship work permit issued by Citizenship and Immigration Canada as a requirement for the mandatory field experiences/internships. Applicants require a medical exam completed by a CIC-certified physician (exam fees vary). Failure to do the medical exam will result in a remark that prohibits students from working in primary or secondary schools on their work permit. Consult International Student Services for more information: mcgill.ca/internationalstudents/work/work-permits/co-opinternship-work-permit.

International students who are applying for the permanent Quebec Teaching Diploma as described above must hold a different type of temporary permit; most commonly the Post-Graduation Work Permit or a study permit (if pursuing further formal education post-graduation). For more information, see mcgill.ca/internationalstudents/work/work-permits/post-graduation-work-permit.

\subsection*{5.4.2 Programs of Professional Development}

The Faculty of Education offers programs of professional development in several fields. All such programs are 30 credits, unless otherwise indicated, and may be completed through part-time study. They are intended to provide an opportunity for teachers and other educators to enhance their existing knowledge and skills or to develop new ones, and thus are normally available only to those who are already certified as teachers.
Detailed information regarding general regulations, admission requirements, and program profiles for the following certificates and diplomas may be found in the section for offering departments.

\subsection*{5.4.2.1 Department of Educational and Counselling Psychology}

\section*{Programs Offered}
- Certificate in Inclusive Education
- Diploma in Human Relationships, Diversity \& Sexuality

Further information is available from:
Department of Educational and Counselling Psychology
Education Building
3700 McTavish Street, Room 614
Montreal QC H3A 1Y2
Telephone: 514-398-4242
Fax: 514-398-6968
Email: Prospective students: ecpcont.education@mcgill.ca; Current students: ecpcont.education@mcgill.ca
Website: mcgill.ca/edu-ecp

\subsection*{5.4.2.2 Department of Integrated Studies in Education}

The Office of First Nations and Inuit Education (OFNIE): The Faculty of Education collaborates with various Indigenous communities and institutions offering programs whose courses are given either at McGill or off campus. In collaboration with the Kativik Ilisarniliriniq, the Cree School Board, the Kahnawà:ke Education Centre, and various other Indigenous communities in Quebec, OFNIE delivers field-based teacher education programs leading to initial teacher certification and to the Bachelor of Education for Certified Teachers or the Bachelor of Education Kindergarten/Elementary First Nations and Inuit degree. OFNIE also works with departments to meet other educational needs of Indigenous peoples.

Department of Integrated Studies in Education
Education Building, McGill University
3700 McTavish Street, Room 431A
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Montreal QC H3A 1Y2
Telephone: 514-398-4527
Email: ofnie.education@mcgill.ca
Website: mcgill.ca/dise/ofnie

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Courses offered through the School of Continuing Studies and Summer Studies: A wide range of courses are offered through the School of Continuing Studies and Summer Studies. For courses offered, please check Minerva.

\subsection*{5.4.3 Programs for First Nations and Inuit}

The following programs are offered for First Nations and Inuit teachers by the Faculty of Education.
Information can be obtained by contacting:
Office of First Nations and Inuit Education (OFNIE)
Faculty of Education
Education Building, McGill University
3700 McTavish Street, Room 431A
Montreal QC H3A 1Y2
Telephone: 514-398-4527
Email: ofnie.education@mcgill.ca
Website: mcgill.ca/dise/ofnie

\section*{Bachelor of Education - Kindergarten and Elementary First Nations and Inuit Studies Option}

Detailed information about this program may be found at section 5.7.2.12: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education First Nations and Inuit Studies (120 credits)

\section*{Programs for First Nations and Inuit}

Detailed information about the following programs may be found in section 5.7.3: Programs for First Nations and Inuit
- : Bachelor of Education for Certified Teachers - Elementary Education: Indigenous Education (90 credits)
- : Certificate (Cert.) Education for First Nations and Inuit (60 credits)
- : Certificate (Cert.) First Nations and Inuit Student Personnel Services (30 credits) (This program is offered by the Department of Educational and Counselling Psychology through the Office of First Nations and Inuit Education. Restrictions apply to enrolment.)
- : Certificate (Cert.) Middle School Education in Indigenous Communities (30 credits)
- : Certificate (Cert.) First Nations and Inuit Educational Leadership (30 credits)
- : Certificate (Cert.) Indigenous Language and Literacy Education (30 credits)
- section 5.7.3.7: Certificate (Cert.) Inclusive Education (30 credits) (This program is offered by the School of Continuing Studies and the Department of Educational and Counselling Psychology through the Office of First Nations and Inuit Education. Restrictions apply to enrolment.)

\subsection*{5.5 Faculty Regulations for Undergraduate Programs}

Please consult University Regulations and Resources > Undergraduate for regulations and procedures regarding registration, fees, course load, course change (add/drop), withdrawal, verification, examinations, inter-university transfer, and graduation. In addition, the following section provides regulations specific to Faculty of Education students.

Note: Each student in the Faculty of Education must be aware of and comply with the Faculty regulations as stated in this publication. While departmental and Faculty advisors and staff are always available to give advice and guidance, the ultimate responsibility-for complete and correct course selection and registration; for compliance with, and completion of program and degree requirements; for the observance of regulations and deadlines; and for academic records-rests with the student. It is the student's responsibility to seek guidance. Misunderstanding will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.

\subsection*{5.5.1 Advising}

Refer to University Regulations and Resources > Undergraduate > section 1.11: Undergraduate Advising for information on the types of advising and advisors, and their role.

\section*{Internships \& Student Affairs (ISA)}

Faculty of Education (Undergraduate)
Education Building, McGill University
3700 McTavish Street, Room 243, 2nd Floor
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Montreal QC H3A 1Y2
Telephone Internships: 514-398-7046
Telephone Student Affairs: 514-398-7042
Fax: 514-398-4679
Email for advising on programs offered by the Department of Integrated Studies in Education (DISE): advisedise.education@mcgill.ca
Email for advising on programs offered by the Department of Kinesiology and Physical Education (KPE): studentaffairs.kpe@mcgill.ca
Website: mcgill.ca/isa

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All newly admitted students are required to consult with an academic advisor prior to the start of the Fall term. For a detailed description of advising and registration procedures, students should refer to Welcome to McGill at mcgill.ca/accepted. Additional advising material is also available on the Internships and Student Affairs website.
Academic advising for all returning students takes place in the spring for the upcoming academic year. Links to departmental (program) advising websites and detailed information on registration and important Faculty of Education policies are posted on the Internships and Student Affairs website: mcgill.ca/isa/student. Students entering their graduating year are encouraged to meet with their departmental (program) advisor during this Advising period.

A list of courses for Freshman/Foundation Year (Year 0) students is available for each program at section 5.4.1: Undergraduate Education Programs.

\subsection*{5.5.2 McGill Principles of Practice, Behaviour and Ethical Conduct for Teacher Candidates}

The mission of McGill University's Bachelor of Education Program within the Department of Integrated Studies in Education (DISE) and the Department of Kinesiology and Physical Education (KPE) as well as the Master of Teaching and Learning (MATL) Program within DISE in cooperation with the Faculty of Education's Internship and Student Affairs Office (ISA) is to prepare teachers who are knowledgeable, skilful, flexible, creative, and compassionate members of the profession guided by a sense of social and ethical responsibility in relation to their students and the wider society.

In keeping with the professional culture of teaching and learning, McGill's teacher education community believes that teaching and learning spaces should model such professional environments. McGill's teacher education community is committed to creating authentic opportunities where an understanding of teaching and learning is co-constructed between instructors and teacher candidates, teachers and learners, as well as peer-to-peer and beyond. In order for us to create these learning environments, we are expected to demonstrate awareness of, respect for, and commitment to, the behaviours and actions of professionals. We expect members of McGill's teacher education community, including teacher candidates, teaching assistants, lecturers, professors and community partners to be accountable to themselves and others, and to be engaged, collegial, and accessible. By doing so, McGill's teacher education community is more fully able to share together in the types of critical dialogue, creative thinking, and reflective practice expected of professionals.
McGill's teacher education community is committed to nurturing a space where teacher candidates, teaching assistants, lecturers, professors and community partners can all engage in the exchange of ideas and dialogue, without fear of being made to feel unwelcome or unsafe on account of biological sex, sexual orientation, gender identity or expression, race/ethnicity, religion, linguistic and cultural background, age, physical or mental ability, or any other aspect integral to one's personhood. We therefore recognize that it is our individual and collective responsibility, to strive to establish and maintain an environment wherein all interactions are based on empathy and mutual respect for the person, acknowledging differences of perspectives, free from judgment, censure, and/or stigma.

Finally, McGill's teacher education community is charged with ensuring that all graduates of its programs have the requisite knowledge, skills, and attitudes required of the teaching profession and can meet standards of the Québec Professional Teacher Competencies to be eligible for professional certification as educators in the Province of Québec.

The complete McGill Principles of Practice, Behaviour and Ethical Conduct for Teacher Candidates document can be found on this link mcgill.ca/isa/student/principles.

\subsection*{5.5.3 English Language Requirement}

The Quebec Ministry of Education requires that all students in teacher education programs demonstrate their proficiency in the language of instruction. To fulfil this obligation, B.Ed. students are expected to write the English Examination for Teacher Certification (EETC) before the end of their first semester in the program, except for Year 0 (Freshman/Foundation Year) students who are required to write the examination in their second year (Year 1). Students must pass the examination prior to their Third Field Experience.

The examination is coordinated by an independent body, the (Centre for the English Exam for Teacher Certification (CEETC)). McGill assists with the administration and scheduling of the examination.
To write this examination, students must:
1. register on Minerva for a section of EDEC 215;
2. register for a specific session date and time with the CEETC (www.ceetc.ca);
3. pay a fee to the CEETC prior to writing the test.

Students who do not pass the examination the first time are expected to avail themselves of support offered via workshops and/or recommended courses and are required to take the EETC again. A fee is charged each time the examination is written. Students who do not pass the examination on their fourth attempt must request permission from the Director of Internships and Student Affairs to write the examination again. If a student does not pass the EETC on the fifth and final attempt, they will be withdrawn from the program. Any subsequent readmission will be conditional on first passing the EETC.
More information about the EETC is available on the ISA website (mcgill.ca/isa/student/current/eetc).

Note: This requirement does not apply to students in Certificate in Education for First Nations and Inuit programs.

\subsection*{5.5.4 Judicial Record Verification for Students in the Bachelor of Education Programs}

Quebec's Education Act, section 261.0.2, grants school boards the right to verify the judicial record of any person regularly in contact with minors, and this includes student teachers. Each school board or private school may have its own administrative procedures for verification. Students are responsible for complying with their request. Anyone unable to obtain the required security clearance will not be permitted to undertake their Field Experiences, which is a mandatory requirement of the program, and consequently would be required to withdraw from the program.

\subsection*{5.5.5 Course and Program Regulations}

\subsection*{5.5.5.1 Course Load}

The normal course load for most undergraduate studies is 15 credits per term (Fall and Winter terms). If you carry fewer than 12 credits per term, you are considered to be a part-time student in that term. Students in Satisfactory Standing may take up to 17 credits per term. Students whose CGPA is above 3.00 may request permission to take an overload. Overloads are not allowed in major Field Experience terms for students in the B.Ed. programs. Students in Probationary Standing take a maximum of 12 credits.
The B.Ed. and B.Sc.(Kinesiology) programs must be followed only on a full-time basis. Students must take a minimum of twelve (12) credits per term (Fall and Winter) unless the Director of Internships and Student Affairs gives them special permission to be registered for fewer than 12 credits in a term (see "Part-Time Student Status" below). Special permission must be requested prior to the end of Course Add/Drop period.

Any absence or reduction in course load that may impact the regular progression of a student's program must have written approval by the Director of Internships and Student Affairs.

The B.A.(Education) program can be followed on a part-time basis (fewer than 12 credits in a term) without special permission, provided students do not exceed the degree time limit (see "Part-Time Student Status" below).

\subsection*{5.5.5.2 Part-Time Student Status}

If you are registered for fewer than 12 credits in a term, you are considered to be a part-time student in that term. Students who opt to study part-time are ultimately responsible for any impact their part-time student status may have. Students are not permitted to study part-time in order to concurrently study at another educational institution. Students are advised to consult with their service providers to ensure that they are meeting the necessary course load requirements to maintain services. If you plan to reduce your course load to below 12 credits, you are advised to have documentation to support this decision should you need to justify your reduced course load to a service provider, immigration authorities, or graduate school admissions committee at a later date. International students, in particular, should be aware of the potential immigration impacts of reducing their course load. If you are considering reducing your course load to fewer than 12 credits, your part-time status may affect the following:
\begin{tabular}{|ll|}
\hline May Impact & Whom to Contact \\
\hline \begin{tabular}{ll} 
Degree time limit, course planning, academic goals & DISE Academic Advisor \\
\begin{tabular}{l} 
Scholarships (applications and renewals), awards, bursaries, loans, financial \\
aid, or government funding
\end{tabular} & Scholarships and Student Aid Office \\
In-course awards & or \\
Immigration, CAQ, or international study permit & \begin{tabular}{l} 
Internships and Student Affairs Office for Faculty of Education-administered \\
awards
\end{tabular} \\
Loans, RESPs, health insurance & International Student Services \\
Student discounts or promotions, including the student OPUS card & Bank, health insurance provider, etc. \\
\hline
\end{tabular} & Service provider \\
\hline
\end{tabular}

\subsection*{5.5.5.3 Time Limit and Credits for Completion of Degrees}

Students are expected to complete their program no more than:
- five (5) years after their initial registration and within 150 credits for the B.Ed. degree;
- four (4) years after their initial registration and within 120 credits for the B.A.(Education) degree;
- four (4) years after their initial registration and within 120 credits for the B.Sc.(Kinesiology) degree.

Students who enter into a Freshman/Foundation Year become subject to these regulations one year after their initial registration. Students who exceed these limits must apply to the Faculty for permission to continue.

Students will receive credits for all courses (subject to degree regulations) taken up to and including the semester in which they obtain the full degree credit requirements. Students who wish to remain at McGill beyond that semester must seek permission of the Director of Internships and Student Affairs. Students
who wish to exceed the specified minimum number of credits required for their degree must also seek permission of the Director of Internships and Student Affairs. If permission is granted, credits over the limit will be flagged for no credit and the grades will not count in the CGPA.

Permission for exceeding the time and/or credit limits will normally be granted only for valid academic reasons, such as change of program or approved part-time status. If permission is granted, students will receive credit only for required and complementary courses necessary to complete their program requirements.

\subsection*{5.5.5.4 Course Requirements}

All required and complementary courses used to fulfil program requirements must be completed with a grade of C or better. Students who fail to obtain a satisfactory grade in a required and/or complementary course must either pass the supplemental examination if available, or repeat the course. If the failed course is a complementary course required by the program, a student may choose to replace it with another complementary course. If a student repeats a required course in which a D was received, credit will only be given once. Students must contact their program advisor at least once each academic year and at the end of year 3 (B.Ed. Programs) and year 2 (B.A.(Education), B.Sc.(Kinesiology) program) to ensure that they are on the right track to completing their program requirements. A failure (F, J, KF, WF) in any level of Field Experience places a student in Unsatisfactory Standing, requiring withdrawal from the program. Further details on requirements for Field Experience are listed in Faculty of Education > Undergraduate > section 5.6: Student Teaching/Field Experience.

\subsection*{5.5.5.5 Electives}

Any courses taught at McGill University may be used towards elective credits, with the following exceptions:
- School of Continuing Studies courses with a teaching unit that starts with C are not for credit (except for CHEM courses).
- Online Education: Refer to the section 5.5.5.8: Online Courses section below.

\subsection*{5.5.5.6 Courses Taken as Transfer Credit}

Students wishing to study away at a university outside of Quebec must obtain approval from their academic advisor and the Internships and Student Affairs Office prior to taking a transfer course. Students will only be permitted to take courses required to complete their program. Students are not permitted to take transfer courses during their graduating term. Please refer to University Regulations and Resources \(>\) Undergraduate \(>\) Student Records \(>\) section 1.5.6: Transfer Credits for further information.

\subsection*{5.5.5.7 Inter-University Transfer Credit}

Students may, with the permission of their academic advisor, register at any university in the province of Quebec for three (3) or, exceptionally, six (6) credits per term in addition to their registration at McGill. Students will only be permitted to take courses required to complete their program. Students are not permitted to take transfer courses during their graduating term. Please refer to University Regulations and Resources > Undergraduate > Registration \(>\) section 1.3.7: Quebec Inter-University Transfer Agreement for further information.

\subsection*{5.5.5.8 Online Courses}

A maximum of 18 credits of courses taught as online courses may be used toward the B.Ed., B.A.(Education), or B.Sc.(Kinesiology) degree at McGill. Requests to take online courses at another university must be assessed for equivalency and approved by an academic advisor and the Internships and Student Affairs Office. Please refer to section 5.5.5.6: Courses Taken as Transfer Credit above.

\subsection*{5.5.5.9 Courses Taken under Satisfactory/Unsatisfactory Option}

Required or complementary courses, including subject area courses for B.Ed. students, cannot be taken under this option. Please consult University Regulations and Resources \(>\) Undergraduate \(>\) Registration \(>\) section 1.3.2.5: Courses Taken under the Satisfactory/Unsatisfactory (S/U) Option.

\subsection*{5.5.5.10 Course Equivalencies and Overlap}

Students will not receive additional credit toward their degree for any course that is considered equivalent or that overlaps in content with a course for which they have already received credit at McGill, or any other institution. It is the student's responsibility to be aware of exclusion clauses specified in the course description in this publication and Minerva. Students should also refer to the following website for specific information about Advanced Standing credits and McGill course exemptions: mcgill.ca/students/courses/plan/transfer, as well as the following website for Faculty-specific information: mcgill.ca/isa.

\subsection*{5.5.5.11 Dress Regulations}

All students enrolled in teacher certification programs are advised that school boards and individual schools may have regulations concerning acceptable attire. Students must adhere to any such regulations.

Students in Kinesiology and Physical Education programs are required to wear appropriate clothing for activity courses as approved by the instructor(s). Students may also be responsible for providing some items of personal equipment.

\subsection*{5.5.6 Registration}

All students register by Minerva, McGill's web-based registration system. For detailed information about registration, refer to University Regulations and Resources > Undergraduate > section 1.3: Registration; Next Steps at mcgill.ca/accepted; the Internships and Student Affairs website, mcgill.ca/isa; and to the Student Records website, mcgill.ca/student-records.
Students who fall into Unsatisfactory Standing at the end of the academic year will have their registration cancelled and may not re-register in the Faculty. Students who can provide proof of extenuating circumstances may appeal to the Director of Internships and Student Affairs for readmission. Please refer to University Regulations and Resources > Undergraduate > section 1.3.10: Readmission and to mcgill.ca/isa for Faculty-specific information.

Students who have an outstanding fee balance from a previous term or outstanding fines will not be permitted to register. Students with financial problems should consult the Student Aid Office, Brown Student Services Building.
Students who decide not to return to McGill must withdraw from all of their courses on Minerva or inform the Internships and Student Affairs Office in writing. For further information, refer to University Regulations and Resources > Undergraduate > section 1.3.3.1: Course Withdrawal and section 1.3.8: University Withdrawal.

\subsection*{5.5.6.1 Course Registration}

Students in Faculty of Education programs should register for the courses as outlined in the individual program overviews and advising material available on the Internships and Student Affairs Office website at mcgill.ca/isa for new and current students. For more information on registration, see University Regulations and Resources \(>\) Undergraduate \(>\) section 1.3: Registration.
Students in the B.Ed. programs who are required to be registered for Field Experience should consult section 5.6: Student Teaching/Field Experience for more information.
Some courses may require special permission. Students should consult the eCalendar and/or the Class Schedule on Minerva well in advance of the Course Change period to determine if permission is required of the instructor, the department, or the Faculty for any course they wish to take.
A number of courses have prerequisites that must be completed prior to course registration. Permission to waive a prerequisite requirement must be given in writing by an academic advisor.

\subsection*{5.5.6.2 Withdrawals}

There are three course withdrawal periods, published on the University website, mcgill.calimportantdates, and in University Regulations and Resources > Undergraduate > section 1.3.3.1: Course Withdrawal. Students may, under exceptional circumstances, be granted permission to withdraw after the published deadlines. Such students should contact the Internships and Student Affairs Office for further information.

Students withdrawing from a Field Experience should refer to section 5.6: Student Teaching/Field Experience.

\subsection*{5.5.7 Attendance}

The class attendance necessary to satisfy course requirements varies from course to course. All students are expected to apprise themselves of and meet course-specific requirements.
Attendance is particularly critical in B.Ed. programs, as these are designed to develop required professional competencies, which prepare students for the demands of the teaching profession. Students must therefore inform themselves of, and adhere to, the attendance requirements for all Education courses. Special attention should be paid to the requirements of intensive courses and professional seminars scheduled around Field Experiences. Unexcused absences may result in exclusion from a course, course failure, and/or removal from any associated Field Experience.
For Field Experiences, punctual attendance is required throughout. Absences are only excused in exceptional circumstances. Please refer to section 5.6: Student Teaching/Field Experience.
Students in B.Ed. programs should be aware that some Field Experiences may begin in August, some are held in the Spring, and some may overlap with the official exam period. In addition, some professional seminars follow unique schedules. It is the student's responsibility to consult the Class Schedule on Minerva. In the case of a conflict with a final exam, students will be excused from the Field Experience or professional seminar on the exam date.

Note: For the most up-to-date and accurate information about placements and attendance, please consult the Student Teaching e-Handbook.

\subsection*{5.5.8 Grading}

During the first week of lectures, each instructor will provide students with a course outline that should include a description of the means of evaluation to be used in the course.
For further information on Grading, see University Regulations and Resources > Undergraduate \(>\) Student Records \(>\) section 1.5.3: Grading and Grade Point Averages (GPA).

\subsection*{5.5.9 Incomplete Grades}

An instructor who believes that there is justification for a student to delay submitting term work may extend the deadline until after the end of the course. In this case, the instructor will submit a grade of K (Incomplete), indicating the date by which the work is to be completed.

The maximum extensions for the submission of grades to the Internships and Student Affairs Office are as follows:
- April 30 for Fall term courses;
- July \(\mathbf{3 0}\) for Winter term courses;
- November 30 for Summer courses.

It is important to note that instructors may impose earlier deadlines than those listed. Please refer to University Regulations and Resources \(>\) Undergraduate \(>\) Student Records > section 1.5.5: Incomplete Courses for more information.

\subsection*{5.5.10 Examinations}

Students should see University Regulations and Resources > Undergraduate> section 1.6: Examinations: General Information for more information about final examinations and deferred examinations. The exam schedules are posted at mcgill.ca/exams, normally one month after the start of classes for the Tentative Exam Schedule, and two months after the start of classes for the Final Examination Schedule.

Students are warned not to make travel arrangements to leave Montreal prior to the scheduled end of any examination period.

\subsection*{5.5.10.1 Supplemental Examinations}

Students who wish to write a supplemental examination for a course in which a supplemental examination is available must apply on Minerva within the published deadline. Please refer to mcgill.ca/exams for important information.
Students must be in Satisfactory or Probationary Standing and have received a final grade of D, J, F, or U in the course.

\subsection*{5.5.10.2 Reassessment and Rereads}

In accordance with the Charter of Student Rights, and subject to the conditions stated therein, students have the right to consult any written submission for which they have received a grade and the right to discuss this submission with the examiner (see University Regulations and Resources > Undergraduate \(>\) Examinations: General Information > Final Examinations > section 1.6.3.3: Final Examinations: Reassessments and Rereads).

The Faculty recognizes two types of reassessments or rereads:
1. Reassessment of coursework (term papers, mid-terms, assignments, quizzes, etc.)
2. Reread of a final exam

\subsection*{5.5.10.3 Reassessment of Course Work}

Reassessment of course work is administered by the course instructor or the offering department. Requests, made by students, must be made within 10 working days of the date of return of the graded materials. The reviewer will assess the fairness of the original grade rather than re-grade the assignment as they would have graded it. Reassessments should normally be completed within 20 working days of the request. Grades may be lowered or raised, or they may remain the same, as a result of the reassessment. The grade obtained on the reassessment takes precedence over the original grade.

\subsection*{5.5.10.4 Rereads of Final Exams or Final Term Papers or Projects}

These rereads are administered by the Internships and Student Affairs Office, but conducted by the units involved. Students must apply in writing to the Internships and Student Affairs Office by:
- March \(\mathbf{3 1}\) for courses in the Fall term
- June 30 for courses in the Winter term
- September 30 for courses in the Summer term

These deadlines are strictly enforced and no requests will be accepted past them. Students are assessed a fee for such rereads; for fee amount and details, please refer to the Student Accounts website. It is strongly recommended, but not required, that students consult with the instructor of the course before requesting an official reread. The reviewer will assess the fairness of the original grade rather than re-grade the assignment as they would have graded it. Grades may be lowered or raised, or they may remain the same, as a result of the reread. The grade obtained on the reread takes precedence over the original grade.
Reassessments and rereads in courses not in the Faculty of Education are subject to the deadlines, rules, and regulations of the particular faculty.

\subsection*{5.5.11 Academic Standing}

Academic Standing is based primarily on students' cumulative grade point average (CGPA), but may also be affected by their term grade point average (TGPA). For students in the B.Ed. programs, it is also based on their performance in the Field Experience courses. Academic Standing, which is assessed after the end of term, determines if students will be allowed to continue their studies in the next term and if any conditions will be attached to their registration.
Decisions about Academic Standing in the Fall term are based only on grades that are available in January. Grades for courses in which students have deferred examinations and Fall term grades for courses that span the Fall and Winter terms do not affect Academic Standing for the Fall term, even though they will ultimately affect students' Fall TGPA. Therefore, Academic Standing for the Fall term is designated as "Interim" and should be interpreted as advisory. Interim Standing decisions are mentioned below only if the rules for them differ from those for regular Standing decisions. Students who do not receive a Pass grade (F grade) for a Fall term EDFE (Field Experience course) are placed in Unsatisfactory Standing (not Interim Unsatisfactory Standing). Permission may be exceptionally granted by the ISA Director to allow them to continue taking courses during the Winter term only.

\subsection*{5.5.11.1 Satisfactory/Interim Satisfactory Standing}

Students in Interim Satisfactory or Satisfactory Standing:
- may continue in their program;
- have a CGPA of 2.00 or greater.

\subsection*{5.5.11.2 Interim Probationary/Probationary Standing}

\subsection*{5.5.11.2.1 Interim Probationary Standing at the End of the Fall Term}

Students in Interim Probationary Standing at the end of the Fall term:
- may continue in their program;
- should evaluate their course load and reduce it;
- should consult with their program advisor before the withdrawal deadlines; and
- are permitted to proceed with the next scheduled Field Experience course, i.e., Winter or Spring, for First- or Second-Year Field Experiences only.

\subsection*{5.5.11.2.2 Probationary Standing at the End of the Winter Term}

Students in Probationary Standing at the end of the Winter term:
- may continue in their program;
- must carry a reduced load (maximum of 12 credits per term);
- are not permitted to take student teaching/Field Experience courses of any level during the next academic year;
- must raise their TGPA and CGPA to return to Satisfactory; and
- should see their departmental advisor to discuss their course selection.

\subsection*{5.5.11.2.3 Placement in Probationary Standing}
- if their CGPA falls between 1.50 and 1.99 , and if they were previously in Satisfactory Standing;
- if they receive a grade of D for a Field Experience course of any level and were previously in Satisfactory Standing;
- if their CGPA falls between 1.50 and 1.99 and their TGPA in Fall or Winter is 2.50 or higher, and if they were previously in Probationary or Interim Unsatisfactory Standing; and
- if their CGPA is between 1.50 and 1.99 and their TGPA is 2.50 or higher, they were previously in Unsatisfactory Readmitted Standing, and have satisfied the relevant conditions specified in their letter of readmission.

\subsection*{5.5.11.3 Interim Unsatisfactory/Unsatisfactory Standing 5.5.11.3.1 Interim Unsatisfactory Standing at the End of the Fall Term}

Students in Interim Unsatisfactory Standing at the end of the Fall term:
- may continue in their program;
- should evaluate their course load and reduce it as appropriate;
- should consult a departmental advisor, before the withdrawal deadlines, about their course selection for the Winter term;
- will not be permitted to proceed with the next normally scheduled Field Experience (B.Ed. students);
- will not be permitted to proceed with any planned internship (B.A.(Education) Students).

\subsection*{5.5.11.3.2 Unsatisfactory Standing at the End of the Winter Term}

Students in Unsatisfactory Standing at the end of the Winter term:
- have failed to meet the minimum standards set by the Faculty;
- may not continue in their program;
- may not be permitted to proceed with any planned internship of field experience.

\subsection*{5.5.11.3.3 Placement in Unsatisfactory Standing (Winter or Summer Term) or Interim Unsatisfactory Standing (Fall Term)}

Students will be placed in Unsatisfactory Standing (Winter or Summer term) or Interim Unsatisfactory Standing (Fall term*):
- if their CGPA falls or remains below 1.50 ;
- if their TGPA falls below 2.50 and their CGPA is below 2.00 and they were previously in Probationary, Unsatisfactory Readmitted, or Interim Unsatisfactory Standing;
- if they receive a failure (F, J, KF, WF) in a student teaching/Field Experience course of any level (*in this case, students will be placed in Unsatisfactory Standing, regardless of the term);
- if they were previously in Unsatisfactory Standing and were readmitted to the Faculty by the Director, Internships and Student Affairs or the Student Affairs Committee and have not at least satisfied the conditions to attain Probationary Standing that were specified in the letter of readmission.

Note: Students in the Concurrent B.Mus. and B.Ed. program who receive an F or J in any Education Field Experience course are placed in Unsatisfactory Standing. Although they may complete their term, they are required to withdraw from the Concurrent program. They may, however, contact the Schulich School of Music regarding application to a Bachelor of Music degree.

\subsection*{5.5.11.3.4 Readmission}

Students should apply on Minerva by July 1 for readmission to the Fall term or by November 15 for the Winter term. Appeals for readmission by students in Unsatisfactory Standing should be addressed to the Director, Internships and Student Affairs. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (e.g., medical or other documentation). Additional conditions may apply.
Students in Unsatisfactory Standing for the second time must withdraw permanently. Students who were placed in Unsatisfactory Standing due to a failure in student teaching/Field Experience cannot apply for readmission for at least one full year and are advised to apply for Fall readmission by April 15. Appeals for readmission due to failure in a field experience are heard by the Faculty of Education Student Affairs Committee. Please refer to the Internships and Student Affairs Office website for further information: mcgill.ca/isa.

\subsection*{5.5.11.3.5 Readmitted Unsatisfactory Standing}

Students who were previously in Unsatisfactory Standing and who were readmitted to the Faculty by the Director, Internships and Student Affairs or the Student Affairs Committee will have their Standing changed to Readmitted Unsatisfactory Standing. Their course load is specified at the time of readmission, as are the conditions they must meet to be allowed to continue in their program. They should see their departmental advisor to discuss their course selection.

\subsection*{5.5.11.3.6 Incomplete Standings}
- Must clear Ks, Ls, or Supplementals
- To Be Determined
- Incomplete

Students with Incomplete Standings in the Winter or Summer term may register for the Fall term, but their Standing must be resolved by the end of the Course Change period for that term. Students whose Incomplete Standing changes to Satisfactory, Probationary, or Interim Unsatisfactory Standing may continue in the program. Students whose Standing changes to Unsatisfactory may not continue in their program.

Students whose Standing changes to Unsatisfactory and who wish to ask for permission to continue in their program must make a request to the Director, Internships and Student Affairs as soon as they are placed in Unsatisfactory Standing. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (e.g., medical or other documentation). Additional conditions may apply.

Students whose Standing is still Incomplete by the end of the Course Change period should immediately consult with the Internships and Student Affairs Office.

\subsection*{5.5.12 Graduation Requirements}

To be eligible for a B.Ed., the B.A.(Education), or the B.Sc.(Kinesiology) degree, students must fulfil all Faculty and program requirements. This includes completing the minimum credit requirements for the degree as stipulated in the letter of acceptance; obtaining a grade of C or better in all required and complementary courses; and achieving a minimum cumulative grade point average (CGPA) of 2.00 . Students must satisfactorily complete a minimum of 60 credits at McGill University toward the fulfilment of the degree requirements. In addition, students must complete specific components of their program at McGill.

Students enrolled in Kinesiology and Physical Education programs are required, before the end of their final year of study, to show proof of certification in Standard Level Safety Oriented First Aid, and Level C in Cardiopulmonary Resuscitation, or equivalencies.

Students must complete their degree requirements within five (5) years after their initial registration for the B.Ed. degree and within four (4) years after their initial registration for the B.A.(Education) and B.Sc.(Kinesiology) degree. Students who enter into a Freshman/Foundation Year become subject to these regulations one year after their initial registration. Students in the part-time B.Ed. for Certified Teachers program are allowed a maximum of 12 years to complete the requirements for the degree.

It is the student's responsibility to ensure that all Faculty requirements are met before graduation.

Early in their graduating year, all students should check with their advisor to make sure that they will meet all program requirements in time for graduation. It is essential that students in their final year indicate the expected date of graduation by applying for graduation on Minerva; see University Regulations and Resources > Undergraduate > section 1.9: Graduation for more information. During the graduation approval process, students can query their graduation record on Minerva to verify that the Faculty has approved their graduation. When a final-year student changes the expected date of graduation, the student must notify the Internships and Student Affairs Office immediately. It is also the student's responsibility to complete the required forms for teacher certification, and to check that their graduation has been approved. Further information is available on the Internships and Student Affairs Office website: mcgill.ca/isa.

Students are not permitted to take courses outside McGill University during the last term prior to graduation. Students who fail to graduate as expected and who do not re-register must apply to the Director of Internships and Student Affairs to graduate. Application to graduate must be made sufficiently in advance of the expected graduation date to allow the Faculty to verify the student's record.
Information pertaining to the convocation ceremonies can be obtained on the McGill website: mcgill.ca/graduation/convocation.

\subsection*{5.5.13 Undergraduate Program Awards}

\subsection*{5.5.13.1 Dean's Honour List Designation for Graduating Students}

The designation Dean's Honour List may be awarded to graduating students under the following conditions:
- Students must be among the top \(10 \%\) of the Faculty's graduating students.
- Students must have completed a minimum of 60 McGill credits to be considered.
- The designation is based on the cumulative academic record (CGPA).

\subsection*{5.5.13.2 Dean's Honour List Designation for In-Course Students}

The designation Dean's Honour List may be awarded to in-course students under the following conditions:
- Students must be among the top \(10 \%\) of the Faculty's students.
- Students must have completed at least 27 graded credits during the academic year.
- The designation is based on the sessional (Fall and Winter) GPA.

\subsection*{5.5.13.3 Scholarships and Awards}

Various scholarships and awards are open to both graduating and in-course students. For more information, consult the Scholarships and Student Aid website at mcgill.ca/studentaid/scholarships-aid.

\subsection*{5.6 Student Teaching/Field Experience}

The Internships and Student Affairs Office (ISA), mcgill.ca/isa, is responsible for arranging the placement and evaluation of all student teachers in supervised Field Experiences.

\subsection*{5.6.1 About Field Experiences}

Field experiences:
- are required courses (with the subject code EDFE) for all students in B.Ed. programs from first through fourth year;
- are the sole responsibility of the Faculty of Education and are organized by the Internships and Student Affairs Office. Under no circumstances should students seek, solicit, or make their own placement arrangements;
- must be taken in the required sequence;
- require that newly admitted and returning students follow registration procedures (see Faculty of Education > Undergraduate \(>\) Faculty Regulations for Undergraduate Programs > section 5.5.6: Registration) or risk not being placed in a host school in a given term;
- are completed in schools within English school boards or private schools in the province of Quebec in the majority of cases, with the exception of the B.Ed. TESL program, in which students are placed in Francophone school boards or private schools in the province of Quebec;
- can be specialized in some circumstances; refer to the ISA website for information regarding such opportunities (distance, special needs, resource room, adult education, etc.);
- require that students travel to their host school. Students should therefore budget time and money for this purpose;
- may begin before the first day of lectures or end after the last day of lectures;
- may continue during regularly scheduled University breaks; and
- may continue through May into the Summer term (refer to the ISA website or Minerva for exact dates).

\subsection*{5.6.2 Registration for the Student Teaching/Field Experience}

\subsection*{5.6.2.1 Newly Admitted Students}

Newly admitted students:
- must register for the appropriate Field Experience course by the date set forth by the Internships \& Student Affairs Office; this date will be communicated to students at their @mail.mcgill.ca email address;
- who are registered for a Field Experience course will receive instructions for accessing the online Student Teaching Placement Form at their @ mail.mcgill.ca email address. Forms must be submitted by the date indicated.

\subsection*{5.6.2.2 Returning Students}

\section*{Returning students:}
- must register for the appropriate Field Experience course by the date set forth by the Internships \& Student Affairs Office; this date will be communicated to students at their @mail.mcgill.ca email address;
- who are registered for a Field Experience course will receive instructions for accessing the online Student Teaching Placement Form at their @ mail.mcgill.ca email address. Forms must be submitted by the date indicated;
- must be in Satisfactory Standing and have satisfied all prerequisite and corequisite course requirements (refer to mcgill.ca/isa/teaching). B.Ed. Secondary program students must have successfully completed 24 credits in their official subject area prior to Field Experience 3. All B.Ed. students must successfully pass the English Exam for Teacher Certification (EETC; EDEC 215) prior to Field Experience 3. Minerva does not necessarily prevent students from registering for courses that they should not take. It is the student's responsibility to be aware of prerequisites, corequisites, restrictions, and Faculty regulations that apply to the courses in which they register. Students should consult an academic advisor for assistance. Students missing any of these requirements will be removed from their field placement (see section 5.6.4.1: Early Dismissal from Field Experience.).
- in B.Ed. K/Elementary, Secondary, and TESL programs who wish to transfer within these programs will not be required to repeat Field Experience 1.

\subsection*{5.6.3 Student Responsibilities}

Students are responsible for familiarizing themselves with the policies and rules governing all aspects of Field Experience, including pedagogical and professional behaviour, available at mcgill.ca/isa/teaching/ehandbook/policy.

Students are advised not to engage in any type of employment during Field Experience nor register for any non-corequisite course(s) that might conflict with times when students should be in the field, and therefore will interfere with the successful outcome of a Field Experience.

\subsection*{5.6.3.1 Guidelines (Syllabus)}

Detailed guidelines and evaluation forms for every Field Experience are posted on the ISA website, arranged by program and year. Students are responsible for familiarizing themselves with the objectives, evaluation criteria, and forms for each level of Field Experience.

\subsection*{5.6.3.2 Attendance and Absences}

Punctual attendance is required at the assigned school for the entire Field Experience. Alternate dates cannot be arranged at the request of the student. Unexcused absences from intensive courses and professional seminars may result in exclusion from the course, course failure, and/or removal from any associated Field Experience.

Days absent due to illness or McGill exams must be made up at the end of the Field Experience. Absences due to illness extending beyond two days require a valid medical note (see mcgill.ca/wellness-hub/get-support/physical-health-support/medical-notes) to be submitted to the ISA, and, depending on the circumstances, the outcome of the Field Experience will be evaluated on an individual basis. Student teachers must contact the following people as soon as possible on the morning of the day of their absence:
- Cooperating Teacher
- ISA Placement Coordinators (Email: placements.education@mcgill.ca)
- Field Supervisor

Student teachers are permitted to be absent for religious holy days, as outlined in McGill's Policy for the Accommodation of Religious Holy Days; see mcgill.ca/importantdates/holy-days-0. Students must notify the ISA, Cooperating Teacher, and Field Supervisor before the Field Experience begins if possible, or at least two weeks before the planned absence. The missed days must be made up, usually at the end of the Field Experience.
Absences related to McGill Intercollegiate Sport events are evaluated by the ISA Director on a case-by-case basis. Student teachers must submit a signed copy of the Intercollegiate Sport Event Accommodation form to the ISA at least two weeks in advance of the scheduled event/absence. This form can be obtained from McGill Athletics \& Recreation.

Requests to be absent from the placement for any other reasons are exceptionally permitted by the ISA Director on a case-by-case basis. Any request for absence must be sent to your Placement Coordinator a minimum of 2 weeks before the proposed absence. Students should consult an academic advisor if they need to rearrange their course schedule.

\subsection*{5.6.3.3 Judicial Record Verification}

See Faculty of Education > Undergraduate > Faculty Regulations for Undergraduate Programs > section 5.5.4: Judicial Record Verification for Students in the Bachelor of Education Programs for information on the requirement to obtain this security clearance. Additional information can be found on the \(I S A\) website.

\subsection*{5.6.3.4 Work Permit for International Students}

In order to be in compliance with government regulations, international students (students who are not Permanent Residents or citizens of Canada) should apply for an internship/co-op work permit issued by Citizenship and Immigration Canada (CIC) to complete their mandatory Field Experiences. This is not the same as an off-campus paid work permit, and it is not automatically included in the study permit. The internship/co-op work permit is free of charge, but takes time to obtain and requires a medical exam by a designated CIC physician; medical exam fees vary. For assistance with the application process, students should contact International Student Services: mcgill.ca/internationalstudents.

\subsection*{5.6.4 Grading and Credit}

Field Experiences are graded "Pass/Fail" (P, F) and final grades are based on field evaluation forms from both the Field Supervisor and Cooperating Teacher.
Where a student is experiencing serious difficulties in a Field Experience but has demonstrated some potential to successfully reach the required standard, the student may be granted a grade of D. In this case, the ISA Director has the authority to grant permission for the student to repeat the Field Experience during the next term in which it is regularly offered. This permission will be granted once only in a student's program.
Given the emphasis of the corequisite course(s) on supporting the fieldwork component and vice versa, students who receive a grade of D in a Field Experience may be required to withdraw from the corequisite course(s) depending on the date of early dismissal and percentage of corequisite course(s) completed. A decision in this regard will be reached by the ISA Director in consultation with the Undergraduate Program Director. In the event that a student must withdraw from the corequisite course(s), the student will register for and repeat the course(s) along with the Field Experience when it is next regularly offered.
Students must receive a grade of P in order to proceed in the B.Ed. program. Failure (F, J, KF, WF) in any Field Experience places a student in Unsatisfactory Standing (regardless of the term), requiring withdrawal from the B.Ed. program.
A student may appeal any outcome of a Field Experience by making a formal application to the Faculty of Education Student Affairs Committee. Please refer to mcgill.ca/isa/teaching/ehandbook/policy/grade-appeal for more details.

\subsection*{5.6.4.1 Early Dismissal from Field Experience}

At any time, students may be removed from their Field Experience at the request of the host School Administrator and/or Cooperating Teacher, or at the request of the ISA Director. Students who are removed from a Field Experience will be informed of the reason for the dismissal and will have the opportunity to meet with the ISA Director after receiving the outcome letter.

Circumstances that could lead to early dismissal include, but are not limited to:
- Prerequisite courses not successfully completed;
- Exceeding the number of permissible unexcused absences for corequisite courses (consult the syllabus for each course);
- Failure to pass a judicial record check, if required by the school/board where the student is placed;
- Unprofessional behaviour; behaviour that contravenes the McGill Principles of Practice, Behaviour and Ethical Conduct for Teacher Candidates;
- Failure to demonstrate Professional Competencies as expected and/or make the improvements outlined on a Competency Improvement Plan (CIP) by the date indicated.

The final outcome for early dismissal from a Field Experience will be decided by the ISA Director.
Possible outcomes are:
- Reassignment during the same term, subject to availability of placements and at the discretion of the ISA Director;
- W - Withdrawal;
- D - Student will be permitted to register for the Field Experience again when next offered;
- F, J, KF, WF - Failure in any Field Experience places the student into Unsatisfactory Standing, requiring withdrawal from the B.Ed. program.

If a student cannot continue the Field Experience due to illness, see section 5.6.4.2: Withdrawal from Field Experience.
If a student wishes to end their Field Experience prematurely, the ISA Director will evaluate the circumstances and determine an outcome. Possible outcomes are the same as those listed above.

\subsection*{5.6.4.2 Withdrawal from Field Experience}
- Withdrawal (with refund) for any reason must be done at least two weeks before the start of the Field Experience. The student is responsible for notifying the ISA in writing by this deadline and deregistering for the Field Experience course in Minerva.
- Students having to withdraw for any reason, including illness, from a Field Experience that begins in less than two weeks or that is already underway must immediately inform the ISA. Based on the circumstances of the withdrawal request, the ISA Director will determine the final outcome of the Field Experience and eligibility for refund.

\subsection*{5.6.4.3 Transfer Credit}

Field Experience courses from other institutions are not eligible for transfer credit to McGill. Students must complete all Field Experiences at McGill, as required by their program.

For general information about transfer credits at McGill, see mcgill.ca/transfercredit, as well as Faculty-specific information at mcgill.ca/isa/student/new.

\subsection*{5.6.5 McGill Principles of Practice, Behaviour, and Ethical Conduct for Teacher Candidates}

\subsection*{5.6.5.1 Section I. Introduction}
- The mission of McGill University's Bachelor of Education Program within the Department of Integrated Studies in Education (DISE) and the Department of Kinesiology and Physical Education (KPE) as well as the Master of Teaching and Learning (MATL) Program within DISE in cooperation with the Faculty of Education's Internship and Student Affairs Office (ISA) is to prepare teachers who are knowledgeable, skillful, flexible, creative, and compassionate members of the profession guided by a sense of social and ethical responsibility in relation to their students and the wider society.

In keeping with the professional culture of teaching and learning, McGill's teacher education community believes that teaching and learning spaces should model such professional environments. McGill's teacher education community is committed to creating authentic opportunities where an understanding of teaching and learning is co-constructed between instructors and teacher candidates, teachers and learners, as well as peer-to-peer and beyond. In order for us to create these learning environments, we are expected to demonstrate awareness of, respect for, and commitment to, the behaviours and actions of professionals. We expect members of McGill's teacher education community, including teacher candidates, teaching assistants, lecturers, professors and community partners to be accountable to themselves and others, and to be engaged, collegial, and accessible. By doing so, McGill's teacher education community is more fully able to share together in the types of critical dialogue, creative thinking, and reflective practice expected of professionals.
McGill's teacher education community is committed to nurturing a space where teacher candidates, teaching assistants, lecturers, professors, and community partners can all engage in the exchange of ideas and dialogue, without fear of being made to feel unwelcome or unsafe on account of biological sex, sexual orientation, gender identity or expression, race/ethnicity, religion, linguistic and cultural background, age, physical or mental ability, or any other aspect integral to one's personhood. We therefore recognize that it is our individual and collective responsibility to strive to establish and maintain an environment wherein all interactions are based on empathy and mutual respect for the person, acknowledging differences of perspectives, free from judgment, censure, and/or stigma.
Finally, McGill's teacher education community is charged with ensuring that all graduates of its programs have the requisite knowledge, skills, and attitudes required of the teaching profession and can meet standards of the Québec Professional Teacher Competencies to be eligible for professional certification as educators in the Province of Québec.
- The complete McGill Principles of Practice, Behaviour and Ethical Conduct for Teacher Candidates document can be found on this link mcgill.ca/isa/student/principles.

\subsection*{5.7 Browse Academic Units and Programs}

The programs and courses in the following sections have been approved for the current academic year as listed.

\subsection*{5.7.1 Educational and Counselling Psychology}

\subsection*{5.7.1.1 Location}

\section*{Educational and Counselling Psychology, Faculty of Education}

3700 McTavish Street, Room 614
Montreal QC H3A 1Y2
Telephone: 514-398-4242
Fax: 514-398-6968
Email for general inquiries: ecpinfo.education@mcgill.ca
Email for admissions inquiries: admissions.ecp@mcgill.ca
Website: mcgill.caledu-ecp

\subsection*{5.7.1.2 About the Department of Educational and Counselling Psychology}

Educational Psychology encompasses:
a. the theoretical and applied study of learning, cognition, and instruction in a variety of educational settings across ages and domains;
b. instructional technology and computers as cognitive tools in learning;
c. cognitive and social processes in learning;
d. evaluation and enhancement of learning and teaching;
e. methods for fostering inclusive education;
f. relationships of phenomena related to teaching, learning, and assessment in human development; and
g. the impact of family and community on children's learning and development.

At the undergraduate level, the Department of Educational and Counselling Psychology is responsible for the B.A. Minor Concentration Educational Psychology; see the Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.11: Educational Psychology for more information and for a variety of undergraduate courses in the areas of learning, cognition and development, inclusive education, gifted education, educational media and computers, and educational measurement and evaluation.
In professional development, the Department offers diploma or certificate programs in Human Relationships, Diversity \& Sexuality, Inclusive Education, and Counselling Applied to Teaching. For more information, please consult our website at mcgill.ca/edu-ecp/programs/prodev, or contact the Department:

Telephone: 514-398-4242
Email: ecpcont.education@mcgill.ca
Special services offered by the Department include the Psychoeducational \& Counselling Clinic (mcgill.ca/edu-ecp/about/clinic).

\section*{Graduate and Postdoctoral Studies}

At the graduate level, the Department of Educational and Counselling Psychology offers Master of Arts degrees (M.A.) in:
- Counselling Psychology - with concentrations in Project (Research-based) or in Professional/Internship (Practitioner-based) **Applications to the Professional/Internship concentration are currently suspended.**
- Educational Psychology - with concentrations in Health Professions Education, Human Development, and Learning Sciences
- School/Applied Child Psychology - Project (Research-based)

\section*{Also offered are Master of Education degrees (M.Ed.) in:}
- Educational Psychology - with concentrations in General Educational Psychology, Inclusive Education, and Learning Sciences.

Students can also obtain Doctoral degrees (Ph.D.) in:
- Counselling Psychology
- School/Applied Child Psychology
- Educational Psychology - with concentrations in Human Development or Learning Sciences

The Department also offers a Postdoctoral Graduate Diploma in School/Applied Child Psychology (**Admission to this program is temporarily suspended.**). For further information, consult the Faculty of Education's Graduate and Postdoctoral Studies section.

\subsection*{5.7.2 Integrated Studies in Education}

\subsection*{5.7.2.1 Location}

Integrated Studies in Education, Department of (DISE)
Education Building, Faculty of Education
3700 McTavish Street, Room 244
Montreal QC H3A 1Y2
Telephone: 514-398-2941
Email: info.dise@mcgill.ca
Website: mcgill.ca/dise

\subsection*{5.7.2.2 About the Department of Integrated Studies in Education}

The Department of Integrated Studies in Education, created in September 2001, incorporates the programs and staff previously associated with the Departments of Culture and Values in Education, Educational Studies, Second Language Education, and First Nations and Inuit Education.
The Department offers four-year programs for CEGEP graduates and five-year programs for out-of-province students leading to a B.Ed. degree, and offers a three-year program for CEGEP graduates and four-year program for out-of-province students leading to a B.A.(Education) degree.
For overview of undergraduate bachelor of education programs, see mcgill.ca/dise/undergrad. For overview of undergraduate bachelor of education programs leading to teacher certification, see mcgill.ca/dise/teachercert.

\subsection*{5.7.2.3 Overview of Programs (Integrated Studies in Education)}

The following is an overview of programs offered by the Department of Integrated Studies in Education.

\subsection*{5.7.2.3.1 Bachelor of Education: Secondary Program ( 120 credits)}

The aim of the B.Ed. Secondary program is to prepare strong teachers for the secondary school level. This integrated 120-credit program (150 credits for out-of-province students) consists of academic studies to provide background depth in subjects taught in the secondary school, and professional studies in pedagogy, curriculum, and educational foundations organized around school-based field experiences. Students choose their teaching profiles from: English, Mathematics, Science and Technology, and Social Sciences (History and Citizenship, and one of Geography or Ethics and Religious Culture). Students applying to the B.Ed. Secondary in the areas of Mathematics or Science and Technology should refer to mcgill.ca/applying/requirements for specific admission requirements.

For more information on each profile, see:
- section 5.7.2.4: Bachelor of Education (B.Ed.) - Secondary English (120 credits)
- section 5.7.2.5: Bachelor of Education (B.Ed.) - Secondary Mathematics ( 120 credits)
- section 5.7.2.6: Bachelor of Education (B.Ed.) - Secondary Science and Technology ( 120 credits)
- section 5.7.2.7: Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture (120 credits)
- section 5.7.2.8: Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Geography (120 credits)

\subsection*{5.7.2.3.2 Concurrent Bachelor of Music (Music Education)/Bachelor of Education in Music program (137 credits)}

This program provides students with the opportunity to obtain a Bachelor of Music degree and a Bachelor of Education degree concurrently. The two degrees are awarded during the same convocation period. This integrated program consists of studies in music to develop musicianship and professional studies in pedagogy, curriculum, and educational foundations organized around school-based field experiences in elementary and secondary music classrooms. Students who have completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies are normally enrolled in a program requiring the completion of 137 credits.
For more information, see:
- section 5.7.2.10: Concurrent Bachelor of Music (B.Mus.) - Major Music Education and Bachelor of Education (B.Ed.) - Music Elementary and Secondary (170 credits)

Applicants without a completed Bachelor of Music degree who wish to pursue a teacher education degree specializing in Music should apply to the Concurrent Bachelor of Music (Music Education)/Bachelor of Education in Music program. Students who have partially completed a Bachelor of Music program are eligible to apply for Advanced Standing in the Concurrent program.

Application to the Concurrent B.Mus./B.Ed. program may be made online at mcgill.ca/applying, where you can also obtain more information, alternatively please contact:

Admissions Office
Schulich School of Music, McGill University
555 Sherbrooke Street West
Montreal QC H3A 1E3
Telephone: 514-398-4546
Email: undergraduateadmissions.music@mcgill.ca
Website: mcgill.ca/music/admissions/undergraduate
Applicants who have completed a Bachelor of Music degree from a North American university should apply to the Bachelor of Education in Music program in the Faculty of Education and, if eligible, will receive Advanced Standing for applicable courses. Application to the Bachelor of Education in Music may be made online at mcgill.ca/applying, where you can also obtain more information, alternatively please contact:
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Service Point
Enrolment Services, McGill University
3415 McTavish Street
Montreal QC H3A 0C8
Telephone: 514-398-7878
Website: mcgill.ca/servicepoint

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Program details are available from:
Department of Integrated Studies in Education
Telephone: 514-398-2941
Email: info.dise@mcgill.ca
Website: mcgill.ca/dise

\subsection*{5.7.2.3.3 Bachelor of Education (Kindergarten and Elementary) (120 credits)}

The aim of the B.Ed. Kindergarten and Elementary program is to prepare strong teachers for the elementary school level. This integrated \(120-\mathrm{credit}\) program ( 150 credits for out-of-province students) consists of academic studies to provide a generalist background in elementary school subjects and professional studies in pedagogy, curriculum, and educational foundations organized around school-based field experiences.

Options within the B.Ed. (Kindergarten and Elementary) program are:
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First Nations and Inuit Studies (offered through community partners)
Jewish Studies
Pédagogie de l'immersion française

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For more information on each profile, see:
- section 5.7.2.11: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education (120 credits)
- section 5.7.2.12: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies (120 credits)
- section 5.7.2.13: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Jewish Studies (120 credits); (Please contact Prof. Eric Caplan for more information. Email: eric.caplan@mcgill.ca. Telephone: 514-398-6544.)
- section 5.7.2.14: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Pédagogie de l'Immersion Française (120 credits)

\subsection*{5.7.2.3.4 Bachelor of Education in Teaching English as a Second Language ( 120 credits)}

This program prepares specialist teachers to teach English as a second language (ESL) at both the elementary level (including regular and intensive ESL) and the secondary level (including regular ESL and enriched ESL). This integrated 120-credit program ( 150 credits for out-of-province students) consists of academic and professional components. The academic components provide students with opportunities to develop a broad liberal education and to study language and language learning from linguistic, social, cultural, and psychological perspectives. The professional components revolve around school-based field experiences, which are supported by studies in pedagogy, curriculum, and educational foundations.

Prior to admission, applicants to the B.Ed. TESL program must also pass the English Language Proficiency Test (ELPT). Eligible applicants will receive email notification from the Admissions Office regarding registration for the ELPT. Please contact info.dise @mcgill.ca for further information.

An option within the B.Ed. in Teaching English as a Second Language program is:
- Teaching Greek Language \& Culture

For more information, see:
- section 5.7.2.15: Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary (120 credits)
- section 5.7.2.16: Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary:Teaching Greek Language \& Culture (120 credits)

\subsection*{5.7.2.3.5 In-Community Programs}

The Department of Integrated Studies in Education offers a number of in-community programs through the Office of First Nations and Inuit Education: a B.Ed. K/Elem First Nations and Inuit Studies; a Certificate in Education for First Nations and Inuit; a Certificate in Indigenous Language and Literacy Education; a Certificate in Middle School Education in Indigenous Communities; a Certificate in First Nations and Inuit Educational Leadership; a Certificate in First Nations and Inuit Student Personnel Services; and a Bachelor of Education for Certified Teachers.

For more information, see:
- section 5.7.2.12: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies (120 credits)
- section 5.7.3.2: Certificate (Cert.) Education for First Nations and Inuit (60 credits)
- section 5.7.3.6: Certificate (Cert.) Indigenous Language and Literacy Education (30 credits)
- section 5.7.3.4: Certificate (Cert.) Middle School Education in Indigenous Communities (30 credits)
- section 5.7.3.5: Certificate (Cert.) First Nations and Inuit Educational Leadership (30 credits)
- section 5.7.3.3: Certificate (Cert.) First Nations and Inuit Student Personnel Services (30 credits)
- section 5.7.3.1: Bachelor of Education for Certified Teachers - Elementary Education: Indigenous Education (90 credits)

\subsection*{5.7.2.3.5.1 Graduate Programs}

At the graduate level, the Department offers M.A. programs with thesis and non-thesis options in the following areas: Education and Society, Educational Leadership, and Second Language Education.

The Department offers a Master of Arts in Teaching and Learning (MATL), leading to teacher certification at the secondary level for those meeting specific criteria. See mcgill.ca/dise/grad.
The Department also offers graduate certificates in Leadership, Teaching English as a Second Language and Pédagogie de l'Immersion Française. See mcgill.ca/dise/grad.

\subsection*{5.7.2.4 Bachelor of Education (B.Ed.) - Secondary English (120 credits)}

The Bachelor of Education (B.Ed.) - Secondary English program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credits for the program) for a total of 150 credits.

The aim of the B.Ed. Secondary Education Program is to prepare strong beginning teachers for the secondary school level. This integrated program consists of courses in Education (including field experiences) and courses in the subject area of the teaching specialization. Students also take 6 credits of free electives. For all teacher education programs, course sequencing is highly structured. For this reason, the advising information in this eCalendar section must be used in conjunction with the summary companion document (Program Overview) found at http://www.mcgill.ca/dise/progs/secenglish.

The Secondary English program provides students with the learning opportunities needed to become proficient English teachers.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification".

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.
The Freshman year is the time to take introductory-level courses in English, as well as to explore areas that are not normally taken as "teachable" subject areas within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

In addition, in consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. The list includes English literature courses that may be used toward the academic component of the Secondary English course requirements. Also included are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level.
\begin{tabular}{lcl} 
EDEC 203* & (3) & Communication in Education \\
EDEM 220 & (3) & Contemporary Issues in Education \\
ENGL 201 & (3) & Survey of English Literature 2 \\
ENGL 215 & (3) & Introduction to Shakespeare \\
ENGL 226 & (3) & American Literature 2 \\
FRSL 101 & (3) & Beginners French 1 \\
FRSL 102 & (3) & Beginners French 2 \\
FRSL 207D1 & (3) & Elementary French 01 \\
FRSL 207D2 & (3) & Elementary French 01 \\
FRSL 211D1 & (3) & Oral and Written French 1 \\
FRSL 211D2 & (3) & Oral and Written French 1 \\
RELG 207 & (3) & Introduction to the Study of Religions \\
WCOM 250 & (3) & Research Essay and Rhetoric
\end{tabular}
* Note: Students may take either CEAP 250 OR EDEC 203 for credit but not both

\section*{Required Courses ( 60 credits)}
\begin{tabular}{lcl} 
EDEC 201 & \((1)\) & First Year Professional Seminar \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 247 & \((3)\) & Policy Issues in Quebec and Indigenous Education \\
EDEC 254 & \((1)\) & Second Professional Seminar (Secondary) \\
EDEC 260 & \((3)\) & Philosophical Foundations \\
EDEC 262 & \((3)\) & Media, Technology and Education \\
EDEC 351 & (2) & Third Professional Seminar (Secondary) \\
EDEC 404 & (3) & Fourth Year Professional Seminar (Sec) \\
EDES 350 & (3) & Classroom Practices \\
EDES 361 & (3) & Teaching Secondary English 1 \\
EDES 461 & (2) & Teaching Secondary English 2 \\
EDFE 200 & (3) & First Field Experience (K/Elem and Secondary) \\
EDFE 254 & (8) & Second Field Experience (Secondary) \\
EDFE 351 & (7) & Third Field Experience (Secondary) \\
EDFE 451 & (3) & Fourth Field Experience (Secondary) \\
EDPE 300 & (3) & Educational Psychology \\
EDPE 304 & Measurement and Evaluation
\end{tabular}
\begin{tabular}{lll} 
EDPI 309 & (3) & Diverse Learners \\
EDPI 341 & (3) & Instruction in Inclusive Schools
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits selected as described below:

\section*{Equity Education}

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

\section*{Secondary English Subject Area (51 credits)}

\section*{Option 1}

51 credits distributed as follows:

\section*{Required Course (3 credits)}
EDES 366
(3)
Literature for Young Adults

\section*{Complementary Language/Linguistics courses (6 credits)}
\begin{tabular}{lll} 
EDEC 203* & (3) & Communication in Education \\
EDSL 305 & (3) & L2 Learning: Classroom Settings \\
EDSL 350 & (3) & Essentials of English Grammar \\
LING 200 & (3) & Introduction to the Study of Language \\
LING 201 & (3) & Introduction to Linguistics \\
LING 355 & (3) & Language Acquisition 1 \\
WCOM \(250^{*}\) & (3) & Research Essay and Rhetoric
\end{tabular}
* Note: Students may take either WCOM 250 OR EDEC 203 for credit but not both

\section*{Complementary Courses}

42 credits distributed as follows (including at least one course in Shakespeare):

\section*{Literature (30 credits)}

A minimum of 15 credits must be at the 300 level or higher, chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:
\begin{tabular}{lcl} 
ENGL 200 & \((3)\) & Survey of English Literature 1 \\
ENGL 201 & (3) & Survey of English Literature 2 \\
ENGL 215 & (3) & Introduction to Shakespeare \\
ENGL 225 & (3) & American Literature 1 \\
ENGL 226 & (3) & American Literature 2 \\
ENGL 227 & (3) & American Literature 3 \\
ENGL 228 & (3) & Canadian Literature 1 \\
ENGL 229 & (3) & Canadian Literature 2 \\
GERM 259 & (3) & Introduction to German Literature 1
\end{tabular}
\begin{tabular}{lcl} 
GERM 260 & (3) & Introduction to German Literature 2 \\
JWST 206 & (3) & Introduction to Yiddish Literature \\
JWST 225 & (3) & Literature and Society \\
LLCU 220 & (3) & Introduction to Literary Analysis \\
RUSS 218 & (3) & Russian Literature and Revolution \\
RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
RUSS 224 & (3) & Russian 19th Century: Literary Giants 2
\end{tabular}

\section*{Cultural Studies (9 credits)}

A minimum of 3 credits must be at the 300 level or higher chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:
\begin{tabular}{lll} 
ENGL 279 & (3) & Introduction to Film as Art \\
ENGL 280 & (3) & Introduction to Film as Mass Medium \\
LLCU 200 & (3) & Topics in Film \\
LLCU 250 & (3) & History and Future of the Book
\end{tabular}

\section*{Drama/Theatre (3 credits)}

Chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:
ENGL 215
(3) Introduction to Shakespeare
ENGL 230
(3)
Introduction to Theatre Studies

\section*{Option 2 (51 credits)}

51 credits distributed as follows:

\section*{Required Course (3 credits)}
EDES 366
(3)
Literature for Young Adults

\section*{Complementary Language/Linguistics courses. ( 6 credits)}

Select 6 credits from the following course list:
\begin{tabular}{lcl} 
EDEC 203* & (3) & Communication in Education \\
EDSL 305 & (3) & L2 Learning: Classroom Settings \\
EDSL 350 & (3) & Essentials of English Grammar \\
LING 200 & (3) & Introduction to the Study of Language \\
LING 201 & (3) & Introduction to Linguistics \\
LING 355 & (3) & Language Acquisition 1 \\
WCOM 250* & (3) & Research Essay and Rhetoric
\end{tabular}
*Note: Students may take either WCOM 250 OR EDEC 203 for credit but not both

\section*{Complementary Courses}

27 credits, distributed as follows (including at least one course in Shakespeare):

\section*{Literature (18 credits)}

A minimum of 6 credits at the 300 level or higher, chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:
\begin{tabular}{|c|c|c|}
\hline ENGL 200 & (3) & Survey of English Literature 1 \\
\hline ENGL 201 & (3) & Survey of English Literature 2 \\
\hline ENGL 215 & (3) & Introduction to Shakespeare \\
\hline ENGL 225 & (3) & American Literature 1 \\
\hline ENGL 226 & (3) & American Literature 2 \\
\hline ENGL 227 & (3) & American Literature 3 \\
\hline ENGL 228 & (3) & Canadian Literature 1 \\
\hline ENGL 229 & (3) & Canadian Literature 2 \\
\hline GERM 259 & (3) & Introduction to German Literature 1 \\
\hline GERM 260 & (3) & Introduction to German Literature 2 \\
\hline JWST 206 & (3) & Introduction to Yiddish Literature \\
\hline JWST 225 & (3) & Literature and Society \\
\hline LLCU 220 & (3) & Introduction to Literary Analysis \\
\hline RUSS 218 & (3) & Russian Literature and Revolution \\
\hline RUSS 223 & (3) & Russian 19th Century: Literary Giants 1 \\
\hline RUSS 224 & (3) & Russian 19th Century: Literary Giants 2 \\
\hline
\end{tabular}

\section*{Cultural Studies ( 6 credits)}

A minimum of 3 credits at the 300 level or higher from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:
\begin{tabular}{lll} 
ENGL 279 & (3) & Introduction to Film as Art \\
ENGL 280 & (3) & Introduction to Film as Mass Medium \\
LLCU 200 & (3) & Topics in Film \\
LLCU 250 & (3) & History and Future of the Book
\end{tabular}

\section*{Drama/Theatre (3 credits)}

Chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:
ENGL 215
(3)
Introduction to Shakespeare
ENGL 230
(3)
Introduction to Theatre Studies

\section*{Unofficial "Teachable" Subject Area (15 credits)}

15 credits of designated courses for Secondary English Option 2 students (Math, Social Sciences, or Science and Technology - see an adviser for course selection.)

\section*{Elective Courses (6 credits)}

Note: Students who have chosen to do Option 2 ( 36 credits in one teachable subject and 15 credits in another) will use 3 credits of electives to take the Secondary Teaching Methods course needed for their second unofficial teachable subject.

\subsection*{5.7.2.5 Bachelor of Education (B.Ed.) - Secondary Mathematics ( 120 credits)}

The Bachelor of Education (B.Ed.) - Secondary Mathematics program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credits for the program) for a total of 150 credits.
Note: Students entering this program from CEGEP or with Advanced Standing should have a strong background in their Mathematics courses. Students entering from CEGEP or with Advanced Standing without having completed two calculus courses and one linear algebra course (MATH 133, MATH 140, and MATH 141 or their equivalents) will be required to make up any deficiencies in these courses over and above the degree requirements.

The aim of the B.Ed. Secondary Education program is to prepare strong beginning teachers for the secondary school level.

This integrated program consists of courses in Education (including field experiences) and courses in the subject area of the teaching specialization. Students also take 6 credits of free electives. For all teacher education programs, course sequencing is highly structured. For this reason, the advising information in this eCalendar section must be used in conjunction with the summary companion document (Program Overview) found at http://www.mcgill.ca/dise/progs/secmath.

The Secondary Mathematics program provides students with the learning opportunities needed to become proficient Mathematics teachers.
Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs", and "Quebec Teacher Certification".

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.
The Freshman year is the time to take introductory-level courses in Mathematics, as well as to explore areas that are not normally taken as teachable subject areas within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

Students in the Secondary Mathematics program must complete three Math prerequisite courses in their Freshman year, MATH 133, MATH 140, and MATH 141.

In addition, students select courses from the recommended list below or other courses in consultation with the Program Adviser. The French Second Language (FRSL) courses suggested require a placement test to determine the appropriate course level.
\begin{tabular}{lcl} 
EDEM 220 & (3) & Contemporary Issues in Education \\
FRSL 101 & (3) & Beginners French 1 \\
FRSL 102 & (3) & Beginners French 2 \\
FRSL 207D1 & \((3)\) & Elementary French 01 \\
FRSL 207D2 & \((3)\) & Elementary French 01 \\
FRSL 211D1 & \((3)\) & Oral and Written French 1 \\
FRSL 211D2 & (3) & Oral and Written French 1 \\
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
WCOM 250 & (3) & Research Essay and Rhetoric
\end{tabular}

\section*{Required Courses ( 60 credits)}
\begin{tabular}{lcl} 
EDEC 201 & \((1)\) & First Year Professional Seminar \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 247 & \((3)\) & Policy Issues in Quebec and Indigenous Education \\
EDEC 254 & \((1)\) & Second Professional Seminar (Secondary) \\
EDEC 260 & \((3)\) & Philosophical Foundations \\
EDEC 262 & (3) & Media, Technology and Education \\
EDEC 351 & (2) & Third Professional Seminar (Secondary) \\
EDEC 404 & (3) & Fourth Year Professional Seminar (Sec) \\
EDES 350 & (3) & Classroom Practices \\
EDES 353 & (3) & Teaching Secondary Mathematics 1 \\
EDES 453 & (3) & Teaching Secondary Mathematics 2 \\
EDFE 200 & (2) & First Field Experience (K/Elem and Secondary) \\
EDFE 254 & (3) & Second Field Experience (Secondary)
\end{tabular}
\begin{tabular}{lcl} 
EDFE 351 & (8) & Third Field Experience (Secondary) \\
EDFE 451 & \((7)\) & Fourth Field Experience (Secondary) \\
EDPE 300 & \((3)\) & Educational Psychology \\
EDPE 304 & \((3)\) & Measurement and Evaluation \\
EDPI 309 & \((3)\) & Diverse Learners \\
EDPI 341 & \((3)\) & Instruction in Inclusive Schools
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits selected as described below.

\section*{Multicultural Education}

3 credits from:
EDEC 248
(3)
Equity and Education
EDEC 249
(3)
Global Education and Social Justice

\section*{Secondary Mathematics Subject Area (51 credits)}

Secondary Mathematics students complete 51 credits selected in consultation with the Program Adviser in one of two options.
Option 1
21 credits from the list of "Required Mathematics Courses" and
30 credits from the list of "Complementary Mathematics Courses"
Or
Option 2:
21 credits from the list of "Required Mathematics Courses" and
15 credits from the list of "Complementary Mathematics Courses"
And
15 credits of designated courses in another unofficial "teachable" subject area (English, Social Sciences, or Science and Technology - see an adviser for courses).

Required Mathematics Courses (21 credits)
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 228 & (3) & Classical Geometry \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics \\
MATH 338 & (3) & History and Philosophy of Mathematics
\end{tabular}

\section*{Complementary Mathematics Courses}
(30 OR 15 credits)
3 credits from:
\begin{tabular}{lll} 
MATH 235* & (3) & Algebra 1 \\
MATH 242* & (3) & Analysis 1
\end{tabular}

\footnotetext{
* Should be taken in Year 1 or Year 2
}

27 credits from the list below for Secondary Mathematics Option 1 students or
12 credits from the list below for Secondary Mathematics Option 2 students
\begin{tabular}{|c|c|c|}
\hline COMP 202 & (3) & Foundations of Programming \\
\hline COMP 230 & (3) & Logic and Computability \\
\hline EDTL 520 & (3) & Perspectives on Knowledge in Mathematics and Science \\
\hline MATH 235 & (3) & Algebra 1 \\
\hline MATH 236 & (3) & Algebra 2 \\
\hline MATH 242 & (3) & Analysis 1 \\
\hline MATH 243 & (3) & Analysis 2 \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 316 & (3) & Complex Variables \\
\hline MATH 317 & (3) & Numerical Analysis \\
\hline MATH 318** & (3) & Mathematical Logic \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 327 & (3) & Matrix Numerical Analysis \\
\hline MATH 329 & (3) & Theory of Interest \\
\hline MATH 340 & (3) & Discrete Mathematics \\
\hline MATH 346 & (3) & Number Theory \\
\hline MATH 348 & (3) & Euclidean Geometry \\
\hline MATH 417 & (3) & Linear Optimization \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 447 & (3) & Introduction to Stochastic Processes \\
\hline MATH 523 & (4) & Generalized Linear Models \\
\hline MATH 524 & (4) & Nonparametric Statistics \\
\hline MATH 525 & (4) & Sampling Theory and Applications \\
\hline PHIL 210** & (3) & Introduction to Deductive Logic 1 \\
\hline
\end{tabular}

\section*{Unofficial "Teachable" Subject Area}

15 credits
15 credits of designated courses for Secondary Mathematics Option 2 students (English, Social Sciences, or Science and Technology - see an adviser for course selection)

\section*{Electives (6 credits)}

Note: Students who have chosen to do 36 credits in one teachable subject and 15 credits in another will use 3 credits of electives to take the Secondary Teaching Methods course needed for their second unofficial teachable subject.

\subsection*{5.7.2.6 Bachelor of Education (B.Ed.) - Secondary Science and Technology (120 credits)}

The Bachelor of Education (B.Ed.) - Secondary Science and Technology program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credits for the program) for a total of 150 credits.

The aim of the B.Ed. Secondary Education program is to prepare strong beginning teachers for the secondary school level. This integrated program consists of courses in Education (including field experiences) and courses in the subject area of the teaching specialization. Students also take 6 credits of free electives. For all teacher education programs, course sequencing is highly structured. For this reason, the advising information in this eCalendar section must be used in conjunction with the summary companion document (Program Overview) found at http://www.mcgill.ca/dise/progs/secscitech.

The Secondary Science and Technology program provides students with the subject matter expertise in the Living World, Earth and Space, the Material World, and the Technological World needed to teach the secondary science curriculum in Quebec schools.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification."
Note: Students entering this program from CEGEP or with Advanced Standing should have completed two biology courses, two chemistry courses, two math courses and two physics courses at the CEGEP level. Students entering from CEGEP without having completed these prerequisites (or their equivalents) will be required to make up any deficiencies in these courses over and above the degree requirements.

\section*{Freshman Program - Basic Sciences}

Freshmen in the Science and Technology program must complete the 29 to 30 credits of Basic Science courses listed below in their first year of studies.
Fall term: BIOL 111, CHEM 110, MATH 139 or MATH 140 or MATH 150, PHYS 101 or PHYS 131
Winter term: BIOL 112, CHEM 120, MATH 141 or MATH 151, PHYS 102 or PHYS 142
Students should consult a program adviser for guidance on which Fall and Winter term Math and Physics courses should be taken. Course choices depend on a student's background in science and plans for upper-level Physics courses.
\begin{tabular}{lcl} 
BIOL 111 & \((3)\) & Principles: Organismal Biology \\
BIOL 112 & \((3)\) & Cell and Molecular Biology \\
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
MATH 139 & (4) & Calculus 1 with Precalculus \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B \\
PHYS 101 & (4) & Introductory Physics - Mechanics \\
PHYS 102 & (4) & Introductory Physics - Electromagnetism \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

\section*{Freshman Program - Complementary}

For Freshman students with Advanced Standing in one or more of the basic sciences, the Faculty also recommends some of the courses listed below. French Second Language (FRSL) courses require a placement test to determine the course level.
\begin{tabular}{lcl} 
EDEM 220 & \((3)\) & Contemporary Issues in Education \\
FRSL 101 & \((3)\) & Beginners French 1 \\
FRSL 102 & \((3)\) & Beginners French 2 \\
FRSL 207D1 & \((3)\) & Elementary French 01 \\
FRSL 207D2 & \((3)\) & Elementary French 01 \\
FRSL 211D1 & \((3)\) & Oral and Written French 1 \\
FRSL 211D2 & \((3)\) & Oral and Written French 1 \\
WCOM 250 & \((3)\) & Research Essay and Rhetoric
\end{tabular}

\section*{Required Courses (60 credits)}
\begin{tabular}{lll} 
EDEC 201 & \((1)\) & First Year Professional Seminar \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 247 & \((3)\) & Policy Issues in Quebec and Indigenous Education
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EDEC 254 & (1) & Second Professional Seminar (Secondary) \\
\hline EDEC 260 & (3) & Philosophical Foundations \\
\hline EDEC 262 & (3) & Media, Technology and Education \\
\hline EDEC 351 & (2) & Third Professional Seminar (Secondary) \\
\hline EDEC 404 & (3) & Fourth Year Professional Seminar (Sec) \\
\hline EDES 335 & (3) & Teaching Secondary Science 1 \\
\hline EDES 350 & (3) & Classroom Practices \\
\hline EDES 435 & (3) & Teaching Secondary Science 2 \\
\hline EDFE 200 & (2) & First Field Experience (K/Elem and Secondary) \\
\hline EDFE 254 & (3) & Second Field Experience (Secondary) \\
\hline EDFE 351 & (8) & Third Field Experience (Secondary) \\
\hline EDFE 451 & (7) & Fourth Field Experience (Secondary) \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline EDPE 304 & (3) & Measurement and Evaluation \\
\hline EDPI 309 & (3) & Diverse Learners \\
\hline EDPI 341 & (3) & Instruction in Inclusive Schools \\
\hline
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits selected as described below:

\section*{Equity Education}

3 credits from:
EDEC 248
(3)
Equity and Education
EDEC 249
Global Education and Social Justice

\section*{Secondary Science and Technology (51 credits)}

51 credits in designated science courses selected to provide subject matter expertise in the four areas of: the Material World
- Earth and Space
- the Living World
- the Technological World

All students need to plan their course selections with attention to the prerequisites.

\section*{Required Courses ( 15 credits)}

3 credits of Statistics:
MATH 203
(3)
Principles of Statistics 1

3 credits of History of Science:
EDTL 520
(3)

Perspectives on Knowledge in Mathematics and Science

3 credits of the Material World:
CHEM 281
(3)
Inorganic Chemistry 1

\section*{3 credits of the Living World:}
BIOL 206
(3)
Methods in Biology

3 credits of the Technological World:
EDTL 525
(3)
Teaching Science and Technology

\section*{Core Complementary Courses (10 credits)}

The Living World
3 credits from:
\begin{tabular}{lll} 
BIOL 200 & (3) & Molecular Biology \\
LSCI 202 & (3) & Molecular Cell Biology
\end{tabular}

The Material World
3 credits from:
\begin{tabular}{lll} 
CHEM 203 & (3) & Survey of Physical Chemistry \\
CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics
\end{tabular}

4 credits from:
\begin{tabular}{lll} 
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
CHEM 232 & (4) & Organic Chemistry Principles
\end{tabular}

\section*{Complementary Courses (26 credits)}

At least 9 of the 26 credits must be taken at the 300 level or above, distributed as follows:
- 3 to 15 credits from the Living World complementary list;
- 3 to 18 credits from Earth and Space complementary list;
- 3 to 18 credits from Earth and Space - Environment complementary list;
- 0 to 15 credits from the Material World complementary list;
- 3 to 12 credits from the Technological World complementary list.

\section*{Living World}

Students select a minimum of 3 credits to a maximum of 15 credits from the following lists:
Cell and Molecular Biology
\begin{tabular}{lll} 
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics \\
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 313 & (3) & Eukaryotic Cell Biology
\end{tabular}

Human and Organismal Biology
BIOL 205
(3)
Functional Biology of Plants and Animals
\begin{tabular}{lll} 
EDKP 292 & \((3)\) & Nutrition and Wellness \\
EDKP 395 & (3) & Exercise Physiology \\
NUTR 207 & (3) & Nutrition and Health \\
NUTR 307 & (3) & Metabolism and Human Nutrition \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & \((3)\) & Mammalian Physiology 2
\end{tabular}

Populations, Ecosystems, and Evolution
\begin{tabular}{lcl} 
BIOL 215 & \((3)\) & Introduction to Ecology and Evolution \\
BIOL 240 & (3) & Monteregian Flora \\
BIOL 304 & (3) & Evolution \\
BIOL 305 & (3) & Animal Diversity \\
BIOL 308 & (3) & Ecological Dynamics \\
BIOL 310 & (3) & Biodiversity and Ecosystems \\
BIOL 331 & (3) & Ecology/Behaviour Field Course \\
BIOL 352 & (3) & Dinosaur Biology \\
ENVB 305 & (3) & Population and Community Ecology \\
EPSC 334 & (3) & Invertebrate Paleontology
\end{tabular}

\section*{Earth and Space}

Students select a minimum of 3 credits to a maximum of 18 credits from the following list:
\begin{tabular}{lll} 
ATOC 214 & \((3)\) & Introduction: Physics of the Atmosphere \\
ATOC 215 & \((3)\) & Oceans, Weather and Climate \\
ATOC 219 & \((3)\) & Introduction to Atmospheric Chemistry \\
ATOC 309 & \((3)\) & Weather Radars and Satellites \\
ATOC 315 & \((3)\) & Thermodynamics and Convection \\
ENVR 202 & \((3)\) & The Evolving Earth \\
EPSC 201 & \((3)\) & Understanding Planet Earth \\
EPSC 210 & \((3)\) & Introductory Mineralogy \\
EPSC 212 & \((3)\) & Introductory Petrology \\
EPSC 220 & \((3)\) & Principles of Geochemistry \\
EPSC 221 & \((1)\) & General Geology \\
EPSC 225 & \((3)\) & Properties of Minerals \\
EPSC 233 & \((3)\) & Earth and Life History \\
EPSC 303 & \((3)\) & Structural Geology \\
EPSC 320 & \((3)\) & Elementary Earth Physics \\
EPSC 350 & \((3)\) & Tectonics \\
ESYS 200 & \((3)\) & Earth System Processes \\
ESYS 300 & (3) & Investigating the Earth System \\
ESYS 301 & (3) & Earth System Modelling \\
GEOG 272 & Earth's Changing Surface \\
GEOG 321 & Climatic Environments \\
\hline
\end{tabular}
(3)

Introductory Astrophysics

\section*{Earth and Space - Environment}

Students select a minimum of 3 credits to a maximum of 18 credits from the following list:
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 221 & (3) & Environment and Health
\end{tabular}

The Material World
Students select a maximum of 15 credits from the following list:
Note: Students who plan to teach Grade 11 Chemistry or Physics should select the maximum 15 credits from this list:
\begin{tabular}{|c|c|c|}
\hline CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 267 & (3) & Introductory Chemical Analysis \\
\hline CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 381 & (3) & Inorganic Chemistry 2 \\
\hline CHEM 392 & (3) & Experimental Chemistry 1 \\
\hline CHEM 429 & (3) & Chemistry of Energy, Storage and Utilization. \\
\hline MATH 222 & (3) & Calculus 3 \\
\hline PHYS 224 & (3) & Physics of Music \\
\hline PHYS 230 & (3) & Dynamics of Simple Systems \\
\hline PHYS 232 & (3) & Heat and Waves \\
\hline PHYS 241 & (3) & Signal Processing \\
\hline PHYS 242 & (2) & Electricity and Magnetism \\
\hline PHYS 257 & (3) & Experimental Methods 1 \\
\hline PHYS 258 & (3) & Experimental Methods 2 \\
\hline PHYS 271 & (3) & Introduction to Quantum Physics \\
\hline PHYS 328 & (3) & Electronics \\
\hline PHYS 331 & (3) & Topics in Classical Mechanics \\
\hline PHYS 333 & (3) & Thermal and Statistical Physics \\
\hline PHYS 339 & (3) & Measurements Laboratory in General Physics \\
\hline PHYS 340 & (3) & Majors Electricity and Magnetism \\
\hline PHYS 342 & (3) & Majors Electromagnetic Waves \\
\hline PHYS 346 & (3) & Majors Quantum Physics \\
\hline PHYS 432 & (3) & Physics of Fluids \\
\hline PHYS 434 & (3) & Optics \\
\hline PHYS 447 & (3) & Applications of Quantum Mechanics \\
\hline
\end{tabular}

\section*{The Technological World}

Students select a minimum of 3 credits to a maximum of 12 credits from the following list:
\begin{tabular}{lcl} 
COMP 102* & (3) & Computers and Computing \\
COMP 202** & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 280* & (3) & History and Philosophy of Computing \\
COMP 364 & (3) & Computer Tools for Life Sciences \\
MATH 204 & (3) & Principles of Statistics 2 \\
* Note: Students may take either COMP 102 or COMP 280, but not both. \\
** Note: Credit will not be given for COMP 102 if it is taken concurrently with or after COMP 202.
\end{tabular}

\section*{Elective Courses (6 credits)}

\subsection*{5.7.2.7 Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture (120 credits)}

The Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credits for the program) for a total of 150 credits.

The aim of the B.Ed. Secondary Education Program is to prepare strong beginning teachers for the secondary school level. This integrated program consists of courses in Education (including field experiences) and courses in the subject area of the teaching specialization. Students also take 6 credits of free electives. For all teacher education programs, course sequencing is highly structured. For this reason, the advising information in this eCalendar section must be used in conjunction with the summary companion document (Program Overview) found at http://www.mcgill.ca/dise/progs/secsocsci.

The Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture program provides students with the learning opportunities needed to become proficient Social Science teachers with a strong knowledge base in the associated disciplinary areas.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification."

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.
The Freshman year is the time to take introductory-level courses in a teachable subject area, as well as to explore areas that are not normally taken within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

In addition, in consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. The list includes History, Geography, and Religious Studies courses that may be used toward the academic component of the Secondary Social Sciences course requirements. Also included are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level.
\begin{tabular}{lcl} 
EDEM 220 & \((3)\) & Contemporary Issues in Education \\
FRSL 101 & \((3)\) & Beginners French 1 \\
FRSL 102 & \((3)\) & Beginners French 2 \\
FRSL 207D1 & \((3)\) & Elementary French 01 \\
FRSL 207D2 & \((3)\) & Elementary French 01 \\
FRSL 211D1 & \((3)\) & Oral and Written French 1 \\
FRSL 211D2 & \((3)\) & Oral and Written French 1 \\
GEOG 200 & \((3)\) & Geographical Perspectives: World Environmental Problems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 210 & (3) & Global Places and Peoples \\
HIST 202 & (3) & Survey: Canada to 1867 \\
HIST 203 & (3) & Survey: Canada since 1867
\end{tabular}
\begin{tabular}{lcl} 
HIST 214 & \((3)\) & Early Modern Europe \\
HIST 215 & (3) & Modern Europe \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 252 & (3) & Hinduism and Buddhism \\
WCOM 250 & (3) & Research Essay and Rhetoric
\end{tabular}

\section*{Required Courses ( 60 credits)}
\begin{tabular}{lll} 
EDEC 201 & \((1)\) & First Year Professional Seminar \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 247 & \((3)\) & Policy Issues in Quebec and Indigenous Education \\
EDEC 254 & \((1)\) & Second Professional Seminar (Secondary) \\
EDEC 260 & \((3)\) & Philosophical Foundations \\
EDEC 262 & (3) & Media, Technology and Education \\
EDEC 351 & (2) & Third Professional Seminar (Secondary) \\
EDEC 404 & (3) & Fourth Year Professional Seminar (Sec) \\
EDER 372 & (3) & Culture and Citizenship in Quebec Context (Secondary) \\
EDES 334 & (3) & Teaching Secondary Social Studies 1 \\
EDES 350 & (2) & Classroom Practices \\
EDFE 200 & (3) & First Field Experience (K/Elem and Secondary) \\
EDFE 254 & (8) & Second Field Experience (Secondary) \\
EDFE 351 & (7) & Third Field Experience (Secondary) \\
EDFE 451 & (3) & Fourth Field Experience (Secondary) \\
EDPE 300 & (3) & Educational Psychology \\
EDPE 304 & (3) & Measurement and Evaluation \\
EDPI 309 & (3) & Instruction in Inclusive Schools \\
EDPI 341 & (3) &
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits selected as described below.

\section*{Equity Education}

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

\section*{Secondary Social Sciences - History \& Citizenship, Ethics \& Religious Culture Subject Area ( 51 credits)}

Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture students complete 51 credits selected in consultation with the Program Adviser with the following specifications:

\section*{Required Courses}

History

9 credits:
\begin{tabular}{lll} 
HIST 202 & (3) & Survey: Canada to 1867 \\
HIST 203 & (3) & Survey: Canada since 1867 \\
HIST 303 & (3) & History of Quebec
\end{tabular}

\section*{Complementary Courses (42 credits)}

History and Citizenship ( 24 credits)
At least 9 of the 24 credits must be taken at the 300 or 400 level, distributed as follows:
3-9 credits in European History
3-9 credits in Asian, African, American, Latin American, or Ancient History
6 credits of history courses on social history, gender history, identity, culture, religion and values, political life and institutions, conflict, wealth and poverty, science, and health.
(Students may consult the course lists for History programs offered by the Faculty of Arts for guidance on course choices.)
\(6-12\) credits selected from the following list. Students must select a minimum of 3 credits ECON and a minimum of 3 credits POLI:
\begin{tabular}{|c|c|c|}
\hline ANTH 338 & (3) & Indigenous Studies of Anthropology \\
\hline CANS 200 & (3) & Understanding Canada \\
\hline ECON 205 & (3) & An Introduction to Political Economy \\
\hline ECON 208 & (3) & Microeconomic Analysis and Applications \\
\hline ECON 209 & (3) & Macroeconomic Analysis and Applications \\
\hline ECON 219 & (3) & Current Economic Problems: Topics \\
\hline ECON 221 & (3) & Economic History \\
\hline ECON 313 & (3) & Economic Development 1 \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 221 & (3) & Government of Canada \\
\hline POLI 222 & (3) & Political Process and Behaviour in Canada \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 354 & (3) & Approaches to International Political Economy \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline
\end{tabular}

\section*{Ethics and Religious Culture}

18 credits as specified below.

6 credits from:
\begin{tabular}{lll} 
EDER 309 & (3) & The Search for World Views \\
RELG 203 & (3) & Bible and Western Culture \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 252 & (3) & Hinduism and Buddhism \\
RELG 309 & (3) & World Religions and Cultures They Create
\end{tabular}

6 credits from:
\begin{tabular}{lcl} 
EDER 395 & \((3)\) & Moral Values and Human Action \\
EDER 461 & \((3)\) & Society and Change \\
EDER 473 & \((3)\) & Living with Insight \\
EDER 494 & \((3)\) & Human Rights and Ethics in Practice \\
PHIL 230 & \((3)\) & Introduction to Moral Philosophy 1 \\
PHIL 237 & \((3)\) & Contemporary Moral Issues
\end{tabular}

6 credits from:
\begin{tabular}{lll} 
CATH 200 & (3) & Introduction to Catholicism \\
EDER 252 & (3) & Understanding and Teaching Jewish Life \\
EDER 319 & (3) & Teaching the Holocaust \\
RELG 270 & (3) & Religious Ethics and the Environment
\end{tabular}

\section*{Electives (6 credits)}

\section*{6 credits}

\subsection*{5.7.2.8 Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Geography (120 credits)}

Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Geography program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credits for the program) for a total of 150 credits.

The aim of the B.Ed. Secondary Education Program is to prepare strong beginning teachers for the secondary school level. This integrated program consists of courses in Education (including field experiences) and courses in the subject area of the teaching specialization. Students also take 6 credits of free electives. For all teacher education programs, course sequencing is highly structured. For this reason, the advising information in this eCalendar section must be used in conjunction with the summary companion document (Program Overview) found at http://www.mcgill.ca/dise/progs/secsocsci.
The Secondary Social Sciences - History and Citizenship, Geography program provides students with the learning opportunities needed to become proficient Social Science teachers with a strong knowledge base in History and Geography.
Please note that graduates of teacher education programs are recommended by the University for Quebec certification to the Ministry (Education). For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification."

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.

The Freshman year is the time to take introductory-level courses in a teachable subject area, as well as to explore areas that are not normally taken within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

In addition, in consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. The list includes History, Geography, and Religious Studies courses that may be used toward the academic component of the Secondary Social Sciences course requirements. Also included are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level.
\begin{tabular}{lll} 
EDEM 220 & \((3)\) & Contemporary Issues in Education \\
FRSL 101 & (3) & Beginners French 1 \\
FRSL 102 & (3) & Beginners French 2 \\
FRSL 207D1 & \((3)\) & Elementary French 01 \\
FRSL 207D2 & \((3)\) & Elementary French 01 \\
FRSL 211D1 & (3) & Oral and Written French 1 \\
FRSL 211D2 & (3) & Oral and Written French 1 \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 210 & (3) & Global Places and Peoples \\
HIST 202 & (3) & Survey: Canada since 1867 \\
HIST 203 & (3) & Early Modern Europe \\
HIST 214 & (3) & Modern Europe \\
HIST 215 & (3) & Judaism, Christianity and Islam \\
RELG 204 & (3) & Introduction to the Study of Religions \\
RELG 207 & (3) & Hinduism and Buddhism \\
RELG 252 & (3) & Research Essay and Rhetoric \\
WCOM 250 & &
\end{tabular}

\section*{Required Courses ( 60 credits)}
\begin{tabular}{lcl} 
EDEC 201 & \((1)\) & First Year Professional Seminar \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 247 & \((3)\) & Policy Issues in Quebec and Indigenous Education \\
EDEC 254 & \((1)\) & Second Professional Seminar (Secondary) \\
EDEC 260 & \((3)\) & Philosophical Foundations \\
EDEC 262 & (3) & Media, Technology and Education \\
EDEC 351 & (2) & Third Professional Seminar (Secondary) \\
EDEC 404 & (3) & Fourth Year Professional Seminar (Sec) \\
EDES 334 & (3) & Teaching Secondary Social Studies 1 \\
EDES 350 & (3) & Classroom Practices \\
EDES 434 & (2) & Teaching Secondary Social Studies 2 \\
EDFE 200 & (3) & First Field Experience (K/Elem and Secondary) \\
EDFE 254 & (8) & Second Field Experience (Secondary) \\
EDFE 351 & (7) & Third Field Experience (Secondary) \\
EDFE 451 & (3) & Fourth Field Experience (Secondary) \\
EDPE 300 & (3) & Educational Psychology \\
EDPE 304 & Measurement and Evaluation \\
\hline
\end{tabular}
EDPI 309
(3)
EDPI 341
Diverse Learners
Instruction in Inclusive Schools

\section*{Complementary Courses (3 credits)}

3 credits selected as described below:

\section*{Equity Education}

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

\section*{Secondary Social Sciences - History and Citizenship, Geography Subject Area (51 credits)}

Secondary Social Sciences - History and Citizenship, Geography students complete 51 credits selected in consultation with the Program Adviser with the following specifications:

\section*{Required Courses}

\section*{History}

9 credits selected from:
\begin{tabular}{lll} 
HIST 202 & (3) & Survey: Canada to 1867 \\
HIST 203 & (3) & Survey: Canada since 1867 \\
HIST 303 & (3) & History of Quebec
\end{tabular}

\section*{Complementary Courses (42 credits)}

History and Citizenship ( 24 credits)
At least 9 of the 24 credits must be taken at the 300 or 400 level, distributed as follows:
3-9 credits in European History
3-9 credits in Asian, African, American, Latin American, or Ancient History
6 credits of history courses on social history, gender history, identity, culture, religion and values, political life and institutions, conflict, wealth and poverty, science, and health
(Students may consult the course lists for History programs offered by the Faculty of Arts for guidance on course choices.)
6-12 credits selected from the following list (students must select a minimum of 3 credits ECON and a minimum of 3 credits POLI):
\begin{tabular}{|c|c|c|}
\hline ANTH 338 & (3) & Indigenous Studies of Anthropology \\
\hline CANS 200 & (3) & Understanding Canada \\
\hline ECON 205 & (3) & An Introduction to Political Economy \\
\hline ECON 208 & (3) & Microeconomic Analysis and Applications \\
\hline ECON 209 & (3) & Macroeconomic Analysis and Applications \\
\hline ECON 219 & (3) & Current Economic Problems: Topics \\
\hline ECON 221 & (3) & Economic History \\
\hline ECON 313 & (3) & Economic Development 1 \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 221 & (3) & Government of Canada \\
\hline POLI 222 & (3) & Political Process and Behaviour in Canada \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 243 & (3) & International Politics of Economic Relations \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 341 & (3) & Foreign Policy: The Middle East \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 354 & (3) & Approaches to International Political Economy \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 362 & (3) & Political Theory and International Relations \\
\hline POLI 423 & (3) & Politics of Ethno-Nationalism \\
\hline POLI 435 & (3) & Identity and Inequality \\
\hline POLI 442 & (3) & International Relations of Ethnic Conflict \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline
\end{tabular}

\section*{Geography}

18 credits from:
\begin{tabular}{lll} 
ENVR 202 & \((3)\) & The Evolving Earth \\
GEOG 200 & \((3)\) & Geographical Perspectives: World Environmental Problems \\
GEOG 205 & \((3)\) & Global Change: Past, Present and Future \\
GEOG 210 & \((3)\) & Global Places and Peoples \\
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 217 & \((3)\) & Cities in the Modern World \\
GEOG 272 & \((3)\) & Earth's Changing Surface \\
GEOG 301 & \((3)\) & Geography of Nunavut \\
GEOG 311 & \((3)\) & Economic Geography \\
GEOG 331 & \((3)\) & Urban Social Geography
\end{tabular}

Note: In consultation with the Program Adviser, students may choose their Geography courses from those that comprise the B.A. Minor Concentration Geography program.

\section*{Electives ( 6 credits)}

\subsection*{5.7.2.9 Bachelor of Arts(Education) - Major Education in Global Contexts (90 credits)}

The B.A.(Education): Major Education in Global Contexts is intended to equip students with a strong grounding in educational theory, issues and challenges, with an emphasis on building in-depth understandings on key issues facing education in diverse global contexts. A foundational program, it provides a variety of pathways for future study or employment for our students in a range of government, educational, industry and community organizations. Students complete a 54 credit major in Education in Global Contexts addressing the core of the program, with the addition of an 18 credit minor in a complementary discipline (choice of three approved minors), and complete the degree with 18 credits of electives. The program includes an internship and opportunities for applied research. This program is a general degree mirroring the "Liberal Arts" degree, but specifically in the area of Education.
NOTE: This program does not lead to Teacher Certification for formal elementary/secondary classroom teaching in the Province of Quebec.

\section*{Freshman Program}

Students whose highest level of education is high school (normally out of province) are admitted into Year 0 (U0) to complete the Freshman Program. Freshman students are required to complete 30 credits of introductory ( 100 - or 200-level) courses of the students' choice (in addition to the 90 -credit program), verified by an adviser*, for a total of 120 credits. Students will not be granted permission to take first-year (U1) courses if the credits from the Freshman year have not been obtained. In consultation with the Program Adviser, students may select courses from the recommended course list below or other courses.

There are no required courses in the Freshman Program, though the department recommends that students use the opportunity to take 100- or 200- level courses in the subject areas that interest them or are relevant to their chosen concentration. As well, the Freshman year offers students the opportunity to explore areas that are not typically taken as a course of study in the program.
The department recommends the following courses:
Courses in the Faculty of Education:
\begin{tabular}{lll} 
EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
EDPE 208 & (3) & Personality and Social Development \\
EDPT 204 & (3) & Creating and Using Media for Learning
\end{tabular}

Courses from the French Language Centre:
(Placement tests may be required)
\begin{tabular}{lcl} 
FRSL 101 & (3) & Beginners French 1 \\
FRSL 102 & (3) & Beginners French 2 \\
FRSL 207D1 & \((3)\) & Elementary French 01 \\
FRSL 207D2 & \((3)\) & Elementary French 01 \\
FRSL 211D1 & \((3)\) & Oral and Written French 1 \\
FRSL 211D2 & \((3)\) & Oral and Written French 1
\end{tabular}

\section*{Courses Across McGill Faculties:}
\begin{tabular}{lll} 
INDG 200 & (3) & Introduction to Indigenous Studies \\
INTD 200 & (3) & Introduction to International Development \\
RELG 207 & (3) & Introduction to the Study of Religions \\
SOCI 210 & (3) & Sociological Perspectives \\
WCOM 250 & (3) & Research Essay and Rhetoric
\end{tabular}

For examples of courses suitable for Freshman Year 0 students, see the Faculty of Education approved freshman courses (https://www.mcgill.ca/dise/freshmancourses).

If you are admitted into McGill with advanced standing (International Baccalaureate, Advanced Placement, etc.), those credits may be used to fulfill some or all of your Freshman requirements.
* Freshman Advising:

All Freshman students must have their Fall and Winter course selections verified prior to the start of classes. This can be done by email or by attending the group advising session in late August. To verify your course selection by email, send a message to edgc.advise@ mcgill.ca with the subject "B.A.(Education) Freshman Course Selection" including your student ID number and Adviser name.

\section*{Required Courses (42 credits)}
\begin{tabular}{lcl} 
EDEC 202 & \((3)\) & Effective Communication \\
EDEC 221 & \((3)\) & Leadership and Group Skills \\
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 249 & \((3)\) & Global Education and Social Justice \\
EDEC 260 & \((3)\) & Philosophical Foundations \\
EDEM 220 & \((3)\) & Contemporary Issues in Education \\
EDER 461 & \((3)\) & Society and Change \\
EDGC 201 & \((3)\) & Media, Learning, and Digital Youth Cultures \\
EDGC 299 & \((3)\) & Research Methods \\
EDGC 301 & \((3)\) & Program Design and Evaluation
\end{tabular}
\begin{tabular}{lll} 
EDGC 398 & \((0)\) & Internship: Education in Global Contexts \\
EDGC 399 & \((3)\) & Internship Capstone \\
EDGC 400 & \((3)\) & 21 st Century Learning \\
EDGC 499 & \((3)\) & Critical Research Inquiry \\
EDPE 300 & \((3)\) & Educational Psychology
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 0}\) credits)}

12 credits from the following; no more than 9 credits from one specific list. Other courses on these topics from the Faculty of Education or other Faculties may be selected subject to approval of program adviser.

Leadership and Social Change
\begin{tabular}{lcl} 
EDGC 300* & (3) & Special Topics \\
EDGC 312 & \((3)\) & Understanding Teacher Leadership \\
EDGC 313 & \((3)\) & Cultivating Process of Social Transformation \\
EDGC 411 & \((3)\) & Affect, Education, and Social Change \\
EDGC 412 & \((3)\) & Historical Knowledge: Tool for Agents of Change
\end{tabular}
* when topic is relevant to this list.

Ethics, Wellbeing, and Diverse Knowledge Approaches
\begin{tabular}{lcl} 
EDER 494 & (3) & Human Rights and Ethics in Practice \\
EDGC 222 & (3) & Integrating Arts into STEM \\
EDGC \(300^{*}\) & (3) & Special Topics \\
EDGC 324 & (3) & Physical Health and Wellbeing in Education \\
EDGC 423 & (3) & Human Knowledge Claims and Education \\
EDSL 390 & (3) & Teaching English as a Second Language in the Community
\end{tabular}
* when topic is relevant to this list.

Critical Issues in Education
\begin{tabular}{lcl} 
EDGC 200 & (3) & Knowledge through the Arts \\
EDGC 233 & (3) & Learning in Out-of-School Contexts \\
EDGC \(300^{*}\) & (3) & Special Topics \\
EDGC 335 & (3) & Eco-Justice and Sustainability in Education \\
EDGC 336 & (3) & Race, Class, and Power in Education in Global Contexts \\
EDGC 337 & (3) & Gendered Identities, Social Learning \\
EDPI 341 & (3) & Instruction in Inclusive Schools \\
EDSL 500 & (3) & Foundations and Issues in Second Language Education
\end{tabular}
* when topic is relevant to this list.

Children and Youth
\begin{tabular}{lll} 
EDGC 244 & \((3)\) & Investigating Children's Reasoning \\
EDGC \(300^{*}\) & \((3)\) & Special Topics \\
EDGC 348 & \((3)\) & Global Perspectives of Early Childhood Education
\end{tabular}
* when topic is relevant to this list.

One of the following approved minors:
B.Com.; Minor in Management for Non-Management Students
B.A.; Minor Concentration in International Development Studies
B.A.; Minor Concentration in Educational Psychology

Subject to approval of program adviser, students in a minor offered by the Faculty of Education (i.e., Educational Psychology) may be granted permission to complete a second minor from the above list in order to fulfill the requirement of 18 credits of elective courses.

\section*{Elective Courses (18 credits)}

18 credits of electives selected from Faculty of Education offerings. Exceptionally, students may be permitted to take courses elsewhere in the University with permission of the program adviser.

\subsection*{5.7.2.10 Concurrent Bachelor of Music (B.Mus.) - Major Music Education and Bachelor of Education (B.Ed.) - Music Elementary and Secondary (170 credits)}

The Concurrent B.Mus./B.Ed. combines the Bachelor of Music (Major Music Education) with the Bachelor of Education (Music Elementary and Secondary).
Requirements are normally completed in five years and lead to certification as a school teacher in the Province of Quebec. Out-of-province students (or those without Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the Concurrent program) are required to complete 170 credits, normally in six years.
Applicants who already hold a Bachelor of Music degree from a North American university should apply directly to the Bachelor of Education in Music Elementary and Secondary (B.Ed. Music) program offered by the Faculty of Education https://www.mcgill.ca/dise/progs/music.
Notes:
1. Students majoring in Music Education in the jazz stream may take Jazz Arranging 1 (MUJZ 260) with the permission of the instructor, per available space in the course, and if they have the prerequisite, MUJZ 161. Alternatively, they may be asked to register for a different jazz stream course upon the recommendation of the Jazz Area Chair and/or the Music Education Area Chair.
2. In addition to meeting prerequisites/co-requisites for MUCO 230 or MUCO 261, students must obtain the relevant instructor's permission, per available space in the course, prior to registration. MUCO 260 is waived as a prerequisite for MUCO 230.

The B.Mus. Major Music Education program in the Schulich School of Music focuses on the development of prospective music educators as musicians. This is achieved both through core music history, theory, musicianship, and performance courses, as well as through different instrumental, vocal, and conducting techniques courses. Laboratory experiences provide an opportunity to develop facility with basic music rehearsing/teaching techniques, with emphasis on the ability to diagnose and correct technical and musical problems. The B.Ed. Music Elementary and Secondary program in the Faculty of Education focuses on the development of the musicians as educators. This is achieved through courses in educational foundations, music pedagogy, pedagogical support, and a practicum component comprised of four field experiences and supporting professional seminars.
The components of the 137-credit Concurrent Bachelor of Music - Major Music Education and Bachelor of Education - Music Elementary and Secondary (excluding the 33 -credit Freshman Program) are as follows:
58 credits in Education
71 credits in Music
8 free elective credits

\section*{Program Prerequisites - Freshman Program}

33 credits

\section*{Prerequisite Courses}

33 credits distributed as follows:
4 credits ( 2 credits per term) Basic Ensemble Training
6 credits of Non-Music Electives
and 23 credits in the following course list:
Students who can demonstrate through auditions and placement tests that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses. First-year students enrolled in the Bachelor of Music program who have completed the Quebec Diploma of Collegial Studies (Diplôme d'études collégiales) in a Music concentration or equivalent, or students transferring from other universities or colleges, who have successfully completed a course in the history of Western music, will be exempted from the first-year Western Musical Traditions requirement (MUHL 186).
\begin{tabular}{lcl} 
MUHL 186 & (3) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUPD 235 & (1) & Music as a Profession 2 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Music Components (48 credits)}

\section*{Music Education}
\begin{tabular}{lcl} 
MUCT 235 & (3) & Vocal Techniques \\
MUGT 215 & (1) & Basic Conducting Techniques \\
MUGT 354 & (3) & Music for Children \\
MUGT 358 & (3) & General Music for Adults and Teenagers \\
MUGT 401 & (3) & Issues in Music Education \\
MUIT 202 & (3) & Woodwind Techniques \\
MUIT 203 & (3) & Brass Techniques \\
MUIT 204 & (3) & Percussion Techniques \\
MUIT 356 & (3) & Jazz Instruction: Philosophy and Techniques
\end{tabular}

\section*{Theory}
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

\section*{Music History}
MUHL 286 (3) Critical Thinking About Music

\section*{Performance}
\begin{tabular}{lll} 
MUIN 280 & (2.5) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 283 & \((1)\) & BMus Concentration Final Examination
\end{tabular}

\section*{Professional Development}
MUPD 235
(1)
Music as a Profession 2

\section*{Complementary Courses - Music Components (24 credits)}

\section*{Composing/Arranging}

3 credits from:
\begin{tabular}{lll} 
MUCO 230 & (3) & The Art of Composition \\
MUCO 261 & (3) & Orchestration 1 \\
MUJZ 260 & (3) & Jazz Arranging 1
\end{tabular}

\section*{Music Education}

3 credits from:
\begin{tabular}{lll} 
MUIT 201 & (3) & String Techniques \\
MUIT 250 & (3) & Guitar Techniques
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
MUCT 315 & (3) & Choral Conducting 1 \\
MUIT 315 & (3) & Instrumental Conducting
\end{tabular}

3 credits from courses with a prefix of MUIT or MUGT.

\section*{Musicianship}

2 credits from:
\begin{tabular}{lcl} 
MUSP 324 & \((2)\) & Musicianship for Strings \\
MUSP 330 & \((2)\) & Musicianship for Woodwinds \\
MUSP 335 & (2) & Musicianship for Brass \\
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 350 & (2) & Musicianship for Pianists \\
MUSP 353 & (2) & Musicianship for Voice \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 355 & (2) & Musicianship for Percussion \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

\section*{Music History}

6 credits from courses with a prefix of MUHL or MUPP

\section*{Performance}

4 credits from:
\begin{tabular}{lll} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill
\end{tabular}
\begin{tabular}{lcl} 
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Elective Courses (8 credits)}

8 credits of free electives

\section*{Required Courses - Education Component (49 credits)}
\begin{tabular}{lcl} 
EDEA 206 & \((1)\) & 1st Year Professional Seminar \\
EDEA 208 & \((1)\) & Second Professional Seminar (Music) \\
EDEA 407 & \((3)\) & Final Year Professional Seminar Music \\
EDEA 442 & \((3)\) & Methods in Music Education 1 \\
EDEA 472 & \((3)\) & Methods in Music Education 2 \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
EDEC 260 & (3) & Philosophical Foundations \\
EDEC 262 & (3) & Media, Technology and Education \\
EDES 350 & (2) & Classroom Practices \\
EDFE 205 & \((3)\) & First Field Experience (Music) \\
EDFE 208 & (8) & Second Field Experience (Music) \\
EDFE 308 & (7) & Third Field Experience (Music) \\
EDFE 407 & (3) & Fourth Field Experience (Music) \\
EDPE 300 & (3) & Educational Psychology \\
EDPI 341 & &
\end{tabular}

\section*{Required Indigenous Studies Course (3 credits)}

EDEC 233 (3) Indigenous Education
or any other course with Indigenous Studies content approved by the Faculty of Education.

\section*{Complementary Courses - Education Components (6 credits)}

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
EDEE 355 & (3) & Classroom-based Evaluation \\
EDPE 304 & (3) & Measurement and Evaluation
\end{tabular}

\subsection*{5.7.2.10.1 Admissions to the Concurrent B.Mus. (Major Music Education) and B.Ed. in Music Program}

Applicants without a completed Bachelor of Music degree who wish to pursue a teacher education degree specializing in Music should apply to the Concurrent Bachelor of Music (Music Education)/Bachelor of Education in Music program. Students who have partially completed a Bachelor of Music program are eligible to apply for Advanced Standing in the Concurrent program.

Application to the Concurrent B.Mus./B.Ed. program may be made online at mcgill.ca/undergraduate-admissions/apply. Information is available on that site or may be obtained from:
Admissions Office
Schulich School of Music, McGill University
555 Sherbrooke Street West
Montreal QC H3A 1E3
Telephone: 514-398-4546
Email: undergraduateadmissions.music@mcgill.ca
Website: mcgill.ca/music/admissions/undergraduate

Those who have completed a Bachelor of Music degree from a North American university should apply to the Bachelor of Education in Music program in the Faculty of Education and, if eligible, will receive Advanced Standing for applicable courses. Application to the Bachelor of Education in Music may be made online at mcgill.ca/undergraduate-admissions/apply. Information is available on that site or may be obtained from:
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Service Point
Enrolment Services,McGill University
3415 McTavish Street
Montreal QC H3A 0C8
Telephone: 514-398-7878
Website: mcgill.ca/servicepoint

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Program details are available from:
Telephone: 514-398-2941
Email: info.dise@mcgill.ca
Website: mcgill.ca/dise

\subsection*{5.7.2.11 Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education ( 120 credits)}

The Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 -credit program) for a total of 150 credits.

The Kindergarten and Elementary Education program leads to certification to teach children between the ages of 5 and 11 years (kindergarten and elementary school). The program consists of academic and professional courses, as well as studies in pedagogy and educational foundations. Each year of the program provides a school-based practicum.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification."

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.
The Freshman year is the time to take introductory-level courses in the subjects taught in elementary school, as well as to explore areas that are not normally taken as "teachable" subject area courses within B.Ed. programs (e.g. Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

In addition, in consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. Included in the list are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level. Also recommended are any 100- or 200-level courses with the subject codes of ANTH (Anthropology), ENGL (English), GEOG (Geography), HIST (History), MUAR (Music-Arts Faculty), POLI (Political Science), PSYC (Psychology), RELG (Religious Studies), and SOCI (Sociology). For 200-level courses, information about any required prerequisites is found in the Minerva Class Schedule by "clicking on" the course CRN for registration. Check prerequisites before registering.
\begin{tabular}{lll} 
EDEE 325 & (3) & Children's Literature \\
EDEM 220 & \((3)\) & Contemporary Issues in Education \\
EDES 366 & \((3)\) & Literature for Young Adults \\
FRSL 101 & (3) & Beginners French 1 \\
FRSL 102 & (3) & Beginners French 2
\end{tabular}
\begin{tabular}{lcl} 
FRSL 207D1 & (3) & Elementary French 01 \\
FRSL 207D2 & (3) & Elementary French 01 \\
FRSL 211D1 & (3) & Oral and Written French 1 \\
FRSL 211D2 & (3) & Oral and Written French 1 \\
MATH 111 & (3) & Mathematics for Education Students \\
RELG 207 & (3) & Introduction to the Study of Religions \\
WCOM 250 & (3) & Research Essay and Rhetoric
\end{tabular}

\section*{Required Courses (84 credits)}
\begin{tabular}{|c|c|c|}
\hline EDEC 201 & (1) & First Year Professional Seminar \\
\hline EDEC 203 & (3) & Communication in Education \\
\hline EDEC 215 & (0) & English Exam for Teacher Certification \\
\hline EDEC 233 & (3) & Indigenous Education \\
\hline EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
\hline EDEC 253 & (1) & Second Professional Seminar (Kindergarten/Elementary) \\
\hline EDEC 260 & (3) & Philosophical Foundations \\
\hline EDEC 262 & (3) & Media, Technology and Education \\
\hline EDEC 405 & (3) & Fourth Year Professional Seminar (K/Elem) \\
\hline EDEE 223 & (3) & Language Arts \\
\hline EDEE 230 & (3) & Elementary School Mathematics 1 \\
\hline EDEE 253 & (3) & Kindergarten Classroom Pedagogy \\
\hline EDEE 260 & (3) & Reading Methods - Kindergarten/Elementary \\
\hline EDEE 270 & (3) & Elementary School Science \\
\hline EDEE 273 & (3) & Elementary School Science 2 \\
\hline EDEE 280 & (3) & Geography, History and Citizenship Education \\
\hline EDEE 283 & (3) & Social Studies Pedagogy \\
\hline EDEE 332 & (3) & Teaching Elementary Mathematics 2 \\
\hline EDEE 353 & (3) & Third Year Professional Seminar (Kindergarten/Elementary) \\
\hline EDEE 355 & (3) & Classroom-based Evaluation \\
\hline EDER 360 & (2) & Culture and Citizenship in Quebec Context (K/Elem) \\
\hline EDFE 200 & (2) & First Field Experience (K/Elem and Secondary) \\
\hline EDFE 256 & (3) & Second Field Experience (Kindergarten/Elementary) \\
\hline EDFE 306 & (8) & Third Field Experience (Kindergarten/Elementary) \\
\hline EDFE 406 & (7) & Fourth Field Experience (K/Elem) \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline EDPI 309 & (3) & Diverse Learners \\
\hline EDPI 341 & (3) & Instruction in Inclusive Schools \\
\hline
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits of courses selected as described below:

\section*{Equity Education}

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

\section*{Ethics, Values, or Religion}

3 credits from:
\begin{tabular}{lll} 
EDER 309 & (3) & The Search for World Views \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 309 & (3) & World Religions and Cultures They Create \\
RELG 341 & (3) & Introduction: Philosophy of Religion
\end{tabular}

\section*{Kindergarten and Elementary Teaching Methods - Art, Drama, or Music}

3-6 credits from:
\begin{tabular}{lll} 
EDEA 332 & (3) & Art Curriculum and Instruction - Elementary \\
EDEA 342 & (3) & Curriculum and Instruction in Drama Education \\
EDEA 345 & (3) & Music Curriculum and Instruction for Generalists
\end{tabular}

\section*{Kindergarten \& Elementary Teaching Methods - Physical Education or English Second Language}

0-3 credits from:
Students may select both their Methods courses from the list above for Art, Drama, or Music.
* Note: EDSL 447 has EDSL 350 as a prerequisite.
EDKP 332
Physical Education Curriculum and Instruction
EDSL 447*
(3)
Methods in TESL 1

\section*{Kindergarten \& Elementary Education - Subject Areas (18 credits)}

18 credits selected in consultation with the Program Adviser as follows:
9 credits in "teachable" subject area courses of the elementary school curriculum from the lists below for Art, English, Ethics and Religious Culture, French, Mathematics, Music, Natural Sciences, Physical Education, and Social Studies.
And
9 credits, 3 credits from each of any three subject areas not chosen above.
No more than 9 credits may be selected from any single course list.
Art
Students may select up to 9 credits from this list and from Art History (ARTH) courses.
\begin{tabular}{lll} 
EDEA 204 & \((3)\) & Drawing \\
EDEA 205 & \((3)\) & Painting 2 \\
EDEA 241 & \((3)\) & Basic Art Media for Classroom \\
EDEA 296 & \((3)\) & Basic Design \\
EDEA 304 & \((3)\) & Painting 3 \\
EDEA 307 & \((3)\) & Drawing 2 \\
EDEA 410 & \((3)\) & Aesthetics and Art for the Classroom \\
EDEA 496 & \((3)\) & Sculpture 1
\end{tabular}

\section*{English}

Students may select up to 9 credits from this list.
\begin{tabular}{|c|c|c|}
\hline CLAS 203 & (3) & Greek Mythology \\
\hline COMS 200 & (3) & History of Communication \\
\hline COMS 210 & (3) & Introduction to Communication Studies \\
\hline COMS 300 & (3) & Media and Modernity in the 20th Century \\
\hline COMS 310 & (3) & Media and Feminist Studies \\
\hline COMS 320 & (3) & Media and Empire \\
\hline COMS 330 & (3) & Media in Cultural Life \\
\hline EDEE 325* & (3) & Children's Literature \\
\hline EDES 366 & (3) & Literature for Young Adults \\
\hline EDSL 350 & (3) & Essentials of English Grammar \\
\hline ENGL 200 & (3) & Survey of English Literature 1 \\
\hline ENGL 201 & (3) & Survey of English Literature 2 \\
\hline ENGL 215 & (3) & Introduction to Shakespeare \\
\hline ENGL 225 & (3) & American Literature 1 \\
\hline ENGL 226 & (3) & American Literature 2 \\
\hline ENGL 227 & (3) & American Literature 3 \\
\hline ENGL 228 & (3) & Canadian Literature 1 \\
\hline ENGL 229 & (3) & Canadian Literature 2 \\
\hline ENGL 230 & (3) & Introduction to Theatre Studies \\
\hline ENGL 237 & (3) & Introduction to Study of a Literary Form \\
\hline ENGL 279 & (3) & Introduction to Film as Art \\
\hline ENGL 280 & (3) & Introduction to Film as Mass Medium \\
\hline ENGL 314 & (3) & 20th Century Drama \\
\hline ENGL 345 & (3) & Literature and Society \\
\hline ENGL 347 & (3) & Great Writings of Europe 1 \\
\hline ENGL 349 & (3) & English Literature and Folklore 1 \\
\hline ENGL 388 & (3) & Studies in Popular Culture \\
\hline LING 200 & (3) & Introduction to the Study of Language \\
\hline LING 201 & (3) & Introduction to Linguistics \\
\hline
\end{tabular}

\section*{Ethics and Religious Culture}

Students may select up to 9 credits from this list. Students may also choose other Religious Studies (RELG) courses with the permission of the Program Adviser.
* Note: Courses marked with an asterisk ("*") may be used as Ethics and Religious Culture courses or as Social Studies.
\begin{tabular}{lcl} 
EDER 252 & \((3)\) & Understanding and Teaching Jewish Life \\
EDER 309 & (3) & The Search for World Views \\
EDER 395 & (3) & Moral Values and Human Action \\
EDER 461 & (3) & Society and Change \\
EDER 473 & (3) & Living with Insight \\
GSFS 200* & (3) & Feminist and Social Justice Studies \\
JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
JWST 240* & (3) & The Holocaust
\end{tabular}
\begin{tabular}{lll} 
PHIL 200 & (3) & Introduction to Philosophy 1 \\
PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
RELG 203 & (3) & Bible and Western Culture \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 252 & (3) & Hinduism and Buddhism \\
RELG 253 & (3) & Religions of East Asia \\
RELG 270 & (3) & Religious Ethics and the Environment \\
RELG 271 & (3) & Religion and Sexuality
\end{tabular}

\section*{French}

Students may choose up to 9 credits of French as a Second Language (FRSL) courses and/or French (FREN) courses and/or:
EDSL 341
(3)
Littératie et littérature jeunesse en FLS

\section*{Mathematics}

Students may choose up to 9 credits of Mathematics (MATH) courses at the 200 level or higher.
Note: Students admitted with CEGEP mathematics (or equivalent) may not take MATH 111 for credit. MATH 111 is a recommended course for Freshman students.
MATH 111
(3)
Mathematics for Education Students

\section*{Music}

Students may choose up to 9 credits from this list. Students may also select any Music course with the MUGT, MUHL, MUIT, or MUCT subject codes. With the permission of the Program Adviser, students without a formal music background may choose courses with the MUAR subject code.
* Note: Courses marked with a single asterisk ("*") require permission from the Schulich School of Music to register.
\begin{tabular}{lcl} 
EDEA 341 & (3) & Listening for Learning \\
MUJZ \(160^{*}\) & (3) & Jazz Materials 1 \\
MUJZ \(161^{*}\) & (3) & Jazz Materials 2
\end{tabular}

\section*{Natural Sciences}

Students may choose up to 9 credits from this list.
\begin{tabular}{lll} 
ATOC 181 & \((3)\) & Introduction to Atmospheric Science \\
ATOC 182 & \((3)\) & Introduction to Oceanic Sciences \\
ATOC 184 & \((3)\) & Science of Storms \\
ATOC 185 & \((3)\) & Natural Disasters \\
BIOL 115 & \((3)\) & Essential Biology \\
CHEM 180 & (3) & World of Chemistry: Environment \\
CHEM 181 & (3) & World of Chemistry: Food \\
CHEM 182 & \((3)\) & World of Chemistry: Technology \\
CHEM 183 & (3) & World of Chemistry: Drugs \\
EDEC 374 & (3) & Education and the Environment \\
EDEE 473 & (3) & Ecological Studies \\
EPSC 180 & (3) & The Terrestrial Planets
\end{tabular}
\begin{tabular}{lcl} 
EPSC 181 & \((3)\) & Environmental Geology \\
EPSC 185 & (3) & Natural Disasters \\
EPSC 201 & \((3)\) & Understanding Planet Earth \\
PHYS 180 & (3) & Space, Time and Matter \\
PHYS 181 & (3) & Everyday Physics \\
PHYS 182 & (3) & Our Evolving Universe \\
PHYS 183 & (3) & The Milky Way Inside and Out
\end{tabular}

\section*{Physical Education}

Students may take up to 9 credits of Physical Education (EDKP) courses from the list with the permission of the Department of Kinesiology and Physical Education.
* Note: EDKP 292 is available as an academic Physical Education course. All other EDKP courses are restricted.
\begin{tabular}{lll} 
EDKP 204 & \((3)\) & Health Education \\
EDKP 208 & \((3)\) & Biomechanics and Motor Learning \\
EDKP 261 & (3) & Motor Development \\
EDKP 292* & (3) & Nutrition and Wellness \\
EDKP 498 & (3) & Sport Psychology
\end{tabular}

\section*{Social Studies}

Students may take up to 9 credits from this list below which represents a balance of History (HIST), Geography (GEOG), and Citizenship courses offered by several departments. Anthropology (ANTH) and Sociology (SOCI) courses not on the list below may not be counted as Social Studies courses in the program requirements. Students may take them as electives only.
Students may select additional History courses as follows:
Any 3 credits in European History
Any 3 credits in Asian, African, or Latin American History
Any 3 credits in any topic or field of history
* Note: Courses marked with an asterisk ("*") may be used as Ethics and Religious Culture or Social Studies courses.
\begin{tabular}{lll} 
ANTH 202 & \((3)\) & Socio-Cultural Anthropology \\
CANS 200 & \((3)\) & Understanding Canada \\
CANS 310 & \((3)\) & Canadian Cultures: Context and Issues \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 210 & (3) & Global Places and Peoples \\
GEOG 217 & (3) & Cities in the Modern World \\
GSFS 200* & (3) & Feminist and Social Justice Studies \\
HIST 202 & (3) & Survey: Canada to 1867 \\
HIST 203 & (3) & Survey: Canada since 1867 \\
JWST 240* & (3) & The Holocaust \\
POLI 221 & (3) & Government of Canada \\
POLI 222 & (3) & Political Process and Behaviour in Canada
\end{tabular}

\section*{Electives (6 credits)}

\subsection*{5.7.2.12 Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies (120 credits)}

The Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies program requires 120 credits and leads to teacher certification. Interested applicants must contact the Office of First Nations and Inuit Education for admission information; please call 514-398-4527.
Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of freshman courses (in addition to the 120 credit program) for a total of 150 credits. Students who are admitted as "mature students" are not required to complete the 30 credits of Freshman courses. These students are admitted to U1.

Please note that graduates of teacher education programs are recommended by the University for Quebec Certification to the Quebec Ministère de l'Enseignement supérieur. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs", and "Quebec Teacher Certification".

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.
The Freshman year is the time to take introductory-level courses in the subjects taught in Elementary school, as well as to explore areas that are not normally taken as teachable subject area courses within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.).

Students admitted to the First Nations and Inuit Studies program in U0 should consult with their program adviser for guidance on course selection. More information is also found for newly admitted students to the B.Ed. Kindergarten and Elementary Education program on the Faculty of Education website at http://www.mcgill.ca/dise/ofnie/teachcert/kelemfnie/current.

\section*{Required Courses (78 credits)}
\begin{tabular}{lcl} 
EDEC 201 & \((1)\) & First Year Professional Seminar \\
EDEC 203 & \((3)\) & Communication in Education \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 216 & \((0)\) & Indigenous Language Requirement \\
EDEC 247 & \((3)\) & Policy Issues in Quebec and Indigenous Education \\
EDEC 253 & \((1)\) & Second Professional Seminar (Kindergarten/Elementary) \\
EDEC 262 & \((3)\) & Media, Technology and Education \\
EDEC 321 & \((3)\) & Visions and Realities of Indigenous Education \\
EDEC 405 & \((3)\) & Fourth Year Professional Seminar (K/Elem) \\
EDEE 223 & \((3)\) & Language Arts \\
EDEE 230 & \((3)\) & Elementary School Mathematics 1 \\
EDEE 253 & \((3)\) & Kindergarten Classroom Pedagogy \\
EDEE 260 & \((3)\) & Reading Methods - Kindergarten/Elementary \\
EDEE 270 & \((3)\) & Elementary School Science \\
EDEE 280 & \((3)\) & Geography, History and Citizenship Education Learners \\
EDEE 283 & \((3)\) & Social Studies Pedagogy Inclusive Schools \\
EDEE 332 & \((3)\) & Thirst Field Experience (K/Elem and Secondary) \\
EDEE 353 & (3) 341 & (3)
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits of courses selected as described below:

\section*{Language - Complementary Component}

6 credits from the following language courses chosen according to language group and fluency:

\section*{Algonquin}
\begin{tabular}{lll} 
EDEC 270 & (3) & Algonquin Heritage Language 1 \\
EDEC 271 & (3) & Algonquin Heritage Language 2 \\
EDEC 272 & (3) & Algonquin Language 1 \\
EDEC 273 & (3) & Algonquin Language 2
\end{tabular}

\section*{Cree}
\begin{tabular}{lll} 
EDEC 241 & (3) & Cree Language 1 \\
EDEC 242 & (3) & Cree Language 2
\end{tabular}

\section*{Inuktitut}
EDEC 289
(3) Inuktitut Orthography and Grammar

EDEC 403
The Dialects of Inuktitut

\section*{Mi'gmaw}
\begin{tabular}{lll} 
EDEC 237 & (3) & Mi'gmaw Heritage Language 1 \\
EDEC 238 & (3) & Mi'gmaw Heritage Language 2 \\
EDEC 239 & (3) & Mi'gmaw Language 1 \\
EDEC 240 & (3) & Mi'gmaw Language 2
\end{tabular}

\section*{Mohawk}
\begin{tabular}{lll} 
EDEC 275 & (3) & Mohawk Heritage Language 1 \\
EDEC 276 & (3) & Mohawk Heritage Language 2 \\
EDEC 277 & (3) & Mohawk Language 1 \\
EDEC 278 & (3) & Mohawk Language 2
\end{tabular}

\section*{Naskapi}
EDEC 227
(3)
EDEC 228
Naskapi Language 1
Naskapi Language 2

\section*{Education Component}

3 credits from:
\begin{tabular}{lll} 
EDEC 233 & (3) & Indigenous Education \\
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice \\
EDEM 502 & (3) & Indigenous Family Dynamics and Supporting Institutions
\end{tabular}

\section*{Science Component}

3 credits from:
\begin{tabular}{lll} 
EDEC 374 & (3) & Education and the Environment \\
EDEE 273 & (3) & Elementary School Science 2
\end{tabular}

\section*{Religion Component}

3 credits from:
\begin{tabular}{lll} 
EDER 309 & \((3)\) & The Search for World Views \\
EDER 395 & (3) & Moral Values and Human Action \\
EDER 461 & (3) & Society and Change \\
EDER 473 & (3) & Living with Insight \\
EDER 494 & \((3)\) & Human Rights and Ethics in Practice
\end{tabular}

\section*{Kindergarten and Elementary Subject Area Component}

9 credits from the subject course lists below

Art
\begin{tabular}{lll} 
EDEA 204 & \((3)\) & Drawing \\
EDEA 205 & \((3)\) & Painting 2 \\
EDEA 241 & \((3)\) & Basic Art Media for Classroom \\
EDEA 242 & \((3)\) & Cultural Skills 1 \\
EDEA 243 & \((3)\) & Cultural Skills 2 \\
EDEA 296 & \((3)\) & Basic Design \\
EDEA 304 & \((3)\) & Painting 3 \\
EDEA 307 & \((3)\) & Drawing 2 \\
EDEA 410 & \((3)\) & Aesthetics and Art for the Classroom \\
EDEA 496 & \((3)\) & Sculpture 1
\end{tabular}

English
\begin{tabular}{lll} 
EDEA 394 & \((3)\) & Creative Dramatics for Classroom \\
EDEE 325 & \((3)\) & Children's Literature \\
EDEE 371 & \((3)\) & Integrating Indigenous Storytelling and Creative Writing \\
EDES 366 & \((3)\) & Literature for Young Adults \\
EDSL 350 & \((3)\) & Essentials of English Grammar
\end{tabular}

Ethics and Religious Culture
\begin{tabular}{lll} 
EDER 252 & (3) & Understanding and Teaching Jewish Life \\
EDER 309 & (3) & The Search for World Views \\
EDER 395 & (3) & Moral Values and Human Action \\
EDER 461 & (3) & Society and Change \\
EDER 473 & \((3)\) & Living with Insight
\end{tabular}
EDER 494
(3)
Human Rights and Ethics in Practice

French
EDSL 341
(3)
Littératie et littérature jeunesse en FLS

\section*{Music}

EDEA 341
(3)

Listening for Learning

Natural Science
\begin{tabular}{lll} 
EDEC 374 & (3) & Education and the Environment \\
EDEE 370 & (3) & Traditional Indigenous Life Skills \\
EDEE 373 & (3) & Traditional Healing \\
EDEE 473 & (3) & Ecological Studies
\end{tabular}

Physical Education
\begin{tabular}{lcl} 
EDKP 204 & (3) & Health Education \\
EDKP 208 & (3) & Biomechanics and Motor Learning \\
EDKP 241 & (3) & Indigenous Physical Activities \\
EDKP 261 & (3) & Motor Development \\
EDKP 292 & \((3)\) & Nutrition and Wellness
\end{tabular}

\section*{Social Studies}

EDEE 383
(3)

Oral and Family History

Advanced Indigenous Languages
EDEC 341
EDEC 342
EDEC 343
EDEC 344

Intermediate Indigenous Heritage Language
Intermediate Indigenous Language
Advanced Indigenous Heritage Language
Advanced Indigenous Language

\section*{Methods and Curriculum and Pedagogy Component}

12 credits,
6-9 credits from the following
\begin{tabular}{lll} 
EDEA 332 & \((3)\) & Art Curriculum and Instruction - Elementary \\
EDEA 342 & (3) & Curriculum and Instruction in Drama Education \\
EDEA 345 & (3) & Music Curriculum and Instruction for Generalists \\
EDEC 243 & (3) & Teaching: Multigrade Classrooms \\
EDEE 243 & \((3)\) & Reading Methods in Inuktitut/Cree \\
EDEE 248 & \((3)\) & Reading and Writing Inuktitut/Cree
\end{tabular}
\begin{tabular}{lll} 
EDSL 247 & (3) & Second Language Education in Indigenous Communities \\
EDSL 300 & (3) & Foundations of L2 Education \\
EDSL 370 & (3) & Issues and Practices in Teaching Indigenous Languages \\
EDSL 390 & (3) & \\
& \\
3-6 credits from the following English as a Second Language in the Community \\
EDEC 244 & (3) & Issues in Aboriginal Education \\
EDEC 263 & (3) & Information Communication Technology in Indigenous Literacy \\
EDEC 302 & (3) & Language and Learning - Curriculum \\
EDEC 313 & (3) & Indigenous Land-Based Pedagogy \\
EDEC 591 & (3) & Cultural Values and Socialization \\
EDEE 245 & (3) & Orientation to Education \\
EDEE 444 & (3) & First Nations and Inuit Curriculum \\
EDPC 209 & (3) & Basic Crisis Intervention Skills \\
EDPI 441 & (3) & Students with Behaviour Difficulties \\
EDPI 442 & Students with Learning Difficulties
\end{tabular}

\section*{Elective Courses (6 credits)}

6 credits chosen from the Subject Area and/or the Methods and Curriculum and Pedagogy courses listed above. No more than 9 credits can be chosen from any one subject area.

\subsection*{5.7.2.13 Bachelor of Education (B.Ed.) - Kindergarten and Elementary Jewish Studies ( 120 credits)}

Bachelor of Education (B.Ed.) - Kindergarten and Elementary Jewish Studies program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 -credit program) for a total of 150 credits.

The Kindergarten and Elementary program leads to certification to teach children between the ages of 5 and 11 years (kindergarten and elementary school). The program consists of academic and professional courses, as well as studies in pedagogy and educational foundations. Each year of the program provides a school-based practicum.

The Jewish Studies option is addressed to students enrolled in the Kindergarten and Elementary program who wish to teach Jewish studies as well as general studies. Students are encouraged to acquire a strong background in Bible, Jewish prayer, Jewish holidays, and Jewish history prior to registering in the option. Students lacking the ability to teach in Hebrew should consider spending a semester at an Israeli university or seek other avenues to improve their language skills.

Please note that graduates of teacher education programs are recommended by the University for Quebec certification to the Ministry (Education). For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs," and "Quebec Teacher Certification."

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.
The Freshman year is the time to take introductory-level courses in the subjects taught in elementary school, as well as to explore areas that are not normally taken as teachable subject area courses within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

In addition, in consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. Included in the list are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level. Also recommended are any 100- or 200-level courses with the subject codes of ANTH (Anthropology), ENGL (English), GEOG (Geography), HIST (History), MUAR (Music-Arts Faculty), POLI (Political Science), PSYC (Psychology), RELG (Religious Studies), and SOCI (Sociology). For 200-level courses, information about any required prerequisites is found in the Minerva Class Schedule by clicking on the course CRN for registration. Check prerequisites before registering.
\begin{tabular}{lll} 
EDEE 325 & \((3)\) & Children's Literature \\
EDEM 220 & \((3)\) & Contemporary Issues in Education \\
EDES 366 & (3) & Literature for Young Adults \\
FRSL 101 & (3) & Beginners French 1
\end{tabular}
\begin{tabular}{lcl} 
FRSL 102 & (3) & Beginners French 2 \\
FRSL 207D1 & (3) & Elementary French 01 \\
FRSL 207D2 & (3) & Elementary French 01 \\
FRSL 211D1 & (3) & Oral and Written French 1 \\
FRSL 211D2 & (3) & Oral and Written French 1 \\
MATH 111 & (3) & Mathematics for Education Students \\
RELG 207 & (3) & Introduction to the Study of Religions \\
WCOM 250 & (3) & Research Essay and Rhetoric
\end{tabular}

\section*{Required Courses (87 credits)}
\begin{tabular}{|c|c|c|}
\hline EDEC 201 & (1) & First Year Professional Seminar \\
\hline EDEC 203 & (3) & Communication in Education \\
\hline EDEC 215 & (0) & English Exam for Teacher Certification \\
\hline EDEC 233 & (3) & Indigenous Education \\
\hline EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
\hline EDEC 253 & (1) & Second Professional Seminar (Kindergarten/Elementary) \\
\hline EDEC 262 & (3) & Media, Technology and Education \\
\hline EDEC 405 & (3) & Fourth Year Professional Seminar (K/Elem) \\
\hline EDEE 223 & (3) & Language Arts \\
\hline EDEE 230 & (3) & Elementary School Mathematics 1 \\
\hline EDEE 253 & (3) & Kindergarten Classroom Pedagogy \\
\hline EDEE 260 & (3) & Reading Methods - Kindergarten/Elementary \\
\hline EDEE 270 & (3) & Elementary School Science \\
\hline EDEE 273 & (3) & Elementary School Science 2 \\
\hline EDEE 280 & (3) & Geography, History and Citizenship Education \\
\hline EDEE 283 & (3) & Social Studies Pedagogy \\
\hline EDEE 332 & (3) & Teaching Elementary Mathematics 2 \\
\hline EDEE 353 & (3) & Third Year Professional Seminar (Kindergarten/Elementary) \\
\hline EDEE 355 & (3) & Classroom-based Evaluation \\
\hline EDER 320 & (3) & Visions and Realities of Jewish Education \\
\hline EDER 360 & (2) & Culture and Citizenship in Quebec Context (K/Elem) \\
\hline EDFE 200 & (2) & First Field Experience (K/Elem and Secondary) \\
\hline EDFE 256 & (3) & Second Field Experience (Kindergarten/Elementary) \\
\hline EDFE 306 & (8) & Third Field Experience (Kindergarten/Elementary) \\
\hline EDFE 406 & (7) & Fourth Field Experience (K/Elem) \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline EDPI 309 & (3) & Diverse Learners \\
\hline EDPI 341 & (3) & Instruction in Inclusive Schools \\
\hline JWST 211 & (3) & Jewish Studies 1: Biblical Period \\
\hline
\end{tabular}

Complementary Courses ( 30 credits)
Equity Education

3 credits from:
EDEC 248
Equity and Education
EDEC 249
Global Education and Social Justice

\section*{Teaching Methods (12 credits)}

3 credits from:
\begin{tabular}{lll} 
EDEA 332 & (3) & Art Curriculum and Instruction - Elementary \\
EDEA 342 & (3) & Curriculum and Instruction in Drama Education \\
EDEA 345 & (3) & Music Curriculum and Instruction for Generalists
\end{tabular}

9 credits from:
\begin{tabular}{lll} 
EDER 252 & (3) & Understanding and Teaching Jewish Life \\
EDER 318 & (3) & Teaching the Jewish Liturgy \\
EDER 319 & (3) & Teaching the Holocaust \\
EDER 401 & (3) & Teaching Biblical Literature - Jewish School 1
\end{tabular}

\section*{Kindergarten and Elementary - Subject Area: Jewish Studies (15 credits)}

In consultation with the Jewish Studies option Program Adviser, students select 15 credits from the undergraduate course offerings of the Department of Jewish Studies, Faculty of Arts.

\section*{Electives (3 credits)}
5.7.2.13.1 B.Ed. Kindergarten and Elementary Program (Jewish Studies Option)

Students who wish to follow this option should contact:
Professor Eric Caplan
Department of Integrated Studies in Education
Faculty of Education
Telephone: 514-398-6544
Email: eric.caplan@mcgill.ca

\subsection*{5.7.2.14 Bachelor of Education (B.Ed.) - Kindergarten and Elementary Pédagogie de l'Immersion Française (120 credits)}

The Kindergarten and Elementary Pédagogie de l'Immersion Française major is designed to meet the needs of students enrolled in the B.Ed. Kindergarten and Elementary program who wish to teach in French immersion contexts. It consists of 30 credits of French and second language education courses embedded within the regular B.Ed. Kindergarten and Elementary program. In addition, certain other course sections may be offered in French.
Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification".

\section*{Competency in French}

Students wishing to follow the Kindergarten and Elementary Pédagogie de l'Immersion Française major must demonstrate a high level of competency in French by: providing proof of graduation from a French language secondary/high school (not French Immersion) or CEGEP; or by placing at the FRSL 431 level or higher on the French Language Placement Test (FLPT) at the French Language Centre (McGill).
For more information on the FLPT, including test dates, see www.mcgill.ca/flc/registration/placement-tests/placement-tests-dates- 0 .
Pédagogie de l'Immersion Française (PIF) Freshman Year (U0)
Students from outside of Quebec may be required to complete the Freshman en français year (offered through the French Language Centre, Faculty of Arts). Students undertaking the Freshman en français year may also be conditionally accepted into the PIF program, if they have a strong background in French (ex. Grade 12 French Immersion Program) and achieve an acceptable grade in the FLPT.

Those students who are conditionally accepted will be transferred to the PIF program following successful completion of their freshman year (passing grade in level appropriate FRSL courses). Unsuccessful candidates will remain registered in the regular B.Ed. Kindergarten/Elementary stream.

Students should contact advisedise.education@mcgill.ca to indicate their desire to transfer into this major and will need to provide proof of French Language Competency, as outlined above for the transfer to be accepted/processed.

\section*{Required Courses (102 credits)}
\begin{tabular}{|c|c|c|}
\hline EDEC 201 & (1) & First Year Professional Seminar \\
\hline EDEC 203 & (3) & Communication in Education \\
\hline EDEC 215 & (0) & English Exam for Teacher Certification \\
\hline EDEC 233 & (3) & Indigenous Education \\
\hline EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
\hline EDEC 253 & (1) & Second Professional Seminar (Kindergarten/Elementary) \\
\hline EDEC 260 & (3) & Philosophical Foundations \\
\hline EDEC 262 & (3) & Media, Technology and Education \\
\hline EDEC 405 & (3) & Fourth Year Professional Seminar (K/Elem) \\
\hline EDEE 223 & (3) & Language Arts \\
\hline EDEE 230* & (3) & Elementary School Mathematics 1 \\
\hline EDEE 253 & (3) & Kindergarten Classroom Pedagogy \\
\hline EDEE 260 & (3) & Reading Methods - Kindergarten/Elementary \\
\hline EDEE 270* & (3) & Elementary School Science \\
\hline EDEE 273* & (3) & Elementary School Science 2 \\
\hline EDEE 280 & (3) & Geography, History and Citizenship Education \\
\hline EDEE 283 & (3) & Social Studies Pedagogy \\
\hline EDEE 332* & (3) & Teaching Elementary Mathematics 2 \\
\hline EDEE 353 & (3) & Third Year Professional Seminar (Kindergarten/Elementary) \\
\hline EDEE 355 & (3) & Classroom-based Evaluation \\
\hline EDER 360 & (2) & Culture and Citizenship in Quebec Context (K/Elem) \\
\hline EDFE 200 & (2) & First Field Experience (K/Elem and Secondary) \\
\hline EDFE 256 & (3) & Second Field Experience (Kindergarten/Elementary) \\
\hline EDFE 306** & (8) & Third Field Experience (Kindergarten/Elementary) \\
\hline EDFE 406** & (7) & Fourth Field Experience (K/Elem) \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline EDPI 309 & (3) & Diverse Learners \\
\hline EDPI 341 & (3) & Instruction in Inclusive Schools \\
\hline EDSL 300 & (3) & Foundations of L2 Education \\
\hline EDSL 301 & (3) & Étude de la langue \\
\hline EDSL 305 & (3) & L2 Learning: Classroom Settings \\
\hline EDSL 341 & (3) & Littératie et littérature jeunesse en FLS \\
\hline
\end{tabular}

Kindergarten and Elementary Teaching Methods
\begin{tabular}{lll} 
EDSL 345 & (3) & Enseignement du FLS-immersion \\
EDSL 444 & (3) & Laboratoire d'enseignement en français langue seconde
\end{tabular}
* Students must register in the sections designated as 'Bilingual section'.
** Note: At least one of these Field Experiences must be completed in a French immersion setting.

\section*{Complementary Courses (12 credits)}

12 credits selected as described below:

\section*{Equity Education}

3 credits from:
EDEC 248
(3) Equity and Education
EDEC 249
Global Education and Social Justice

\section*{Ethics and Religious Culture}

3 credits from:
\begin{tabular}{lll} 
EDER 309 & (3) & The Search for World Views \\
RELG 204 & (3) & Judaism, Christianity and Islam \\
RELG 207 & (3) & Introduction to the Study of Religions \\
RELG 309 & (3) & World Religions and Cultures They Create \\
RELG 341 & (3) & Introduction: Philosophy of Religion
\end{tabular}

\section*{French}

6 credits selected from courses with a FREN or FRSL (400 level, except FRSL 407 or FRSL 408) prefix, QCST 336 or POLI 336, in consultation with an adviser and in keeping with individual student's French background.

\section*{Elective Courses ( 6 credits)}

The following courses are suggested:
\begin{tabular}{lll} 
EDEA 332 & (3) & Art Curriculum and Instruction - Elementary \\
EDEA 342 & (3) & Curriculum and Instruction in Drama Education \\
EDEA 345 & (3) & Music Curriculum and Instruction for Generalists \\
EDEE 325 & (3) & Children's Literature \\
EDKP 332 & (3) & Physical Education Curriculum and Instruction \\
EDSL 501 & (0) & Attestation de maîtrise langue française \\
MATH 111 & (3) & Mathematics for Education Students
\end{tabular}

\subsection*{5.7.2.15 Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary (120 credits)}

The Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120-credit program) for a total of 150 credits.

The program includes studies in language and language learning from linguistic, literary, social, cultural, and psychological perspectives, accompanied by field experiences. It prepares students to teach English as a Second Language (ESL) at both the elementary school level (including regular and intensive ESL) and the secondary school level (including regular ESL and ESLA - English Second Language Arts), and provides a base for adult and other ESL teaching.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs", and "Quebec Teacher Certification".
The Department is committed to supporting students in the development and creation of their individual professional portfolios throughout their program.

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.

The Freshman year is the time to take introductory-level courses in the subject field, as well as to explore areas that are not normally taken as academic subjects within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.
In consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. Included in the list are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level. In Quebec, ESL is taught within the French school system. Thus, proficiency in French is an asset for student teaching placements, and is a requirement for employment in Quebec.

Other language courses (selected from CLAS Greek/Latin; EAST Korean/Chinese/Japanese; GERM German; HISP Spanish, ISLA Arabic; ITAL Italian; RUSS Russian/Polish) are also good choices for the Freshman year.
\begin{tabular}{lcl} 
EDEC 203 & (3) & Communication in Education \\
EDEE 325 & (3) & Children's Literature \\
EDEM 220 & (3) & Contemporary Issues in Education \\
ENGL 201 & (3) & Survey of English Literature 2 \\
FRSL 101 & (3) & Beginners French 1 \\
FRSL 102 & (3) & Beginners French 2 \\
FRSL 207D1 & (3) & Elementary French 01 \\
FRSL 207D2 & (3) & Elementary French 01 \\
FRSL 211D1 & (3) & Oral and Written French 1 \\
FRSL 211D2 & (3) & Oral and Written French 1 \\
LING 200 & (3) & Introduction to the Study of Language \\
LING 201 & (3) & Introduction to Linguistics
\end{tabular}

\section*{Required Courses (90 credits)}
\begin{tabular}{|c|c|c|}
\hline EDEC 215 & (0) & English Exam for Teacher Certification \\
\hline EDEC 233 & (3) & Indigenous Education \\
\hline EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
\hline EDEC 260 & (3) & Philosophical Foundations \\
\hline EDEC 262 & (3) & Media, Technology and Education \\
\hline EDES 350 & (3) & Classroom Practices \\
\hline EDES 361 & (3) & Teaching Secondary English 1 \\
\hline EDFE 209 & (2) & First Field Experience (TESL) \\
\hline EDFE 255 & (3) & Second Field Experience (TESL) \\
\hline EDFE 359 & (8) & Third Field Experience (TESL) \\
\hline EDFE 459 & (7) & Fourth Field Experience (TESL) \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline EDPI 309 & (3) & Diverse Learners \\
\hline EDPI 341 & (3) & Instruction in Inclusive Schools \\
\hline EDSL 210 & (1) & First Professional Seminar \\
\hline EDSL 215 & (3) & Communication in Education for TESL in Quebec \\
\hline EDSL 254 & (1) & Second Professional Seminar (TESL) \\
\hline EDSL 300 & (3) & Foundations of L2 Education \\
\hline EDSL 304 & (3) & Sociolinguistics and L2 Education \\
\hline EDSL 305 & (3) & L2 Learning: Classroom Settings \\
\hline EDSL 311 & (3) & Pedagogical Grammar \\
\hline EDSL 315 & (2) & Third Year Professional Seminar \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
EDSL 330 & (3) & Literacy 1:Teaching Reading in ESL \\
EDSL 332 & (3) & Literacy 2: Teaching Writing in ESL \\
EDSL 334 & (3) & Teaching Oral Skills in ESL \\
EDSL 350 & (3) & Essentials of English Grammar \\
EDSL 412 & \((3)\) & Assessment in TESL \\
EDSL 415 & \((3)\) & Fourth Professional Seminar \\
EDSL 447 & (3) & Methods in TESL 1 \\
EDSL 458 & (3) & Methods in TESL 2
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

24 credits selected as described below:

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
EDEA 332 & (3) & Art Curriculum and Instruction - Elementary \\
EDEA 342 & (3) & Curriculum and Instruction in Drama Education \\
EDEA 345 & (3) & Music Curriculum and Instruction for Generalists \\
EDKP 332 & (3) & Physical Education Curriculum and Instruction
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
LING 200 & (3) & Introduction to the Study of Language \\
LING 201 & (3) & Introduction to Linguistics
\end{tabular}

3 credits* from:
FRSL
OR:
\begin{tabular}{lll} 
FREN 201 & (3) & Le français littéraire (français langue seconde) \\
FREN 203 & (3) & Analyse de textes (français langue seconde) \\
FREN 239 & (3) & Stylistique comparée \\
FREN 245 & \((3)\) & Grammaire normative \\
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800 \\
FREN 252 & (3) & Littérature québécoise
\end{tabular}
(*selected according to individual student's French proficiency level)

12 credits of English and other complementary courses distributed as follows:
6-9 credits of English (ENGL) courses
And
3-6 credits of other complementary courses including

\section*{Foreign language courses ( \(0-6\) credits)}

Other Complementary courses ( \(0-6\) credits)

\section*{Electives (6 credits)}

6 credits

\subsection*{5.7.2.16 Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary:Teaching Greek Language \& Culture ( 120 credits)}

This program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 -credit program) for a total of 150 credits.

The program includes studies in language and language learning from linguistic, literary, social, cultural, and psychological perspectives, accompanied by field experiences. It prepares students to teach English as a Second Language (ESL) at both the elementary school level (including regular and intensive ESL) and the secondary school level (including regular ESL and ESLA - English Second Language Arts), and provides a base for adult and other ESL teaching. This program also prepares students to teach in Hellenic school settings. Students are encouraged to participate in a 'study away' semester in Greece.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs", and "Quebec Teacher Certification".

The Department is committed to supporting students in the development and creation of their individual professional portfolios throughout their program.

\section*{Additional Entrance and Language Requirements}

All applicants must pass the English Language Proficiency Test (ELPT) set by the Department of Integrated Studies in Education and pass a Greek language proficiency test set by the Department of Classical Studies prior to being offered admission. Eligible applicants will be contacted by email with information on how to register for these two tests.

\section*{Freshman Program}

Students normally complete 30 credits in their Freshman (U0) year.
The Freshman year is the time to take introductory-level courses in the subject field, as well as to explore areas that are not normally taken as academic subjects within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

In consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. Included in the list are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level. In Quebec, ESL is taught within the French school system. Thus, proficiency in French is an asset for student teaching placements, and is a requirement for employment in Quebec.

Other language courses (selected from CLAS Greek/Latin; EAST Korean/Chinese/Japanese; GERM German; HISP Spanish, ISLA Arabic; ITAL Italian; RUSS Russian/Polish) are also good choices for the Freshman year.
\begin{tabular}{lcl} 
EDEE 325 & (3) & Children's Literature \\
EDEM 220 & (3) & Contemporary Issues in Education \\
ENGL 201 & (3) & Survey of English Literature 2 \\
FRSL 101 & (3) & Beginners French 1 \\
FRSL 102 & (3) & Beginners French 2 \\
FRSL 207D1 & (3) & Elementary French 01 \\
FRSL 207D2 & (3) & Elementary French 01 \\
FRSL 211D1 & (3) & Oral and Written French 1 \\
FRSL 211D2 & (3) & Oral and Written French 1 \\
LING 200 & (3) & Introduction to the Study of Language \\
LING 201 & (3) & Introduction to Linguistics
\end{tabular}

\section*{Required Courses (90 credits)}
\begin{tabular}{lll} 
CLAS 336* & (3) & Modern Greek Literature \\
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 233 & \((3)\) & Indigenous Education
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
\hline EDEC 260 & (3) & Philosophical Foundations \\
\hline EDEC 262 & (3) & Media, Technology and Education \\
\hline EDES 350 & (3) & Classroom Practices \\
\hline EDFE 209 & (2) & First Field Experience (TESL) \\
\hline EDFE 255 & (3) & Second Field Experience (TESL) \\
\hline EDFE 359** & (8) & Third Field Experience (TESL) \\
\hline EDFE 459** & (7) & Fourth Field Experience (TESL) \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline EDPI 309 & (3) & Diverse Learners \\
\hline EDPI 341 & (3) & Instruction in Inclusive Schools \\
\hline EDSL 210 & (1) & First Professional Seminar \\
\hline EDSL 215 & (3) & Communication in Education for TESL in Quebec \\
\hline EDSL 254 & (1) & Second Professional Seminar (TESL) \\
\hline EDSL 300 & (3) & Foundations of L2 Education \\
\hline EDSL 304 & (3) & Sociolinguistics and L2 Education \\
\hline EDSL 305 & (3) & L2 Learning: Classroom Settings \\
\hline EDSL 311 & (3) & Pedagogical Grammar \\
\hline EDSL 315 & (2) & Third Year Professional Seminar \\
\hline EDSL 330 & (3) & Literacy 1:Teaching Reading in ESL \\
\hline EDSL 332 & (3) & Literacy 2: Teaching Writing in ESL \\
\hline EDSL 334 & (3) & Teaching Oral Skills in ESL \\
\hline EDSL 350 & (3) & Essentials of English Grammar \\
\hline EDSL 412 & (3) & Assessment in TESL \\
\hline EDSL 415 & (3) & Fourth Professional Seminar \\
\hline EDSL 447 & (3) & Methods in TESL 1 \\
\hline EDSL 458 & (3) & Methods in TESL 2 \\
\hline
\end{tabular}
* Note: Offered every 3rd year (alternating with CLAS 333, 335).
** Note: At least one of these Field Experiences must be completed in a Hellenic school.

\section*{Complementary Courses ( \(\mathbf{3 0}\) credits)}

30 credits selected as described below:

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
EDEA 332 & (3) & Art Curriculum and Instruction - Elementary \\
EDEA 342 & (3) & Curriculum and Instruction in Drama Education \\
EDEA 345 & (3) & Music Curriculum and Instruction for Generalists \\
EDKP 332 & (3) & Physical Education Curriculum and Instruction
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
LING 200 & (3) & Introduction to the Study of Language \\
LING 201 & (3) & Introduction to Linguistics
\end{tabular}

3 credits from* FRSL
or
\begin{tabular}{lll} 
FREN 201 & (3) & Le français littéraire (français langue seconde) \\
FREN 203 & (3) & Analyse de textes (français langue seconde) \\
FREN 239 & (3) & Stylistique comparée \\
FREN 245 & (3) & Grammaire normative \\
FREN 250 & (3) & Littérature française avant 1800 \\
FREN 251 & (3) & Littérature française depuis 1800 \\
FREN 252 & (3) & Littérature québécoise
\end{tabular}
(*selected according to individual student's French proficiency level)

\section*{TESL and Greek Language \& Culture (18 credits)}

12-15 credits of Greek Language and Culture from the following (with adviser's approval);
\begin{tabular}{lcl} 
CLAS 230D1 & (3) & Introductory Modern Greek \\
CLAS 230D2 & (3) & Introductory Modern Greek \\
CLAS 331 & (3) & Intermediate Modern Greek 1 \\
CLAS 332 & (3) & Intermediate Modern Greek 2 \\
CLAS 335 & (3) & Modern Greek Culture and Society \\
CLAS 498 & (3) & Independent Research \\
HIST 349 & (3) & Greece: From Ottoman to the European Union \\
HIST 368 & (3) & Greek History: Classical Period
\end{tabular}

3-6 credits from (with adviser's approval, other courses may be considered):
\begin{tabular}{|c|c|c|}
\hline ARTH 314 & (3) & The Medieval City \\
\hline CLAS 203 & (3) & Greek Mythology \\
\hline CLAS 301 & (3) & Ancient Greek Literature and Society \\
\hline CLAS 404 & (3) & Classical Tradition \\
\hline HIST 205 & (3) & Ancient Mediterranean History \\
\hline HIST 369 & (3) & Greek History: Early Greece \\
\hline PHIL 345 & (3) & Greek Political Theory \\
\hline PHIL 353 & (3) & The Presocratic Philosophers \\
\hline PHIL 355 & (3) & Aristotle \\
\hline PHIL 452 & (3) & Later Greek Philosophy \\
\hline PHIL 454 & (3) & Ancient Moral Theory \\
\hline POLI 333 & (3) & Western Political Theory 1 \\
\hline
\end{tabular}

\subsection*{5.7.3 Programs for First Nations and Inuit}

The following programs are offered in Indigenous communities for First Nations and Inuit teachers by McGill's Faculty of Education.
Information may be obtained by contacting:

\section*{Office of First Nations and Inuit Education (OFNIE), Faculty of Education \\ 3700 McTavish Street, Room 431A \\ Montreal QC H3A 1Y2 \\ Telephone: 514-398-4527 \\ Website: mcgill.ca/dise/ofnie}

For details about the First Nations and Inuit Studies Option within the Bachelor of Education Kindergarten and Elementary program, see section 5.7.2.12: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies (120 credits).

\subsection*{5.7.3.1 Bachelor of Education for Certified Teachers - Elementary Education: Indigenous Education (90 credits)}

This 90-credit program is designed for teachers who are already certified to teach in elementary schools and who wish to earn a Bachelor of Education degree. Normally, a minimum of 60 credits must be taken in the program, and no more than 30 credits may be transferred from other institutions. Credits may be transferred from programs leading to the certificates in Educational Technology, Second Language Teaching, Inclusive Education, or Indigenous Language and Literacy Education taken concurrently. Credit may also be transferred from the Certificate in Education for First Nations and Inuit, which is normally completed before the B.Ed. Students completing the Bachelor of Education for Certified Teachers following the Certificate in Education for First Nations and Inuit will have accumulated a total of 120 credits, 60 for the certificate and a further 60 for the B.Ed.

The Certificate in Indigenous Language and Literacy Education, the Certificate in Middle School Education in Indigenous Communities, or the Certificate in First Nations and Inuit Educational Leadership may be taken concurrently and completed within the Bachelor of Education for Certified Teachers if the required B.Ed. profile is fulfilled.

This program does not lead to further certification.

\section*{Complementary Courses}

Candidates enrolled in the program complete 90 credits within the following general pattern.

\section*{Academic Concentration ( \(\mathbf{3 0}\) credits)}

30 credits in five (5) subject areas relevant to elementary education in a 12-9-3-3-3 pattern (i.e., 12 credits in one subject, 9 credits in a second subject, and 3 credits in each of three (3) other subject areas), or 30 academic credits in three subject areas in a 15-9-6 pattern.

Note: Subject areas relevant to elementary education, in broad terms, are the Arts (Art, Music and Drama), English, French, Science, Mathematics, Physical Education, Moral and Religious Education, Social Studies, Educational Technology, or an Indigenous language.

\section*{Cultural Development (15 credits)}

15 credits of courses that will enhance the candidate's cultural development. These are to be chosen in consultation with the Director of Programs in First Nations and Inuit Education.

\section*{Education Concentration ( 30 credits)}

30 credits. Normally the Education concentration is completed within the Certificate in Education for First Nations and Inuit.

\section*{Electives (15 credits)}

15 credits selected by the candidate after consultation with the Director of Programs in First Nations and Inuit Education.

\subsection*{5.7.3.1.1 Admission Requirements for the B.Ed. for Certified Teachers}

Applicants apply on the basis of having completed the Certificate in Education for First Nations and Inuit or equivalent and must have the continued support of their education authority to attend the field-based program. The right of final decision for acceptance of candidates rests with McGill.

\subsection*{5.7.3.2 Certificate (Cert.) Education for First Nations and Inuit (60 credits)}

This 60-credit program provides an opportunity for Algonquin, Cree, Inuit, Mi'gmaq, Mohawk, and Naskapi people to become qualified as teachers. It is offered on a part-time basis in Indigenous communities throughout Quebec in collaboration with, for example, the Cree School Board, the Kativik Ilisarniliriniq and various Mi'gmaq, Mohawk, Algonquin and education authorities.

Quebec graduates of this program receive Quebec Ministère de l'Éducation certification to teach at the elementary school level in Indigenous schools.
On completion of the Certificate requirements, trainees may apply for admission to the Bachelor of Education - Kindergarten and Elementary Education First Nations and Inuit Studies or Bachelor of Education for Certified Teachers program and consult the Program Adviser to determine Advanced Standing.
Time Limit

The time limit for completion of the 60 -credit Certificate in Education for First Nations and Inuit is 12 years. The University reserves the right to request that a student retake a course or courses after a five-year period if it is felt that too long a break has occurred in the ongoing nature of the training.

\section*{Required Courses (27 credits)}
\begin{tabular}{lcl} 
EDEC 201 & (1) & First Year Professional Seminar \\
EDEC 203 & \((3)\) & Communication in Education \\
EDEC 253 & \((1)\) & Second Professional Seminar (Kindergarten/Elementary) \\
EDEM 502 & (3) & Indigenous Family Dynamics and Supporting Institutions \\
EDFE 200 & (2) & First Field Experience (K/Elem and Secondary) \\
EDFE 256 & (3) & Second Field Experience (Kindergarten/Elementary) \\
EDFE 306 & (8) & Third Field Experience (Kindergarten/Elementary) \\
EDPE 300 & (3) & Educational Psychology \\
EDPI 341 & (3) & Instruction in Inclusive Schools
\end{tabular}

\section*{Complementary Courses (33 credits)}

6 credits from the following language courses according to language group and fluency:

\section*{Algonquin}
\begin{tabular}{lll} 
EDEC 270 & (3) & Algonquin Heritage Language 1 \\
EDEC 271 & (3) & Algonquin Heritage Language 2 \\
EDEC 272 & (3) & Algonquin Language 1 \\
EDEC 273 & (3) & Algonquin Language 2
\end{tabular}

\section*{Cree}
\begin{tabular}{lll} 
EDEC 241 & (3) & Cree Language 1 \\
EDEC 242 & (3) & Cree Language 2
\end{tabular}

\section*{Inuktitut}
\begin{tabular}{lll} 
EDEC 289 & (3) & Inuktitut Orthography and Grammar \\
EDEC 342 & (3) & Intermediate Indigenous Language \\
EDEC 344 & (3) & Advanced Indigenous Language
\end{tabular}

\section*{Mi'gmaw}

EDEC 237
(3) Mi'gmaw Heritage Language 1

EDEC 238
(3)

Mi'gmaw Heritage Language 2
EDEC 239
(3) Mi'gmaw Language 1

EDEC 240
Mi'gmaw Language 2

\section*{Mohawk}
\begin{tabular}{lll} 
EDEC 275 & (3) & Mohawk Heritage Language 1 \\
EDEC 276 & (3) & Mohawk Heritage Language 2 \\
EDEC 277 & (3) & Mohawk Language 1 \\
EDEC 278 & (3) & Mohawk Language 2
\end{tabular}

\section*{Naskapi}
\begin{tabular}{lll} 
EDEC 227 & (3) & Naskapi Language 1 \\
EDEC 228 & (3) & Naskapi Language 2
\end{tabular}

27 credits from one of the three following Stream course lists:
Stream A: Generalist
Stream B: Physical Education
Stream C: Culture and Language
In order to ensure appropriate choices, students select from the list of Complementary Courses in consultation with the Program Adviser.

\section*{Stream A: Generalist}

27 credits from the following list:
\begin{tabular}{lll} 
EDEA 242 & \((3)\) & Cultural Skills 1 \\
EDEC 243 & \((3)\) & Teaching: Multigrade Classrooms \\
EDEC 260 & \((3)\) & Philosophical Foundations \\
EDEC 262 & \((3)\) & Media, Technology and Education \\
EDEE 223 & \((3)\) & Language Arts \\
EDEE 230 & \((3)\) & Elementary School Mathematics 1 \\
EDEE 245 & \((3)\) & Orientation to Education \\
EDEE 248 & \((3)\) & Reading and Writing Inuktitut/Cree \\
EDEE 253 & \((3)\) & Kindergarten Classroom Pedagogy \\
EDEE 270 & (3) & Elementary School Science \\
EDEE 273 & (3) & Elementary School Science 2 \\
EDEE 280 & \((3)\) & Geography, History and Citizenship Education \\
EDEE 283 & (3) & Social Studies Pedagogy \\
EDEE 325 & (3) & Children's Literature \\
EDEE 332 & (3) & Teaching Elementary Mathematics 2 \\
EDEE 353 & (3) & Third Year Professional Seminar (Kindergarten/Elementary) \\
EDEE 355 & (3) & Classroom-based Evaluation \\
\hline
\end{tabular}

\section*{Stream B: Physical Education}

21 credits from the following list:
\begin{tabular}{lcl} 
EDEC 243 & \((3)\) & Teaching: Multigrade Classrooms \\
EDEC 262 & \((3)\) & Media, Technology and Education \\
EDEE 223 & \((3)\) & Language Arts \\
EDEE 245 & \((3)\) & Orientation to Education \\
EDEE 353 & \((3)\) & Third Year Professional Seminar (Kindergarten/Elementary) \\
EDKP 204 & \((3)\) & Health Education \\
EDKP 241 & \((3)\) & Indigenous Physical Activities \\
EDKP 292 & \((3)\) & Nutrition and Wellness \\
EDKP 307 & \((3)\) & Evaluation in Physical Education \\
EDKP 342 & \((3)\) & Physical Education Methods
\end{tabular}
EDKP 494
(3)
Physical Education Curriculum Development
and 6 credits from the following Physical Education courses:
\begin{tabular}{lcl} 
EDKP 214 & \((2)\) & Basketball \\
EDKP 217 & \((3)\) & Track and Field \\
EDKP 218 & \((2)\) & Volleyball \\
EDKP 223 & \((3)\) & Games 1: Elementary Physical Education \\
EDKP 229 & \((1)\) & Ice Hockey 1
\end{tabular}

\section*{Stream C: Culture and Language}

27 credits from the following list:
\begin{tabular}{|c|c|c|}
\hline EDEA 242 & (3) & Cultural Skills 1 \\
\hline EDEA 243 & (3) & Cultural Skills 2 \\
\hline EDEA 244 & (3) & Cultural Skills - Fall \\
\hline EDEA 245 & (3) & Cultural Skills - Winter \\
\hline EDEA 246 & (3) & Cultural Skills - Spring \\
\hline EDEA 247 & (3) & Cultural Skills - Summer \\
\hline EDEC 263 & (3) & Information Communication Technology in Indigenous Literacy \\
\hline EDEC 342 & (3) & Intermediate Indigenous Language \\
\hline EDEC 344 & (3) & Advanced Indigenous Language \\
\hline EDEE 230 & (3) & Elementary School Mathematics 1 \\
\hline EDEE 245 & (3) & Orientation to Education \\
\hline EDEE 248 & (3) & Reading and Writing Inuktitut/Cree \\
\hline EDEE 270 & (3) & Elementary School Science \\
\hline EDEE 283 & (3) & Social Studies Pedagogy \\
\hline EDEE 332 & (3) & Teaching Elementary Mathematics 2 \\
\hline EDEE 347 & (3) & Grammar and Composition 1 \\
\hline EDEE 348 & (3) & Grammar and Composition 2 \\
\hline EDEE 353 & (3) & Third Year Professional Seminar (Kindergarten/Elementary) \\
\hline EDEE 355 & (3) & Classroom-based Evaluation \\
\hline EDEE 370 & (3) & Traditional Indigenous Life Skills \\
\hline EDEE 371 & (3) & Integrating Indigenous Storytelling and Creative Writing \\
\hline EDEE 373 & (3) & Traditional Healing \\
\hline EDEE 383 & (3) & Oral and Family History \\
\hline EDKP 241 & (3) & Indigenous Physical Activities \\
\hline
\end{tabular}

\subsection*{5.7.3.2.1 Admission to the Certificate in Education for First Nations and Inuit}

Those intending to complete the program offered in cooperation with the Kativik Ilisarniliriniq must be fluent and literate in Inuktitut/Inuinnaqtun. Fluency in Algonquin, Cree, Mi'gmaw, Mohawk, or Naskapi is not a condition for acceptance for applicants from these communities, but is considered an asset. Courses are available in some of these languages for those teaching in immersion classes and other teaching situations where a knowledge of the first language is essential.

An applicant will normally be employed as a teacher or as a classroom assistant, have a valid teaching authorization from the appropriate teaching authority or a community education committee, be recommended by the school principal and an officer of the education authority, be recommended by a local community education committee, and be at least 21 years of age. Younger applicants will be considered for admission if they hold a Grade 12 Secondary School Diploma or a Diploma of Collegial Studies. The right of final decision for acceptance of candidates rests with McGill.

\subsection*{5.7.3.3 Certificate (Cert.) First Nations and Inuit Student Personnel Services ( \(\mathbf{3 0}\) credits)}

This program is offered by the Department of Educational and Counselling Psychology through Office First Nations and Inuit Education.
This 30-credit program is designed to provide Indigenous school personnel advisers with a training program that will enable them to learn about the principles and practice of personnel services as generally applied in educational settings, to help Indigenous student personnel advisers develop their personal skills, and to modify or adapt their services and the content to best suit the cultural and educational needs of Indigenous students; to encourage Indigenous student personnel advisers to take leadership in developing educational programs that address the social needs of their communities, to upgrade their academic qualifications and professional development; and to develop and make available, in English and in the languages of instruction, collections of professional and scholarly knowledge about students' needs, and services in Indigenous communities.

Bearers of this certificate will be qualified to work as educational and school personnel advisers within the employ of an Indigenous educational authority.

\section*{Required Courses ( 21 credits)}
\begin{tabular}{lcl} 
EDPC 201 & (3) & Introduction to Student Advising \\
EDPC 202 & \((3)\) & Helping Skills Practicum 1 \\
EDPC 203 & (3) & Helping Skills Practicum 2 \\
EDPC 205 & (3) & Career/Occupational Development \\
EDPC 208 & (3) & Native Families' Dynamics \\
EDPC 209 & (3) & Basic Crisis Intervention Skills \\
EDPC 210 & \((3)\) & Field Experience
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits selected from the list below or any other suitable course approved by the Program Adviser.
Registration in EDEM 502, EDKP 204, or any other courses offered by departments other than Educational and Counselling Psychology, or in other programs of this Department is dependent on availability (e.g., through a concurrently offered program) or through an arrangement made with that department or program. The Program Adviser will attempt to make these contacts whenever required.
\begin{tabular}{lll} 
EDEM 502 & (3) & Indigenous Family Dynamics and Supporting Institutions \\
EDKP 204 & (3) & Health Education \\
EDPI 211 & (3) & Social and Emotional Development
\end{tabular}

\subsection*{5.7.3.3.1 Admission to Certificate in First Nations and Inuit Student Personnel Services}

\section*{Admission Requirements}
- Fluently speak, read, and write the language of instruction as agreed upon between the Office of First Nations and Inuit Education and the Indigenous School Board or Education authority.
- Hold a student adviser position in an Indigenous community. This may be a new appointment concurrent with registration in the program. The position must be sufficient to meet the practicum requirements of the program.
- Be recommended by the local education authority.
- Be at least 21 years of age (except for special permission). By this means, students will qualify for admission as Mature Students under McGill regulations, and thereby not be required to have a Diploma of Collegial Studies (DEC).
- Be recommended and selected by the school administration in collaboration with McGill personnel.

The right of final decision for acceptance of candidates rests with McGill.

\subsection*{5.7.3.4 Certificate (Cert.) Middle School Education in Indigenous Communities (30 credits)}

This 30-credit program focuses on developing the particular skills and abilities required of the Indigenous teacher in the middle school of his/her community. It does not lead to provincial certification. Rather, it prepares Indigenous teachers, who are bilingual or have some knowledge of their Indigenous language and who have already established themselves as teachers, to teach students at this level in ways that are developmentally and culturally appropriate. The program focuses on the particular psychological, emotional, and social needs of Aboriginal adolescents and the teacher's role in facilitating the transition between elementary and high school.
This certificate may be taken concurrently and completed within the Bachelor of Education for Certified Teachers program if the requirements for the B.Ed. are fulfilled.

\section*{Required Courses (15 credits)}

EDEC 245 (3) Middle School Teaching
\begin{tabular}{lll} 
EDEC 246 & (3) & Middle School Curriculum \\
EDFE 210 & (3) & Middle School Practicum \\
EDPE 377 & (3) & Adolescence and Education
\end{tabular}

3 credits from the list below:
EDEC 302
(3)
Language and Learning - Curriculum
EDSL 305
L2 Learning: Classroom Settings

\section*{Major Subject Area ( 6 credits)}

6 credits in the major subject area of the Bachelor of Education for Certified Teachers selected in consultation with the Director of Programs in First Nations and Inuit Education.

\section*{Minor Subject Area (6 credits)}

6 credits in the minor subject area of the Bachelor of Education for Certified Teachers selected in consultation with the Director of Programs in First Nations and Inuit Education.

\section*{Education Courses (3 credits)}

3 credits from the list below or from other courses as approved by the Director of Programs in First Nations and Inuit Education.
\begin{tabular}{lll} 
EDEA 241 & \((3)\) & Basic Art Media for Classroom \\
EDEC 220 & \((3)\) & Curriculum Development \\
EDEC 243 & \((3)\) & Teaching: Multigrade Classrooms \\
EDEC 591 & \((3)\) & Cultural Values and Socialization \\
EDEE 444 & \((3)\) & First Nations and Inuit Curriculum \\
EDKP 241 & \((3)\) & Indigenous Physical Activities \\
EDPT 200 & \((3)\) & Integrating Educational Technology in Classrooms \\
EDSL 247 & \((3)\) & Second Language Education in Indigenous Communities \\
EDSL 305 & \((3)\) & L2 Learning: Classroom Settings
\end{tabular}

\subsection*{5.7.3.4.1 Admission to the Certificate in Middle School Education in Indigenous Communities}

Applicants will normally have completed or be completing their B.Ed. for Certified Teachers. It is strongly recommended that they have some competence in their Indigenous language as indicated by the successful completion of at least two language courses. For those applying with degrees from other universities, additional courses may be required to match the McGill B.Ed. for Certified Teachers profile. As the program and courses will be delivered in the partnership communities, applicants must be recommended by their school boards or teaching authorities. The right of final decision for acceptance of candidates rests with McGill.

\subsection*{5.7.3.5 Certificate (Cert.) First Nations and Inuit Educational Leadership (30 credits)}

The 30 credit Certificate in First Nations and Inuit Educational Leadership will focus on the following 5 objectives: (1) developing the core competencies of educational leaders; (2) fostering a self-reflective leader able to partner with parents to create community outreach; (3) cultivating awareness of the holistic learning and developmental cycles of the child and the role of the educational leader in enhancing that development; (4) maintaining the inter-connectedness and continuity of community and cultural values and aspirations within the structure of the administration of the school and other educational milieu; and (5) understanding and supporting the pedagogical objectives and the administrative framework of the educational context and system.

\section*{Required Courses (18 credits)}
\begin{tabular}{lll} 
EDEC 203 & \((3)\) & Communication in Education \\
EDEC 222 & (3) & Personnel Management and Group Skills \\
EDEC 311 & (6) & Resource Management \\
EDEC 312 & (3) & Practicum in Educational Leadership \\
EDEM 502 & (3) & Indigenous Family Dynamics and Supporting Institutions
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits from the list below or any other course approved by the Director of Programs in First Nations and Inuit Education.
\begin{tabular}{lcl} 
EDEC 230 & \((3)\) & Conflict Resolution \\
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 244 & \((3)\) & Issues in Aboriginal Education \\
EDEC 262 & \((3)\) & Media, Technology and Education \\
EDEE 245 & \((3)\) & Orientation to Education \\
EDEE 340 & \((3)\) & Special Topics: Cultural Issues \\
EDES 365 & \((3)\) & Experiences in Communications
\end{tabular}

\subsection*{5.7.3.5.1 Admission to the Certificate in First Nations and Inuit Educational Leadership}

Students admitted to this program will be recommended by their communities. They must be mature students (21 years of age) or hold a Secondary V diploma or equivalent. Students must speak, read, and write fluently the language of instruction as agreed upon between the unit and the Indigenous School Board or Education Centre. For Nunavik applicants, students must have experience in a Nunavik educational or community organization. The right of final decision for acceptance of candidates rests with McGill.

\subsection*{5.7.3.6 Certificate (Cert.) Indigenous Language and Literacy Education (30 credits)}

This 30-credit program is designed for Algonquin, Cree, Inuit, Mi'kmaq, and Kanienkehaka (Mohawk) students who wish to gain a deeper understanding of their Indigenous language, especially in its written form. It is aimed mainly at those who will be teaching their Indigenous language.

This certificate may be taken concurrently and completed within the Bachelor of Education for Certified Teachers program if the requirements for B.Ed. are fulfilled.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
EDEC 342 & (3) & Intermediate Indigenous Language \\
EDEC 344 & (3) & Advanced Indigenous Language
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits selected as described below.

\section*{Language Courses}

6 credits from the following language courses (or other courses as approved by the Director of Programs in First Nations and Inuit Education) including a beginning course ( 3 credits) in the Indigenous language as a first language (e.g., EDEC 241 Cree Language 1) and a second-level course ( 3 credits) in the same language (e.g., EDEC 242 Cree Language 2).
\begin{tabular}{lcl} 
EDEC 227 & \((3)\) & Naskapi Language 1 \\
EDEC 228 & \((3)\) & Naskapi Language 2 \\
EDEC 239 & \((3)\) & Mi'gmaw Language 1 \\
EDEC 240 & \((3)\) & Mi'gmaw Language 2 \\
EDEC 241 & \((3)\) & Cree Language 1 \\
EDEC 242 & \((3)\) & Cree Language 2 \\
EDEC 272 & \((3)\) & Algonquin Language 1 \\
EDEC 273 & \((3)\) & Algonquin Language 2 \\
EDEC 277 & \((3)\) & Mohawk Language 1 \\
EDEC 278 & \((3)\) & Mohawk Language 2 \\
EDEC 289 & \((3)\) & Inuktitut Orthography and Grammar
\end{tabular}

\section*{Education Courses}

12 credits from the list below:
\begin{tabular}{lcl} 
EDEA 242 & \((3)\) & Cultural Skills 1 \\
EDEC 220 & \((3)\) & Curriculum Development \\
EDEC 403 & \((3)\) & The Dialects of Inuktitut \\
EDEE 223 & \((3)\) & Language Arts \\
EDEE 240 & \((3)\) & Use and Adaptation of Curricula \\
EDEE 243 & \((3)\) & Reading Methods in Inuktitut/Cree \\
EDEE 248 & \((3)\) & Reading and Writing Inuktitut/Cree \\
EDEE 345 & \((3)\) & Literature and Creative Writing 1 \\
EDEE 346 & \((3)\) & Literature and Creative Writing 2 \\
EDEE 347 & \((3)\) & Grammar and Composition 1 \\
EDEE 348 & \((3)\) & Grammar and Composition 2 \\
EDEE 373 & \((3)\) & Traditional Healing \\
EDEE 383 & \((3)\) & Oral and Family History \\
EDES 365 & \((3)\) & Experiences in Communications \\
EDPE 304 & \((3)\) & Measurement and Evaluation
\end{tabular}

\section*{Electives (6 credits)}

6 credits of suitable courses approved by the Director of Programs in First Nations and Inuit Education.

\subsection*{5.7.3.6.1 Admission to the Certificate in Indigenous Language and Literacy Education}

Students admitted to this program will be recommended by their communities. If the program is used for professional development, students will be Indigenous teachers employed in local schools. They must be mature students or hold a Secondary V diploma or equivalent. The right of final decision for acceptance of candidates rests with McGill.

\subsection*{5.7.3.7 Certificate (Cert.) Inclusive Education (30 credits)}

The Certificate in Inclusive Education is intended for regular class teachers, special educators, adult educators, and other educational personnel. The program provides a sequence of courses that will ensure a sound foundation for adapting curriculum and instruction for students with varying abilities, learning styles, and special needs. It strives to meet the needs of educators who must adapt to their changing roles in contemporary schools: (a) for general educators, to educate students with diverse needs in their heterogeneous classrooms, and (b) for special educators, to collaborate with other professionals working with exceptional students.

\section*{Required Courses ( 24 credits)}
\begin{tabular}{lcl} 
EDPI 309 & \((3)\) & Diverse Learners \\
EDPI 341 & \((3)\) & Instruction in Inclusive Schools \\
EDPI 344 & \((3)\) & Assessment for Instruction \\
EDPI 440 & \((3)\) & Managing the Inclusive Classroom \\
EDPI 441 & (3) & Students with Behaviour Difficulties \\
EDPI 442 & (3) & Students with Learning Difficulties \\
EDPI 526 & (3) & Supporting Students' Strengths and Talents \\
EDPI 543 & (3) & Family, School and Community
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits chosen from the following:
\begin{tabular}{lll} 
EDPE 496 & (3) & Individual Reading Course \\
EDPI 527 & (3) & Creativity and its Cultivation \\
EDPI 539 & (3) & Field Work 1 \\
EDPI 540 & (3) & Field Work 2
\end{tabular}

Other courses may be approved by the Program Director. Further information may be obtained by emailing ecpundergrad.education@mcgill.ca. Courses listed above are not necessarily offered on a regular basis. Check Minerva for course availability.

\subsection*{5.7.4 Kinesiology and Physical Education}

\subsection*{5.7.4.1 Location}
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Kinesiology and Physical Education, Faculty of Education
Currie Gym
475 Pine Avenue West, 2nd floor
Montreal QC H2W 1S4
Telephone: 514-398-2617
Fax: 514-398-4186
Email: studentaffairs.kpe@mcgill.ca
Website: mcgill.ca/edu-kpe

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\subsection*{5.7.4.2 About the Department of Kinesiology and Physical Education}

The Department of Kinesiology and Physical Education offers one program leading to a B.Ed. degree, two programs leading to a B.Sc. degree, a Minor in Kinesiology for Science students, and a Minor in Entrepreneurship in collaboration with the Faculty of Management. For more information, please visit the website's Undergraduate Program Information section.

The Department also offers programs at the graduate level leading to an M.A. and M.Sc., as well as a Ph.D. in Kinesiology Sciences. For further information on these programs, please visit mcgill.ca/edu-kpe/programs section.

\subsection*{5.7.4.3 Bachelor of Education (B.Ed.) - Physical and Health Education (120 credits)}

The Bachelor of Education (B.Ed.) - Physical and Health Education is a 120-credit program leading to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credit program) for a total of 150 credits.
The Physical and Health Education program prepares students to teach physical and health education at the elementary and secondary levels. In a unique structure interweaving academic studies, professional course work, and teaching practices over the course of study, students are rapidly given the opportunity to assume a teaching role; the extent of teaching involvement and expectations progressively building on additional academic and professional courses.

Please note that graduates of teacher education programs are recommended by the University for Quebec certification to the Ministère de l'Éducation, et L'Enseignment supérieur (MEES). For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs", and "Quebec Teacher Certification".

\section*{Freshman Program}

Freshman students are required to complete 30 credits of introductory (100- or 200-level) courses. Students will not be granted permission to take first-year (U1) courses if the credits from the Freshman year have not been obtained. For students considering a second teachable subject, the following areas are recommended: history, geography, English, or mathematics.
From the "Required Courses" list, Freshman students take the 0-credit course EDEC 215 English Language Requirement. In addition, in consultation with the Program Adviser, students may select courses from the recommended course list below or other courses.
\begin{tabular}{lll} 
EDEC 202 & \((3)\) & Effective Communication \\
EDEM 220 & (3) & Contemporary Issues in Education \\
WCOM 250 & (3) & Research Essay and Rhetoric
\end{tabular}

\section*{Required Courses (102 credits)}
\begin{tabular}{lcl} 
EDEC 215 & \((0)\) & English Exam for Teacher Certification \\
EDEC 247 & \((3)\) & Policy Issues in Quebec and Indigenous Education \\
EDEC 260 & \((3)\) & Philosophical Foundations \\
EDFE 246 & \((3)\) & First Field Experience (Physical Education) \\
EDFE 373 & \((3)\) & Second Field Experience (Physical Education) \\
EDFE 380 & \((7)\) & Third Field Experience (Physical Education) \\
EDFE 480 & \((7)\) & Fourth Field Experience (Physical Education) \\
EDKP 100 & \((3)\) & Introduction to Physical and Health Education in Quebec
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EDKP 204 & (3) & Health Education \\
\hline EDKP 208 & (3) & Biomechanics and Motor Learning \\
\hline EDKP 213 & (1) & Aquatics \\
\hline EDKP 215 & (0) & Standard First Aid/Cardio-Pulmonary Resuscitation Level C \\
\hline EDKP 217 & (3) & Track and Field \\
\hline EDKP 223 & (3) & Games 1: Elementary Physical Education \\
\hline EDKP 225 & (3) & Games 2: Secondary Physical Education \\
\hline EDKP 232 & (3) & Health-Related Fitness \\
\hline EDKP 235 & (3) & Non-Traditional Physical Activities \\
\hline EDKP 237 & (3) & Outdoor Education \\
\hline EDKP 253 & (3) & Movement Education \\
\hline EDKP 261 & (3) & Motor Development \\
\hline EDKP 292 & (3) & Nutrition and Wellness \\
\hline EDKP 293 & (3) & Anatomy and Physiology \\
\hline EDKP 307 & (3) & Evaluation in Physical Education \\
\hline EDKP 330 & (3) & Physical Activity and Public Health \\
\hline EDKP 342 & (3) & Physical Education Methods \\
\hline EDKP 391 & (3) & Physiology in Sport and Exercise \\
\hline EDKP 394 & (3) & Historical Perspectives \\
\hline EDKP 396 & (3) & Adapted Physical Activity \\
\hline EDKP 442 & (3) & Physical Education Pedagogy \\
\hline EDKP 443 & (3) & Research Methods \\
\hline EDKP 448 & (3) & Exercise and Health Psychology \\
\hline EDKP 494 & (3) & Physical Education Curriculum Development \\
\hline EDKP 498 & (3) & Sport Psychology \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits selected as specified below:

\section*{Multicultural Education}

3 credits from:
\begin{tabular}{lll} 
EDEC 233 & (3) & Indigenous Education \\
EDEC 248 & \((3)\) & Equity and Education \\
EDEC 249 & \((3)\) & Global Education and Social Justice
\end{tabular}

\section*{Media, Technology, Computers and Education}

3 credits from:
\begin{tabular}{lll} 
EDEC 262 & (3) & Media, Technology and Education \\
EDPT 200 & (3) & Integrating Educational Technology in Classrooms \\
EDPT 204 & (3) & Creating and Using Media for Learning
\end{tabular}

Electives (12 credits)

12 credits chosen from any of the University's course offerings to contribute to the student's academic proficiency and professional preparation. Students are encouraged to choose as they wish. However, beware that some courses have restrictions, pre-requisites and/or enrollment limitations.

\subsection*{5.7.4.4 Bachelor of Science (B.Sc) (Kinesiology) - Minor in Entrepreneurship (18 credits)}

This Minor is a collaboration of the Department of Kinesiology and Physical Education and the Desautels Faculty of Management. The program will demonstrate how to conceptualize, develop and manage successful new ventures - including for-profit private companies, social enterprises and cooperatives, as well as intrapreneurship initiatives. The program covers the essentials of management and is interdisciplinary and integrative. Many courses in the Minor will address a mix of students from across multiple McGill faculties.

This Minor is restricted to students who have completed one year of university studies with a minimum CGPA of 3.0. The Minor has limited enrolment; students should contact the Student Advising Office to apply for admission. Students in this Minor are not permitted to take the Desautels Minor in Management (for Non-Management Students).

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
INTG 201 & (3) & Integrated Management Essentials 1 \\
INTG 202 & (3) & Integrated Management Essentials 2 \\
MGPO 362 & (3) & Fundamentals of Entrepreneurship \\
MGPO 364 & (3) & Entrepreneurship in Practice
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits from the following:
\begin{tabular}{lll} 
BUSA 465 & \((3)\) & Technological Entrepreneurship \\
EDKP 302 & (3) & Kinesiology Clinic Internship 1 \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MIMM 387 & (3) & The Business of Science
\end{tabular}

\subsection*{5.7.4.5 Bachelor of Science (Kinesiology) (B.Sc.(Kinesiology)) - Kinesiology (90 credits)}

The B.Sc.(Kinesiology) is a 90-credit program. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies are normally enrolled in a four-year B.Sc.(Kinesiology) program, which includes a 30-credit Freshman year for a total of 120 credits.
The focus of the Kinesiology program is a comprehensive understanding of human movement. Kinesiology is a multidisciplinary field viewing human movement from social, historical, psychological, or biological perspectives. The program provides students with a breadth of theoretical knowledge as well as an opportunity to explore related areas in greater depth, including minor programs available elsewhere within the University.

An Honours program is available for particularly strong students. To qualify for the Honours program, students must obtain a CGPA of 3.3 after two years in Kinesiology and must retain this CGPA until graduation.

Graduation Requirement:
Prior to graduation, students are required to show proof of certification in Standard Level Safety Oriented First Aid/Level C in Cardiopulmonary Resuscitation, or equivalencies.

\section*{Freshman Program}

29-30 credits of basic science courses depending on the Fall term MATH course selected.
Students admitted from CEGEP or with other Advanced Standing should have equivalencies for these courses to be exempt from Freshman program requirements.
Fall term BIOL and CHEM courses:
BIOL 111
(3)
Principles: Organismal Biology
CHEM 110
General Chemistry 1

In consultation with a program adviser, one of the following Fall term MATH courses:
\begin{tabular}{lll} 
MATH 139 & (4) & Calculus 1 with Precalculus \\
MATH 140 & (3) & Calculus 1
\end{tabular}
MATH 150
(4)
Calculus A

In consultation with a program adviser, one of the following Fall term PHYS courses:
\begin{tabular}{lll} 
PHYS 101 & (4) & Introductory Physics - Mechanics \\
PHYS 131 & (4) & Mechanics and Waves
\end{tabular}

Winter term BIOL and CHEM courses:
BIOL 112
(3)
Cell and Molecular Biology
CHEM 120
(4)
General Chemistry 2

One of the following Winter term MATH courses:
\begin{tabular}{lll} 
MATH 141 & (4) & Calculus 2 \\
MATH 151 & (4) & Calculus B
\end{tabular}

One of the following Winter term PHYS courses:
\begin{tabular}{lll} 
PHYS 102 & (4) & Introductory Physics - Electromagnetism \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

\section*{Required Courses (51 credits)}
\begin{tabular}{lll} 
ANAT 315 & \((3)\) & Clinical Human Musculoskeletal Anatomy \\
ANAT 316 & \((3)\) & Clinical Human Visceral Anatomy \\
EDKP 206 & \((3)\) & Biomechanics of Human Movement \\
EDKP 215 & \((0)\) & Standard First Aid/Cardio-Pulmonary Resuscitation Level C \\
EDKP 250 & \((3)\) & Introductory Principles in Applied Kinesiology \\
EDKP 261 & (3) & Motor Development \\
EDKP 292 & (3) & Nutrition and Wellness \\
EDKP 330 & (3) & Physical Activity and Public Health \\
EDKP 350 & (3) & Physical Fitness Evaluation Methods \\
EDKP 395 & (3) & Exercise Physiology \\
EDKP 396 & (3) & Adapted Physical Activity \\
EDKP 443 & (3) & Research Methods \\
EDKP 447 & (3) & Extor Control \\
EDKP 448 & (3) & Advanced Principles in Applied Kinesiology \\
EDKP 450 & (3) & Sport Psychology \\
EDKP 498 & (3) & Mammalian Physiology 1 \\
PHGY 209 & (3) & Mammalian Physiology 2 \\
PHGY 210 & &
\end{tabular}

\section*{Complementary Courses (15-24 credits)}

3 credits from Statistics:
\begin{tabular}{lcl} 
BIOL 373 & (3) & Biometry \\
EDPE 375 & (3) & Introductory Statistics \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

3 credits from Psychosocial:
\begin{tabular}{lll} 
EDKP 394 & \((3)\) & Historical Perspectives \\
EDKP 405 & (3) & Sport in Society \\
EDKP 548 & (3) & Applied Exercise Psychology
\end{tabular}

0-6 credits from Internships/Practicums:
\begin{tabular}{lcl} 
EDKP 301 & (3) & Kinesiology Internship 1 \\
EDKP 302 & (3) & Kinesiology Clinic Internship 1 \\
EDKP 401 & (3) & Kinesiology Internship 2 \\
EDKP 402 & \((3)\) & Kinesiology Clinic Internship 2 \\
EDKP 451 & \((3)\) & Personal Trainer Practicum \\
EDKP 453 & \((3)\) & Research Practicum in Kinesiology
\end{tabular}

3 credits from Biomechanics/Motor Learning:
\begin{tabular}{lll} 
EDKP 444 & (3) & Ergonomics \\
EDKP 446 & (3) & Physical Activity and Ageing \\
EDKP 566 & (3) & Advanced Biomechanics Theory
\end{tabular}

6 credits from Exercise Physiology:
\begin{tabular}{lll} 
EDKP 445 & \((3)\) & Exercise Metabolism \\
EDKP 449 & (3) & Neuromuscular and Inflammatory Pathophysiology \\
EDKP 485 & \((3)\) & Cardiopulmonary Exercise Pathophysiology \\
EDKP 542 & (3) & Environmental Exercise Physiology
\end{tabular}

0-3 credits from Nutrition:
NUTR 503 (3) Nutrition and Exercise

\section*{Elective Courses (15-24 credits)}

15-24 credits of any 200-500 level courses; in consultation with the Student Adviser, a Minor in another faculty may be possible.

\subsection*{5.7.4.6 Bachelor of Science (Kinesiology) (B.Sc.(Kinesiology)) - Kinesiology - Honours (90 credits)}

The Honours version of the B.Sc.(Kinesiology) is a 90-credit program. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies are normally enrolled in a four-year B.Sc.(Kinesiology) program, which includes a 30 -credit Freshman year for a total of 120 credits.

The Kinesiology - Honours program offers particularly strong students aspiring to continue their studies at the graduate level the opportunity to pursue more advanced coursework. The program requires the completion of a research project under the direction of a professor during the final year. To qualify for the Honours program, students must obtain a CGPA of 3.3 after two years in Kinesiology and must retain this CGPA until graduation.
Graduation Requirement:
Prior to graduation, students are required to show proof of certification in Standard Level Safety Oriented First Aid/Level C in Cardiopulmonary Resuscitation, or equivalencies.

\section*{Freshman Program}

29-30 credits of basic science courses depending on the Fall term MATH course selected.
Students admitted from CEGEP or with other Advanced Standing should have equivalencies for these courses to be exempt from Freshman program requirements.

Fall term BIOL and CHEM courses:
BIOL 111
(3)
Principles: Organismal Biology
CHEM 110
(4)
General Chemistry 1

In consultation with a program adviser, one of the following Fall term MATH courses:
\begin{tabular}{lll} 
MATH 139 & (4) & Calculus 1 with Precalculus \\
MATH 140 & (3) & Calculus 1 \\
MATH 150 & (4) & Calculus A
\end{tabular}

In consultation with a program adviser, one of the following Fall term PHYS courses:
\begin{tabular}{lll} 
PHYS 101 & (4) & Introductory Physics - Mechanics \\
PHYS 131 & (4) & Mechanics and Waves
\end{tabular}

Winter term BIOL and CHEM courses:
BIOL 112
(3)
Cell and Molecular Biology
CHEM 120
(4)
General Chemistry 2

One of the following Winter term MATH courses:
\begin{tabular}{lll} 
MATH 141 & (4) & Calculus 2 \\
MATH 151 & (4) & Calculus B
\end{tabular}

One of the following Winter term PHYS courses:
\begin{tabular}{lll} 
PHYS 102 & (4) & Introductory Physics - Electromagnetism \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

\section*{Required Courses ( 60 credits)}
\begin{tabular}{lll} 
ANAT 315 & (3) & Clinical Human Musculoskeletal Anatomy \\
ANAT 316 & (3) & Clinical Human Visceral Anatomy \\
EDKP 206 & (3) & Biomechanics of Human Movement \\
EDKP 215 & (0) & Standard First Aid/Cardio-Pulmonary Resuscitation Level C \\
EDKP 250 & \((3)\) & Introductory Principles in Applied Kinesiology
\end{tabular}
\begin{tabular}{lcl} 
EDKP 261 & \((3)\) & Motor Development \\
EDKP 292 & \((3)\) & Nutrition and Wellness \\
EDKP 330 & \((3)\) & Physical Activity and Public Health \\
EDKP 350 & \((3)\) & Physical Fitness Evaluation Methods \\
EDKP 395 & \((3)\) & Exercise Physiology \\
EDKP 396 & \((3)\) & Adapted Physical Activity \\
EDKP 443 & \((3)\) & Research Methods \\
EDKP 447 & \((3)\) & Motor Control \\
EDKP 448 & \((3)\) & Exercise and Health Psychology \\
EDKP 450 & \((3)\) & Advanced Principles in Applied Kinesiology \\
EDKP 454 & \((3)\) & Honours Research Practicum \\
EDKP 498 & \((3)\) & Sport Psychology \\
EDKP 499 & \((6)\) & Undergraduate Honours Research Project \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & \((3)\) & Mammalian Physiology 2
\end{tabular}

\section*{Complementary Courses}
\(15-24\) credits

3 credits of Statistics from:
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

3 credits of Psychosocial from:
\begin{tabular}{lll} 
EDKP 394 & \((3)\) & Historical Perspectives \\
EDKP 405 & \((3)\) & Sport in Society \\
EDKP 548 & \((3)\) & Applied Exercise Psychology \\
PSYC 471 & \((3)\) & Human Motivation
\end{tabular}

0-6 credits of Internships/Practicum from:
\begin{tabular}{lll} 
EDKP 301 & (3) & Kinesiology Internship 1 \\
EDKP 401 & (3) & Kinesiology Internship 2 \\
EDKP 451 & (3) & Personal Trainer Practicum \\
EDKP 453 & (3) & Research Practicum in Kinesiology
\end{tabular}

3 credits of Biomechanics/Motor Learning from:
\begin{tabular}{lll} 
EDKP 444 & (3) & Ergonomics \\
EDKP 446 & (3) & Physical Activity and Ageing \\
EDKP 566 & (3) & Advanced Biomechanics Theory
\end{tabular}
POTH 434
(3)
Musculoskeletal Biomechanics

6 credits of Exercise Physiology from:
\begin{tabular}{lll} 
EDKP 445 & (3) & Exercise Metabolism \\
EDKP 449 & (3) & Neuromuscular and Inflammatory Pathophysiology \\
EDKP 485 & (3) & Cardiopulmonary Exercise Pathophysiology \\
EDKP 495 & (3) & Scientific Principles of Training \\
EDKP 542 & (3) & Environmental Exercise Physiology \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}
\(0-3\) credits of Nutrition from:
NUTR 344
Clinical Nutrition 1
NUTR 503
Nutrition and Exercise

\section*{Elective Courses}

6-15 credits of any 200-level or higher courses, chosen in consultation with the Student Adviser.

\section*{\(6 \quad\) Faculty of Engineering}

\subsection*{6.1 About the Faculty of Engineering}

The Faculty currently includes six engineering departments and two schools, and houses three institutes:

\section*{Departments}

\section*{Bioengineering}

Chemical Engineering
Civil Engineering
Electrical and Computer Engineering
Mechanical Engineering
Mining and Materials Engineering

\section*{Schools}

The Peter Guo-hua Fu School of Architecture
Urban Planning

\section*{Institutes}

Trottier Institute for Sustainability in Engineering and Design (TISED) (Website: mcgill.ca/tised)
McGill Institute for Advanced Materials (MIAM) (Website: mcgill.ca/miam) (established by the Faculties of Engineering and Science)
McGill Institute for Aerospace Engineering (MIAE) (Website: mcgill.ca/miae)

The Faculty serves approximately 3,300 undergraduate students and 1,300 graduate students in a wide variety of academic programs.
Undergraduate programs leading to professional bachelor's degrees are offered in all Engineering departments. These programs are designed to qualify graduates for immediate employment in a wide range of industries and for membership in the appropriate professional bodies. Additionally, a non-professional undergraduate degree is offered in the School of Architecture for those who plan to work in related fields not requiring professional qualification.

The curricula are structured to provide suitable preparation for those who plan to continue their education in postgraduate studies either at McGill or elsewhere. The professional degrees in Architecture and Urban Planning are offered at the master's level and are described at Faculty of Engineering >Graduate.

The academic programs are divided into required and complementary sections. The required courses emphasize basic principles which permit graduates to keep abreast of progress in technology throughout their careers. Exposure to current technology is provided by the wide variety of complementary courses which allow students to pursue a particular interest in depth. For program details and requirements, refer to section 6.9: Browse Academic Units \& Programs.
The Engineering Internship Program provides engineering students with the opportunity to participate in four-, eight-, twelve-, or sixteen-month paid work experiences. Details can be found at mcgill.ca/careers4engineers/engineering-internship-program/students In addition, co-op programs are offered in Mining Engineering, Materials Engineering, and Software Engineering.

Graduate and postgraduate programs leading to master's and doctoral degrees are offered in all sectors of the Faculty. Numerous areas of specialization are available in each of the departments and schools. All postgraduate programs, including the professional degree programs in Architecture and in Urban Planning, are described on the Faculty of Engineering's Graduate Studies page.

\subsection*{6.2 About Engineering (Undergraduate)}

\subsection*{6.2.1 Location}

\section*{Faculty of Engineering}

\author{
Macdonald Engineering Building \\ 817 Sherbrooke Street West \\ Montreal QC H3A 0C3 \\ Telephone: 514-398-7250 \\ Faculty website: mcgill.ca/engineering
}

The McGill Engineering Student Centre (Student Affairs Office, Career Centre, Peer Tutoring Services) and the Office of the Associate Dean (Student Affairs) are located at the following address:
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3450 University Street
Montreal QC H3A 0E8
Frank Dawson Adams Building, Suite 22
Telephone: 514-398-7257
McGill Engineering Student Centre website: mcgill.ca/engineering/students/undergraduate/mesc

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\subsection*{6.2.2 About the Faculty of Engineering}

The mission of the Faculty of Engineering is to contribute to the advancement of learning and to the socioeconomic development of Quebec and Canada, through teaching and research activities at the highest international standards of quality.

Goals:
- To prepare graduates for productive professional careers through the provision of accredited bachelor's programs;
- To train students through focused professional programs to attain the forefront of their fields;
- To perform research and other scholarly activities which achieve international recognition;
- To ensure that technological innovations developed through research are transferred to industry; and
- To provide a stimulating environment for teaching, learning, and research.

In this section, you will find up-to-date information about the Faculty and about the undergraduate programs and courses it offers. Graduate Studies in the Faculty of Engineering is also offered by McGill.
You will find information on the following topics (and others):
- section 6.1: About the Faculty of Engineering
- section 6.3: Degrees and Requirements for Professional Registration
- section 6.6: Student Activities
- section 6.8: Engineering Internship Program (EIP)
- Undergraduate Programs and Courses
- section 6.9.10: Minor Programs for students in the Faculty of Engineering

For regulations that are specific to undergraduate studies in the Faculty of Engineering, see University Regulations and Resources (Undergraduate) and watch for sections and notes that are specific to the Faculty of Engineering.

\subsection*{6.3 Degrees and Requirements for Professional Registration}

\section*{Non-Professional}

Bachelor of Science (Architecture)

The first professional degree in architecture is the Master of Architecture (Professional). Further information can be found on the Faculty of Engineering Graduate Studies page.

\section*{Professional}

Bachelor of Engineering

The B.Eng. programs are accredited by the Canadian Engineering Accreditation Board (CEAB) of Engineers Canada. Our accredited programs fulfil the academic requirements for admission to the provincial engineering professional organizations. Engineers Canada has also negotiated agreements with engineering organizations in other countries to grant Canadian licensed engineers the same privileges accorded to professional engineers in those countries. For more information, visit the Engineers Canada website at www.engineerscanada.ca.

To become a professional engineer in Canada, a graduate must pass an examination on legal aspects and on the principles of professional practice, and acquire two to four years of engineering experience, depending on the province. Only persons duly registered may use the title "engineer" and perform the professional activities reserved for engineers by provincial laws and regulations.

In Quebec, the professional engineering body is the Ordre des ingénieurs du Québec (OIQ). In order to better prepare new graduates for the practice of their profession, McGill organizes seminars in cooperation with the OIQ on various aspects of the profession. The OIQ also has a student section. For more information, visit the OIQ website at www.oiq.qc.ca.

\subsection*{6.4 Admission Requirements}

The Faculty of Engineering offers programs leading to the degrees of B.Eng. and B.Sc.(Arch.). Enrolment in Engineering programs is limited.
For detailed information on admissions requirements, see the Undergraduate Admissions Guide at mcgill.ca/applying.

\subsection*{6.5 Student Progress}

The length of the B.Eng. and B.Sc.(Arch.) programs varies depending on the program and basis of admission. You can find the curriculum for your program on the website of your department/school. See mcgill.ca/engineering/departments-schools-and-institutes for links to department/school websites.

You are expected to complete the B.Eng. or B.Sc.(Arch.) program within six years of entry. However, this may vary if students are admitted to a shortened program (e.g., on account of Advanced Standing). Extensions may be granted by the Committee on Standing in cases of serious medical problems or where other similarly uncontrollable factors have affected your progress, or your program is lengthened (e.g., participation in the Engineering Internship Program).

\subsection*{6.6 Student Activities}

The campus offers a wide variety of extracurricular activities for students. All are encouraged to participate. Many of these are organized within the Faculty under the auspices of the Engineering Undergraduate Society (EUS). EUS publishes a handbook describing their operations and the activities of various Faculty clubs and societies; you can also find these on their website (see below). All undergraduate students automatically become members of the EUS. Each department and school also has a student association.
- For more information about EUS and links to department/school student association websites, visit the EUS website at mcgilleus.ca/.
- For more information on extra-curricular activities and organizations, see mcgill.ca/engineering/students/undergraduate/student-life.
- For more information on student design teams and projects, see mcgill.ca/engineering/students/undergraduate/student-life/design-teams-projects.

\subsection*{6.7 Degrees and Programs Offered}

\section*{Internship Program}

Engineering Internship Program

\section*{Co-op Programs}

Materials Engineering (B.Eng.)
Mining Engineering (B.Eng.)
Software Engineering (B.Eng)

\section*{Major Programs}

Architecture (B.Sc.(Arch.))
Bioengineering (B.Eng.)
Chemical Engineering (B.Eng.)
Civil Engineering (B.Eng.)
Computer Engineering (B.Eng.)
Electrical Engineering (B.Eng.)
Materials Engineering (B.Eng.)
Mechanical Engineering (B.Eng.)
Mining Engineering (B.Eng.)

\section*{Honours Programs}

Electrical Engineering (B.Eng.)
Mechanical Engineering (B.Eng.)

\section*{Minors}

Aerospace Engineering
Applied Artificial Intelligence
Arts
Biomedical Engineering
Biotechnology
Chemistry
Computer Science
Construction Engineering and Management
Economics
Environment
Environmental Engineering
Management Minors: Minor in Finance, Minor in Management, Minor in Marketing, Minor in Operations Management
Materials Engineering
Mathematics
Mining Engineering
Musical Science and Technology
Nanotechnology
Physics
Software Engineering
Technological Entrepreneurship

\subsection*{6.8 Engineering Internship Program}

\section*{Real world experiences await.}

What is the EIP?
The McGill Engineering Internship Program (EIP) offers full-time undergraduate engineering students in non co-op degree programs the possibility of participating in industry-related internships and having their experiences formally recognized. With an increasing number of employers requiring applicants to be part of a formal university coop/internship program, the EIP enables non co-op students to be eligible and apply to those internship opportunities

\subsection*{6.8.1 Eligibility Criteria}
- Students must be registered full-time in their degree program before the proposed internship term and must be returning to full-time studies following the completion of the internship.
- Internships must meet a standard durational requirement of \(4,8,12\), or 16 months.
- Internships must be considered full-time (at least 35 hours per week).
- Internships must be a paid position with a salary based on the student's experience and level of study; unpaid internships are not eligible.
- Internships must be related to the student's degree program.
- International students are also eligible, but will require a co-op work permit to participate.
- Students cannot miss more than two academic terms for internships.
- Students may be eligible to pursue one academic course (maximum of 4 credits) while on an approved internship term, pending certain conditions.

\subsection*{6.9 Browse Academic Units \& Programs}

The programs and courses in the following sections have been approved for the 2024-2025 session as listed.

\subsection*{6.9.1 Architecture}

\subsection*{6.9.1.1 Location}

Macdonald-Harrington Building, Room 201
815 Sherbrooke Street West
Montreal QC H3A 0C2
Telephone: 514-398-6700
Fax: 514-398-7372
Website: mcgill.ca/architecture

\subsection*{6.9.1.2 About the Peter Guo-hua Fu School of Architecture}

Founded in 1896, the Peter Guo-hua Fu School of Architecture at McGill University offers professional programs, including B.Sc. (Arch.) and M.Arch. (Professional), and post-professional research programs, including M.Arch. (Post-professional) and Ph.D.

\section*{Vision}

To advance professional architectural education that flourishes through research, critical practice, and community engagement.

\section*{Mission}

The Peter Guo-hua Fu School of Architecture educates professionals who contribute to the global community through the design, construction, and interpretation of the built environment. The School:
- encourages a diverse environment for teaching, learning, and research, supported by both traditional and state-of-the-art digital resources;
- develops professional and post-professional research-based Masters and Ph.D. programs that enable graduates to contribute responsibly to the profession, to research, and to careers in related fields;
- enriches multidisciplinary teaching and research within the University and in connection with other local and international universities; and
- engages citizens' groups, local, provincial, and national governments, the private sector, and the profession toward the improvement of the built environment.

\subsection*{6.9.1.3 Architectural Certification in Canada}

In Canada, all provincial/territorial associations/institutes/orders recommend a degree from an accredited professional degree program as a prerequisite for licensure. The Canadian Architectural Certification Board (CACB), which is the sole agency authorized to accredit Canadian professional degree programs in architecture, recognizes two types of accredited degrees: the Master of Architecture (M.Arch.), and the Bachelor of Architecture (B.Arch.). A program may be granted a two-year, three-year, or six-year term of accreditation, depending on its degree of conformance with established educational standards.
Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.
The M.Arch. (Professional) degree is accredited by the Canadian Architectural Certification Board (CACB), and is recognized as accredited by the National Council of Architectural Registration Boards (NCARB) in the United States.

\subsection*{6.9.1.4 Programs of Study}

Students in the B.Sc.(Arch.) program who intend to proceed to the professional degree must satisfy certain minimum requirements. Students must:
- complete the B.Sc.(Arch.) degree, including the series of required and complementary courses stipulated for professional studies, with a minimum CGPA of 3.00. Please note that the minimum CGPA requirement does not guarantee entry into M.Arch program; and
- submit a portfolio of work executed in the sequence of six design studios, as well as samples of professional and personal work.

Further information on the M.Arch. (Professional) program and application procedures is available at mcgill.ca/architecture/programs/professional/prospective-students/application-procedures.

\subsection*{6.9.1.4.1 Student Exchanges}

A limited number of qualified students may participate in an exchange with schools of architecture at other universities that have agreements with the McGill School of Architecture, for a maximum of one term in the second year of the B.Sc.(Arch.) program. These include the following:
- Università Iuav di Venezia (Venice, Italy);
- Fakultät für Architektur und Raumplanung;
- Université Catholique de Louvain (Louvain, Brussels, and Tournai, Belgium);
- Scuola di Architettura Civile Politecnico di Milano (Leonardo) (Milan, Italy);
- College of Architecture and Urban Planning, Tongji University (Shanghai, China);
- École nationale supérieure d'architecture de Paris-Belleville (Paris, France);
- École nationale supérieure d'architecture de Grenoble (Grenoble, France).

\subsection*{6.9.1.5 Ancillary Academic Facilities}

\section*{Laboratories and Workshops}

Media Centre - Juan Osorio, Media Technician
Workshop Facilities - Athanasia Blounas, Technician; David Speller, Technician

\section*{Library}

Blackader-Lauterman Collection of Architecture and Art, located in the Redpath Library - Emily Jaeger-McEnroe, Liaison Librarian

\section*{Collections}

The John Bland Canadian Architecture Collection - Jennifer Garland, Assistant Head Librarian, Rare Books and Special Collections

\subsection*{6.9.1.6 Bachelor of Science (B.Sc.) (Architecture) - Architecture (126 credits)}

Program credit weight: 126 credits
Program credit weight for CEGEP students: 98 credits
The B.Sc.(Arch.) program provides conceptual, technical, and procedural foundations for the professional M.Arch. program, which is accredited by the Canadian Architectural Certification Board and recognized as accredited by the National Council of Architectural Registration Boards in the US. Students entering the B.Sc.(Arch.) program complete first-year courses in general studies (including sciences, humanities, and social sciences), for which individuals entering with the Québec Diploma of Collegial Studies in Arts and Science or Pure and Applied Science (or equivalent) are generally granted transfer credits. All students then complete six terms of immersion in architecture, centered in studio courses exploring principles of design, norms of representation, cultures of construction, and the human experience of architecture. Studio-based learning is complemented by lecture courses on foundational knowledge. Complementary courses provide further opportunities to learn about how culture intersects with technology in the work of architecture, and students select electives to customize their learning experience.

\section*{Required Year 0 (Freshman) Courses}

28 credits
Generally, students admitted to the Architecture program from Quebec CEGEPs are granted transfer credit for the Year 0 (Freshman) courses and enter a 98-credit (six-term) program.

Course choices must be made through consultation with the Student Adviser for the Professional Programs.
All Year 0 students must successfully complete 10 credits from the following:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
PHYS 131* & (4) & Mechanics and Waves
\end{tabular}

All Year 0 students must also successfully complete 16 credits as follows:
3 credits from among any 100- or 200-level courses with the subject codes of ATOC (Atmospheric and Oceanic Sciences), COMP (Computer Science), ENVR (Environment), and EPSC (Earth and Planetary Sciences).
15 credits from among any 100- or 200-level courses with the subject codes of AFRI (African Studies), ANTH (Anthropology), ARTH (Art History), CANS (Canadian Studies), CATH (Catholic Studies), CLAS (Classics), COMS (Communication Studies), EAST (East Asian Studies), ECON (Economics), ENGL (English), FREN (French), FSCI (Faculty of Science), GEOG (Geography), GSFS (Gender, Sexuality, Feminist, and Social Justice), GERM (German), HISP (Hispanic Studies), HIST (History), INDG (Indigenous Studies), ISLA (Islamic Studies), ITAL (Italian), JWST (Jewish Studies), LING (Linguistics), LLCU (Languages, Literatures, and Cultures), MUAR (Music - Arts Faculty), PHIL (Philosophy), POLI (Political Science), PSYC (Psychology), RELG (Religious Studies), RUSS (Russian), SOCI (Sociology).
* A PHYS course equivalent to Mechanics with labs may be substituted upon approval of the department.

\section*{Required Courses (83 credits)}

Architectural Courses
Note: ARCH 250 and ARCH 378 should be taken in the first year of studies.
\begin{tabular}{|c|c|c|}
\hline ARCH 201 & (6) & Communication, Behaviour and Architecture \\
\hline ARCH 202 & (6) & Architectural Graphics and Elements of Design \\
\hline ARCH 221 & (2) & Architectural Drawing \\
\hline ARCH 240 & (3) & Organization of Materials in Buildings \\
\hline ARCH 241 & (3) & Architectural Structures 1 \\
\hline ARCH 250 & (3) & Architectural History 1 \\
\hline ARCH 251 & (3) & Architectural History 2 \\
\hline ARCH 303 & (6) & Design and Construction 1 \\
\hline ARCH 304 & (6) & Design and Construction 2 \\
\hline ARCH 325 & (2) & Architectural Sketching \\
\hline ARCH 342 & (3) & Digital Representation \\
\hline ARCH 354 & (3) & Architectural History 3 \\
\hline ARCH 355 & (3) & Architectural History 4 \\
\hline ARCH 375 & (3) & Landscape \\
\hline ARCH 377 & (3) & Energy, Environment, and Buildings 1 \\
\hline ARCH 378 & (3) & Introduction to Building Environments \\
\hline ARCH 405 & (6) & Design and Construction 3 \\
\hline ARCH 406 & (6) & Design and Construction 4 \\
\hline ARCH 445 & (3) & Architectural Structures 2 \\
\hline ARCH 447 & (3) & Energy, Environment, and Buildings 2 \\
\hline ARCH 451 & (3) & Building Regulations and Safety \\
\hline ARCH 512 & (3) & Architectural Modelling \\
\hline ARCH 551 & (3) & Urban Design and Planning \\
\hline
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits from among the following:
\begin{tabular}{|c|c|c|}
\hline ARCH 217 & (1) & Freehand Drawing \\
\hline ARCH 379 & (3) & Summer Course Abroad \\
\hline ARCH 383 & (3) & Geometry and Architecture \\
\hline ARCH 461 & (1) & Freehand Drawing and Sketching \\
\hline ARCH 490 & (2) & Selected Topics in Design \\
\hline ARCH 514 & (3) & Community Design Workshop \\
\hline ARCH 515 & (3) & Sustainable Design \\
\hline ARCH 517 & (3) & Sustainable Residential Development \\
\hline ARCH 519 & (3) & Field Course Abroad \\
\hline ARCH 520 & (3) & Montreal: Urban Morphology \\
\hline ARCH 523 & (3) & Significant Texts and Buildings \\
\hline ARCH 525 & (3) & Seminar on Analysis and Theory \\
\hline ARCH 526 & (3) & Philosophy of Structure \\
\hline ARCH 528 & (3) & History of Housing \\
\hline ARCH 531 & (3) & Architectural Intentions Vitruvius - Renaissance \\
\hline ARCH 532 & (3) & Origins of Modern Architecture \\
\hline ARCH 535 & (3) & History of Architecture in Canada \\
\hline ARCH 536 & (3) & Heritage Conservation \\
\hline ARCH 540 & (3) & Selected Topics in Architecture 1 \\
\hline ARCH 541 & (3) & Selected Topics in Architecture 2 \\
\hline ARCH 542 & (3) & Selected Topics in Architecture 3 \\
\hline ARCH 543 & (3) & Selected Topics in Architecture 4 \\
\hline ARCH 562 & (3) & Innovative Homes and Communities \\
\hline ARCH 564 & (3) & Design for Development \\
\hline ARCH 566 & (3) & Cultural Landscapes Seminar \\
\hline
\end{tabular}

\section*{Elective Courses (9 credits)}

9 credits of elective courses outside the School of Architecture must be completed, subject to approval by the Student Adviser.

\subsection*{6.9.2 Bioengineering}

\subsection*{6.9.2.1 Location}
McConnell Engineering Building
Room 350
3480 University Street
Montreal QC H3A 0E9
Telephone: 514-398-3647
Fax: 514-398-7379
Email: studentaffairs.bioeng @mcgill.ca
Website: mcgill.ca/bioengineering

\subsection*{6.9.2.2 About the Department of Bioengineering}

The Department of Bioengineering, established in 2012, is the newest academic unit in McGill University's renowned Faculty of Engineering. In Fall 2016, the Department launched a full-time undergraduate program, admitting its first cohort of students. The program is designed to provide students with fundamental knowledge in natural sciences, engineering, and mathematics, as they relate to the field of bioengineering. Those pursuing an undergraduate degree in Bioengineering may select courses in one of the following three streams:
- Biological Materials, Mechanics, and Sensing
- Biomolecular, Cellular, and Tissue Engineering
- Biological Information and Computational Bioengineering

\subsection*{6.9.2.3 Bachelor of Engineering (B.Eng.) - Bioengineering (142 credits)}

Program credit weight: 142-152 credits
Program credit weight for Quebec CEGEP students: 122-123 credits
Program credit weight for out-of-province students: 142-143 credits
The B.Eng.; Major in Bioengineering will 1) provide students with the ability to apply systematic knowledge of biology, physical sciences and mathematics; and sound engineering foundations in order to solve problems of a biological nature; and 2) prepare students for the broad area of bioengineering, incorporating both biology-focused biological engineering and medicine-focused biomedical engineering.

Students will acquire fundamental knowledge in bioengineering-related natural sciences and mathematics, as well as in the foundations of general engineering and bioengineering. Students will also acquire knowledge in one area of specialization of bioengineering: 1) biological materials and biomechanics; 2) biomolecular and cellular engineering; or 3) biological information and computation

\section*{Required Year 0 (Freshman) Courses}

29 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credits for Year 0 (Freshman) courses, except BIOL 112, and enter a 122-123-credit program. Students from Quebec CEGEPs who have successfully completed a course at CEGEP that is equivalent to BIOL 112 may obtain transfer credits for this course by passing the McGill Science Placement Exam for BIOL 112. For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels and Science Placement Exams, see www.mcgill.ca/engineering/student/sao/newstudents and select your term of admission.
\begin{tabular}{lcl} 
BIOL 112 & \((3)\) & Cell and Molecular Biology \\
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & \((4)\) & Calculus 2 \\
PHYS 131 & \((4)\) & Mechanics and Waves \\
PHYS 142 & \((4)\) & Electromagnetism and Optics
\end{tabular}

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

30 credits
\begin{tabular}{lll} 
CHEM 212** & (4) & Introductory Organic Chemistry 1 \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
FACC \(100^{*}\) & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers
\end{tabular}
\begin{tabular}{lll} 
MATH 264 & (3) & Advanced Calculus for Engineers \\
PHYS 319 & (3) & Introduction to Biophysics \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.
** Students from a CEGEP background who have completed a CEGEP course equivalent to CHEM 212 may obtain transfer credits for this course by passing the McGill Placement Exam before the start of their first term. For information on Science Placement Exams, see www.mcgill.ca/exams/dates/science. CEGEP students who do not successfully complete the CHEM 212 Placement Exam must take CHEM 212 at McGill, as outlined in the program requirements.

\section*{Required Bioengineering Courses}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{50 credits} \\
\hline BIEN 200 & (2) & Introduction to Bioengineering \\
\hline BIEN 210 & (3) & Electrical and Optical Properties of Biological Systems \\
\hline BIEN 219 & (4) & Introduction to Physical Molecular and Cell Biology \\
\hline BIEN 220 & (2) & Introduction to Mechanics for Bioengineers \\
\hline BIEN 267 & (3) & Bioanalytical Methods in Bioengineering. \\
\hline BIEN 290 & (3) & Bioengineering Measurement Laboratory \\
\hline BIEN 300 & (3) & Thermodynamics in Bioengineering \\
\hline BIEN 314 & (3) & Transport Phenomena in Biological Systems 1 \\
\hline BIEN 340 & (3) & Transport Phenomena in Biological Systems 2 \\
\hline BIEN 350 & (4) & Biosignals, Systems and Control \\
\hline BIEN 360 & (3) & Physical Chemistry in Bioengineering \\
\hline BIEN 390 & (3) & Bioengineering Laboratory \\
\hline BIEN 420 & (3) & Biodevices Design for Diagnostics and Screening \\
\hline BIEN 470D1 & (3) & Bioengineering Design Project \\
\hline BIEN 470D2 & (3) & Bioengineering Design Project \\
\hline BIEN 471 & (2) & Bioengineering Research Project \\
\hline BIEN 560 & (3) & Design of Biosensors \\
\hline
\end{tabular}

\section*{Complementary Courses}

33-34 credits

\section*{Bioengineering Complementary Courses}

24-25 credits
Starting in the third year (second year for CEGEP students) (Year 2), students will need to take 30-31 credits of courses to upgrade their general knowledge of Bioengineering. Students must register for the required Technical Complementary courses in one of the three streams of bioengineering knowledge and practice: 1) Biological Materials and Mechanics (25 credits); 2) Biomolecular and Cellular Engineering (24 credits); or 3) Biological Information and Computation ( 24 credits).

\section*{Stream 1: Biological Materials and Mechanics (25 credits)}

13 credits from List A
12 credits from List B

List A:
\begin{tabular}{lll} 
BIEN 320 & (3) & Molecular, Cellular and Tissue Biomechanics \\
BIEN 361 & (3) & Materials for Bio-Applications \\
BIEN 570 & (3) & Active Mechanics in Biology
\end{tabular}
(4) Solid Mechanics

List B:
\begin{tabular}{|c|c|c|}
\hline BIEN 330 & (3) & Tissue Engineering and Regenerative Medicine \\
\hline BIEN 414 & (3) & Fundamentals and Rheology of Biological Fluids \\
\hline BIEN 450 & (3) & Biological Structures and Assemblies \\
\hline BIEN 462 & (3) & Engineering Principles in Physiological Systems \\
\hline BIEN 500 & (3) & Special Topics in Bioengineering 1 \\
\hline BIEN 510 & (3) & Engineered Nanomaterials for Biomedical Applications \\
\hline BIEN 515 & (3) & Special Topics in Bioengineering 2 \\
\hline BIEN 525 & (3) & Special Topics in Bioengineering 3 \\
\hline BIEN 530 & (3) & Imaging and Bioanalytical Instrumentation \\
\hline BIEN 535 & (3) & Electron Microscopy and 3D Imaging for Biological Materials \\
\hline BIEN 545 & (3) & Diagnostic Devices at the Point-of-Care \\
\hline BIEN 550 & (3) & Biomolecular Devices \\
\hline BIEN 580 & (3) & Synthetic Biology \\
\hline BIEN 585 & (3) & Metabolic Engineering \\
\hline BMDE 503 & (3) & Biomedical Instrumentation \\
\hline BMDE 504 & (3) & Biomaterials and Bioperformance \\
\hline BMDE 505 & (3) & Cell and Tissue Engineering \\
\hline BMDE 512 & (3) & Finite-Element Modelling in Biomedical Engineering \\
\hline CHEE 563* & (3) & Biofluids and Cardiovascular Mechanics \\
\hline CIVE 281 & (3) & Analytical Mechanics \\
\hline MECH 321 & (3) & Mechanics of Deformable Solids \\
\hline MECH 547 & (3) & Mechanics of Biological Materials \\
\hline MECH 561 & (3) & Biomechanics of Musculoskeletal Systems \\
\hline MECH 563* & (3) & Biofluids and Cardiovascular Mechanics \\
\hline MECH 572 & (3) & Mechanics and Control of Robotic Manipulators \\
\hline MIME 470 & (3) & Engineering Biomaterials \\
\hline MIME 473 & (3) & Introduction to Computational Materials Design \\
\hline SEAD 515 & (3) & Climate Change Adaptation and Engineering Infrastructure \\
\hline SEAD 520 & (3) & Life Cycle-Based Environmental Footprinting \\
\hline SEAD 540 & (3) & Industrial Ecology and Systems \\
\hline SEAD 550 & (3) & Decision-Making for Sustainability in Engineering and Design \\
\hline
\end{tabular}
*Note: Students may choose only one of CHEE 563 and MECH 563 Biofluids and Cardiovascular Mechanics NOTE: Maximum 6 credits of SEAD courses are allowed.

\section*{Stream 2: Biomolecular and Cellular Engineering (24-25 credits)}

12 credits from List A
12-13 credits from List B

List A
BIEN 310
Introduction to Biomolecular Engineering
\begin{tabular}{lll} 
BIEN 320 & (3) & Molecular, Cellular and Tissue Biomechanics \\
BIEN 550 & (3) & Biomolecular Devices \\
BIEN 590 & (3) & Cell Culture Engineering
\end{tabular}

List B
\begin{tabular}{|c|c|c|}
\hline BIEN 330 & (3) & Tissue Engineering and Regenerative Medicine \\
\hline BIEN 410 & (3) & Computational Methods in Biomolecular Engineering \\
\hline BIEN 414 & (3) & Fundamentals and Rheology of Biological Fluids \\
\hline BIEN 450 & (3) & Biological Structures and Assemblies \\
\hline BIEN 462 & (3) & Engineering Principles in Physiological Systems \\
\hline BIEN 500 & (3) & Special Topics in Bioengineering 1 \\
\hline BIEN 510 & (3) & Engineered Nanomaterials for Biomedical Applications \\
\hline BIEN 515 & (3) & Special Topics in Bioengineering 2 \\
\hline BIEN 525 & (3) & Special Topics in Bioengineering 3 \\
\hline BIEN 530 & (3) & Imaging and Bioanalytical Instrumentation \\
\hline BIEN 535 & (3) & Electron Microscopy and 3D Imaging for Biological Materials \\
\hline BIEN 540 & (3) & Information Storage and Processing in Biological Systems \\
\hline BIEN 545 & (3) & Diagnostic Devices at the Point-of-Care \\
\hline BIEN 570 & (3) & Active Mechanics in Biology \\
\hline BIEN 580 & (3) & Synthetic Biology \\
\hline BIEN 585 & (3) & Metabolic Engineering \\
\hline BMDE 503 & (3) & Biomedical Instrumentation \\
\hline BMDE 508 & (3) & Introduction to Micro and Nano-Bioengineering \\
\hline CIVE 281 & (3) & Analytical Mechanics \\
\hline CIVE 557 & (3) & Microbiology for Environmental Engineering \\
\hline PHYS 534 & (3) & Nanoscience and Nanotechnology \\
\hline SEAD 510 & (4) & Energy Analysis \\
\hline SEAD 515 & (3) & Climate Change Adaptation and Engineering Infrastructure \\
\hline SEAD 520 & (3) & Life Cycle-Based Environmental Footprinting \\
\hline SEAD 540 & (3) & Industrial Ecology and Systems \\
\hline SEAD 550 & (3) & Decision-Making for Sustainability in Engineering and Design \\
\hline
\end{tabular}

NOTE: Maximum 6 credits of SEAD courses are allowed.

\section*{Stream 3:Biological Information and Computation (24-25 credits)}

12 credits from List A
12-13 credits from List B

List A
\begin{tabular}{lll} 
BIEN 310 & (3) & Introduction to Biomolecular Engineering \\
BIEN 410 & (3) & Computational Methods in Biomolecular Engineering \\
BIEN 530 & (3) & Imaging and Bioanalytical Instrumentation \\
BIEN 540 & (3) & Information Storage and Processing in Biological Systems
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{List B} \\
\hline BIEN 414 & (3) & Fundamentals and Rheology of Biological Fluids \\
\hline BIEN 450 & (3) & Biological Structures and Assemblies \\
\hline BIEN 462 & (3) & Engineering Principles in Physiological Systems \\
\hline BIEN 500 & (3) & Special Topics in Bioengineering 1 \\
\hline BIEN 515 & (3) & Special Topics in Bioengineering 2 \\
\hline BIEN 525 & (3) & Special Topics in Bioengineering 3 \\
\hline BIEN 535 & (3) & Electron Microscopy and 3D Imaging for Biological Materials \\
\hline BIEN 545 & (3) & Diagnostic Devices at the Point-of-Care \\
\hline BIEN 580 & (3) & Synthetic Biology \\
\hline BIEN 585 & (3) & Metabolic Engineering \\
\hline BMDE 502 & (3) & BME Modelling and Identification \\
\hline BMDE 503 & (3) & Biomedical Instrumentation \\
\hline BMDE 512 & (3) & Finite-Element Modelling in Biomedical Engineering \\
\hline BMDE 519 & (3) & Biomedical Signals and Systems \\
\hline CIVE 281 & (3) & Analytical Mechanics \\
\hline COMP 250 & (3) & Introduction to Computer Science \\
\hline COMP 251 & (3) & Algorithms and Data Structures \\
\hline COMP 462 & (3) & Computational Biology Methods \\
\hline COMP 551 & (4) & Applied Machine Learning \\
\hline ECSE 415 & (3) & Introduction to Computer Vision \\
\hline MECH 513 & (3) & Control Systems \\
\hline MECH 572 & (3) & Mechanics and Control of Robotic Manipulators \\
\hline SEAD 510 & (4) & Energy Analysis \\
\hline SEAD 515 & (3) & Climate Change Adaptation and Engineering Infrastructure \\
\hline SEAD 520 & (3) & Life Cycle-Based Environmental Footprinting \\
\hline SEAD 540 & (3) & Industrial Ecology and Systems \\
\hline SEAD 550 & (3) & Decision-Making for Sustainability in Engineering and Design \\
\hline
\end{tabular}

NOTE: Students in Stream 3 may only take one of the two 4 credit list B TCs (either COMP 551 or SEAD 510 or another 3 credit list B TC) NOTE: Maximum 6 credits of SEAD courses are allowed.

\section*{Complementary Studies}

9 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & (3) & Economics of Climate Change \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & \((3)\) & Global Change: Past, Present and Future
\end{tabular}
\begin{tabular}{lcl} 
GEOG 302 & \((3)\) & Environmental Management 1 \\
MGPO \(440^{*}\) & \((3)\) & Strategies for Sustainability \\
PHIL 343 & \((3)\) & Biomedical Ethics \\
RELG 270 & \((3)\) & Religious Ethics and the Environment \\
SOCI 235 & \((3)\) & Technology and Society \\
SOCI 312 & \((3)\) & Sociology of Work and Industry \\
URBP 201 & (3) & Planning the 21st Century City
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at www.mcgill.ca/importantdates.

Group B - Humanities and Social Science, Management Studies and Law
Generally, students admitted to Engineering from Quebec CEGEP's are granted transfer credits for 3 credits (one course) from the Complementary Studies Group B list.
6 credits of courses at the 200-level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew)***
School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR from the following courses:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management \\
\hline
\end{tabular}

\footnotetext{
* Note: Management courses have limited enrolment and registration dates. See Important Dates: www.mcgill.ca/importantdates.
}
** INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\section*{Elective Courses}

0-9 credits
Students from Quebec CEGEPs must take 9 credits of elective courses. These can be chosen from any course at the 200-level or higher offered by the University, subject to permission of the offering department.

\subsection*{6.9.3 Chemical Engineering}

\subsection*{6.9.3.1 Location}
M.H. Wong Building, Room 3060

3610 University Street
Montreal QC H3A 0C5
Telephone: 514-398-4494
Fax: 514-398-6678
Email: ugrad.chemeng@mcgill.ca
Website: mcgill.ca/chemeng

\subsection*{6.9.3.2 About the Department of Chemical Engineering}

The central purpose of engineering is to pursue solutions to technological problems in order to satisfy the needs and desires of society. Chemical engineers are trained to solve the kinds of problems that are typically found in the "chemical process industries", which include:
- chemical manufacturing;
- plastics;
- water treatment;
- pulp and paper;
- petroleum refining;
- ceramics; and
- paint industries;
as well as substantial portions of the:
- food processing;
- textile;
- nuclear energy;
- alternative energy;
- biochemical;
- biomedical; and
- pharmaceutical industries.

The technological problems and opportunities in these industries are often closely linked to social, economic, and environmental concerns. For this reason, chemical engineers often deal with these questions while working in management, pollution abatement, product development, marketing, and equipment design.

By means of complementary courses, students can also obtain further depth in technical areas and breadth in non-technical subjects. Some students elect to complete a minor in biotechnology, nanotechnology, management, materials engineering, computer science, environmental engineering, chemistry, or another minor (see section 6.9.10: Minor Programs for minors available to engineering students).
The solution to many environmental problems requires an understanding of technological principles; a Chemical Engineering degree provides an ideal background. In addition to relevant material learned in the core program, a selection of environmental complementary courses and minor programs is available. The involvement of many Chemical Engineering faculty members in environmental research provides the opportunity for undergraduate students to carry out research projects in this area.
The B.Eng. curriculum also provides the preparation necessary to undertake postgraduate studies leading to M.Eng., M.Sc., or Ph.D. degrees in Chemical Engineering. Students completing this curriculum acquire a broad, balanced education in the natural sciences with the accent on application. Thus, for those
who do not continue in Chemical Engineering, it provides an exceptionally balanced education in applied science. For others, it will form the basis of an educational program that may continue with a variety of studies such as business administration, medicine, or law. Versatility is, therefore, one of the most valuable characteristics of Chemical Engineering program graduates.

\subsection*{6.9.3.3 Academic Programs}

The Chemical Engineering program comprises 143 credits ( 114 credits for those who completed the Quebec CEGEP program in Pure and Applied Sciences).
Students must obtain a grade of C or better in all core courses. For the Department of Chemical Engineering, core courses include all required courses (departmental and non-departmental) as well as technical complementary courses.

\subsection*{6.9.3.4 Canadian Society for Chemical Engineering}

The Chemical Engineering Student Society has for many years been affiliated with both the CSChE (Canadian Society for Chemical Engineering) which is one of the member societies of the Chemical Institute of Canada (CIC) and with the AIChE (American Institute of Chemical Engineers). CSChE membership is free for all full-time undergraduate students at McGill. CSChE and AIChE members gain access to a range of benefits, including registration rates at the Canadian Chemical Engineering Conference, as well as member rates in the American Chemical Society (ACS) and affiliated events. The student chapter also organizes a series of local social, educational, and sporting events. Recent events have included student-professor banquets, parties, speakers, broomball games, and joint events with the Montreal Section of the CIC (www.cicmontrealsection.ca), which gives students a chance to network with practising chemical engineers in the Montreal region.

\subsection*{6.9.3.5 Bachelor of Engineering (B.Eng.) - Chemical Engineering (143 credits)}

Program credit weight: 143 credits
Program credit weight for Quebec CEGEP students: 114 credits
Program credit weight for out-of-province students: 143 credits
The discipline of chemical engineering is distinctive in being based equally on physics, mathematics, and chemistry. Application of these three fundamental sciences is basic to a quantitative understanding of the process industries. Those with an interest in the fourth fundamental science, biology, will find several courses in the chemical engineering curriculum that integrate aspects of the biological sciences relevant to process industries such as food processing, fermentation, biomedical, and water pollution control. Courses on the technical operations and economics of the process industries are added to this foundation. The core curriculum concludes with process design courses taught by practising design engineers. Problem-solving, experimenting, planning, and communication skills are emphasized in courses throughout the core curriculum.

Certain students who take advantage of Summer session courses can complete the departmental program in three calendar years.
In some cases, students from university science disciplines have sufficient credits to complete the requirements for the B.Eng. (Chemical) program in two and a half years. Those concerned should discuss this with their adviser.

Students must obtain a grade of C or better in all core courses. For the Department of Chemical Engineering, core courses include all required courses (departmental and non-departmental) as well as technical complementary courses.

\section*{Note to CEGEP students}

If you have successfully completed a course at CEGEP that is equivalent to CHEM 212 or CHEM 234, you may obtain transfer credits for either or both courses by passing the McGill Science Placement Exam for the course(s). You must complete an application form available on the Science Placement Exam website and an application fee will be charged to your student account. Science placement exams take place in August and September before classes begin. If you pass the exam(s), transfer credits for the course(s) will be reflected on your transcript and your program credit requirements will be decreased to reflect these transfer credits. For information on Science Placement Exams, including application deadlines, the application form, application fee, dates, times, and location of the exams, see www.mcgill.ca/exams/dates/science. If you do not pass the placement exams, you must register for CHEM 212 and CHEM 234 during your studies at McGill as outlined in your program requirements.

\section*{Required Year 0 (Freshman) Courses}

\section*{29 credits}

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 114 -credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
PHYS 131 & \((4)\) & Mechanics and Waves
\end{tabular}

Electromagnetism and Optics

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies and Law, listed below under Complementary Studies (Group B).

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

24 credits
\begin{tabular}{|c|c|c|}
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 234 & (3) & Topics in Organic Chemistry \\
\hline COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
\hline FACC 100* & (1) & Introduction to the Engineering Profession \\
\hline FACC 250 & (0) & Responsibilities of the Professional Engineer \\
\hline FACC 300 & (3) & Engineering Economy \\
\hline FACC 400 & (1) & Engineering Professional Practice \\
\hline MATH 262 & (3) & Intermediate Calculus \\
\hline MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
\hline MATH 264 & (3) & Advanced Calculus for Engineers \\
\hline
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Chemical Engineering Courses}

75 credits
\begin{tabular}{|c|c|c|}
\hline CHEE 200 & (3) & Chemical Engineering Principles 1 \\
\hline CHEE 204 & (3) & Chemical Engineering Principles 2 \\
\hline CHEE 220 & (3) & Chemical Engineering Thermodynamics \\
\hline CHEE 231 & (3) & Data Analysis and Design of Experiments \\
\hline CHEE 291 & (4) & Instrumentation and Measurement 1 \\
\hline CHEE 310 & (3) & Physical Chemistry for Engineers \\
\hline CHEE 314 & (3) & Fluid Mechanics \\
\hline CHEE 315 & (3) & Heat and Mass Transfer \\
\hline CHEE 351 & (3) & Separation Processes \\
\hline CHEE 370 & (3) & Elements of Biotechnology \\
\hline CHEE 380 & (3) & Materials Science \\
\hline CHEE 390 & (3) & Computational Methods in Chemical Engineering \\
\hline CHEE 400 & (3) & Principles of Energy Conversion \\
\hline CHEE 401 & (3) & Energy Systems Engineering \\
\hline CHEE 423 & (3) & Chemical Reaction Engineering \\
\hline CHEE 440 & (3) & Process Modelling \\
\hline CHEE 453 & (4) & Process Design \\
\hline CHEE 455 & (3) & Process Control \\
\hline CHEE 456D1 & (4.5) & Design Project \\
\hline CHEE 456D2 & (4.5) & Design Project \\
\hline CHEE 474 & (3) & Biochemical Engineering \\
\hline CHEE 484 & (3) & Materials Engineering \\
\hline
\end{tabular}

Instrumentation and Measurement 2

\section*{Technical Complementaries}

9 credits
The purpose of this requirement is to provide students with an area of specialization within the broad field of chemical engineering. Alternatively, students use the technical complementaries to increase the breadth of their chemical engineering training.
List A
3-9 credits from the following:
\begin{tabular}{lll} 
CHEE 301 & (3) & Resource Recovery and Circular Use \\
CHEE 511 & (3) & Catalysis for Sustainable Fuels and Chemicals \\
CHEE 512 & (3) & Stem Cell Bioprocess Engineering \\
CHEE 515 & (3) & Interface Design: Biomimetic Approach \\
CHEE 521+ & (3) & Nanomaterials and the Aquatic Environment \\
CHEE 541 & (3) & Electrochemical Engineering \\
CHEE 543 & (3) & Plasma Engineering \\
CHEE 563+ & (3) & Biofluids and Cardiovascular Mechanics \\
CHEE 582 & (3) & Polymer Science and Engineering \\
CHEE 584 & (3) & Polymer Processing \\
CHEE 585 & (3) & Foundations of Soft Matter \\
CHEE 591 & (3) & Environmental Bioremediation \\
CHEE 593+ & (3) & Industrial Water Pollution Control \\
CIVE 430+ & (3) & Water Treatment and Pollution Control \\
CIVE 521+ & (3) & Nanomaterials and the Aquatic Environment \\
MECH 534+ & (3) & Air Pollution Engineering \\
MECH 563+ & (3) & Biofluids and Cardiovascular Mechanics
\end{tabular}
+ Students may choose only one course in each of the following sets:
- CHEE 521 or CIVE 521
- CHEE 563 or MECH 563
- CHEE 593 or CIVE 430

List B
0-6 credits from the following:
\begin{tabular}{lcl} 
BIEN 550 & (3) & Biomolecular Devices \\
BIOT 505* & (3) & Selected Topics in Biotechnology \\
BREE 325 & (3) & Food Process Engineering \\
BREE 522 & (3) & Bio-Based Polymers \\
CHEE \(363^{* *}\) & (2) & Projects Chemical Engineering 1 \\
CHEE \(494^{* *}\) & (3) & Research Project and Seminar 1 \\
CHEE \(495^{* *}\) & (4) & Research Project and Seminar 2 \\
CHEE \(496^{* *}\) & (3) & Environmental Research Project \\
CIVE 557 & (3) & Microbiology for Environmental Engineering \\
MIME 470 & (3) & Engineering Biomaterials \\
MIME 515 & (3) & (Bio)material Surface Analysis and Modification
\end{tabular}
MIME 558
(3)
Engineering Nanomaterials
* BIOT 505 can only be chosen by students taking the Minor in Biotechnology.
** Students may choose only one project course: CHEE 363, CHEE 494, CHEE 495, or CHEE 496.

\section*{List C}

\section*{0-3 credits}

The remaining credits, up to a maximum of 3 credits, may be taken from other suitable undergraduate courses in the Faculty of Engineering, with departmental permission.

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
BTEC 502 & (3) & Biotechnology Ethics and Society \\
ECON 225 & (3) & Economics of the Environment \\
ECON 347 & (3) & Economics of Climate Change \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440 *\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Remedical Ethics \\
RELG 270 & (3) & Technology and Society \\
SOCI 235 & (3) & Sociology of Work and Industry \\
SOCI 312 & (3) & Planning the 21st Century City
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies and Law
3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR 3 credits from the following:
ARCH 528
(3)
History of Housing
\begin{tabular}{lcl} 
BUSA 465* & \((3)\) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & \((3)\) & Law for Architects and Engineers \\
FACC 500 & \((3)\) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.
Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\subsection*{6.9.3.5.1 More about B.Eng. Degree in Chemical Engineering}

Courses CHEE 582 and CHEE 584 comprise a Polymeric Materials course sequence, while courses CHEE 380 and CHEE 484 present fundamental aspects of materials science and engineering, respectively. Additional courses in the polymer materials area are available in the Chemistry Department (e.g., CHEM 574). The Department has considerable expertise in the polymer area.

Courses CHEE 370 and CHEE 474 make up a sequence in Biochemical Engineering and Biotechnology. Students interested in this area may take additional courses, particularly those offered by the section 6.9.2: Bioengineering (Faculty of Engineering); by the section 2.6.4: Department of Food Science and Agricultural Chemistry (Faculty of Agricultural and Environmental Sciences); and courses in biochemistry and microbiology. The food, beverage, and pharmaceutical industries are large industries in the Montreal area, and these courses are relevant to these industries and to the new high-technology applications of biotechnology.

A third sequence of courses is offered in Energy, comprising CHEE 400 Principles of Energy Conversion and CHEE 401 Energy Systems Engineering. Additional courses that offer topics related to energy are CHEE 511 Catalysis for Sustainable Fuels and Chemicals and CHEE 541 Electrochemical Engineering.
The fourth area in which there is a sequence of courses is Pollution Control. The Department offers three courses in this area: CHEE 521, CHEE 591, and CHEE 593. As some water pollution control problems are solved by microbial processes, course CHEE 474 is also relevant to the pollution control area. Additional courses in this area are listed in the section 6.9.10.11: Bachelor of Engineering (B.Eng.) - Minor Environmental Engineering (21 credits).
A Minor in Biotechnology is also offered by the Faculties of Engineering and Science with emphasis on molecular biology and chemical engineering processes. A full description of the program appears in the section 6.9.10.5: Bachelor of Engineering (B.Eng.) - Minor Biotechnology (for Engineering Students) ( 24 credits).

\footnotetext{
Note: Many of the technical complementaries are offered only in alternate years. Students should, therefore, plan their complementaries as far ahead as possible. With the approval of the instructor and Academic Adviser, students may take graduate ( \(600-\mathrm{level}\) ) CHEE courses as technical complementaries.
}

\subsection*{6.9.4 Civil Engineering}

\subsection*{6.9.4.1 Location}

Macdonald Engineering Building, Room 495
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8 1 7 Sherbrooke Street West
Montreal QC H3A 0C3
Telephone: 514-398-6860
Fax: 514-398-7361
Email: ugradinfo.civil@mcgill.ca
Website: mcgill.ca/civil

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\subsection*{6.9.4.2 About the Department of Civil Engineering}

Civil engineers have traditionally applied scientific and engineering knowledge to the task of providing the built environment, from its conception and planning to its design, construction, maintenance, rehabilitation, and sustainability. Examples include buildings; bridges; roads; railways; dams; facilities for water supply and treatment; waste disposal; and transportation system.

With the aging and deterioration of an already vast infrastructure, maintenance and rehabilitation have become increasingly important roles of the civil engineering professional. In the midst of worldwide concern about the detrimental impact of human activities on the environment, civil engineers are now in the forefront of developing and providing the means for both prevention and remediation of environmental pollution.

Students who wish to extend their knowledge in certain areas beyond the range that the program's complementary courses allow can also take a minor. Minors are available in fields such as:
- Arts;
- Economics;
- Management;
- Environmental Engineering;
- Construction Engineering and Management;
- and others.

These require additional credits to be taken from a specified list of topics relating to the chosen field. Further information on the various minors may be found in section 6.9.10: Minor Programs. Details on how minors can be accommodated within the Civil Engineering program will be made available during preregistration counselling.

\subsection*{6.9.4.3 Academic Programs}

Considerable freedom exists for students to influence the nature of the program of study which they follow in the Department of Civil Engineering. A variety of advanced complementary courses is offered in five main groupings:
- Environmental Engineering;
- Geotechnical and Geoenvironmental Engineering;
- Water Resources and Hydraulic Engineering;
- Structural Engineering;
- Transportation Engineering.

Guidance on the sequence in which required core courses should be taken is provided for students in the form of a sample program which covers the entire period of study. The technical complementary courses selected, usually in the last two terms of the program, will depend upon the student's interests. All students must meet with their advisor each term to confirm the courses for which they are registered.

Courses taken in Term 3 or later will depend on a student's interests and ability. Information and advice concerning different possibilities are made available in the Department prior to registration. All programs require the approval of a staff advisor. Programs for students transferring into the Department with Advanced Standing will be dependent upon the academic credit previously achieved, and such a program will be established only after consultation with a staff advisor.

\subsection*{6.9.4.4 Bachelor of Engineering (B.Eng.) - Civil Engineering (139 credits)}

Program credit weight: 139 credits

\section*{Program credit weight for Quebec CEGEP students: 110 credits}

The Civil Engineering program is comprehensive in providing the fundamentals in mechanics and engineering associated with the diverse fields of the profession, in offering choices of specialization, and in fully reflecting the advances in science, mathematics, engineering, and computing that have transformed all fields of engineering in recent years. The resulting knowledge and training enables graduates to not only enter the profession thoroughly well prepared, but also to adapt to further change.

The required courses ensure a sound scientific and analytical basis for professional studies through courses in solid mechanics, fluid mechanics, soil mechanics, environmental engineering, water resources management, structural analysis, systems analysis, and mathematics. Fundamental concepts are applied to various fields of practice in both required and complementary courses.

By a suitable choice of complementary courses, students can attain advanced levels of technical knowledge in the specialized areas mentioned above. Alternatively, students may choose to develop their interests in a more general way by combining complementary courses within the Department with several from other departments or faculties.

\section*{Required Year 0 (Freshman) Courses}

29 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 110-credit program.
For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & \((4)\) & Calculus 2 \\
PHYS 131 & \((4)\) & Mechanics and Waves \\
PHYS 142 & \((4)\) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B).
Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

28 credits
\begin{tabular}{lcl} 
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
EPSC 221 & (3) & General Geology \\
FACC 100* & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MATH 264 & (3) & Advanced Calculus for Engineers \\
MECH 261 & (2) & Measurement Laboratory \\
MECH 289 & (3) & Design Graphics \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Civil Engineering Courses}

61 credits
\begin{tabular}{lcl} 
CIVE 202 & (4) & Construction Materials \\
CIVE 205 & \((3)\) & Statics \\
CIVE 206 & \((3)\) & Dynamics \\
CIVE 207 & \((4)\) & Solid Mechanics \\
CIVE 208 & \((3)\) & Civil Engineering System Analysis \\
CIVE 210 & \((2)\) & Surveying \\
CIVE 225 & \((4)\) & Environmental Engineering
\end{tabular}
\begin{tabular}{lll} 
CIVE 290 & \((3)\) & Thermodynamics and Heat Transfer \\
CIVE 302 & \((3)\) & Probabilistic Systems \\
CIVE 311 & \((4)\) & Geotechnical Mechanics \\
CIVE 317 & \((3)\) & Structural Engineering 1 \\
CIVE 318 & \((3)\) & Structural Engineering 2 \\
CIVE 319 & \((3)\) & Transportation Engineering \\
CIVE 320 & \((4)\) & Numerical Methods \\
CIVE 323 & \((3)\) & Hydrology and Water Resources \\
CIVE 324 & \((3)\) & Sustainable Project Management \\
CIVE 327 & \((4)\) & Fluid Mechanics and Hydraulics \\
CIVE 418 & \((4)\) & Design Project \\
CIVE 432 & \((1)\) & Technical Paper
\end{tabular}

\section*{Complementary Courses}

21 credits

\section*{List A - Design Technical Complementaries}

6-15 credits from the following:
\begin{tabular}{lcl} 
CIVE 416 & \((3)\) & Geotechnical Engineering \\
CIVE 421 & (3) & Municipal Systems \\
CIVE 428 & (3) & Water Resources and Hydraulic Engineering \\
CIVE 430 & (3) & Water Treatment and Pollution Control \\
CIVE 440 & (3) & Traffic Engineering and Simulation \\
CIVE 462 & (3) & Design of Steel Structures \\
CIVE 463 & (3) & Design of Concrete Structures
\end{tabular}

\section*{List B - General Technical Complementaries}
\(0-9\) credits from the following, or from other suitable undergraduate or 500-level courses:
\begin{tabular}{lll} 
CHEE 521* & (3) & Nanomaterials and the Aquatic Environment \\
CIVE 446 & (3) & Construction Engineering \\
CIVE 460 & (3) & Matrix Structural Analysis \\
CIVE 470 & (3) & Undergraduate Research Project \\
CIVE 512 & (3) & Advanced Civil Engineering Materials \\
CIVE 520 & (3) & Groundwater Hydrology \\
CIVE \(521^{*}\) & (3) & Nanomaterials and the Aquatic Environment \\
CIVE 527 & (3) & Renovation and Preservation: Infrastructure \\
CIVE 528 & (3) & Design of Wood Structures \\
CIVE 540 & (3) & Urban Transportation Planning \\
CIVE 542 & (3) & Transportation Network Analysis \\
CIVE 546 & (3) & Selected Topics in Civil Engineering 1 \\
CIVE 550 & (3) & Water Resources Management \\
CIVE 555 & (3) & Environmental Data Analysis \\
CIVE 557 & Microbiology for Environmental Engineering
\end{tabular}
\begin{tabular}{lcl} 
CIVE 560 & (3) & Transportation Safety and Design \\
CIVE 561 & (3) & Greenhouse Gas Emissions \\
CIVE 572 & (3) & Computational Hydraulics \\
CIVE 573 & (3) & Hydraulic Structures \\
CIVE 574 & (3) & Fluid Mechanics of Water Pollution \\
CIVE 577 & (3) & River Engineering \\
CIVE 584 & (3) & Mechanics of Groundwater Flow \\
URBP 551 & Urban Design and Planning \\
* Students may choose only one of CHEE 521 or CIVE 521. \\
Complementary Studies & \\
6 credits
\end{tabular}

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
BTEC 502 & \((3)\) & Biotechnology Ethics and Society \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440^{*}\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Sociology of Work and Industry \\
URBP 201 & Planning the 21st Century City
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies, and Law
3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR one of the following:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA \(465^{*}\) & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\subsection*{6.9.5 Electrical and Computer Engineering}

\subsection*{6.9.5.1 Location}
Department of Electrical and Computer Engineering
Undergraduate Programs Office
McConnell Engineering Building, Room 602
3480 University Street
Montreal QC H3A 0E9
Telephone: 514-398-3943
Email: undergrad.ece@mcgill.ca
Website: mcgill.ca/ece

\subsection*{6.9.5.2 About the Department of Electrical and Computer Engineering}

The Department of Electrical and Computer Engineering offers undergraduate degree programs in:
- Electrical Engineering
- Electrical Engineering (Honours)
- Computer Engineering
- Software Engineering Co-op

All programs provide students with a strong background in mathematics, natural sciences, engineering science, engineering design, and complementary studies, in conformity with the requirements of the Canadian Engineering Accreditation Board (CEAB).

In addition to technical complementary courses, students in all three programs take general complementary courses in humanities and social sciences and/or management studies and law. These courses allow students to develop specific interests in areas such as psychology, economics, management, or political science.

\subsection*{6.9.5.3 Bachelor of Engineering (B.Eng.) - Electrical Engineering (134 credits)}

Program credit weight: 134-137 credits
Program credit weight for Quebec CEGEP students: 109-112 credits
This program gives students a broad understanding of the key principles that are responsible for the extraordinary advances in the technology of computers, micro-electronics, automation and robotics, telecommunications, and power systems. These areas are critical to the development of our industries and, more generally, to our economy. A graduate of this program is exposed to all basic elements of electrical engineering and can function in any of our client industries. This breadth is what distinguishes an engineer from, for example, a computer scientist or physicist.
In addition to technical complementary courses, students in the Electrical Engineering program take general complementary courses in social sciences, administrative studies, and humanities. These courses allow students to develop specific interests in areas such as psychology, economics, management, or political science.

\section*{Required Year 0 (Freshman) Courses}

25 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 109 - to 112 credit program.
For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & \((4)\) & Calculus 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B)

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

26 credits
\begin{tabular}{lcl} 
CIVE 281 & (3) & Analytical Mechanics \\
COMP 202 & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
FACC \(100^{*}\) & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MIME 262 & (3) & Properties of Materials in Electrical Engineering \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}

\footnotetext{
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.
}

\section*{Required Electrical Engineering Courses}

57 credits
\begin{tabular}{|c|c|c|}
\hline ECSE 200 & (3) & Electric Circuits 1 \\
\hline ECSE 205 & (3) & Probability and Statistics for Engineers \\
\hline ECSE 206 & (3) & Introduction to Signals and Systems \\
\hline ECSE 210 & (3) & Electric Circuits 2 \\
\hline ECSE 211 & (3) & Design Principles and Methods \\
\hline ECSE 222 & (3) & Digital Logic \\
\hline ECSE 250 & (3) & Fundamentals of Software Development \\
\hline ECSE 251 & (3) & Electric and Magnetic Fields \\
\hline ECSE 307 & (4) & Linear Systems and Control \\
\hline ECSE 308 & (4) & Introduction to Communication Systems and Networks \\
\hline ECSE 324 & (4) & Computer Organization \\
\hline ECSE 331 & (4) & Electronics \\
\hline ECSE 343 & (3) & Numerical Methods in Engineering \\
\hline ECSE 354 & (4) & Electromagnetic Wave Propagation \\
\hline ECSE 362 & (4) & Fundamentals of Power Engineering \\
\hline ECSE 458D1 & (3) & Capstone Design Project \\
\hline ECSE 458D2 & (3) & Capstone Design Project \\
\hline
\end{tabular}

Note: ECSE 458N1 and ECSE 458N2 can be taken instead of ECSE 458D1 and ECSE 458D2.

\section*{Complementary Courses (23-26 credits)}

\section*{Technical Complementaries}
\(17-20\) credits ( 5 courses) must be taken, chosen as follows:
8 credits (2 courses) from List A
9-12 credits (3 courses) from List A or List B
List A:Technical Complementaries with Laboratory Experience
8-20 credits
\begin{tabular}{lcl} 
ECSE 335 & (4) & Microelectronics \\
ECSE 403 & \((4)\) & Control \\
ECSE 408 & \((4)\) & Communication Systems \\
ECSE 416 & \((4)\) & Telecommunication Networks \\
ECSE 433 & \((4)\) & Physical Basis of Transistor Devices \\
ECSE 444 & \((4)\) & Microprocessors \\
ECSE 470 & \((4)\) & Electromechanical and Static Conversion Systems
\end{tabular}

\section*{List B:Technical Complementaries}
\(0-12\) credits
\begin{tabular}{lll} 
COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
COMP 551^ & (4) & Applied Machine Learning \\
COMP 559 & (4) & Fundamentals of Computer Animation \\
COMP 562 & (4) & Theory of Machine Learning \\
ECSE 310 & (3) & Thermodynamics of Computing \\
ECSE 325 & (3) & Digital Systems
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ECSE 405 & (3) & Antennas \\
\hline ECSE 412 & (3) & Discrete Time Signal Processing \\
\hline ECSE 415 & (3) & Introduction to Computer Vision \\
\hline ECSE 420 & (3) & Parallel Computing \\
\hline ECSE 421 & (3) & Embedded Systems \\
\hline ECSE 422 & (3) & Fault Tolerant Computing \\
\hline ECSE 423 & (3) & Fundamentals of Photonics \\
\hline ECSE 424 & (3) & Human-Computer Interaction \\
\hline ECSE 425 & (3) & Computer Architecture \\
\hline ECSE 427 & (3) & Operating Systems \\
\hline ECSE 430 & (3) & Photonic Devices and Systems \\
\hline ECSE 435 & (3) & Mixed-Signal Test Techniques \\
\hline ECSE 446 & (3) & Realistic Image Synthesis \\
\hline ECSE 451 & (3) & EM Transmission and Radiation \\
\hline ECSE 460* & (3) & Appareillage électrique (Electrical Power Equipment) \\
\hline ECSE 463** & (3) & Electric Power Generation \\
\hline ECSE 464 & (3) & Power Systems Analysis \\
\hline ECSE 465*** & (3) & Power Electronic Systems \\
\hline ECSE 466* & (3) & Réseaux de distribution \\
\hline ECSE 467* & (3) & Comportement des réseaux électriques \\
\hline ECSE 468* & (3) & Electricité industrielle (Industrial Power Systems) \\
\hline ECSE 469* & (3) & Protection des réseaux électriques \\
\hline ECSE 472 & (3) & Fundamentals of Circuit Simulation and Modelling \\
\hline ECSE 500 & (3) & Mathematical Foundations of Systems \\
\hline ECSE 501 & (3) & Linear Systems \\
\hline ECSE 507 & (3) & Optimization and Optimal Control \\
\hline ECSE 508 & (3) & Multi-Agent Systems \\
\hline ECSE 509 & (3) & Probability and Random Signals 2 \\
\hline ECSE 510 & (3) & Filtering and Prediction for Stochastic Systems \\
\hline ECSE 516 & (3) & Nonlinear and Hybrid Control Systems \\
\hline ECSE 519 & (3) & Semiconductor Nanostructures and Nanophotonic Devices \\
\hline ECSE 521 & (3) & Digital Communications 1 \\
\hline ECSE 525 & (4) & Satellite Navigation Systems \\
\hline ECSE 526 & (3) & Artificial Intelligence \\
\hline ECSE 532 & (4) & Computer Graphics \\
\hline ECSE 543 & (3) & Numerical Methods in Electrical Engineering \\
\hline ECSE 544 & (4) & Computational Photography \\
\hline ECSE 551^ & (4) & Machine Learning for Engineers \\
\hline ECSE 552 & (4) & Deep Learning \\
\hline ECSE 554 & (4) & Applied Robotics \\
\hline ECSE 556 & (4) & Machine Learning in Network Biology \\
\hline ECSE 557 & (3) & Introduction to Ethics of Intelligent Systems \\
\hline ECSE 562** & (4) & Low-Carbon Power Generation Engineering \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
ECSE 563 & (3) & Power Systems Operation and Planning \\
ECSE \(565^{* * *}\) & (3) & Introduction to Power Electronics \\
ECSE 575 & (3) & Heterogeneous Integration Systems \\
PHYS 434 & Optics \\
* Courses taught in French. & \\
** ECSE 463 and ECSE 562 cannot both be taken. \\
\(* * *\) ECSE 465 and ECSE 565 cannot both be taken. \\
\(\wedge\) ECSE 551 and COMP 551 cannot both be taken. \\
Complementary Studies & \\
6 credits
\end{tabular}

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
BTEC 502 & \((3)\) & Biotechnology Ethics and Society \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440^{*}\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Planning the 21 st Century City
\end{tabular}
*Note: Management courses have limited enrolment and registration dates. See Important Dates at www.mcgill.ca/importantdates.

\section*{Group B - Humanities and Social Sciences, Management Studies, and Law}

3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR 3 credits from the following:
ARCH 528
(3)
History of Housing
\begin{tabular}{lcl} 
BUSA \(465^{*}\) & \((3)\) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.
Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\section*{Elective Course}

One 3-credit course at the 200-level or higher from any department at McGill, approved by the Undergraduate Programs Office in the Department of Electrical and Computer Engineering.

\section*{Enhanced Power Concentration}

Students following this program must complete 16-17 credits of technical complementary courses.
The Institute for Electrical Power Engineering was recently established as a province-wide centre for electrical power engineering education. It is funded by industry, mostly Hydro-Québec, and provides a comprehensive program, state-of-the-art laboratory facilities, and a point of contact between industry and universities involved in power engineering.
Note: This program is open to students in the regular Electrical Engineering program only.
Here are some benefits of the concentration:
A complete and up-to-date final-year program in electrical power engineering, with industry-sponsored and supported courses
Access to industry-sponsored projects, internships, and new employment opportunities
ELIGIBILITY CRITERIA
Admission to the program is granted only in the Fall semester of every academic year. To be considered, the applicant must:
- be registered in the B.Eng. program (regular Electrical Engineering);
- have a cumulative GPA of at least 2.5;
- have completed or be registered in ECSE 362 (Fundamentals of Power Engineering);
- be able to complete the degree requirements within three semesters after initial registration in the concentration (excluding summer semesters);
- agree to follow the curriculum requirements set out below.

\section*{SELECTION CRITERIA}

The number of students selected, expected to be between five and ten, will be subject to a specific agreement between the University and the Institute. Selection criteria for admission to the Institute will be based on the CGPA and on the curriculum vitae. The selection process for the scholarship may involve an interview with the committee presided by Hydro-Québec and the industrial partners. There is a possibility of an internship with Hydro-Québec.

\section*{CURRICULUM REQUIREMENTS FOR SELECTED STUDENTS}

Generally, unless the University has authorized specific substitutions, students must complete the degree requirements set out in this eCalendar with the following specifications:

\section*{Technical Complementaries and Laboratories (16 credits)}

All students must take (or have taken) five courses from the following:

\section*{Required Courses}

10 credits
\begin{tabular}{lll} 
ECSE 464 & (3) & Power Systems Analysis \\
ECSE \(465^{* * *}\) & (3) & Power Electronic Systems \\
ECSE 470 & (4) & Electromechanical and Static Conversion Systems
\end{tabular}

Students must also complete ECSE 458 (Capstone Design Project) on a practical project in power engineering, preferably at the Institute or with a company sponsoring the Institute.

\section*{Complementary Courses}

6-7 credits from the following:
\begin{tabular}{lcl} 
ECSE 403 & (4) & Control \\
ECSE 460* & (3) & Appareillage électrique (Electrical Power Equipment) \\
ECSE 463** & (3) & Electric Power Generation \\
ECSE 466* & (3) & Réseaux de distribution \\
ECSE 467* & (3) & Comportement des réseaux électriques \\
ECSE 468* & (3) & Electricité industrielle (Industrial Power Systems) \\
ECSE 469* & (3) & Protection des réseaux électriques \\
* Courses taught in French. & &
\end{tabular}

Note: ECSE 460, ECSE 463, ECSE 464, ECSE 465, ECSE 467, ECSE 468, and ECSE 469 are courses sponsored by the Institute and taught at Polytechnique Montréal.

\subsection*{6.9.5.4 Bachelor of Engineering (B.Eng.) - Honours Electrical Engineering (138 credits)}

Program credit weight: 138-141 credits
Program credit weight for Quebec CEGEP students: 113-116 credits

\section*{Entry into the Electrical Engineering Honours Program}

The Honours program is a limited enrolment program and entry is highly competitive. There is no direct entry to the Honours program in the first year. Students may enter the Honours program in the following ways:
- Students from CEGEP will be admitted, on the basis of their grades, at the start of the third term.
- Students from outside Quebec will be admitted, on the basis of their grades, at the start of the fifth term.

To remain in the Honours program and to be awarded the Honours degree, a student must have completed at least 14 credits in each term since entering Electrical and Computer Engineering, except for the final two terms of their degree, and maintained a CGPA of at least 3.30 since entering Electrical and Computer Engineering. In either of their final two full terms (i.e., Fall and Winter, or Winter and Fall) students may drop below 14 credits, provided the combined load for the two terms is at least 16 credits. For more information, please contact the Departmental office at 514-398-3943.

\section*{Required Year 0 (Freshman) Courses ( 25 credits)}

Note: Students in the Honours Electrical Engineering program complete the Year 0 (Freshman) courses before entering the Honours program, as explained above.

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 113- to 116-credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B).
Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

26 credits
\begin{tabular}{lcl} 
CIVE 281 & (3) & Analytical Mechanics \\
COMP 202 & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
FACC 100* & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MIME 262 & (3) & Properties of Materials in Electrical Engineering \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Electrical Engineering Courses}
\begin{tabular}{lcl} 
61 credits & & \\
ECSE 200 & \((3)\) & Electric Circuits 1 \\
ECSE 205 & \((3)\) & Probability and Statistics for Engineers \\
ECSE 206 & \((3)\) & Introduction to Signals and Systems \\
ECSE 210 & \((3)\) & Electric Circuits 2 \\
ECSE 211 & \((3)\) & Design Principles and Methods \\
ECSE 222 & \((3)\) & Digital Logic \\
ECSE 250 & \((3)\) & Fundamentals of Software Development \\
ECSE 251 & \((4)\) & Electric and Magnetic Fields \\
ECSE 307 & \((4)\) & Linear Systems and Control \\
ECSE 308 & \((4)\) & Introduction to Communication Systems and Networks \\
ECSE 324 & \((4)\) & Computer Organization \\
ECSE 331 & \((3)\) & Electronics \\
ECSE 343 & \((4)\) & Numerical Methods in Engineering \\
ECSE 354 & \((4)\) & Electromagnetic Wave Propagation \\
ECSE 362 & Fundamentals of Power Engineering
\end{tabular}
\begin{tabular}{lcl} 
ECSE 396 & (1) & Honours Research Laboratory Rotation 1 \\
ECSE 397 & (1) & Honours Research Laboratory Rotation 2 \\
ECSE 478D1 & (3) & Electrical Engineering Honours Thesis \\
ECSE 478D2 & (3) & Electrical Engineering Honours Thesis \\
ECSE 496 & (1) & Honours Research Laboratory Rotation 3 \\
ECSE 497 & (1) & Honours Research Laboratory Rotation 4
\end{tabular}

Note: ECSE 478N1 and ECSE 478N2 can be taken instead of ECSE 478D1 and ECSE 478D2.

\section*{Complementary Courses (23-26 credits)}

\section*{Technical Complementaries}

17-20 credits ( 5 courses) must be taken, chosen as follows:
8 credits (2 courses) from List A
\(6-8\) credits ( 2 courses) from 500-level ECSE courses
\(3-4\) credits (1 course) from List A, List B, List C or from 500-level ECSE courses
List A:Technical Complementaries with Laboratory Experience
8-12 credits from the following:
\begin{tabular}{lcl} 
ECSE 335 & \((4)\) & Microelectronics \\
ECSE \(403^{*}\) & \((4)\) & Control \\
ECSE \(408^{* *}\) & \((4)\) & Communication Systems \\
ECSE 416 & \((4)\) & Telecommunication Networks \\
ECSE 433 & \((4)\) & Physical Basis of Transistor Devices \\
ECSE 444 & \((4)\) & Microprocessors \\
ECSE 470 & \((4)\) & Electromechanical and Static Conversion Systems
\end{tabular}
* ECSE 403 and ECSE 501 cannot both be taken.
** ECSE 408 and ECSE 511 cannot both be taken.

\section*{List B:Technical Complementaries}

0-3 credits
\begin{tabular}{|c|c|c|}
\hline ECSE 310 & (3) & Thermodynamics of Computing \\
\hline ECSE 325 & (3) & Digital Systems \\
\hline ECSE 415 & (3) & Introduction to Computer Vision \\
\hline ECSE 420 & (3) & Parallel Computing \\
\hline ECSE 421 & (3) & Embedded Systems \\
\hline ECSE 422 & (3) & Fault Tolerant Computing \\
\hline ECSE 424 & (3) & Human-Computer Interaction \\
\hline ECSE 425 & (3) & Computer Architecture \\
\hline ECSE 427 & (3) & Operating Systems \\
\hline ECSE 435 & (3) & Mixed-Signal Test Techniques \\
\hline ECSE 446 & (3) & Realistic Image Synthesis \\
\hline ECSE 451 & (3) & EM Transmission and Radiation \\
\hline ECSE 460* & (3) & Appareillage électrique (Electrical Power Equipment) \\
\hline ECSE 464 & (3) & Power Systems Analysis \\
\hline
\end{tabular}
\begin{tabular}{lll} 
ECSE 467* & (3) & Comportement des réseaux électriques \\
ECSE 468* & (3) & Electricité industrielle (Industrial Power Systems) \\
ECSE 469* & (3) & Protection des réseaux électriques \\
* Courses taught in French. &
\end{tabular}

\section*{List C: Non-departmental Complementary Courses}

0-4 credits
\begin{tabular}{lll} 
COMP 445 & (3) & Computational Linguistics \\
COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
COMP 550 & (3) & Natural Language Processing \\
COMP 551 & (4) & Applied Machine Learning \\
COMP 562 & (4) & Theory of Machine Learning \\
COMP 579 & (4) & Reinforcement Learning \\
MATH 247 & (3) & Honours Applied Linear Algebra \\
MATH 249 & (3) & Honours Complex Variables \\
MATH 547 & (4) & Stochastic Processes \\
PHYS 357 & (3) & Honours Quantum Physics 1 \\
PHYS 434 & (3) & Optics \\
PHYS 457 & (3) & Honours Quantum Physics 2 \\
PHYS 558 & (3) & Solid State Physics
\end{tabular}

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
BTEC 502 & (3) & Biotechnology Ethics and Society \\
ECON 225 & (3) & Economics of the Environment \\
ECON 347 & (3) & Economics of Climate Change \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440 *\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Teligious Ethics and the Environment \\
SOCI 235 & (3) & Sociology of Work and Industry \\
SOCI 312 & (3) & Planning the 21st Century City
\end{tabular}

\footnotetext{
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
}

\section*{Group B - Humanities and Social Sciences, Management Studies, and Law}

3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR 3 credits from the following:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\section*{Elective Course (3 credits)}

One 3-credit course at the 200-level or higher from any department at McGill, approved by the Undergraduate Programs Office in the Department of Electrical and Computer Engineering.

\subsection*{6.9.5.5 Bachelor of Engineering (B.Eng.) - Computer Engineering (133 credits)}

Program credit weight: 133-136 credits
Program credit weight for Quebec CEGEP students: 108-111 credits

Program credit weight for out-of-province students: 133-136 credits
The Computer Engineering program provides students with greater depth and breadth of knowledge in the hardware and software aspects of computers. Students are exposed to both theoretical and practical issues of both hardware and software in well-equipped laboratories. Although the program is designed to meet the growing demands by industry for engineers with a strong background in modern computer technology, it also provides the underlying depth for graduate studies in all fields of Computer Engineering.
In addition to technical complementary courses, students in the program take general complementary courses in social sciences, management studies, and humanities. These courses allow students to develop specific interests in areas such as psychology, economics, management, or political science.

\section*{Required Year 0 (Freshman) Courses}

25 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 108- to 111 credit program.
For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 120 & (4) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & \((4)\) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Administrative Studies, and Law, listed below under Complementary Studies (Group B).

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

26 credits
\begin{tabular}{lcl} 
COMP 202 & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 251 & (3) & Algorithms and Data Structures \\
FACC 100* & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 240 & (3) & Discrete Structures \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Computer Engineering Courses}

64 credits
\begin{tabular}{lll} 
ECSE 200 & (3) & Electric Circuits 1 \\
ECSE 205 & (3) & Probability and Statistics for Engineers \\
ECSE 206 & (3) & Introduction to Signals and Systems \\
ECSE 210 & \((3)\) & Electric Circuits 2 \\
ECSE 211 & (3) & Design Principles and Methods
\end{tabular}
\begin{tabular}{lcl} 
ECSE 222 & (3) & Digital Logic \\
ECSE 223 & \((3)\) & Model-Based Programming \\
ECSE 250 & \((3)\) & Fundamentals of Software Development \\
ECSE 308 & \((4)\) & Introduction to Communication Systems and Networks \\
ECSE 310 & \((3)\) & Thermodynamics of Computing \\
ECSE 321 & (3) & Introduction to Software Engineering \\
ECSE 324 & \((4)\) & Computer Organization \\
ECSE 325 & (3) & Digital Systems \\
ECSE 331 & (4) & Electronics \\
ECSE 353 & (3) & Electromagnetic Fields and Waves \\
ECSE 425 & (3) & Computer Architecture \\
ECSE 427 & (3) & Operating Systems \\
ECSE 444 & (4) & Microprocessors \\
ECSE 458D1 & (3) & Capstone Design Project \\
ECSE 458D2 & (3) & Capstone Design Project
\end{tabular}

Note: ECSE 458N1 and ECSE 458N2 can be taken instead of ECSE 458D1 and ECSE 458D2.

\section*{Complementary Courses}

15-18 credits
Technical Complementaries
\(9-12\) credits ( 3 courses) must be taken, chosen as follows:
\(3-4\) credits (1 course) from List A
6-8credits (2 courses) from List A or List B

\section*{List A}

3-12 credits from the following:
\begin{tabular}{lcl} 
ECSE 307 & \((4)\) & Linear Systems and Control \\
ECSE 335 & \((4)\) & Microelectronics \\
ECSE 403 & \((4)\) & Control \\
ECSE 408 & \((4)\) & Communication Systems \\
ECSE 412 & \((3)\) & Discrete Time Signal Processing \\
ECSE 415 & \((3)\) & Introduction to Computer Vision \\
ECSE 416 & \((4)\) & Telecommunication Networks \\
ECSE 420 & \((3)\) & Parallel Computing \\
ECSE 428 & \((3)\) & Software Engineering Practice \\
ECSE 435 & \((3)\) & Mixed-Signal Test Techniques \\
ECSE 439 & \((3)\) & Software Language Engineering \\
ECSE 508 & \((3)\) & Multi-Agent Systems \\
ECSE 510 & \((3)\) & Filtering and Prediction for Stochastic Systems \\
ECSE 544 & (4) & Computational Photography
\end{tabular}

\section*{List B}
\(0-12\) credits from the following:
\begin{tabular}{|c|c|c|}
\hline COMP 307 & (3) & Principles of Web Development \\
\hline COMP 421 & (3) & Database Systems \\
\hline COMP 424** & (3) & Artificial Intelligence \\
\hline COMP 445 & (3) & Computational Linguistics \\
\hline COMP 512 & (4) & Distributed Systems \\
\hline COMP 520 & (4) & Compiler Design \\
\hline COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
\hline COMP 550 & (3) & Natural Language Processing \\
\hline COMP 551* & (4) & Applied Machine Learning \\
\hline COMP 559 & (4) & Fundamentals of Computer Animation \\
\hline COMP 562 & (4) & Theory of Machine Learning \\
\hline COMP 579 & (4) & Reinforcement Learning \\
\hline COMP 588 & (4) & Probabilistic Graphical Models \\
\hline ECSE 343 & (3) & Numerical Methods in Engineering \\
\hline ECSE 421 & (3) & Embedded Systems \\
\hline ECSE 422 & (3) & Fault Tolerant Computing \\
\hline ECSE 424 & (3) & Human-Computer Interaction \\
\hline ECSE 429 & (3) & Software Validation \\
\hline ECSE 437 & (3) & Software Delivery \\
\hline ECSE 446 & (3) & Realistic Image Synthesis \\
\hline ECSE 472 & (3) & Fundamentals of Circuit Simulation and Modelling \\
\hline ECSE 500 & (3) & Mathematical Foundations of Systems \\
\hline ECSE 501 & (3) & Linear Systems \\
\hline ECSE 507 & (3) & Optimization and Optimal Control \\
\hline ECSE 509 & (3) & Probability and Random Signals 2 \\
\hline ECSE 516 & (3) & Nonlinear and Hybrid Control Systems \\
\hline ECSE 521 & (3) & Digital Communications 1 \\
\hline ECSE 525 & (4) & Satellite Navigation Systems \\
\hline ECSE 526** & (3) & Artificial Intelligence \\
\hline ECSE 532 & (4) & Computer Graphics \\
\hline ECSE 551 & (4) & Machine Learning for Engineers \\
\hline ECSE 552 & (4) & Deep Learning \\
\hline ECSE 554 & (4) & Applied Robotics \\
\hline ECSE 556 & (4) & Machine Learning in Network Biology \\
\hline ECSE 557 & (3) & Introduction to Ethics of Intelligent Systems \\
\hline ECSE 575 & (3) & Heterogeneous Integration Systems \\
\hline MATH 247 & (3) & Honours Applied Linear Algebra \\
\hline \multicolumn{3}{|l|}{* ECSE 551 and COMP 551 cannot both be taken.} \\
\hline \multicolumn{3}{|l|}{** COMP 424 and ECSE 526 cannot both be taken.} \\
\hline \multicolumn{3}{|l|}{Complementary Studies} \\
\hline \multicolumn{3}{|l|}{Group A - Impact of Technology on Society} \\
\hline \multicolumn{3}{|l|}{3 credits from the following:} \\
\hline
\end{tabular}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
BTEC 502 & \((3)\) & Biotechnology Ethics and Society \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440^{*}\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Planning the 21 st Century City
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies, and Law
3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR 3 credits from the following:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics
\end{tabular}
\begin{tabular}{lll} 
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\section*{Elective Course (3 credits)}

One 3-credit course at the 200-level or higher from any department at McGill, approved by the Undergraduate Programs Office in the Department of Electrical and Computer Engineering.

\subsection*{6.9.5.6 Bachelor Engineering (B.Eng.) - Co-op in Software Engineering (141 credits)}

Program credit weight: 141-144 credits
Program credit weight for Quebec CEGEP students: 113-116 credits
Program credit weight for out-of-province students: 141-144 credits

\section*{Required Year 0 (Freshman) Courses}

28 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 113- to 116-credit program.
For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 120 & (4) & General Chemistry 2 \\
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies and Law, listed below under Complementary Studies (Group B).
AND 3 credits Natural Science complementary courses chosen from courses from the following science departments, approved by the Undergraduate Programs Office in the Department of Electrical and Computer Engineering:
Atmospheric and Oceanic Sciences (ATOC)
Biology (BIOL)
Chemistry (CHEM)
Earth and Planetary Sciences (EPSC)
Earth System Science (ESYS)
Physics (PHYS)
Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

35 credits
COMP 202 (3) Foundations of Programming
\begin{tabular}{lcl} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 360 & (3) & Algorithm Design \\
COMP 421 & (3) & Database Systems \\
FACC \(100^{* *}\) & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 240 & (3) & Discrete Structures \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: *CCOM 206 must be passed two terms prior to ECSE 201.
** Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Software Engineering Courses}

60 credits
\begin{tabular}{lll} 
ECSE 200 & (3) & Electric Circuits 1 \\
ECSE 201 & (2) & Co-operative Work Term 1 \\
ECSE 205 & (3) & Probability and Statistics for Engineers \\
ECSE 211 & (3) & Design Principles and Methods \\
ECSE 222 & (3) & Digital Logic \\
ECSE 223 & (3) & Model-Based Programming \\
ECSE 250 & (3) & Fundamentals of Software Development \\
ECSE 301 & (2) & Co-operative Work Term 2 \\
ECSE 310 & (3) & Thermodynamics of Computing \\
ECSE 316 & (3) & Signals and Networks \\
ECSE 321 & (3) & Introduction to Software Engineering \\
ECSE 324 & (4) & Computer Organization \\
ECSE 326 & (3) & Software Requirements Engineering \\
ECSE 401 & (2) & Co-operative Work Term 3 \\
ECSE 402 & (2) & Co-operative Work Term 4 \\
ECSE 420 & (3) & Parallel Computing \\
ECSE 427 & (3) & Operating Systems \\
ECSE 428 & (3) & Software Engineering Practice \\
ECSE 429 & (3) & Software Validation \\
ECSE 458D1 & (3) & Capstone Design Project \\
ECSE 458D2 & (3) & Capstone Design Project \\
\hline
\end{tabular}

Note: ECSE 458N1 and ECSE 458N2 can be taken instead of ECSE 458D1 and ECSE 458D2.

\section*{Complementary Courses}

15-18 credits

\section*{Technical Complementaries}
\(9-12\) credits ( 3 courses) must be taken, chosen as follows:
\(3-4\) credits (1 course) from List A
6-8 credits (2 courses) from List A or List B
* COMP 350 and ECSE 343 cannot both be taken
** ECSE 551 and COMP 551 cannot both be taken
*** COMP 424 and ECSE 526 cannot both be taken

\section*{List A}

3-12 credits from the following:
\begin{tabular}{lcl} 
ECSE 325 & \((3)\) & Digital Systems \\
ECSE 415 & \((3)\) & Introduction to Computer Vision \\
ECSE 416 & \((4)\) & Telecommunication Networks \\
ECSE 439 & \((3)\) & Software Language Engineering \\
ECSE 444 & \((4)\) & Microprocessors \\
ECSE 544 & \((4)\) & Computational Photography
\end{tabular}

\section*{List B}
\(0-8\) credits from the following:
\begin{tabular}{|c|c|c|}
\hline COMP 307 & (3) & Principles of Web Development \\
\hline COMP 330 & (3) & Theory of Computation \\
\hline COMP 350* & (3) & Numerical Computing \\
\hline COMP 409 & (3) & Concurrent Programming \\
\hline COMP 417 & (3) & Introduction Robotics and Intelligent Systems \\
\hline COMP 424*** & (3) & Artificial Intelligence \\
\hline COMP 512 & (4) & Distributed Systems \\
\hline COMP 520 & (4) & Compiler Design \\
\hline COMP 521 & (4) & Modern Computer Games \\
\hline COMP 525 & (3) & Formal Verification \\
\hline COMP 529 & (4) & Software Architecture \\
\hline COMP 533 & (3) & Model-Driven Software Development \\
\hline COMP 547 & (4) & Cryptography and Data Security \\
\hline COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
\hline COMP 550 & (3) & Natural Language Processing \\
\hline COMP 551* & (4) & Applied Machine Learning \\
\hline COMP 559 & (4) & Fundamentals of Computer Animation \\
\hline COMP 562 & (4) & Theory of Machine Learning \\
\hline COMP 588 & (4) & Probabilistic Graphical Models \\
\hline ECSE 343* & (3) & Numerical Methods in Engineering \\
\hline ECSE 421 & (3) & Embedded Systems \\
\hline ECSE 422 & (3) & Fault Tolerant Computing \\
\hline ECSE 424 & (3) & Human-Computer Interaction \\
\hline ECSE 425 & (3) & Computer Architecture \\
\hline
\end{tabular}
\begin{tabular}{lll} 
ECSE 437 & \((3)\) & Software Delivery \\
ECSE 446 & \((3)\) & Realistic Image Synthesis \\
ECSE 507 & \((3)\) & Optimization and Optimal Control \\
ECSE 509 & (3) & Probability and Random Signals 2 \\
ECSE 525 & (4) & Satellite Navigation Systems \\
ECSE 526*** & (3) & Artificial Intelligence \\
ECSE 532 & (4) & Computer Graphics \\
ECSE 551** & (4) & Machine Learning for Engineers \\
ECSE 552 & (4) & Deep Learning \\
ECSE 554 & (4) & Applied Robotics \\
ECSE 556 & (4) & Machine Learning in Network Biology \\
ECSE 557 & (3) & Introduction to Ethics of Intelligent Systems \\
MATH 247 & \((3)\) & Honours Applied Linear Algebra
\end{tabular}

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{|c|c|c|}
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline BTEC 502 & (3) & Biotechnology Ethics and Society \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 203 & (3) & Environmental Systems \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline MGPO 440* & (3) & Strategies for Sustainability \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline SOCI 235 & (3) & Technology and Society \\
\hline SOCI 312 & (3) & Sociology of Work and Industry \\
\hline URBP 201 & (3) & Planning the 21st Century City \\
\hline
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies, and Law
3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***
School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR 3 credits from the following:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\section*{Elective Course ( \(\mathbf{3}\) credits)}

One 3-credit course at the 200-level or higher from any department at McGill, approved by the Undergraduate Programs Office in the Department of Electrical and Computer Engineering.

\subsection*{6.9.6 Mechanical Engineering}

\subsection*{6.9.6.1 Location}

Macdonald Engineering Building, Room 270
817 Sherbrooke Street West
Montreal QC H3A 0C3
Telephone: 514-398-6296
Fax: 514-398-7365
Email: ugrad.mecheng @mcgill.ca
Website: mcgill.ca/mecheng

\subsection*{6.9.6.2 About the Department of Mechanical Engineering}

Mechanical engineers are involved in the conception, design, implementation, and operation of mechanical systems. Typical application areas include aerospace, energy, manufacturing, machinery, and transportation. Because of the very broad nature of the discipline, there is a high demand for mechanical engineers

Many mechanical engineers follow other career paths, including sales, finance, and management. Graduate studies are useful for the specialists working in research establishments, consulting firms, or in corporate research and development.

To prepare the mechanical engineer for a wide range of career possibilities, there is a heavy emphasis in our curriculum on the fundamental analytical disciplines. This is balanced by a sequence of experimental and design engineering courses, which include practice in design, manufacturing, and experimentation. In these courses, students learn how to apply their analytical groundwork to the solution of practical problems.

The Honours program has a greater emphasis on research and prepares students for future graduate studies. A Minor in Aerospace Engineering and a Concentration in Design are available for students in either the regular or Honours program who wish to specialize in these areas.

While the program is demanding, there is time for many extracurricular activities. Many students participate in extra-curricular design teams, such as Aerospace Design, Formula Electric, Racing, Rocketry, and Robotics. Student associations, including the McGill Association of Mechanical Engineers (MAME) and the Engineering Undergraduate Society (EUS), allow students to shape their community.
Relations between faculty and students are extremely close. Social functions, at which students and professors meet to exchange views and get to know each other, are organized frequently.

\subsection*{6.9.6.3 Bachelor of Engineering (B.Eng.) - Mechanical Engineering (142 credits)}

Program credit weight: 142 credits
Program credit weight for Quebec CEGEP students: 113 credits
Program credit weight for out-of-province students: 142 credits
To prepare the mechanical engineer for a wide range of career possibilities, there is a heavy emphasis in our curriculum on the fundamental analytical disciplines. This is balanced by a sequence of experimental and design engineering courses which include practice in design, manufacturing, and experimentation. In these courses, students learn how to apply their analytical groundwork to the solution of practical problems.

Special interests are satisfied by selecting appropriate complementary courses from among those offered with a specific subject concentration, such as management, industrial engineering, computer science, controls and robotics, bio-engineering, aeronautics, combustion, systems engineering, etc.

\section*{Required Year 0 (Freshman) Courses}

29 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 113 -credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B).

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

33 credits
\begin{tabular}{lll} 
CIVE 207 & (4) & Solid Mechanics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
ECSE 461 & (3) & Electric Machinery \\
FACC 100 & (1) & Introduction to the Engineering Profession
\end{tabular}
\begin{tabular}{lll} 
FACC 250 & \((0)\) & Responsibilities of the Professional Engineer \\
FACC 300 & \((3)\) & Engineering Economy \\
FACC 400 & \((1)\) & Engineering Professional Practice \\
MATH 262 & \((3)\) & Intermediate Calculus \\
MATH 263 & \((3)\) & Ordinary Differential Equations for Engineers \\
MATH 264 & \((3)\) & Advanced Calculus for Engineers \\
MATH 271 & \((3)\) & Linear Algebra and Partial Differential Equations \\
MIME 260 & \((3)\) & Materials Science and Engineering \\
WCOM 206 & \((3)\) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

Required Mechanical Engineering Courses
65 credits
\begin{tabular}{|c|c|c|}
\hline MECH 201 & (2) & Introduction to Mechanical Engineering \\
\hline MECH 210 & (2) & Mechanics 1 \\
\hline MECH 220 & (4) & Mechanics 2 \\
\hline MECH 240 & (3) & Thermodynamics 1 \\
\hline MECH 262 & (3) & Statistics and Measurement Laboratory \\
\hline MECH 290 & (3) & Design Graphics for Mechanical Engineering \\
\hline MECH 292 & (3) & Design 1: Conceptual Design \\
\hline MECH 309 & (3) & Numerical Methods in Mechanical Engineering \\
\hline MECH 314 & (3) & Dynamics of Mechanisms \\
\hline MECH 315 & (4) & Mechanics 3 \\
\hline MECH 321 & (3) & Mechanics of Deformable Solids \\
\hline MECH 331 & (3) & Fluid Mechanics 1 \\
\hline MECH 341 & (3) & Thermodynamics 2 \\
\hline MECH 346 & (3) & Heat Transfer \\
\hline MECH 360 & (3) & Principles of Manufacturing \\
\hline MECH 362 & (2) & Mechanical Laboratory 1 \\
\hline MECH 383 & (3) & Applied Electronics and Instrumentation \\
\hline MECH 393 & (3) & Design 2: Machine Element Design \\
\hline MECH 412 & (3) & System Dynamics and Control \\
\hline MECH 430 & (3) & Fluid Mechanics 2 \\
\hline MECH 463D1 & (3) & Design 3: Mechanical Engineering Project \\
\hline MECH 463D2 & (3) & Design 3: Mechanical Engineering Project \\
\hline
\end{tabular}

\section*{Technical Complementary Courses}

9 credits

6 credits at the 300 level or higher, chosen from Mechanical Engineering courses (subject code MECH). One of these two courses ( 3 credits) must be from the following list:
\begin{tabular}{lll} 
CHEE 563* & (3) & Biofluids and Cardiovascular Mechanics \\
MECH 497 & (3) & Value Engineering
\end{tabular}
\begin{tabular}{lcl} 
MECH 498 & \((3)\) & Interdisciplinary Design Project 1 \\
MECH 499 & (3) & Interdisciplinary Design Project 2 \\
MECH 513 & (3) & Control Systems \\
MECH 530 & (3) & Mechanics of Composite Materials \\
MECH 532 & (3) & Aircraft Performance, Stability and Control \\
MECH 535 & (3) & Turbomachinery and Propulsion \\
MECH 536 & (3) & Aerospace Structures \\
MECH 543 & (3) & Design with Composite Materials \\
MECH 544 & (3) & Processing of Composite Materials \\
MECH 553 & (3) & Design and Manufacture of Microdevices \\
MECH 559 & (3) & Engineering Systems Optimization \\
MECH 560 & (3) & Eco-design and Product Life Cycle Assessment \\
MECH 563* & (3) & Biofluids and Cardiovascular Mechanics \\
MECH 564 & (3) & Thermal Radiation and Solar Energy Systems \\
MECH 565 & (3) & Fluid Flow and Heat Transfer Equipment \\
MECH 573 & (3) & Mechanics of Robotic Systems \\
\hline
\end{tabular}
* Students select either CHEE 563 or MECH 563.

3 credits chosen from courses at the 300 level or higher (approved by the Department) in the Faculty of Engineering (including MECH courses) or from courses in the Faculty of Science, including MATH courses.

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
BTEC 502 & \((3)\) & Biotechnology Ethics and Society \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440^{*}\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Planning the 21 st Century City
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies, and Law
3 credits at the 200 level or higher from the following departments:

\section*{Anthropology (ANTH)}

Economics (any 200- or 300-level course excluding ECON 227, and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR one of the following:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\section*{Typical Program of Study}

Students entering the program from CEGEP follow a different course of study from those entering from out of province. Students will be advised by the Department as to which courses they should select from the course lists above.
For a detailed curriculum, see http://www.mcgill.ca/mecheng/undergrad/curriculum.
For all minors and concentrations, students should complete a Course Authorization Form, available from the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) or from the Undergraduate Program Coordinator, indicating their intention to take the minor or concentration.

\subsection*{6.9.6.4 Bachelor of Engineering (B.Eng.) - Honours Mechanical Engineering (142 credits)}

Program credit weight: 142 credits

Program credit weight for Quebec CEGEP students: 113 credits
Program credit weight for out-of-province students: 142 credits
To prepare the mechanical engineer for a wide range of career possibilities, there is a heavy emphasis in our curriculum on the fundamental analytical disciplines. This is balanced by a sequence of experimental and design Engineering courses, which include practice in design, manufacturing, and experimentation. In these courses, students learn how to apply their analytical groundwork to the solution of practical problems

The Honours program is particularly suitable for those with a high aptitude in mathematics and physics and gives a thorough grounding in the basic engineering sciences.

Special interests are satisfied by selecting appropriate complementary courses from among those offered with a specific subject concentration, such as management, industrial engineering, computer science, controls and robotics, bio-engineering, aeronautics, combustion, systems engineering, etc.

\section*{Required Year 0 (Freshman) Courses}

29 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 113 -credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lcl} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies and Law, listed below under Complementary Studies (Group B).

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

27 credits
\begin{tabular}{lcl} 
CIVE 207 & (4) & Solid Mechanics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
FACC \(100^{*}\) & \((1)\) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MATH 264 & (3) & Advanced Calculus for Engineers \\
MATH 271 & (3) & Linear Algebra and Partial Differential Equations \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Mechanical Engineering Courses}

\section*{62 credits}
\begin{tabular}{lll} 
MECH 201 & (2) & Introduction to Mechanical Engineering \\
MECH 210 & (2) & Mechanics 1 \\
MECH 220 & (4) & Mechanics 2
\end{tabular}
\begin{tabular}{lll} 
MECH 240 & (3) & Thermodynamics 1 \\
MECH 262 & (3) & Statistics and Measurement Laboratory \\
MECH 290 & (3) & Design Graphics for Mechanical Engineering \\
MECH 292 & (3) & Design 1: Conceptual Design \\
MECH 309 & (3) & Numerical Methods in Mechanical Engineering \\
MECH 321 & (3) & Mechanics of Deformable Solids \\
MECH 331 & (3) & Fluid Mechanics 1 \\
MECH 341 & (3) & Thermodynamics 2 \\
MECH 346 & (3) & Heat Transfer \\
MECH 360 & (3) & Principles of Manufacturing \\
MECH 362 & (2) & Mechanical Laboratory 1 \\
MECH 383 & (3) & Applied Electronics and Instrumentation \\
MECH 403D1 & (3) & Thesis (Honours) \\
MECH 403D2 & (3) & Thesis (Honours) \\
MECH 404 & (3) & Honours Thesis 2 \\
MECH 419 & (4) & Advanced Mechanics of Systems \\
MECH 430 & (3) & Fluid Mechanics 2 \\
MECH 494 & (3) & Honours Design Project
\end{tabular}

\section*{Technical Complementary Courses}

18 credits
3 credits from the following, chosen with the approval of either the thesis supervisor or the coordinator of the Honours program, when a thesis supervisor has not yet been secured:
\begin{tabular}{lll} 
MATH 316 & (3) & Complex Variables \\
MATH 323 & (3) & Probability \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 417 & (3) & Linear Optimization \\
MATH 478 & (3) & Computational Methods in Applied Mathematics
\end{tabular}

6 credits from the following:
\begin{tabular}{lcl} 
MECH 513 & (3) & Control Systems \\
MECH 546 & (3) & Finite Element Methods in Solid Mechanics \\
MECH 559* & (3) & Engineering Systems Optimization \\
MECH 562 & (3) & Advanced Fluid Mechanics \\
MECH 578 & (3) & Advanced Thermodynamics \\
MECH 579* & (3) & Multidisciplinary Design Optimization
\end{tabular}
*Note: Students select either MECH 559 or MECH 579.

6 credits at the 300 level or higher, chosen from Mechanical Engineering courses (subject code MECH). One of these two courses ( 3 credits) must be from the following list:
\begin{tabular}{lll} 
CHEE 563* & (3) & Biofluids and Cardiovascular Mechanics \\
MECH 497 & (3) & Value Engineering
\end{tabular}
\begin{tabular}{lcl} 
MECH 498 & \((3)\) & Interdisciplinary Design Project 1 \\
MECH 499 & \((3)\) & Interdisciplinary Design Project 2 \\
MECH 513 & (3) & Control Systems \\
MECH 530 & (3) & Mechanics of Composite Materials \\
MECH 532 & (3) & Aircraft Performance, Stability and Control \\
MECH 535 & (3) & Turbomachinery and Propulsion \\
MECH 536 & (3) & Aerospace Structures \\
MECH 543 & (3) & Design with Composite Materials \\
MECH 544 & (3) & Processing of Composite Materials \\
MECH 553 & (3) & Design and Manufacture of Microdevices \\
MECH 559 & (3) & Engineering Systems Optimization \\
MECH 560 & (3) & Eco-design and Product Life Cycle Assessment \\
MECH 563* & (3) & Biofluids and Cardiovascular Mechanics \\
MECH 564 & (3) & Thermal Radiation and Solar Energy Systems \\
MECH 565 & (3) & Fluid Flow and Heat Transfer Equipment \\
MECH 573 & (3) & Mechanics of Robotic Systems \\
\hline
\end{tabular}
*Students choose either CHEE 563 or MECH 563
3 credits chosen from courses at the 300 -level or higher (approved by the Department) in the Faculty of Engineering (including MECH courses) or from MIME 260 or from courses at the 300 level or higher in the Faculty of Science, including MATH courses.

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
BTEC 502 & \((3)\) & Biotechnology Ethics and Society \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440 *\) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Sociology of Work and Industry \\
URBP 201 & (3) & Planning the 21st Century City
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B: Humanities and Social Sciences, Management Studies and Law
3 credits at the 200 level or higher from the following departments:

\section*{Anthropology (ANTH)}

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR one of the following:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\section*{Typical Program of Study}

Students entering the program from Quebec CEGEPs follow a different course of study from those entering from outside the province. Students will be advised by the Department as to which courses they should select from the course lists above.
For a detailed curriculum, please see
http://www.mcgill.ca/mecheng/undergrad/curriculum.
For all minors and concentrations, students should complete a Course Authorization Form, available from the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) or from the Undergraduate Program Coordinator, indicating their intention to take the minor or concentration.

\subsection*{6.9.6.5 Bachelor of Engineering (B.Eng.) - Mechanical Engineering - Design (15 credits)}

Students in this concentration take five courses in the area of design, including the completion of an interdisciplinary project.
Students should complete a Course Authorization Form, available from the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) or from the Undergraduate Program Coordinator, indicating their intention to take the concentration.
Total concentration credit weight: 15-16 credits

\section*{Required Courses}

6 credits
\begin{tabular}{lll} 
MECH 498 & (3) & Interdisciplinary Design Project 1 \\
MECH 499 & (3) & Interdisciplinary Design Project 2
\end{tabular}

\section*{Complementary Courses}
\(9-10\) credits from the following:
\begin{tabular}{lcl} 
ARCH 515 & (3) & Sustainable Design \\
CHEE 453 & (4) & Process Design \\
MECH 497 & (3) & Value Engineering \\
MECH 528 & (3) & Product Design \\
MECH 530 & (3) & Mechanics of Composite Materials \\
MECH 543 & (3) & Design with Composite Materials \\
MECH 565 & (3) & Fluid Flow and Heat Transfer Equipment \\
MECH 579 & (3) & Multidisciplinary Design Optimization
\end{tabular}

\subsection*{6.9.6.6 Bachelor of Engineering (B.Eng.) - Honours Mechanical Engineering - Design (15 credits)}

Students in this concentration take five courses in the area of design, including the completion of an interdisciplinary project.
Students should complete a Course Authorization Form, available from the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) or from the Undergraduate Program Coordinator, indicating their intention to take the concentration.

Total concentration credit weight: 15-16 credits

\section*{Required Courses}

6 credits
\begin{tabular}{lll} 
MECH 498 & (3) & Interdisciplinary Design Project 1 \\
MECH 499 & (3) & Interdisciplinary Design Project 2
\end{tabular}

\section*{Complementary Courses}

9-10 credits from the following:
\begin{tabular}{lcl} 
ARCH 515 & (3) & Sustainable Design \\
CHEE 453 & (4) & Process Design \\
MECH 497 & (3) & Value Engineering \\
MECH 528 & (3) & Product Design \\
MECH 530 & (3) & Mechanics of Composite Materials \\
MECH 543 & (3) & Design with Composite Materials \\
MECH 565 & (3) & Fluid Flow and Heat Transfer Equipment \\
MECH 579 & (3) & Multidisciplinary Design Optimization
\end{tabular}

\subsection*{6.9.7 Mining and Materials Engineering}

\subsection*{6.9.7.1 Location}

\section*{General Office:}

Wong Building, Room 2140
3610 University Street
Montreal QC H3A 0C5
Website: mcgill.ca/minmat

\section*{Materials:}

Wong Building, Room 2140
3610 University Street
Montreal QC H3A 0C5
Telephone: 514-398-1040
Fax: 514-398-4492
Email: coordinator.minmat@mcgill.ca
Website:mcgill.ca/materials

\section*{Mining:}

Frank Dawson Adams Building, Room 125
3450 University Street
Montreal QC H3A 0E8
Telephone: 514-398-2215
Fax: 514-398-7099
Email: admin.mining@mcgill.ca
Website: mcgill.ca/mining

\subsection*{6.9.7.2 About the Department of Mining and Materials Engineering}

The Department of Mining and Materials Engineering offers programs leading to the Bachelor of Engineering degree in Materials Engineering or Mining Engineering. In addition to regular courses and laboratories, the curriculum includes seminars, colloquia, and student projects reinforced by field trips to industrial operations.
For more information, refer to:
- Materials Engineering - section 6.9.7.3.3: Bachelor of Engineering (B.Eng.) - Materials Engineering (148 credits) and section 6.9.7.3.4: Bachelor of Engineering (B.Eng.) - Co-op in Materials Engineering (148 credits)
- Mining Engineering - and section 6.9.7.4.3: Bachelor of Engineering (B.Eng.) - Mining Engineering (144 credits) and section 6.9.7.4.4: Bachelor of Engineering (B.Eng.) - Co-op in Mining Engineering (150 credits)

\subsection*{6.9.7.2.1 Scholarships}

The Department offers renewable Entrance Scholarships every year. A substantial number of other scholarships and bursaries are also awarded by the Department, as well as by the Canadian Mineral Industry Education Foundation, Canadian Institute of Mining Foundation, Quebec Mining Association, and others.
Please refer to the Faculty of Engineering website's Scholarships and Financial Aid section for more information.

\subsection*{6.9.7.3 About Materials Engineering}

\subsection*{6.9.7.3.1 Co-op in Materials Engineering}

The Materials Engineering degree is a cooperative program leading to a B.Eng. and includes formal industrial work periods. It is built on a strong background of mathematics, basic sciences, computer skills and applications, and specific engineering and design courses to provide up-to-date training in materials engineering. Students take core courses covering processing, fabrication, applications, and performance of materials.
The program is fully accredited by the Canadian Engineering Accreditation Board (CEAB) and is designed to offer students exceptional training for employment in the field.

The core courses are supplemented by complementary courses, which provide a diverse selection of specialties for the graduating engineer. The course structure is reinforced with laboratory exercises. Graduates find employment in a wide range of industries, including the resource and manufacturing sectors. Students in the Co-op program benefit from practical learning experience gained from work-term employment in meaningful engineering jobs, as well as non-tangible learning experiences arising from the responsibilities required to obtain and successfully complete the work terms.

Regarding the Co-op program fees, an amount of \(\$ 258.05\) will be billed during ten consecutive terms for a total amount of \(\$ 2,580.50\) before graduation. These fees cover expenses directly related to the operation of the Co-op program. Students must register for each of their industrial training courses within
the university registration period for returning students or late fees will apply. Before registering for any work term course, students must contact the Co-op in Materials Engineering Liaison Officer for approval.

\subsection*{6.9.7.3.2 Student Advising}

Students entering this program must plan their schedule of studies in consultation with one of the departmental advisors. Appointments may be obtained by contacting the Administrative and Student Affairs Coordinator.

For more information, please refer to the Academic Advising section of our website.

\subsection*{6.9.7.3.3 Bachelor of Engineering (B.Eng.) - Materials Engineering (148 credits)}

Program credit weight: 148 credits
Program credit weight for Quebec CEGEP students: 119 credits
Students wanting to study Materials Engineering may only be admitted into the B.Eng.; Co-op in Materials Engineering program. There is no direct admission to the B.Eng.; Materials Engineering program (which does not include the work terms required for the Co-op program). Students can transfer from the B.Eng.; Co-op in Materials Engineering to the B.Eng.; Materials Engineering program once they have met certain requirements and obtained approval from the departmental adviser.
The department offers a Major in Materials Engineering leading to an accredited B.Eng. degree in Materials Engineering. Materials are used to enact every human technology and have shaped key eras in history. Major in Materials Engineering students will have the opportunity to learn the fundamental science and engineering of materials through the materials processing pipeline, including how to enrich mineral-poor ore, how to process the materials into the desired microstructures and compositions, and how to use these materials in various applications (aerospace, electronics, and biological systems). With the choice of technical complementary courses, students have an opportunity to specialize and strengthen key materials technologies or broaden their horizons and take courses from several interdisciplinary areas.

Students entering this program must plan their schedule of studies in consultation with a departmental adviser.

\section*{Required Year 0 (Freshman) Courses}

29 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 119-credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lcl} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B).

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

36 credits
\begin{tabular}{lcl} 
CHEM 233 & \((3)\) & Topics in Physical Chemistry \\
CIVE 205 & (3) & Statics \\
CIVE 207 & (4) & Solid Mechanics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
ECSE 209 & (3) & Electrotechnology \\
FACC \(100^{*}\) & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & \((1)\) & Engineering Professional Practice
\end{tabular}
\begin{tabular}{lll} 
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MATH 264 & (3) & Advanced Calculus for Engineers \\
MECH 289 & (3) & Design Graphics \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Materials Engineering Courses}

62 credits
\begin{tabular}{|c|c|c|}
\hline MIME 209 & (3) & Mathematical Applications \\
\hline MIME 212 & (3) & Engineering Thermodynamics \\
\hline MIME 250 & (3) & Introduction to Extractive Metallurgy \\
\hline MIME 261 & (3) & Structure of Materials \\
\hline MIME 311 & (3) & Modelling and Automatic Control \\
\hline MIME 317 & (3) & Analytical and Characterization Techniques \\
\hline MIME 341 & (3) & Introduction to Mineral Processing \\
\hline MIME 345 & (3) & Applications of Polymers \\
\hline MIME 350 & (3) & Extractive Metallurgical Engineering \\
\hline MIME 352 & (3) & Hydrochemical Processing \\
\hline MIME 356 & (4) & Heat, Mass and Fluid Flow \\
\hline MIME 360 & (3) & Phase Transformations: Solids \\
\hline MIME 362 & (3) & Mechanical Properties \\
\hline MIME 452 & (4) & Process and Materials Design \\
\hline MIME 455 & (3) & Advanced Process Engineering \\
\hline MIME 456 & (3) & Steelmaking and Steel Processing \\
\hline MIME 465 & (3) & Metallic and Ceramic Powders Processing \\
\hline MIME 467 & (3) & Electronic Properties of Materials \\
\hline MIME 470 & (3) & Engineering Biomaterials \\
\hline MIME 473 & (3) & Introduction to Computational Materials Design \\
\hline
\end{tabular}

\section*{Complementary Courses (21 credits)}

\section*{Technical Complementaries}

15 credits
\(9-15\) credits from the following:
\begin{tabular}{lll} 
CHEE 515* & (3) & Interface Design: Biomimetic Approach \\
CIVE 512 & (3) & Advanced Civil Engineering Materials \\
MECH 530 & (3) & Mechanics of Composite Materials \\
MIME 410 & (3) & Materials Research Project \\
MIME 442 & (3) & Analysis, Modelling and Optimization in Mineral Processing \\
MIME 512 & (3) & Corrosion and Degradation of Materials \\
MIME 515* & (3) & (Bio)material Surface Analysis and Modification \\
MIME 526 & (3) & Mineral Economics
\end{tabular}
\begin{tabular}{lll} 
MIME 542 & (3) & Transmission Electron Microscopy \\
MIME 544 & (3) & Analysis: Mineral Processing Systems 1 \\
MIME 545 & (3) & Analysis: Mineral Processing Systems 2 \\
MIME 551 & (3) & Electrochemical Processing \\
MIME 556 & (3) & Sustainable Materials Processing \\
MIME 558 & (3) & Engineering Nanomaterials \\
MIME 559 & (3) & Aluminum Physical Metallurgy \\
MIME 560 & (3) & Joining Processes \\
MIME 561 & (3) & Advanced Materials Design \\
MIME 563 & (3) & Hot Deformation of Metals \\
MIME 565 & (3) & Aerospace Metallic-Materials and Manufacturing Processes \\
MIME 568 & (3) & Topics in Advanced Materials \\
MIME 569 & (3) & Electron Beam Analysis of Materials \\
MIME 570 & (3) & Micro- and Nano-Fabrication Fundamentals \\
MIME 571 & (3) & Surface Engineering \\
MIME 572 & (3) & Computational Thermodynamics \\
MIME 580 & (3) & Additive Manufacturing Using Metallic and Ceramic Materials
\end{tabular}
* Students choose either CHEE 515 or MIME 515, offered in alternate years.

6 credits may be taken from courses outside of the Department of Mining and Materials Engineering, with department approval.

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
BTEC 502 & \((3)\) & Biotechnology Ethics and Society \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440^{*}\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Sociology of Work and Industry \\
URBP 201 & Planning the 21 st Century City
\end{tabular}
* Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies, and Law
3 credits at the 200 level or higher from the following departments:

* Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\subsection*{6.9.7.3.4 Bachelor of Engineering (B.Eng.) - Co-op in Materials Engineering (148 credits)}

Program credit weight: 148 credits
Program credit weight for Quebec CEGEP students: 119 credits
The Department offers a Co-op in Materials Engineering program leading to an accredited B.Eng. degree in Materials Engineering. Materials are used to enact every human technology and have shaped key areas of history. In the Co-op in Materials Engineering, students will have the opportunity to learn the fundamental science and engineering of materials and complete three work-term semesters. The program spans the materials processing pipeline, teaching students how to enrich mineral-poor ore, then to process the materials into the desired microstructures and compositions and finally how to use these materials in various applications (aerospace, electronics and biological systems). With the choice of technical complementary courses, students have an opportunity to specialize and strengthen key materials technologies or broaden their horizons and take courses from several interdisciplinary areas.

Students entering this program must plan their schedule of studies in consultation with a departmental adviser.

\section*{Required Year 0 (Freshman) Courses}

29 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 119-credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lll} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & \((4)\) & Calculus 2 \\
PHYS 131 & \((4)\) & Mechanics and Waves \\
PHYS 142 & \((4)\) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B).
Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

36 credits
\begin{tabular}{lcl} 
CHEM 233 & (3) & Topics in Physical Chemistry \\
CIVE 205 & (3) & Statics \\
CIVE 207 & (4) & Solid Mechanics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
ECSE 209 & (3) & Electrotechnology \\
FACC 100* & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MATH 264 & (3) & Advanced Calculus for Engineers \\
MECH 289 & (3) & Design Graphics \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Materials Engineering Courses}

68 credits
\begin{tabular}{lcl} 
MIME 209 & (3) & Mathematical Applications \\
MIME 212 & (3) & Engineering Thermodynamics \\
MIME 250 & (3) & Introduction to Extractive Metallurgy \\
MIME 261 & (3) & Structure of Materials \\
MIME 280 & (2) & Industrial Training 1 \\
MIME 311 & (3) & Modelling and Automatic Control \\
MIME 317 & (3) & Analytical and Characterization Techniques \\
MIME 341 & (3) & Introduction to Mineral Processing
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MIME 345 & (3) & Applications of Polymers \\
\hline MIME 350 & (3) & Extractive Metallurgical Engineering \\
\hline MIME 352 & (3) & Hydrochemical Processing \\
\hline MIME 356 & (4) & Heat, Mass and Fluid Flow \\
\hline MIME 360 & (3) & Phase Transformations: Solids \\
\hline MIME 362 & (3) & Mechanical Properties \\
\hline MIME 380 & (2) & Industrial Training 2 \\
\hline MIME 452 & (4) & Process and Materials Design \\
\hline MIME 455 & (3) & Advanced Process Engineering \\
\hline MIME 456 & (3) & Steelmaking and Steel Processing \\
\hline MIME 465 & (3) & Metallic and Ceramic Powders Processing \\
\hline MIME 467 & (3) & Electronic Properties of Materials \\
\hline MIME 470 & (3) & Engineering Biomaterials \\
\hline MIME 473 & (3) & Introduction to Computational Materials Design \\
\hline MIME 480 & (2) & Industrial Training 3 \\
\hline
\end{tabular}

\section*{Complementary Courses}

15 credits

\section*{Technical Complementaries}

9 credits
6-9 credits from the following:
\begin{tabular}{lll} 
CHEE 515* & (3) & Interface Design: Biomimetic Approach \\
CIVE 512 & (3) & Advanced Civil Engineering Materials \\
MECH 530 & (3) & Mechanics of Composite Materials \\
MIME 410 & (3) & Materials Research Project \\
MIME 442 & (3) & Analysis, Modelling and Optimization in Mineral Processing \\
MIME 512 & (3) & Corrosion and Degradation of Materials \\
MIME 515* & (3) & (Bio)material Surface Analysis and Modification \\
MIME 526 & (3) & Mineral Economics \\
MIME 542 & (3) & Transmission Electron Microscopy \\
MIME 544 & (3) & Analysis: Mineral Processing Systems 1 \\
MIME 545 & (3) & Analysis: Mineral Processing Systems 2 \\
MIME 551 & (3) & Electrochemical Processing \\
MIME 553 & (3) & Impact of Materials Production \\
MIME 556 & (3) & Sustainable Materials Processing \\
MIME 558 & (3) & Engineering Nanomaterials \\
MIME 559 & (3) & Aluminum Physical Metallurgy \\
MIME 560 & (3) & Joining Processes \\
MIME 561 & (3) & Advanced Materials Design \\
MIME 563 & (3) & (3) Deformation of Metals \\
MIME 565 & (3) & Topics in Advanced Materials \\
MIME 568 & (3) &
\end{tabular}
\begin{tabular}{lcl} 
MIME 569 & \((3)\) & Electron Beam Analysis of Materials \\
MIME 570 & (3) & Micro- and Nano-Fabrication Fundamentals \\
MIME 571 & (3) & Surface Engineering \\
MIME 572 & (3) & Computational Thermodynamics \\
MIME 580 & (3) & Additive Manufacturing Using Metallic and Ceramic Materials \\
* Students choose either CHEE 515 or MIME 515, offered in alternate years.
\end{tabular}

0-3 credits may be taken from courses outside of the Department of Mining and Materials Engineering, with departmental approval.

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
BTEC 502 & (3) & Biotechnology Ethics and Society \\
ECON 225 & (3) & Economics of the Environment \\
ECON 347 & (3) & Economics of Climate Change \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440^{*}\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Sociology of Work and Industry \\
URBP 201 & & Planning the 21 st Century City
\end{tabular}
* Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

\section*{Group B - Humanities and Social Sciences, Management Studies, and Law}

3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR 3 credits from the following:
ARCH 528
(3)
History of Housing
\begin{tabular}{lcl} 
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams building, Room 22) or email an adviser.
Note regarding language courses: Language course are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\subsection*{6.9.7.4 About Mining Engineering}

\subsection*{6.9.7.4.1 Co-op in Mining Engineering}

McGill is proud to be the host of the oldest mining engineering program in Canada, which started in 1871. The program is known for the excellence of its courses as well as the training it provides in mining science and technology, mineral economics, mine planning, rock mechanics, renewable energy, and mine design. Mining offers excellent career opportunities in Canada and around the world. There have been rapid technological developments in recent years, presenting numerous challenges to students with strong interest in engineering and a taste for innovation.
The Department offers a co-operative program leading to an accredited B.Eng. degree in Mining Engineering. It includes three paid industrial work terms. The Department has a dedicated Mining Co-op Liaison Officer to help the students find jobs in industry. The program is offered in one of two streams: English Stream for high school students and Bilingual Stream for CEGEP students, in collaboration with the mining engineering program at Polytechnique Montréal in Montreal. Students in the Bilingual Stream take six mining courses at Polytechnique Montréal at the latter part of the program. The teaching and learning style in mining courses is one that permits the students to sharpen their communication skills—both written and oral—and develop their team working skills.
A wide range of scholarships are available to new and continuing students from the Department, Faculty of Engineering, as well as from industry. The Department provides financial support to students who are willing to participate in mining competitions, such as the Canadian Mining Games and World Mining Competition.

When taking a co-op work term, students must register for MIME 290, MIME 291, and MIME 392; thus, co-op work terms appear on the student transcript. Interested students may also take a fourth work term as a complementary course and a fifth one as an extra course.

\subsection*{6.9.7.4.2 Student Advising}

The Department gives priority to their academic advising service. Each student in the mining engineering program is assigned an academic advisor at the start of their study at McGill and for the duration of their undergraduate degree. Our academic advising service ensures quality and individual guidance to each student in the program. Students will meet with their advisor at least once a year to discuss their progress and interest in exchange with other mining schools or taking a minor in their areas of interest among other things.
For more information, please refer to the Academic Advising section of our website.

\subsection*{6.9.7.4.3 Bachelor of Engineering (B.Eng.) - Mining Engineering (144 credits)}
***Enrolment in this program is subject to departmental approval, please consult with an Academic Advisor within the appropriate program further to discuss your suitability in this program.***

The Department offers a Major in Mining Engineering Program leading to an accredited B.Eng. degree in Mining Engineering. The program focuses on the science and engineering of sustainable extraction of mineral aresources. It contains two streams: English for non-CEGEP students and Bilingual (six courses in French) for CEGEP students, in collaboration with the mining engineering program at Polytechnique Montreal. The program includes projects that are reinforced by field trips to industrial operations.

\section*{B.Eng.; Major in Mining Engineering}

Program credit weight: 144-145 credits
Program credit weight for CEGEP students: 115-116 credits
Entry into the Major in Mining Engineering
Students in Mining can be admitted only into the B.Eng.; Co-op in Mining Engineering. There is no direct entry to the Major in Mining Engineering (which does not include the work terms required for the Co-op program).

Students may enter the Major in Mining Engineering if they wish at any point in time during their study.
To transfer into the Major program, students must obtain approval from the department adviser and submit a Request for Course Authorization form to the McGill Engineering Student Centre (Frank Dawson Adams, Room 22).

\section*{Required Year 0 (Freshman) Courses}

\section*{29 credits}

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 115- to 116-credit program.
\begin{tabular}{lll} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & \((4)\) & Calculus 2 \\
PHYS 131 & \((4)\) & Mechanics and Waves \\
PHYS 142 & \((4)\) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies and Law, listed below under Complementary Studies (Group B).

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.
Required Non-Departmental Courses (37 credits)
\begin{tabular}{lcl} 
CIVE 205 & (3) & Statics \\
CIVE 207 & (4) & Solid Mechanics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
ECSE 209 & (3) & Electrotechnology \\
EPSC 221 & (3) & General Geology \\
EPSC 225 & (1) & Properties of Minerals \\
FACC 100* & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MATH 264 & (3) & Advanced Calculus for Engineers \\
MECH 289 & (3) & Design Graphics \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}

\footnotetext{
* Note: FACC (Introduction to the Engineering Profession) must be taken during the first year of study.
}

\section*{Required Mining Engineering Courses (47 credits)}
\begin{tabular}{lll} 
MIME 200 & (3) & Introduction to the Minerals Industry \\
MIME 203 & (2) & Mine Surveying \\
MIME 209 & (3) & Mathematical Applications \\
MIME 260 & (3) & Materials Science and Engineering \\
MIME 322 & (3) & Fragmentation and Comminution \\
MIME 323 & (3) & Rock and Soil Mass Characterization \\
MIME 325 & (3) & Mineral Industry Economics \\
MIME 333 & (3) & Materials Handling \\
MIME 340 & (3) & Applied Fluid Dynamics \\
MIME 341 & (3) & Introduction to Mineral Processing \\
MIME 413 & (3) & Strategic Mine Planning With Uncertainty \\
MIME 419 & (3) & Surface Mining \\
MIME 422 & (3) & Mine Ventilation \\
MIME 425 & (3) & Applied Stochastic Orebody Modelling \\
MIME 426 & (6) & Mine Design and Prefeasibility Study
\end{tabular}

\section*{Complementary Courses}

31-32 credits
17 credits from one of Stream A or Stream B

\section*{Stream A - CEGEP Students}

CEGEP students must take the following courses:
\begin{tabular}{lll} 
MPMC \(321^{*}\) & (3) & Mécanique des roches et contrôle des terrains \\
MPMC \(326^{*}\) & (3) & Recherche opérationnelle I \\
MPMC \(328^{*}\) & (3) & Environnement et gestion des rejets miniers \\
MPMC \(329^{*}\) & (2) & Géologie minière \\
MPMC \(330^{*}\) & (3) & Géotechnique minière \\
MPMC \(421^{*}\) & (3) & Exploitation en souterrain
\end{tabular}
* Mining courses taken at Polytechnique Montréal

\section*{Stream B - Non-CEGEP Students}

Non-CEGEP students must take the following courses:
\begin{tabular}{lcl} 
CIVE 208 & (3) & Civil Engineering System Analysis \\
MIME 329 & (2) & Mining Geology \\
MIME 330 & (3) & Mining Geotechnics \\
MIME 421 & (3) & Rock Mechanics \\
MIME 424 & (3) & Underground Mining Methods \\
MIME 428 & (3) & Environmental Mining Engineering
\end{tabular}

\section*{Technical Complementaries}

8-9 credits can be chosen from the following or from any other approved technical courses in Engineering, Management or Science.
Note: Not all course are given annually; see the "Courses" section of this publication to know if a course is offered.
\begin{tabular}{|c|c|c|}
\hline CFIN 410 & (3) & Investment and Portfolio Management \\
\hline CIVE 416 & (3) & Geotechnical Engineering \\
\hline CIVE 421 & (3) & Municipal Systems \\
\hline CIVE 584 & (3) & Mechanics of Groundwater Flow \\
\hline EPSC 320 & (3) & Elementary Earth Physics \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline FINE 482 & (3) & International Finance 1 \\
\hline MIME 290 & (2) & Industrial Work Period 1 \\
\hline MIME 320 & (3) & Extraction of Energy Resources \\
\hline MIME 442 & (3) & Analysis, Modelling and Optimization in Mineral Processing \\
\hline MIME 484 & (3) & Mining Project \\
\hline MIME 511 & (3) & Advanced Subsurface Ventilation and Air Conditioning \\
\hline MIME 514 & (3) & Sustainability Analysis of Mining Systems \\
\hline MIME 520 & (3) & Stability of Rock Slopes \\
\hline MIME 527 & (3) & Selected Topics in Mineral Resource Engineering \\
\hline MIME 544 & (3) & Analysis: Mineral Processing Systems 1 \\
\hline MIME 545 & (3) & Analysis: Mineral Processing Systems 2 \\
\hline MIME 588 & (3) & Reliability Analysis of Mining Systems \\
\hline MPMC 320* & (3) & CAO et informatique pour les mines \\
\hline
\end{tabular}
* Mining courses taken at Polytechnique Montréal

\section*{Complementary Studies (6 credits)}

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{|c|c|c|}
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline BTEC 502 & (3) & Biotechnology Ethics and Society \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 203 & (3) & Environmental Systems \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline MGPO 440* & (3) & Strategies for Sustainability \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline SOCI 235 & (3) & Technology and Society \\
\hline SOCI 312 & (3) & Sociology of Work and Industry \\
\hline URBP 201 & (3) & Planning the 21st Century City \\
\hline
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies and Law
3 credits at the 200-level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)
Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sa
Hebrew) ***
School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR

3 credits from the following:
ARCH 528
BUSA 465*
CLAS 203
ENVR 203
ENVR 400
FACC 220
FACC 500
FACC 501
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.
Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\subsection*{6.9.7.4.4 Bachelor of Engineering (B.Eng.) - Co-op in Mining Engineering ( 150 credits)}

Program credit weight: 150-151 credits
Program credit weight for Quebec CEGEP students: 121-122 credits
The Department offers a Co-op in Mining Engineering Program leading to an accredited B.Eng. degree in Mining Engineering. The program focuses on the science and engineering of sustainable extraction of mineral resources. It contains two streams: English for non-CEGEP students and Bilingual (six courses in French) for CEGEP students, in collaboration with the mining engineering program at Polytechnique Montreal. The program includes projects that are reinforced by field trips to industrial operations as well as three industrial work terms. Students must register for each work term (MIME 290, MIME 291, MIME 392) and pay associated fees by the Course Change (add/drop) registration deadline. Before registering for any work term course, students must contact the Mining Co-op Liaison Officer for approval.

\section*{Required Year 0 (Freshman) Courses}

29 credits
Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 121- to 123-credit program.
For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.
\begin{tabular}{lcl} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & \((4)\) & Calculus 2 \\
PHYS 131 & \((4)\) & Mechanics and Waves \\
PHYS 142 & \((4)\) & Electromagnetism and Optics
\end{tabular}

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B)
Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Non-Departmental Courses}

37 credits
\begin{tabular}{lcl} 
CIVE 205 & (3) & Statics \\
CIVE 207 & (4) & Solid Mechanics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
ECSE 209 & (3) & Electrotechnology \\
EPSC 221 & (3) & General Geology \\
EPSC 225 & (1) & Properties of Minerals \\
FACC 100* & (1) & Introduction to the Engineering Profession \\
FACC 250 & (0) & Responsibilities of the Professional Engineer \\
FACC 300 & (3) & Engineering Economy \\
FACC 400 & (1) & Engineering Professional Practice \\
MATH 262 & (3) & Intermediate Calculus \\
MATH 263 & (3) & Ordinary Differential Equations for Engineers \\
MATH 264 & (3) & Advanced Calculus for Engineers \\
MECH 289 & (3) & Design Graphics \\
WCOM 206 & (3) & Communication in Engineering
\end{tabular}
* Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

\section*{Required Mining Engineering Courses}

53 credits
\begin{tabular}{lll} 
MIME 200 & (3) & Introduction to the Minerals Industry \\
MIME 203 & (2) & Mine Surveying \\
MIME 209 & (3) & Mathematical Applications \\
MIME 260 & (3) & Materials Science and Engineering \\
MIME 290 & (2) & Industrial Work Period 1 \\
MIME 291 & (2) & Industrial Work Period 2
\end{tabular}
\begin{tabular}{lcl} 
MIME 322 & \((3)\) & Fragmentation and Comminution \\
MIME 323 & \((3)\) & Rock and Soil Mass Characterization \\
MIME 325 & (3) & Mineral Industry Economics \\
MIME 333 & (3) & Materials Handling \\
MIME 340 & (3) & Applied Fluid Dynamics \\
MIME 341 & (3) & Introduction to Mineral Processing \\
MIME 392 & (2) & Industrial Work Period 3 \\
MIME 413 & (3) & Strategic Mine Planning With Uncertainty \\
MIME 419 & (3) & Surface Mining \\
MIME 422 & (3) & Mine Ventilation \\
MIME 425 & (3) & Applied Stochastic Orebody Modelling \\
MIME 426 & (6) & Mine Design and Prefeasibility Study
\end{tabular}

\section*{Complementary Courses}

31-32 credits
17 credits from one of Stream A or Stream B

\section*{Stream A - CEGEP Students}

CEGEP students must take the following courses:
\begin{tabular}{lll} 
MPMC \(321^{*}\) & (3) & Mécanique des roches et contrôle des terrains \\
MPMC 326* & (3) & Recherche opérationnelle I \\
MPMC \(328^{*}\) & (3) & Environnement et gestion des rejets miniers \\
MPMC 329* & (2) & Géologie minière \\
MPMC \(330^{*}\) & \((3)\) & Géotechnique minière \\
MPMC \(421^{*}\) & \((3)\) & Exploitation en souterrain
\end{tabular}
* Mining courses taken at Polytechnique Montréal

\section*{Stream B - Non-CEGEP Students}

Non-CEGEP students must take the following courses:
\begin{tabular}{lcl} 
CIVE 208 & (3) & Civil Engineering System Analysis \\
MIME 329 & (2) & Mining Geology \\
MIME 330 & (3) & Mining Geotechnics \\
MIME 421 & (3) & Rock Mechanics \\
MIME 424 & (3) & Underground Mining Methods \\
MIME 428 & (3) & Environmental Mining Engineering
\end{tabular}

\section*{Technical Complementaries}

8-9 credits can be chosen from the following or from any other approved technical courses in Engineering, Management, or Science (including mathematics courses).
Note: Not all courses are given annually; see the "Courses" section of this eCalendar to know if a course is offered.
\begin{tabular}{lll} 
CFIN 410 & (3) & Investment and Portfolio Management \\
CIVE 416 & (3) & Geotechnical Engineering \\
CIVE 421 & (3) & Municipal Systems \\
CIVE 584 & (3) & Mechanics of Groundwater Flow
\end{tabular}
\begin{tabular}{lcl} 
EPSC 320 & \((3)\) & Elementary Earth Physics \\
EPSC 549 & \((3)\) & Hydrogeology \\
FINE 482 & \((3)\) & International Finance 1 \\
MIME 320 & (3) & Extraction of Energy Resources \\
MIME 442 & (3) & Analysis, Modelling and Optimization in Mineral Processing \\
MIME 484 & (3) & Mining Project \\
MIME 494 & (2) & Industrial Work Period 4 \\
MIME 511 & (3) & Advanced Subsurface Ventilation and Air Conditioning \\
MIME 514 & (3) & Sustainability Analysis of Mining Systems \\
MIME 520 & (3) & Stability of Rock Slopes \\
MIME 527 & (3) & Selected Topics in Mineral Resource Engineering \\
MIME 544 & (3) & Analysis: Mineral Processing Systems 1 \\
MIME 545 & (3) & Reliability Analysis of Mining Systems \\
MIME 588 & (3) & CAO et informatique pour les mines \\
MPMC 320* &
\end{tabular}
* Mining course taken at Polytechnique Montréal

\section*{Complementary Studies}

6 credits

\section*{Group A - Impact of Technology on Society}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
BTEC 502 & \((3)\) & Biotechnology Ethics and Society \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
GEOG 302 & (3) & Environmental Management 1 \\
MGPO \(440^{*}\) & (3) & Strategies for Sustainability \\
PHIL 343 & (3) & Biomedical Ethics \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOCI 235 & (3) & Technology and Society \\
SOCI 312 & (3) & Sociology of Work and Industry \\
URBP 201 & Planning the 21 st Century City
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Group B - Humanities and Social Sciences, Management Studies, and Law
3 credits at the 200 level or higher from the following departments:
Anthropology (ANTH)
Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)
History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)
Political Science (POLI)
Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)
Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) ***

School of Social Work (SWRK)
Sociology (excluding SOCI 350)
OR 3 credits from the following:
\begin{tabular}{lcl} 
ARCH 528 & (3) & History of Housing \\
BUSA 465* & (3) & Technological Entrepreneurship \\
CLAS 203 & (3) & Greek Mythology \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought \\
FACC 220 & (3) & Law for Architects and Engineers \\
FACC 500 & (3) & Technology Business Plan Design \\
FACC 501 & (3) & Technology Business Plan Project \\
HISP 225 & (3) & Hispanic Civilization 1 \\
HISP 226 & (3) & Hispanic Civilization 2 \\
INDR 294* & (3) & Introduction to Labour-Management Relations \\
INTG 201** & (3) & Integrated Management Essentials 1 \\
INTG 202** & (3) & Integrated Management Essentials 2 \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MGCR 222* & (3) & Introduction to Organizational Behaviour \\
MGCR 352* & (3) & Principles of Marketing \\
ORGB 321* & (3) & Leadership \\
ORGB 423* & (3) & Human Resources Management
\end{tabular}
* Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.
** Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
*** If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

\subsection*{6.9.8 Urban Planning}

\subsection*{6.9.8.1 Location}

Macdonald-Harrington Building, Room 400
815 Sherbrooke Street West
Montreal QC H3A 0C2
Telephone: 514-398-4075
Fax: 514-398-8376
Email: admissions.planning@mcgill.ca
Website: mcgill.ca/urbanplanning

\subsection*{6.9.8.2 About the School of Urban Planning}

Urban planning is the set of processes by which communities shape their environments to meet their needs and to realize their aspirations for the future. Urban planning is also the profession of those who facilitate this process. While the practice of planning is as old as the cities themselves, the profession of urban planning is only about a century old. In the late 19th and early 20 th centuries, architects, landscape architects, engineers, government reformers, lawyers, public health specialists, and others joined forces to tackle the serious social and environmental problems of the industrial city. They created new techniques and institutions to improve living conditions and decision-making processes, with an eye to improving cities in terms of health, safety, efficiency, equity, beauty, identity, etc. Today, people who enter the profession come from diverse backgrounds as well, including the design professions, engineering and applied sciences, environmental and social studies, and other fields. Their chief task is to reinvent tools, procedures, and processes to meet new challenges in making metropolitan areas socially, economically, and environmentally resilient and just. A key feature of planning education is learning to view issues in a multidisciplinary way, to manage processes of collaboration and of conflict, and to generate equitable and efficient solutions to complex problems of growth and development.

The School of Urban Planning offers three graduate degrees; a professionally accredited M.U.P., a thesis-based M.Sc., and a Ph.D. For more information, please see the graduate e-calendar.

\subsection*{6.9.8.3 Undergraduate Courses in Urban Planning}

The following courses taught by faculty in the School of Urban Planning are open to undergraduate students:
\begin{tabular}{lll} 
Undergraduate Courses in Urban Planning \\
URBP 201 & (3) & Planning the 21st Century City \\
URBP 501 & (2) & Principles and Practice 1 \\
URBP 503 & (3) & Public Transport: Planning and Operations \\
URBP 504 & (3) & Planning for Active Transportation \\
URBP 505 & (3) & Geographic Information Systems \\
URBP 506 & (3) & Environmental Policy and Planning \\
URBP 514 & (3) & Community Design Workshop \\
URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
URBP 536 & (2) & Current Issues in Transportation 1 \\
URBP 537 & (1) & Current Issues in Transportation 2 \\
URBP 541 & (1) & Selected Topics in Planning \\
URBP 542 & (1) & Selected Topics \\
URBP 543 & (3) & Urban Design and Planning \\
URBP 551 & (3) & Urban Governance \\
URBP 553 & (3) & Real Estate and Planning \\
URBP 555 & (3) & Urban Economy: A Spatial Perspective \\
URBP 556 & (3) & Rethinking Zoning \\
URBP 557 & &
\end{tabular}

\subsection*{6.9.9 Other Engineering Programs}

\subsection*{6.9.9.1 Bioresource Engineering}

The Faculty of Engineering cooperates with the Faculty of Agricultural and Environmental Sciences in providing courses of instruction for a fully accredited curriculum in bioresource engineering to meet requirements for a professional engineering degree awarded in the Faculty of Agricultural and Environmental Sciences. For details, refer to the B.Eng.(Bioresource) program requirements in Faculty of Agricultural \& Environmental Sciences \(>\) Undergraduate \(>\) Browse Academic Programs \(>\) section 2.5.3: Bachelor of Engineering (Bioresource) - B.Eng.(Bioresource).

Some of the courses offered by the Department of Bioresource Engineering (subject code BREE) may be of interest to students in the Faculty of Engineering.
The Department of Bioresource Engineering is located in the Faculty of Agricultural and Environmental Sciences on the Macdonald Campus:
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Department of Bioresource Engineering
Macdonald-Stewart Building, Room MS1-028
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue QC H9X 3V9

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Telephone: 514-398-7773
Fax: 514-398-7990
Website: mcgill.ca/bioeng

\subsection*{6.9.10 Minor Programs}

This section includes general information concerning minors that are designed for students in the Faculty of Engineering.
Minors are coherent sequences of courses taken in addition to the courses required for the B.Eng. or B.Sc.(Arch.) degree. Minors normally consist of 18-24 credits, allowing 6-12 credits of overlap with the degree program (see individual minor program requirements for specific information regarding course overlap). The real credit cost to the student is typically \(9-18\) credits, representing one term beyond the B.Eng. or B.Sc.(Arch.) degree program. All courses in a minor must be passed with a grade of C or better.

Engineering students choose from a considerable variety of complementary courses under the categories of technical and complementary studies. Students should refer to their department for information concerning selection of complementary courses, and should see their departmental advisor. Departments also publish information regarding the choice of courses in this publication and in separate documents.
For enrolment in any other minors available at the University which is not listed below, please consult an advisor at MESC.
Note: Students are also permitted to register for minor concentrations offered by departments in the Faculty of Arts. To register in one of these minor concentrations, students must submit a request through the Minor Webform to obtain approval from the Faculty of Engineering. The Faculty of Engineering allows up to nine credits of overlap with the degree program for Engineering students taking Arts minor concentrations.

\section*{Minor Programs:}
- section 6.9.10.1: Bachelor of Engineering (B.Eng.) - Minor Aerospace Engineering (24 credits)
- section 6.9.10.2: Bachelor of Engineering (B.Eng.) - Minor Applied Artificial Intelligence (22-25 credits) (25 credits)
- section 6.9.10.3: Bachelor of Engineering (B.Eng.) - Minor Arts (24 credits)
- section 6.9.10.4: Bachelor of Engineering (B.Eng.) - Minor Biomedical Engineering (21 credits)
- section 6.9.10.5: Bachelor of Engineering (B.Eng.) - Minor Biotechnology (for Engineering Students) (24 credits)
- section 6.9.10.6: Bachelor of Engineering (B.Eng.) - Minor Chemistry ( 25 credits)
- section 6.9.10.7: Computer Science Courses and Minor Program
- section 6.9.10.8: Bachelor of Engineering (B.Eng.) - Minor Construction Engineering and Management (24 credits)
- section 6.9.10.9: Bachelor of Engineering (B.Eng.) - Minor Economics (18 credits)
- section 6.9.10.10: Minor in Environment
- section 6.9.10.11: Bachelor of Engineering (B.Eng.) - Minor Environmental Engineering (21 credits)
- section 6.9.10.12: Minor Program in Management
- section 6.9.10.13: Bachelor of Engineering (B.Eng.) - Minor Materials Engineering (24 credits)
- section 6.9.10.14: Bachelor of Engineering (B.Eng.) - Minor Mathematics (18 credits)
- section 6.9.10.15: Bachelor of Engineering (B.Eng.) - Minor Mining Engineering (23 credits)
- section 6.9.10.16: Minor in Musical Science and Technology
- section 6.9.10.17: Bachelor of Engineering (B.Eng.) - Minor Nanotechnology (21 credits)
- section 6.9.10.18: Bachelor of Engineering (B.Eng.) - Minor Physics (18 credits)
- section 6.9.10.19: Bachelor of Engineering (B.Eng.) - Minor Software Engineering (18 credits)
- section 6.9.10.20: Bachelor of Engineering (B.Eng.) - Minor Technological Entrepreneurship (18 credits)

\subsection*{6.9.10.1 Bachelor of Engineering (B.Eng.) - Minor Aerospace Engineering (24 credits)}

The Minor is designed for engineering students wishing to pursue a career in aerospace engineering. The program covers fundamental aircraft and spacecraft design and the certification process. The program includes further specialization in the following streams: aerodynamics and propulsion, structural analysis, materials and processes, spacecraft engineering and systems and avionics. A capstone aerospace design project is offered in the last year of the program in collaboration with the local aerospace companies.
The Minor in Aerospace Engineering is offered by the McGill Institute of Aerospace Engineering and is open to all students in engineering programs.
A maximum of 15 credits of coursework in the student's major may double-count with the Minor.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
AERO 401 & (3) & Introduction to Aerospace Engineering \\
AERO 410 & (3) & Aerospace Design and Certification Process
\end{tabular}

\section*{Complementary Courses (18 credits)}

6 credits from list below:
\begin{tabular}{lll} 
AERO 460D1 & \((3)\) & Aerospace Project \\
AERO 460D2 & \((3)\) & Aerospace Project \\
ECSE 458D1* & \((3)\) & Capstone Design Project \\
ECSE 458D2* & \((3)\) & Capstone Design Project \\
ECSE 478D1* & \((3)\) & Electrical Engineering Honours Thesis \\
ECSE 478D2* & \((3)\) & Electrical Engineering Honours Thesis \\
MECH 403D1* & \((3)\) & Thesis (Honours) \\
MECH 403D2* & \((3)\) & Thesis (Honours) \\
MECH 463D1* & \((3)\) & Design 3: Mechanical Engineering Project \\
MECH 463D2* & \((3)\) & Design 3: Mechanical Engineering Project
\end{tabular}
* An aerospace engineering project or honours thesis will be defined for students enrolled in the Minor and approved by the Minor Adviser.

And
12 credits from one of the following streams:
Students may take one complementary course outside of their stream, but their selection must be approved by the Minor Adviser prior to the registration for the course.

\section*{Aerodynamics and Propulsion Stream}
\begin{tabular}{lcl} 
MECH 447 & (3) & Combustion \\
MECH 516 & (3) & Computational Gasdynamics \\
MECH 532 & (3) & Aircraft Performance, Stability and Control \\
MECH 533 & (3) & Subsonic Aerodynamics \\
MECH 535 & (3) & Turbomachinery and Propulsion \\
MECH 539 & (3) & Computational Aerodynamics \\
MECH 562 & (3) & Advanced Fluid Mechanics \\
MECH 566 & (3) & Fluid-Structure Interactions \\
MECH 579 & (3) & Multidisciplinary Design Optimization
\end{tabular}

\section*{Aircraft Structures Stream}
\begin{tabular}{lcl} 
MECH 530 & (3) & Mechanics of Composite Materials \\
MECH 536 & (3) & Aerospace Structures \\
MECH 543 & (3) & Design with Composite Materials \\
MECH 544 & (3) & Processing of Composite Materials \\
MECH 546 & (3) & Finite Element Methods in Solid Mechanics \\
MECH 550 & (3) & Vibrations of Continuous Systems \\
MECH 551 & (3) & Nonlinear Dynamics of Shell Structures \\
MECH 567 & (3) & Structural Dynamics of Turbomachines \\
MIME 560 & (3) & Joining Processes \\
MIME 565 & (3) & Aerospace Metallic-Materials and Manufacturing Processes
\end{tabular}

\section*{Spacecraft and Systems Stream}
\begin{tabular}{lcl} 
GEOG 308 & (3) & Remote Sensing for Earth Observation \\
MECH 513 & (3) & Control Systems \\
MECH 536 & (3) & Aerospace Structures \\
MECH 542 & (3) & Spacecraft Dynamics \\
MECH 546 & (3) & Finite Element Methods in Solid Mechanics \\
MECH 550 & (3) & Vibrations of Continuous Systems \\
MECH 559 & (3) & Engineering Systems Optimization \\
MIME 565 & (3) & Aerospace Metallic-Materials and Manufacturing Processes \\
PHYS 320 & (3) & Introductory Astrophysics
\end{tabular}

\section*{Material and Processes Stream}
\begin{tabular}{lcl} 
CHEE 515* & (3) & Interface Design: Biomimetic Approach \\
CHEE 541 & (3) & Electrochemical Engineering \\
CHEE 543 & (3) & Plasma Engineering \\
MECH 544 & (3) & Processing of Composite Materials \\
MIME 512 & (3) & Corrosion and Degradation of Materials \\
MIME 515* & (3) & (Bio)material Surface Analysis and Modification \\
MIME 559 & (3) & Aluminum Physical Metallurgy \\
MIME 560 & (3) & Joining Processes \\
MIME 563 & (3) & Hot Deformation of Metals \\
MIME 565 & (3) & Aerospace Metallic-Materials and Manufacturing Processes \\
MIME 571 & (3) & Surface Engineering \\
MIME 580 & (3) & Additive Manufacturing Using Metallic and Ceramic Materials \\
* Students may choose only one of CHEE 515 or MIME 515.
\end{tabular}

\section*{Avionics Stream}
\begin{tabular}{|c|c|c|}
\hline ECSE 403 & (4) & Control \\
\hline ECSE 408 & (4) & Communication Systems \\
\hline ECSE 412 & (3) & Discrete Time Signal Processing \\
\hline ECSE 420 & (3) & Parallel Computing \\
\hline ECSE 421 & (3) & Embedded Systems \\
\hline ECSE 422 & (3) & Fault Tolerant Computing \\
\hline ECSE 425 & (3) & Computer Architecture \\
\hline ECSE 427 & (3) & Operating Systems \\
\hline ECSE 429 & (3) & Software Validation \\
\hline ECSE 444 & (4) & Microprocessors \\
\hline ECSE 465 & (3) & Power Electronic Systems \\
\hline ECSE 501 & (3) & Linear Systems \\
\hline ECSE 507 & (3) & Optimization and Optimal Control \\
\hline ECSE 511 & (3) & Introduction to Digital Communication \\
\hline ECSE 512 & (3) & Digital Signal Processing 1 \\
\hline ECSE 513 & (3) & Robust Control Systems \\
\hline
\end{tabular}
\begin{tabular}{lll} 
ECSE 516 & (3) & Nonlinear and Hybrid Control Systems \\
ECSE 524 & (3) & Interconnects and Signal Integrity \\
ECSE 565 & (3) & Introduction to Power Electronics \\
ECSE 593 & (3) & Antennas and Propagation.
\end{tabular}

\subsection*{6.9.10.2 Bachelor of Engineering (B.Eng.) - Minor Applied Artificial Intelligence (22-25 credits) ( 25 credits)}

The B.Eng.; Minor in Applied Artificial Intelligence, open to all engineering students, is designed to provide the foundation for applications of AI techniques in various fields of interest.

Students must complete 7 courses as follows. Up to three courses can be double counted with the major.

\section*{Complementary Courses (22-25)}

\section*{Group A}

3 credits from the following:
\begin{tabular}{lll} 
COMP 250* & (3) & Introduction to Computer Science \\
ECSE 250* & (3) & Fundamentals of Software Development
\end{tabular}
* COMP 250 and ECSE 250 cannot both be taken.

Group B
4 credits from the following:
\begin{tabular}{lll} 
COMP 551* & (4) & Applied Machine Learning \\
ECSE 551* & (4) & Machine Learning for Engineers
\end{tabular}
* ECSE 551 and COMP 551 cannot both be taken

Group C
3 credits from the following:
\begin{tabular}{lll} 
ECSE 343 & (3) & Numerical Methods in Engineering \\
MATH 223 & (3) & Linear Algebra \\
MATH 247 & (3) & Honours Applied Linear Algebra \\
MATH 271 & (3) & Linear Algebra and Partial Differential Equations
\end{tabular}

\section*{Group D}

3 credits from the following:
\begin{tabular}{lcl} 
AEMA 310 & (3) & Statistical Methods 1 \\
CIVE 302 & (3) & Probabilistic Systems \\
ECSE 205 & (3) & Probability and Statistics for Engineers \\
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 323 & \((3)\) & Probability \\
MECH 262 & (3) & Statistics and Measurement Laboratory \\
MIME 209 & (3) & Mathematical Applications
\end{tabular}

\section*{Group E}

9-12 credits from the following:
\begin{tabular}{lcl} 
COMP 417 & \((3)\) & Introduction Robotics and Intelligent Systems \\
COMP \(424^{* * *}\) & (3) & Artificial Intelligence \\
COMP 445 & (3) & Computational Linguistics \\
COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
COMP 550 & (3) & Natural Language Processing \\
COMP 562 & (4) & Theory of Machine Learning \\
COMP 565 & (4) & Machine Learning in Genomics and Healthcare \\
COMP 579 & (4) & Reinforcement Learning \\
COMP 588 & (4) & Probabilistic Graphical Models \\
ECSE 415 & (3) & Introduction to Computer Vision \\
ECSE 446 & (3) & Realistic Image Synthesis \\
ECSE 507 & (3) & Optimization and Optimal Control \\
ECSE \(526^{* * *}\) & (3) & Artificial Intelligence \\
ECSE 544 & (4) & Computational Photography \\
ECSE 552 & (4) & Deep Learning \\
ECSE 554 & (4) & Applied Robotics \\
ECSE 556 & (4) & Machine Learning in Network Biology \\
ECSE 557 & (3) & Introduction to Ethics of Intelligent Systems \\
MECH 559 & (3) & Engineering Systems Optimization \\
\hline
\end{tabular}
*** COMP 424 and ECSE 526 cannot both be taken.
Or any 400 or 500 level special topics courses in the area of artificial intelligence with the approval of the Electrical and Computer Engineering department.

\subsection*{6.9.10.3 Bachelor of Engineering (B.Eng.) - Minor Arts (24 credits)}

Minor Adviser: Faculty Student Adviser in the Engineering Student Centre (Frank Dawson Adams Building, Room 22)
B.Sc.(Arch.), and B.Eng., students may obtain the Arts Minor as part of their B.Eng., or B.Sc.(Arch.) degree by completing 24 credits, as described below.

Students must select courses for this Minor in consultation with one of the Advisers indicated above.
All courses in the Minor must be passed with a grade of C or better.

\section*{Requirements}

24 credits as follows:
a) At least two areas of concentration in the Faculty of Arts must be chosen, with a minimum of 6 credits in any one area.
b) At least 12 credits must be at the 300 level or higher.

In general, B.Eng. students may use courses from the Complementary Studies lists (Group A and Group B) in their program that are offered by the Faculty of Arts to satisfy some of these requirements. No more than 9 credits of these courses can be credited toward the Arts Minor.

\subsection*{6.9.10.4 Bachelor of Engineering (B.Eng.) - Minor Biomedical Engineering (21 credits)}

Biomedical engineering can be defined as the application of engineering principles to medicine and the life sciences. Students in the Biomedical Engineering Minor take courses in life sciences (anatomy, biology, chemistry, and physiology) and choose courses form area(s) within the field of biomedicine (artificial cells and organs; bioinformatics, genomics, and proteomics; biomaterials, biosensors, and nanotechnology; biomechanics and prosthetics; medical physics and imagine; neural systems and biosignal processesing).

Note: Open to students in the Faculty of Engineering and the Department of Bioresource Engineering.
The Biomedical Engineering Minor allows access to courses in basic life sciences and it intended to expose students to the interdisciplinary tools used in biomedicine.

To complete this Minor, students must obtain a grade of C or better in all approved courses and satisfy the requirements of both the major program and the Minor. By careful selection of courses, the Minor can be satisfied with 9 additional credits in the student's major program or a maximum of 12 credits overlap with the major program.
Students considering this Minor should contact the Minor Advisers listed above.

Minor Advisers: Prof. R. Leask (Wong Building, Room 4120), Prof. R. Mongrain (Macdonald Engineering Building, Room 369) or Prof. G. Mitsis (McConnell Engineering Building, Room 361).

\section*{Complementary Courses}
(21-25 credits)

\section*{Introductory Life Sciences}

Minimum of 3 credits from the courses below:
\begin{tabular}{lcl} 
ANAT 212* & (3) & Molecular Mechanisms of Cell Function \\
BIEN 219** & (4) & Introduction to Physical Molecular and Cell Biology \\
BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
BIOL 219** & (4) & Introduction to Physical Molecular and Cell Biology \\
CHEM 212*** & (4) & Introductory Organic Chemistry 1 \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}
* Students can choose one of ANAT 212, BIOC 212 or BIOL 201.
** Students can choose one of ANAT 212, BIEN 219, BIOC 212, BIOL 200, BIOL 201 or BIOL 219.
*** Cannot be taken by Chemical Engineering students.

\section*{Specialization Courses}

Minimum of 12 credits from courses below:
Students must select 6 credits from courses outside their department and at least one BMDE course. BMDE courses are best taken near the end of the program, when prerequisites are satisfied.

\section*{Physiological Systems, Artificial Cells and Organs}
\begin{tabular}{lcl} 
BIEN 340 & (3) & Transport Phenomena in Biological Systems 2 \\
BIEN 360 & (3) & Physical Chemistry in Bioengineering \\
BIEN 462 & (3) & Engineering Principles in Physiological Systems \\
BIEN 540 & (3) & Information Storage and Processing in Biological Systems \\
BMDE 505 & (3) & Cell and Tissue Engineering \\
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
PHGY 518 & (3) & Artificial Cells
\end{tabular}

\section*{Bioinformatics, Genomics and Proteomics}
\begin{tabular}{lcl} 
ANAT 365 & (3) & Cellular Trafficking \\
ANAT 458* & (3) & Membranes and Cellular Signaling \\
BIEN 310 & (3) & Introduction to Biomolecular Engineering \\
BIEN 410 & (3) & Computational Methods in Biomolecular Engineering \\
BIEN 420 & (3) & Biodevices Design for Diagnostics and Screening \\
BIEN 540 & (3) & Information Storage and Processing in Biological Systems \\
BIEN 590 & (3) & Cell Culture Engineering
\end{tabular}
\begin{tabular}{lcl} 
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOC 312 & (3) & Biochemistry of Macromolecules \\
BIOC \(458^{*}\) & (3) & Membranes and Cellular Signaling \\
BMDE 508 & (3) & Introduction to Micro and Nano-Bioengineering \\
COMP 424 & (3) & Artificial Intelligence \\
COMP 462 & (3) & Computational Biology Methods
\end{tabular}
* Students select either ANAT 458 or BIOC 458.

\section*{Biomaterials, Biosensors and Nanotechnology}
\begin{tabular}{lcl} 
BIEN 330 & \((3)\) & Tissue Engineering and Regenerative Medicine \\
BIEN 510 & \((3)\) & Engineered Nanomaterials for Biomedical Applications \\
BIEN 550 & (3) & Biomolecular Devices \\
BIEN 560 & (3) & Design of Biosensors \\
BMDE 504 & (3) & Biomaterials and Bioperformance \\
BMDE 505 & (3) & Cell and Tissue Engineering \\
BMDE 508 & (3) & Introduction to Micro and Nano-Bioengineering \\
CHEE 380 & (3) & Materials Science \\
ECSE 424 & (3) & Human-Computer Interaction \\
MECH 553 & (3) & Design and Manufacture of Microdevices \\
MIME 360 & (3) & Phase Transformations: Solids \\
MIME 362 & (3) & Mechanical Properties \\
MIME 470 & (3) & Engineering Biomaterials \\
PHYS 534 & (3) & Nanoscience and Nanotechnology
\end{tabular}

\section*{Biomechanics and Prosthetics}
\begin{tabular}{lcl} 
BIEN 320 & (3) & Molecular, Cellular and Tissue Biomechanics \\
BIEN 570 & (3) & Active Mechanics in Biology \\
BMDE 512 & (3) & Finite-Element Modelling in Biomedical Engineering \\
CHEE 563* & (3) & Biofluids and Cardiovascular Mechanics \\
MECH 315 & (4) & Mechanics 3 \\
MECH 321 & (3) & Mechanics of Deformable Solids \\
MECH 530 & (3) & Mechanics of Composite Materials \\
MECH 561 & (3) & Biomechanics of Musculoskeletal Systems \\
MECH 563* & (3) & Biofluids and Cardiovascular Mechanics \\
MIME 360 & (3) & Phase Transformations: Solids \\
MIME 362 & (3) & Mechanical Properties
\end{tabular}
* Students choose either CHEE 563 or MECH 563.

\section*{Medical Physics and Imaging}
\begin{tabular}{lll} 
BIEN \(350^{*}\) & (4) & Biosignals, Systems and Control \\
BIEN 530 & (3) & Imaging and Bioanalytical Instrumentation \\
BMDE 512 & (3) & Finite-Element Modelling in Biomedical Engineering
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BMDE 519 & (3) & Biomedical Signals and Systems \\
\hline COMP 424 & (3) & Artificial Intelligence \\
\hline COMP 558 & (4) & Fundamentals of Computer Vision \\
\hline ECSE 206* & (3) & Introduction to Signals and Systems \\
\hline ECSE 412 & (3) & Discrete Time Signal Processing \\
\hline PHYS 557 & (3) & Nuclear Physics \\
\hline \multicolumn{3}{|l|}{* Students choose either BIEN 350 or ECSE 206.} \\
\hline \multicolumn{3}{|l|}{Neural Systems and Biosignal Processing} \\
\hline BIEN 350* & (4) & Biosignals, Systems and Control \\
\hline BIEN 462 & (3) & Engineering Principles in Physiological Systems \\
\hline BMDE 501 & (3) & Selected Topics in Biomedical Engineering \\
\hline BMDE 502 & (3) & BME Modelling and Identification \\
\hline BMDE 503 & (3) & Biomedical Instrumentation \\
\hline BMDE 519 & (3) & Biomedical Signals and Systems \\
\hline ECSE 206* & (3) & Introduction to Signals and Systems \\
\hline ECSE 517 & (3) & Neural Prosthetic Systems \\
\hline ECSE 526 & (3) & Artificial Intelligence \\
\hline PHYS 413 & (3) & Physical Basis of Physiology \\
\hline \multicolumn{3}{|l|}{* Students choose either BIEN 350 or ECSE 206.} \\
\hline 0-6 credits ca & rmis & Departmental Adviser and approval of the Minor A \\
\hline
\end{tabular}

\subsection*{6.9.10.5 Bachelor of Engineering (B.Eng.) - Minor Biotechnology (for Engineering Students) (24 credits)}

Minor Adviser: Faculty Student Adviser in the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22). For advising regarding Science courses, contact Nancy Nelson, Undergraduate Adviser, Department of Biology, Faculty of Science.

This Minor is offered by the Faculty of Engineering and the Faculty of Science for students who wish to take biotechnology courses that are complementary to their area. It has been designed specifically for Chemical Engineering students; other Engineering students who are interested in the Minor should contact a Faculty Student Adviser in the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22).

To obtain the Biotechnology Minor, students must complete 24 credits, 18 of which must be exclusively for the Minor. Approved substitutions must be made for any of the required courses that are part of the student's major program.
The Department of Chemical Engineering permits students taking this Minor to complete BIOT 505 (Selected Topics in Biotechnology) as one of their technical complementary courses. Chemical Engineering students complete 15 credits beyond their 141-credit (115-credit for CEGEP students) B.Eng. program to obtain this Minor.

\section*{Required Courses}
\begin{tabular}{lll}
12 credits & \\
BIOT 505 & (3) & Selected Topics in Biotechnology \\
CHEE 200 & (3) & Chemical Engineering Principles 1 \\
CHEE 204 & (3) & Chemical Engineering Principles 2 \\
CHEE 474 & \((3)\) & Biochemical Engineering
\end{tabular}

OR

\section*{Alternative Required Courses (for Chemical Engineering students)}

A Chemical Engineering student may complete the Biotechnology Minor by taking the courses below plus one course from the list of complementary courses, not including FACC 300.
BIOL 200
(3) Molecular Biology
\begin{tabular}{lll} 
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics \\
BIOT 505 & (3) & Selected Topics in Biotechnology \\
MIMM 211 & (3) & Introductory Microbiology
\end{tabular}

\section*{Complementary Courses}

12 credits selected from courses outside the Department of the student's major program and/or from the lists below. If courses are chosen from the lists below, at least three courses must be taken from one area of concentration as grouped.

\section*{Biomedicine}
\begin{tabular}{lll} 
ANAT 541 & (3) & Cell and Molecular Biology of Aging \\
EXMD 504 & (3) & Biology of Cancer \\
PATH 300 & (3) & Human Disease
\end{tabular}

\section*{Chemistry}
\begin{tabular}{lll} 
CHEM 482 & (3) & Organic Chemistry: Natural Products \\
CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
CHEM 552 & (3) & Physical Organic Chemistry
\end{tabular}

\section*{General}
FACC \(300 \quad\) (3) Engineering Economy

\section*{Immunology}
\begin{tabular}{lll} 
ANAT 261 & (4) & Introduction to Dynamic Histology \\
BIOC 503 & (3) & Biochemistry of Immune Diseases \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
MIMM 414 & (3) & Advanced Immunology \\
PHGY 513 & (3) & Translational Immunology
\end{tabular}

\section*{Management}

Note: Engineering students may not use these courses to count toward a Management minor, nor toward the Complementary Studies requirement.
\begin{tabular}{lll} 
ECON 208 & (3) & Microeconomic Analysis and Applications \\
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management.
\end{tabular}

\section*{Microbiology}
\begin{tabular}{lll} 
MIMM 323 & (3) & Microbial Physiology \\
MIMM 324 & (3) & Fundamental Virology \\
MIMM 413 & (3) & Parasitology \\
MIMM 465 & (3) & Bacterial Pathogenesis
\end{tabular}
MIMM 466
(3)
Viral Pathogenesis

\section*{Molecular Biology (Biology)}
\begin{tabular}{lll} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 314 & (3) & Molecular Biology of Cancer \\
BIOL 520 & (3) & Gene Activity in Development \\
BIOL 524 & (3) & Topics in Molecular Biology \\
BIOL 551 & (3) & Principles of Cellular Control
\end{tabular}

\section*{Molecular Biology (Biochemistry)}
\begin{tabular}{lll} 
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOC 312 & (3) & Biochemistry of Macromolecules \\
BIOC 450 & (3) & Protein Structure and Function \\
BIOC 454 & (3) & Nucleic Acids \\
PSYT 455 & (3) & Neurochemistry
\end{tabular}

\section*{Physiology}
\begin{tabular}{lll} 
EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
EXMD 502 & (3) & Advanced Endocrinology 1 \\
EXMD 503 & (3) & Advanced Endocrinology 02 \\
PHAR 562 & (3) & Neuropharmacology \\
PHAR 563 & (3) & Endocrine Pharmacology \\
PHGY 518 & (3) & Artificial Cells
\end{tabular}

\section*{Pollution}

Note: Engineering students may not use these courses to count toward the Environmental Engineering Minor.
\begin{tabular}{lll} 
CIVE 225 & (4) & Environmental Engineering \\
CIVE 430 & (3) & Water Treatment and Pollution Control \\
CIVE 557 & (3) & Microbiology for Environmental Engineering
\end{tabular}

\subsection*{6.9.10.6 Bachelor of Engineering (B.Eng.) - Minor Chemistry ( 25 credits)}

Minor Adviser (program coordinator): Dr. Samuel Sewall (Director of Undergraduate Studies, Chemistry)
Program credit weight: 25 credits
A passing grade for courses in the Minor is a C .

\section*{Required Courses}

10 credits
\begin{tabular}{lll} 
CHEE 310* & (3) & Physical Chemistry for Engineers \\
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
CHEM 233* & (3) & Topics in Physical Chemistry \\
CHEM 234** & (3) & Topics in Organic Chemistry
\end{tabular}

\footnotetext{
* Students choose either CHEM 233 or CHEE 310
}
** or CEGEP equivalent

\section*{Complementary Courses}

15 credits from the following lists, two courses of which must be laboratory courses (* indicates lab).
Note that CHEM 212 is a prerequisite for most of the courses listed below, and CHEM 213 (Introductory Physical Chemistry 1) and CHEM 273 (Introductory Physical Chemistry 2) or their equivalents are prerequisites for the Physical Chemistry courses. If students take CHEM 222 (Introductory Organic Chemistry 2), which includes a lab, instead of CHEM 234, they will receive credit for one of the two required laboratory courses, but they must complete a total of 25 credits in chemistry for the Minor.

\section*{Inorganic Chemistry}
\begin{tabular}{lll} 
CHEM 281 & (3) & Inorganic Chemistry 1 \\
CHEM 381 & (3) & Inorganic Chemistry 2 \\
CHEM 591 & (3) & Bioinorganic Chemistry
\end{tabular}

\section*{Analytical Chemistry}
\begin{tabular}{lll} 
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 367 & (3) & Instrumental Analysis 1 \\
CHEM 377 & (3) & Instrumental Analysis 2
\end{tabular}

\section*{Organic Chemistry}
\begin{tabular}{lll} 
CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
CHEM 362* & (2) & Advanced Organic Chemistry Laboratory \\
CHEM 482 & (3) & Organic Chemistry: Natural Products
\end{tabular}

\section*{Physical Chemistry}
\begin{tabular}{lll} 
CHEM 345 & (3) & Introduction to Quantum Chemistry \\
CHEM 355 & (3) & Applications of Quantum Chemistry \\
CHEM 493* & (2) & Advanced Physical Chemistry Laboratory \\
CHEM 574 & (3) & Introductory Polymer Chemistry
\end{tabular}

\subsection*{6.9.10.7 Computer Science Courses and Minor Program}

The School of Computer Science offers an extensive range of courses for students in the Faculty of Engineering who are interested in computers. Students in the Faculty of Engineering may obtain a Computer Science Minor by completing 24 credits of courses, passed with a grade of C or better.
Students interested in this Minor should contact:
Liette Chin
Undergraduate Program Coordinator
School of Computer Science
McConnell Engineering Building, Room 320
Telephone: 514-398-7071, ext. 00118
Email: liette.chin@mcgill.ca
and the Minor Adviser in the School of Computer Science.

\subsection*{6.9.10.7.1 Computer Science Courses in Engineering Programs}

The School of Computer Science offers an extensive range of courses for students in the Faculty of Engineering who are interested in computers. The course taken by students in most B.Eng. programs (COMP 208) and other courses included in the core of the various B.Eng. programs are listed below.
Search All Courses for other courses offered by the School of Computer Sciences (subject code COMP).

\section*{Computer Science Courses in Engineering Programs}
\begin{tabular}{lll} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 360 & (3) & Algorithm Design \\
COMP 421 & (3) & Database Systems
\end{tabular}

\subsection*{6.9.10.7.2 Bachelor of Engineering (B.Eng.) - Minor Computer Science (25 credits)}

24-26 credits
This program gives students in Engineering an introduction to core computer science concepts. The Minor is open to B.Eng. and B.Sc.(Arch.) students in Engineering who have already taken ECSE 202, COMP 202, or COMP 208. This program is not open to students in the B.Eng.; Co-op in Software Engineering program. All courses in the Minor must be passed with a grade of C or better. The Minor program may be completed in \(24-26\) credits, of which no more than 6 credits may overlap with the primary program. Students who are interested in this Minor should consult with the Undergraduate Program CooThis program gives students in Engineering an introduction to core computer science concepts. The Minor is open to B.Eng. and B.Sc.(Arch.) students in Engineering who have already taken ECSE 202, COMP 202, or COMP 208. This program is not open to students in the B.Eng.; Co-op in Software Engineering program. All courses in the Minor must be passed with a grade of C or better. The Minor program may be completed in 24-26 credits, of which no more than 6 credits may overlap with the primary program. Students who are interested in this Minor should consult with the Undergraduate Program Coordinator in the School of Computer Science for administrative matters, and should consult with both the Minor Adviser in Computer Science and with their department adviser for approval of their course selection. Forms must be submitted and approved before the end of the drop/add period of the student's final term

\section*{Required Courses}

3 credits
COMP 206
(3)
Introduction to Software Systems

\section*{Complementary Courses (21-23 credits)}

3 credits from the following:
\begin{tabular}{lll} 
COMP 250 & (3) & Introduction to Computer Science \\
ECSE 250 & (3) & Fundamentals of Software Development
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design
\end{tabular}

3-4 credits from the following:
\begin{tabular}{lll} 
COMP 273 & (3) & Introduction to Computer Systems \\
ECSE 324 & (4) & Computer Organization
\end{tabular}

3-4 credits from the following:
\begin{tabular}{lll} 
CHEE 390 & \((3)\) & Computational Methods in Chemical Engineering \\
CIVE 320 & (4) & Numerical Methods \\
COMP 350 & (3) & Numerical Computing \\
ECSE 343 & (3) & Numerical Methods in Engineering \\
MATH 317 & (3) & Numerical Analysis
\end{tabular}
MECH 309
(3)
Numerical Methods in Mechanical Engineering

9 credits from:
COMP 251
(3)
Algorithms and Data Structures
MATH 240
(3)
Discrete Structures

COMP courses at the 300 level or above except COMP 396, COMP 400.
It is strongly recommended that students take COMP 251, as it is a prerequisite of many later computer science courses.

\subsection*{6.9.10.8 Bachelor of Engineering (B.Eng.) - Minor Construction Engineering and Management (24 credits)}

This Minor covers construction project management, law related to construction, labour-management relations, financial accounting and project finance, in addition to topics in other construction-related fields, architecture or mining engineering.

All courses in the Minor must be passed with a grade of C or better.
A maximum of 12 credits of coursework in the student's major may double-count with the Minor.
Minor Adviser: Prof. L. Chouinard, Macdonald Engineering Building, Room 491 (Telephone: 514-398-6446)
Minor program credit weight: 24 credits
Note: This Minor is particularly designed for Civil Engineering students, but is open to all B.Eng. and B.Sc.(Arch.) students.
All courses in the Minor must be passed with a grade of C or better.

\section*{Prerequisites}
\begin{tabular}{lll} 
CIVE 208 & (3) & Civil Engineering System Analysis \\
CIVE 302 & (3) & Probabilistic Systems \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
FACC 300 & (3) & Engineering Economy
\end{tabular}

\section*{Required Courses: Management and Law (15 credits)}
\begin{tabular}{lll} 
CIVE 324 & (3) & Sustainable Project Management \\
FACC 220 & (3) & Law for Architects and Engineers \\
INDR 294 & (3) & Introduction to Labour-Management Relations \\
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 341 & (3) & Introduction to Finance
\end{tabular}

\section*{Complementary Courses (9 credits)}

3 credits from List A
6 credits from List B
List A:
\begin{tabular}{lll} 
ARCH 447 & (3) & Energy, Environment, and Buildings 2 \\
ARCH 451 & (3) & Building Regulations and Safety \\
MIME 322 & (3) & Fragmentation and Comminution \\
MIME 333 & (3) & Materials Handling
\end{tabular}

List B:
\begin{tabular}{lll} 
CIVE 446 & (3) & Construction Engineering \\
CIVE 527 & (3) & Renovation and Preservation: Infrastructure
\end{tabular}
\begin{tabular}{lcl} 
ECSE 461 & (3) & Electric Machinery \\
FINE 445 & (3) & Real Estate Finance \\
MIME 520 & (3) & Stability of Rock Slopes \\
MIME 521 & (3) & Stability of Underground Openings \\
MPMC 321* & Mécanique des roches et contrôle des terrains \\
*Course offered in French at École Polytechnique in Montreal
\end{tabular}

\subsection*{6.9.10.9 Bachelor of Engineering (B.Eng.) - Minor Economics (18 credits)}

The B.Eng.; Minor in Economics focuses on such economic topics as: how societies decide what to produce, how much of it, what determines prices, exchange rates, interest rates, and levels of inflation. How economies function internally and on a global scale, what drives consumers, and how public policy and global events affect markets. A maximum of 9 credits of coursework in the student's major may be double counted with the Minor.

\section*{Required Courses (18 credits)}

6 credits from the following:
\begin{tabular}{lll} 
ECON 230D1 & (3) & Microeconomic Theory \\
ECON 230D2 & (3) & Microeconomic Theory \\
ECON 250D1 & (3) & Introduction to Economic Theory: Honours \\
ECON 250D2 & (3) & Introduction to Economic Theory: Honours
\end{tabular}

12 credits from:
\begin{tabular}{|c|c|c|}
\hline ECON 209 & (3) & Macroeconomic Analysis and Applications \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 303 & (3) & Canadian Economic Policy \\
\hline ECON 304 & (3) & Financial Instruments and Institutions \\
\hline ECON 305 & (3) & Industrial Organization \\
\hline ECON 306 & (3) & Labour Markets and Wages \\
\hline ECON 308 & (3) & Governmental Policy Towards Business \\
\hline ECON 313 & (3) & Economic Development 1 \\
\hline ECON 314 & (3) & Economic Development 2 \\
\hline ECON 316 & (3) & The Underground Economy \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 332* & (3) & Macroeconomic Theory: Majors 1 \\
\hline ECON 333* & (3) & Macroeconomic Theory - Majors 2 \\
\hline ECON 335 & (3) & The Japanese Economy \\
\hline ECON 336 & (3) & The Chinese Economy \\
\hline ECON 337 & (3) & Introductory Econometrics 1 \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline ECON 406 & (3) & Topics in Economic Policy \\
\hline ECON 408 & (3) & Public Sector Economics 1 \\
\hline ECON 409 & (3) & Public Sector Economics 2 \\
\hline ECON 411 & (3) & Economic Development: A World Area \\
\hline ECON 416 & (3) & Topics in Economic Development 2 \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
ECON 420 & \((3)\) & Topics in Economic Theory \\
ECON 426 & \((3)\) & Labour Economics \\
ECON 434 & \((3)\) & Current Economic Problems \\
ECON 440 & \((3)\) & Health Economics \\
ECON 468 & \((3)\) & Econometrics 1-Honours \\
ECON 469 & (3) & Econometrics 2 - Honours \\
ECON 525 & (3) & Project Analysis \\
ECON 546 & (3) & Game Theory \\
MIME 325** & (3) & Mineral Industry Economics \\
MIME 526** & (3) & Mineral Economics \\
* If chosen, students choose either ECON 209 or ECON 332 and ECON 333. \\
** Note: Only open to Mining and Materials Engineering students.
\end{tabular}

\subsection*{6.9.10.10 Minor in Environment}

Environmental studies focus on the interactions between humans and their natural and technological environments. Environmental problems are complex, and their satisfactory solutions require the synthesis of social, scientific, and institutional knowledge.
The Minor in Environment is offered and administered by the Bieler School of Environment.
Since the program comprises a total of 18 credits for the Minor, additional credits beyond those needed for the B.Eng. degree are required. Students wishing to complete the Minor should prepare a program and have it approved by both their regular Engineering departmental advisor and the Minor program advisor. For program details, see Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.5.1: Minor in Environment.
Minor Advisor: Students interested in this Minor should contact:
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Kathy Roulet
Bieler School of Environment, Program Advisor
Telephone: 514-398-4306
Email: kathy.roulet@mcgill.ca

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\subsection*{6.9.10.11 Bachelor of Engineering (B.Eng.) - Minor Environmental Engineering (21 credits)}

The Minor program is designed to focus on the principles of environmental engineering in all engineering disciplines providing a specialization at the undergraduate level.
The Environmental Engineering Minor is offered by the Department of Civil Engineering for all students in Engineering and in the Department of Bioresource Engineering wishing to pursue studies in this area.
Note: Not all courses listed are offered every year. Students should see the "Courses" section of this eCalendar to know if a course is offered.
A maximum of 12 credits of coursework in the student's major may be double-counted with the Minor.

\section*{Complementary Courses}

\section*{21-22 credits}

3-4 credits from the following list:
\begin{tabular}{lll} 
BREE 327 & (3) & Bio-Environmental Engineering \\
CIVE 225 & (4) & Environmental Engineering
\end{tabular}

18 credits from Stream A or Stream B:

\section*{Stream A}

15 credits* from the Engineering Course List and 3 credits from the Non-Engineering Course List below
* A minimum of 6 credits must be from outside the student's department. A maximum of 6 credits of research project courses may be counted toward this category, provided the project has sufficient environmental engineering content (project requires approval of project supervisor and coordinator of the Minor).

\section*{Stream B}

9 credits of courses specified from the "Barbados Interdisciplinary Tropical Studies (BITS)" field semester below, provided the project has sufficient environmental engineering content (project requires approval of the Coordinator of the Minor):
\begin{tabular}{lll} 
AEBI 425 & (3) & Tropical Energy and Food \\
AEBI 427 & (6) & Barbados Interdisciplinary Project
\end{tabular}

9 credits chosen from the Engineering Course List below, excluding CHEE 496.

\section*{Engineering Course List}

Courses offered at the MacDonald campus:
\begin{tabular}{lll} 
BREE 217 & (3) & Hydrology and Water Resources \\
BREE \(322^{*}\) & (3) & Organic Waste Management \\
BREE 416 & (3) & Engineering for Land Development \\
BREE 518 & (3) & Ecological Engineering \\
BREE 533 & \((3)\) & Water Quality Management
\end{tabular}
* Not open to students who have passed CIVE 323.

Courses offered at the Downtown campus:
\begin{tabular}{|c|c|c|}
\hline ARCH 377 & (3) & Energy, Environment, and Buildings 1 \\
\hline ARCH 515 & (3) & Sustainable Design \\
\hline CHEE 351 & (3) & Separation Processes \\
\hline CHEE 370 & (3) & Elements of Biotechnology \\
\hline CHEE 496 & (3) & Environmental Research Project \\
\hline CHEE 591 & (3) & Environmental Bioremediation \\
\hline CHEE 593 & (3) & Industrial Water Pollution Control \\
\hline CIVE 225 & (4) & Environmental Engineering \\
\hline CIVE 323** & (3) & Hydrology and Water Resources \\
\hline CIVE 421 & (3) & Municipal Systems \\
\hline CIVE 428 & (3) & Water Resources and Hydraulic Engineering \\
\hline CIVE 430 & (3) & Water Treatment and Pollution Control \\
\hline CIVE 520 & (3) & Groundwater Hydrology \\
\hline CIVE 550 & (3) & Water Resources Management \\
\hline CIVE 555 & (3) & Environmental Data Analysis \\
\hline CIVE 557 & (3) & Microbiology for Environmental Engineering \\
\hline CIVE 561 & (3) & Greenhouse Gas Emissions \\
\hline CIVE 572 & (3) & Computational Hydraulics \\
\hline CIVE 573 & (3) & Hydraulic Structures \\
\hline CIVE 574 & (3) & Fluid Mechanics of Water Pollution \\
\hline CIVE 577 & (3) & River Engineering \\
\hline CIVE 584 & (3) & Mechanics of Groundwater Flow \\
\hline MECH 447 & (3) & Combustion \\
\hline MECH 534 & (3) & Air Pollution Engineering \\
\hline MECH 535 & (3) & Turbomachinery and Propulsion \\
\hline MECH 560 & (3) & Eco-design and Product Life Cycle Assessment \\
\hline MIME 422 & (3) & Mine Ventilation \\
\hline
\end{tabular}
\begin{tabular}{lll} 
MIME 428 & (3) & Environmental Mining Engineering \\
MIME 512 & (3) & Corrosion and Degradation of Materials \\
MIME 556 & (3) & Sustainable Materials Processing \\
MPMC 328 & (3) & Environnement et gestion des rejets miniers \\
SEAD 515 & (3) & Climate Change Adaptation and Engineering Infrastructure \\
SEAD 520 & (3) & Life Cycle-Based Environmental Footprinting \\
SEAD 550 & (3) & Decision-Making for Sustainability in Engineering and Design \\
URBP 506 & (3) & Environmental Policy and Planning
\end{tabular}
** Not open to students who have passed BREE 217.

\section*{Non-Engineering Course List}

Courses offered at the MacDonald campus:
\begin{tabular}{lll} 
ENVB 210 & (3) & The Biophysical Environment \\
LSCI 230+ & (3) & Introductory Microbiology \\
MICR 331+ & (3) & Microbial Ecology \\
MICR 341 & (3) & Mechanisms of Pathogenicity \\
RELG 270 & (3) & Religious Ethics and the Environment \\
SOIL 331 & (3) & Environmental Soil Physics \\
WILD 370 & () &
\end{tabular}
+ Not open to students who have passed CHEE 370.

Courses offered at the Downtown campus:
\begin{tabular}{|c|c|c|}
\hline ANTH 206 & (3) & Environment and Culture \\
\hline BIOL 205 & (3) & Functional Biology of Plants and Animals \\
\hline BIOL 432 & (3) & Limnology \\
\hline CMPL 580 & (3) & Environment and the Law \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 201 & (3) & Introductory Geo-Information Science \\
\hline GEOG 203 & (3) & Environmental Systems \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 404 & (3) & Environmental Management 2 \\
\hline MIMM 211 & (3) & Introductory Microbiology \\
\hline
\end{tabular}
6.9.10.12 Minor Program in Management

Prerequisites: None

Minor for Non-Management Students: Students considering this minor program should consult a Faculty student adviser in the McGill Engineering Student Centre (Student Affairs Office; Frank Dawson Adams Building, Room 22) before applying to the Desautels Faculty of Management.

Many engineers begin to assume management functions within a few years of graduation. They can, at this stage, take up the study of economics, behavioural science, and other management subjects. Students wishing to include such studies in their undergraduate program can take suitable courses from Engineering and Management.

A minor comprises 18 credits of courses available from the core program of the Desautels Faculty of Management (subject to timetable requirements). Some courses from the Management core program have considerable overlap with Engineering courses and thus are not available to Engineering students.

Students embarking on a minor must be prepared to take credits additional to their Engineering program. Students in a B.Eng. program may be able to count up to 6 credits of Complementary Studies Group B courses (Humanities and Social Sciences, Management Studies, and Law courses) toward both their Engineering major program and a Management minor where applicable. More information about Complementary Studies is given in each individual academic program listing for the B.Eng. degree (see section 6.9: Browse Academic Units \& Programs).
Admission requirements for the Management minor change annually. Please consult the Desautels Faculty of Management website for more details.
Students planning to take any course with statistics as a prerequisite must have completed MGCR 271 (Business Statistics) or an equivalent course approved by the BCom Student Affairs Office.

\section*{Application and Program Requirements}

Detailed information on the following Minor program can be found in Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.7: Minor for Non-Management Students:
- : Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) (18 credits)

Further information can also be found at mcgill.ca/engineering/students/undergraduate/advising-programs/minor-programs.

\subsection*{6.9.10.13 Bachelor of Engineering (B.Eng.) - Minor Materials Engineering (24 credits)}

Minor Adviser: Prof. Richard Chromik (Minor Coordinator), Wong Building, Room 2620
Engineering students may obtain a Materials Engineering Minor by completing 24 credits chosen from the required and complementary courses listed below. By a careful selection of complementary courses, Engineering students may obtain this Minor with a minimum of 15 additional credits.

\section*{Required Courses}

15 credits
\begin{tabular}{lcl} 
CHEE 380* & (3) & Materials Science \\
CHEE 484 & (3) & Materials Engineering \\
MIME \(260^{*}\) & (3) & Materials Science and Engineering \\
MIME 345 & (3) & Applications of Polymers \\
MIME 465 & (3) & Metallic and Ceramic Powders Processing \\
MIME 467 & (3) & Electronic Properties of Materials
\end{tabular}
* Students choose either CHEE 380 or MIME 260.

\section*{Complementary Courses}

9 credits from the following:
\begin{tabular}{lcl} 
MECH 530 & (3) & Mechanics of Composite Materials \\
MIME 360 & (3) & Phase Transformations: Solids \\
MIME 512 & (3) & Corrosion and Degradation of Materials \\
MIME 560 & (3) & Joining Processes \\
MIME 561 & (3) & Advanced Materials Design \\
MIME 563 & (3) & Hot Deformation of Metals \\
MIME 569 & (3) & Electron Beam Analysis of Materials
\end{tabular}

\subsection*{6.9.10.14 Bachelor of Engineering (B.Eng.) - Minor Mathematics (18 credits)}

The B.Eng.; Minor in Mathematics provides students with an even stronger foundation in mathematics to further develop their knowledge of this subject. Students enrolled in the B.Eng.; Minor in Mathematics complete a series of mathematics courses offered by the Department of Mathematics and Statistics, or other units offering mathematics courses.

Minor Adviser: Faculty Student Adviser in the McGIll Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) AND an adviser designated by the Department of Mathematics and Statistics. (Please consult the Department of Mathematics and Statistics for the name of this adviser.) Selection of courses must be undertaken in conjunction with the Minor Advisers, normally beginning in the U2 year.
Note: The B.Eng.; Minor in Mathematics is open to all students in the Faculty of Engineering (including students registered in the B.Sc.(Arch.)). A maximum of 9 credits of overlap (double-counting) with the degree program is allowed.
Engineering students must obtain a grade of C or better in courses approved for this Minor.

\section*{Required Course (3 credits)}
MATH 242
(3)
Analysis 1

\section*{Complementary Courses ( 15 credits)}

3 credits selected from:
\begin{tabular}{|c|c|c|}
\hline MATH 223 & (3) & Linear Algebra \\
\hline MATH 247 & (3) & Honours Applied Linear Algebra \\
\hline \multicolumn{3}{|l|}{6-12 credits selected from:} \\
\hline ECSE 205* & (3) & Probability and Statistics for Engineers \\
\hline MATH 204 & (3) & Principles of Statistics 2 \\
\hline MATH 240 & (3) & Discrete Structures \\
\hline MATH 243 & (3) & Analysis 2 \\
\hline MATH 264 & (3) & Advanced Calculus for Engineers \\
\hline MATH 271** & (3) & Linear Algebra and Partial Differential Equations \\
\hline MATH 316 & (3) & Complex Variables \\
\hline MATH 319** & (3) & Partial Differential Equations \\
\hline MATH 323* & (3) & Probability \\
\hline MATH 324* & (3) & Statistics \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 340 & (3) & Discrete Mathematics \\
\hline MATH 378 & (3) & Nonlinear Optimization \\
\hline MATH 417 & (3) & Linear Optimization \\
\hline MATH 427 & (3) & Statistical Quality Control \\
\hline MATH 447 & (3) & Introduction to Stochastic Processes \\
\hline MATH 463 & () & Convex Optimization \\
\hline MATH 475 & (3) & Honours Partial Differential Equations \\
\hline MATH 478 & (3) & Computational Methods in Applied Mathematics \\
\hline MATH 563 & () & Honours Convex Optimization \\
\hline \multicolumn{3}{|l|}{* Students who take ECSE 205 may not take MATH 323 or MATH 324.} \\
\hline ** Students ma & 271 & 9 but not both. \\
\hline
\end{tabular}

0-6 credits chosen from (200- to 500-level) Mathematics and Statistics courses approved for the B.Sc. Major Mathematics or B.Sc. Honours Mathematics programs, or from mathematics courses offered in other units. The courses in this category must be chosen in consultation with, and approved by, the Minor Adviser from the Department of Mathematics and Statistics.
Note: MATH 262, MATH 263 (or any course with substantial overlap in content with these two courses) and/or MATH 338 cannot be credited towards this minor.

\subsection*{6.9.10.15 Bachelor of Engineering (B.Eng.) - Minor Mining Engineering (23 credits)}

Program credit weight: 23-25 credits
The Mining Engineering Minor covers fundamentals of mineral exploration, ore extraction, and mineral processing. The program includes an experiential learning component through an industrial work term for which enrolment may be limited.

\section*{Required Courses}

17 credits
\begin{tabular}{lll} 
MIME 200 & (3) & Introduction to the Minerals Industry \\
MIME 291 & (2) & Industrial Work Period 2 \\
MIME 322 & (3) & Fragmentation and Comminution \\
MIME 325 & (3) & Mineral Industry Economics \\
MIME 333 & (3) & Materials Handling \\
MIME 341 & (3) & Introduction to Mineral Processing
\end{tabular}

\section*{Complementary Courses ( \(6-8\) credits)}

6-8 credits from one or more of the following groups:

\section*{List A: Mining Engineering}

0-6 credits from the following:
\begin{tabular}{|c|c|c|}
\hline MIME 320 & (3) & Extraction of Energy Resources \\
\hline MIME 323 & (3) & Rock and Soil Mass Characterization \\
\hline MIME 413 & (3) & Strategic Mine Planning With Uncertainty \\
\hline MIME 419 & (3) & Surface Mining \\
\hline MIME 421 & (3) & Rock Mechanics \\
\hline MIME 422 & (3) & Mine Ventilation \\
\hline MIME 424 & (3) & Underground Mining Methods \\
\hline MIME 425 & (3) & Applied Stochastic Orebody Modelling \\
\hline MIME 428 & (3) & Environmental Mining Engineering \\
\hline MIME 442 & (3) & Analysis, Modelling and Optimization in Mineral Processing \\
\hline MIME 511 & (3) & Advanced Subsurface Ventilation and Air Conditioning \\
\hline MIME 514 & (3) & Sustainability Analysis of Mining Systems \\
\hline MIME 520 & (3) & Stability of Rock Slopes \\
\hline MIME 544 & (3) & Analysis: Mineral Processing Systems 1 \\
\hline MIME 545 & (3) & Analysis: Mineral Processing Systems 2 \\
\hline MIME 588 & (3) & Reliability Analysis of Mining Systems \\
\hline
\end{tabular}

\section*{List B: Mechanical Engineering}

0-6 credits from the following:
\begin{tabular}{lll} 
MECH 497 & (3) & Value Engineering \\
MECH 513 & (3) & Control Systems \\
MECH 559 & (3) & Engineering Systems Optimization \\
MECH 560 & (3) & Eco-design and Product Life Cycle Assessment \\
MECH 572 & (3) & Mechanics and Control of Robotic Manipulators
\end{tabular}
MECH 573
(3)
Mechanics of Robotic Systems

\section*{List C: Civil Engineering}

0-6 credits from the following:
\begin{tabular}{lll} 
CIVE 416 & (3) & Geotechnical Engineering \\
CIVE 462 & (3) & Design of Steel Structures \\
CIVE 463 & (3) & Design of Concrete Structures \\
CIVE 527 & (3) & Renovation and Preservation: Infrastructure
\end{tabular}

\section*{List D: Chemical Engineering}

0-6 credits from the following:
\begin{tabular}{lll} 
CHEE 453 & \((4)\) & Process Design \\
CHEE 455 & \((3)\) & Process Control \\
CHEE 484 & \((3)\) & Materials Engineering
\end{tabular}

\section*{List E: Electrical Engineering}
\(0-6\) credits from the following:
\begin{tabular}{lcl} 
ECSE 403 & \((4)\) & Control \\
ECSE 422 & \((3)\) & Fault Tolerant Computing \\
ECSE 428 & \((3)\) & Software Engineering Practice \\
ECSE 429 & \((3)\) & Software Validation \\
ECSE 444 & \((4)\) & Microprocessors \\
ECSE 464 & \((3)\) & Power Systems Analysis \\
ECSE 507 & \((3)\) & Optimization and Optimal Control
\end{tabular}

\section*{List F : Bioengineering}
\(0-3\) credits from the following:
BIEN 560
Design of Biosensors

\subsection*{6.9.10.16 Minor in Musical Science and Technology}

The Musical Science and Technology Minor focuses on interdisciplinary topics in science and technology applied to music. The goal of the program is to help prepare students for commercial jobs in the audio technology sector and/or for subsequent graduate research study. Enrolment in the MST Minor is limited to students with existing scientific backgrounds from all faculties at McGill University. Selection is based on prior experience in math, computer programming, and related sciences; expressed interest in the program; and Cumulative Grade Point Average (CGPA).

Detailed information on this program can be found in Schulich School of Music > Undergraduate > Browse Academic Units \& Programs > Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program > section 10.6.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits).
The online application form is available at mcgill.ca/music/programs/minor/mst and must be submitted by the application deadline.
For further information about this Minor, please visit website: mcgill.ca/music/programs/minor/mst

\subsection*{6.9.10.17 Bachelor of Engineering (B.Eng.) - Minor Nanotechnology (21 credits)}

Through courses already offered in the Faculties of Science, Engineering, and Medicine and Health Sciences, depending on the courses completed, undergraduate students will acquire knowledge in some of the following areas related to nanotechnology:
- Nanomaterial synthesis and processing approaches
- Physicochemistry and quantum behavior of nanomaterials
- State-of-the-art techniques for nanomaterial characterization and detection
- Applications of nanomaterials in engineered solutions
- Nanomaterials in medicine and pharmacology
- Nanomaterials in electronics and energy
- Environmental, health, and social impacts of nanomaterials

Minor program credit weight: 21-22 credits
Students must complete 21 credits of courses as indicated below. A maximum of 12 credits of courses in the student's major may double-count with the Minor.

Students who have not taken the listed prerequisites for any of these courses should ensure that they have the adequate background and/or meet with the instructor before registering for the course. Permission from the instructor and/or department may be required.
The program is open to undergraduate students that are in Year 2 or higher.

\section*{Complementary Courses (21-22 credits)}

Group A
Students must complete a minimum of 3 credits from the following list of courses:
\begin{tabular}{lcl} 
BIEN 510 & (3) & Engineered Nanomaterials for Biomedical Applications \\
BMDE 508 & (3) & Introduction to Micro and Nano-Bioengineering \\
CHEE 521* & (3) & Nanomaterials and the Aquatic Environment \\
CHEM 534* & (3) & Nanoscience and Nanotechnology \\
CIVE 521* & (3) & Nanomaterials and the Aquatic Environment \\
ECSE 535** & (3) & Nanoelectronic Devices \\
MIME 570 & (3) & Micro- and Nano-Fabrication Fundamentals \\
PHYS 534* & (3) & Nanoscience and Nanotechnology
\end{tabular}

\section*{Group B}

Students will be required to take up to 18-19 credits of courses from Group B, depending on how many courses from Group A were taken.^

Bioengineering
\begin{tabular}{lll} 
BIEN 420 & (3) & Biodevices Design for Diagnostics and Screening \\
BIEN 550 & (3) & Biomolecular Devices
\end{tabular}

Chemical Engineering
\begin{tabular}{lll} 
CHEE 380* & (3) & Materials Science \\
CHEE 515* & (3) & Interface Design: Biomimetic Approach \\
CHEE 543 & (3) & Plasma Engineering \\
CHEE 582 & (3) & Polymer Science and Engineering \\
CHEE 585 & (3) & Foundations of Soft Matter
\end{tabular}

Chemistry
\begin{tabular}{lll} 
CHEM 334 & (3) & Advanced Materials \\
CHEM 531 & (3) & Chemistry of Inorganic Materials \\
CHEM 582 & (3) & Supramolecular Chemistry
\end{tabular}
CHEM 585
(3)
Colloid Chemistry

Electrical Engineering
\begin{tabular}{lcl} 
ECSE 423 & \((3)\) & Fundamentals of Photonics \\
ECSE 430 & \((3)\) & Photonic Devices and Systems \\
ECSE 433 & (4) & Physical Basis of Transistor Devices \\
ECSE 519** & (3) & Semiconductor Nanostructures and Nanophotonic Devices \\
ECSE 536** & (3) & RF Microelectronics \\
ECSE 571** & (3) & Optoelectronic Devices \\
ECSE 596** & (3) & Optical Waveguides \\
MIME 262* & (3) & Properties of Materials in Electrical Engineering
\end{tabular}

Mechanical Engineering
\begin{tabular}{lll} 
MECH \(500^{* * *}\) & (3) & Selected Topics in Mechanical Engineering \\
MECH 553 & (3) & Design and Manufacture of Microdevices \\
MECH 556 & (3) & Microfluidics and BioMEMS \\
MIME 260* & (3) & Materials Science and Engineering
\end{tabular}

Materials Engineering
\begin{tabular}{lcl} 
MIME 261* & (3) & Structure of Materials \\
MIME 467 & (3) & Electronic Properties of Materials \\
MIME 515* & (3) & (Bio)material Surface Analysis and Modification \\
MIME 542 & (3) & Transmission Electron Microscopy \\
MIME 558 & (3) & Engineering Nanomaterials \\
MIME 569 & (3) & Electron Beam Analysis of Materials \\
MIME 571 & (3) & Surface Engineering
\end{tabular}

Pharmacology
PHAR 504
(3)
Drug Discovery and Development 2

Physics
\begin{tabular}{lll} 
BIOL 319* & (3) & Introduction to Biophysics \\
PHYS 319* & (3) & Introduction to Biophysics \\
PHYS 346 & (3) & Majors Quantum Physics \\
PHYS 558 & (3) & Solid State Physics
\end{tabular}

\footnotetext{
* Students can take only one course from each set of the following courses:
- MIME 260, MIME 261, MIME 262 or CHEE 380
- CHEE 515 or MIME 515
- CHEE 521 or CIVE 521
}
- CHEM 534 or PHYS 534
- BIOL 319 or PHYS 319
\(\wedge\) A research-based course (maximum 4cr) with the focus on nanotechnology taken at McGill University may be considered for credits towards this Minor; students must obtain the approval of the research project from the Minor adviser prior to taking the course in order for the course to be counted as part of the Minor credits.
** A 3.0 or higher CGPA is required in order to take these courses.
*** When topic is appropriate, with approval from the Minor Adviser.

\subsection*{6.9.10.18 Bachelor of Engineering (B.Eng.) - Minor Physics (18 credits)}

This Minor is restricted to students in Honours Engineering programs (Honours Electrical Engineering and Honours Mechanical Engineering). Students take 9 credits of required courses in thermal physics and honours quantum physics and choose three other Physics courses (subject code PHYS).

Minor Adviser: Head Adviser, Department of Physics, undergraduate.advisor@physics.mcgill.ca. For names and other contact information, see http://www.physics.mcgill.ca.ugrads/advsched.html.

\section*{Required Courses}

9 credits
\begin{tabular}{lll} 
PHYS 253 & (3) & Thermal Physics \\
PHYS 357 & (3) & Honours Quantum Physics 1 \\
PHYS 457 & (3) & Honours Quantum Physics 2
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits from the following:
\begin{tabular}{lcl} 
PHYS 351 & \((3)\) & Honours Classical Mechanics 2 \\
PHYS 362 & \((3)\) & Statistical Mechanics \\
PHYS 432 & \((3)\) & Physics of Fluids \\
PHYS 514 & (3) & General Relativity \\
PHYS 551 & (3) & Quantum Theory \\
PHYS 557 & (3) & Nuclear Physics \\
PHYS 558 & (3) & Solid State Physics \\
PHYS 559 & (3) & Advanced Statistical Mechanics \\
PHYS 562 & (3) & Electromagnetic Theory \\
PHYS 567 & (3) & Particle Physics
\end{tabular}

\subsection*{6.9.10.19 Bachelor of Engineering (B.Eng.) - Minor Software Engineering (18 credits)}

The Software Engineering Minor provides a foundation in basic computer science, computer programming, and software engineering practice.
The Minor program does not carry professional recognition.

Students must complete 18 credits (six courses) as follows. Up to 6 credits (two courses) may be double-counted towards a degree program.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
ECSE 223 & (3) & Model-Based Programming \\
ECSE 321 & (3) & Introduction to Software Engineering \\
ECSE 428 & (3) & Software Engineering Practice
\end{tabular}

\section*{Complementary Courses}

3 credits from the following:
\begin{tabular}{|c|c|c|}
\hline COMP 250* & (3) & Introduction to Computer Science \\
\hline ECSE 250* & (3) & Fundamentals of Software Development \\
\hline 6 credits from th & & \\
\hline COMP 302 & (3) & Programming Languages and Paradigms \\
\hline COMP 307 & (3) & Principles of Web Development \\
\hline COMP 409 & (3) & Concurrent Programming \\
\hline COMP 421 & (3) & Database Systems \\
\hline COMP 424* & (3) & Artificial Intelligence \\
\hline COMP 512 & (4) & Distributed Systems \\
\hline COMP 527 & (3) & Logic and Computation \\
\hline ECSE 326 & (3) & Software Requirements Engineering \\
\hline ECSE 420 & (3) & Parallel Computing \\
\hline ECSE 421 & (3) & Embedded Systems \\
\hline ECSE 422 & (3) & Fault Tolerant Computing \\
\hline ECSE 424 & (3) & Human-Computer Interaction \\
\hline ECSE 425 & (3) & Computer Architecture \\
\hline ECSE 427 & (3) & Operating Systems \\
\hline ECSE 429 & (3) & Software Validation \\
\hline ECSE 437 & (3) & Software Delivery \\
\hline ECSE 439* & (3) & Software Language Engineering \\
\hline ECSE 446*+ & (3) & Realistic Image Synthesis \\
\hline ECSE 526*+ & (3) & Artificial Intelligence \\
\hline ECSE 539*+ & (4) & Advanced Software Language Engineering \\
\hline ECSE 546*+ & (4) & Advanced Image Synthesis \\
\hline \multicolumn{3}{|l|}{*Students may choose only one course in each of the following sets:} \\
\hline \multicolumn{3}{|l|}{- COMP 250 and ECSE 250} \\
\hline \multicolumn{3}{|l|}{- COMP 424 and ECSE 526} \\
\hline \multicolumn{3}{|l|}{- ECSE 439 and ECSE 539} \\
\hline \multicolumn{3}{|l|}{- ECSE 446 and ECSE 546} \\
\hline \multicolumn{3}{|l|}{+ Restricted to Honours students or Computer Engineering or} \\
\hline Electrical Engin & ts wi & at least 3.0 and \(\mathrm{B}+\) or better in prerequisites \\
\hline
\end{tabular}

\subsection*{6.9.10.20 Bachelor of Engineering (B.Eng.) - Minor Technological Entrepreneurship (18 credits)}

Minor Adviser: Faculty Student Adviser in the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22). This Minor is a collaboration of the Faculty of Engineering and Desautels Faculty of Management and is designed to provide Engineering (B.Eng. and B.Sc. (Arch.)) students with an understanding of how to conceptualize, develop, and manage successful new ventures - including for-profit private companies, social enterprises, and cooperatives as well as intrapreneurship initiatives. The program covers the essentials of management and is multidisciplinary and integrative. Many courses in the Minor will address a mix of students from across multiple McGill faculties.
B.Eng. students may double-count up to two courses ( 6 credits) of Complementary Studies (Group B., Humanities, and Social Science courses) toward the Minor. B.Eng. Mechanical Engineering students may double-count up to 6 credits of Complementary Studies Group B courses and/or Elective courses (for Mechanical Engineering students from a CEGEP background) toward the Minor.

This Minor is restricted to students in Year 2 or higher. Students in this Minor are not permitted to take the Desautels Minors in Management, Marketing, Finance or Operations Management (for non-Management students).

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
FACC 500 & (3) & Technology Business Plan Design \\
INTG 201 & (3) & Integrated Management Essentials 1 \\
INTG 202 & (3) & Integrated Management Essentials 2 \\
MGPO 362 & (3) & Fundamentals of Entrepreneurship
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

3-6 credits from the following:
\begin{tabular}{lll} 
FACC 501 & (3) & Technology Business Plan Project \\
MGPO 364 & (3) & Entrepreneurship in Practice
\end{tabular}
\(0-3\) credits from the following:
BUSA 465
LAWG 570
MGPO 438
ORGB 321

Technological Entrepreneurship
Innovation for Non-Law Students
Social Entrepreneurship and Innovation
Leadership

\section*{\(7 \quad\) Bieler School of Environment}

\subsection*{7.1 About the Bieler School of Environment}

McGill's faculties of Arts, of Science, and of Agricultural and Environmental Sciences, have forged a unique approach to the study of environment through the interfaculty, trans-disciplinary Bieler School of Environment. The rapid growth of technology, global economies, and global population have dramatic and significant environmental impacts that are felt locally and in the short-term as well as perturbations affecting large-scale global ecosystems felt over hundreds if not thousands of years. Solutions to the environmental challenges we face will come from an understanding of global ecosystems and the conflicting and complex ways in which human activities are intertwined with them. Studying environmental problems at the intersection of the natural environment and human-built world requires a depth and breadth of knowledge in both the social and natural sciences. The approach of the Bieler School of Environment programs is to introduce students to a broad range of ideas early in the program to provide a foundation and an openness upon which more specialized, disciplinary knowledge can be built. The Bieler School attracts exceptional students able to comprehend and navigate the complex dynamics of environmental challenges and who are catalysts of change in their communities.

The mission of the Bieler School of Environment is:
- to provide a program that will develop a broad-based environmental literacy in the undergraduate population;
- to develop opportunities for graduate students to pursue studies of the environment at an advanced level to create future leaders and researchers; and
- to generate new ideas, new insights, new technologies, and new approaches to understanding and redressing environmental problems through academic research and outreach that draws on the University's existing strength in research and spans disciplinary boundaries.

\subsection*{7.1.1 Location}

For advising, contact:
Environment Program Advisor
Telephone: 514-398-4306
Fax: 514-398-1643
Email: advisor.environment@mcgill.ca
Website: mcgill.ca/environment
Downtown Campus
3534 University Street
Montreal, Quebec H3A 2A7

Telephone: 514-398-2827
Fax: 514-398-1643
Macdonald Campus
Rowles House
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue, Quebec H9X 3V9
Telephone: 514-398-7559
Fax: 514-398-7846

\subsection*{7.2 Admission, Registration, and Regulations}

Information concerning admission to the Bieler School of Environment and the regulations concerning the Environment programs is provided in these sections:

\section*{Admission, Registration, and Regulations}
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section 7.2.1: Admission

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section 7.2.2: Degree Requirements
section 7.2.3: Important Information about Program Selection
section 7.2.4: Examination Regulations
section 7.2.5: Courses Outside the Student's Faculty

\subsection*{7.2.1 Admission}

You may be admitted to a B.A., B.A. \& Sc., B.Sc.(Ag.Env.Sc.), or B.Sc. program offered by the Bieler School of Environment on one of the University's two campuses: the Macdonald Campus (B.Sc.(Ag.Env.Sc.) program) and the Downtown Campus (B.A., B.A. \& Sc., and B.Sc. programs). You register as a student within your faculty of admission and are governed by all rules and regulations of your faculty.

If you have already completed a bachelor or an equivalent degree, you may be admitted to the Diploma in Environment through the Faculty of Agricultural and Environmental Sciences, the Faculty of Arts, or the Faculty of Science. You register as a student within your faculty of admission and are governed by all rules and regulations of your faculty relative to the Diploma.
Please see the Undergraduate Admissions Guide, found at mcgill.ca/applying.

\subsection*{7.2.2 Degree Requirements}

To be eligible for a B.A. degree, you must fulfil all the faculty and program requirements as indicated in the Degree Requirements for the Faculty of Arts.
To be eligible for a B.A. \& Sc. degree, you must fulfil all the faculty and program requirements as indicated in the Degree Requirements for the Bachelor of Arts \& Science.
To be eligible for a B.Sc.(Ag.Env.Sc.) degree, you must fulfil all the faculty and program requirements as indicated in the Degree Requirements for the Faculty of Agricultural and Environmental Sciences.
To be eligible for a B.Sc. degree, you must fulfil all the faculty and program requirements as indicated in the Degree Requirements for the Faculty of Science.
To be eligible for the Diploma in Environment, you must fulfil all program requirements as specified for the Diploma in Environment.
To be eligible for an Honours degree, you must fulfil all the faculty and program requirements as indicated in the Honours and First Class Honours section under your home faculty. In addition, you must fulfil the honours program requirements outlined in the Honours Program in Environment section.

To be eligible for a Joint Honours degree, you must fulfil all the faculty and program requirements as detailed in the section on Honours and First-Class Honours for Faculties of Arts and Science (including B.A. \& Sc.). In addition, you must fulfil the honours program requirements outlined in section 7.5.6.1: Bachelor of Arts (B.A.) - Joint Honours Component Environment (36 credits).

\subsection*{7.2.3 Important Information about Program Selection}

You must select a Concentration in order to graduate. If you are unsure of the Concentration that you want to pursue in U1, you may register in the Major or Faculty Program Environment without picking a Concentration. However, you must pick a Concentration by your U2 year.
This section does not apply to students in the B.A. \& Sc., Minor, Minor Concentration, or Diploma programs.

\subsection*{7.2.4 Examination Regulations}

Regulations concerning the method of evaluation of any course (including those governing supplemental examinations) are those of the faculty that offers the course. You should note that supplemental exams are available for courses taught in the Faculties of Arts, of Science, and of Education, but not for courses taught in the Faculties of Agricultural and Environmental Sciences, Engineering, or Management.

Note: All ENVR courses, regardless of where they are taught, are offered only by the Faculty of Science.

For more information on the University regulations and procedures concerning examinations, see Examination: General Information.

\subsection*{7.2.5 Courses Outside the Student's Faculty}

Students in the School's B.A., B.A. \& Sc., B.Sc., and B.Sc.(Ag.Env.Sc.) programs may take courses outside their faculty according to the regulations of their faculty of admission.

These regulations are not identical:
- Arts students, see Examinations: General Information.
- Arts and Science students, see Examinations: General Information.
- Agricultural and Environmental Sciences students, see the Faculty's Minimum Credit Requirement.
- Science students, see Courses Outside the Faculties of Arts and of Science.
- Faculty of Science students in particular should be aware that some courses are restricted and cannot be taken for credit. Refer to Restrictions on courses outside the Faculty of Science in the Faculty of Science's Undergraduate Handbook, or contact SOUSA
- Students in the Diploma of Environment follow the program as specified; see section 7.5.7: Diploma Environment.

\subsection*{7.3 Overview of Programs Offered}

The Bieler School of Environment offers nine programs on the Downtown and Macdonald Campuses:
1. A Minor (or Minor Concentration) in Environment is open to all undergraduate students. For more information, see section 7.5 .1 : Minor in Environment.
2. A Faculty Program in Environment leading to a B.A. is open to students meeting the entrance requirements of the Faculty of Arts. For more information, see section 7.5.2: B.A. Faculty Program in Environment.
3. An Interfaculty Program in Environment leading to a B.A. \& Sc. is open to students meeting the entrance requirements for the Bachelor of Arts and Science. For more information, see section 7.5.3: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Programs.
4. An Interfaculty Program in Sustainability, Science and Society leading to a B.A. and Sc. is offered by the Bieler School of Environment in partnership with the Department of Geography. It is open to students meeting the entrance requirements for the Bachelor of Arts and Science. For more information, see Bachelor of Arts and Science > Undergraduate > section 4.11.34.3: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program in Sustainability, Science and Society ( 54 credits).
5. A Major Environment leading to a B.Sc. (Ag.Env.Sc.) is open to students meeting the entrance requirements of the Faculty of Agricultural and Environmental Sciences. For more information, see section 7.5.4: Major in Environment - B.Sc.(Ag.Env.Sc.) and B.Sc. .
6. A Major Environment leading to a B.Sc. is open to students meeting the entrance requirements of the Faculty of Science. For more information, see section 7.5.4: Major in Environment - B.Sc.(Ag.Env.Sc.) and B.Sc..
7. An Honours Program in Environment is open to senior Environment students in the B.A., B.A. \& Sc., B.Sc.(Ag.Env.Sc.) and B.Sc. degrees. For more information, see section 7.5.5: Honours Environment.
8. A Joint Honours Program in Environment is open to senior Environment students in the B.A. degree. For more information, see section 7.5.6.1: Bachelor of Arts (B.A.) - Joint Honours Component Environment (36 credits).
9. A Diploma in Environment is available only to students who have already completed a Bachelor or an equivalent degree, and who want to return to university for further undergraduate study. The Diploma is offered by the Faculty of Agricultural and Environmental Sciences, the Faculty of Arts, and the Faculty of Science. For more information, see section 7.5.7: Diploma Environment.

These programs strive to offer the flexibility necessary to deal with the environment through a set of core courses that provide the general knowledge base of the program combined with a progressive series of courses in a transdisciplinary Concentration of environmental specialization.

The programs are designed to prepare students for further study in environment or discipline-based graduate programs, and for employment in industry, government, and education.

\subsection*{7.4 Suggested Courses for U0 Year Students}

In general, the Downtown Campus offerings (section -001) of ENVR courses are restricted to students in U1 and above. Where course capacity allows, Students in their U0 year are allowed to take the Macdonald Campus offerings (section -051) of the 200-level ENVR courses. Students in their U1 to U3 years are welcome to take selected ENVR courses as electives where space permits. For courses to take in their U0 year, students should refer to the website of their respective faculty.
- Students in the B.Sc. degree, see www.mcgill.ca/science/undergraduate/handbook\#bsc-program-specific-advice.
- Students in the B.Sc.(Ag.Env.Sc.) degree, see mcgill.ca/macdonald/prospective/freshmanyear/academics.
- Students in the B.A. \& Sc. degree, see www.mcgill.ca/science/undergraduate/handbook\#basc-program-specific-advice.
- Students in the B.A. degree, see www.mcgill.ca/oasis/students/new.

\section*{Browse Academic Programs}

The programs and courses in the following sections have been approved for the 2024-2025 academic year as listed.

\subsection*{7.5.1 Minor in Environment}

The Minor in Environment is intended to complement an expertise obtained through a Major, Major Concentration, Faculty program, or Interfaculty program offered by an academic unit other than the Bieler School of Environment*. Students taking the Minor (or Minor Concentration) in Environment are exposed to different approaches, perspectives, and world views that will help them gain an understanding of the complexity and conflicts that underlie environmental problems.
Students, after consulting with their advisor in their Major program or Major Concentration, and the Environment Program Advisor, can declare their intention to do a Minor (or Minor Concentration) in Environment.
* Note: Students in Arts, Law, and Management complete the Minor Concentration Environment. Students in Agricultural and Environmental Sciences, Engineering, and Science complete the Minor Environment.

\subsection*{7.5.1.1 Bachelor of Arts (B.A.) - Minor Concentration Environment (18 credits)}

This 18-credit Minor Concentration Environment is intended for Arts students in the multi-track system, Law and Management students. Students in Agricultural \& Environmental Sciences, Engineering, and Science should complete the Minor Environment.

\section*{Advising Note:}

Consultation with the Program Adviser for approval of course selection to meet program requirements is obligatory. No overlap is allowed between this program and the student's major program or concentration, or a second minor program.
For more information, contact:
Ms. Kathy Roulet, Program Adviser
Email: kathy.roulet@mcgill.ca
Telephone: 514-398-4306

\section*{Complementary Courses (18 credits)}

18 credits of complementary courses, all of which must fall outside the discipline or field of the student's major program or concentration, and which must be 200-level or above, selected as follows:

12 credits of MSE core courses:
The core ENVR courses are taught at both campuses. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

6 credits of environmentally related courses selected with the approval of the Program Adviser (at least 3 credits must be in natural sciences). A list of Suggested Courses is given below.

\section*{Suggested Course List}

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.
Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.
This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Program Adviser.
Some courses on the Suggested Course List may be subject to other regulations (e.g., the Restricted Courses List for Faculty of Science students. If in doubt, ask the Program Adviser.

\section*{Location Note:}

When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Social Sciences and Policy}
\begin{tabular}{|c|c|c|}
\hline AGEC 231 & (3) & Economic Systems of Agriculture \\
\hline AGEC 333 & (3) & Resource Economics \\
\hline AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
\hline AGEC 442 & (3) & Economics of International Agricultural Development \\
\hline AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
\hline ANTH 206 & (3) & Environment and Culture \\
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline ANTH 339 & (3) & Ecological Anthropology \\
\hline ANTH 418 & (3) & Environment and Development \\
\hline ANTH 512 & (3) & Political Ecology \\
\hline ECON 205 & (3) & An Introduction to Political Economy \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline EDER 494 & (3) & Human Rights and Ethics in Practice \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline ENVR 400 & (3) & Environmental Thought \\
\hline ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 210 & (3) & Global Places and Peoples \\
\hline GEOG 216 & (3) & Geography of the World Economy \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 300 & (3) & Human Ecology in Geography \\
\hline GEOG 301 & (3) & Geography of Nunavut \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 303 & (3) & Health Geography \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GEOG 310 & (3) & Development and Livelihoods \\
\hline GEOG 370 & (3) & Protected Areas \\
\hline GEOG 403 & (3) & Global Health and Environmental Change \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline GEOG 423 & (3) & Dilemmas of Development \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline HIST 249 & (3) & Health and the Healer in Western History \\
\hline HIST 292 & (3) & History and the Environment \\
\hline NRSC 221 & (3) & Environment and Health \\
\hline PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
\hline PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
\hline PHIL 237 & (3) & Contemporary Moral Issues \\
\hline PHIL 334 & (3) & Ethical Theory \\
\hline PHIL 341 & (3) & Philosophy of Science 1 \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline PHIL 348 & (3) & Philosophy of Law 1 \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 412 & (3) & Canadian Voting/Public Opinion \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline PSYC 215 & (3) & Social Psychology \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 235 & (3) & Technology and Society \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 366 & (3) & Neighborhoods and Inequality \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline URBP 201 & (3) & Planning the 21st Century City \\
\hline URBP 504 & (3) & Planning for Active Transportation \\
\hline URBP 506 & (3) & Environmental Policy and Planning \\
\hline URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
\hline URBP 551 & (3) & Urban Design and Planning \\
\hline WCOM 314 & (3) & Communicating Science \\
\hline
\end{tabular}

Natural Sciences and Technology

\begin{tabular}{|c|c|c|}
\hline GEOG 201** & (3) & Introductory Geo-Information Science \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322** & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 470 & (3) & Wetlands \\
\hline GEOG 550 & (3) & Historical Ecology Techniques \\
\hline LSCI 230** & (3) & Introductory Microbiology \\
\hline MICR 331 & (3) & Microbial Ecology \\
\hline MIME 320 & (3) & Extraction of Energy Resources \\
\hline MIMM 211** & (3) & Introductory Microbiology \\
\hline MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline NRSC 333 & (3) & Pollution and Bioremediation \\
\hline PARA 410 & (3) & Environment and Infection \\
\hline PARA 515 & (3) & Water, Health and Sanitation \\
\hline PHYS 228 & (3) & Energy and the Environment \\
\hline PLNT 304 & (3) & Biology of Fungi \\
\hline PLNT 305 & (3) & Plant Pathology \\
\hline PLNT 358 & (3) & Flowering Plant Diversity \\
\hline PLNT 460 & (3) & Plant Ecology \\
\hline SOIL 300 & (3) & Geosystems \\
\hline WILD 302 & (3) & Fish Ecology \\
\hline WILD 421** & (3) & Wildlife Conservation \\
\hline
\end{tabular}

\subsection*{7.5.1.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Minor Environment (18 credits)}

This 18-credit Minor is intended for Faculty of Agricultural and Environmental Science students and Faculty of Science students, but is open to students from other faculties as well, except Arts, Law and Management. Students in Arts, Law and Management should complete the Minor Concentration Environment.

\section*{Advising Note:}

Consultation with the Program Adviser for approval of course selection to meet program requirements is obligatory. No overlap is allowed between this program and the student's major program or concentration, or a second minor program.
For more information, contact:
Ms Kathy Roulet, Program Adviser
Email: Kathy.roulet@mcgill.ca
Telephone: 514-398-4306

\section*{Complementary Courses (18 credits)}

18 credits of complementary courses, all of which must fall outside the discipline or field of the student's major program or concentration, and which must be 200-level or above, selected as follows:

12 credits of Bieler School of Environment core courses:

The core courses are taught at both campuses. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

6 credits of environmentally related courses selected with the approval of the Program Adviser (at least 3 credits must be in social sciences). A list of Suggested Courses is given below.

\section*{Suggested Course List}

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.
Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.
This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Bieler School of Environment Program Adviser.
Some courses on the Suggested Course List may be subject to other regulations (e.g., the Restricted Courses List for Faculty of Science students). If in doubt, ask the Program Adviser.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Social Sciences and Policy}
\begin{tabular}{|c|c|c|}
\hline AGEC 231 & (3) & Economic Systems of Agriculture \\
\hline AGEC 333 & (3) & Resource Economics \\
\hline AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
\hline AGEC 442 & (3) & Economics of International Agricultural Development \\
\hline AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
\hline ANTH 206 & (3) & Environment and Culture \\
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline ANTH 339 & (3) & Ecological Anthropology \\
\hline ANTH 418 & (3) & Environment and Development \\
\hline ANTH 512 & (3) & Political Ecology \\
\hline ECON 205 & (3) & An Introduction to Political Economy \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline EDER 494 & (3) & Human Rights and Ethics in Practice \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline ENVR 400 & (3) & Environmental Thought \\
\hline ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 210 & (3) & Global Places and Peoples \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GEOG 216 & (3) & Geography of the World Economy \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 300 & (3) & Human Ecology in Geography \\
\hline GEOG 301 & (3) & Geography of Nunavut \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 303 & (3) & Health Geography \\
\hline GEOG 310 & (3) & Development and Livelihoods \\
\hline GEOG 370 & (3) & Protected Areas \\
\hline GEOG 403 & (3) & Global Health and Environmental Change \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline GEOG 423 & (3) & Dilemmas of Development \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline HIST 249 & (3) & Health and the Healer in Western History \\
\hline HIST 292 & (3) & History and the Environment \\
\hline NRSC 221 & (3) & Environment and Health \\
\hline PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
\hline PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
\hline PHIL 237 & (3) & Contemporary Moral Issues \\
\hline PHIL 334 & (3) & Ethical Theory \\
\hline PHIL 341 & (3) & Philosophy of Science 1 \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline PHIL 348 & (3) & Philosophy of Law 1 \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 412 & (3) & Canadian Voting/Public Opinion \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline PSYC 215 & (3) & Social Psychology \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 235 & (3) & Technology and Society \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 365 & (3) & Health and Development \\
\hline SOCI 366 & (3) & Neighborhoods and Inequality \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline URBP 201 & (3) & Planning the 21st Century City \\
\hline URBP 504 & (3) & Planning for Active Transportation \\
\hline URBP 506 & (3) & Environmental Policy and Planning \\
\hline
\end{tabular}
\begin{tabular}{lll} 
URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
URBP 551 & (3) & Urban Design and Planning \\
WCOM 314 & (3) & Communicating Science
\end{tabular}

\section*{Natural Sciences and Technology}
** Note: you may take LSCI 230 or MIMM 211, but not both: you may take ENVB 529 or GEOG 201, but not both: you make take one of BREE 217, CIVE 323 or GEOG 322: you may take BIOL 308 or ENVB 305, but not both: you may take BIOL 465 or WILD 421, but not both: you may take COMP 202 or COMP 204, but not both: you may take EPSC 201 or EPSC 233, but not both.
\begin{tabular}{|c|c|c|}
\hline AGRI 340 & (3) & Principles of Ecological Agriculture \\
\hline ANSC 326 & (3) & Fundamentals of Population Genetics \\
\hline ANTH 311 & (3) & Primate Behaviour and Ecology \\
\hline ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
\hline ATOC 215 & (3) & Oceans, Weather and Climate \\
\hline BIOL 240 & (3) & Monteregian Flora \\
\hline BIOL 305 & (3) & Animal Diversity \\
\hline BIOL 308** & (3) & Ecological Dynamics \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 342 & (3) & Global Change Biology of Aquatic Ecosystems \\
\hline BIOL 418 & (3) & Freshwater Invertebrate Ecology \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 436 & (3) & Evolution and Society \\
\hline BIOL 465** & (3) & Conservation Biology \\
\hline BREE 217** & (3) & Hydrology and Water Resources \\
\hline BREE 322 & (3) & Organic Waste Management \\
\hline BREE 327 & (3) & Bio-Environmental Engineering \\
\hline BREE 518 & (3) & Ecological Engineering \\
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 281 & (3) & Inorganic Chemistry 1 \\
\hline CIVE 225 & (4) & Environmental Engineering \\
\hline CIVE 323** & (3) & Hydrology and Water Resources \\
\hline CIVE 550 & (3) & Water Resources Management \\
\hline COMP 202** & (3) & Foundations of Programming \\
\hline COMP 204** & (3) & Computer Programming for Life Sciences \\
\hline ENVB 210 & (3) & The Biophysical Environment \\
\hline ENVB 301 & (3) & Meteorology \\
\hline ENVB 305** & (3) & Population and Community Ecology \\
\hline ENVB 410 & (3) & Ecosystem Ecology \\
\hline ENVB 415 & (3) & Ecosystem Management \\
\hline ENVB 529** & (3) & GIS for Natural Resource Management \\
\hline ENVR 200 & (3) & The Global Environment \\
\hline ENVR 202 & (3) & The Evolving Earth \\
\hline ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
\hline EPSC 201** & (3) & Understanding Planet Earth \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EPSC \(233 * *\) & (3) & Earth and Life History \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline FDSC 230 & (4) & Organic Chemistry \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 201** & (3) & Introductory Geo-Information Science \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322** & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 470 & (3) & Wetlands \\
\hline GEOG 550 & (3) & Historical Ecology Techniques \\
\hline LSCI 230** & (3) & Introductory Microbiology \\
\hline MICR 331 & (3) & Microbial Ecology \\
\hline MIME 320 & (3) & Extraction of Energy Resources \\
\hline MIMM 211** & (3) & Introductory Microbiology \\
\hline MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline NRSC 333 & (3) & Pollution and Bioremediation \\
\hline PARA 410 & (3) & Environment and Infection \\
\hline PARA 515 & (3) & Water, Health and Sanitation \\
\hline PHYS 228 & (3) & Energy and the Environment \\
\hline PLNT 304 & (3) & Biology of Fungi \\
\hline PLNT 305 & (3) & Plant Pathology \\
\hline PLNT 358 & (3) & Flowering Plant Diversity \\
\hline PLNT 460 & (3) & Plant Ecology \\
\hline SOIL 300 & (3) & Geosystems \\
\hline WILD 302 & (3) & Fish Ecology \\
\hline WILD 421** & (3) & Wildlife Conservation \\
\hline
\end{tabular}

\subsection*{7.5.2 B.A. Faculty Program in Environment}

The B.A. Faculty Program comprises two course components: core and concentration.
Core: In the core component, the four introductory courses and an intermediate-level course expose students to different interdisciplinary perspectives, approaches, and world views to help them understand the complexity and conflicts that underlie most environmental problems. In the two senior-level courses of the core component, students will apply the general and specialized knowledge acquired through the rest of their program, to the analysis of a selection of contemporary environmental problems. Students will be challenged by the core program to look beyond the confines of their individual views of environment.

Concentration: In addition to the core program, students choose a concentration, a transdisciplinary study of a particular theme or component of the environment. The requirements and complementary course sets vary between Concentrations. You can choose to follow one of three concentrations within the B.A. Faculty Program in Environment:
- Ecological Determinants of Health in Society
- Economics and the Earth's Environment
- Environment and Development

To obtain a B.A. Faculty Program in Environment, students must:
- register in a Concentration online, using Minerva;
- satisfy the co- and/or prerequisites for the program (Numeracy [e.g., calculus] and a Basic Science course);
- pass all courses counted towards the Faculty Program with a grade of C or higher;
- confirm that their course selection satisfies the required components of the core and their chosen concentration, and that the Complementary courses are approved courses in their chosen Concentration; and
- fulfil all Faculty requirements as specified for the B.A. in Faculty of Arts > Undergraduate > section 3.5: Degree Requirements for the Faculty of Arts, which include meeting the minimum credit requirement as specified in their letter of admission.

\subsection*{7.5.2.1 Ecological Determinants of Health in Society Concentration}

This Concentration is open only to students in the B.A. Faculty Program in Environment.

\subsection*{7.5.2.1.1 Bachelor of Arts (B.A.) - Faculty Program Environment - Ecological Determinants of Health in Society (54 credits)}

An understanding of the interface between human health and environment depends not only on an appreciation of the biological and ecological determinants of health, but equally on an appreciation of the role of social sciences in the design, implementation, and monitoring of interventions. Demographic patterns and urbanization, economic forces, ethics, indigenous knowledge and culture, and an understanding of how social change can be effected are all critical if we are to be successful in our efforts to assure health of individuals and societies in the future. Recognizing the key role that nutritional status plays in maintaining a healthy body, and the increasing importance of infection as a health risk linked intimately with the environment, this domain prepares students to contribute to the solution of problems of nutrition and infection by tying the relevant natural sciences to the social sciences.

\section*{Program Prerequisites or Corequisites}

To graduate from the Faculty Program in Environment, students are required to complete these courses by the end of their U1 year. These courses can be taken using the Satisfactory/Unsatisfactory option. See:
http://www.mcgill.ca/study/university_regulations_and_resources/undergraduate/gi_courses_taken_under_the_satisfactory_unsatisfactory_option for details.

\section*{Numeracy}

3 credits from the following, or equivalent (e.g., CEGEP objective 00UN):
MATH 139
(4) Calculus 1 with Precalculus
MATH 140
(3)
Calculus 1

\section*{Basic Science}

3 credits of basic science from the following, or equivalent (e.g., CEGEP objective 00UK):
AEBI 120
BIOL 111
(3)
General Biology
Principles: Organismal Biology

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: You are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the program prerequisites or corequisites listed above.
Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment
\end{tabular}
\begin{tabular}{lll} 
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
AEBI 427 & (6) & Barbados Interdisciplinary Project \\
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project
\end{tabular}

\section*{Complementary Courses (33 credits)}

33 credits of complementary courses are chosen as follows:
6 credits of Health and Environment
12 credits of Fundamentals, maximum 3 credits from any one category
9 credits from List A
6 credits from List B

\section*{Health and Environment}
\begin{tabular}{lll} 
GEOG \(221^{*}\) & \((3)\) & Environment and Health \\
GEOG 303 & \((3)\) & Health Geography \\
NRSC \(221^{*}\) & \((3)\) & Environment and Health
\end{tabular}

\footnotetext{
* Students take either GEOG 221 or NRSC 221, but not both.
}

\section*{Fundamentals: (12 credits)}

12 credits of Fundamentals ( 3 credits from each category):

\section*{Health and Infection}
\begin{tabular}{lll} 
GEOG 403 & (3) & Global Health and Environmental Change \\
GEOG 493 & (3) & Health and Environment in Africa \\
GEOG 503 & (3) & Advanced Topics in Health Geography \\
PARA 410 & (3) & Environment and Infection \\
PPHS 529 & (3) & Global Environmental Health and Burden of Disease
\end{tabular}

\section*{Economics}
\begin{tabular}{lll} 
AGEC 200 & (3) & Principles of Microeconomics \\
ECON 208 & (3) & Microeconomic Analysis and Applications \\
ECON 225 & (3) & Economics of the Environment
\end{tabular}

\section*{Nutrition}
\begin{tabular}{lll} 
EDKP 292 & (3) & Nutrition and Wellness \\
NUTR 207 & (3) & Nutrition and Health
\end{tabular}

\section*{Statistics}

One of the following Statistics courses or equivalent:
Note: Credit given for Statistics courses is subject to certain restrictions. You should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

\section*{List A:}

9 credits from List A (maximum 3 credits from any one category):

\section*{Health and Society}
\begin{tabular}{lll} 
SOCI 225 & (3) & Medicine and Health in Modern Society \\
SOCI 234 & (3) & Population and Society \\
SOCI 309 & (3) & Health and Illness \\
SOCI 331 & (3) & Population and Environment \\
SOCI 515 & \((3)\) & Medicine and Society
\end{tabular}

\section*{Hydrology and Climate}
* Note: You may take BREE 217 or GEOG 322, but not both.
\begin{tabular}{lll} 
AGRI 452 & (3) & Water Resources in Barbados \\
BREE 217* & (3) & Hydrology and Water Resources \\
GEOG 321 & (3) & Climatic Environments \\
GEOG 322* & (3) & Environmental Hydrology
\end{tabular}

\section*{Agriculture}
\begin{tabular}{lll} 
AEBI 425 & (3) & Tropical Energy and Food \\
AGRI 340 & (3) & Principles of Ecological Agriculture \\
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
AGRI 550 & (3) & Sustained Tropical Agriculture \\
NUTR 341 & (3) & Global Food Security
\end{tabular}

\section*{Decision Making}
\begin{tabular}{lll} 
AGEC 333 & \((3)\) & Resource Economics \\
ECON 440 & (3) & Health Economics \\
PHIL 343 & \((3)\) & Biomedical Ethics \\
RELG 270 & \((3)\) & Religious Ethics and the Environment
\end{tabular}

\section*{Biology Fundamentals:}
* Note: You may take BIOL 308 or ENVB 305, but not both.
\begin{tabular}{lll} 
AEBI 210 & \((3)\) & Organisms 1 \\
AEBI 211 & \((3)\) & Organisms 2 \\
BIOL 200 & (3) & Molecular Biology
\end{tabular}
\begin{tabular}{lcl} 
BIOL 308* & (3) & Ecological Dynamics \\
ENVB 305* & (3) & Population and Community Ecology \\
LSCI 211 & (3) & Biochemistry 1
\end{tabular}

\section*{Development and Ecology}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 339 & \((3)\) & Ecological Anthropology \\
ANTH 512 & (3) & Political Ecology \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
GEOG 300 & \((3)\) & Human Ecology in Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods \\
SOCI 254 & \((3)\) & Development and Underdevelopment \\
SOCI 365 & \((3)\) & Health and Development
\end{tabular}

\section*{List B:}

6 credits from List B (maximum 3 credits from any one category):

\section*{Advanced Ecology}
* Note: You may take BIOL 451 or NRSC 451, but not both.
\begin{tabular}{lcl} 
AEBI 421 & (3) & Tropical Horticultural Ecology \\
BIOL \(451^{*}\) & (3) & Research in Ecology and Development in Africa \\
BIOL 465 & (3) & Conservation Biology \\
BIOL 553 & (3) & Neotropical Environments \\
ENVB 410 & (3) & Ecosystem Ecology \\
ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
NRSC 451* & (3) & Research in Ecology and Development in Africa
\end{tabular}

Pollution Control and Pest Management
\begin{tabular}{lll} 
ENTO 350 & (3) & Insect Biology and Control \\
ENTO 352 & (3) & Biocontrol of Pest Insects \\
NRSC 333 & (3) & Pollution and Bioremediation \\
PARA 515 & (3) & Water, Health and Sanitation
\end{tabular}

\section*{Techniques and Management}
* Note: You may take ENVB 529 or GEOG 201, but not both.
\begin{tabular}{lcl} 
AEBI 423 & (3) & Sustainable Land Use \\
ENVB 529* & (3) & GIS for Natural Resource Management \\
ENVR 422 & \((3)\) & Montreal Urban Sustainability Analysis \\
GEOG 201* & \((3)\) & Introductory Geo-Information Science \\
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 404 & (3) & Environmental Management 2 \\
WILD 421 & \((3)\) & Wildlife Conservation
\end{tabular}
or, advanced quantitative methods course (with approval of Adviser).

\section*{Social Change and Influences}
\begin{tabular}{lcl} 
ANTH 227 & \((3)\) & Medical Anthropology \\
ENVR 430 & (3) & The Economics of Well-Being \\
GEOG 340 & (3) & Sustainability in the Caribbean \\
GEOG 406 & (3) & Human Dimensions of Climate Change \\
GEOG 514 & \((3)\) & Climate Change Vulnerability and Adaptation \\
HIST 249 & \((3)\) & Health and the Healer in Western History \\
SOCI 307 & (3) & Globalization
\end{tabular}

\section*{Immunology and Infectious Disease}
\begin{tabular}{lcl} 
* Note: You may take MIMM 413 or WILD 424, but not both. \\
MIMM 214 & \((3)\) & Introductory Immunology: Elements of Immunity \\
MIMM 314 & \((3)\) & Intermediate Immunology \\
MIMM 324 & \((3)\) & Fundamental Virology \\
MIMM 413* & \((3)\) & Parasitology \\
PARA 424* & (3) & Fundamental Parasitology \\
PARA 438 & (3) & Immunology \\
PPHS 501 & (3) & Population Health and Epidemiology
\end{tabular}

\section*{Populations and Place}
* Note: You may take ANTH 451 or GEOG 451, but not both.
\begin{tabular}{lll} 
ANTH 451* & (3) & Research in Society and Development in Africa \\
EDKP 204 & (3) & Health Education \\
GEOG 451* & (3) & Research in Society and Development in Africa \\
GEOG 498 & (3) & Humans in Tropical Environments \\
HIST 335 & (3) & Science and Medicine in Canada \\
HIST 510 & (3) & Environmental History of Latin America (Field) \\
SOCI 520 & (3) & Migration and Immigrant Groups \\
SOCI 525 & (3) & Health Care Systems in Comparative Perspective \\
SOCI 550 & (3) & Developing Societies
\end{tabular}

\subsection*{7.5.2.2 Economics and the Earth's Environment Concentration}

This Concentration is open only to students in the B.A. Faculty Program in Environment.

\subsection*{7.5.2.2.1 Bachelor of Arts (B.A.) - Faculty Program Environment - Economics and the Earth's Environment (54 credits)}

Understanding Earth's geologic processes provides us with the knowledge to mitigate many of our society's environmental impacts due to resource extraction and waste disposal. This knowledge is not always enough, as economics often plays a controlling role in how we use and abuse our environment.
This domain educates students in the fundamentals of economics and Earth sciences. The fundamentals of economics are provided, as is their application to the effects of economic choices on Earth's environment. Examples of these applications include the economic effects of public policy toward resource industries and methods of waste disposal, and the potential effects of global warming on the global economy. Students also learn of minerals, rocks, soils, and waters that define much of Earth's environment and how these materials interact with each other and with the atmosphere. Courses in specific subdisciplines of Earth sciences combined with courses presenting a global vision of how the Earth and its environment operate provide the student with the necessary knowledge of geologic processes. Examples of this knowledge include the effects of mineral and energy extraction on the environment and how industrial waste interacts with solids and liquids in the environment. The Earth science and economics studies merge in the final year when the students apply what they have learned in the domain to current environmental issues.

\section*{Program Prerequisites or Corequisites}

To graduate from the Faculty Program in Environment, students are required to complete these courses by the end of their U1 year. These courses can be taken using the Satisfactory/Unsatisfactory option. See:
http://www.mcgill.ca/study/university_regulations_and_resources/undergraduate/gi_courses_taken_under_the_satisfactory_unsatisfactory_option for details.

\section*{Numeracy}

3 credits, one of the following, or equivalent (e.g., CEGEP objective OOUN):
\begin{tabular}{lll} 
MATH 139 & (4) & Calculus 1 with Precalculus \\
MATH 140 & (3) & Calculus 1
\end{tabular}

\section*{Basic Science}

3 credits of Basic Science, one of the following, or their equivalents (e.g., CEGEP objectives Chemistry OOUL):
AECH 110
(4) General Chemistry 1
CHEM 110
(4)
General Chemistry 1

\section*{Other Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Ms. Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 34 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the program pre-requisites or co-requisites listed above.
Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lcl} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program: extra credits will count as electives.
\begin{tabular}{lll} 
AEBI 427 & (6) & Barbados Interdisciplinary Project \\
ENVR 401 & \((3)\) & Environmental Research \\
ENVR 451 & \((6)\) & Research in Panama \\
FSCI 444 & \((6)\) & Barbados Research Project
\end{tabular}

\section*{Domain: Required Courses (15 credits)}
\begin{tabular}{lll} 
ECON 230D1 & (3) & Microeconomic Theory \\
ECON 230D2 & (3) & Microeconomic Theory
\end{tabular}
\begin{tabular}{lll} 
ECON 405 & (3) & Natural Resource Economics \\
EPSC 210 & (3) & Introductory Mineralogy \\
EPSC 240 & (3) & Geology in the Field
\end{tabular}

\section*{Domain: Complementary Courses (18 credits)}

18 credits are selected from various categories as follows:

\section*{Statistics (3 credits)}

One of the following Statistics courses or equivalent:
Note: Credit given for Statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

\section*{Economics}

6 credits from:
\begin{tabular}{lcl} 
AGEC 333 & (3) & Resource Economics \\
ECON 209 & (3) & Macroeconomic Analysis and Applications \\
ECON 326 & (3) & Ecological Economics \\
ECON 347 & (3) & Economics of Climate Change \\
ECON 416 & \((3)\) & Topics in Economic Development 2 \\
ECON 511 & \((3)\) & Energy, Economy and Environment
\end{tabular}

\section*{Advanced Courses (9 credits)}

9 credits chosen from two areas:

\section*{Area 1: Development/Environmental Management}
* Note: You can take ENVB 529 or GEOG 201 but not both; you can take BIOL 451 or NRSC 451 but not both; you can take ANTH 451 or GEOG 451 but not both.
\begin{tabular}{lll} 
AEBI 423 & \((3)\) & Sustainable Land Use \\
AGRI 550 & \((3)\) & Sustained Tropical Agriculture \\
ANTH 451* & \((3)\) & Research in Society and Development in Africa \\
BIOL 451* & \((3)\) & Research in Ecology and Development in Africa \\
ECON 305 & \((3)\) & Industrial Organization \\
ECON 313 & \((3)\) & Economic Development 1 \\
ECON 314 & \((3)\) & Economic Development 2 \\
ECON 408 & \((3)\) & Public Sector Economics 1 \\
ECON 409 & (3) & Public Sector Economics 2 \\
ENVB 437 & (3) & Assessing Environmental Impact \\
ENVB 529* & (3) & GIS for Natural Resource Management \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
ENVR 422 & \((3)\) & Montreal Urban Sustainability Analysis \\
GEOG 201* & (3) & Introductory Geo-Information Science
\end{tabular}
\begin{tabular}{lcl} 
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 340 & \((3)\) & Sustainability in the Caribbean \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG \(451^{*}\) & \((3)\) & Research in Society and Development in Africa \\
GEOG 498 & (3) & Humans in Tropical Environments \\
HIST 510 & (3) & Environmental History of Latin America (Field) \\
MIME 320 & \((3)\) & Extraction of Energy Resources \\
NRSC \(451^{*}\) & \((3)\) & Research in Ecology and Development in Africa
\end{tabular}

\section*{Area 2: Environmental Resources}
\begin{tabular}{|c|c|c|}
\hline ATOC 341 & (3) & Caribbean Climate and Weather \\
\hline BIOL 308* & (3) & Ecological Dynamics \\
\hline BIOL 343 & (3) & Biodiversity in the Caribean \\
\hline BREE 217* & (3) & Hydrology and Water Resources \\
\hline ENVB 305* & (3) & Population and Community Ecology \\
\hline EPSC 355 & (3) & Sedimentary Geology \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline GEOG 305 & (3) & Soils and Environment \\
\hline GEOG 322* & (3) & Environmental Hydrology \\
\hline SOIL 300 & (3) & Geosystems \\
\hline
\end{tabular}

\subsection*{7.5.2.3 Environment and Development Concentration}

This Concentration is open only to students in the B.A. Faculty Program in Environment.

\subsection*{7.5.2.3.1 Bachelor of Arts (B.A.) - Faculty Program Environment - Environment and Development (54 credits)}

The B.A.; Faculty Program in Environment; Environment and Development is an introduction to theories, concepts and approaches associated with the complexities between environment and development. The problems and solutions to the development/environmental crisis, which include: the natural world, theories behind economic development and growth, and of the cultural constructs of nature and environment; knowledge of global economic and environmental organizations; and sustainability and the climate crisis.

\section*{Program Prerequisites or Corequisites}

To graduate from the Faculty Program in Environment, students are required to complete these courses by the end of their U1 year. These courses can be taken using the Satisfactory/Unsatisfactory option. See:
http://www.mcgill.ca/study/university_regulations_and_resources/undergraduate/gi_courses_taken_under_the_satisfactory_unsatisfactory_option for details.

\section*{Calculus}

3 credits of calculus from the following, or equivalent (e.g., CEGEP objective OOUN):
MATH 139
(4)
Calculus 1 with Precalculus
MATH 140
(3)
Calculus 1

\section*{Basic Science}

3 credits of basic science from the following, or equivalent (e.g., CEGEP objectives: Biology OOUK, Chemistry OOUL, Physics OOUR):
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
CHEM 110 & (4) & General Chemistry 1 \\
PHYS 101 & (4) & Introductory Physics - Mechanics
\end{tabular}

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Ms. Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes required courses, but does not include the program prerequisites or corequisites listed above.
Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Required Courses ( 30 credits)}

Location Note: ENVR courses are taught at both McGill's Downtown campus and Macdonald campus. You should register in Section 001 of an ENVR course on the Downtown campus, and in Section 051 of an ENVR on the Macdonald campus.
\begin{tabular}{lcl} 
ANTH 339 & \((3)\) & Ecological Anthropology \\
ECON 313 & \((3)\) & Economic Development 1 \\
ECON 314 & \((3)\) & Economic Development 2 \\
ENVR 200 & \((3)\) & The Global Environment \\
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
ENVR 202 & \((3)\) & The Evolving Earth \\
ENVR 203 & \((3)\) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought \\
GEOG 302 & (3) & Environmental Management 1
\end{tabular}

\section*{Complementary Courses ( 24 credits)}

\section*{Senior Research Project}

3 credits will be applied to the program; extra credits will count as electives.
3 credits from:
\begin{tabular}{lll} 
AEBI 427 & \((6)\) & Barbados Interdisciplinary Project \\
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project \\
GEOG 451 & \((3)\) & Research in Society and Development in Africa
\end{tabular}

\section*{Microeconomics}

3 credits from:
\begin{tabular}{lll} 
AGEC 200 & (3) & Principles of Microeconomics \\
ECON 208 & (3) & Microeconomic Analysis and Applications
\end{tabular}

\section*{Statistics}

3 credits from one of the following Statistics courses or equivalent:
Note: Credit given for Statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
GEOG 202 & (3) & Statistics and Spatial Analysis
\end{tabular}
\begin{tabular}{lll} 
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{Advanced Development Courses}

6 credits from:
\begin{tabular}{lll} 
AGEC 442 & (3) & Economics of International Agricultural Development \\
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
GEOG 408 & (3) & Geography of Development \\
GEOG 409 & (3) & Geographies of Developing Asia \\
GEOG 423 & (3) & Dilemmas of Development \\
GEOG 514 & (3) & Climate Change Vulnerability and Adaptation \\
GEOG 525 & (3) & Asian Cities in the 21st Century
\end{tabular}

\section*{Natural Sciences}

3 credits from:
* Note: If chosen, you may take BIOL 308 or ENVB 305 ; you may take BIOL 465 or WILD 421; you may take ENVB 210 or GEOG 305; you may take BREE 217 or GEOG 322.
\begin{tabular}{lcl} 
AEBI 421 & (3) & Tropical Horticultural Ecology \\
AGRI 550 & (3) & Sustained Tropical Agriculture \\
ATOC 341 & (3) & Caribbean Climate and Weather \\
BIOL 308* & (3) & Ecological Dynamics \\
BIOL 343 & (3) & Biodiversity in the Caribean \\
BIOL 451 & (3) & Research in Ecology and Development in Africa \\
BIOL 465* & (3) & Conservation Biology \\
BIOL 553 & (3) & Neotropical Environments \\
BREE 217* & (3) & Hydrology and Water Resources \\
ENVB 210* & (3) & The Biophysical Environment \\
ENVB 305 & (3) & Population and Community Ecology \\
GEOG 305* & (3) & Environmental Hydrology \\
GEOG 322* & (3) & Research in Ecology and Development in Africa \\
NRSC 451 & (3) & Nutrition in Developing Countries \\
NUTR 501 & (3) & Public Health Nutrition \\
NUTR 505 & (3) & Environment and Infection \\
PARA 410 & (3) & Wildlife Conservation \\
WILD 421* & &
\end{tabular}

\section*{Social Sciences}

6 credits from:
\begin{tabular}{lll} 
AEBI 423 & \((3)\) & Sustainable Land Use \\
AEBI 425 & (3) & Tropical Energy and Food \\
AGEC 333 & (3) & Resource Economics \\
ANTH 322 & (3) & Social Change in Modern Africa \\
ANTH 451 & \((3)\) & Research in Society and Development in Africa
\end{tabular}
\begin{tabular}{lll} 
ANTH 512 & \((3)\) & Political Ecology \\
ECON 326 & \((3)\) & Ecological Economics \\
ECON 347 & \((3)\) & Economics of Climate Change \\
ECON 405 & \((3)\) & Natural Resource Economics \\
ECON 511 & \((3)\) & Energy, Economy and Environment \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 311 & (3) & Economic Geography \\
GEOG 331 & (3) & Urban Social Geography \\
GEOG 340 & (3) & Sustainability in the Caribbean \\
GEOG 404 & (3) & Environmental Management 2 \\
GEOG 496 & (3) & Geographical Excursion \\
GEOG 498 & (3) & Humans in Tropical Environments \\
GEOG 510 & (3) & Humid Tropical Environments \\
GEOG 514 & (3) & Communicating Science \\
GEOG 530 & (3) & (3) \\
HIST 292 & (3) & (3)
\end{tabular}

\subsection*{7.5.3 Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Programs}

These interfaculty programs are open only to students in the B.A. \& Sc. degree.
To obtain a B.A. \& Sc. Interfaculty Program in Environment or a B.A. \& Sc. Interfaculty Program in Sustainability, Science and Society, students must:
- register in the interfaculty program online, using Minerva;
- pass all courses counted toward the interfaculty program with a grade of C or higher;
- confirm that their course selection satisfies the required and complementary course components of the program;
- fulfil all requirements specified for the B.A. \& Sc. in Bachelor of Arts \& Science > Undergraduate > section 4.5: Degree Requirements, which include meeting the minimum credit requirement as specified in their letter of admission.
section 7.5.3.1: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program Environment (54 credits)

Program Advisor, Bieler School of Environment
Ms. Kathy Roulet
Telephone: 514-398-4306
Email: kathy.roulet@mcgill.ca

\author{
Program Advisor, Faculty of Science, Department of Geography \\ Ms. Michelle Maillet \\ Telephone: 514-398-4304 \\ Email: advisor.geog@mcgill.ca
}

\subsection*{7.5.3.1 Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program Environment (54 credits)}

The growth of technology, globalization of economies, and rapid increases in population and per capita consumption have all had dramatic environmental impacts. The Interfaculty Program Environment for the Bachelor of Arts and Science is designed to provide students with a broad "Liberal Arts/Science" training. In combination with careful mentoring, this program offers a great degree of flexibility, allowing students to develop the skills and knowledge base required to face the myriad of environmental problems that currently need to be addressed.

\section*{Program Requirements}
1. Students are required to take a maximum of 21 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes required courses.
2. Students must complete at least 21 credits in the Faculty of Arts and at least 21 in the Faculty of Science as part of their interfaculty program and their minor or minor concentration. ENVR courses are considered courses in both Arts and Science, and so the credits are split between the two faculties for the purpose of this regulation.
Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught on both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Required Courses (18 credits)}

Location Note: Core required courses are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lcl} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & \((3)\) & Knowledge, Ethics and Environment \\
ENVR 301 & \((3)\) & Environmental Research Design \\
ENVR 400 & \((3)\) & Environmental Thought
\end{tabular}

\section*{Complementary Courses (36 credits)}

36 credits of complementary courses are selected as follows:
3 credits - Senior Research Project
3 credits - Statistics
30 credits - chosen from amongst 12 Areas of focus

\section*{Senior Research Project}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project
\end{tabular}

\section*{Statistics:}

One of:
AEMA 310
(3)
Statistical Methods 1
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{Areas:}

30 credits from at least three of the following Areas. At least 6 credits must be at the 400 level or higher, selected either from these lists or in consultation with the Program Adviser.

\section*{Area 1: Population, Community, and Ecosystem Ecology}
* Note: You may take BIOL 540 or ENVR 540, but not both; you may take BIOL 308 or ENVB 305, but not both.
\begin{tabular}{lcl} 
BIOL \(308^{*}\) & \((3)\) & Ecological Dynamics \\
BIOL 432 & \((3)\) & Limnology \\
BIOL 441 & \((3)\) & Biological Oceanography \\
BIOL 540* & (3) & Ecology of Species Invasions \\
ENVB 305* & \((3)\) & Population and Community Ecology \\
ENVB 410 & \((3)\) & Ecosystem Ecology \\
ENVB 500 & \((3)\) & Advanced Topics in Ecotoxicology \\
ENVR 540* & \((3)\) & Ecology of Species Invasions \\
GEOG 350 & \((3)\) & Ecological Biogeography \\
PLNT 460 & \((3)\) & Plant Ecology
\end{tabular}

Area 2: Biodiversity and Conservation
\begin{tabular}{lcl} 
BIOL 305 & \((3)\) & Animal Diversity \\
BIOL 343 & \((3)\) & Biodiversity in the Caribean \\
BIOL 355 & \((3)\) & Trees: Ecology and Evolution \\
BIOL 427 & \((3)\) & Herpetology \\
BIOL 465 & \((3)\) & Conservation Biology \\
MICR 331 & \((3)\) & Microbial Ecology \\
PLNT 358 & \((3)\) & Flowering Plant Diversity \\
WILD 307 & (3) & Natural History of Vertebrates \\
WILD 350 & (3) & Mammalogy \\
WILD 420 & Ornithology
\end{tabular}

\section*{Area 3: Field Studies in Ecology and Conservation}
\begin{tabular}{lll} 
BIOL 240 & (3) & Monteregian Flora \\
BIOL 331 & \((3)\) & Ecology/Behaviour Field Course \\
BIOL 334D1 & \((1.5)\) & Applied Tropical Ecology \\
BIOL 334D2 & \((1.5)\) & Applied Tropical Ecology \\
BIOL 553 & \((3)\) & Neotropical Environments \\
GEOG 495 & \((3)\) & Field Studies - Physical Geography \\
GEOG 499 & \((3)\) & Subarctic Field Studies \\
WILD 475 & \((3)\) & Desert Ecology
\end{tabular}

\section*{Area 4: Hydrology and Water Resources}
* Note: You may take only one of: GEOG 322, BREE 217, or CIVE 323.
\begin{tabular}{lcl} 
BREE 217* & (3) & Hydrology and Water Resources \\
CIVE 323* & (3) & Hydrology and Water Resources \\
EPSC 549 & (3) & Hydrogeology \\
GEOG 322* & (3) & Environmental Hydrology \\
GEOG 372 & (3) & Running Water Environments \\
GEOG 537 & (3) & Advanced Fluvial Geomorphology
\end{tabular}

\section*{Area 5: Human Health}
\begin{tabular}{lll} 
NUTR 307 & \((3)\) & Metabolism and Human Nutrition \\
PARA 410 & (3) & Environment and Infection \\
PATH 300 & (3) & Human Disease \\
PHAR 303 & (3) & Principles of Toxicology
\end{tabular}

\section*{Area 6: Earth and Soil Sciences}
\begin{tabular}{lll} 
ATOC 215 & \((3)\) & Oceans, Weather and Climate \\
ATOC 341 & (3) & Caribbean Climate and Weather \\
EPSC 201 & (3) & Understanding Planet Earth \\
GEOG 272 & (3) & Earth's Changing Surface \\
GEOG 305 & (3) & Soils and Environment \\
GEOG 321 & (3) & Climatic Environments \\
SOIL 326 & (3) & Soils in a Changing Environment
\end{tabular}

\section*{Area 7: Economics}
* Note: You may take AGEC 200 or ECON 208, but not both.
\begin{tabular}{lcl} 
AGEC 200* & (3) & Principles of Microeconomics \\
AGEC 333 & (3) & Resource Economics \\
ECON 208* & (3) & Microeconomic Analysis and Applications \\
ECON 326 & (3) & Ecological Economics \\
ECON 347 & (3) & Economics of Climate Change \\
ECON 405 & (3) & Natural Resource Economics \\
GEOG 216 & \((3)\) & Geography of the World Economy
\end{tabular}

\section*{Area 8: Development and Underdevelopment}
\begin{tabular}{lll} 
ANTH 212 & \((3)\) & Anthropology of Development \\
ANTH 418 & \((3)\) & Environment and Development \\
ECON 313 & \((3)\) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2 \\
GEOG 408 & (3) & Geography of Development \\
GEOG 410 & (3) & Geography of Underdevelopment: Current Problems
\end{tabular}
\begin{tabular}{lll} 
POLI 227 & (3) & Developing Areas/Introduction \\
POLI 445 & (3) & International Political Economy: Monetary Relations
\end{tabular}

\section*{Area 9: Cultures and People}
\begin{tabular}{lll} 
ANTH 206 & (3) & Environment and Culture \\
ANTH 339 & (3) & Ecological Anthropology \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
GEOG 210 & (3) & Global Places and Peoples
\end{tabular}

\section*{Area 10: Human Ecology and Health}
\begin{tabular}{lll} 
ANTH 227 & \((3)\) & Medical Anthropology \\
GEOG 300 & \((3)\) & Human Ecology in Geography \\
GEOG 303 & \((3)\) & Health Geography \\
PHIL 343 & (3) & Biomedical Ethics \\
SOCI 225 & \((3)\) & Medicine and Health in Modern Society \\
SOCI 309 & (3) & Health and Illness
\end{tabular}

\section*{Area 11: Spirituality, Philosophy, and Thought}
\begin{tabular}{lcl} 
EDER 461 & \((3)\) & Society and Change \\
PHIL 221 & \((3)\) & Introduction to History and Philosophy of Science 2 \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 348 & (3) & Philosophy of Law 1 \\
RELG 270 & (3) & Religious Ethics and the Environment \\
RELG 370 & (3) & Religion and Human Rights
\end{tabular}

\section*{Area 12: Environmental Management}
\begin{tabular}{lcl} 
AGRI 435 & \((3)\) & Soil and Water Quality Management \\
ENVB 437 & \((3)\) & Assessing Environmental Impact \\
ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 340 & \((3)\) & Sustainability in the Caribbean \\
GEOG 404 & (3) & Environmental Management 2 \\
NRSC 333 & (3) & Pollution and Bioremediation \\
WILD 401 & \((3)\) & Fisheries and Wildlife Management \\
WOOD 441 & (3) & Integrated Forest Management
\end{tabular}

\subsection*{7.5.3.2 Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program in Sustainability, Science and Society}

For further information about this program, see Bachelor of Arts and Science > Undergraduate > Browse Academic Units \& Programs > Sustainability, Science and Society > section 4.11.34.3: Bachelor of Arts and Science (B.A. \& Sc.) - Interfaculty Program in Sustainability, Science and Society (54 credits).

\subsection*{7.5.4 Major in Environment - B.Sc.(Ag.Env.Sc.) and B.Sc.}

Students in the Faculty of Agricultural and Environmental Sciences B.Sc.(Ag.Env.Sc.) program and students in the Faculty of Science B.Sc. program can register in the Major in Environment.

The Major comprises two course components: Core and Concentration.
1. Core: In the Core, the four introductory courses and an intermediate-level course expose students to different interdisciplinary perspectives, approaches, and world views to help them understand the complexity and conflicts that underlie most environmental problems. In the two senior-level courses of the Core, students will apply the general and specialized knowledge acquired through the rest of their program to the analysis of a selection of contemporary environmental problems. Students will be challenged by the Core program to look beyond the confines of their individual views of environment.
2. Concentration: In addition to the Core, students choose a Concentration, a transdisciplinary study of a particular theme or component of the environment. The requirements and complementary course sets vary between Concentrations. B.Sc.(Ag.Env.Sc.) and B.Sc. students can choose one of the following concentrations:
- Biodiversity and Conservation
- Ecological Determinants of Health (Population and Cellular stream options)
- Environmetrics
- Food Production and Environment
- Land Surface Processes and Environmental Change
- Renewable Resource Management
- Water Environments and Ecosystems (Biological and Physical stream options)
B.Sc. students in the Faculty of Science may also choose one of the following concentrations:
- Atmospheric Environment and Air Quality
- Earth Sciences and Economics
3. Senior Core and Research: In the two senior courses of the Core, students will apply the general and specialized knowledge that they have gained in the program to the analysis of some specific, contemporary environmental problems.

To obtain a Major in Environment, students must:
- register in a concentration online using Minerva;
- pass all courses counted toward the Major with a grade of \(\mathbf{C}\) or higher;
- confirm that their course selection satisfies the required components of the Core and their chosen Concentration, and that the complementary courses are approved courses in their chosen Concentration; and
- fulfil all faculty requirements as specified by the faculty in which they are registered: for the B.Sc.(Ag.Env.Sc.), refer to Faculty of Agricultural \& Environmental Sciences > Undergraduate > About the Faculty of Agricultural and Environmental Sciences, including School of Human Nutrition (Undergraduate) > section 2.3.5: Faculty Information and Regulations; for the B.Sc., see Faculty of Science > Undergraduate > section 11.5: Faculty Degree Requirements. This includes meeting the minimum credit requirement as specified in their letter of admission.

\subsection*{7.5.4.1 Biodiversity and Conservation Concentration}

This concentration is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment.

\subsection*{7.5.4.1.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Biodiversity and Conservation ( 63 credits)}

This domain ( 63 credits including core) is open only to students in the B.Sc.(Ag.Env.Sc.) Major in Environment or B.Sc. Major in Environment program.
This domain links the academic study of biological diversity with the applied field of conservation biology. The study of biological diversity, or "biodiversity," lies at the intersection of evolution with ecology and genetics, combining the subdisciplines of evolutionary ecology, evolutionary genetics, and ecological genetics. It has two main branches: the creation of diversity and the maintenance of diversity. Both processes are governed by a general mechanism of selection acting over different scales of space and time. This gives rise to a distinctive set of principles and generalizations that regulate rates of diversification and levels of diversity, as well as the abundance or rarity of different species. Conservation biology constitutes the application of these principles in the relevant social and economic context to the management of natural systems, with the object of preventing the extinction of rare species and maintaining the diversity of communities. As the impact of industrialization and population growth on natural systems has become more severe, conservation has emerged as an important area of practical endeavour.

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.

Location Note: When planning their schedule and registering for courses, students should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Required Courses ( \(\mathbf{1 8}\) credits)}

Location Note: ENVR courses are taught at both McGill's Downtown campus and Macdonald campus. You should register in Section 001 of an ENVR course on the Downtown campus, and in Section 051 of an ENVR course on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Complementary Courses (45 credits)}

\section*{Senior Research Project}

3 credits will be applied to the program; extra credits will count as electives.
3 credits from:
\begin{tabular}{lll} 
AEBI 427 & \((6)\) & Barbados Interdisciplinary Project \\
ENVR 401 & \((3)\) & Environmental Research \\
ENVR 451 & \((6)\) & Research in Panama \\
FSCI 444 & \((6)\) & Barbados Research Project \\
GEOG 451 & \((3)\) & Research in Society and Development in Africa
\end{tabular}

\section*{Biological Principles of Diversity/ Systematics/ Conservation}

3 credits from:
AEBI 212
(3)
Evolution and Phylogeny
BIOL 304
(3)
Evolution

3 credits from:
\begin{tabular}{lll} 
AEBI 211 & (3) & Organisms 2 \\
BIOL 305 & (3) & Animal Diversity
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
BIOL 465 & (3) & Conservation Biology \\
WILD 421 & (3) & Wildlife Conservation
\end{tabular}

\section*{Ecology:}

3 credits from:
\begin{tabular}{lll} 
BIOL 308 & (3) & Ecological Dynamics \\
ENVB 305 & \((3)\) & Population and Community Ecology
\end{tabular}

\section*{Statistics:}

3 credits from the following Statistics courses or equivalent:
Note: Other appropriate statistics courses may be approved as substitutions by the Program Adviser. Credit given for Statistics courses is subject to certain restrictions. Students in the Faculty of Arts or the Faculty of Science should consult the "Course Overlap" information in the "Course Requirements" section of the e-Calendar for the Faculty of Science.
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

\section*{Science, Policy, and Management:}

9 credits from the following:
*You may take AGEC 200 or ECON 208, but not both.
\begin{tabular}{|c|c|c|}
\hline AEBI 423 & (3) & Sustainable Land Use \\
\hline AGEC 200* & (3) & Principles of Microeconomics \\
\hline AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
\hline BIOL 451 & (3) & Research in Ecology and Development in Africa \\
\hline ECON 208* & (3) & Microeconomic Analysis and Applications \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 340 & (3) & Sustainability in the Caribbean \\
\hline GEOG 360 & (3) & Analyzing Sustainability \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline NRSC 451 & (3) & Research in Ecology and Development in Africa \\
\hline PLNT 312 & (3) & Urban Horticulture \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline WCOM 314 & (3) & Communicating Science \\
\hline
\end{tabular}

\section*{Field Courses}
\begin{tabular}{lll}
3 credits from the following: & \\
BIOL 240 & \((3)\) & Monteregian Flora \\
BIOL 331 & \((3)\) & Ecology/Behaviour Field Course \\
BIOL 334D1 & \((1.5)\) & Applied Tropical Ecology \\
BIOL 334D2 & \((1.5)\) & Applied Tropical Ecology \\
BIOL 335 & (3) & Marine Mammals \\
BIOL 553 & (3) & Neotropical Environments \\
ENTO 340 & (3) & Field Entomology \\
ENVB 410 & \((3)\) & Ecosystem Ecology \\
GEOG 495 & (3) & Field Studies - Physical Geography \\
PLNT 358 & (3) & Flowering Plant Diversity \\
PLNT 460 & (3) & Plant Ecology \\
WILD 401 & (3) & Fisheries and Wildlife Management
\end{tabular}
\begin{tabular}{lll} 
WILD 475 & (3) & Desert Ecology \\
WOOD 441 & (3) & Integrated Forest Management
\end{tabular}

\section*{General Scientific Principles}

6 credits from the following:
* Note: You may take one of BREE 529, ENVB 529 or GEOG 314; you may take one of GEOG 322 or BREE 217; you may take one of ANSC 326 or BIOL 324.
\begin{tabular}{|c|c|c|}
\hline ANSC 326* & (3) & Fundamentals of Population Genetics \\
\hline ATOC 341 & (3) & Caribbean Climate and Weather \\
\hline BIOL 202 & (3) & Basic Genetics \\
\hline BIOL 216 & (3) & Biology of Behaviour \\
\hline BIOL 324* & (3) & Ecological Genetics \\
\hline BIOL 342 & (3) & Global Change Biology of Aquatic Ecosystems \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 441 & (3) & Biological Oceanography \\
\hline BIOL 515 & (3) & Advances in Aquatic Ecology \\
\hline BREE 217* & (3) & Hydrology and Water Resources \\
\hline BREE 529* & (3) & GIS for Natural Resource Management \\
\hline ENVB 313 & (3) & Phylogeny and Biogeography \\
\hline ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
\hline ENVB 529* & (3) & GIS for Natural Resource Management \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 314* & (3) & Geospatial Analysis \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322* & (3) & Environmental Hydrology \\
\hline LSCI 204 & (3) & Genetics \\
\hline MICR 331 & (3) & Microbial Ecology \\
\hline SOIL 315 & (3) & Soil Nutrient Management \\
\hline
\end{tabular}

A second field course from the program curriculum may also be taken.

\section*{Social Science:}

3 credits from the following:
\begin{tabular}{lcl} 
AGEC 333 & \((3)\) & Resource Economics \\
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
ANSC 555 & (3) & The Use and Welfare of Animals \\
ANTH 339 & (3) & Ecological Anthropology \\
ANTH 416 & (3) & Environment/Development: Africa \\
ANTH 451 & (3) & Research in Society and Development in Africa \\
ECON 326 & (3) & Ecological Economics \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
GEOG 404 & (3) & Environmental Management 2 \\
GEOG 498 & (3) & Humans in Tropical Environments \\
GEOG 530 & (3) & Global Land and Water Resources
\end{tabular}

\section*{Organisms and Diversity:}

6 credits from the following:
* Note: You may take one of ENTO 330, BIOL 350 or ENTO 350.
\begin{tabular}{|c|c|c|}
\hline AEBI 421 & (3) & Tropical Horticultural Ecology \\
\hline AGRI 340 & (3) & Principles of Ecological Agriculture \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 343 & (3) & Biodiversity in the Caribean \\
\hline BIOL 350* & (3) & Insect Biology and Control \\
\hline BIOL 352 & (3) & Dinosaur Biology \\
\hline BIOL 427 & (3) & Herpetology \\
\hline BIOL 510 & (3) & Advances in Community Ecology \\
\hline BIOL 540 & (3) & Ecology of Species Invasions \\
\hline ENTO 330* & (3) & Insect Biology \\
\hline ENTO 350* & (3) & Insect Biology and Control \\
\hline ENVR 540 & (3) & Ecology of Species Invasions \\
\hline PARA 424 & (3) & Fundamental Parasitology \\
\hline PLNT 304 & (3) & Biology of Fungi \\
\hline PLNT 434 & (3) & Weed Biology and Control \\
\hline REDM 400 & (3) & Science and Museums \\
\hline WILD 307 & (3) & Natural History of Vertebrates \\
\hline WILD 350 & (3) & Mammalogy \\
\hline WILD 420 & (3) & Ornithology \\
\hline
\end{tabular}

\subsection*{7.5.4.2 Ecological Determinants of Health Concentration}

This concentration is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment. Within this concentration, there are two program options: the Cellular stream, and the Population stream.

\subsection*{7.5.4.2.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Ecological Determinants of Health - Cellular (63 credits)}

The Cellular concentration in this domain is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment program.
This domain considers the interface between the environment and human well-being, with particular focus on the triad that ties human health to the environment through the elements of food and infectious agents. Each of these elements is influenced by planned and unplanned environmental disturbances. For example, agricultural practices shift the balance between beneficial and harmful ingredients of food. Use of insecticides presents dilemmas with regard to the environment, economics, and human health. The distribution of infectious diseases is influenced by the climatic conditions that permit vectors to coexist with humans, by deforestation, by urbanization, and by human interventions ranging from the building of dams to provision of potable water.

In designing interventions that aim to prevent or reduce infectious contaminants in the environment, or to improve food production and nutritional quality, not only is it important to understand methods of intervention, but also to understand social forces that influence how humans respond to such interventions.

Students in the Cellular concentration will explore these interactions in more depth, at a physiological level. Students in the Population concentration will gain a depth of understanding at an ecosystem level that looks at society, land, and population health.

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: You are required to take a maximum of 33 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
AEBI 427 & (6) & Barbados Interdisciplinary Project \\
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project
\end{tabular}

\section*{Domain: Required Course (6 credits)}
\begin{tabular}{lll} 
GEOG 403 & (3) & Global Health and Environmental Change \\
PARA 410 & (3) & Environment and Infection
\end{tabular}

\section*{Domain: Complementary Courses (36 credits)}

36 credits of the complementary courses are selected as follows:
18 credits - Fundamentals, 3 credits from each category
12 credits - Human Health, maximum of 3 credits from any one category
6 credits - Natural Environment, maximum of 3 credits from any one category

\section*{Fundamentals:}

18 credits of Fundamentals, 3 credits from each category.

\section*{Health, Society, and Environment}
* Note: You may take GEOG 221 or NRSC 221, but not both.
\begin{tabular}{lcl} 
GEOG \(221^{*}\) & \((3)\) & Environment and Health \\
GEOG 303 & \((3)\) & Health Geography \\
GEOG 503 & (3) & Advanced Topics in Health Geography \\
NRSC \(221^{*}\) & (3) & Environment and Health \\
PPHS 529 & (3) & Global Environmental Health and Burden of Disease \\
SOCI 234 & (3) & Population and Society \\
SOCI 309 & (3) & Health and Illness \\
SOCI 331 & (3) & Population and Environment
\end{tabular}

Cellular Biology
* Note: You will not receive credit for either LSCI 211 or LSCI 202 if you have already received credit for both BIOL 200 and BIOL 201; you will not receive credit for either BIOL 200 or BIOL 201 if you have already received credit for both LSCI 202 and LSCI 211.
\begin{tabular}{lll} 
ANSC 234 & \((3)\) & Biochemistry 2 \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
LSCI 202 & (3) & Molecular Cell Biology
\end{tabular}

\section*{Genetics}
\begin{tabular}{lll} 
BIOL 202 & (3) & Basic Genetics \\
LSCI 204 & (3) & Genetics
\end{tabular}

\section*{Molecular Biology}
* Note: You will not receive credit for either LSCI 211 or LSCI 202 if you have already received credit for both BIOL 200 and BIOL 201; you will not receive credit for either BIOL 200 or BIOL 201 if you have already received credit for both LSCI 202 and LSCI 211.
BIOL 200
(3) Molecular Biology
LSCI 211
(3)
Biochemistry 1

\section*{Statistics}

One of the following Statistics courses or equivalent:
Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

\section*{Nutrition}
\begin{tabular}{lll} 
ANSC 433 & (3) & Animal Nutrition and Metabolism \\
NUTR 207 & (3) & Nutrition and Health \\
NUTR 307 & (3) & Metabolism and Human Nutrition
\end{tabular}

\section*{Human Health:}

12 credits chosen from Human Health, maximum of 3 credits from any one category:

\section*{Immunology and Pathogenicity}
\begin{tabular}{lcl} 
MICR 341 & (3) & Mechanisms of Pathogenicity \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
MIMM 314 & (3) & Intermediate Immunology \\
PARA 438 & (3) & Immunology \\
PATH 300 & (3) & Human Disease
\end{tabular}

\section*{Infectious Disease}
\begin{tabular}{lll} 
* Note: You can take MIMM 413 or PARA 424, but not both. \\
ANSC 400 & (3) & Eukaryotic Cells and Viruses \\
MIMM 324 & (3) & Fundamental Virology \\
MIMM 413* & (3) & Parasitology
\end{tabular}
\begin{tabular}{lll} 
PARA 424* & (3) & Fundamental Parasitology \\
PPHS 501 & (3) & Population Health and Epidemiology
\end{tabular}

\section*{Toxicology}
\begin{tabular}{lll} 
ANSC 312 & (3) & Animal Health and Disease \\
ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
NUTR 512 & (3) & Herbs, Foods and Phytochemicals \\
PHAR 300 & (3) & Drug Action \\
PHAR 303 & \((3)\) & Principles of Toxicology
\end{tabular}

\section*{Hormones}
* Note: You will not receive credit for ANSC 424 if you have already received credit for both PHGY 209 and PHGY 210; you will not receive credit for PHGY 210 if you have already received credit for both ANSC 323 and ANSC 424.
\begin{tabular}{lll} 
ANSC 424* & (3) & Metabolic Endocrinology \\
PHGY 210* & (3) & Mammalian Physiology 2 \\
PSYC 342 & (3) & Hormones and Behaviour
\end{tabular}

\section*{Physiology}
* Note: You will not receive credit ANSC 323 if you have already received credit for both PHGY 209 and PHGY 210; you will not receive credit for PHGY 209 if you have already received credit for both ANSC 323 and ANSC 424.
ANSC 323*
(3)
Mammalian Physiology
PHGY 209*
(3) Mammalian Physiology 1

\section*{Natural Environment:}

6 credits chosen from the Natural Environment, maximum of 3 credits from any one category:

\section*{Hydrology and Climate}
\begin{tabular}{lcl} 
* Note: You may take BREE 217 or GEOG 322, but not both. \\
ATOC 341 & (3) & Caribbean Climate and Weather \\
BREE 217* & (3) & Hydrology and Water Resources \\
GEOG 321 & (3) & Climatic Environments \\
GEOG 322* & (3) & Environmental Hydrology
\end{tabular}

\section*{Techniques and Management}
\begin{tabular}{lll} 
AEBI 423 & \((3)\) & Sustainable Land Use \\
ENVB 437 & \((3)\) & Assessing Environmental Impact \\
ENVR 422 & \((3)\) & Montreal Urban Sustainability Analysis \\
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 340 & \((3)\) & Sustainability in the Caribbean \\
NUTR 450 & \((3)\) & Research Methods: Human Nutrition
\end{tabular}
or, advanced quantitative methods course (with approval of Adviser).

\section*{Pest Management}
* Note: You may take BIOL 350 or ENTO 350, but not both.
\begin{tabular}{lll} 
BIOL 350* & (3) & Insect Biology and Control \\
ENTO 350* & (3) & Insect Biology and Control \\
ENTO 352 & (3) & Biocontrol of Pest Insects
\end{tabular}

\section*{Pollution Control and Management}
\begin{tabular}{lll} 
BREE 322 & (3) & Organic Waste Management \\
BREE 518 & (3) & Ecological Engineering \\
NRSC 333 & (3) & Pollution and Bioremediation \\
PARA 515 & (3) & Water, Health and Sanitation
\end{tabular}

\section*{Ecology}
* Note: You may take ENVR 540 or BIOL 540, but not both; you many take BIOL 451 or NRSC 451 , but not both.
\begin{tabular}{lcl} 
AEBI 421 & \((3)\) & Tropical Horticultural Ecology \\
BIOL 343 & \((3)\) & Biodiversity in the Caribean \\
BIOL 432 & (3) & Limnology \\
BIOL 451* & (3) & Research in Ecology and Development in Africa \\
BIOL 465 & (3) & Conservation Biology \\
BIOL 540* & (3) & Ecology of Species Invasions \\
BIOL 553 & (3) & Neotropical Environments \\
ENVB 410 & (3) & Ecosystem Ecology \\
ENVR 540* & (3) & Ecology of Species Invasions \\
MICR 331 & (3) & Microbial Ecology \\
NRSC 451* & (3) & Research in Ecology and Development in Africa \\
PLNT 304 & (3) & Biology of Fungi \\
PLNT 460 & (3) & Plant Ecology
\end{tabular}

\subsection*{7.5.4.2.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Ecological Determinants of Health- Population (63 credits)}

The Population concentration in this domain is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment program.
This domain considers the interface between the environment and human well-being, with particular focus on the triad that ties human health to the environment through the elements of food and infectious agents. Each of these elements is influenced by planned and unplanned environmental disturbances. For example, agricultural practices shift the balance between beneficial and harmful ingredients of food. Use of insecticides presents dilemmas with regard to the environment, economics, and human health. The distribution of infectious diseases is influenced by the climatic conditions that permit vectors to coexist with humans, by deforestation, by urbanization, and by human interventions ranging from the building of dams to provision of potable water.
In designing interventions that aim to prevent or reduce infectious contaminants in the environment, or to improve food production and nutritional quality, not only is it important to understand methods of intervention, but also to understand social forces that influence how humans respond to such interventions.
Students in the Population concentration will gain a depth of understanding at an ecosystem level that looks at society, land, and population health. Students in the Cellular concentration will explore these interactions in more depth, at a physiological level.

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: You are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.
Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
AEBI 427 & (6) & Barbados Interdisciplinary Project \\
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project
\end{tabular}

\section*{Domain: Required Course (3 credits)}
PARA 410 (3) Environment and Infection

\section*{Domain: Complementary Courses (39 credits)}

39 credits of complementary courses are selected as follows:
24 credits - Fundamentals, maximum of 3 credits from each category
6 credits - List A categories, maximum of 3 credits from any one category
9 credits - List B categories, maximum of 3 credits from any one category

\section*{Fundamentals:}

24 credits of fundamentals, 3 credits from each category:

\section*{Health and Environment}
\begin{tabular}{lll} 
GEOG 221 & (3) & Environment and Health \\
GEOG 303 & (3) & Health Geography \\
NRSC 221 & (3) & Environment and Health
\end{tabular}

\section*{Health and Society}
\begin{tabular}{lll} 
GEOG 403 & (3) & Global Health and Environmental Change \\
GEOG 503 & (3) & Advanced Topics in Health Geography \\
PPHS 529 & (3) & Global Environmental Health and Burden of Disease \\
SOCI 234 & (3) & Population and Society \\
SOCI 309 & (3) & Health and Illness \\
SOCI 331 & (3) & Population and Environment
\end{tabular}

\section*{Toxicology}
\begin{tabular}{lll} 
ANSC 312 & \((3)\) & Animal Health and Disease \\
ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
NUTR 512 & (3) & Herbs, Foods and Phytochemicals \\
PHAR 303 & (3) & Principles of Toxicology
\end{tabular}

\section*{Cellular Biology}

Note: You will not receive credit for either LSCI 211 or LSCI 202, if you have already received credit for both BIOL 200 and BIOL 201; you will not receive credit for either BIOL 200 or BIOL 201 if you have already received credit for LSCI 202 and LSCI 211.
ANSC 234
Biochemistry 2
BIOL 201
Cell Biology and Metabolism
LSCI 202
(3)
Molecular Cell Biology

\section*{Molecular Biology}

Note: You will not receive credit for either LSCI 211 or LSCI 202 if you have already received credit for both BIOL 200 and BIOL 201; you will not receive credit for either BIOL 200 or BIOL 201 if you have already received credit for both LSCI 202 and LSCI 211.
BIOL 200
(3)
Molecular Biology
LSCI 211
(3)
Biochemistry 1

\section*{Statistics}

One of the following Statistics courses or equivalent:
Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

\section*{Nutrition}
\begin{tabular}{lll} 
ANSC 433 & (3) & Animal Nutrition and Metabolism \\
NUTR 207 & (3) & Nutrition and Health \\
NUTR 307 & (3) & Metabolism and Human Nutrition
\end{tabular}

\section*{Advanced Ecology}
* Note: You may take ENVR 540 or BIOL 540, but not both; you make take BIOL 451 or NRSC 451 , but not both.
\begin{tabular}{lcl} 
AEBI 421 & (3) & Tropical Horticultural Ecology \\
BIOL \(451^{*}\) & (3) & Research in Ecology and Development in Africa \\
BIOL 465 & \((3)\) & Conservation Biology \\
BIOL 540* & (3) & Ecology of Species Invasions \\
BIOL 553 & (3) & Neotropical Environments \\
ENVB 410 & (3) & Ecosystem Ecology \\
ENVR 540* & (3) & Ecology of Species Invasions \\
MICR 331 & (3) & Microbial Ecology \\
NRSC 451* & (3) & Research in Ecology and Development in Africa \\
PLNT 460 & (3) & Plant Ecology
\end{tabular}

\section*{List A:}

6 credits from the following List A categories, maximum of 3 credits from any one category:
Hydrology, Climate, and Agriculture
* Note: You may take BREE 217 or GEOG 322, but not both.
\begin{tabular}{lll} 
AGRI 340 & (3) & Principles of Ecological Agriculture \\
AGRI 550 & (3) & Sustained Tropical Agriculture \\
ATOC 341 & (3) & Caribbean Climate and Weather \\
BREE \(217^{*}\) & (3) & Hydrology and Water Resources \\
GEOG 321 & \((3)\) & Climatic Environments \\
GEOG \(322^{*}\) & \((3)\) & Environmental Hydrology
\end{tabular}

\section*{Decision Making, Techniques and Management}
* Note: You may take AGEC 200 or ECON 208, but not both; you may take ENVB 529 or GEOG 201, but not both.
\begin{tabular}{lcl} 
AEBI 423 & (3) & Sustainable Land Use \\
AGEC 200* & (3) & Principles of Microeconomics \\
AGEC 333 & (3) & Resource Economics \\
ECON 208* & (3) & Microeconomic Analysis and Applications \\
ENVB 437 & (3) & Assessing Environmental Impact \\
ENVB 529* & (3) & GIS for Natural Resource Management \\
ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
GEOG 201* & (3) & Introductory Geo-Information Science \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 340 & (3) & Sustainability in the Caribbean \\
GEOG 404 & (3) & Environmental Management 2 \\
PHIL 343 & (3) & Biomedical Ethics
\end{tabular}
or, advanced quantitative methods course (with approval of Adviser).

\section*{Development and History}
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
EDER 461 & (3) & Society and Change \\
HIST 292 & (3) & History and the Environment \\
NUTR 501 & (3) & Nutrition in Developing Countries \\
SOCI 254 & \((3)\) & Development and Underdevelopment
\end{tabular}

\section*{List B:}

9 credits from the following List B categories, maximum of 3 credits from any one category:
Immunology and Infectious Disease
\begin{tabular}{lll} 
ANSC 400 & (3) & Eukaryotic Cells and Viruses \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
MIMM 314 & (3) & Intermediate Immunology \\
MIMM 324 & (3) & Fundamental Virology
\end{tabular}
\begin{tabular}{lll} 
MIMM 413 & (3) & Parasitology \\
PARA 424 & \((3)\) & Fundamental Parasitology \\
PARA 438 & \((3)\) & Immunology \\
PPHS 501 & (3) & Population Health and Epidemiology
\end{tabular}

\section*{Populations and Place}
* Note: You may take ANTH 451 or GEOG 451, but not both.
\begin{tabular}{lll} 
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
ANTH \(451^{*}\) & (3) & Research in Society and Development in Africa \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
GEOG 300 & (3) & Human Ecology in Geography \\
GEOG \(451^{*}\) & (3) & Research in Society and Development in Africa \\
GEOG 498 & (3) & Humans in Tropical Environments \\
NUTR 341 & (3) & Global Food Security
\end{tabular}

\section*{Pollution Control and Pest Management}
\begin{tabular}{lcl} 
* Note: You may take BIOL 350 or ENTO 350, but not both. \\
BIOL \(350^{*}\) & (3) & Insect Biology and Control \\
BREE 322 & \((3)\) & Organic Waste Management \\
ENTO 350* & (3) & Insect Biology and Control \\
ENTO 352 & (3) & Biocontrol of Pest Insects \\
NRSC 333 & \((3)\) & Pollution and Bioremediation \\
PARA 515 & \((3)\) & Water, Health and Sanitation
\end{tabular}

\section*{Genetics}

BIOL 202
(3) Basic Genetics

LSCI 204
Genetics

\subsection*{7.5.4.3 Environmetrics Concentration}

This concentration is open only to students in B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment.

\subsection*{7.5.4.3.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Environmetrics (63 credits)}

This domain ( 63 credits including core) is open only to students in the B.Sc.(Ag.Env.Sc.) Major in Environment or B.Sc. Major in Environment program.
In view of the crucial need for sound study design and appropriate statistical methods for analyzing environmental changes and their impacts on humans and various life forms and their ecological relationships, this program is intended to provide students with a strong background in the use of statistical methods of data analysis in environmental sciences.

Graduates will be capable of effectively participating in the design of environmental studies and adequately analyzing data for use by the environmental community. Accordingly, the list of courses for the Environmetrics Domain is composed primarily of statistics courses and mathematically oriented courses with biological and ecological applications. The list is completed by general courses that refine the topics introduced in the Bieler School of Environment core courses by focusing on the ecology of living organisms, soil sciences or water resources, and impact assessment. These courses should allow the students to understand their interlocutors and be understood by them in their future job. Students can further develop their background in applied or mathematical statistics and their expertise in environmental sciences by taking complementary courses along each of two axes: statistics and mathematics, and environmental sciences. An internship is also offered to students to provide them with preliminary professional experience.

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

Prerequisites and equivalent courses are common with Math courses, so check with your adviser when choosing your courses. Be especially careful with Statistics courses, as you will receive no credit (and no warning!) for a course that is considered equivalent to one you have already taken. Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.

Statistics courses BIOL 373 OR AEMA 310 can be taken in U1, but do not take them if you want to follow Option 1 (below), as they overlap with MATH 324.

\section*{Program Requirements}

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.
Location Note: When planning their schedule and registering for courses, students should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course if you want to take it on the Downtown campus, and in Section 051 of an ENVR course if you want to take it on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & \((3)\) & Environmental Research Design \\
ENVR 400 & \((3)\) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project
\end{tabular}

\section*{Domain: Required Courses ( 6 credits)}
\begin{tabular}{lll} 
AEMA 403 & (3) & Environmetrics Stage \\
AEMA 414 & (3) & Temporal and Spatial Statistics 01
\end{tabular}

\section*{Domain - Complementary Courses (36 credits)}

36 credits of complementary courses are selected as follows:
12 credits - Fundamentals
3 credits - Basic Environmental Science
6 credits - Statistics, one of two options
15 credits - List 1 and List 2

\section*{Fundamentals:}

12 credits of Fundamentals, 3 credits from each category.

\section*{Ecology}
\begin{tabular}{lll} 
BIOL 308 & (3) & Ecological Dynamics \\
ENVB 305 & (3) & Population and Community Ecology
\end{tabular}

\section*{Impact}
\begin{tabular}{lll} 
ENVB 437 & (3) & Assessing Environmental Impact \\
GEOG 340 & (3) & Sustainability in the Caribbean \\
MIME 308 & (3) & Social Impact of Technology
\end{tabular}

\section*{Modelling}
BIOL 309
(3)
ENVB 506
(3)
Mathematical Models in Biology
Quantitative Methods: Ecology

\section*{GIS Techniques}
\begin{tabular}{lll} 
ENVB 529 & (3) & GIS for Natural Resource Management \\
GEOG 201 & (3) & Introductory Geo-Information Science
\end{tabular}

\section*{Basic Environmental Science:}

One of:
\begin{tabular}{lll} 
BREE 217 & (3) & Hydrology and Water Resources \\
CIVE 323 & (3) & Hydrology and Water Resources \\
ENVB 210 & (3) & The Biophysical Environment \\
GEOG 305 & (3) & Soils and Environment \\
GEOG 322 & (3) & Environmental Hydrology \\
GEOG 350 & (3) & Ecological Biogeography
\end{tabular}

\section*{Statistics:}

6 credits of Statistics are selected from one of the following two options.
Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science. Several Statistics courses overlap (especially with MATH 324) and cannot be taken together. These rules do not apply to B.Sc.(Ag.Env.Sc.) students.

\section*{Option 1}
\begin{tabular}{lll} 
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}

\section*{Option 2}

One of:
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
BIOL 373 & (3) & Biometry
\end{tabular}

And one of:
\begin{tabular}{lll} 
AEMA 411 & (3) & Experimental Designs 01 \\
CIVE 555 & (3) & Environmental Data Analysis \\
GEOG 351 & (3) & Quantitative Methods
\end{tabular}
SOCI 461
(3)
Quantitative Data Analysis

A total of 15 credits are chosen from the following two lists.

\section*{List 1}

3 credits minimum of statistics and mathematics chosen from:
* Note: or equivalent courses to BREE 252 or BREE 319.
\begin{tabular}{lcl} 
BIOL 434 & \((3)\) & Theoretical Ecology \\
BREE \(252^{*}\) & (3) & Computing for Engineers \\
BREE \(319^{*}\) & (3) & Engineering Mathematics \\
GEOG 401 & (3) & Socio-Environmental Systems: Theory and Simulation \\
MATH 223 & (3) & Linear Algebra \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 423 & (3) & Applied Regression \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 525 & (4) & Sampling Theory and Applications \\
SOCI 504 & (3) & Quantitative Methods 1 \\
SOCI 580 & (3) & Social Research Design and Practice
\end{tabular}

\section*{List 2}
\begin{tabular}{lll}
3 credits minimum of environmental sciences chosen from: \\
AGRI 550 & \((3)\) & Sustained Tropical Agriculture \\
ATOC 341 & \((3)\) & Caribbean Climate and Weather \\
BIOL 331 & \((3)\) & Ecology/Behaviour Field Course \\
BIOL 343 & \((3)\) & Biodiversity in the Caribean \\
BIOL 553 & (3) & Neotropical Environments \\
ENVB 313 & (3) & Phylogeny and Biogeography \\
ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
GEOG 300 & (3) & Human Ecology in Geography \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 404 & (3) & Environmental Management 2 \\
GEOG 494 & (3) & Urban Field Studies \\
GEOG 499 & (3) & Subarctic Field Studies \\
NRSC 333 & (3) & Pollution and Bioremediation \\
PLNT 460 & (3) & Plant Ecology \\
WILD 401 & (3) & Fisheries and Wildlife Management
\end{tabular}

\subsection*{7.5.4.4 Food Production and Environment Concentration}

This concentration is open only to students in B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment.

\subsection*{7.5.4.4.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Food Production and Environment (63 credits)}

This domain ( 63 credits including core) is open only to students in the B.Sc.(Ag.Env.Sc.) Major in Environment or B.Sc. Major in Environment programs.
The business of food production is an area of human activity with a large and intimate interaction with the environment. As the global population rises, demand for food and food production increases. This demand must be met through a combination of increased productivity of existing agricultural land and by bringing new arable land into production. This is a serious challenge for two main reasons. Firstly, there are environmental impacts of agricultural activities which can be significant and which can be difficult to assess and contain, as the effects range from loss of biodiversity due to increasing farm size, production of biofuels versus food, non-point source pollution of rivers and lakes, and a loss of arable land to urbanization. Secondly, a growing population needs support from a number of different land uses (e.g., urban growth, transportation, water resource use, timber resources, etc.), many of which conflict, and all of which compete with food production land requirements. As the available land resource decreases, land-use competition for what remains will grow more fierce, making the need for smart and informed decision-making related to food production increasingly critical.

\section*{Program Prerequisites or Corequisites}

All students in this program MUST take these pre- or corequisite courses, or their equivalents. These courses are taken as follows:

One of the following courses or CEGEP equivalent (e.g., CEGEP objective 00XU):
BIOL 112
(3)
Cell and Molecular Biology
LSCI 211
(3)
Biochemistry 1

One of the following courses or CEGEP equivalent (e.g., CEGEP objective 00XV):
CHEM 212
Introductory Organic Chemistry 1
FDSC 230
Organic Chemistry

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 34 credits at the 200 level and a minimum of 15 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the domain prerequisites or corequisites listed above.
Location Note: When planning their schedule and registering for courses, students should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
AEBI 427 & \((6)\) & Barbados Interdisciplinary Project \\
ENVR 401 & \((3)\) & Environmental Research \\
ENVR 451 & \((6)\) & Research in Panama \\
FSCI 444 & \((6)\) & Barbados Research Project
\end{tabular}

\section*{Domain: Required Courses (6 credits)}
\begin{tabular}{lll} 
AEBI 210 & (3) & Organisms 1 \\
AGRI 340 & (3) & Principles of Ecological Agriculture
\end{tabular}

\section*{Domain: Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits of complementary courses selected as follows:
18 credits - Fundamentals
12 credits - Applied Sciences
6 credits - Social Sciences/Humanities
The Applied and Social Sciences courses are grouped according to subtopics. Students can choose their courses from one subtopic, or a combination of subtopics.

\section*{Fundamentals (18 credits)}

One of the following Statistics courses or equivalent:
Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

One of:
\begin{tabular}{lll} 
ANSC 250 & (3) & Principles of Animal Science \\
PLNT 300 & (3) & Cropping Systems
\end{tabular}

One of:
\begin{tabular}{lll} 
BIOL 202 & (3) & Basic Genetics \\
LSCI 204 & (3) & Genetics
\end{tabular}

One of:
\begin{tabular}{lll} 
ENVB 210 & (3) & The Biophysical Environment \\
GEOG 305 & (3) & Soils and Environment
\end{tabular}

One of:
BIOL 308
(3) Ecological Dynamics

ENVB 305
(3)

Population and Community Ecology

One of:
AGEC 200
Principles of Microeconomics
ECON 208
(3)

Microeconomic Analysis and Applications

\section*{Applied Sciences (12 credits)}

\section*{Food and Human Health}
\begin{tabular}{lcl} 
* Note: Students take FDSC 200 or NUTR 207, but not both. \\
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
FDSC 200* & (3) & Introduction to Food Science \\
MICR 331 & \((3)\) & Microbial Ecology \\
NUTR 207* & (3) & Nutrition and Health \\
NUTR 501 & (3) & Nutrition in Developing Countries \\
NUTR 505 & (3) & Public Health Nutrition \\
PARA 410 & (3) & Environment and Infection \\
PHAR 303 & \((3)\) & Principles of Toxicology
\end{tabular}

\section*{Food Production}
\begin{tabular}{lcl} 
AEBI 421 & \((3)\) & Tropical Horticultural Ecology \\
AEBI 425 & \((3)\) & Tropical Energy and Food \\
AGRI 215 & \((3)\) & Agro-Ecosystems Field Course \\
AGRI 325 & (3) & Sustainable Agriculture and Food Security \\
AGRI 550 & (3) & Sustained Tropical Agriculture \\
BIOL 385 & (3) & Plant Growth and Development \\
ENTO 352 & (3) & Biocontrol of Pest Insects \\
PLNT 302 & (3) & Forage Crops and Pastures \\
PLNT 307 & (3) & Agroecology of Vegetables and Fruits \\
PLNT 353 & (3) & Plant Structure and Function \\
PLNT 430 & (3) & Pesticides in Agriculture \\
PLNT 434 & (3) & Weed Biology and Control \\
SOIL 315 & (3) & Soil Nutrient Management
\end{tabular}

\section*{Natural Resources and Natural Resource Impacts}
\begin{tabular}{lcl} 
* Note: Students take BIOL 465 or WILD 421, but not both. \\
** Note: Students take BREE 217 or GEOG 322 , but not both. \\
AGRI 435 & (3) & Soil and Water Quality Management \\
BIOL 343 & (3) & Biodiversity in the Caribean \\
BIOL \(465^{*}\) & (3) & Conservation Biology \\
BIOL 553 & (3) & Neotropical Environments \\
BREE \(217 * *\) & (3) & Hydrology and Water Resources \\
BREE 322 & (3) & Organic Waste Management \\
BREE 518 & (3) & Ecological Engineering \\
ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
GEOG \(322^{* *}\) & (3) & Pollution and Bioremediation \\
NRSC 333 & (3) & Environmental Soil Chemistry \\
SOIL 510 & (3) & Fisheries and Wildlife Management \\
WILD 401 & (3) & Wildlife Conservation \\
WILD \(421^{*}\) &
\end{tabular}

\section*{Social Science ( 6 credits)}

\section*{Economic and Resource Policy}
* Note: Students take AGEC 333 or ECON 405, but not both.
\begin{tabular}{lll} 
AGEC 320 & (3) & Intermediate Microeconomic Theory \\
AGEC \(333^{*}\) & (3) & Resource Economics \\
AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
AGEC 442 & (3) & Economics of International Agricultural Development \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON \(405^{*}\) & (3) & Natural Resource Economics
\end{tabular}

\section*{Social Change and Human Impacts}
\begin{tabular}{lll} 
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
GEOG 340 & (3) & Sustainability in the Caribbean \\
GEOG 406 & (3) & Human Dimensions of Climate Change \\
GEOG 410 & (3) & Geography of Underdevelopment: Current Problems \\
GEOG 498 & (3) & Humans in Tropical Environments \\
GEOG 510 & (3) & Humid Tropical Environments \\
HIST 510 & (3) & Environmental History of Latin America (Field) \\
SOCI 254 & (3) & Development and Underdevelopment
\end{tabular}

\section*{Environment Management}
* Note: Students may take only one of BREE 529, ENVB 529, or GEOG 201.
\begin{tabular}{lcl} 
AEBI 423 & (3) & Sustainable Land Use \\
ANTH 418 & \((3)\) & Environment and Development \\
BREE 529* & \((3)\) & GIS for Natural Resource Management \\
ENVB 437 & (3) & Assessing Environmental Impact \\
ENVB 529* & \((3)\) & GIS for Natural Resource Management \\
ENVR 422 & \((3)\) & Montreal Urban Sustainability Analysis \\
GEOG 201* & \((3)\) & Introductory Geo-Information Science \\
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 530 & (3) & Global Land and Water Resources \\
MGPO 440 & (3) & Strategies for Sustainability
\end{tabular}

\subsection*{7.5.4.5 Land Surface Processes and Environmental Change Concentration}

This concentration is open only to students in B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment.

\subsection*{7.5.4.5.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment-Land Surface Processes and Environmental Change ( 63 credits)}

This domain ( 63 credits including core) is open only to students in the B.Sc.(Ag.Env.Sc.) Major in Environment or B.Sc. Major in Environment programs.
The thin soil layer on the planet's land surfaces controls the vital inputs of water, nutrients, and energy to terrestrial and freshwater aquatic ecosystems. Widespread occurrences around the globe of desertification, soil erosion, deforestation, and land submergence over water reservoirs indicate that this dynamic system is under increasing pressure from population growth and changes in climate and land uses. Production of key greenhouse gases (water vapour, CO2, and methane) is controlled by complex processes operating at the land surface, involving climate change feedbacks that need to be fully understood, given current global warming trends.

The program introduces students to the interacting physical and biogeochemical processes at the atmosphere-lithosphere interface, which fashion land surface habitats and determine their biological productivity and response to anthropogenic or natural environmental changes. Through an appropriate selection of courses, students can prepare for graduate training in emerging research areas such as earth system sciences, environmental hydrology, and landscape ecology.

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.

Location Note: When planning their schedule and registering for courses, students should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}
\begin{tabular}{lcl} 
ENVR 200 & \((3)\) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & \((3)\) & Knowledge, Ethics and Environment \\
ENVR 301 & \((3)\) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
AEBI 427 & (6) & Barbados Interdisciplinary Project \\
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project \\
GEOG 451 & (3) & Research in Society and Development in Africa
\end{tabular}

\section*{Domain Required Course (3 credits)}
GEOG 203
(3)
Environmental Systems

\section*{Domain: Complementary Courses ( \(\mathbf{3 9}\) credits)}

39 credits of complementary courses are selected as follows:
9 credits - 3 credits from each category of Statistics, Geographic Information Systems, Weather and Climate
9 credits of fundamental land surface processes
3 credits of environment and resource management
3 credits of field course
3 credits of social science
12 credits total of advanced studies chosen from List A: Particular Environments and List B: Surface Processes

\section*{Statistics}

3 credits from one of the following Statistics courses or equivalent:
* Note: Other appropriate statistics courses may be approved as substitutions by the Program Adviser. Credit given for Statistics courses is subject to certain restrictions. Students in the Faculty of Arts or the Faculty of Science should consult the "Course Overlap" information in the "Course Requirements" section of the eCalendar for the Faculty of Science.
AEMA 310
(3)
Statistical Methods 1
\begin{tabular}{lll} 
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

\section*{Geographic Information Systems}

3 credits from:
\begin{tabular}{lll} 
ENVB 529 & (3) & GIS for Natural Resource Management \\
GEOG 201 & (3) & Introductory Geo-Information Science
\end{tabular}

\section*{Weather and Climate}

3 credits from:
\begin{tabular}{lll} 
ATOC 215 & \((3)\) & Oceans, Weather and Climate \\
ATOC 341 & (3) & Caribbean Climate and Weather \\
ENVB 301 & (3) & Meteorology
\end{tabular}

\section*{Fundamental Land Surface Processes}

9 credits total of fundamental land surface processes chosen as follows:
\(0-3\) credits chosen from:
\begin{tabular}{lll} 
GEOG 321 & \((3)\) & Climatic Environments \\
0-3 credits from: & & \\
GEOG 272 & (3) & Earth's Changing Surface \\
SOIL 300 & Geosystems \\
0-3 credits from: & & \\
ENVB 210 & \((3)\) & The Biophysical Environment \\
GEOG 305 & (3) & \\
& & Soils and Environment \\
\(0-3\) credits from: & (3) & Hydrology and Water Resources \\
BREE 217 & (3) & Environmental Hydrology \\
GEOG 322 & &
\end{tabular}

\section*{Environment and Resource Management:}

3 credits from:
* Note: You may take BIOL 308 or ENVB 305, but not both.
\begin{tabular}{lcl} 
AGRI 550 & (3) & Sustained Tropical Agriculture \\
BIOL 308* & (3) & Ecological Dynamics \\
BIOL 465 & (3) & Conservation Biology \\
CIVE 225 & (4) & Environmental Engineering \\
ENVB 305* & (3) & Population and Community Ecology \\
ENVB 437 & (3) & Assessing Environmental Impact \\
ENVB 530 & \((3)\) & Advanced GIS for Natural Resource Management
\end{tabular}
\begin{tabular}{lcl} 
ENVR 422 & \((3)\) & Montreal Urban Sustainability Analysis \\
ESYS 301 & \((3)\) & Earth System Modelling \\
GEOG 302 & \((3)\) & Environmental Management 1 \\
GEOG 308 & \((3)\) & Remote Sensing for Earth Observation \\
GEOG 340 & \((3)\) & Sustainability in the Caribbean \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 530 & (3) & Global Land and Water Resources \\
SOIL 315 & (3) & Soil Nutrient Management \\
WILD 421 & (3) & Wildlife Conservation \\
WOOD 441 & (3) & Integrated Forest Management
\end{tabular}

\section*{Field Course}

3 credits from:
\begin{tabular}{lcl} 
ATOC 555 & (3) & Field Course 1 \\
BIOL 343 & (3) & Biodiversity in the Caribean \\
BIOL 553 & (3) & Neotropical Environments \\
GEOG 495 & (3) & Field Studies - Physical Geography \\
GEOG 496 & (3) & Geographical Excursion \\
GEOG 499 & (3) & Subarctic Field Studies \\
WILD 475 & (3) & Desert Ecology
\end{tabular}

\section*{Social Science:}

3 credits from:
\begin{tabular}{lll} 
AGEC 333 & \((3)\) & Resource Economics \\
ANTH 339 & \((3)\) & Ecological Anthropology \\
ECON 225 & \((3)\) & Economics of the Environment \\
ECON 326 & (3) & Ecological Economics \\
ECON 405 & (3) & Natural Resource Economics \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
GEOG 221 & (3) & Environment and Health \\
GEOG 408 & (3) & Geography of Development \\
GEOG 498 & (3) & Humans in Tropical Environments \\
HIST 510 & (3) & Environmental History of Latin America (Field) \\
NRSC 221 & (3) & Environment and Health \\
POLI 350 & (3) & Global Environmental Politics \\
WCOM 314 & (3) & Communicating Science
\end{tabular}

12 credits total of advanced studies chosen from the following two lists:

\section*{List A - Particular Environments:}

3-9 credits of advanced study of Particular Environments:
\begin{tabular}{lcl} 
BIOL 432 & \((3)\) & Limnology \\
ENVB 410 & \((3)\) & Ecosystem Ecology \\
GEOG 372 & \((3)\) & Running Water Environments \\
GEOG 470 & \((3)\) & Wetlands \\
GEOG 550 & (3) & Historical Ecology Techniques \\
PLNT 358 & \((3)\) & Flowering Plant Diversity \\
PLNT 460 & \((3)\) & Plant Ecology
\end{tabular}

\section*{List B - Surface Processes:}

3-9 credits advanced study of Surface Processes:
\begin{tabular}{lll} 
ATOC 315 & \((3)\) & Thermodynamics and Convection \\
BREE 509 & \((3)\) & Hydrologic Systems and Modelling. \\
EPSC 549 & \((3)\) & Hydrogeology \\
GEOG 401 & \((3)\) & Socio-Environmental Systems: Theory and Simulation \\
GEOG 505 & \((3)\) & Global Biogeochemistry \\
GEOG 537 & \((3)\) & Advanced Fluvial Geomorphology \\
MICR 331 & (3) & Microbial Ecology \\
NRSC 333 & \((3)\) & Pollution and Bioremediation \\
SOIL 510 & \((3)\) & Environmental Soil Chemistry \\
SOIL 535 & \((3)\) & Soil Ecology
\end{tabular}

\subsection*{7.5.4.6 Renewable Resource Management Concentration}

This concentration is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment.

\subsection*{7.5.4.6.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Renewable Resource Management (63 credits)}

This domain ( 63 credits including core) is open only to students in the B.Sc.(Ag.Env.Sc.) Major in Environment or B.Sc. Major in Environment program.
Renewable resource management is an emerging field that focuses on the ecosystem structures and processes required to sustain the delivery, to humanity, of ecosystem goods and services such as food, clean water and air, essential nutrients, and the provision of beauty and inspiration. Renewable resource management recognizes humans as integral components of ecosystems and is used to develop goals that are consistent with sustainability and ecosystem maintenance.

The Renewable Resource Management domain provides students with an understanding of: 1) the interactions between physical and biological factors that determine the nature and dynamics of populations and entities in the natural environment; 2) the ways in which ecosystems can be managed to meet specific goals for the provision of goods and services; 3 ) the economic and social factors that determine how ecosystems are managed; 4) the ways in which management of natural resources can affect the capability of natural ecosystems to continue to supply human needs in perpetuity; and 5) the approaches and technologies required to monitor and analyze the dynamics of natural and managed ecosystems.

\section*{Program Prerequisites or Corequisites}

All students in this program MUST take the following pre- or corequisite courses:

One of the following biology courses or CEGEP equivalent (e.g., CEGEP objective 00XU):
BIOL 112
(3)
Cell and Molecular Biology
LSCI 211
Biochemistry 1

One of the following chemistry courses or CEGEP equivalent (e.g., CEGEP objective 00XV):
\begin{tabular}{lll} 
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
FDSC 230 & (4) & Organic Chemistry
\end{tabular}

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Ms. Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the domain prerequisites or corequisites listed above.
Location Note: When planning their schedule and registering for courses, students should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & \((3)\) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
ENVR 401 & (3) & Environmental Research \\
ENVR 451 & (6) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project
\end{tabular}

\section*{Domain: Complementary Courses (42 credits)}

42 credits of complementary courses are selected as follows:
9 credits - Basic Principles of Ecosystem Processes and Diversity
6 credits - 3 credits from each category of Statistics and GIS
6 credits - Advanced Ecosystem Components
6 credits - Advanced Ecological Processes
6 credits - Social Processes
9 credits - Ecosystem Components or Management of Ecosystems

\section*{Basic Principles of Ecosystem Processes:}

9 credits of basic principles of ecosystem processes and diversity are selected as follows:

One of:
\begin{tabular}{lll} 
AEBI 210 & (3) & Organisms 1 \\
AEBI 211 & (3) & Organisms 2 \\
BIOL 305 & (3) & Animal Diversity
\end{tabular}

One of:
BIOL 308
(3)
Ecological Dynamics
ENVB 305
(3)
Population and Community Ecology

One of:
ENVB 210
(3)
GEOG 305
(3)
The Biophysical Environment
Soils and Environment

\section*{Statistics}

One of:
\begin{tabular}{lll} 
AEMA 310 & (3) & Statistical Methods 1 \\
BIOL 373 & (3) & Biometry
\end{tabular}

\section*{GIS Methods}

One of:
\begin{tabular}{lll} 
ENVB 529 & (3) & GIS for Natural Resource Management \\
GEOG 201 & (3) & Introductory Geo-Information Science
\end{tabular}

\section*{Advanced Ecosystem Components:}

6 credits of advanced ecosystem components selected from:
\begin{tabular}{lll} 
BIOL 553 & (3) & Neotropical Environments \\
GEOG 372 & (3) & Running Water Environments \\
PLNT 358 & (3) & Flowering Plant Diversity \\
SOIL 326 & (3) & Soils in a Changing Environment \\
WILD 307 & (3) & Natural History of Vertebrates
\end{tabular}

\section*{Advanced Ecological Processes:}

6 credits of advanced ecological processes selected from:
* Note: you can take BREE 217 or GEOG 322, but not both.
\begin{tabular}{lcl} 
BIOL 343 & \((3)\) & Biodiversity in the Caribean \\
BIOL 432 & \((3)\) & Limnology \\
BIOL 465 & (3) & Conservation Biology \\
BREE 217* & (3) & Hydrology and Water Resources \\
ENVB 410 & (3) & Ecosystem Ecology \\
ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
GEOG 322* & (3) & Environmental Hydrology \\
MICR 331 & (3) & Microbial Ecology \\
NRSC 333 & (3) & Pollution and Bioremediation \\
PLNT 460 & (3) & Plant Ecology
\end{tabular}

\section*{Social Processes:}

6 credits of social processes selected as follows:
* Note: You may take AGEC 333 and ECON 405, but not both.
AGEC 242
(3)
Management Theories and Practices
\begin{tabular}{lcl} 
AGEC \(333^{*}\) & \((3)\) & Resource Economics \\
ANTH 339 & \((3)\) & Ecological Anthropology \\
ECON \(405^{*}\) & \((3)\) & Natural Resource Economics \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
GEOG 340 & \((3)\) & Sustainability in the Caribbean \\
GEOG 382 & \((3)\) & Principles Earth Citizenship \\
GEOG 498 & \((3)\) & Humans in Tropical Environments \\
RELG 270 & \((3)\) & Religious Ethics and the Environment
\end{tabular}

\section*{Ecosystem Components or Management of Ecosystems:}

9 credits of ecosystem components or management of ecosystems selected from:
\begin{tabular}{lcl} 
AGRI 435 & \((3)\) & Soil and Water Quality Management \\
AGRI 452 & (3) & Water Resources in Barbados \\
AGRI 550 & (3) & Sustained Tropical Agriculture \\
ENVB 437 & (3) & Assessing Environmental Impact \\
ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 404 & (3) & Environmental Management 2 \\
PLNT 300 & (3) & Cropping Systems \\
WILD 401 & (3) & Fisheries and Wildlife Management \\
WOOD 441 & (3) & Integrated Forest Management
\end{tabular}

\subsection*{7.5.4.7 Water Environments and Ecosystems Concentration}

This concentration is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment. Within this concentration, there are two program options: the Biological stream, and the Physical stream.

\subsection*{7.5.4.7.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Water Environments \& Ecosystems - Biological ( 60 credits)}

The Water Environments and Ecosystems - Biological ( 60 credits including core) is a concentration open only to students in the B.Sc.(Ag.Env.Sc.); Major in Environment or B.Sc.; Major in Environment program.

The program focuses on the ecological facet of the water environment and the mechanisms regulating the different forms of life in water bodies; and to a lesser extent on the physical mechanisms controlling water properties.

Graduates of this domain are qualified to enter the work force or to pursue advanced studies in fields such as marine biology, geography, physical oceanography, and atmospheric science.

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lcl} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lcl} 
AEBI 427 & \((6)\) & Barbados Interdisciplinary Project \\
ENVR 401 & \((3)\) & Environmental Research \\
ENVR 451 & \((6)\) & Research in Panama \\
FSCI 444 & (6) & Barbados Research Project \\
GEOG 451 & (3) & Research in Society and Development in Africa
\end{tabular}

\section*{Domain: Required Courses (3 credits)}

ATOC 214 (3) Introduction: Physics of the Atmosphere

\section*{Domain: Complementary Courses ( \(\mathbf{3 6}\) credits)}

36 credits of complementary courses are selected as follows:
3 credits - Meteorology
6 credits - Hydrology and Ecology
3 credits - Statistics
3 credits - Field Course
3 credits - Social Sciences and Policy
18 credits chosen in total from List A: Water Environments and Habitats, and List B: Surface and Atmospheric Processes

\section*{Meteorology:}

3 credits from:
\begin{tabular}{lll} 
ATOC 215 & (3) & Oceans, Weather and Climate \\
ENVB 301 & (3) & Meteorology
\end{tabular}

\section*{Hydrology and Ecology:}

6 credits selected as follows:

3 credits from:
BREE 217
(3)
Hydrology and Water Resources
GEOG 322
(3)
Environmental Hydrology

3 credits from:
\begin{tabular}{lll} 
BIOL 308 & \((3)\) & Ecological Dynamics \\
ENVB 305 & (3) & Population and Community Ecology
\end{tabular}

\section*{Statistics:}

3 credits from:
* Note: Other appropriate statistics courses may be approved as substitutes by the Program Adviser. Credit for Statistics courses is subject to certain restrictions. Students in the Faculty of Arts or the Faculty of Science should consult "Course Overlap" information in the "Course Requirements" section of the eCalendar for the Faculty of Science.
\begin{tabular}{lll} 
AEMA 310* & (3) & Statistical Methods 1 \\
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

\section*{Field Course:}

3 credits selected from the following courses or an equivalent Aquatic Field course:
\begin{tabular}{lll} 
BIOL 331 & (3) & Ecology/Behaviour Field Course \\
BIOL 334D1 & \((1.5)\) & Applied Tropical Ecology \\
BIOL 334D2 & \((1.5)\) & Applied Tropical Ecology \\
BIOL 335 & \((3)\) & Marine Mammals \\
BIOL 343 & \((3)\) & Biodiversity in the Caribean \\
GEOG 495 & \((3)\) & Field Studies - Physical Geography \\
WILD 401 & \((3)\) & Fisheries and Wildlife Management
\end{tabular}

\section*{Social Sciences and Policy:}

3 credits from:
\begin{tabular}{lll} 
AGEC 333 & \((3)\) & Resource Economics \\
ANSC 555 & \((3)\) & The Use and Welfare of Animals \\
ANTH 339 & (3) & Ecological Anthropology \\
ANTH 418 & (3) & Environment and Development \\
ECON 225 & (3) & Economics of the Environment \\
ECON 326 & (3) & Ecological Economics \\
ENVB 437 & (3) & Assessing Environmental Impact \\
ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 340 & (3) & Sustainability in the Caribbean \\
GEOG 404 & (3) & Environmental Management 2 \\
GEOG 498 & (3) & Humans in Tropical Environments \\
GEOG 530 & (3) & Global Land and Water Resources \\
HIST 510 & (3) & Environmental History of Latin America (Field) \\
POLI 345 & (3) & International Organizations \\
POLI 350 & (3) & Global Environmental Politics \\
WCOM 314 & (3) & Communicating Science \\
WILD 421 & (3) & Wildlife Conservation \\
\hline
\end{tabular}

18 credits chosen in total from List A and List B as follows:

\section*{List A (Water Environments and Habitats)}

9-12 credits chosen from:
* Note: you may take BIOL 540 or ENVR 540, but not both; you may take ENVB 210 or GEOG 305, but not both,
\begin{tabular}{|c|c|c|}
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 342 & (3) & Global Change Biology of Aquatic Ecosystems \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 441 & (3) & Biological Oceanography \\
\hline BIOL 465 & (3) & Conservation Biology \\
\hline BIOL 540* & (3) & Ecology of Species Invasions \\
\hline BIOL 553 & (3) & Neotropical Environments \\
\hline BREE 533 & (3) & Water Quality Management \\
\hline ENVB 210* & (3) & The Biophysical Environment \\
\hline ENVB 410 & (3) & Ecosystem Ecology \\
\hline ENVB 500 & (3) & Advanced Topics in Ecotoxicology \\
\hline ENVR 540* & (3) & Ecology of Species Invasions \\
\hline GEOG 305* & (3) & Soils and Environment \\
\hline GEOG 470 & (3) & Wetlands \\
\hline MICR 331 & (3) & Microbial Ecology \\
\hline NRSC 333 & (3) & Pollution and Bioremediation \\
\hline PARA 410 & (3) & Environment and Infection \\
\hline SOIL 535 & (3) & Soil Ecology \\
\hline WILD 302 & (3) & Fish Ecology \\
\hline WILD 401 & (3) & Fisheries and Wildlife Management \\
\hline
\end{tabular}

\section*{List B (Surface and Atmospheric Processes)}

6-9 credits chosen from:
\begin{tabular}{lll} 
* Note: you may take ATOC 219 or CHEM 219, but not both; you may take ENVB 529 or GEOG 201, but not both. \\
ATOC \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
ATOC 341 & (3) & Caribbean Climate and Weather \\
BIOL 515 & (3) & Advances in Aquatic Ecology \\
CHEM \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
ENVB 529* & (3) & GIS for Natural Resource Management \\
ENVB 530 & (3) & Advanced GIS for Natural Resource Management \\
EPSC 220 & (3) & Principles of Geochemistry \\
GEOG \(201^{*}\) & (3) & Introductory Geo-Information Science \\
GEOG 308 & (3) & Remote Sensing for Earth Observation \\
GEOG 372 & (3) & Running Water Environments \\
GEOG 505 & (3)
\end{tabular}
GEOG 537
(3)
GEOG 550
Advanced Fluvial Geomorphology
Historical Ecology Techniques

\subsection*{7.5.4.7.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Water Environments and Ecosystems - Physical (63 credits)}

The Water Environments and Ecosystems - Physical ( 63 credits, including the core) is a a concentration open only to students in the B.Sc.(Ag.Env.Sc.); Major in Environment or B.Sc.; Major in Environment program.

The program focuses on the physical facet of the water environment, and the transport and transformation mechanisms of water on the planet, from rivers to the oceans and atmosphere; and to a lesser extent on the biological processes taking place in water bodies.
Graduates of this domain are qualified to enter the work force or to pursue advanced studies in fields such as marine biology, geography, physical oceanography, and atmospheric science.

\section*{Suggested First Year (U1) Courses}

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

\section*{Program Requirements}

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.
Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Core: Required Courses (18 credits)}

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & \((3)\) & Environmental Thought
\end{tabular}

\section*{Core: Complementary Course - Senior Research Project (3 credits)}

Note: Only 3 credits will be applied to the program; extra credits will count as electives.
\begin{tabular}{lll} 
AEBI 427 & \((6)\) & Barbados Interdisciplinary Project \\
ENVR 401 & \((3)\) & Environmental Research \\
ENVR 451 & \((6)\) & Research in Panama \\
FSCI 444 & \((6)\) & Barbados Research Project \\
GEOG 451 & \((3)\) & Research in Society and Development in Africa
\end{tabular}
\begin{tabular}{lll} 
Domain: Required Courses (9 credits) & \\
ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
ATOC 315 & (3) & Thermodynamics and Convection \\
GEOG 372 & \((3)\) & Running Water Environments
\end{tabular}

\section*{Domain: Complementary Courses (33 credits)}

33 credits of complementary courses are selected as follows:
```

3 credits - Meteorology
6 credits - Hydrology and Ecology
3 credits - Statistics
3 credits - Intermediate Calculus
3 credits - Field course
9 credits chosen from List A: Engineering/Math/Hydrology
6 credits chosen from List B: Marine and Freshwater Biology

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\section*{Meteorology}

3 credits from:
\begin{tabular}{lll} 
ATOC 215 & \((3)\) & Oceans, Weather and Climate \\
ATOC 341 & \((3)\) & Caribbean Climate and Weather \\
ENVB 301 & (3) & Meteorology
\end{tabular}

\section*{Hydrology and Ecology}

6 credits selected as follows:

3 credits from:
BREE 217
(3)
Hydrology and Water Resources
GEOG 322
(3)
Environmental Hydrology

3 credits from:
BIOL 308
(3)
Ecological Dynamics
ENVB 305
(3)
Population and Community Ecology

\section*{Statistics}

3 credits from:
* Note: Other appropriate statistics courses may be approved as substitutes by the Program Adviser.

Credit given for Statistics courses is subject to certain restrictions. Students in the Faculty of Arts or the Faculty of Science should consult the "Course Overlap" information in the "Course Requirements" section of the eCalendar for the Faculty of Science.
\begin{tabular}{lll} 
AEMA 310* & (3) & Statistical Methods 1 \\
BIOL 373 & \((3)\) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

\section*{Intermediate Calculus}

3 credits from:
\begin{tabular}{lll} 
AEMA 202 & (3) & Intermediate Calculus \\
MATH 222 & (3) & Calculus 3
\end{tabular}

\section*{Field Course:}

3 credits selected from the following courses or an equivalent Aquatic Field course:
BIOL 331
(3)
Ecology/Behaviour Field Course
\begin{tabular}{lll} 
BIOL 334D1 & (1.5) & Applied Tropical Ecology \\
BIOL 334D2 & (1.5) & Applied Tropical Ecology \\
BIOL 335 & (3) & Marine Mammals \\
BIOL 343 & (3) & Biodiversity in the Caribean \\
GEOG 495 & (3) & Field Studies - Physical Geography \\
WILD 401 & (3) & Fisheries and Wildlife Management
\end{tabular}

\section*{List A: (Engineering/Math/Hydrology)}

6-9 credits chosen from:
* Note: You can taken ENVB 529 or GEOG 201, but not both; you can take ENVB 530 or GEOG 506, but not both; you can take ENVB 210 or GEOG 305, but not both.
\begin{tabular}{lll} 
ATOC 309 & (3) & Weather Radars and Satellites \\
BREE 416 & \((3)\) & Engineering for Land Development \\
BREE 420 & (3) & Engineering for Sustainability \\
BREE 506 & (3) & Advances in Drainage Management \\
BREE 509 & \((3)\) & Hydrologic Systems and Modelling. \\
BREE 533 & (3) & Water Quality Management \\
CIVE 323 & (3) & Hydrology and Water Resources \\
ENVB 210* & (3) & The Biophysical Environment \\
ENVB 529* & (3) & GIS for Natural Resource Management \\
ENVB 530 & (3) & Advanced GIS for Natural Resource Management \\
EPSC 549 & (3) & Hydrogeology \\
GEOG 201* & (3) & Introductory Geo-Information Science \\
GEOG 305* & (3) & Soils and Environment \\
GEOG 308 & (3) & Remote Sensing for Earth Observation \\
GEOG 314 & (3) & Geospatial Analysis \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 537 & (3) & Advanced Fluvial Geomorphology \\
SOIL 315 & (3) & Soil Nutrient Management \\
\hline
\end{tabular}

0-3 credits from:
\begin{tabular}{lll} 
AEMA 305 & (3) & Differential Equations \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{List B: (Marine and Freshwater Biology)}

6 credits chosen from:
\begin{tabular}{lcl} 
BIOL 310 & \((3)\) & Biodiversity and Ecosystems \\
BIOL 342 & \((3)\) & Global Change Biology of Aquatic Ecosystems \\
BIOL 432 & \((3)\) & Limnology \\
BIOL 441 & \((3)\) & Biological Oceanography \\
BIOL 465 & \((3)\) & Conservation Biology \\
BIOL 553 & \((3)\) & Neotropical Environments
\end{tabular}
\begin{tabular}{lcl} 
ENVB 410 & \((3)\) & Ecosystem Ecology \\
GEOG 470 & \((3)\) & Wetlands \\
GEOG 505 & \((3)\) & Global Biogeochemistry \\
GEOG 530 & \((3)\) & Global Land and Water Resources \\
WILD 302 & \((3)\) & Fish Ecology \\
WILD 421 & \((3)\) & Wildlife Conservation
\end{tabular}

\subsection*{7.5.5 Honours Environment}

\section*{Environment Program Advisor}

Telephone: 514-398-4306
Email: advisor.environmment@mcgill.ca

This program is open only to students in the B.Sc. Major Environment, B.Sc.(Ag.Env.Sc.) Major Environment, B.A. Faculty Program Environment, and the B.A. \& Sc. Interfaculty Program Environment.

The Honours Environment program offers students the opportunity to undertake a year-long independent research project under the close supervision of a professor. Honours research provides excellent preparation for graduate studies, but is not required for such studies. The Honours program (6 credits) is undertaken in a student's final year of their regular degree and does not add to the length (duration) of the degree. If, for some reason, a student cannot complete the Honours requirements, they may still graduate within the regular Environment program.

\subsection*{7.5.5.1 Bachelor of Arts (B.A.) - Honours Environment (60 credits)}

This program is open only to students in the B.A. Faculty Program Environment. To be eligible for Honours, students must satisfy the requirements set by their B.A. degree.

In addition, students must satisfy the following:
1. Students apply for the Honours program in March of their U2 year. See the Program Adviser for details.
2. Applicants must have a minimum Program GPA (GPA of all required and complementary courses for the program in Environment taken at McGill) of 3.3 to enter the Honours program.
3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).
4. Students are required to achieve a minimum overall CGPA of 3.0 at graduation, and a minimum Program GPA of 3.3 to obtain Honours.
5. Arts (B.A.) students in the Honours Environment program must also complete a minor concentration in an academic unit other than the Bieler School of Environment. Please refer to the Faculty of Arts regulations on Honours programs found under "Faculty Degree Requirements", "About Program Requirements" and "Departmental Programs".

Students in the B.A. Honours programs complete the core and domain courses ( 54 credits) according to their chosen domain as well as the 6 credits of Honours required courses.
At the completion of your Honours research, you are expected to present your results at an Honours Symposium, and are required to submit a copy of your final report to the Bieler School of Environment Program Adviser

\section*{Honours Required Courses (6 credits)}

Note: you take either ENVR 495D1 and ENVR 495D2 (6 credits over consecutive terms) or ENVR 495N1 and ENVR \(495 N 2\) ( 6 credits over non-consecutive terms).
\begin{tabular}{lcl} 
ENVR 495D1 & (3) & Honours Research \\
ENVR 495D2 & (3) & Honours Research \\
ENVR 495N1 & (3) & Honours Research \\
ENVR 495N2 & (3) & Honours Research
\end{tabular}

\subsection*{7.5.5.2 Bachelor of Science (B.Sc.) - Honours Environment (72 credits)}

This program is open only to students in the B.Sc. Major Environment. To be eligible for Honours, students must satisfy the requirements set by their B.Sc. degree.

In addition, students must satisfy the following:
1. Students apply for the Honours program in March of their U2 year. See the Program Adviser for details.
2. Applicants must have a minimum Program GPA (GPA of all required and complementary courses for the program in Environment taken at McGill) of 3.3 to enter the Honours program.
3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).
4. Students are required to achieve a minimum overall CGPA of 3.0 at graduation, and a minimum Program GPA of 3.3 to obtain Honours.

Students in the B.Sc. Honours programs complete the core and domain courses ( 60 to 66 credits) according to their chosen domain as well as the 6 credits of Honours required courses.

At the completion of your Honours research, you are expected to present your results at an Honours Symposium, and are required to submit a copy of your final report to the Bieler School of Environment Program Adviser.

\section*{Honours Required Courses ( 6 credits)}

Note: you take either ENVR 495D1 and ENVR 495D2 (6 credits over consecutive terms) or ENVR 495N1 and ENVR 495N2 (6 credits over non-consecutive terms).
\begin{tabular}{lcl} 
ENVR 495D1 & (3) & Honours Research \\
ENVR 495D2 & (3) & Honours Research \\
ENVR 495N1 & (3) & Honours Research \\
ENVR 495N2 & (3) & Honours Research
\end{tabular}

\subsection*{7.5.5.3 Bachelor of Arts and Science (B.A. \& Sc.) - Honours Environment ( 60 credits)}

This program is open only to students in the B.A. \& Sc. Interfaculty Program Environment.
To be eligible for Honours, students must satisfy the requirements set by their B.A. \& Sc. degree.
In addition, students must satisfy the following:
1. Students apply for the Honours program in March of their U2 year. See the Program Adviser for details.
2. Applicants must have a minimum Program GPA (GPA of all required and complementary courses for the program in Environment taken at McGill) of 3.3 to enter the Honours program.
3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).
4. Students are required to achieve a minimum overall CGPA of 3.0 at graduation, and a minimum Program GPA of 3.3 to obtain Honours.
5. B.A. \& Sc. students must complete at least 21 credits in the Faculty of Arts and at least 21 in the Faculty of Science as part of their Honours program and their Minor concentration or Minor program. For a list of available Minor concentrations or Minor programs, see "Overview of Programs Offered" and "Minor Concentrations or Minors."
Students in the B.A. \& Sc. Honours programs complete the coursework ( 54 credits) for the Interfaculty Program in Environment as well as the Honours required courses ( 6 credits).
At the completion of your Honours research, you are expected to present your results at an Honours Symposium, and are required to submit a copy of your final report to the Bieler School of Environment Program Adviser.

\section*{Honours Required Courses (6 credits)}

Note: You take either ENVR 495D1 and ENVR 495D2 (6 credits over consecutive terms) or ENVR 495N1 and ENVR 495N2 (6 credits over non-consecutive terms).
\begin{tabular}{lcl} 
ENVR 495D1 & (3) & Honours Research \\
ENVR 495D2 & (3) & Honours Research \\
ENVR 495N1 & (3) & Honours Research \\
ENVR 495N2 & (3) & Honours Research
\end{tabular}

\subsection*{7.5.5.4 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Environment (69 credits)}

This program is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment. To be eligible for Honours, students must satisfy the requirements set by their B.Sc.(Ag.Env.Sc.) degree.

In addition, students must satisfy the following:
1. Students apply for the Honours program in March of their U2 year. See the Program Adviser for details.
2. Applicants must have a minimum Program GPA (GPA of all required and complementary courses for the program in Environment taken at McGill) of 3.3 to enter the Honours program.

\section*{3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).}
4. Students are required to achieve a minimum overall CGPA of 3.0 at graduation, and a minimum Program GPA of 3.3 to obtain Honours.

Students in the B.Sc.(Ag.Env.Sc.) Honours program complete the core and domain courses ( 60 to 63 credits) according to their chosen domain as well as the 6 credits of required Honours courses.
At the completion of your Honours research, you are expected to present your results at an Honours Symposium, and are required to submit a copy of your final report to the Bieler School Program Adviser.

\section*{Honours - Required Courses ( 6 credits)}
\begin{tabular}{lcl} 
ENVR 495D1 & (3) & Honours Research \\
ENVR 495D2 & (3) & Honours Research \\
ENVR 495N1 & (3) & Honours Research \\
ENVR 495N2 & (3) & Honours Research
\end{tabular}

Note: Students take either ENVR 495D1 and ENVR 495D2 (6 credits over consecutive terms) or ENVR 495N1 and ENVR 495N2 (6 credits over non-consecutive terms).

\subsection*{7.5.6 Joint Honours Component Environment}

\section*{Advisor}

\author{
Environment Program Advisor \\ Telephone: 514-398-4306 \\ Email: advisor.environment@mcgill.ca
}

This program is open only to students in the Faculty of Arts.
The Joint Honours Component Environment offers students the opportunity to undertake a year-long, interdisciplinary research project in their final year under the close supervision of a professor. Honours research provides excellent preparation for graduate studies, but is not required for such studies. If, for some reason, students cannot complete the Joint Honours requirements, they may still graduate with a Minor Concentration Environment.

\subsection*{7.5.6.1 Bachelor of Arts (B.A.) - Joint Honours Component Environment (36 credits)}

Students wishing to study at the honours level in two disciplines can combine joint honours program components in any two Arts disciplines. For a list of available joint honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".
Joint Honours students should consult an adviser in each department for approval of their course selection and their interdisciplinary honours research project.
Students will enter the Joint Honours at the end of their U1 year, and will be required to maintain a PGPA of 3.30 and an overall CGPA of 3.0. Whereas the Faculty Program Environment Honours requires the student to undertake a Minor as well, the Joint Honours Environment component does not.
This program comprises 36 credits, including: Honours research ( 6 credits); Environment core ( 21 credits); statistics ( 3 credits); and complementary courses ( 6 credits).

\section*{Program Prerequisites or Corequisites}

The program corequisites ( \(6-8\) credits), which are common to the stand-alone Environment Honours program, are in addition to the overall credit account. Students are required to complete these courses by the end of their U1 year.

3 credits of Basic Science, one of the following, or their equivalents (e.g., CEGEP objectives Biology 00UK, Chemistry 00UL, Physics 00UR):
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
CHEM 110 & (4) & General Chemistry 1 \\
PHYS 101 & (4) & Introductory Physics - Mechanics
\end{tabular}

And one of the following:
3 credits of Calculus or equivalent (e.g., CEGEP objective 00UN):
\begin{tabular}{lll} 
MATH 139 & (4) & Calculus 1 with Precalculus \\
MATH 140 & (3) & Calculus 1
\end{tabular}

\section*{Required Courses (21 credits)}
\begin{tabular}{lcl} 
ENVR 200 & \((3)\) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought \\
ENVR 401 & (3) & Environmental Research
\end{tabular}

\section*{Complementary Courses (15 credits)}

\section*{Statistics}

3 credits of statistics from the following (or equivalent):
\begin{tabular}{lll} 
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{Honours Research}
\(0-6\) credits from the following:
\begin{tabular}{lcl} 
ENVR 494 & (3) & Joint Honours Research \\
ENVR 495D1 & (3) & Honours Research \\
ENVR 495D2 & (3) & Honours Research \\
ENVR 495N1 & (3) & Honours Research \\
ENVR 495N2 & \((3)\) & Honours Research
\end{tabular}

Note: Students must complete 6 credits of honours research between the two components of the program. If the second component requires 0 credits of honours research, the student must take 6 credits of ENVR honours research. If the second component requires 3 credits of honours research, the student must take 3 credits of ENVR honours research. If the second component requires 6 credits of honours research, the student is not required to take any credits of ENVR honours research. Students may not count the same honours research credits towards both components.

6-12 credits chosen with approval of the Program Adviser. A maximum of 3 credits of these courses may be at 200 or 300 level.

\subsection*{7.5.7 Diploma Environment}

\section*{Program Advisor}

Telephone: 514-398-4306
Email: advisor.environment@mcgill.ca

\subsection*{7.5.7.1 Diploma (Dip.) Environment ( 30 credits)}

The Diploma in Environment is designed for students with an undergraduate degree who wish to enrich or reorient their training, supplementing their specialization with additional undergraduate-level course work in Environment.

The Diploma requires 30 credits of full-time or part-time studies at McGill and is a one-year program if taken full-time.
Students holding a B.Sc. or a B.A. degree or equivalent in good standing will be permitted to register for the Diploma through the Faculty of Agricultural and Environmental Sciences, the Faculty of Arts, or the Faculty of Science, provided they are otherwise acceptable for admission to the University.

Advising Note:

Consultation with the Program Adviser for approval of course selection to meet program requirements is obligatory. All courses must be at the 200 level and above, and completed with a grade of C or better.

\section*{Required Courses ( \(\mathbf{1 8}\) credits)}

The core ENVR courses are offered on both campuses. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 301 & (3) & Environmental Research Design \\
ENVR 400 & (3) & Environmental Thought
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits of complementary courses are selected as follows:
3 credits - selected with the approval of the Program Adviser in an area outside of the student's previous degree (e.g., those with a B.A. or equivalent degree must take at least 3 credits in the natural sciences; those with a B.Sc. or equivalent degree must take at least 3 credits in the social sciences). A list of Suggested Courses is given below.

9 credits - in an area of focus chosen by the student with the approval of the Program Adviser. At least 6 credits must be taken at the 400 level or higher. A list of Suggested Courses is given below.

\section*{Suggested Course List}

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.
Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.
This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Program Adviser.
Some courses on the Suggested Course List may be subject to other regulations (e.g., the Restricted Courses List for Faculty of Science students). If in doubt, ask the Program Adviser.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Social Sciences and Policy}
\begin{tabular}{lcl} 
AGEC 231 & (3) & Economic Systems of Agriculture \\
AGEC 333 & (3) & Resource Economics \\
AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
AGEC 442 & (3) & Economics of International Agricultural Development \\
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
ANTH 206 & (3) & Environment and Culture \\
ANTH 212 & (3) & Anthropology of Development \\
ANTH 339 & (3) & Ecological Anthropology \\
ANTH 418 & (3) & Environment and Development \\
ANTH 512 & (3) & Political Ecology \\
ECON 205 & (3) & An Introduction to Political Economy \\
ECON 225 & (3) & Economics of the Environment \\
ECON 326 & (3) & Ecological Economics \\
ECON 347 & (3) & Economics of Climate Change \\
ECON 405 & (3) & Natural Resource Economics
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EDER 494 & (3) & Human Rights and Ethics in Practice \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline ENVR 400 & (3) & Environmental Thought \\
\hline ENVR 421 & (3) & Montreal: Environmental History and Sustainability \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 210 & (3) & Global Places and Peoples \\
\hline GEOG 216 & (3) & Geography of the World Economy \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 300 & (3) & Human Ecology in Geography \\
\hline GEOG 301 & (3) & Geography of Nunavut \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 303 & (3) & Health Geography \\
\hline GEOG 310 & (3) & Development and Livelihoods \\
\hline GEOG 370 & (3) & Protected Areas \\
\hline GEOG 403 & (3) & Global Health and Environmental Change \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline GEOG 423 & (3) & Dilemmas of Development \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline HIST 249 & (3) & Health and the Healer in Western History \\
\hline HIST 292 & (3) & History and the Environment \\
\hline NRSC 221 & (3) & Environment and Health \\
\hline PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
\hline PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
\hline PHIL 237 & (3) & Contemporary Moral Issues \\
\hline PHIL 334 & (3) & Ethical Theory \\
\hline PHIL 341 & (3) & Philosophy of Science 1 \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline PHIL 348 & (3) & Philosophy of Law 1 \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 350 & (3) & Global Environmental Politics \\
\hline POLI 412 & (3) & Canadian Voting/Public Opinion \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline POLI 474 & (3) & Inequality and Development \\
\hline PSYC 215 & (3) & Social Psychology \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 235 & (3) & Technology and Society \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
SOCI 254 & \((3)\) & Development and Underdevelopment \\
SOCI 307 & \((3)\) & Globalization \\
SOCI 365 & \((3)\) & Health and Development \\
SOCI 366 & \((3)\) & Neighborhoods and Inequality \\
SOCI 386 & \((3)\) & Contemporary Social Movements \\
URBP 201 & (3) & Planning the 21st Century City \\
URBP 504 & (3) & Planning for Active Transportation \\
URBP 506 & (3) & Environmental Policy and Planning \\
URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
URBP 551 & (3) & Urban Design and Planning \\
WCOM 314 & (3) & Communicating Science
\end{tabular}

\section*{Natural Sciences and Technology}
** Note: you may take LSCI 230 or MIMM 211, but not both; you may take ENVB 529 or GEOG 201, but not both; you may take one of BREE 217, CIVE 323 or GEOG 322; you may take BIOL 308 or ENVB 305, but not both; you may take BIOL 465 or WILD 421, but not both; you may take COMP 202 or COMP 204, but not both; you may take EPSC 201 or EPSC 233, but not both.
\begin{tabular}{lll} 
AGRI 340 & \((3)\) & Principles of Ecological Agriculture \\
ANSC 326 & \((3)\) & Fundamentals of Population Genetics \\
ANTH 311 & \((3)\) & Primate Behaviour and Ecology \\
ATOC 214 & \((3)\) & Introduction: Physics of the Atmosphere \\
ATOC 215 & (3) & Oceans, Weather and Climate \\
BIOL 240 & (3) & Monteregian Flora \\
BIOL 305 & (3) & Animal Diversity \\
BIOL \(308^{* *}\) & (3) & Ecological Dynamics \\
BIOL 310 & (3) & Biodiversity and Ecosystems \\
BIOL 342 & (3) & Global Change Biology of Aquatic Ecosystems \\
BIOL 418 & (3) & Freshwater Invertebrate Ecology \\
BIOL 432 & (3) & Limnology \\
BIOL 436 & (3) & Evolution and Society \\
BIOL \(465^{* *}\) & (3) & Conservation Biology \\
BREE \(217^{* *}\) & (3) & Hydrology and Water Resources \\
BREE 322 & (3) & Organic Waste Management \\
ENVE 327 & (3) 210 & (3)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ENVB 305** & (3) & Population and Community Ecology \\
\hline ENVB 410 & (3) & Ecosystem Ecology \\
\hline ENVB 415 & (3) & Ecosystem Management \\
\hline ENVB 529** & (3) & GIS for Natural Resource Management \\
\hline ENVR 200 & (3) & The Global Environment \\
\hline ENVR 202 & (3) & The Evolving Earth \\
\hline ENVR 422 & (3) & Montreal Urban Sustainability Analysis \\
\hline EPSC 201** & (3) & Understanding Planet Earth \\
\hline EPSC \(233 * *\) & (3) & Earth and Life History \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 201** & (3) & Introductory Geo-Information Science \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322** & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 470 & (3) & Wetlands \\
\hline GEOG 550 & (3) & Historical Ecology Techniques \\
\hline LSCI 230** & (3) & Introductory Microbiology \\
\hline MICR 331 & (3) & Microbial Ecology \\
\hline MIME 320 & (3) & Extraction of Energy Resources \\
\hline MIMM 211** & (3) & Introductory Microbiology \\
\hline MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline NRSC 333 & (3) & Pollution and Bioremediation \\
\hline PARA 410 & (3) & Environment and Infection \\
\hline PARA 515 & (3) & Water, Health and Sanitation \\
\hline PHYS 228 & (3) & Energy and the Environment \\
\hline PLNT 304 & (3) & Biology of Fungi \\
\hline PLNT 305 & (3) & Plant Pathology \\
\hline PLNT 358 & (3) & Flowering Plant Diversity \\
\hline PLNT 460 & (3) & Plant Ecology \\
\hline SOIL 300 & (3) & Geosystems \\
\hline WILD 302 & (3) & Fish Ecology \\
\hline WILD 421** & (3) & Wildlife Conservation \\
\hline
\end{tabular}

\section*{8 Faculty of Law}

\subsection*{8.1 Legal Education at McGill}

\section*{We do legal education like nobody else}

Proudly bilingual, rigorously pluralistic, the McGill Law program breaks the mould for legal education in our fast-paced, globalized world. No other law program reaches further. The McGill program ensures that students gain a cosmopolitan understanding of the law that is not confined to specific jurisdictions or legal traditions.

Legal education at McGill explores concepts and ideas through a comparative, integrated lens that is unique around the world.
The McGill curriculum features multiple opportunities for problem-based learning, translation of knowledge into action, and the development of skills that are critical to engaged, effective, and enlightened jurists.

\section*{An integrated education}
1. Designed to work across the traditional boundaries of first-year coursework.
2. Offered in French and English.
3. That builds on an expertise in the civil law and common law, broadened to include other legal traditions, including better understandings of Indigenous law, as well as cutting-edge scholarship in alternate dispute resolution.

\section*{A focus on problem-solving}
1. Students work in small groups to tackle issues in legal methodology and ethics, empirical research, and policy analysis.
2. A revised semester timetable makes space for one-week intensive teaching on specialized topics during the fall and winter terms.

\section*{Innovative pedagogy that flips the script and}
1. Allows you to take the lead in your own education.
2. Uses technology in modernized classrooms to enhance participation and critical reflection.

The original and critical vision that characterizes legal education at McGill is a springboard for those whose ideas will inspire legal leadership for global challenges.
Above all, the Faculty prides itself on developing agile thinkers, conscientious citizens, and globally oriented, forward-looking jurists for the 21 st century.
McGill Law. It's a world-class move.

\subsection*{8.1.1 Location}

Chancellor Day Hall
3644 Peel Street
Montreal QC H3A 1W9
Canada
Telephone: 514-398-6666
Website: mcgill.ca/law

\section*{Undergraduate Admissions}

3644 Peel Street, Room 418
New Chancellor Day Hall
Montreal QC H3A 1W9
Telephone: 514-398-6602
Email: admissions.law@mcgill.ca

\section*{Graduate Admissions}

3644 Peel Street, Room 406
New Chancellor Day Hall
Montreal QC H3A 1W9
Telephone: 514-398-6635
Email: grad.law@mcgill.ca

\subsection*{8.2 Faculty Governance and Academic Regulations}

As the delegate of the Senate of McGill University, the Faculty Council is the principal academic policy-making body within the Faculty of Law. It has either direct or advisory authority over all matters relating to undergraduate admissions, curriculum, examinations, graduate studies, library, and staff appointments.

\subsection*{8.2.1 Faculty Council}

The Faculty Council operates through a committee system and meets on average once per month during teaching terms.
Faculty Council is composed of all members of the full-time teaching staff and undergraduate and graduate students representing one-fifth of its total membership. When considering the admission, evaluation, and Standing of students, and when dealing with the recruitment and terms of contract of members of the academic staff, the Faculty Council is composed solely of members of the full-time teaching staff.

\subsection*{8.2.2 Outline of Academic Regulations}

This publication and the Faculty Regulations in force govern students registered in the Faculty of Law during the 2024-2025 academic year. As well, students are subject to changes published in this publication from time to time within the Faculty before Fall registration.
These Regulations, and all others under which the curriculum is administered, are subject to change at any time.

\subsection*{8.2.2.1 Academic Standing}

Academic Standing is determined under a credit system as set out in the Faculty Academic Regulations contained in the Registration Materials published each academic year. This publication, which is posted on the Student Affairs Office website, mcgill.ca/law-studies/courses, prior to registration opening on Minerva in May, contains the detailed Regulations for the McGill Program. The Faculty is also governed by the University Code of Student Conduct and Disciplinary Procedures, found in McGill's Handbook on Student Rights and Responsibilities available at mcgill.ca/students/srr.

\subsection*{8.2.2.2 Academic Requirements}

To be eligible for a Faculty degree, you must complete the required number of credits for that degree within five years of your initial registration in the program, unless you have been granted a leave of absence by the Dean or the Dean's delegate (Regulation 5), or unless you have received permission to pursue your degree on a part-time basis (Regulation 53).
You are not permitted to be enrolled concurrently in a Faculty of Law program and the professional training program of any Bar, whether this program consists of a course of lectures or a period of articling (Regulation 4).
Full-time students at the Faculty must register for at least 12 credits each term, with the exception of your final term, if fewer credits are required to obtain your degree (Regulation 3). You will not receive credit for any course taken to fulfil the requirements of any other degree (Regulation 10).

You should anticipate at least two hours of directed study for every hour of lecture. In addition, you are obliged to write essays, attend seminars, participate in the Legal Methodology Program, and fulfil all other Faculty requirements. You are expected to devote your whole time to your legal studies, and must not undertake other studies during the academic session without prior approval of the Dean or the Dean's delegate.
The Faculty generally follows the University Examination Regulations, and evaluates all students anonymously (Regulations 19 and 22). Examinations and other assignments may be written in either English or French. Examinations are set in the language in which a course is given, but may contain materials in either French or English (Regulation 20).

If you do not pass a session, you will be required to withdraw from the Faculty, subject to your right to apply for readmission to the Faculty (Regulations 49 and 50). For more information, see mcgill.ca/law-studies.

\subsection*{8.3 Admission to the Legal Profession}

The Faculty's Career Development Office (CDO) endeavours to maintain up-to-date information on Bar admission requirements for jurisdictions of interest to the majority of students graduating from the Faculty. However, it is the student's responsibility to ensure that they have fulfilled all requirements of the Bar to which they are applying, including pre-law educational requirements.

\subsection*{8.3.1 Admission to the Legal Profession: Canada}

Information on the following Bars/Law Societies can be obtained by consulting their websites. For information on the National Committee on Accreditation, which oversees the transfer from one provincial bar to another, visit the Federation of Law Societies of Canada's website: www.flsc.ca. Transfer to the Quebec Bar is managed by the Comités des équivalences: www.barreau.qc.ca/fr/ordre/historique.

Barreau du Québec: www.barreau.qc.ca
Chambre des notaires du Québec: www.cnq.org
École du-Barreau du Québec: www.ecoledubarreau.qc.ca
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Law Society of Alberta: www.lawsociety.ab.ca
Law Society of British Columbia: www.lawsociety.bc.ca
Law Society of Manitoba: www.lawsociety.mb.ca
Law Society of New Brunswick: www.lawsociety-barreau.nb.ca
Law Society of Newfoundland: www.lawsociety.nf.ca
Law Society of the Northwest Territories: www.lawsociety.nt.ca
Law Society of Nunavut: www.lawsociety.nu.ca
Law Society of Prince Edward Island: www.lawsocietypei.ca
Law Society of Saskatchewan: www.lawsociety.sk.ca
Law Society of Ontario: www.lso.ca
Law Society of Yukon: www.lawsocietyyukon.com
Nova Scotia Barristers' Society: nsbs.org

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\subsection*{8.3.2 Admission to the Legal Profession: The United States}

The J.D. degree is an approved law degree in some U.S. jurisdictions (i.e., NY and MA), and is accepted as the equivalent of a degree in law from an accredited U.S. law school in those jurisdictions. This approval means that McGill graduates may proceed through the Bar admission process in those jurisdictions in the same way as their U.S. counterparts, subject to a "Foreign Legal Education Evaluation" process for the New York Bar.

You can obtain information on the Bar examinations of New York and Massachusetts by consulting the following websites:
The Massachusetts Board of Bar Examiners: http://www.mass.gov/orgs/massachusetts-board-of-bar-examiners.
The New York State Board of Law Examiners: www.nybarexam.org.
In addition to requiring a recognized law degree, some states require specific pre-law studies in order for a candidate to be eligible to sit state Bar exams. Students contemplating practice in the United States should ensure as early as possible that they will meet the Bar admission requirements of the jurisdiction in which they intend to practise. Further information on a number of jurisdictions is available in the Career Development Office's online resources.

\subsection*{8.4 Career Development Office}

The programs offered by the Faculty of Law prepare students for a wide array of careers in the practice of law and related fields. To enable its graduates to take full advantage of opportunities available to them, the Faculty provides career counselling through its Career Development Office (CDO). With the assistance of a career advisor and an Associate, the Director of the Office-a faculty graduate and lawyer with experience in private practice in Toronto and Montreal and in the provincial public sector-oversees all career development activities, which include assisting students with their search for summer employment and articling positions.

Career development communications, activities, and programs also provide students with information about the various types of career opportunities open to them after graduation.

The CDO also assists employers with their search for candidates by giving them access to myFuture, where they can post positions for free, by organizing on-campus interviews, and by inviting employers to various events.

\subsection*{8.4.1 Resource Centre}

The Resource Centre of the Career Development Office (CDO) houses publications related to job search strategies, diversity, employer types, and much more! The CDO also maintains a website full of publications, information, and resources. Students regularly use the online job search tool myFuture to research employment opportunities in the legal sector and other fields.

Further information is available on the \(C D O\) website and the myFuture tool.

\subsection*{8.4.2 On-Campus Recruitment}

The Career Development Office (CDO; mcgill.ca/cdo) coordinates various recruitment processes throughout the year. Four of these involve On-Campus Interviews (OCIs): one for U.S. employers (August), one for Vancouver and Calgary employers (September), one for Toronto employers (October), and one for Ottawa employers (January). Students can also take part in organized recruitment processes for other major cities in Canada.

Montreal recruitment is called Course aux stages. During this recruitment period, local firms conduct interviews at their offices. The CDO provides step-by-step support to participants.

\subsection*{8.4.3 Career Days}

The Career Development Office (CDO; mcgill.ca/cdo) organizes six career days annually: one exploring the different career paths a law degree leads to, one for public interest employers from all over the country, one for Ottawa employers, one for Montreal employers, one for Toronto employers, and one for U.S. employers. Several legal employers visit the Faculty of Law to speak to students about the opportunities available at their law firm or government
organization. During Public Interest Career Day, which is held in November, guest speakers and panellists discuss opportunities for law graduates in various public interest fields.

\subsection*{8.4.4 Training Programs and Publications}

The Career Development Office (CDO; mcgill.ca/cdo) provides materials and organizes seminars on how to pursue a career in law and related areas. Individual counselling is provided to assist students in their search for employment. Special newsletters for participants of various organized recruitment processes provide step-by-step tips, reminders, and resources. Students can also request a mock interview to prepare for a meeting with a potential employer.

Furthermore, the CDO is pleased to offer several panel discussions and networking events throughout the year at which practitioners and alumni discuss their area of specialization with students. Through these events and others, the CDO supports and promotes student employment opportunities in Quebec, elsewhere in Canada, and abroad.

The CDO publishes various guides to assist students with their preparations for life beyond the Faculty of Law.

\subsection*{8.5 Nahum Gelber Law Library}

The Law Library is a state-of-the-art facility with a collection of over 220,000 volumes and online resources covering Canadian, foreign, and international law. The collection supports the Faculty of Law undergraduate transsystemic program, graduate courses, and the Faculty of Law research centres with particular focuses on air and space law; comparative law; private and public international law; human rights law; intellectual property; and international trade law. The collection also covers mixed jurisdictions, and some aspects of Talmudic and Islamic Law. It also has legal materials from other common law and civil law jurisdictions such as Great Britain, France, and the United States.

The Peter Marshall Laing Special Collections Room houses the Wainwright Collection of French law from the ancien régime, and other rare books in Canadian and English Law. Other collections of note include an extensive collection of French legal theses and the John Humphrey United Nations Collection.

The Dobrin-Steinberg Computer Instruction Classroom, when not in use for legal research workshops, may be used by McGill students for personal research. In addition, wireless network access is available throughout the building, as well as colour printers and scanning facilities. Other facilities include six Moot Team Preparation Rooms for the exclusive use of competitive moot teams representing the Faculty of Law, cubicles, carrels, and three group study rooms for use by McGill Law students.

For complete information on the Nahum Gelber Law Library please visit our website: mcgill.ca/library/branches/law.

\subsection*{8.6 Research Centres}

Two research institutes are affiliated to the Faculty of Law: the Institute of Comparative Law (ICL); and the Institute of Air and Space Law (IASL).
The Faculty of Law also supports several semi-independent research centres:
- the Centre for Human Rights and Legal Pluralism;
- the Centre for Intellectual Property Policy;
- the Centre for Research in Air and Space Law;
- the Paul-André Crépeau Centre for Private and Comparative Law.

\subsection*{8.6.1 Centre for Human Rights and Legal Pluralism}

This Centre is a focal point for innovative legal and interdisciplinary research, dialogue, and outreach on human rights and legal pluralism. The Centre's mission is to provide students, professors, and the larger community with a locus of intellectual resources and experiential opportunities for engaging critically with the impact that law has on some of the most compelling social problems of our era.

Further information is available on the Centre's website.

\subsection*{8.6.2 Centre for Intellectual Property Policy}

This Centre was founded in 2003 under the auspices of the Faculty of Law. The goal of the Centre is to explore new perspectives on intellectual property.
Researchers affiliated with the Centre come from a variety of disciplines such as law, management, philosophy, ethics, science, and economics. They study how governments, researchers, and industry manage new and old technologies, and balance the concerns of technology users, technology creators, and citizens. The Centre also regularly holds conferences and workshops on a variety of topics related to intellectual property and innovation.

\subsection*{8.6.3 Centre for Research in Air and Space Law}

This Centre is the principal research and educational outreach arm of McGill's Institute of Air and Space Law (established in 1951), which provides the core degree-granting educational program. The Centre for Research in Air and Space Law produces research; publishes books and other literature; and offers educational products around the world. Since its birth, the Centre has published numerous monographic studies, symposia proceedings, reports, and books,
and has produced workshops, seminars, and conferences in Montreal and various international venues. In recent years, Centre researchers have undertaken studies addressing the following topics:
- International Aviation Policy
- Peaceful Uses of Outer Space
- Assessing Outer Space Security
- Outer Space Resources
- Governance of Commercialized Air Navigation Services
- International Air Carrier Liability

Since 1976, the Centre for Research in Air and Space Law has published the Annals of Air and Space Law, a specialized journal devoted to promoting scholarship in the field of air and space law. Published every year as a hardcover book, the Annals of Air and Space Law is among the premier periodicals in its field. The Centre has also published several other books and reports in recent years, and held seminars and conferences in Montreal, Bogota, Dubai, Macau, New Delhi, Brussels, Abu Dhabi, Cologne, Singapore, London, Amsterdam, and Dublin.

Further information is available on the Centre's website.

\subsection*{8.6.4 Paul-André Crépeau Centre for Private and Comparative Law}

The Paul-André Crépeau Centre for Private and Comparative Law was founded in 1975 and conducts research in the field of comparative private law, with a special focus on jurilinguistics, i.e., the relationship between law and language. The Centre produces historical and critical editions of the Civil Codes and an ongoing multi-volume Treatise of Quebec Civil Law. The Centre has also published a series of volumes making up the Private Law Dictionary / Dictionnaire de droit privé, along with associated bilingual lexicons; these are world-renowned authorities on the vocabulary of the civil law in English and French. The new dictionary project focuses on the law of successions as a continuation of the individual volumes which cover the law of obligations, property, and family. The Centre sponsors the Civil Law Workshops at the Faculty, which are designed to explore the foundations of the civil law tradition and further explore new theoretical understandings of private law, of which many have led to published collections of scholarly texts. It also serves as the focus for research relating to the implications for legal knowledge of the Faculty's ground-breaking program of transsystemism.

Further information is available on the Centre's website.

\subsection*{8.7 Overview of Undergraduate Degrees Offered}

Our undergraduate Law program integrates the Civil Law and the Juris Doctor. Consequently, students in the undergraduate program obtain a double degree of Civil Law (B.C.L.) and Juris Doctor (J.D.). Students may enrich their program with one of our minor, major, or honours programs, or take one of our joint degree programs in Management or Social Work. Students can also go on exchange through our Student Exchange Program, take non-course credits and outside credits, or put their learning in practice through our various internship programs.

\subsection*{8.7.1 McGill B.C.L./J.D. Program}

The Faculty of Law's unique integrated program leads to graduation with both Civil Law and Juris Doctor degrees (B.C.L./J.D.).
McGill Law students are introduced to "transsystemic" teaching in the first year of the program; fundamental concepts of the civil law and Juris Doctor traditions are studied within a single course. This unique method of instruction fosters analytical ability, critical reflection, and openness to diverse approaches to legal problems. Students in the McGill program must complete 105 credits. Most students take three-and-a-half or four years to complete the program. It is possible, however, to complete the program in three years by taking additional credits over the summer and by carrying heavier course loads in second and third years.

Due to the demanding nature of the B.C.L./J.D. Program, the Faculty does not permit students to be registered in our B.C.L./J.D. Program and another university program concurrently. In addition, the Faculty does not permit students to register in our program on a part-time basis with a view to completing other programs of studies while taking courses in our Faculty. Furthermore, the Faculty does not permit students to take leave from our program in order to complete a graduate program.

\subsection*{8.7.2 M.B.A./Law Program}

This joint program, Master of Business Administration (M.B.A.) with integrated Bachelor of Civil Law/Juris Doctor (B.C.L./J.D.) is offered by the Faculty of Law and the Desautels Faculty of Management.

Candidates interested in pursuing this program must submit separate applications to the Faculty of Law and to the Desautels Faculty of Management M.B.A. program. Information about the M.B.A./Law program is available at mcgill.ca/law-studies/bcljd-studies/joint\#MBA.

\subsection*{8.7.3 M.S.W./Law Program}

This joint program, Master of Social Work (M.S.W.) with integrated Bachelor of Civil Law/Juris Doctor (B.C.L./J.D.) is offered by the Faculty of Law and the School of Social Work.

Candidates interested in pursuing this program must submit separate applications to the Faculty of Law and to the School of Social Work M.S.W. program. Information about the M.S.W./Law program is available at mcgill.ca/law-studies/bcljd-studies/joint\#MSW.

\subsection*{8.8 Undergraduate Admissions Policy and Application Procedures}

In this section you will find information on our admissions policy, requirements, categories of applicants, deadlines, supporting documents for application, and the application procedures.

\subsection*{8.8.1 Admissions Policy}

The Faculty's admissions policy is to select applicants who are best suited to studying law in McGill's uniquely comparative, transsystemic, and bilingual environment. Diversity and excellence are essential to our Faculty. Indeed, our Faculty's excellence is based on its diversity.

Our admissions process is holistic, meaning that reviewers look at all aspects of an application to get a sense of the candidate as a whole. Committee reviewers assess the applicant's academic record, linguistic abilities, personal motivations for studying law, extracurricular, community, or professional activities, and letters of reference (see Supporting Documents).

In addition, applicants must demonstrate substantial reading ability in, and oral comprehension of, both English and French (see section 8.8.1.2: Language Requirements).
The Admissions Committee is looking for applicants who have the ability to succeed academically in our rigorous academic program, as well as indicators of intellectual curiosity, community engagement, insight (cultural, economic, political, social, and otherwise), leadership skills, ability to work with others, openness to diversity, maturity, ethical sense, and judgement, and potential for development through opportunity or adversity, among other criteria. We do not use GPA or LSAT cut-offs, and we do not have quotas for categories of applicants.
We seek to create a diverse community of learners drawn from across Quebec, Canada, and beyond, in which there is a wide range of career aspirations, backgrounds, and life experiences. This approach contributes to the rich and dynamic learning environment for which McGill Law has become known.

The Faculty of Law is committed to equity and diversity. We welcome applications from Indigenous peoples, people with disabilities, racialized people, 2SLGBTQ+ people, women, people from an economically disadvantaged background, and others who may face systemic barriers that impact their access to education.

The B.C.L./J.D. is a limited enrolment program for which admission is competitive. Each year the Faculty admits approximately 180 new students. The number of applications is approximately eight times greater than the number of available places. Unfortunately, every year we must refuse many qualified candidates due to lack of space in the program.

Files are reviewed by the Admissions Office and the Faculty's Admissions Committee, which is composed of full-time faculty members appointed by the Dean; four senior law students selected by the Law Students' Association Executive; the Assistant Dean, Inclusion - Black and Indigenous Flourishing; and the Assistant Dean, Admissions and Recruitment.

\subsection*{8.8.1.1 Educational Requirements}

Candidates must have a minimum of 60 credits of university studies, or a Diploma of College Studies (DCS) from a Quebec College of General and Professional Education (CEGEP), before starting their law studies. Students with a French Baccalaureate from Quebec (Collège international Marie de France or Collège Stanislas) are also eligible to apply.

Candidates from a French Baccalaureate program completed outside of Quebec, International Baccalaureate programs, or who are finishing high school are not eligible to apply.

Admission to the program is highly competitive. Almost all students admitted in the "University" category will have completed an undergraduate degree before starting our B.C.L./J.D. program.

In our holistic review process, there are no minimum thresholds for GPA, LSAT score, nor R-score. While the numerical aspects of the applicant's file are not, in themselves, decisive, students admitted to McGill Law, nonetheless, tend to have outstanding academic records, in addition to their other qualities. Applicants may consult the statistics on our website for a sense of how their academic indicators may impact the likelihood of admission.

Note: Candidates admitted directly from CEGEP or a Quebec French Baccalaureate who are interested in practising in the United States should be aware that bar admission requirements in a number of states include studies at the university level before studying law.

Note: Applicants are not eligible to apply directly from a French Baccalaureate program completed outside of Quebec or from high school. Applicants must meet the eligibility requirement mentioned above.

\subsection*{8.8.1.2 Language Requirements}

McGill's BCL/JD program is offered in a bilingual (French and English) environment. Candidates must demonstrate that they are at least passively bilingual, which means that they have at a minimum an advanced proficiency in one language and an advanced intermediate level of reading and oral comprehension in another. The Faculty uses the standards set in the Common European Framework of Reference for Languages to evaluate language proficiency, and expects candidates to meet one of the following sets of minimal standards:
- C1 proficiency in English and a B2 level in reading and oral comprehension in French; or
- C1 proficiency in French and B2 level of reading and oral comprehension in English.

Passive bilingualism is a minimum requirement, not a competitive admissions asset.
The Faculty's policy of passive bilingualism permits students to submit written work, write exams, and ask questions in class in either English or French, regardless of the language of instruction. Students may fulfil their Moot Court requirements in English or French. First-year courses are offered in English and French, and a number of upper-year courses are offered in one language only. While examination questions are set in the language in which a course is given, any examination may contain extensive passages in either French or English. Due to space limitations, it is not always possible for students to be registered in courses given in their preferred language. Almost all first-year students will be registered in at least one class in a French section.

If no evidence of passive bilingualism in French or English appears in the application, the candidate will be refused admission.
To demonstrate that they meet bilingualism requirements, candidates must indicate in their application how they acquired both English and French. They must also submit transcripts from any post-secondary English and French language courses they have taken. The Admissions Committee reviews each candidate's CV and references to take into account work or volunteering experiences in each language.

In order to get a sense of the level of reading comprehension that is expected of McGill Law students, candidates are encouraged to visit the website of the Supreme Court of Canada and to read judgments in English and in French.
Candidates intending to proceed to the Bar of Quebec or the Board of Notaries of Quebec should carefully review University Regulations and Resources > Undergraduate > Admission to Professional and Graduate Studies > section 1.10.1: Language Requirements for Professions. The Charter of the French Language imposes certain mandatory language requirements on attorneys and notaries who practise in Quebec.

Please visit the Faculty of Law Eligibility page for more information on our language testing, conditional admissions, demonstration of bilingualism, and exemptions.

\subsection*{8.8.1.3 Indigenous Applicants}

McGill Law is committed to recruiting and supporting Indigenous students and we welcome dialogue with prospective BCL/JD applicants. First Nations (Status, Non-Status), Inuit, Métis, or Indigenous persons with ties to Turtle Island are strongly encouraged to apply to the Faculty of Law and are invited to self-identify on their application form. For more information on this applicant category and rationale for this category, please visit the Indigenous Applicants page. Indigenous applicants retain the option of applying to the other applicant categories instead of applying to the Indigenous applicant category. If they elect to do so, they must follow the instructions and deadlines for applying to these categories.
Self-identification allows McGill to inform Indigenous students of specific services and funding opportunities and to assess our progress in the recruitment and retention of Indigenous students.

\section*{Linguistic Support}

We acknowledge that our bilingualism admission requirement may represent an added challenge for some Indigenous applicants for whom English or French may be their third language, and potentially perceived as a colonizing influence. Applicants are encouraged not to exclude themselves from applying on linguistic grounds, and are encouraged to speak with us regarding any concerns on this point. Financial support is available to admitted Indigenous candidates who wish to improve their abilities in English or French before starting the program and to continue to address a relative weakness in English or French during legal studies here. This program is generously supported by the McCarthy Tétrault Fund for Language Training. Please contact us to find out more!

\section*{Indigenous Student Financial Assistance}

McGill has established a funding program for Indigenous students, made possible in part by Indspire, an Indigenous-led registered charity that invests in the education of Indigenous peoples of Canada.

\section*{Indigenous Research and Experiential Opportunities}

McGill offers Indigenous students the opportunity to study and complete research with a wide range of legal scholars in English and French. The Faculty is host to a vibrant Indigenous Law Association and the Indigenous Human Rights Initiatives. McGill also gives Indigenous students the possibility to acquire practical experience working at the Legal Clinic at Kahnawà:ke, to participate in the Faculty's L.E.X. (Law-Éducation-Connexion) program with the Kahnawà:ke Survival School, as well as the chance to participate in the national Kawaskimhon Moot or to complete a Minor at McGill in Indigenous Studies. Students can apply to partake in a term away at the Indigenous Peoples Law \& Policy Program at the University of Arizona, and the Intensive Program in Indigenous Lands, Resources \& Governments at York University's Osgoode Hall Law School. In 2022, McGill Law partnered with the Treaty Relations Commission of Manitoba to offer as a pilot project a month-long Anishinaabe Law Field School. For more information on various opportunities for Indigenous students at the Faculty and at McGill University, please visit our Indigenous Initiatives page.

Indigenous students may be eligible for numerous sources of financial support.

\section*{First Peoples' House}

McGill's First Peoples' House provides a sense of community and a voice for Indigenous students who have left their communities to study at McGill. A "home away from home", First Peoples' House offers a mentorship program, computer facilities, guest lectures, elder visits, academic counselling, an ever expanding resource centre, as well as student housing.

\section*{Indigenous Law Centre Programming}

The Indigenous Law Centre at the University of Saskatchewan offers a curriculum and programming that aims to facilitate access to legal education for Indigenous peoples, to promote the development of the law and the legal system in Canada in ways which better accommodate the advancement of Indigenous peoples and communities, and to disseminate information concerning Indigenous peoples and the law. We encourage all incoming Indigenous students to explore the opportunities available at the Indigenous Law Centre before beginning their legal studies.

\subsection*{8.8.1.4 Honesty and Integrity of Applicants}

McGill University and the Faculty of Law value honesty and integrity. Applicants to the Faculty of Law are expected to conduct themselves accordingly. The submission of false, incomplete, inconsistent, or misleading information, or any omission that may result in a false or misleading conclusion, constitutes
misconduct in the admission process. Instances of such misconduct include, as examples: the submission of a personal statement that was not written by the applicant, and failure to disclose an LSAT score.

A finding of misconduct in the application process may lead to a refusal or, if an offer of admission has already been extended, a withdrawal of the offer at the sole discretion of the University. Intent is not an element of a finding of misconduct.

As a member school of the Law School Admissions Council (LSAC), McGill's Faculty of Law reserves the right to report any misconduct to the LSAC's Misconduct and Irregularities in the Admissions Process Subcommittee for its investigation.

\subsection*{8.8.2 Application Process for BCL/JD Degree Program}

Law at McGill is a limited enrolment program. Apply as early as possible and ensure that we have received all required supporting documents on or before the appropriate deadline. Files are reviewed only when complete.

\subsection*{8.8.2.1 Online Application}

Candidates must apply to the BCL/JD program online. The online application is available as of September 1. In order to avoid unnecessary processing delays, please read the application instructions carefully. Please email the Law Admissions Office at the Faculty of Law if you are unable to apply online (transfer applicants).

Once you have applied, an acknowledgment notice will be sent to the email address indicated on your application within 48 hours. If you have not received your acknowledgment notice within 48 hours following the submission of your application, you should contact the Admissions Office at the Faculty of Law admissions.law@mcgill.ca).

\subsection*{8.8.2.2 Verifying the Status of Your Application in the Applicant Portal}

After submitting the application, you can log into the Applicant Portal, where you can monitor the status of your application. As your supporting documents are received and recorded, consult the admissions checklist to see which documents (if any) are missing, incomplete, or illegible. Consult your admissions checklist regularly as new items might be requested to complete your file. It is important to respond to requests for further documentation in a timely manner.
You are responsible for monitoring the status of your application on the Applicant Portal. A status of "Provide supporting documents" means that your application is incomplete. If your application remains incomplete after the deadline for submission of supporting documents, your application will be cancelled. However, your application will not be cancelled if only your LSAT score is missing after the deadline. If you plan on writing the LSAT, your application status will remain "Items outstanding" until we get your score, after which your file will be reviewed by the Admissions Committee.
An indication of "In review" means that your file is complete and/or under review by the Admissions Committee. Your status will remain "In review" until a final decision is rendered.
During peak periods (i.e., close to deadlines), the we receive a high volume of documents. At those times, there may be a delay of up to 48 hours between when a document is received and when it is verified on the Applicant Portal. Taking this delay into consideration, please contact the BCL/JD Admissions Office only if your file remains incomplete 48 hours past the deadline.

You must upload supporting documents via the Applicant Portal after completing the online application and receiving the application submission notification email. Please see the instructions for uploading the supporting documents at mcgill.ca/admissions/checklist-information on the Applying to McGill website.

\subsection*{8.8.2.3 Review of Applications}

Once an application is complete, it is circulated for review. Reviewers carefully assess all documents submitted and evaluate the candidacy according to the Faculty's Admissions Policy, and in comparison to all other candidates in the applicant pool.

\subsection*{8.8.2.4 Admission Decisions}

Applicants receive an email from the Admissions Office when a decision has been rendered. Final decisions are available in the Applicant Portal. Decisions are never disclosed over the phone.
Every effort is made to inform candidates of the decision at the earliest possible date. However, the review process is labour-intensive and may extend into June. Final decisions on waitlisted applicants may be made until the end of August.

\subsection*{8.8.2.5 Application Fee}

A non-refundable application fee is required for application to the BCL/JD program. For current fee information, please visit the Student Accounts website. A credit card (Visa, MasterCard, or American Express only) is required to complete the online application form. McGill's highly secured e-payment service minimizes cardholder risk. Your credit card information is passed instantly to the Moneris payment gateway and is not stored at McGill. Moneris handles \(80 \%\) of all credit card transactions processed in Canada.

\subsection*{8.8.2.6 Applicant Categories}

Applicant categories leading to BCL/JD degree (September entrance only)
- section 8.8.2.6.1: University Applicants
- section 8.8.2.6.2: Mature Applicants
- section 8.8.2.6.3: CEGEP and Quebec French Baccalaureate (Collège international Marie de France and Collège Stanislas) Applicants
- section 8.8.2.6.4: Advanced Standing Students
- section 8.8.2.6.5: Transfer Students
- section 8.8.1.3: Indigenous Applicants

\section*{Applicant categories not leading to BCL/JD degree (September or January entrance)}
- \(\quad\) section 8.8.2.6.7: Visiting Students (Letters of Permission)
- section 8.8.2.6.8: Incoming Exchange Students
- section 8.8.2.6.6: Comité des équivalences
- section 8.8.2.6.9: Special Students

\subsection*{8.8.2.6.1 University Applicants}

A University applicant to McGill's Faculty of Law must be on track to complete their degree or have a minimum of 60 credits of undergraduate studies before starting their law studies. This category includes applicants who, at time of registration, will have completed more than 30 credits in addition to a Diploma of College Studies (DCS).

While candidates who have completed 60 credits are eligible to apply to the B.C.L./J.D. program, applicants who are not on track to complete their degree before starting their law studies are unlikely to be offered admission.

\subsection*{8.8.2.6.2 Mature Applicants}

Mature applicants are those who have interrupted their formal education for a minimum of five years. This includes anyone who has finished a university degree five (or more) years ago, or anyone who has taken time off between degrees or during their post-secondary studies, as long as the time off adds up to five (or more) years. It does not have to be five consecutive years out of school. Applicants who qualify as mature will be automatically placed in this category based on the academic history they have provided in the application form.

There is no predetermined number of Mature candidates admitted in a given year. Mature applicants are evaluated according to the same criteria and standards of excellence as any other applicant, with particular attention being paid to professional activities. Mature applicants must meet the educational requirements, set for all candidates, as outlined in the Education requirements page. Mature applicants who are regarded as potentially admissible following a review of their file may be required to attend an interview.

\subsection*{8.8.2.6.3 CEGEP and Quebec French Baccalaureate (Collège international Marie de France and Collège Stanislas) Applicants}

Candidates may apply on the basis of a Diploma of College Studies (DCS) from a CEGEP, or a Quebec French Baccalaureate (QFB). This category includes candidates who will have completed up to 30 credits of university studies in addition to the DCS or QFB at the time of registration.
Only candidates completing French Baccalaureate Programs in Quebec at Collèges international Marie de France and Stanislas are eligible to apply. Any French Baccalaureate programs from outside Quebec do not meet the eligibility requirements. Candidates who will have completed a French Baccalaureate or an International Baccalaureate Diploma outside the province of Quebec, must have completed a minimum of two years of full-time university studies ( 60 credits) at the time of registration to be eligible to apply to our program.
- CEGEP/QFB candidates are not eligible to apply to the joint degree programs.
- CEGEP/QFB candidates who are regarded as potentially admissible following review of their file are required to attend an interview.
- Candidates admitted directly from CEGEP or a Quebec French Baccalaureate, who are interested in practicing in the United States, should be aware that Bar admission requirements in a number of US states requires studies at the university level before studying law.

\subsection*{8.8.2.6.4 Advanced Standing Students}

Applicants who hold a law degree from a Canadian or foreign university recognized by McGill must apply for admission to the BCL/JD program under the Advanced Standing category, unless applying under the Comité des équivalences category (see section 8.8.2.6.6: Comité des équivalences). There are a limited number of places available for Advanced Standing applicants. Applications are evaluated using the same criteria as applications to the first year of the BCL/JD program, with particular attention to performance in law studies.

As a general rule, Advanced Standing candidates have completed a law degree which would allow them to sit the Bar exam for the same jurisdiction as the one in which they completed their studies and/or would be admissible to graduate programs in law. Advanced Standing candidates applying from the French educational system must have a license (licence en droit); candidates holding only a DEUG are not eligible.
Successful applicants must complete a minimum of 75 credits at McGill and graduate from the integrated BCL/JD program. In most cases, Advanced Standing students will be required to complete the required private law courses that are taught transsystemically-Property, Contractual Obligations, and Extra-Contractual Obligations/Torts-in order to meet McGill's degree requirements. It is not possible to obtain either the BCL or the JD degree on its own. The Associate Dean (Academic) determines equivalences for previous studies.

\subsection*{8.8.2.6.5 Transfer Students}

Students who have successfully completed at least one year of full-time studies in an undergraduate program at another Canadian law faculty may apply for admission as a Transfer student. There are a limited number of places available for Transfer students. Transfer applications are evaluated according to the criteria for admission to the first year of the BCL/JD program. Particular attention is paid to performance in law studies and reasons for requesting a transfer.
Successful transfer applicants must complete a minimum of 75 credits at McGill (roughly 2.5 years). The Associate Dean (Academic) determines credit for previous studies. In most cases, Transfer Students must take the required private law courses that are taught transsystemically-Property, Contractual Obligations, and Extra-Contractual Obligations/Torts-in order to meet McGill's degree requirements. Candidates will not receive credit for courses in property, obligations, contracts, or torts taken during the first year completed at another law faculty.
- Transfer students should forward transcripts of Winter term results as soon as they become available. Transfer applications cannot be evaluated without these results.
- Candidates who have completed a certificate in law are not eligible to apply under the Transfer category. These candidates must apply in the category of University, Mature, or CEGEP. Courses completed in a certificate in law program cannot be credited toward a McGill law degree.
- Students who are not in good standing or who have been required to withdraw at the end of their first year at another Canadian law faculty are not eligible to transfer to McGill.
- The online application is available from September 1 until November 1 for this category, even though the deadline for submitting an application is May 1. To submit a paper application under this category after November 1, please contact admissions.law@mcgill.ca.

\subsection*{8.8.2.6.6 Comité des équivalences}

The Faculty accepts applications from candidates who hold a law degree from a Canadian or foreign university recognized by McGill and who are seeking to fulfil the requirements of the Comité des équivalences of the Barreau du Québec or of the Chambre des notaires, in order to practice in Quebec. Successful applicants must have the final decision of the Comité des équivalences of the Barreau or the Chambre des notaires in hand at the time of registration. Candidates must submit their equivalency application from the Barreau du Québec or the Chambre des notaires before our deadline for supporting documents.

Please note that:
- This is a non-degree program. Courses taken by Comité des équivalences students cannot be credited toward a McGill law degree. Students wishing to obtain the BCL/JD degrees should apply under the section 8.8.2.6.4: Advanced Standing Students category.
- The Faculty does not consider candidates applying to fulfil the requirements of the National Committee on Accreditation.

\subsection*{8.8.2.6.7 Visiting Students (Letters of Permission)}

Students who have completed two years of studies at another law faculty who wish, for academic or personal reasons, to spend a term at McGill may be admitted as a Visiting Student. The Faculty endeavours to accommodate qualified students who are in good standing in their own faculties, where student numbers at McGill permit.

Students from other law faculties who would like to attend McGill as a Visiting Student must apply through the Admissions Office. Their application must include a Letter of Permission from their home university. The Director (Student Life and Learning) makes decisions on these applications. Accepted students must arrange their academic program with the Director (Student Life and Learning).
- This is a non-degree program. Courses taken by Visiting Students cannot be credited toward a McGill law degree.

\subsection*{8.8.2.6.8 Incoming Exchange Students}

Students registered in degree programs in law at universities that have an official exchange agreement with McGill University or with the Faculty of Law may apply as Exchange students. In addition, McGill participates in a number of exchange programs through BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ). McGill's exchange partners are listed on McGill University's website.

Candidates in this category must fill out the online application form. There is no application fee.
Exchange students are selected and officially nominated by their home universities. Please note that home university internal application deadlines may vary. McGill considers applicants on an individual basis; the minimum entrance requirement is generally a cumulative B average or its equivalent. Decisions on applications for exchange are made by the Director, Student Life and Learning at the Faculty of Law. Admission decisions on exchange applications are final.

The Faculty has a limited number of places for Exchange students, and entrance into courses which have enrolment limits or require the permission of the instructor is not guaranteed.

Note: This is a non-degree program. Courses taken by Exchange students cannot be credited toward a McGill law degree.

\subsection*{8.8.2.6.9 Special Students}

The Faculty will exceptionally permit a limited number of candidates not actively pursuing a law degree to apply as Special Students. Students registered in other universities, and candidates not actively pursuing a university degree, may apply to take certain courses within the Faculty.
Special Student status will be granted to applicants who provide compelling academic or professional reasons for taking law courses and who successfully demonstrate the capacity to undertake the requirements of the requested course(s). Status will be granted only where sufficient course space is available.

Special Students are limited to a maximum of 6 credits per term, and to 12 credits in total.

\section*{Important information about this category:}
- McGill students registered in a faculty other than law, who, for exceptional reasons related to their program of study, wish to enrol in a Faculty of Law course, must obtain the permission of the Associate Dean (Academic) and the course instructor. Such students need not fill out the online application. The Application to register for law courses for McGill students form is available on the Law Student Affairs Office website.
- Students registered in other Quebec universities who wish to take certain courses within the Faculty must apply through BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ). Such students need not fill out the online application.
- This is a non-degree program. Courses taken by Special Students will not be credited toward a McGill law degree.
- Students wishing to obtain a McGill law degree and students recently refused admission to a degree program in the Faculty of Law will not be admitted as Special Students.
- The Faculty does not consider Special Student applications from candidates seeking to fulfil the requirements of the National Committee on Accreditation.

The list of courses offered by the Faculty of Law is available from the Student Affairs Office website at mcgill.ca/law-studies/courses/current.
Note: All mandatory undergraduate courses for the BCL/JD program (see list below) and graduate courses (600 level) are not open to Special Students:
- LAWG 100D1/D2 Contractual Obligations
- LAWG 101D1/D2 Extra-Contractual Obligations/Torts
- LAWG 102D1/D2 Criminal Justice
- LAWG 110D1/D2 Integration Workshop
- LAWG 210 Legal Ethics and Professionalism
- LAWG 220D1/D2 Property
- PRAC 200 Advocacy
- PROC 124 Judicial Institutions and Civil Procedure
- PUB2 101D1/D2 Constitutional Law
- PUB3 116 Foundations

In addition, the following undergraduate complementary courses are not open to Special Students:
- PROC 200 Advanced Civil Law Obligations
- PRV3 200 Advanced Common Law Obligations

\subsection*{8.8.2.7 Application Deadlines for Law Undergraduate Programs}

The online application is available as of September 1. Deadlines vary by applicant category. Applicants must take the time to identify the category in which they must apply. Applicants are responsible for ensuring that the online application is completed by the deadlines indicated below and that all supporting documents are uploaded via McGill' Applicant Portal by the deadlines listed below. Instructions on uploading documents can be found at section 8.8.2.8: Application Supporting Documents. With the exception of references (which must be submitted in accordance with specific instructions for referees) and some transcripts, all supporting documents must be uploaded via Applicant Portal.

Deadlines must be respected. Late applications are not accepted. There are no exceptions. Applicants are strongly encouraged to apply and submit all required supporting documents as early in the process as possible and in advance of their relevant deadlines.
Incomplete applications will not be circulated to the Admissions Committee. Incomplete applications will be cancelled the day following the supporting document submission deadlines.

Please refer to section 8.8.2.6: Applicant Categories in order to determine which deadline applies to you.
Note: First-year, Transfer, and Advanced-Standing students may only enter the program in September.
\begin{tabular}{lll} 
First Year (Fall) & Online Application Deadlines & Supporting Document Deadlines \\
University & November 1 & November 8 \\
Mature & November 1 & November 8 \\
CEGEP/Baccalaureate (Collège international Marie & March 1 & March 7 \\
de France and Collège Stanislas) & & \\
Applicants to Upper Years & Online Application Deadlines & Supporting Document Deadlines \\
Advanced Standing (Fall) & November 1 & January 15 \\
Transfer (Fall) & May 1 & June 15 \\
Comité des équivalences (Fall entrance) & May 1 & July 1 \\
Chambre des notaires (Fall entrance) & May 1 & July 1 \\
Special (Fall entrance) & August 1 & August 8 \\
Visiting (Fall and/or Winter) & May 1 & June 15 \\
Incoming Exchange (Winter) & September 15 & October 1 \\
Incoming Exchange (Fall) & April 15 & May 1 \\
Comité des équivalences (Winter entrance) & October 1 & December 1 \\
Chambre des notaires (Winter entrance) & October 1 & December 1 \\
Special (Winter entrance) & December 1 & December 8
\end{tabular}

\subsection*{8.8.2.8 Application Supporting Documents}

Applicants must upload supporting documents via the Applicant Portal after having completed the online application (after having received the acknowledgment notice via email). Not all documents may be uploaded in the Applicant Portal. See section 8.8.2.8.1: Uploading Supporting Documents below.
Supporting documents required for all applicant categories (unless otherwise indicated):
- section 8.8.2.8.3: Transcripts
- section 8.8.2.8.4: Personal Statement
- section 8.8.2.8.6: CV
- section 8.8.2.8.7: References (not required for Exchange students)
- Letter of permission/nomination (Visiting and Exchange students only)
- Final decision from the Comité des équivalences of the Barreau du Québec or the Chambre des notaires du Québec (Comité des équivalences applicants only)
- Photocopy of passport (Exchange students only)

The Admissions Office will obtain LSAT results directly from the Law School Admission Council for those candidates who have taken, or plan to take, the LSAT.

After completing the online application, candidates must ensure that required supporting documents are uploaded via the Applicant Portal. In the Applicant Portal, an application checklist will show candidates the status of their file. Candidates must consult their checklist regularly as this is where the Admissions Office will update their file and indicate if more, or revised, information is needed.
During peak periods (i.e., close to deadlines), the volume of document intake is extremely high (over 1,300 applications yearly) and there may be a delay of up to 48 hours between the receipt of a document and the date on which it is recorded in our information system. Taking this delay into consideration, candidates should contact the Admissions Office only if their file remains incomplete 48 hours past the deadline for supporting documents.

Documents submitted to McGill University in support of an application to be admitted-including, but not limited to, transcripts, diplomas, references, and test scores (in paper or electronic format)—become the property of McGill University and will not be returned to the applicant or forwarded to another institution.

\subsection*{8.8.2.8.1 Uploading Supporting Documents}

You must upload your supporting documents rather than mailing them. Uploading your documents saves you time, effort, and the expense of mailing transcripts and supporting documents to us. It prevents delays normally incurred in the processing of paper documentation, allows you to associate your documents with the correct application and requirement, and assures that your documents have been received.

Only one version of the Personal Statement the Extenuating Circumstances form and the CV is accepted. Candidates must ensure that they have uploaded the correct version of these documents. Candidates may submit updated transcripts and must contact the Admissions Office to do so.

Only required supporting documents will be added to a candidate's file. Please refrain from sending other items, as these will not be considered as part of the admission file.

Please see the instructions at mcgill.ca/undergraduate-admissions/apply/submit-application/step-step-guide. Documents that have been successfully uploaded to an application should not be sent by mail.

\subsection*{8.8.2.8.2 Mailing Supporting Documents}

Documents that have been successfully uploaded to an application should not be sent by mail. Below is the address for supporting documents, if submitting in person, by mail, or courier (for documents that cannot be uploaded):
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Law Admissions Office
Faculty of Law
McGill University
New Chancellor Day Hall, Room }41
3644 Peel Street
Montreal QC H3A 1W9
Canada

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Submit your documents as early as possible. The Admissions Committee only reviews files once complete. Only required supporting documents will be added to your file. Please refrain from sending other items, as these will not be considered part of your admission file.
Inquiries about supporting documents should be directed to:
Telephone: 514-398-6602
Email: admissions.law@mcgill.ca
Website: mcgill.ca/law/bcl-jd

\subsection*{8.8.2.8.3 Transcripts}

Applicants must submit a complete academic record from all previous post-secondary studies, as well as subsequent transcripts until the applicant has received the Admissions Committee's final decision.

Applicants have three different ways to submit their transcripts:
1. Transcripts for studies undertaken in Quebec universities may be submitted electronically via the BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ) system. Applicants have to contact the registrar of their home university and ask for this arrangement.
2. All other transcripts must be uploaded via Applicant Portal. Transcripts received in this manner are considered unofficial. Applicants will only be asked for official transcripts if and when offered admission to the program. Our offer of admission will be contingent upon the receipt and verification of these official documents. If you have uploaded unofficial transcripts, you are not required to submit official transcripts until we request them from you.
3. If submitting official transcripts, to be considered official, these must be submitted in an envelope sealed by the Office of the Registrar of the issuing institution. If your institution offers the option of sending official e-transcripts to McGill, the email address to use is: officialschooldocs@mcgill.ca.This email address is for the reception of official transcripts and/or proof of graduation only and must be sent to us directly from the institution, or third party service provider (i.e., Parchment, NSC, Digitary).

Scanning your transcript - Make sure that the page orientation of the scanned document matches the original. For example, transcripts that are printed vertically (portrait) should be scanned so that they appear in portrait format. Transcripts printed horizontally (landscape) should appear in landscape format.

Note: McGill University reserves the right to require official academic credentials at any time during the admissions process, and rescind any offer of admission made if discrepancies between unofficial and official transcript(s) are found.
It is the applicant's responsibility to ensure that all required transcripts are submitted as early as possible.
1. BCI transcripts: Applicants need not submit paper-based official transcripts of studies undertaken in Quebec universities to the Admissions Office if these transcripts are submitted electronically via the BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ) system. Transcripts submitted via the BCI system are considered official.
2. McGill transcripts: Transcripts for studies at McGill are obtained by the Admissions office directly from McGill's Enrolment Services. Applicants who participated in an exchange during their program at McGill must submit a transcript for their exchange grades.
3. Exchange, Visiting, or Independent studies transcripts: Applicants must submit transcripts for results in studies carried out while on exchange or visiting another university, unless the grades as well as the credits obtained are already included on transcripts issued by their home university. Exchange programs should be indicated in the University History form of the online application.
4. Transcripts not in French or English: Transcripts in a language other than English or French must be accompanied by an English or French translation provided either by the school issuing the transcript or by a certified translator.
5. CEGEP transcripts (Permanent Code): Applicants who are currently, or have been, enrolled at a CEGEP must provide their Permanent Code. Starting mid-October each year, McGill will obtain official CEGEP transcripts electronically from the Government of Quebec. The processing of applications for applicants who are currently, or have been, enrolled at a CEGEP will not take place until a valid Permanent Code is provided.
6. Quebec French Baccalaureate: Applicants in Quebec French Baccalaureate programs must submit official transcripts.
7. Official Electronic Transcripts: More and more institutions offer the option to send official e-transcripts. The email address to use when requesting e-transcripts be sent to McGill is: officialschooldocs@mcgill.ca. This email address is for the reception of official transcripts and/or proof of graduation only and must be sent to us directly from the institution or 3 rd party service provider (e.g., Parchment, NSC, Digitary).
8. Winter term transcripts for Transfer students: Transfer students should forward the official transcript of their Winter term results as soon as they become available. Transfer applications cannot be evaluated without these results.
9. Transcripts will not be returned: Transcripts sent to McGill become the property of the University and will not be returned or forwarded to other institutions.
10. Law School Data Assembly Service and Ontario Law School Application Service (OLSAS): The Faculty of Law at McGill does not receive transcripts through the Law School Data Assembly Service or through OLSAS.
11. French or English language courses: Applicants should report in the University History form (or the Quebec Collegial Studies from) of the online application any courses taken, outside a degree program, which would contribute to their language competency and submit a transcript or certificate of completion.

\subsection*{8.8.2.8.4 Personal Statement}

Applicants must submit a 750-word essay referred to as a Personal Statement.

\section*{What is the purpose of the Personal Statement?}

The Personal Statement is your moment to showcase the unique aspects of your motivations, your background, and your personality that make you a compelling candidate for our program.
The Admissions Committee relies on the Personal Statement to understand the factors that motivate you to pursue a legal education, the particular meaning that the study of law holds for you, and the reasons for your interest in our program. In addition, your Personal Statement shows the Admissions Committee your writing style, your ability to present your ideas in English and/or French, and your maturity and judgment as shown through your writing.

\section*{What is the Admissions Committee looking for in reading your Personal Statement?}

The Admissions Committee is interested in hearing why you want to study law, why you are interested in McGill in particular, and what you will bring to our learning community. The Committee looks for indicators of intellectual curiosity, community engagement, political/social insight, leadership skills, ability to work with others, openness to diversity (cultural, linguistic, and otherwise), maturity, judgment, and potential for development through opportunity or adversity.

We strongly encourage applicants belonging to an equity-deserving group to include information in their Personal Statements on how their personal circumstances, life experience, work, community involvement, and extra-curricular activities relate to their desire and preparation to study law at McGill University.

The Personal Statement must be a product of your own reflection. We truly value a wide range of backgrounds, identities, and future aspirations. Whether you wish to become a practising lawyer or you have other ideas about your career path following a legal education, your application, and specifically your Personal Statement, should show thoughtful consideration of your reasons for studying law, and at our Faculty in particular.

\section*{Practical tips}

Read our Admissions Policy to get a sense of what we look for in our students.
Before writing, reflect critically on your motivations, your interests, and your convictions, and their connection to our program. Do some research on our law faculty and others. Law faculties all tend to have their own strengths and particularities. Doing some research may help you identify and articulate why you are interested in studying at McGill in particular.
The Personal Statement should not be used as a vehicle for narrating or repeating your CV. You have a limited amount of writing space; make it count. Do not repeat aspects of your candidacy that the Committee will see in other documents unless these aspects are directly linked to your interest in studying law at McGill. Be authentic. Be yourself. Don't be afraid to be original, but be careful not to sacrifice substance.

You may submit your Personal Statement in English, French, or both. It is important that you write the statement in whatever of the two language(s) you are most comfortable expressing yourself. It is not recommended to use the Personal Statement as a way to establish your bilingualism unless you are very comfortable expressing yourself in the other language.
Importantly, make sure that your Personal Statement follows our formatting guidelines (see below) and that it has grammatical integrity. Only one submission of the Personal Statement is accepted so it is important to submit the Personal Statement in its final version of both format and substance. Indigenous applicants are invited to submit additional documentation in addition to the Personal Statement. Please see the Indigenous Applicants page for more information.

\section*{Format}

The format of the Personal Statement must adhere to the following basic characteristics:
- Maximum of 750 words (include a word count at the end of your Personal Statement).
- Indicate your name and McGill ID (found in the acknowledgment notice) at the top right corner of all pages.
- Candidates who have applied to the Faculty in the past must submit a new Personal Statement with any new application. Re-applicants who make no substantive changes to their Personal Statement from one application to the next are unlikely to be viewed as competitive.

\subsection*{8.8.2.8.5 Extenuating Circumstances}

If an applicant has experienced any serious medical or personal difficulty(ies) that have had an impact on their academic performance as demonstrated in their official transcripts, for a defined period of time (including the manner in which they have completed their degree requirements), they may complete an extenuating circumstances form to support their application.
The review of requests for consideration of extenuating circumstances by the Admissions Office will be guided by the following factors:
1. The credibility of the circumstances, including supporting official or objective documentation provided;
2. The time-frame of the circumstances (defined start and end dates);
3. The connection between the described circumstances and the applicant's academic performance (specific semesters or courses which were affected).

Where an applicant's circumstances are determined to be credible, circumscribed in time, and having had an impact on academic performance, the Admissions Office will determine what-if any—adjustments can be made to the overall academic evaluation in light of the circumstances. The standard adjustment could be (but is not limited to) assessing academic performance using available records, but excluding those elements affected by the extenuating circumstances. Whether and to what extent adjustments will be made is at the discretion of the Office and its decisions in this regard are final.

\subsection*{8.8.2.8.5.1 Format}

Applicants wishing to declare extenuating circumstances should do so in the application. They will be prompted to complete the extenuating circumstances form, which will be added as a checklist item. The extenuating circumstances form should be accompanied by supporting documentation (where applicable). Please limit supporting documents to two pages maximum. Only one version is accepted. Updates and additional documents sent by mail will not be included.

\subsection*{8.8.2.8.6 CV}

Applicants are required to submit a CV highlighting:
- academic background and achievements;
- work experience;
- volunteer and community work;
- extracurricular activities;
- sports, hobbies, and other significant interests; and
- language skills.

The CV assists the Admissions Committee in its assessment of a candidate's academic strength, depth of involvement in extra-curricular activities, leadership, and time management skills.

Note: We strongly encourage you to indicate the number of hours worked during your studies, as well as the time commitment involved in your volunteer and community activities. It is in applicants' interest to share with the Admissions Committee their academic and non-academic contributions and distinctions. Any and all work experience is relevant.

Re-application: Candidates who have applied to the Faculty of Law in previous years are required to submit an updated CV.

\subsection*{8.8.2.8.6.1 Format}

While you may format your CV in any way that best presents your information, the CV must conform to the two-page maximum. The Admissions Committee will not read beyond the two-page limit.

Please visit the Supporting Documents page of the Faculty of Law Admissions Guide if you wish to use our optional CV template: mcgill.ca/law/bcl-jd/admissions-guide/supporting-documents.

\subsection*{8.8.2.8.7 References}

Two (2) references are required. The Admissions Committee does not accept additional references.
Applicants must indicate the two chosen referees in the first and second fields of the Referee Information section of the online application. An automated email will be sent to the provided referees, containing instructions to fill in the form and upload their reference letters directly onto our application platform. Only forms received from the two chosen referees will be inserted in the candidate's file. If you wish to make a referee substitution, you may do so until the deadline to submit Supporting Documents. In this case, please follow the instructions in the Applicant Portal.

Those applying under the optional category for Indigenous Applicants should visit the Indigenous Applicant page for more information about selecting references.

Applicants who are students, or who have recently completed programs of study, are expected to provide academic references from current or recent professors or teachers who are familiar with their work. Applicants in the CEGEP and Quebec French Baccalaureate (Collège international Marie de France and Collège Stanislas) category are expected to submit two references from CEGEP or college professors.

Applicants who are unable to obtain academic references because they are no longer students should submit references from individuals who are well placed to evaluate the applicant's academic abilities such as critical reading, research, and writing; these may be professional references, but ought to be from a person who is in a supervisory position vis-à-vis the applicant.

It is highly recommended that candidates also review the instructions and form for referees to think of referees who might best be able to respond to the questions asked.

\section*{Personal references are not helpful.}

Note: The Law Admissions Office does not contact your referees to solicit their references.

\subsection*{8.8.2.8.7.1 Requirements}

McGill will request references on your behalf from referees you identified on the application form. Referees will receive the instructions on how to submit the reference form. The reference form must be sent from a valid institutional or corporate email address. Forms sent from generic accounts such as Hotmail, Gmail, Yahoo, Sympatico, Videotron, etc. will be refused.

The candidate must inform their referees what category of admission they are applying under. It is the candidate's responsibility to ensure that Reference forms are received by the Admissions Office by the applicable deadline.

The Admissions Office does not confirm receipt of references with the referee via email. Applicants are instead encouraged to verify the status of their documents via their Supporting Documents Checklist in the Applicant Portal.

\section*{Re-applicants}

Starting in the 2024-2025 admissions cycle, re-applicants must identify all referees in the Recommendations section of the online application, which will automatically send the referees the reference form. While re-applicants are welcome to identify the same referees as in a past application, the referees should be informed that they will need to submit a new form.

\subsection*{8.8.2.8.8 Law School Admission Test (LSAT)}

Applicants are not required to take the LSAT. However, if a candidate has taken or will be taking the LSAT, the score will be considered. Applicants who have taken or will be taking the test must report the date(s) of sitting(s) and provide their LSAT identification number in the appropriate places on the application. They must do so regardless of whether the LSAT may, in their own estimation, strengthen or weaken their candidacy.

Note: Candidates must advise the Faculty of Law Admissions Office in writing of any change regarding the registration to the LSAT when the change occurs after the submission of the application form. If the candidate is writing the LSAT, the file will be circulated for review by the Admissions Committee only when all pending LSAT results are received.

\subsection*{8.8.2.8.8.1 Consequences of Failure to Disclose}

The Faculty of Law may revoke an offer of admission or cancel an application at any time for material misrepresentation, including omissions, in an application. Although the LSAT is not a mandatory element in an application for admission, every applicant who has taken or will be taking it must disclose their LSAT information and failure to do so is a material misrepresentation. The Admissions Office conducts random verifications for LSAT scores throughout the admissions process and a systematic verification with respect to candidates who receive an offer of admission. These verifications have, in the past, resulted in the revocation of offers of admission.
8.8.2.8.8.1.1 Why does the Faculty of Law not require the LSAT?

The Faculty of Law is a bilingual learning environment. We believe it would be disadvantageous to the significant proportion of applicants and admitted students who indicate French as a first language to require, as a matter of eligibility, a test that is offered only in English.
8.8.2.8.8.1.2 Who should take the LSAT?

While it is not required, it may nevertheless be advisable for many candidates to consider writing the LSAT. Admission to McGill's Law program is highly competitive; there are roughly eight times as many applicants as there are available places in the first-year class. Accordingly, candidates are strongly encouraged to apply for admission to a number of faculties of law. Almost all faculties of law outside Quebec (with the exception of the Civil Law program at the University of Ottawa and the French Common Law programs at the University of Moncton and the University of Ottawa) require the LSAT.

The quality of McGill's applicant pool is exceptionally strong. Among admitted students, the average entering GPA is a 3.8 on a 4.0 scale (about an \(85 \%\) average). Applicants with academic records below this average GPA or percentile are encouraged to consider writing the LSAT.

If you are considering writing the LSAT only to improve your application to McGill Law, it will be important to assess how the results could impact the strength of your application. It is also important to note that if you write the LSAT more than once, McGill Law takes your average score. Based on an average of incoming classes in recent years, the average LSAT result of those entering the McGill program is 162 , with \(50 \%\) of the entering class with a score between 160 and \(164,25 \%\) being between 150 and 160 , and \(25 \%\) being above 164 .

\subsection*{8.8.2.8.8.1.3 When should I write the LSAT?}

Candidates should write the LSAT by November of the year prior to the year for which they seek admission. Candidates who register for the November LSAT should be aware that consideration of their file will be delayed until receipt of the score.
Applications from candidates who register for the January LSAT of the year for which they seek admission will be reviewed by the Admissions Committee only when all required elements, including the January LSAT score, are received. Given the passing of several months since the application deadline, candidates who register for the January LSAT risk that, by the time the Committee reviews their application, there will no longer be a place to offer even if the Committee wishes to admit.

For candidates who write the LSAT in November or January following the application deadline, the status of their application will appear as "Items outstanding" until such a time as the Admissions Office receives their LSAT results from LSAC.

\subsection*{8.8.2.8.8.1.4 Processing of LSAT Results}

The Admissions Office obtains test results directly from the Law School Admission Council (LSAC). Applicants whose service with the Law School Admission Council has expired must reactivate their service in order to enable the Admissions Office to obtain their LSAT score.
McGill University does not administer the LSAT. Applicants who wish to register for the LSAT must do so directly with Law School Admission Council.
For additional information, see the LSAT section of our FAQ.

\subsection*{8.9 Exchange and Study Abroad Options}

For more information, see the Study Abroad \& Field Studies section.
The Faculty of Law has a strong exchange program with partnerships with leading institutions around the world. Approximately \(25 \%\) of undergraduate law students participate in a study abroad program.
- If you are a McGill law student who is interested in participating in an exchange program, consult the Student Affairs Office website.
- If you are a law student from another institution who is interested in coming to McGill as part of an exchange program, see the Incoming Exchange \& Visiting Students website.

The Faculty of Law also offers students the opportunity to participate in credited summer Human Rights Internships. These internships are coordinated through the Centre for Human Rights and Legal Pluralism (CHRLP) and count for course credit. Details about the Human Rights Internships can be found at mcgill.ca/humanrights/clinical/internships. Please visit mcgill.ca/cdo for additional information on these opportunities and others.

\subsection*{8.10}

\section*{Student Activities and Services}

The Faculty of Law offers a wide variety of extracurricular activities for students. All are encouraged to participate. Many of these are organized within the Faculty under the auspices of the Law Students Association (LSA). The LSA website provides details regarding various student clubs: www.lsa-aed.ca. For more information on extracurricular activities and organizations, please visit mcgill.ca/law.

\subsection*{8.10.1 Clinical Legal Education at McGill Law}

The Faculty of Law is proud to offer a wide variety of Clinical Legal Education (CLE) opportunities that allow students to build valuable skills through experiential learning. B.C.L./J.D. students may take up to \(\mathbf{1 5}\) 'non-course" credits by participating in the International Human Rights Internship Program, Court Clerkships, Competitive Mooting, the Legal Clinic Course, Law Journals, and working as Legal Methodology Tutorial Leaders or Group Assistants for a professor. For additional information about each of the CLE opportunities available, please visit mcgill.ca/law-studies/bcljd-studies/clinical-legal-education.

\subsection*{8.10.2 Law Student Services}

\subsection*{8.10.2.1 Student Affairs Office}

The Student Affairs Office (SAO) is located in New Chancellor Day Hall, Room 433. The SAO is home to the Associate Dean (Academic); the Assistant Dean (Students) \& Dean's Lead, Black and Indigenous Flourishing; the Student Affairs Officer; two Student Advisors; a Senior Administrative \& Student

Affairs Coordinator; and two Students Affairs Coordinators. The members of the SAO are here to help students navigate the Law School at every point in their program.

The following SAO services and supports are available to all students at any point in their Law program.

\subsection*{8.10.2.2 Student Advising \& Support}

Students are encouraged to seek academic advice and support from the SAO throughout their academic career. If you are experiencing acute stress, struggling to maintain productivity, or not sleeping or eating well, dealing with financial problems or any other personal problem, support is available. Come by your SAO on the fourth floor or send your availabilities to sao.law@mcgill.ca to schedule an appointment with the Director (Student Life \& Learning) or one of our student advisors. For more information, see mcgill.ca/law-studies/information.

If you notice one of your classmates struggling, send them our way.
The SAO also provides academic advising related to registration, program planning, part-time status, leave of absence, exams, major program, honours program, minors, exchange program, clinical legal education, summer courses/programs, exam conflicts and deferrals, and much more.

\subsection*{8.10.2.3 Academic Accommodations}

Students may experience personal situations which may prevent them from writing an exam as scheduled, submitting a paper or assignment on time, or completing a course. There may be times when a student may require a more comprehensive academic plan due to illness or a disability. There are policies and procedures in place that provide options to assist a student. These options may include extensions, deferrals, attendance waiver, leave of absence, and/or part time studies. Requests for academic accommodations are directed to the Student Affairs Office rather than individual instructors. The SAO is available to meet with students to discuss ways to provide some flexibility in the program and to accommodate particular circumstances. Students must be prepared to provide supporting documentation when seeking accommodations. Please contact sao.law@mcgill.ca to arrange an appointment with an advisor. See the Academic Advising \& Support section of our website to find out about your advisors and how they can support you. For more information, see mcgill.ca/law-studies/information/academic-considerations.

The Student Accessibility \& Achievement also works with students who have documented disabilities, mental health issues, chronic health conditions, or other impairments. These may be temporary, permanent, or episodic. We encourage all students to book an appointment using ClockWork to discuss your barriers and to determine what resources or accommodations will help to make your time at McGill a success.

\subsection*{8.10.2.4 Scholarships and Financial Support}

The Faculty of Law offers a number of awards that acknowledge academic achievement and extra-curricular activities. Students are encouraged to review the prizes and scholarships available and direct any questions to the Student Affairs Office. For more information, see mcgill.ca/law-studies/financial-support/prizes.
The University's Scholarships and Student Aid Office also offers scholarships and financial aid to undergraduate students currently enrolled in full-time degree programs at McGill. The Scholarships and Student Aid Office administers the University's In-course Financial Aid Program. Financial Aid Counsellors are available to assess student need, decide on suitable aid amounts (non-repayable and payable), and guide students towards other forms of support such as government aid and on-campus work programs. For more information, see McGill's Scholarships and Student Aid website.

\subsection*{8.10.2.5 Student Wellness}

Law students have interests and responsibilities outside of the walls of Chancellor Day Hall. The SAO recognizes this and aims to help you balance your academic self with the other aspects of your life. Learning doesn't just happen in the classroom, but as a lifelong journey beyond law school! To promote wellness at the Faculty, the SAO provides workshops via the Academic Success Series, organizes wellness events throughout the year, and has a Student Wellness website dedicated to providing resources related to Healthy Body \& Mind, Financial Wellbeing, Volunteering, Students with Dependents, and the Mentorship Program.

Students may also reach out to a Local Wellness Advisors situated in the Faculty of Law for support. Local Wellness Advisors (LWAs) are Student Wellness Hub staff who are here to promote awareness, and facilitate prevention, and early intervention in their designated areas. LWAs offer wellness-related programming and will be available for one-on-one single session consultations. LWAs can also provide training to student groups who are interested in developing different skills (i.e., active listening, mental health awareness) and student wellness concerns.

\subsection*{8.10.3 Law Students' Association/Association des étudiant.e.s en droit}

The Law Students' Association was created on March 12, 1912. Before that time, law students were members exclusively of the Student Society of McGill University (SSMU). Since then, our membership has grown from 30 to about 600 . On May 4, 1992 the LSA was incorporated and continues to play a very active role in student life and student governance at various levels: Faculty, University, Provincial, and Federal. The LSA is the official student organization of the Faculty of Law of McGill University. We aim to represent your voice in the Faculty's administration as well as offering services, organizing events and supporting your projects. If you have any questions or suggestions, please come and see us in the LSA office in the basement of Old Chancellor Day Hall, write us an email, call us, or simply stop us in the halls. The LSA executive has nine members who represent law students. Every executive member is elected or acclaimed during end-of-year elections.
Further information is available on the \(L S A / A E ́ D\) website.

\subsection*{8.10.4 Student-Led Associations and Initiatives}
- section 8.10.4.1: Legal Information Clinic at McGill
- section 8.10.4.2: Contours
- section 8.10.4.3: Graduate Law Student Association
- section 8.10.4.4: Innocence McGill
- section 8.10.4.5: L.E.X. Program
- section 8.10.4.6: McGill Journal of Law and Health
- section 8.10.4.7: McGill Journal of Sustainable Development Law
- section 8.10.4.8: McGill Law Journal
- section 8.10.4.9: McGill Journal of Dispute Resolution
- section 8.10.4.10: Pro Bono Students Canada
- section 8.10.4.11: Quid Novi
- section 8.10.4.12: Skit Nite

\subsection*{8.10.4.1 Legal Information Clinic at McGill}

The Legal Information Clinic at McGill (LICM) is a non-profit, student-run, bilingual, and free legal information service. Our mandate is to provide legal information, referral and document certification services to the McGill and Montreal communities, with a continuing commitment to meeting the needs of marginalized groups. Students who have completed their first year at the Faculty of Law are eligible to volunteer, but all McGill students are entitled to receive our services for free! For further information, contact:
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Legal Information Clinic at McGill
SSMU Building
3 4 8 0 rue McTavish, Room 1 0 7
Montreal QC H3A 0E7
Telephone: 514-398-6792
Website: licm.ca

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\subsection*{8.10.4.2 Contours}

Contours is a project based at the McGill Faculty of Law that aims to map and shape the contours of debates, experiences, concerns, and aspirations through written and artistic exploration of the intersection of women and law. Founded in 2012, the student-run magazine is a space for women's voices and an invitation for us all to start a conversation. Contours is published annually and welcomes contributions in English and French from students and faculty. Nous accueillions des réponses argumentatives et émotionnelles, théoriques et expérientielles, par écrit et de l'art, parce que nous croyons que toutes ces formes d'expression sont utiles pour développer notre compréhension des intersections entre les femmes et le droit à différents niveaux.

\subsection*{8.10.4.3 Graduate Law Student Association}

The Graduate Law Students' Association (GLSA) is an Association with an Executive Board composed of five graduate students, who represent all Law graduate students at both the Faculty of Law and the Post-Graduate Students Society of McGill University (PGSS). All graduate students and postdoctoral fellows at the McGill Faculty of Law are members of the GLSA. The GLSA executives aim to improve the graduate student experience at McGill and advance your interests within the Faculty of Law. The GLSA holds seats at many Faculty committees, including Faculty Council, the Graduate Studies Committee and PGSS Council. The GLSA also organizes social, cultural, and academic events which provide students the opportunity to relax and socialize outside the classroom, and to discuss their research with their peers.

\subsection*{8.10.4.4 Innocence McGill}

Innocence McGill is a legal clinic based at McGill University's Faculty of Law and dedicated to researching and investigating claims of wrongful conviction for serious crimes in Quebec. Founded in 2005, we are a student-led and student-run organization with oversight by our supervising lawyer (a criminal defence attorney in Montreal) and our Faculty Advisor. Our ultimate goal is to help secure the freedom of those who are factually innocent of serious crimes for which they continue to serve sentences in Quebec prisons.

\subsection*{8.10.4.5 L.E.X. Program}

The Faculty's High School Outreach Program has been renamed to L.E.X. (Law - Éducation - Connexion) to better reflect its bilingual nature and priorities. L.E.X. gives law students and Montreal-area high school kids a chance to meet, interact with, and learn from each other. This initiative stems from our concern about Quebec's alarming high school dropout rates and about the fact that many underprivileged kids, as well as children of immigrants and visible minorities in Montreal, are under-represented in post-secondary and legal education. The L.E.X. Program reflects our view that the privileges enjoyed by the Faculty of Law and its students also bring responsibilities.

\subsection*{8.10.4.6 McGill Journal of Law and Health}

The McGill Journal of Law and Health (MJLH)/Revue de droit et santé de McGill (RDSM) is a peer-reviewed academic journal featuring literature from renowned academics and practitioners on current issues of law and policy relating to health. Publishing annually since 2007 on topics ranging from medical
practice and technology to intellectual property and medical ethics, the MJLH is a bilingual, student-run venture based at the Faculty of Law of McGill University, and operates within an interdisciplinary and transsystemic framework of legal scholarship.

\subsection*{8.10.4.7 McGill Journal of Sustainable Development Law}

The McGill Journal of Sustainable Development Law (MJSDL), formerly McGill International Journal of Sustainable Development Law and Policy (JSDLP), provides a forum in which the world's leading scholars exchange ideas on the intersection between law, development, the environment, economics, and society. Over the past quarter-century, determining how to enrich our world in a more sustainable fashion has become an imperative, especially given the impact of development on the environment and human rights. Despite this pressing need for new ideas, there are few outlets for informed and focussed commentary on sustainability, particularly in Canada. In response to this void, students at the Faculty of Law of McGill University established the MJSDL, a student-run, peer-reviewed academic journal, in 2004.

\subsection*{8.10.4.8 McGill Law Journal}

The McGill Law Journal was founded in 1952 by students at the Faculty of Law of McGill University. Since its establishment, the Journal has promoted the development of legal scholarship by providing content with broad appeal to an audience that includes professors of law, practicing lawyers, and law students. The Journal has consistently pursued this objective for six decades and continues to foster a more profound understanding of the common law and civil law legal traditions. Today the Journal is recognized as an important forum for the critical analysis of contemporary legal issues in the realms of public, private, and international law.

\subsection*{8.10.4.9 McGill Journal of Dispute Resolution}

The MDJR is a peer-reviewed academic journal founded in 2014 that publishes articles on domestic and international alternative dispute resolution ("ADR").

\subsection*{8.10.4.10 Pro Bono Students Canada}

Pro Bono Students Canada (PBSC) was founded in 1996 at the University of Toronto Faculty of Law. Since then, PBSC has expanded to have chapters in all 22 Canadian law schools. Each year across Canada, 1,600 PBSC law student volunteers provide approximately 140,000 hours of free legal services to over 400 public interest and other community organizations, courts, and tribunals. PBSC is the only national student program in Canada, the only national pro bono program in the country, and the only national pro bono service organization anywhere in the world. PBSC McGill began in 2000 and has been going strong since then. During the 2012-2013 school year, PBSC McGill had 91 law student volunteers who worked with and provided legal services to 32 different community organizations across Montreal.

\subsection*{8.10.4.11 Quid Novi}

Quid Novi is the weekly newspaper of the McGill Faculty of Law, and is published and financially supported by the Law Students' Association. It covers events and legal issues, both inside and outside the Faculty. Content ranges from wit and satire to investigative journalism, from poetry to front-page news stories, and from political commentary to humorous contests.

\subsection*{8.10.4.12 Skit Nite}

Skit Nite is an annual theatrical event produced and performed by law students. Comprising humorous vignettes of law school life and musical performances, the show has become the highlight of the Faculty social calendar. The primary purpose of the evening, however, is to raise money for worthy local causes. Skit Nite donates every year to several Montreal charities.

\subsection*{8.11 Scholarships, Prizes, and Student Aid for Undergraduate Students}

A complete list of undergraduate scholarships, bursaries, and other forms of financial assistance administered by the Scholarships and Student Aid Office (SSAO) is available in the Undergraduate Scholarships and Awards Calendar, which can be accessed at mcgill.ca/studentawards/undergraduate-scholarships-and-awards.
- Information and regulations governing entrance scholarships may be viewed at mcgill.ca/studentaid/scholarships-aid/future-undergrads/entrance-scholarships.
- Information and regulations pertaining to in-course awards are available at mcgill.ca/studentaid/scholarships-aid/current-undergrads.
- Information regarding the application process for discretionary prizes and scholarships awarded by the Faculty of Law Prizes and Scholarships Committee are available at mcgill.ca/law-studies/financial-support/prizes.
- For information on bursaries and loans, students should consult mcgill.ca/studentaid/scholarships-aid/future-undergrads/need.
- Details on the Work Study program are available at mcgill.ca/studentaid/work-study.

\subsection*{8.12 Undergraduate Program Requirements}

\section*{The McGill B.C.L/J.D Program}
section 8.12.1: Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) Law (105 credits)
section 8.12.2: Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) Honours Law (120 credits)
section 8.12.3: Bachelor of Law (B.C.L.) / Juris Doctor (J.D.) with Major Concentration Law with Major Concentration Commercial Negotiation and Dispute Resolution (123 credits)
section 8.12.4: Bachelor of Law (B.C.L.) / Juris Doctor (J.D.) with Major Concentration Law with Major International Human Rights and Development (123 credits)
section 8.12.5: Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) with Minor Law (with Minor) (123 credits)
section 8.12.7: Bachelor of Law (B.C.L.)/Juris Doctor (J.D.) \& Master of Social Work (M.S.W.) (Joint B.C.L./J.D \& M.S.W.) Law \& Social Work (Non-Thesis) ( 132 credits)

\subsection*{8.12.1 Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) Law (105 credits)}

At the Faculty of Law, students pursue an integrated program of studies which qualifies them for the Bar Admission Programs in all Canadian provinces. The Faculty grants concurrently both its degrees - Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) - to candidates who have successfully completed 105 credits.
Students should consult the Faculty website for updates: http://www.mcgill.ca/law-studies/.

\section*{Required Courses (47 credits)}

\section*{First Year}

The following 33 credits of courses may be taken only in the first year:
\begin{tabular}{lll} 
LAWG 100D1 & (3) & Contractual Obligations \\
LAWG 100D2 & (3) & Contractual Obligations \\
LAWG 101D1 & (3) & Extra-Contractual Obligations/Torts \\
LAWG 101D2 & (3) & Extra-Contractual Obligations/Torts \\
LAWG 102D1 & (3) & Criminal Justice \\
LAWG 102D2 & (3) & Criminal Justice \\
LAWG 103 & (3) & Indigenous Legal Traditions \\
LAWG 110D1 & (1.5) & Integration Workshop \\
LAWG 110D2 & (1.5) & Integration Workshop \\
PUB2 101D1 & (3) & Constitutional Law \\
PUB2 101D2 & (3) & Constitutional Law \\
PUB3 116 & (3) & Foundations
\end{tabular}

\section*{Second Year}

The following 13 credits of courses may be taken only in the second year:
\begin{tabular}{lcl} 
LAWG 210 & (3) & Legal Ethics and Professionalism \\
LAWG 220D1 & (3) & Property \\
LAWG 220D2 & (3) & Property \\
PROC 124 & (4) & Judicial Institutions and Civil Procedure
\end{tabular}

\section*{Any Year}

The following 1 credit course may be taken in any year after completing the first year:

Advocacy

\section*{Complementary Courses (12 credits)}

\section*{Civil Law Immersion Courses}

3 credits from the following list of civil law courses:
\begin{tabular}{lll} 
BUS2 561 & (3) & Insurance \\
LAWG 506 & (3) & Advanced Civil Law Property \\
PROC 200 & (3) & Advanced Civil Law Obligations \\
PROC 549 & (3) & Lease, Enterprise, Suretyship \\
PRV2 270 & (3) & Law of Persons \\
PRV4 548 & (3) & Administration Property of Another and Trusts
\end{tabular}

\section*{Common Law Immersion Courses}

3 credits from the following list of common law courses:
\begin{tabular}{lll} 
PRV3 200 & \((3)\) & Advanced Common Law Obligations \\
PRV3 534 & (3) & Remedies \\
PRV4 500 & (3) & Restitution \\
PRV4 549 & (3) & Equity and Trusts \\
PRV5 582 & (3) & Advanced Torts
\end{tabular}

Social Diversity, Human Rights and Indigenous Law Courses
Students must take at least 3 credits from the following courses:
\begin{tabular}{|c|c|c|}
\hline CMPL 500 & (3) & Indigenous Peoples and the State \\
\hline CMPL 504 & (3) & Feminist Legal Theory \\
\hline CMPL 511 & (3) & Social Diversity and Law \\
\hline CMPL 516 & (3) & International Development Law \\
\hline CMPL 565 & (3) & International Humanitarian Law \\
\hline CMPL 571 & (3) & International Law of Human Rights \\
\hline CMPL 573 & (3) & Civil Liberties \\
\hline CMPL 575 & (3) & Discrimination and the Law \\
\hline IDFC 500 & (3) & Indigenous Field Studies \\
\hline LAWG 503 & (3) & Inter-American Human Rights \\
\hline LAWG 505 & (3) & Critical Engagements with Human Rights \\
\hline LAWG 507 & (3) & Critical Race Theory Advanced Seminar \\
\hline LAWG 508D1 & (3) & Indigenous Constitutionalism \\
\hline LAWG 508D2 & (3) & Indigenous Constitutionalism \\
\hline LAWG 509 & (3) & Indigenous Law Revitalization \\
\hline LAWG 562 & (3) & Regulating Artificial Intelligence \\
\hline LAWG 580 & (3) & Women and Constitutions \\
\hline LAWG 582 & (3) & Disability Law and Policy \\
\hline LEEL 369 & (3) & Labour Law \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
LEEL 582 & (3) & Law and Poverty \\
PUB2 105 & (3) & Public International Law \\
PUB2 500 & (3) & Law and Psychiatry \\
PUB2 502 & (3) & International Criminal Law \\
PUB2 551 & (3) & Immigration and Refugee Law \\
PUB3 515 & (3) & Canadian Charter of Rights and Freedoms
\end{tabular}

Principles of Canadian Administrative Law
3 credits from the following courses:
\begin{tabular}{|c|c|c|}
\hline BUS1 532 & (3) & Bankruptcy and Insolvency \\
\hline BUS2 504 & (3) & Securities Regulation \\
\hline CMPL 539 & (3) & International Taxation \\
\hline CMPL 543 & (3) & Law and Practice of International Trade \\
\hline CMPL 574 & (3) & Government Control of Business \\
\hline CMPL 575 & (3) & Discrimination and the Law \\
\hline CMPL 577 & (3) & Communications Law \\
\hline CMPL 580 & (3) & Environment and the Law \\
\hline LAWG 523 & (3) & Tax Practice Seminar \\
\hline LAWG 561 & (3) & Privacy Law \\
\hline LAWG 581 & (3) & Health Care Delivery and the Law \\
\hline LAWG 583 & (3) & Public Health Law and Policy. \\
\hline LEEL 369 & (3) & Labour Law \\
\hline LEEL 570 & (3) & Employment Law \\
\hline LEEL 582 & (3) & Law and Poverty \\
\hline PRV4 545 & (3) & Land Use Planning \\
\hline PRV5 483 & (3) & Consumer Law \\
\hline PUB2 400 & (3) & The Administrative Process \\
\hline PUB2 401 & (3) & Judicial Review of Administrative Action \\
\hline PUB2 500 & (3) & Law and Psychiatry \\
\hline PUB2 515 & (3) & Tax Policy \\
\hline PUB2 551 & (3) & Immigration and Refugee Law \\
\hline
\end{tabular}

\section*{Elective Courses}

46 credits.
Students must take 46 other elective courses offered within the Faculty or approved as credit equivalences in order to complete the 105-credit degree requirement.

\section*{Minimum Writing Requirement}

All students are required to submit at least one research paper. This requirement may be satisfied by:
a) writing an essay in a course in which the essay constitutes no less than \(75 \%\) of the final grade;
b) writing a term essay under independent supervision, for credit, within the Faculty of Law;
c) writing an article, note, or comment of equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication.

Papers written jointly do not satisfy this requirement.

\subsection*{8.12.2 Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) Honours Law (120 credits)}

The B.C.L and J.D. with Honours program is open to students who have completed four terms of study at the Faculty of Law and who, during that time, have maintained a GPA of 3.0. Students must complete 15 credits of Honours Thesis courses in addition to the 105 credits required in the B.C.L and J.D. program. Conditional upon submission and approval of an Honours Thesis, students will be granted a B.C.L. and J.D. with Honours.
\begin{tabular}{lcc} 
Required - Honours Thesis Courses (15 credits) \\
WRIT 450 & (3) & Honours Thesis 1 \\
WRIT 451 & (6) & Honours Thesis 2 \\
WRIT 452 & (6) & Honours Thesis 3
\end{tabular}

\section*{Required Courses (47 credits)}

\section*{First Year}

The following 33 credits of courses may be taken only in the first year:
\begin{tabular}{lcl} 
LAWG 100D1 & (3) & Contractual Obligations \\
LAWG 100D2 & \((3)\) & Contractual Obligations \\
LAWG 101D1 & \((3)\) & Extra-Contractual Obligations/Torts \\
LAWG 101D2 & \((3)\) & Extra-Contractual Obligations/Torts \\
LAWG 102D1 & \((3)\) & Criminal Justice \\
LAWG 102D2 & \((3)\) & Criminal Justice \\
LAWG 103 & \((3)\) & Indigenous Legal Traditions \\
LAWG 110D1 & \((1.5)\) & Integration Workshop \\
LAWG 110D2 & \((1.5)\) & Integration Workshop \\
PUB2 101D1 & (3) & Constitutional Law \\
PUB2 101D2 & (3) & Constitutional Law \\
PUB3 116 & (3) & Foundations
\end{tabular}

\section*{Second Year}

The following 13 credits of courses may be taken only in the second year:
\begin{tabular}{lll} 
LAWG 210 & (3) & Legal Ethics and Professionalism \\
LAWG 220D1 & (3) & Property \\
LAWG 220D2 & (3) & Property \\
PROC 124 & (4) & Judicial Institutions and Civil Procedure
\end{tabular}

\section*{Any Year}

The following 1 credit course may be taken in any year after completing the first year:
PRAC 200
(1)
Advocacy

\section*{Complementary Courses (12 credits)}

\section*{Civil Law Immersion Courses}

3 credits from the following list of civil law courses:
\begin{tabular}{lll} 
BUS2 561 & (3) & Insurance \\
LAWG 506 & (3) & Advanced Civil Law Property
\end{tabular}
\begin{tabular}{lll} 
PROC 200 & (3) & Advanced Civil Law Obligations \\
PROC 549 & (3) & Lease, Enterprise, Suretyship \\
PRV2 270 & (3) & Law of Persons \\
PRV4 548 & (3) & Administration Property of Another and Trusts
\end{tabular}

\section*{Common Law Immersion Courses}

3 credits from the following list of common law courses:
\begin{tabular}{lll} 
PRV3 200 & (3) & Advanced Common Law Obligations \\
PRV3 534 & (3) & Remedies \\
PRV4 500 & (3) & Restitution \\
PRV4 549 & (3) & Equity and Trusts \\
PRV5 582 & (3) & Advanced Torts
\end{tabular}

\section*{Social Diversity, Human Rights and Indigenous Law Courses}

Students must take at least 3 credits from the following courses:
\begin{tabular}{|c|c|c|}
\hline CMPL 500 & (3) & Indigenous Peoples and the State \\
\hline CMPL 504 & (3) & Feminist Legal Theory \\
\hline CMPL 511 & (3) & Social Diversity and Law \\
\hline CMPL 516 & (3) & International Development Law \\
\hline CMPL 565 & (3) & International Humanitarian Law \\
\hline CMPL 571 & (3) & International Law of Human Rights \\
\hline CMPL 573 & (3) & Civil Liberties \\
\hline CMPL 575 & (3) & Discrimination and the Law \\
\hline IDFC 500 & (3) & Indigenous Field Studies \\
\hline LAWG 503 & (3) & Inter-American Human Rights \\
\hline LAWG 505 & (3) & Critical Engagements with Human Rights \\
\hline LAWG 507 & (3) & Critical Race Theory Advanced Seminar \\
\hline LAWG 508D1 & (3) & Indigenous Constitutionalism \\
\hline LAWG 508D2 & (3) & Indigenous Constitutionalism \\
\hline LAWG 509 & (3) & Indigenous Law Revitalization \\
\hline LAWG 562 & (3) & Regulating Artificial Intelligence \\
\hline LAWG 580 & (3) & Women and Constitutions \\
\hline LAWG 582 & (3) & Disability Law and Policy \\
\hline LEEL 369 & (3) & Labour Law \\
\hline LEEL 582 & (3) & Law and Poverty \\
\hline PUB2 105 & (3) & Public International Law \\
\hline PUB2 500 & (3) & Law and Psychiatry \\
\hline PUB2 502 & (3) & International Criminal Law \\
\hline PUB2 551 & (3) & Immigration and Refugee Law \\
\hline PUB3 515 & (3) & Canadian Charter of Rights and Freedoms \\
\hline
\end{tabular}

\section*{Principles of Canadian Administrative Law}

3 credits from the following courses:
\begin{tabular}{lll} 
BUS1 532 & \((3)\) & Bankruptcy and Insolvency \\
BUS2 504 & (3) & Securities Regulation \\
CMPL 543 & (3) & Law and Practice of International Trade \\
CMPL 574 & (3) & Government Control of Business \\
CMPL 575 & (3) & Discrimination and the Law \\
CMPL 577 & (3) & Communications Law \\
CMPL 580 & (3) & Environment and the Law \\
LAWG 523 & (3) & Tax Practice Seminar \\
LAWG 561 & (3) & Privacy Law \\
LAWG 581 & (3) & Health Care Delivery and the Law \\
LAWG 583 & (3) & Public Health Law and Policy. \\
LEEL 369 & (3) & Labour Law \\
LEEL 570 & (3) & Employment Law \\
LEEL 582 & (3) & Law and Poverty \\
PRV4 545 & (3) & Land Use Planning \\
PRV5 483 & (3) & Consumer Law \\
PUB2 400 & (3) & The Administrative Process \\
PUB2 401 & (3) & Judicial Review of Administrative Action \\
PUB2 500 & (3) & Law and Psychiatry \\
PUB2 515 & (3) & Tax Policy \\
PUB2 551 & Immigration and Refugee Law \\
\hline
\end{tabular}

\section*{Elective Courses}

46 credits
Students must take 46 other elective courses offered within the Faculty or approved as credit equivalences in order to complete the 120 -credit degree requirement.

\section*{Minimum Writing Requirement}

All students are required to submit at least one research paper. This requirement may be satisfied by:
a) writing and essay in a course in which the essay constitutes no less than \(75 \%\) of the final grade;
b) writing a term essay under independent supervision, for credit, within the Faculty of Law;
c) writing an article, note, or comment of equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication.

Papers written jointly do not satisfy this requirement.

\subsection*{8.12.3 Bachelor of Law (B.C.L.) / Juris Doctor (J.D.) with Major Concentration Law with Major Concentration Commercial Negotiation and Dispute Resolution (123 credits)}

The B.C.L. and J.D.. with a major concentration is open to all students enrolled in the Faculty of Law.
The Major Concentration in Commercial Negotiation and Dispute Resolution is articulated around a synthetic skill set driven by the transversal theme "Commercial Negotiation and Dispute Resolution" and is inspired by an interdisciplinary approach.
Law and non-law courses are combined with the practical experience acquired during an internship. The required writing of an independent essay allows students to integrate the various academic and clinical strands of the major program, and, more broadly, of legal learning.

The Major concentration is a 36 -credit program. Students are permitted to include within their 105 credits for the B.C.L. and J.D. 18 credits toward their Major concentration. The remaining 18 credits needed for the Major concentration are added on top of the 105 credits for the Law degrees for a total of 123 credits.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
WRIT 300D1 & (3) Major Internship \\
WRIT 300D2 & (3) & Major Internship
\end{tabular}

\section*{Complementary Courses (30 credits)}

\section*{Essay Course (3 credits)}

3 credits from:
\begin{tabular}{lll} 
WRIT 491 & (3) & Term Essay 1A \\
WRIT 492 & \((3)\) & Term Essay 2 \\
WRIT 493 & \((3)\) & Term Essay 3 \\
WRIT 494 & \((3)\) & Term Essay 1B \\
WRIT 495 & \((3)\) & Term Essay 1C
\end{tabular}

The essay must be written on a subject related to Commercial Negotiation and Dispute Resolution. The essay is to be written in the fourth year of the program in order to allow the student to integrate the various academic and clinical strands of the program. The topic must be approved by the Associate Dean (Academic).

\section*{Law and Non-Law Courses ( 27 credits)}

27 credits from the following lists of law and non-law courses of which at least 6 credits must be non-law courses.

\section*{Law Courses}

15-21 credits of law courses selected from:
\begin{tabular}{|c|c|c|}
\hline BUS1 532 & (3) & Bankruptcy and Insolvency \\
\hline BUS2 503 & (3) & Business Organizations \\
\hline BUS2 504 & (3) & Securities Regulation \\
\hline BUS2 505 & (3) & Corporate Finance \\
\hline CMPL 515 & (3) & International Carriage of Goods by Sea \\
\hline CMPL 521 & (3) & Trade Regulation \\
\hline CMPL 524 & (3) & Entertainment Law \\
\hline CMPL 533 & (3) & Resolution of International Disputes \\
\hline CMPL 543 & (3) & Law and Practice of International Trade \\
\hline CMPL 568 & (3) & Extrajudicial Dispute Resolution \\
\hline CMPL 574 & (3) & Government Control of Business \\
\hline LAWG 200 & (3) & Commercial Law \\
\hline LAWG 400 & (4) & Secured Transactions \\
\hline LAWG 511 & (1) & Specialized Topics in Law 1 \\
\hline LAWG 512 & (1) & Specialized Topics in Law 2 \\
\hline LAWG 513 & (2) & Specialized Topics in Law 3 \\
\hline LAWG 514 & (2) & Specialized Topics in Law 4 \\
\hline LAWG 515 & (3) & Specialized Topics in Law 5 \\
\hline LAWG 516 & (3) & Specialized Topics in Law 6 \\
\hline LAWG 517 & (3) & Specialized Topics in Law 7 \\
\hline LAWG 518 & (3) & Specialized Topics in Law 8 \\
\hline LAWG 521 & (3) & Student-Initiated Seminar 1 \\
\hline LAWG 522 & (3) & Student-Initiated Seminar 2 \\
\hline LEEL 369 & (3) & Labour Law \\
\hline
\end{tabular}
\begin{tabular}{lll} 
PROC 549 & (3) & Lease, Enterprise, Suretyship \\
PRV4 500 & (3) & Restitution \\
PRV5 483 & (3) & Consumer Law \\
PUB2 517 & \((3)\) & Corporate Taxation
\end{tabular}

\section*{Non-Law Courses}

Students may take 6-12 credits of non-law courses. Students who take 6 non-law credits as part of their Major concentration may count an additional 6 non-law credits toward their B.C.L. and J.D. program. Students who take 9 non-law credits as part of their Major concentration may count an additional 3 credits toward their B.C.L. and J.D. Students who take 12 non-law credits as part of their Major concentration may not count additional non-law credits toward their B.C.L. and J.D.

Other non-law courses related to Commercial Negotiation and Dispute Resolution not included in these lists may be taken with the approval of the Program Adviser.

\section*{Non-Law Courses - Economics}
\begin{tabular}{lll} 
ECON 223 & \((3)\) & Political Economy of Trade Policy \\
ECON 305 & (3) & Industrial Organization \\
ECON 310 & (3) & Introduction to Behavioural Economics \\
ECON 546 & (3) & Game Theory
\end{tabular}

\section*{Non-Law Courses - Management}
\begin{tabular}{lll} 
BUSA 395 & \((3)\) & Managing in Europe \\
BUSA 481 & \((3)\) & Managing in North America \\
INDR 459 & \((3)\) & Comparative Employment Relations \\
INDR 492 & \((3)\) & Globalization and Labour Policy \\
INDR 496 & (3) & Collective Bargaining \\
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGPO 383 & (3) & International Business Policy \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 445 & (3) & Industry Analysis and Competitive Strategy \\
MGPO 450 & (3) & Ethics in Management \\
MGPO 460 & (3) & Managing Innovation \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 470 & (3) & Strategy and Organization \\
ORGB 325 & (3) & Negotiations and Conflict Resolution \\
ORGB 380 & (3) & Cross Cultural Management \\
ORGB 420 & Managing Organizational Teams \\
\hline
\end{tabular}

\section*{Non-Law Courses - Political Science}
POLI 243
(3)
International Politics of Economic Relations

\subsection*{8.12.4 Bachelor of Law (B.C.L.) / Juris Doctor (J.D.) with Major Concentration Law with Major International Human Rights and Development (123 credits)}

The B.C.L. and J.D. with a major concentration is open to all students enrolled in the Faculty of Law.
The Major Concentration in International Human Rights and Development is articulated around a synthetic skill-set driven by the transversal theme "International Human Rights and Development" and inspired by an interdisciplinary approach.

Law and non-law courses are combined with the practical experience acquired during an internship. The required writing of an independent essay allows students to integrate the various academic and clinical strands of the major program, and, more broadly, of legal learning.

The Major concentration is a 36-credit program. Students are permitted to include within their 105 credits for the B.C.L. and J.D. 18 credits toward their Major concentration. The remaining 18 credits needed for the Major concentration are added on top of the 105 credits for the Law degrees for a total of 123 credits.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
WRIT 300D1 & (3) & Major Internship \\
WRIT 300D2 & (3) & Major Internship
\end{tabular}
Complementary Courses (30 credits)
Essay Course (3 credits)
3 credits from:
WRIT 491
WRIT 492
WRIT 493
WRIT 494
WRIT 495

The essay must be written on a subject related to International Human Rights and Development. The essay is to be written in the fourth year of the program, in order to allow the student to integrate the various academic and clinical strands of the program. The topic must be approved by the Associate Dean (Academic).

\section*{Law and Non-Law Courses ( 27 credits)}

27 credits from the following lists of law and non-law courses of which at least 6 credits must be from non-law courses.

\section*{Law Courses}

15-21 credits of law courses selected from:
\begin{tabular}{lcl} 
CMPL 516 & \((3)\) & International Development Law \\
CMPL 521 & (3) & Trade Regulation \\
CMPL 533 & (3) & Resolution of International Disputes \\
CMPL 543 & (3) & Law and Practice of International Trade \\
CMPL 546 & (3) & International Environmental Law and Politics \\
CMPL 565 & (3) & International Humanitarian Law \\
CMPL 571 & (3) & International Law of Human Rights \\
LAWG 503 & (3) & Inter-American Human Rights \\
LAWG 505 & (3) & Critical Engagements with Human Rights \\
LAWG 511 & (1) & Specialized Topics in Law 1 \\
LAWG 512 & (1) & Specialized Topics in Law 2 \\
LAWG 513 & (2) & Specialized Topics in Law 3 \\
LAWG 514 & (2) & Specialized Topics in Law 4
\end{tabular}
\begin{tabular}{lll} 
LAWG 515 & (3) & Specialized Topics in Law 5 \\
LAWG 516 & (3) & Specialized Topics in Law 6 \\
LAWG 517 & (3) & Specialized Topics in Law 7 \\
LAWG 518 & (3) & Specialized Topics in Law 8 \\
LAWG 521 & (3) & Student-Initiated Seminar 1 \\
LAWG 522 & (3) & Student-Initiated Seminar 2 \\
PUB2 105 & (3) & Public International Law \\
PUB2 502 & (3) & International Criminal Law \\
PUB2 503 & (3) & Comparative Federalism \\
PUB2 551 & (3) & Immigration and Refugee Law
\end{tabular}

\section*{Non-Law Courses}

Students may take 6-12 credits of non-law courses. Students who take 6 non-law credits as part of their Major concentration may count an additional 6 non-law credits toward their B.C.L. and J.D. program. Students who take 9 non-law credits as part of their Major concentration may count an additional 3 credits toward their B.C.L. and J.D.. Students who take 12 non-law credits as part of their major concentration may not count additional non-law credits towards their B.C.L. and J.D.

Other non-law courses related to International Human Rights and Development not included in these lists may be taken with the approval of the Program Adviser.

\section*{Non-Law Courses - Anthropology}
\begin{tabular}{lll} 
ANTH 212 & (3) & Anthropology of Development \\
ANTH 418 & (3) & Environment and Development
\end{tabular}

\section*{Non-Law Courses - Economics}
\begin{tabular}{lll} 
ECON 223 & \((3)\) & Political Economy of Trade Policy \\
ECON 313 & \((3)\) & Economic Development 1 \\
ECON 314 & \((3)\) & Economic Development 2 \\
ECON 316 & (3) & The Underground Economy \\
ECON 426 & \((3)\) & Labour Economics
\end{tabular}

\section*{Non-Law Courses - Geography}
\begin{tabular}{lll} 
GEOG 200 & \((3)\) & Geographical Perspectives: World Environmental Problems \\
GEOG 210 & \((3)\) & Global Places and Peoples \\
GEOG 216 & \((3)\) & Geography of the World Economy \\
GEOG 408 & (3) & Geography of Development \\
GEOG 410 & (3) & Geography of Underdevelopment: Current Problems
\end{tabular}

\section*{Non-Law Courses - International Development}
INTD 200
Introduction to International Development

Non-Law Courses - Management
\begin{tabular}{lll} 
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
ORGB 380 & (3) & Cross Cultural Management
\end{tabular}

\section*{Non-Law Courses - Political Science}
\begin{tabular}{lcl} 
POLI 227 & \((3)\) & Developing Areas/Introduction \\
POLI 243 & \((3)\) & International Politics of Economic Relations \\
POLI 324 & \((3)\) & Developing Areas/Africa \\
POLI 340 & (3) & Developing Areas/Middle East \\
POLI 345 & \((3)\) & International Organizations \\
POLI 354 & (3) & Approaches to International Political Economy \\
POLI 362 & \((3)\) & Political Theory and International Relations \\
POLI 474 & \((3)\) & Inequality and Development \\
POLI 522 & (3) & Seminar: Developing Areas
\end{tabular}

\section*{Non-Law Courses - Sociology}
\begin{tabular}{lll} 
SOCI 254 & \((3)\) & Development and Underdevelopment \\
SOCI 265 & \((3)\) & War, States and Social Change \\
SOCI 370 & (3) & Sociology: Gender and Development \\
SOCI 484 & \((3)\) & Emerging Democratic States \\
SOCI 519 & (3) & Gender and Globalization \\
SOCI 550 & (3) & Developing Societies
\end{tabular}

\subsection*{8.12.5 Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) with Minor Law (with Minor) (123 credits)}

The B.C.L. and J.D. with Minor is open to all students enrolled in the Faculty of Law and allows them to graduate with a minor concentration offered by McGill's Faculty of Arts or a minor offered by McGill's Faculty of Science or a minor offered by McGill's Desautels Faculty of Management for Non-Management students.
Law students should consult the Faculty of Arts and Faculty of Science and the Desautels Faculty of Management sections of the Undergraduate Programs, Courses and University Regulations publication available at http://www.mcgill.ca/study/ to determine the requirements for individual minor concentrations and minors.
B.C.L. and J.D. with Minor

In addition to the 105 credits needed for the B.C.L. and J.D. program, students complete 18 further credits toward a minor program. Since Science minors are typically 24 credits and Management minors and Arts minor concentrations are typically 18 credits, Law students will be allowed to count 6 credits of a 24-credit Science minor toward their Law degree as non-Law credits.

\section*{Required Courses (47 credits)}

\section*{First Year}

The following 33 credits of courses may be taken only in the first year:
\begin{tabular}{lll} 
LAWG 100D1 & (3) & Contractual Obligations \\
LAWG 100D2 & (3) & Contractual Obligations \\
LAWG 101D1 & (3) & Extra-Contractual Obligations/Torts \\
LAWG 101D2 & (3) & Extra-Contractual Obligations/Torts \\
LAWG 102D1 & \((3)\) & Criminal Justice \\
LAWG 102D2 & \((3)\) & Criminal Justice \\
LAWG 103 & \((3)\) & Indigenous Legal Traditions \\
LAWG 110D1 & \((1.5)\) & Integration Workshop \\
LAWG 110D2 & \((1.5)\) & Integration Workshop \\
PUB2 101D1 & (3) & Constitutional Law
\end{tabular}
\begin{tabular}{lll} 
PUB2 101D2 & (3) & Constitutional Law \\
PUB3 116 & (3) & Foundations
\end{tabular}

\section*{Second Year}

The following 13 credits of courses may be taken only in the second year:
\begin{tabular}{lll} 
LAWG 210 & (3) & Legal Ethics and Professionalism \\
LAWG 220D1 & (3) & Property \\
LAWG 220D2 & (3) & Property \\
PROC 124 & (4) & Judicial Institutions and Civil Procedure
\end{tabular}

\section*{Any Year}

The following 1 credit course may be taken in any year after completing the first year:
PRAC 200
(1)
Advocacy

\section*{Complementary Courses (12 credits)}

Civil Law Immersion Courses
3 credits from the following list of civil law courses:
\begin{tabular}{lll} 
BUS2 561 & (3) & Insurance \\
LAWG 506 & (3) & Advanced Civil Law Property \\
PROC 200 & (3) & Advanced Civil Law Obligations \\
PROC 549 & (3) & Lease, Enterprise, Suretyship \\
PRV2 270 & (3) & Law of Persons \\
PRV4 548 & (3) & Administration Property of Another and Trusts
\end{tabular}

Common Law Immersion Courses
3 credits from the following list of common law courses:
\begin{tabular}{lll} 
PRV3 200 & \((3)\) & Advanced Common Law Obligations \\
PRV3 534 & (3) & Remedies \\
PRV4 500 & (3) & Restitution \\
PRV4 549 & (3) & Equity and Trusts \\
PRV5 582 & (3) & Advanced Torts
\end{tabular}

Social Diversity, Human Rights and Indigenous Law Courses
Students must take at least 3 credits from the following courses:
\begin{tabular}{lll} 
CMPL 500 & (3) & Indigenous Peoples and the State \\
CMPL 504 & (3) & Feminist Legal Theory \\
CMPL 511 & (3) & Social Diversity and Law \\
CMPL 516 & (3) & International Development Law \\
CMPL 565 & (3) & International Humanitarian Law \\
CMPL 571 & (3) & International Law of Human Rights \\
CMPL 573 & (3) & Civil Liberties
\end{tabular}
\begin{tabular}{lcl} 
CMPL 575 & \((3)\) & Discrimination and the Law \\
IDFC 500 & (3) & Indigenous Field Studies \\
LAWG 503 & (3) & Inter-American Human Rights \\
LAWG 505 & (3) & Critical Engagements with Human Rights \\
LAWG 507 & (3) & Critical Race Theory Advanced Seminar \\
LAWG 508D1 & (3) & Indigenous Constitutionalism \\
LAWG 508D2 & (3) & Indigenous Constitutionalism \\
LAWG 509 & (3) & Indigenous Law Revitalization \\
LAWG 562 & (3) & Regulating Artificial Intelligence \\
LAWG 580 & (3) & Women and Constitutions \\
LAWG 582 & (3) & Disability Law and Policy \\
LEEL 369 & (3) & Labour Law \\
LEEL 582 & (3) & Law and Poverty \\
PUB2 105 & (3) & Public International Law \\
PUB2 500 & (3) & Law and Psychiatry \\
PUB2 502 & (3) & International Criminal Law \\
PUB2 551 & (3) & Immigration and Refugee Law \\
PUB3 515 & (3) & Canadian Charter of Rights and Freedoms
\end{tabular}

Principles of Canadian Administrative Law
3 credits from the following courses:
\begin{tabular}{|c|c|c|}
\hline BUS1 532 & (3) & Bankruptcy and Insolvency \\
\hline BUS2 504 & (3) & Securities Regulation \\
\hline CMPL 539 & (3) & International Taxation \\
\hline CMPL 543 & (3) & Law and Practice of International Trade \\
\hline CMPL 574 & (3) & Government Control of Business \\
\hline CMPL 575 & (3) & Discrimination and the Law \\
\hline CMPL 577 & (3) & Communications Law \\
\hline CMPL 580 & (3) & Environment and the Law \\
\hline LAWG 523 & (3) & Tax Practice Seminar \\
\hline LAWG 561 & (3) & Privacy Law \\
\hline LAWG 581 & (3) & Health Care Delivery and the Law \\
\hline LAWG 583 & (3) & Public Health Law and Policy. \\
\hline LEEL 369 & (3) & Labour Law \\
\hline LEEL 570 & (3) & Employment Law \\
\hline LEEL 582 & (3) & Law and Poverty \\
\hline PRV4 545 & (3) & Land Use Planning \\
\hline PRV5 483 & (3) & Consumer Law \\
\hline PUB2 400 & (3) & The Administrative Process \\
\hline PUB2 401 & (3) & Judicial Review of Administrative Action \\
\hline PUB2 500 & (3) & Law and Psychiatry \\
\hline PUB2 515 & (3) & Tax Policy \\
\hline
\end{tabular}
PUB2 551
(3)
Immigration and Refugee Law

\section*{Elective Courses}

46 credits.
Students must take 46 other elective courses offered within the Faculty or approved as credit equivalences in order to complete the 123 -credit degree requirement.

\section*{Minimum Writing Requirement}

All students are required to submit at least one research paper. This requirement may be satisfied by:
a) writing an essay in a course in which the essay constitutes no less than \(75 \%\) of the final grade;
b) writing a term essay under independent supervision, for credit, within the Faculty of Law;
c) writing an article, note, or comment of equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication.
Papers written jointly do not satisfy this requirement.

\subsection*{8.12.6 Bachelor of Civil Law Juris Doctor (Joint B.C.L./J.D. \& M.B.A.) Law and Management (Non-Thesis): General Management ( 132 credits)}

A joint M.B.A.; Non-Thesis - General Management and B.C.L./J.D. program is offered by the Desautels Faculty of Management and the Faculty of Law. This joint program provides students the opportunity to pursue legal and administrative aspects of business. Successful candidates graduate with M.B.A., B.C.L., and J.D. degrees, a trio that prepares them for careers in private and public enterprise, as well as government service.

Students complete 39 credits for the M.B.A. and 93 credits for the integrated B.C.L./J.D., for a total of 132 credits.

\section*{Required Courses - Management ( \(\mathbf{2 4}\) credits)}
\begin{tabular}{lcl} 
BUSA 695 & \((1.5)\) & Real-Time Decisions \\
MGCR 613 & \((1.5)\) & Managerial Economics \\
MGCR 614 & \((1.5)\) & Management Statistics \\
MGCR 617 & \((1.5)\) & Operations Management \\
MGCR 618 & \((1.5)\) & Leadership and Professional Skills \\
MGCR 620 & \((1.5)\) & Information Systems \\
MGCR 621 & \((1.5)\) & International Environment \\
MGCR 622 & \((1.5)\) & Organizational Strategy \\
MGCR 628 & \((1.5)\) & Integrative Course \\
MGCR 638 & \((1.5)\) & Marketing Management \\
MGCR 639 & \((1.5)\) & Managing Organizational Behaviour \\
MGCR 640 & \((1.5)\) & Accounting and Financial Reporting \\
MGCR 642 & \((4.5)\) & Financial Reporting \\
MGCR 660 & International Study Trip
\end{tabular}

\section*{Elective Courses (15 credits)}

15 credits of courses are chosen from 600-level courses offered by the Faculty. Course choice must be approved by a program adviser in the Faculty. Students will have to attend the M.B.A. Base Camp (Accounting and Business Math) prior to commencing the M.B.A.

\section*{Required Courses - Law (47 credits)}

First Year - 33 credits
LAWG 100D1
(3)
Contractual Obligations
LAWG 100D2
(3)
Contractual Obligations
\begin{tabular}{lcl} 
LAWG 101D1 & (3) & Extra-Contractual Obligations/Torts \\
LAWG 101D2 & (3) & Extra-Contractual Obligations/Torts \\
LAWG 102D1 & (3) & Criminal Justice \\
LAWG 102D2 & \((3)\) & Criminal Justice \\
LAWG 103 & \((3)\) & Indigenous Legal Traditions \\
LAWG 110D1 & \((1.5)\) & Integration Workshop \\
LAWG 110D2 & \((1.5)\) & Integration Workshop \\
PUB2 101D1 & \((3)\) & Constitutional Law \\
PUB2 101D2 & \((3)\) & Constitutional Law \\
PUB3 116 & (3) & Foundations
\end{tabular}

Second Year - 14 credits
\begin{tabular}{lll} 
LAWG 210 & (3) & Legal Ethics and Professionalism \\
LAWG 220D1 & (3) & Property \\
LAWG 220D2 & (3) & Property \\
PRAC 200 & (1) & Advocacy \\
PROC 124 & (4) & Judicial Institutions and Civil Procedure
\end{tabular}

\section*{Complementary Courses - Law (12 credits)}

Civil Law Immersion Courses ( 3 credits)
\begin{tabular}{lll} 
BUS2 561 & \((3)\) & Insurance \\
LAWG 506 & (3) & Advanced Civil Law Property \\
PROC 200 & (3) & Advanced Civil Law Obligations \\
PROC 549 & (3) & Lease, Enterprise, Suretyship \\
PRV2 270 & (3) & Law of Persons \\
PRV4 548 & (3) & Administration Property of Another and Trusts
\end{tabular}

Common Law Immersion Courses (3 credits)
\begin{tabular}{lll} 
PRV3 200 & (3) & Advanced Common Law Obligations \\
PRV3 534 & (3) & Remedies \\
PRV4 500 & (3) & Restitution \\
PRV4 549 & (3) & Equity and Trusts \\
PRV5 582 & (3) & Advanced Torts
\end{tabular}

Social Diversity, Human Rights and Indigenous Law Courses (3 credits)
\begin{tabular}{lll} 
CMPL 500 & (3) & Indigenous Peoples and the State \\
CMPL 504 & (3) & Feminist Legal Theory \\
CMPL 511 & (3) & Social Diversity and Law \\
CMPL 516 & (3) & International Development Law \\
CMPL 565 & (3) & International Humanitarian Law \\
CMPL 571 & (3) & International Law of Human Rights
\end{tabular}
\begin{tabular}{lcl} 
CMPL 573 & (3) & Civil Liberties \\
CMPL 575 & (3) & Discrimination and the Law \\
IDFC 500 & (3) & Indigenous Field Studies \\
LAWG 503 & (3) & Inter-American Human Rights \\
LAWG 505 & (3) & Critical Engagements with Human Rights \\
LAWG 507 & (3) & Critical Race Theory Advanced Seminar \\
LAWG 508D1 & (3) & Indigenous Constitutionalism \\
LAWG 508D2 & (3) & Indigenous Constitutionalism \\
LEEL 369 & (3) & Labour Law \\
LEEL 582 & (3) & Law and Poverty \\
PUB2 105 & (3) & Public International Law \\
PUB2 500 & (3) & Law and Psychiatry \\
PUB2 502 & (3) & International Criminal Law \\
PUB2 551 & (3) & Immigration and Refugee Law \\
PUB3 515 & (3) & Canadian Charter of Rights and Freedoms
\end{tabular}

Principles of Canadian Administrative Law (3 credits)
\begin{tabular}{lll} 
BUS1 532 & \((3)\) & Bankruptcy and Insolvency \\
BUS2 504 & \((3)\) & Securities Regulation \\
CMPL 539 & (3) & International Taxation \\
CMPL 543 & (3) & Law and Practice of International Trade \\
CMPL 574 & (3) & Government Control of Business \\
CMPL 575 & (3) & Discrimination and the Law \\
CMPL 577 & (3) & Communications Law \\
CMPL 580 & (3) & Environment and the Law \\
LAWG 523 & (3) & Tax Practice Seminar \\
LEEL 369 & (3) & Labour Law \\
LEEL 570 & (3) & Employment Law \\
LEEL 582 & (3) & Law and Poverty \\
PRV4 545 & (3) & Land Use Planning \\
PRV5 483 & (3) & Consumer Law \\
PUB2 400 & (3) & The Administrative Process \\
PUB2 401 & (3) & Judicial Review of Administrative Action \\
PUB2 500 & (3) & Law and Psychiatry \\
PUB2 515 & (3) & Tax Policy \\
PUB2 551 & &
\end{tabular}

\section*{Elective Courses ( \(\mathbf{3 4}\) credits)}

Students must take 34 other elective courses, offered within the Faculty or approved as credit equivalencies in order to complete the 93 -credit degree

\section*{Minimum Writing Requirement}

All students are required to submit at least one research paper. This requirement may be satisfied by: a) writing an essay in a course in which the essay constitutes no less than \(75 \%\) of the final grade; b) writing a term essay under independent supervision, for credit, within the Faculty of Law; c) writing an
article, note, or comment or equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication. Papers written jointly do not satisfy this requirement.

\subsection*{8.12.7 Bachelor of Law (B.C.L.)/Juris Doctor (J.D.) \& Master of Social Work (M.S.W.) (Joint B.C.L./J.D \& M.S.W.) Law \& Social Work (Non-Thesis) (132 credits)}

A joint Master of Social Work (M.S.W.) with integrated Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) program is offered by the School of Social Work and the Faculty of Law.
Students complete 45 credits for the M.S.W. degree and 87 credits for the integrated B.C.L. and J.D. degrees for a total of 132 credits.

\section*{Required Courses - Social Work (30 credits)}
\begin{tabular}{lll} 
SWRK 605 & (3) & Anti-Racist Social Work Practice \\
SWRK 650 & (3) & Field Work Practicum 1 \\
SWRK 651 & (3) & Field Work Practicum 2 \\
SWRK 653 & (3) & Research Methods 1 \\
SWRK 660 & (6) & Field Work Practicum 3 \\
SWRK 691 & (12) & Social Work / Law Independent Study Project
\end{tabular}

\section*{Complementary Courses - Social Work (15 credits)}

15 credits of SWRK courses at the 500 or 600 level. Up to 6 graduate-level credits may be taken outside the School of Social Work with the approval of the Academic Adviser.

\section*{Required Courses - Law (46 credits)}

First Year
The following 32 credits of courses may be taken only in the first year:
\begin{tabular}{lll} 
LAWG 100D1 & (3) & Contractual Obligations \\
LAWG 100D2 & \((3)\) & Contractual Obligations \\
LAWG 101D1 & \((3)\) & Extra-Contractual Obligations/Torts \\
LAWG 101D2 & \((3)\) & Extra-Contractual Obligations/Torts \\
LAWG 102D1 & \((3)\) & Criminal Justice \\
LAWG 102D2 & \((3)\) & Criminal Justice \\
LAWG 110D1 & \((1.5)\) & Integration Workshop \\
LAWG 110D2 & \((1.5)\) & Integration Workshop \\
PUB2 101D1 & \((3)\) & Constitutional Law \\
PUB2 101D2 & (3) & Constitutional Law \\
PUB3 116D1 & () & \\
PUB3 116D2 & () &
\end{tabular}

\section*{Second Year}

The following 13 credits of courses may be taken only in the second year:
\begin{tabular}{lll} 
LAWG 210 & (3) & Legal Ethics and Professionalism \\
LAWG 220D1 & (3) & Property \\
LAWG 220D2 & (3) & Property \\
PROC 124 & (4) & Judicial Institutions and Civil Procedure
\end{tabular}

The following 1 credit course may be taken in any year after completing the first year:

Advocacy

\section*{Complementary Courses (12 credits)}

Civil Law Immersion Courses
3 credits from the following list of civil law courses:
\begin{tabular}{lll} 
BUS2 561 & (3) & Insurance \\
LAWG 506 & (3) & Advanced Civil Law Property \\
PROC 200 & (3) & Advanced Civil Law Obligations \\
PROC 549 & (3) & Lease, Enterprise, Suretyship \\
PRV2 270 & (3) & Law of Persons \\
PRV4 548 & (3) & Administration Property of Another and Trusts
\end{tabular}

\section*{Common Law Immersion Courses}

3 credits from the following list of common law courses:
\begin{tabular}{lll} 
PRV3 200 & (3) & Advanced Common Law Obligations \\
PRV3 534 & (3) & Remedies \\
PRV4 500 & (3) & Restitution \\
PRV4 549 & (3) & Equity and Trusts \\
PRV5 582 & (3) & Advanced Torts
\end{tabular}

Social Diversity, Human Rights and Indigenous Law Courses
3 credits from the following courses:
\begin{tabular}{|c|c|c|}
\hline CMPL 500 & (3) & Indigenous Peoples and the State \\
\hline CMPL 504 & (3) & Feminist Legal Theory \\
\hline CMPL 511 & (3) & Social Diversity and Law \\
\hline CMPL 516 & (3) & International Development Law \\
\hline CMPL 565 & (3) & International Humanitarian Law \\
\hline CMPL 571 & (3) & International Law of Human Rights \\
\hline CMPL 573 & (3) & Civil Liberties \\
\hline CMPL 575 & (3) & Discrimination and the Law \\
\hline IDFC 500 & (3) & Indigenous Field Studies \\
\hline LAWG 503 & (3) & Inter-American Human Rights \\
\hline LAWG 505 & (3) & Critical Engagements with Human Rights \\
\hline LAWG 507 & (3) & Critical Race Theory Advanced Seminar \\
\hline LEEL 369 & (3) & Labour Law \\
\hline LEEL 582 & (3) & Law and Poverty \\
\hline PUB2 105 & (3) & Public International Law \\
\hline PUB2 500 & (3) & Law and Psychiatry \\
\hline PUB2 502 & (3) & International Criminal Law \\
\hline PUB2 551 & (3) & Immigration and Refugee Law \\
\hline PUB3 515 & (3) & Canadian Charter of Rights and Freedoms \\
\hline
\end{tabular}

Principles of Canadian Administrative Law
3 credits from the following courses:
\begin{tabular}{lll} 
BUS1 532 & \((3)\) & Bankruptcy and Insolvency \\
BUS2 504 & (3) & Securities Regulation \\
CMPL 543 & (3) & Law and Practice of International Trade \\
CMPL 574 & (3) & Government Control of Business \\
CMPL 575 & (3) & Discrimination and the Law \\
CMPL 577 & (3) & Communications Law \\
CMPL 580 & (3) & Environment and the Law \\
LEEL 369 & (3) & Labour Law \\
LEEL 570 & (3) & Employment Law \\
LEEL 582 & (3) & Law and Poverty \\
PRV4 545 & (3) & Land Use Planning \\
PRV5 483 & (3) & Consumer Law \\
PUB2 400 & (3) & The Administrative Process \\
PUB2 401 & (3) & Judicial Review of Administrative Action \\
PUB2 500 & (3) & Law and Psychiatry \\
PUB2 551 & (3) & Immigration and Refugee Law
\end{tabular}

\section*{Elective Courses (29 credits)}

Students must take 29 other elective courses offered within the Faculty or approved as credit equivalencies in order to complete the 132 -credit degree requirement.

\section*{Minimum Writing Requirement}

All students are required to submit at least one research paper. This requirement may be satisfied by:
a) writing an essay in a course in which the essay constitutes no less than \(75 \%\) of the final grade;
b) writing a term essay under independent supervision, for credit, within the Faculty of Law;
c) writing an article, note, or comment of equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication.
Papers written jointly do not satisfy this requirement.

\subsection*{8.13 Undergraduate Selection of Course Concentrations (Law Programs)}

Several courses of instruction may be grouped because they treat a common subject matter or theme. The following unofficial groupings of courses regularly offered in the Faculty are intended to assist students desiring to specialize in selecting elective courses. They do not represent any academic policy decision by the Faculty as to the appropriate characterization of individual offerings. Moreover, some courses appear in more than one grouping. In all cases, reference should be made to the course description.

\section*{1. Basic Private Law}

Contractual Obligations (LAWG 100D1 / LAWG 100D2)
Extra-Contractual Obligations/Torts (LAWG 101D1 / LAWG 101D2)

\section*{2. Advanced Private Law}

\section*{Civil Law}

Advanced Civil Law Obligations (PROC 200)
Advanced Civil Law Property (LAWG 506)

\section*{2. Advanced Private Law}

Insurance (BUS2 561)
Law of Persons (PRV2 270)
Lease, Enterprise, Suretyship (PROC 549)
Common Law
Advanced Common Law Obligations (PRV3 200)
Advanced Torts (PRV5 582)
Equity and Trusts (PRV4 549)
Real Estate Transactions (PRV4 451)
Remedies (PRV3 534)
Restitution (PRV4 500)

\section*{Transsystemic Private Law}

Business Associations (BUS2 365)
Commercial Law (LAWG 200)
Consumer Law (PRV5 483)
Death and Property (LAWG 504)
Employment Law (LEEL 570)
Evidence (Civil Matters) (LAWG 415)
Family Law (LAWG 273)
Family Property Law (LAWG 300)
Medical Liability (CMPL 522)
Private International Law (LAWG 316)
Property (LAWG 220D1 / LAWG 220D2)
Secured Transactions (LAWG 400)

\section*{3. Legal Theory, Legal Traditions, and Legal History}

Aboriginal Peoples and the Law (CMPL 500)
Advanced Jurisprudence (CMPL 505)
Canadian Legal History (CMPL 547)
Feminist Legal Theory (CMPL 504)
Foundations (PUB3 116D1 / PUB3 116D2)
Jurisprudence (CMPL 501)
Legal Theory (CMPL 506)
Linguistic and Literary Approaches to Law (CMPL 507)
Roman Law (CMPL 510)
Talmudic Law (CMPL 513)
Theories of Justice (CMPL 512)

\section*{4. Human Rights and Cultural Diversity}

Aboriginal Peoples and the Law (CMPL 500)
Canadian Charter of Rights and Freedoms (PUB3 515)
Civil Liberties (CMPL 573)
Discrimination and the Law (CMPL 575)
Inter-American Human Rights (LAWG 503)

\section*{4. Human Rights and Cultural Diversity}

International Humanitarian Law (CMPL 565)
International Law of Human Rights (CMPL 571)
The McGill International Human Rights Internship (WRIT 020)
Social Diversity and Law (CMPL 511)

\section*{5. Social Law}

Immigration and Refugee Law (PUB2 551)
Labour Law (LEEL 369)
Land Use Planning (PRV4 545)
Law and Poverty (LEEL 582)
Law and Psychiatry (PUB2 500)

\section*{6. Law of the State}

The Administrative Process (PUB2 400)
Comparative Federalism (PUB2 503)
Constitutional Law (PUB2 101D1 / PUB2 101D2)
Constitutional Law of the United States (PUB2 102)
Judicial Review of Administrative Action (PUB2 401)
Municipal Law (PUB2 403)
Policies, Politics and Legislative Process (CMPL 518)
Statutory Interpretation (PUB2 505)

\section*{7. Regulation, Technology, and Society}

Communications Law (CMPL 577)
Comparative Medical Law (CMPL 551)
Computers and the Law (CMPL 578)
Copyright and Trademark Theory (BUS2 500)
Entertainment Law (CMPL 524)
Environment and the Law (CMPL 580)
Government Control of Business (CMPL 574)
Intellectual \& Industrial Property (BUS2 502)
Medical Liability (CMPL 522)
Patent Theory and Policy (BUS2 501)
Science Technology and Law (CMPL 576)

\section*{8. Corporate Law and Taxation}

Banking Law (BUS2 531)
Bankruptcy and Insolvency (BUS1 532)
Business Associations (BUS2 365)
Business Organizations (BUS2 503)
Corporate Finance (BUS2 505)
Corporate Taxation (PUB2 517)
Estate Planning (BUS1 414)
International Taxation (CMPL 539)

\section*{8. Corporate Law and Taxation}

Securities Regulation (BUS2 504)
Taxation (PUB2 313)
Tax Policy (PUB2 515)

\section*{9. International Business Law}

European Union Law 1 (CMPL 536)
European Union Law 2 (CMPL 537)
International Carriage of Goods by Sea (CMPL 515)
International Development Law (CMPL 516)
International Maritime Conventions (CMPL 553)
Law and Practice of International Trade (CMPL 543)
Resolution of International Disputes (CMPL 533)
Trade Regulation (CMPL 521)

\section*{10. Public International Law}

International Criminal Law (PUB2 502)
International Environmental Law and Politics (CMPL 546)
International Humanitarian Law (CMPL 565)
International Law of Human Rights (CMPL 571)
The Law of International Organization (PUB2 506)
The McGill International Human Rights Internship (WRIT 020)
Public International Law (PUB2 105)

\section*{11. Criminal Law}

Advanced Criminal Law (PUB2 501)
Criminal Law (PUB2 111)
Criminal Justice (LAWG 102D1 / LAWG 102D2)
Criminal Procedure (PUB2 422)
Evidence (Criminal Matters) (LAWG 426)
International Criminal Law (PUB2 502)
International Law of Human Rights (CMPL 571)
Sentencing in Canadian Law (PUB2 504)

\section*{12. Advocacy and the Legal Profession}

Advocacy (PRAC 200)
Civil Litigation Workshop (PROC 459)
Criminal Procedure (PUB2 422)
Evidence (Civil Matters) (LAWG 415)
Evidence (Criminal Matters) (LAWG 426)
Extrajudicial Dispute Resolution (CMPL 568)
Judicial Institutions and Civil Procedure (PROC 124)
Legal Ethics and Professionalism (LAWG 210)
Trial Advocacy (PUB2 420)

\section*{9 Desautels Faculty of Management}

\subsection*{9.1 About Desautels Faculty of Management}

Founded in 1906, the Desautels Faculty of Management at McGill University is ranked as one of the world's top international business schools. The Faculty's innovative programs and historic reputation for excellence continue to attract the finest students and the most prominent professors from around the globe, as well as the most demanding recruiters from the world's top employers.

McGill Desautels houses numerous research centres and academic programs at the undergraduate, graduate, executive, and post-graduate levels. The curriculum is built on an integrated, interdisciplinary model that combines research, practice, and teaching. This valuable, holistic approach prepares students to successfully manage and lead in today's increasingly interconnected world.
For more information, please visit mcgill.ca/desautels/about.

\subsection*{9.2 Desautels Faculty of Management Studies}

\subsection*{9.2.1 Location}

BCom Student Affairs Office
Samuel Bronfman Building
1001 Sherbrooke Street West, Room 305
Montreal QC H3A 1G5
Telephone: 514-398-4068
Faculty website: mcgill.ca/desautels
BCom degree website: mcgill.ca/desautels/programs/bcom
The BCom Student Affairs Office serves all students taking undergraduate Management courses.

\subsection*{9.2.2 Administrative Officers}

\section*{Dean}

Yolande Chan

\section*{Associate Dean, Undergraduate Programs}

Benjamin Croitoru

\section*{Associate Director, BCom Program}

Giulia Campofredano

\section*{Associate Director, BCom Student Affairs}

Heather McCombie

\subsection*{9.2.3 Bachelor of Commerce Program}

Internationally acclaimed for its high academic standards and excellence in teaching/research, and widely recognized as Canada's leading international business school, McGill University consistently attracts top students and faculty members from around the world.

The primary objective of the McGill BCom program is to prepare students for an effective professional and managerial career. The BCom program exposes students to cutting edge and innovative business education. This preparation includes developing a capacity for critical thinking, for integrating knowledge across different disciplines, and for utilizing current theory in approaching practical business problems. Students are also expected to work as part of a team and develop the necessary skills to lead others. They will acquire the critical management competencies which will enable them to offer the expertise organizations need to respond to the ever-changing and increasingly complex global marketplace.
The BCom's highly flexible curriculum offers students both breadth and depth. Breadth is achieved through a broad-based core of required courses which provide the necessary quantitative, analytical, and communication skills, while grounding them in applied theory and practice across the major management
disciplines. Depth is achieved through various alternate specializations of study designed to meet the needs of a highly diverse student body with a wide range of career interests and priorities.

In the General Management Major, students focus their degree in at least two areas. They must choose one concentration in Management as well as a choice of a second concentration in Management or a minor in another faculty. General Management studies is ideal for students looking for a general business education requiring a broad management perspective, for students interested in continuing their education in a related field, such as law or industrial relations, or for students wishing to pursue a management career that spans multiple industries and across various sectors, some of which can include the arts, applied sciences, or public administration.
Majors and honours programs are available to those wishing to focus primarily in one area to get maximum exposure to a chosen field. This option is for students with clearly defined career objectives, or those interested in further professional training, such as a CPA or CFA designation.
In the Major in International Management, students have a chance to pursue interdisciplinary global studies. All students in this Major will complete the requirements of the International Business Concentration as well as a Minor outside of the Management Faculty; learn an additional language (achieving intermediate level); and fulfill the experiential learning component by:
1. going on exchange or a study away; or
2. submitting a research paper ( 3 credits); or
3. participating in an international internship (3 credits).

Exchange and study away grant credits depending on the number of courses taken abroad.
The Honours in Investment Management program is the first to offer students training that combines rigorous academic groundwork with real-world experience in investment management, global internship opportunities, and access to the expertise of corporate partners from around the world.

Candidates coming from the Quebec CEGEP system apply to a three-year program, whereas out-of-province and international students follow a four-year program.

\subsection*{9.2.4 BCom Student Affairs Office}

\subsection*{9.2.4.1 Location}
Samuel Bronfman Building
1001 Sherbrooke Street West, Room 305
Montreal QC H3A 1G5
Telephone: 514-398-4068
Email: bcom.mgmt@mcgill.ca
Website: mcgill.ca/desautels/programs/bcom

\subsection*{9.2.4.2 About BCom Student Affairs Office}

The BCom Student Affairs Office provides ongoing advice and guidance on:
- programs and prerequisites
- degree requirements
- honours, majors, concentrations, and minors
- registration
- course changes
- procedures for withdrawal
- examinations
- rereads
- academic standing
- inter-faculty transfers
- exchanges or study abroad
- transfer credits
- scholarships
- graduation

Student advisors offer help managing academic situations during periods of personal, financial, or medical problems by working with you to identify various possibilities and strategies for making informed decisions.
For more information, please refer to the BCom website at mcgill.ca/desautels/programs/bcom.
To book an advising appointment, student should sign-in to BCom Insight using their McGill credentials: mcgill.ca/desautels/programs/bcom/contact-us.

\subsection*{9.2.5 Summer Studies}

If you want to make up deficiencies in your background or accelerate progress in your degree, you may do so by taking summer courses at McGill or at another institution. Please note that McGill's course offerings are not guaranteed from year to year.

Each summer, from early May to July, some core and elective courses are offered by the Desautels Faculty of Management for full credit. They are available to Management students, and to students from other faculties and universities who have the necessary course prerequisites.

Information on summer courses is available from:

\section*{BCom Student Affairs Office}

Telephone: 514-398-4068
Email: bcom.mgmt@mcgill.ca
Website: mcgill.ca/desautels/programs/bcom
OR

\section*{Summer Studies Office}

Telephone: 514-398-5212
Email: summer.studies@mcgill.ca
Website: mcgill.ca/summer
You are permitted to take 6 credits in any one summer period (May to July) due to the intensive nature of the offerings. Should you require additional credits, you must consult with one of the BCom Associate Directors.
If you want to pursue courses at another institution, credit will be granted for such courses only if they fit into your overall program, and if written permission to complete such courses for credit has been obtained in advance from the BCom Student Affairs Office. A course that overlaps with material already completed in your program, or a language course that does not substantially progress beyond corresponding language courses already taken, will not receive credit approval. For more information about transferring credits, see section 9.2.7: Transfer Credit and Advanced Standing.

\subsection*{9.2.6 International Student Exchange Program}

The Desautels Faculty of Management prides itself on its international focus. To broaden this focus, we offer students the possibility of an exchange to over 60 top business schools around the world. You will gain incredible life experience in and out of the classroom, as well as return with academic credits towards your degree. This experiential learning will make you face challenges and opportunities that will help you grow personally and professionally. You will build lifelong relationships and discover a new part of the world. Your future career will be enhanced as a result.
At least two-thirds of all departmental program requirements must be completed at McGill and there is a CGPA requirement of 3.0. Once accepted, you must obtain written faculty authorization for transfer credits before leaving to go on exchange. For more information about the International Student Exchange program, please visit mcgill.ca/desautels/programs/bcom/academics/exchange.
More information can also be obtained from the BCom Student Affairs Office at 514-398-4068, bcom.mgmt@mcgill.ca, or on the McGill Abroad website.

\subsection*{9.2.7 Transfer Credit and Advanced Standing}

Students are admitted to a four-year program requiring the completion of 120 credits, but Advanced Standing of up to 30 credits may be granted if you have obtained satisfactory results in the Diploma of College Studies, International Baccalaureate, French Baccalaureate, European Baccalaureate, Bologna signatory countries, Advanced Level and Advanced Subsidiary Exams, and Advanced Placement Exams. Students who transfer course credit from another institution may transfer up to one-third of the credits required in their degree program, including the concentration, major, or honours requirements under the following conditions:
- For credit transfer from another institution, please visit section 1.5.6: Transfer Credits for the grading policy.
- Grades of P or S are acceptable only if transferred from faculties within McGill.
- The letter grades applied by the former home institution or host institution (for exchanges and study away) take precedence over the numerical grades if provided.
- For exchange or study away purposes, it is required that course and credit approval is obtained before courses are taken at the host institution.
- The four-year program will require a minimum 80-credit residency at McGill.
- The three-year program will require a minimum 60-credit residency at McGill.
- A maximum of 6 credits of online non-management electives may transfer to the B.Com. degree if approved by the appropriate department at McGill.

\section*{9.3 \\ B.Com. Degree Admission Requirements}

The Desautels Faculty of Management offers programs that are highly selective; fulfilment of minimum admission requirements does not guarantee acceptance. For information about admission requirements to the BCom program, please refer to the Undergraduate Admissions guide, found at
mcgill.ca/undergraduate-admissions/apply. Students who have been asked to withdraw from a program in another faculty/university due to poor performance are not eligible for transfer into the BCom program. Information about interfaculty transfers can be obtained from the BCom Student Affairs Office at 514-398-4068 or the BCom website at mcgill.ca/desautels/programs/bcom.

\subsection*{9.4 B.Com. Degree Requirements}

The Bachelor of Commerce (B.Com.) degree program is a three- or four-year program when taken full-time. Although the language of instruction at McGill is English, those who plan to be part of the Quebec business environment are reminded of the importance of competence in both written and oral French. Students may submit assignments and write exams in French.

\subsection*{9.4.1 Academic Requirements for Graduation}

Each student in the Desautels Faculty of Management must be aware of the Faculty regulations as stated in this publication and on the McGill and BCom website. While BCom Office advisors and staff are always available to give advice and guidance, the ultimate responsibility for completeness and correctness of course selection and registration, for compliance with and completion of program and degree requirements, and for the observance of regulations and deadlines rests with you. It is your responsibility to seek guidance from the BCom Student Affairs Office if in any doubt; misunderstanding or misapprehension will not be accepted as cause for any exception from any regulation, deadline, program, or degree requirement.

For students entering with a Quebec CEGEP diploma, the number of credits is generally 90 . Students from outside the province of Quebec who have not completed the equivalent of a CEGEP diploma are required to complete 120 credits.

\section*{Experiential Learning Degree Requirement}

All BCom students are required to complete a minimum 3-credit experiential learning course to graduate with a BCom degree.
Students who pursue a major in Business Analytics, Managing for Sustainability, or Retail Management may fulfil this degree requirement by means of completing their program requirements. These students should still confirm that their chosen course is indicated in the experiential course repository. Students in other programs may fulfill the experiential learning degree requirement by selecting a course that will count as an elective or as part of the complementary section of their program.
All courses that can fulfill this requirement are indicated in the Desautels experiential course repository:
mcgill.ca/desautels/course-based-experiential-learning-opportunities-undergraduates. Students can select which course to pursue based on their area of study and interests.

There are multiple courses that meet the degree requirement, but they are not necessarily offered each term. While degree planning, it is the student's responsibility to take course availability into account to make sure their graduation is not delayed. Students are encouraged to reach out to the BCom Student Affairs Office with any questions, concerns and/or for advising.

\section*{Students Entering with Advanced Standing}

All students admitted with Advanced Standing must meet with a BCom advisor. It is your responsibility to ensure that all appropriate official results are provided to McGill and that your McGill transcript accurately reflects the minimum credit requirement. This must be finalized by the end of your first term at McGill. Delays to submit all official documentation may result in the Advanced Standing not being granted.

It is your responsibility to make sure that your course of study conforms with the curriculum requirements as described in this publication. If you want to deviate from your program, you must obtain written permission from the Associate Director, BCom Program.

If you have transferred with Advanced Standing to the Desautels Faculty of Management from another university, you are required to complete a minimum of 60 credits while registered in the BCom program, including required courses that are deemed necessary, to become eligible for the B.Com. degree.

\subsection*{9.4.2 Cumulative Grade Point Average (CGPA)}

You will be eligible for graduation upon satisfactory completion of the minimum credit requirement for the degree as indicated in your letter of acceptance, subject to the curriculum and CGPA of 2.00 ( 3.00 for Honours) requirements.

\subsection*{9.4.3 Course Requirements}

All required and complementary courses used to fulfil program requirements, including the Freshman/Foundation Year program, must be completed with a grade of C or better. If you fail to obtain a satisfactory grade in a required course (core, part of a concentration, minor, major, or honours program), you must repeat the course. Course substitution will be allowed only in special cases; you should consult your academic advisor. Normally, you are permitted to repeat a failed course only once (failure is considered to be a grade of less than C or the administrative failures of J and KF ). If the failed course is a complementary course required by the program, you may choose to replace it with another complementary course. If you choose to substitute another complementary course for a complementary course in which a \(D\) was received, credit for the first course will still be given, but as an elective. If you repeat a required course in which a D was received, credit will be given only once. In either case, both grades of D count toward the CGPA.

In addition, if a course is passed with a grade of C or better, and is then repeated in the future, the subsequent course will not be allowed to count for credit nor be calculated in the CGPA.

\subsection*{9.4.4 Academic Advising}

IfIf you're new to the Desautels Faculty of Management, attending an Orientation and Advising Session in the last week of August is mandatory. During this session, the BCom Student Affairs Office staff will provide information on all aspects of the BCom program. If you have had difficulty registering for your courses, and have not contacted the BCom Office to resolve your issues, you will have the opportunity to resolve your problems after this session. For a detailed description of advising and registration procedures, you should refer to section 9.4.5: Registration; the website for newly admitted undergraduate students at mcgill.ca/accepted; and the BCom website at mcgill.ca/desautels/programs/bcom.
To avoid limited course enrolment, it's best not to wait until August to resolve registration issues.
Academic advising for all returning students takes place in February and March for the upcoming academic year. Appointments can be made using BCom Insight tool found at mcgill.ca/desautels/programs/bcom/contact-us:
- from mid-August until the end of the add/drop period in the Fall term;
- from the beginning of January until the end of the add/drop period in the Winter term.

Appointments to discuss programs of study with student advisors may be made as soon as the add/drop period ends in September and then again in January. All new students are required to attend a mandatory appointment with an academic student advisor in this period of their first semester. In February or March, an Information Session takes place that helps you to select a course of study for specialization. In April, as a student continuing in the BCom program, you will plan your studies for the following year using the requirements as listed in the eCalendar or in the My Progress module available through Minerva, as a guide to your course selection. Advice is available at the BCom Faculty of Management Undergraduate Student Affairs Office for students having difficulty. Students register online using Minerva.
If you are a General Management student choosing to do a minor in another faculty as your second area of study, you should meet with the appropriate department advisor to plan your courses. It should be noted that minors must have a minimum of 18 credits not overlapping with other program requirements.
If you are taking the Minor, Major, or Honours in Economics, you must see an advisor in the BCom Student Affairs Office for approval of your program and course selection after meeting with an Economics Advisor.
If you are in the Major in Mathematics and Statistics for Management, the Major Concentration in Mathematics for Management Students, or the Minor in Mathematics or Statistics, you must have your program of study initially authorized by the appropriate department advisor prior to consulting with a student advisor in the BCom Faculty of Management Undergraduate Student Affairs Office.
You should contact a student advisor as soon as possible if you are encountering difficulties (academic or personal) or are requesting specific information about the BCom program.

\subsection*{9.4.5 Registration}
- It is your responsibility to register on time. To avoid delays in graduation and program completion, it's crucial to register on time during the registration period. Keep in mind that space is limited.
- Priority registration for Fall and Winter courses will begin May/June for returning BCom students. Priority registration in Management courses for Summer opens in early March. Exact dates may be obtained from mcgill.ca/importantdates.
- All courses have limited enrolment. BCom students who are unable to register for required or complementary courses that they need in order to graduate on time should submit a copy of the Closed Course Request form to the BCom Student Affairs Office after registration in June. During the add/drop periods, Closed Course Request forms will not be accepted. Exact deadlines may be obtained from mcgill.ca/importantdates.
- BCom students are not permitted to take courses offered through the School of Continuing Studies for credit toward their degree.
- New students must select their area(s) of specialization online using Minerva before they are permitted to register for courses. The program options available are found in the Change your Curriculum module of the Student Menu. Please note that this can be changed at any time.
- Full-time students must register for courses online using Minerva. Additional information for new students is distributed at the time of admission and is also available on the Faculty website's Newly admitted BCom students section, and mcgill.ca/student-records. Information for returning students and part-time students is available in the BCom Student Affairs Office as of March.
- If you want to change the courses for which you are registered within the add/drop period, you must do so online using Minerva.
- If you want to withdraw from a course after the add/drop deadline, you must do so online using Minerva by the withdrawal deadline. A grade of W will be indicated on the transcript, which does not affect your GPA. Approval to withdraw after the withdrawal deadline will be granted only in exceptional circumstances. A written request for such consideration, accompanied by substantial documentation, must be submitted to the BCom Associate Director. If your circumstances require you to withdraw from your program completely, you should see an advisor in the BCom Student Affairs Office.
- When your record is verified, any courses taken that violate the degree regulations will be flagged after the end of the course change period as "not for credit towards the BCom". As a result, your expected date of graduation may be delayed. If you believe that you have valid reasons to take a course that may not be credited toward your B.Com. degree, you must obtain permission from the BCom Associate Director.

\subsection*{9.4.6 Course Overlap}

You will not receive credit toward your degree for any course that overlaps in content with a course taken for credit at McGill, CEGEP, or another university; advanced placement exams; Advanced Level results; International Baccalaureate Diploma; or French Baccalaureate Diploma.
It is your responsibility to consult with the BCom Student Affairs Office as to whether or not credit can be obtained and to be aware of exclusion clauses specified in the course descriptions in this publication. Please refer to mcgill.ca/transfercredit for specific information about Advanced Standing credits and McGill course exemptions.

Credit for Statistics courses will be subject to the following restrictions:
BCom students must take the statistics courses that are part of the B.Com. degree, as specified in Core and the various programs. There are many statistics courses at McGill that overlap with the statistics in our B.Com. degree. If students wish to receive credit from other statistics courses at McGill, they must be assessed by the BCom Office on a case-by-case basis.
- Statistics courses must be taken in the correct sequence in order to receive credits for all.
- MGCR 271 and MGSC 372 must be taken before MATH 324. If MATH 324 is completed first, you cannot complete MGCR 271 nor MGSC 372 and receive credits.
- MATH 203 and MATH 204 are not open to BCom students.
- Interfaculty Transfer students: if you have completed MATH 203 at McGill and are transferring to the Bachelor of Commerce, if admitted we will grant an exemption for MGCR 271. If MATH 203 was completed prior to McGill (i.e. in CEGEP), you will not receive an exemption for MGCR 271; you must complete MGCR 271.
Credit for Economics courses will be subject to the following restrictions:
- A maximum of 6 credits will be granted for Foundation Economics courses.
- A maximum of 9 credits will be granted for ECON 230D1/ECON 230D2, ECON 250D1/ECON 250D2, and MGCR 293.
- A maximum of 9 credits will be granted for ECON 330D1/ECON 330D2, ECON 352D1/ECON 352D2, ECON 295, and MGCR 294.
- ECON 208 and ECON 209 are not permitted.

\subsection*{9.4.7 Courses Taken Under the Satisfactory/Unsatisfactory Option}

You may select or cancel the Satisfactory/Unsatisfactory (S/U) option up until the end of the add/drop period. Please find the form here:
mcgill.ca/desautels/satisfactoryunsatisfactory-su-passfail-option. All S/U credits will be excluded when calculating the GPA. This option may only be used for elective courses, one course per term, to a maximum of \(10 \%\) of the total credits taken at McGill to fulfil your degree requirements.
Careful consideration should be given before using this option as it can affect scholarship and award consideration, where a minimum of 27 graded credits are required for the year, excluding the Summer term. Speak to the BCom Office about the effects that your request may have on your studies.
For more information and restrictions, refer to University Regulations and Resources > Undergraduate \(>\) Registration \(>\) section 1.3.2.5: Courses Taken under the Satisfactory/Unsatisfactory (S/U) Option.

\subsection*{9.4.8 Electives}

\subsection*{9.4.8.1 Non-Management Electives}

Non-Management electives may be chosen from a broad range of faculties and departments, subject to the exclusions of section 9.4.6: Course Overlap regarding Statistics, Computer, and Economics courses, and the restrictions listed below.

Note 1: Quantitative Methods, Statistics, and Research courses offered by any department must be approved by the BCom Associate Director prior to registration in the course. Failure to obtain the necessary approval will result in the course being excluded (E) from the credit count.

Note 2: A maximum of 6 credits can be taken in English for Academic Purposes and/or English as a Second Language: the relevant subject codes are WCOM and EDEC.

\subsection*{9.4.8.1.1 Faculty Constraints}

\section*{Agricultural \& Environmental Sciences:}
- The following courses are not approved and may not be taken for credit within the BCom program: AEMA 101, AEMA 102, AEMA 310, AGEC 200, AGEC 201, AGEC 242, AGEC 320, AGEC 330, AGEC 450, and BREE 103.

\section*{Arts:}
- All courses are approved, subject to section 9.4.6: Course Overlap and the above notes, with a maximum of 6 credits approved in WCOM or SWRK (advisor's approval only).
- ECON 208, ECON 209, ECON 217, and ECON 227 may not be taken for credit within the BCom program.

\section*{Education:}
- A maximum of 6 credits are approved from the following subject codes (combined): EDEA, EDEC, EDEE, EDEM, EDES, EDKP, and EDPT.
- No courses are approved from subject codes EDET, EDFC, EDFE, or EDSL.

\section*{Engineering:}
- Most courses in subject codes ARCH, CHEE, CIVE, ECSE, MECH, MIME, URBP with approval of an advisor.
- No courses are approved from subject codes FACC or MPMC.
- The following courses are not approved: CHEE 291; CIVE 210, CIVE 432; ECSE 443; MECH 201, MECH 260, MECH 262, MECH 289; MIME

202, MIME 221, MIME 280, MIME 290, MIME 291, MIME 380, MIME 392, MIME 480, MIME 481, MIME 494.

\section*{Music:}
- All courses are approved in subject codes MUGT, MUHL, MUMT, MUPD, MUPP, MUSR, MUTH, and MUAR (taught by Arts).
- A maximum of 6 credits is approved from the following (combined): MUCO, MUCT, MUEN, MUIN, MUIT, MUJZ, MUPG, and MUSP.

Science:
- All courses are approved, subject to section 9.4.6: Course Overlap and the above Note 1, except MATH 111, MATH 112, MATH 150, MATH 151, MATH 203, MATH 204, and BIOL 373.

\subsection*{9.4.8.2 Electives}

Subject to the requirements and restrictions for non-Management electives as outlined above, all remaining elective credits may be taken in any faculty, Management or otherwise.

\subsection*{9.4.9 Academic Standing}

Academic Standing is based primarily on your cumulative grade point average (CGPA), but may also be affected by your term grade point average (TGPA). Academic Standing is assessed in January for the Fall term, in May for the Winter term, and in September for the Summer term; this determines whether you will be allowed to continue your studies in the next term and whether any conditions will be attached to your registration.
Decisions about Academic Standing in the Fall term are based only on grades that are available in January. Grades for courses in which you have deferred examinations and Fall-term grades for courses that span the Fall and Winter terms do not affect your Academic Standing for the Fall term, even though they will ultimately affect your Fall TGPA. Therefore, Academic Standings for the Fall term are designated as "Interim." Interim Standing decisions are mentioned below only if the rules for them differ from those for regular Standing decisions.
If you are not in Satisfactory Standing, you are strongly advised to consult with an academic advisor in the BCom Student Affairs Office about your course selection before the withdrawal deadlines.

\subsection*{9.4.9.1 Satisfactory/Interim Satisfactory Standing}

If you are in Satisfactory Standing, you may continue in your program. New students are admitted to Satisfactory Standing. Students with a CGPA of 2.00 or greater are in Satisfactory Standing. You must obtain a minimum CGPA of 2.00 to be considered for graduation with a McGill degree.

\subsection*{9.4.9.2 Probationary/Interim Probationary Standing}

If you are in Probationary Standing, you may continue in your program, but must carry a reduced load (maximum 14 credits per term) and raise your TGPA and CGPA to return to Satisfactory Standing (see above). You must see an academic advisor to discuss your course selection.

If you are in Interim Probationary Standing, you may continue in your program, but should evaluate your course load and reduce it as appropriate. You are strongly advised to consult with an academic advisor, before the withdrawal deadlines, about your course selection for the Winter term.
- If you were previously in Satisfactory Standing, you will be placed in Probationary Standing if your CGPA falls between 1.50 and 1.99 .
- If you were previously in Probationary Standing, you will remain in Probationary Standing if your CGPA falls between 1.50 and 1.99 and your TGPA is 2.50 or higher (although the TGPA requirement will not apply to the Summer term).
- If you were previously in Interim Unsatisfactory Standing, you will be placed in Probationary Standing if your CGPA falls between 1.50 and 1.99 and your TGPA is 2.50 or higher.
- If you were previously in Unsatisfactory Standing and you were readmitted to the BCom program, you will be placed in Probationary Standing if your CGPA is lower than 2.00. To remain in the program, you must satisfy the relevant conditions specified in your letter of readmission.

\subsection*{9.4.9.3 Unsatisfactory Readmitted Standing}

If you were previously in Unsatisfactory Standing and you were readmitted to the BCom program, you will have your Standing changed to Unsatisfactory Readmitted Standing. You course load is specified in your letter of readmission, as are the conditions you must meet to be allowed to continue in your program. You should see an academic advisor to discuss your course selection.

\subsection*{9.4.9.4 Unsatisfactory/Interim Unsatisfactory Standing}

If you are in Interim Unsatisfactory Standing, you may continue in your program, but should evaluate your course load and reduce it as appropriate. You must see a student advisor, before the withdrawal deadlines, about your course selection for the Winter term.

If you are in Unsatisfactory Standing, you have failed to meet the minimum standards set by the Faculty. You may not continue in your program, and your registration will be cancelled.
Appeals for readmission by students in Unsatisfactory Standing should be addressed to the Academic Director, BCom Program Director, BCom Program, no later than July 15 for readmission to the Fall term and November 15 for the Winter term. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (i.e., medical or other documentation) along with reassurances of future improvement. If you are in Unsatisfactory Standing for the second time, you must withdraw permanently.
- You will be placed in Unsatisfactory Standing (Winter or Summer term) or Interim Unsatisfactory Standing (Fall term) if your CGPA falls or remains below 1.50.
- If you were previously in Probationary, Unsatisfactory Readmitted, or Interim Unsatisfactory Standing, you will be placed in Unsatisfactory Standing if your TGPA falls below 2.50 and your CGPA is below 2.00
- If you were previously in Unsatisfactory Standing and you were readmitted to the BCom program by the Academic Director, and you have not at least satisfied the conditions to attain Probationary Standing that were specified in your letter of readmission, you will be placed in Unsatisfactory Standing.

\subsection*{9.4.9.5 Incomplete Standings}
- Standing awaits deferred exam;
- Standing Incomplete.

If you have an Incomplete Standing in the Winter or Summer term, you may register for the Fall term, but your Standing must be resolved by the end of the add/drop period for that term. If your Incomplete Standing changes to Satisfactory, Probationary, or Interim Unsatisfactory Standing, you may continue in the program. If your Standing changes to Unsatisfactory Standing, you may not continue in your program, and your registration will be cancelled.

If your Standing changes to Unsatisfactory and you wish to ask for permission to continue in your program, you must meet with your academic advisor as soon as you are placed in Unsatisfactory Standing. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (i.e., medical or other documentation) along with reassurances of future improvement.

\subsection*{9.4.10 Time and Credit Limit for Completion of the BCom Degree}

If you need 90 or fewer credits to complete your degree requirements, you are expected to complete your degree in no more than eight terms after your initial registration for the BCom degree. If you are a student completing over 90 and up to 120 credits, you become subject to these regulations one year after your initial registration.
If you wish to return to the BCom program after interrupting your studies for a period of one year or more, you must make a request for readmission through Minerva and also apply in writing to bcom.mgmt@mcgill.ca. When you are readmitted after a period of absence, you are normally subject to the program and degree requirements in effect at the time of readmission.

\subsection*{9.5 Grading and Credit}

During the first week of lectures, each instructor will provide you with a written course outline that should include:
- Grading guidelines;
- A description of the topics to be considered in the course;
- A list of required or recommended textbooks and reading materials;
- A grading scheme or description of the methods of evaluation to be used in the course, along with due dates for assignments and dates/times of exams. All term work must be assigned early enough in the term for students to complete the assignment(s) by the last day of class. The due date for term work must be no later than the last day of classes. Changes in the distributed grading scheme are permitted only with the unanimous consent of all students registered in the course. In practice, therefore, the grading scheme is almost never changed during the term;
- The instructor's office hours for students, office location, telephone number for office appointments, and secretarial contact information;
- Academic Integrity statement: McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism, and other academic offences described in the Code of Student Conduct and Disciplinary Procedures and consult the Students Rights and Responsibilities page at mcgill.ca/students/srr/honest for more information. Note that all newly admitted undergraduate students are required to complete the Academic Integrity tutorial through Minerva.

\subsection*{9.5.1 Examinations}

For information about final examinations and deferred examinations, also see University Regulations and Resources \(>\) Undergraduate \(>\) section 1.6: Examinations: General Information.

Final examinations are centrally administered by Enrolment Services. Around the beginning of November and March, a final examination schedule will be posted on the McGill Exams website by Enrolment Services. The seating arrangements are posted on the McGill website toward the end of the last week of classes.

BCom students and non-Management students taking BCom courses are contacted by Enrolment Services via McGill email regarding final exam conflicts. Arrangements to resolve final exam conflicts are made and communicated by Enrolment Services via McGill email as well. You should also refer to the BCom website for more information, or contact Enrolment Services Service Point. Students are warned not to make travel arrangements to leave Montreal prior to the posting of the official final examination schedule.

BCom courses cannot have examinations scheduled during the last two weeks of term worth more than \(10 \%\) of the final grade. You must repeat any grades of D or F in core courses or courses as part of a concentration, minor, major, or honours program. However, D is a passing grade for elective courses.

\subsection*{9.5.1.1 Supplemental Examinations}

Supplemental examinations are not offered in undergraduate courses administered by the Desautels Faculty of Management. If you are required to improve your standing in a course, you must repeat the course in a subsequent term, completing all course requirements to the satisfaction of the instructor. Faculty policy does not allow you to do additional work to improve your standing in a course.

\subsection*{9.5.1.2 Deferred Examinations}

For missed final examinations, whatever the reason may be, professors and students are not to make alternate arrangements. If you are unable to write your final exam due to illness or another serious reason, you may apply for a deferral of your exam through your Minerva account, and if your application is accepted, you will be permitted to write it during the next deferred examination period.
To qualify, you must obtain documentation (such as a doctor's note) explaining your inability to write the exam, which must be dated within \(\mathbf{5}\) days of the exam, and bring it to the BCom Office as soon as possible after the exam. The application and supporting documentation must be submitted no later than January \(\mathbf{1 5}\) for Fall courses or May \(\mathbf{1 5}\) for Winter and Fall-Winter courses.
The BCom Office will then review the reasons for which the exam was missed and decide whether to allow you to write a deferred final exam. If approved, you will write the final exam during the University's official deferred exam period-specific dates in March (Fall term) and August (Winter and Summer terms). It is up to you to verify the deferral schedule, which is administered by the Registrar.

It is recommended that students who have been approved for deferred exams meet with an academic advisor.

\subsection*{9.5.2 Verification of Grades and Rereads}

In accordance with the Charter of Student Rights, and subject to its stated conditions, you have the right to consult any written submission for which you have received a mark and the right to discuss this submission with the examiner.

In a case where you feel that an error has been made in arriving at the final grade, a Re-Read Application Form must be completed in the BCom Student Affairs Office, requesting the instructor to carry out a detailed check that all questions have been marked, and that the final grade has been computed correctly on the basis of the term work, final examination, etc. However, during the course of the term, any requests to have term work re-evaluated should initially be made directly to the instructor.

The Desautels Faculty of Management recognizes two types of rereads or reassessments:
- reread of coursework (term papers, mid-terms, assignments, quizzes, etc.)
- reread of a final exam

In both cases, rather than recorrect the work and then grade it as they would have done themselves, reviewers assess the appropriateness of the original grade based, for example, on the application of the grading key to the student's work. If a grade is deemed unfair, it is changed, whether the new grade is higher or lower than the original, i.e., the reviewer's grade takes precedence over the original grade.

\subsection*{9.5.2.1 Reread of Coursework}

You may apply to the BCom Student Affairs Office for rereads of written coursework. You are assessed a fee for such rereads; consult the Student Accounts website for specific fee amounts. Requests for rereads involving group work require the consent of all members of the group, but only one reread fee will be assessed. It is strongly recommended that you consult with the instructor of the course before requesting a reread of coursework. Requests for rereads must be made within 10 working days of the date of return of the graded materials. Reassessments should normally be completed within 20 working days of the request.

\subsection*{9.5.2.2 Rereads of Final Exams}

These rereads are administered by the BCom Student Affairs Office. You must apply in writing to the BCom Student Affairs Office by March 31 for courses in the Fall term and by September 30 for courses in the Winter or Summer terms (these deadlines are strictly enforced, and no requests will be accepted past them). You are assessed a fee for such rereads; consult the Student Accounts website for specific fee amounts. It is strongly recommended, but not required, that you consult with the instructor of the course before requesting a reread of a final exam.

Reassessments and rereads in courses outside the Desautels Faculty of Management are subject to the deadlines, rules, and regulations of the relevant faculty.

\subsection*{9.5.3 Awards and Honorary Designations}

\subsection*{9.5.3.1 Honours and First-Class Honours}

Graduating students registered in an honours program may be awarded Honours or First-Class Honours under the following conditions:
- For Honours, the CGPA at graduation must be 3.0 or higher, and a GPA of 3.0 or higher in the specified courses of the program.
- For First-Class Honours, the CGPA at graduation must be 3.5 or higher, and a GPA of 3.5 or higher in the specified courses of the program.

Students in an honours program whose GPA or CGPA is below 3.0, or who did not satisfy certain additional program requirements, must consult their student advisor to determine whether they are eligible to graduate in a program other than honours.

\subsection*{9.5.3.2 Distinction}

For information on the designation of Distinction awarded at graduation, see University Regulations and Resources \(>\) Undergraduate \(>\) Graduation \(>\) Graduation Honours \(>\) section 1.9.3.2: Distinction.

\subsection*{9.5.3.3 Dean's Honour List}

For information on the designation of Dean's Honour List awarded at graduation, see University Regulations and Resources \(>\) Undergraduate \(>\) Graduation > Graduation Honours > section 1.9.3.1: Dean's Honour List.

\subsection*{9.5.3.4 Scholarships, Prizes, and Awards}

\section*{Graduation Scholarships, Prizes, and Awards}

Certain scholarships, based solely on academic and program-related criteria, are automatically granted by the Undergraduate Scholarship Committee to students graduating at the end of the Fall or Winter terms prior to Spring Convocation.
The following scholarships are based on additional criteria, such as leadership and community involvement, and require an application. Graduating students must apply online on the BCom website by the early May deadline at mcgill.ca/desautels/programs/bcom/current-students/scholarships.
- Anil Gondi Community Impact Award
- BCom Class of 1986 Activity Award for Leadership
- BCom Class of 1990 Activity Award
- Jaclyn Lea Fisher Volunteer Leadership Award
- Richard G. Donovan Prize in Case Excellence
- Stephen S. Goldbloom Memorial Prize

Convocation Awards Without Application:
- Barry Clamen Prize for Outstanding Achievement in Accounting
- Cissy and Jimmy Greer Prize
- Commerce 1925 Award
- Dr. J. A. Coote Prize in Organizational Behaviour
- Dr. M. Richard Gelfand Prize in Marketing
- Finestone Economics Prize
- Herbert E. Siblin Award
- Hugh Howson Memorial Prize
- L. J. Forget \& Company Awards
- Laddie Millen Memorial Prizes
- McGill Accounting Society Prize
- McGill Alumnae Society Prize
- Misawa Homes Prize in International Business
- Peter S. Wise Memorial Prize in Accounting
- Sir Edward Beatty Medal

In-Course Scholarships, Prizes, and Awards:
In-course scholarships are granted to registered students with 27 graded credits in the fall and winter terms or 14 graded credits in one term at McGill. Eligible students are automatically considered by the Undergraduate Scholarships Committee for any award that is based solely on academic or program-related criteria. The following in-course scholarships are based on a combination of academic, volunteer, leadership, and extra-curricular involvement and require an application. Students must apply online on the BCom webpage by the early June deadline: mcgill.ca/desautels/programs/bcom/current-students/scholarships. One application is required per student for all awards to which they wish to apply.
Full list of in-course scholarships for students returning for a full academic year of studies:
- Accenture Prize
- André Desmarais and Francine Chrétien-Desmarais Award in International Management
- Anil Gondi B.Com Scholarhip (awarded every three years, application required)
- Barry Clamen Scholarship for Excellence in Accounting
- Cecil Vineberg Scholarship
- Commerce 1953 Scholarships
- Commerce 1955 Scholarships (application required)
- Danny and Monica Gold Award for Academic Excellence (application required)
- Deloitte Scholarship
- Devon Anthony Haye Social Impact Scholarship (application required)
- Dobson Cup Grit Prize (awarded by the Dobson Centre)
- Donald R. McRobie Award (application required)
- Dorothy Esmé Graham Snell Scholarship
- Dr. Alex Paterson Scholarship (application required)
- Elizabeth Macfarlane Prize
- Frederick M. Connell Award
- Gary and Wendy Balter Scholarship in Management
- George Arnold Hart Memorial Scholarship
- Gerald Benjamin Wasserman Memorial Scholarship in Entrepreneurship
- Great-West Life \& London Life Scholarship in Management (application required)
- Hazelview Sustainable Business Management Scholarship (application required)
- HSBC Bank Canada Management Awards (application required)
- Jon Hartwick Award
- John V. Galley Scholarships
- Joseph H. Jacobs Prize
- Letko Brosseau Investment Management Award
- Marcel A. Desautels Leadership Scholarship (application required)
- Marion McCall Daly Award (application required)
- McGill Alumnae Helen R. Y. Reid Scholarship
- Paul-Hervé Desrosiers Scholarship in Entrepreneurial Studies (application required)
- Peter Brojde Scholarship (application required)
- Peter Johnson Start-Up Prize (awarded by the Dobson Centre)
- Philippe \& Nan-B de Gaspé Beaubien Citizenship Prize (awarded in odd years only, application required)
- Richter Scholarships in Accounting
- Robert Bruce Scholarship
- Sheila Wellington BMO Financial Group Awards (application required)
- Shirin Yeganegi Memorial Scholarship (application required)
- Sir William Macdonald Scholarship
- Sujata Madan Award
- Women Associates of McGill Scholarship

To be awarded a scholarship students must be enrolled full-time in the subsequent fall and winter terms in the BCom program. If they are going on exchange in one of the following terms they must be full-time in the term they are at McGill. Students graduating in the Summer or Fall term are not eligible for in-course awards but may apply for graduating awards the following spring. Students who do not meet any of the eligibility requirements for a scholarship after it has been granted will have their scholarship revoked. Students who are on a leave of absence in a subsequent term or terms may not retain the award so long as they are not registered at McGill.

\subsection*{9.6 Overview of BCom Programs Offered by the Desautels Faculty of Management}

The Desautels Faculty of Management offers several programs leading to a B.Com. degree, which fall within the following categories:

\section*{Overview of BCom Programs}
section 9.6.3: 120-Credit Program, Foundation Year Course Distribution
section 9.6.5: Concentrations (General Management Major)
section 9.6.8: Majors
section 9.6.9: Honours
section 9.6.6: Minors for Management Students
section 9.6.7: Minor for Non-Management Students

The following information outlines the credit structure for each BCom program type:
BCom Program Credit Structures and Course Distributions
section 9.6.3: 120-Credit Program, Foundation Year Course Distribution
section 9.6.4: Management Core
section 9.6.1: BCom Program Credit Structure: General Management Program (Concentrations)
section 9.6.2: BCom Program Credit Structure: Major or Honours Programs

\subsection*{9.6.1 BCom Program Credit Structure: General Management Program (Concentrations)}
\begin{tabular}{lll|}
\hline \(\mathbf{2}\) Concentrations & \(\mathbf{9 0}\) credits & \(\mathbf{1 2 0}\) credits \\
\hline Freshman/Foundation Year Requirements & 0 & 30 \\
Core & 39 & 39 \\
2 Concentrations & 30 & 30 \\
Electives & 21 & 21 \\
Total & 90 & 120 \\
\hline \(\mathbf{1}\) Concentration and 1 Minor (18* or \(\mathbf{2 4}\) credits) & \(\mathbf{9 0}\) credits & \(\mathbf{1 2 0}\) credits \\
\hline Freshman/Foundation Year Requirements & 0 & 30 \\
Core & 39 & 39 \\
1 Concentration & 15 & 15 \\
1 Minor \(\left(18^{*}\right.\) or 24 credits) & \(18^{*}\) or 24 & \(18^{*}\) or 24 \\
Electives & \(18^{*}\) or 12 & 18 or 12 \\
Total & 90 & 120 \\
\hline
\end{tabular}

\section*{Concentrations}
- Accounting
- Business Analytics
- Entrepreneurship
- Finance
- Information Technology Management
- International Business
- Labour-Management Relations and Human Resources
- Managing for Sustainability
- Marketing
- Operations Management
- Organizational Behaviour
- Retail Management
- Strategic Management - Global Strategy
- Strategic Management - Social Business \& Enterprise

\subsection*{9.6.1.1 Minors/Minor Concentrations for Management Students}

A wide variety of programs are available as listed in the sections for the Faculties of Arts and Science. Popular choices include Anthropology, Canadian Studies, Computer Science, English - Literature, Environmental Studies, Geological Sciences, German, History, International Development, Political Science, Women's Studies, etc.
*: It should be noted that a minimum of 18 credits of the Minor's requirements must not overlap with any other part of the student's program.

\subsection*{9.6.2 BCom Program Credit Structure: Major or Honours Programs}
\begin{tabular}{lll|}
\hline Majors in Management & \(\mathbf{9 0}\) credits & \(\mathbf{1 2 0}\) credits \\
\hline Freshman/Foundation Year Requirements & 0 & 30 \\
\hline
\end{tabular}
\begin{tabular}{lll} 
Majors in Management & \(\mathbf{9 0}\) credits & \(\mathbf{1 2 0}\) credits \\
Core & 39 & 39 \\
Major & 30 & 30 \\
Electives & 21 & 21 \\
Total & 90 & 120 \\
Major in Mathematics and Statistics for Management & \(\mathbf{9 0}\) credits & \(\mathbf{1 2 0}\) credits \\
Math Freshman/Foundation Year Requirements: MATH 140, MATH & 0 & 10 \\
141, and MATH 133 & & 17 \\
Freshman/Foundation Year Requirements & 0 & 36 \\
Core & 36 & 39 \\
Major & 39 & 18 \\
Electives & 15 & 120 \\
Total & 90 & \(\mathbf{1 2}\) \\
\hline Major in Economics & \(\mathbf{9 0}\) credits & \(\mathbf{1 2 0}\) credits \\
\hline Freshman/Foundation Year Requirements & 0 & 18 \\
Core* & 30 & 30 \\
Major** & 36 & 36 \\
Electives & 24 & 36 \\
Total & 90 & 120 \\
\hline
\end{tabular}
*: MGCR 271 Business Statistics is counted toward the 36 credits of the Major, not core.
** : Additional Services Charges MGCR 293 and MGCR 294 in core are exempted by the required ECON courses within the Major.
\begin{tabular}{|c|c|c|}
\hline Major in International Management & 90 credits & 120 credits \\
\hline Freshman/Foundation Year Requirements & 0 & 27 \\
\hline Core & 39 & 39 \\
\hline International Business Concentration Component & 15 & 15 \\
\hline Area of Study Component: Minor Concentration & 18 & 18 \\
\hline Language Component & 9-12 & 9-12 \\
\hline Experiential Learning Component * & 0-3 & 0-3 \\
\hline Electives & 3-9 & 6-12 \\
\hline Total & 90 & 120 \\
\hline \multicolumn{3}{|l|}{*: Going on exchange grants the credits for the approved courses taken abroad; it does not grant an additional 3 credits.} \\
\hline Major in Managing for Sustainability & 90 credits & 120 credits \\
\hline Freshman/Foundation Year Requirements & 0 & 18 \\
\hline Core & 39 & 39 \\
\hline Major & 39 & 39 \\
\hline Electives & 12 & 24 \\
\hline Total & 90 & 120 \\
\hline Honours in Investment Management & 90 credits & 120 credits \\
\hline Freshman/Foundation Year Requirements & 0 & 27 \\
\hline Core & 39 & 39 \\
\hline Honours & 45 & 45 \\
\hline
\end{tabular}
\begin{tabular}{lll}
\hline Honours in Investment Management & \(\mathbf{9 0}\) credits & \(\mathbf{1 2 0}\) credits \\
\hline Electives & 6 & 9 \\
Total & 90 & 120 \\
\hline
\end{tabular}

\section*{Majors}
- Accounting
- Business Analytics
- Economics for Management Students
- Finance
- Information Technology Management
- International Management
- Managing for Sustainability
- Marketing
- Mathematics and Statistics for Management
- Organizational Behaviour and Human Resources
- Retail Management
- Statistics (Major Concentration)
- Strategic Management

\section*{Honours}
- Investment Management

\subsection*{9.6.3 120-Credit Program, Foundation Year Course Distribution}

Students admitted to a program requiring 97 to 120 credits (four years) register in a Foundation Year in which they must complete MATH 122, MATH 123, and MGCR 250 in their first year of study, as well as Electives.

\section*{30 Credits}

U0 Required Courses - 9 Credits

\section*{U0 Required Courses (9 credits)}
\begin{tabular}{llr} 
MATH 122 & Calculus for Management & \((3\) credits) \\
MATH 123 & Linear Algebra and Probability & \((3\) credits \()\) \\
MGCR 250 & Expressive Analysis for Management & \((3\) credits \()\)
\end{tabular}

\section*{U0 Elective Courses - 21 Credits}

All Electives are subject to the restrictions for non-Management electives, please consult the mcgill.ca/desautels/programs/bcom/academics/programstructure/electives page.

A minimum grade of C is required for all courses in U0.
Students may choose to replace up to 6 credits of electives above by selecting core courses from the following, space permitting. Reach out to the BCom Office for more information:
- MGCR 222 Introduction to Organizational Behaviour (3)
- MGCR 293 Managerial Economics (3) if prerequisites MATH 122 and MATH 140 (or equivalent) have been fulfilled
- MGCR 331 Information Technology Management (3)
- MGCR 352 Principles of Marketing (3)

\subsection*{9.6.4 Management Core}

All BCom students take the 39-credit core curriculum set out below, except where modifications are specifically required by a major or honours program.
A grade of C or better is required for all core courses. If a D is obtained in a core course, the course must be repeated.

\subsection*{9.6.4.1 Core Course Distribution}

\section*{Required Courses (39 credits)}
MGCR 211 Introduction to Financial Accounting 3 credits
\begin{tabular}{lll} 
Required Courses (39 credits) & & \\
MGCR 222 & Introduction to Organizational Behaviour & 3 credits \\
MGCR 250 & Expressive Analysis for Management & 3 credits \\
MGCR 271 & Business Statistics & 3 credits \\
MGCR 293 & Managerial Economics & 3 credits \\
MGCR 294 & The Firm in the Macroeconomy & 3 credits \\
MGCR 331 & Information Technology Management & 3 credits \\
MGCR 341 & Introduction to Finance & 3 credits \\
MGCR 352 & Principles of Marketing & 3 credits \\
MGCR 372 & Operations Management & 3 credits \\
MGCR 382 & International Business & 3 credits \\
MGCR 423 & Strategic Management & 3 credits \\
MGCR 460 & Social Context of Business & 3 credits
\end{tabular}

\section*{Program Footnotes:}

Students considering the following programs:
- Major in Mathematics or Major and Minor in Statistics:
- replace MGCR 271 with MATH 324 (prerequisite: MATH 323)
- Major Program in Economics:
- replace MGCR 293 with ECON 230D1/ECON 230D2.
- replace MGCR 294 with ECON 330D1/ECON 330D2 (taken in the second year)

\section*{Also note that:}
- A maximum of 6 credits will be permitted within the BCom program for MGCR 293 and ECON 230D1/ECON 230 D 2 or ECON 250D1/ECON 250D2.
- A maximum of 6 credits will be permitted within the BCom program for MGCR 294 and ECON 330D1/ECON 330 D 2 or ECON 352D1/ECON 352D2.

\subsection*{9.6.5 Concentrations (General Management Major)}

In order to complete a concentration, students must achieve a grade of C or better in the courses counting towards the concentration. If a student receives less than a C in a complementary course, they have the option of repeating this course or selecting another complementary course. They may also choose to pursue a different concentration altogether.
In general, students will begin taking courses from the chosen concentration(s) in the U2 year.
Academic mentors are appointed for each Management concentration to assist students in choosing a concentration and provide additional information regarding course selection.
Second Concentration: Students who choose to take a second concentration will be required to complete 15 non-overlapping credits at a satisfactory level with a minimum grade of \(C\) in each course.

Mentors: Please consult the Bachelor of Commerce website at: mcgill.ca/desautels/programs/bcom/academics/programstructure\#concentrations.

\subsection*{9.6.5.1 Bachelor of Commerce (B.Com.) - Concentration in Accounting (15 credits)}

The Accounting concentration is designed to meet the needs of Management students who want to have a good basic understanding of accounting, but do not intend to become professional accountants or accounting specialists. It is primarily oriented toward users of financial information and emphasizes breadth of knowledge in a coherent selection of courses.
This concentration complements or forms part of the B.Com., General Management program. The individual courses in the concentration also act as service courses for other areas in the Faculty for their majors or concentrations.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
ACCT 351 & (3) & Intermediate Financial Accounting 1 \\
ACCT 361 & (3) & Management Accounting
\end{tabular}

\section*{Complementary Courses (9 credits)}

Selected from the following:
\begin{tabular}{lcl} 
ACCT 352 & (3) & Intermediate Financial Accounting 2 \\
ACCT 354 & (3) & Financial Statement Analysis \\
ACCT 362 & (3) & Cost Accounting \\
ACCT 385 & (3) & Principles of Taxation \\
ACCT 401 & (3) & Sustainability and Environmental Accounting \\
ACCT 434 & (3) & Topics in Accounting 1 \\
ACCT 451 & (3) & Data Analytics in Capital Market \\
ACCT 452 & (3) & Financial Reporting Valuation \\
ACCT 453 & (3) & Advanced Financial Accounting \\
ACCT 463 & (3) & Management Control \\
ACCT 475 & (3) & Principles of Auditing \\
ACCT 486 & (3) & Business Taxation 2
\end{tabular}

\subsection*{9.6.5.2 Bachelor of Commerce (B.Com.) - Concentration in Business Analytics (15 credits)}

Students completing this concentration will have training in a diverse set of methods in analytics and tools to conduct analyses as applied in a variety of managerial disciplines. Today, business professionals, managers, and entrepreneurs need to be able to leverage the power of data that is collected. The Business Analytics concentration provides students with essential skills and knowledge needed to navigate in the world of data. This Concentration offers courses with a strong practical and applied orientation from a variety of managerial disciplines.

\section*{Required Courses ( 3 credits)}
INSY 336 (3) Data Handling and Coding for Analytics

\section*{Complementary Courses (12 credits)}

3-6 credits from the following:
\begin{tabular}{lll} 
MGSC 401 & (3) & Statistical Foundations of Data Analytics \\
MGSC 416 & (3) & Data-Driven Models for Operations Analytics
\end{tabular}

3-6 credits from the following:

INSY 446
MGSC 404

Data Mining for Business Analytics
Foundations of Decision Analytics
\(0-6\) credits from the following:
\begin{tabular}{lcl} 
ACCT 451 & (3) & Data Analytics in Capital Market \\
BUSA 471 & (3) & Artificial Intelligence Ethics for Business \\
FINE 460 & (3) & Financial Analytics \\
INSY 442 & (3) & Data Analysis and Visualization \\
INSY 446 & (3) & Data Mining for Business Analytics \\
INSY 448 & (3) & Text and Social Media Analytics
\end{tabular}
\begin{tabular}{lll} 
INSY 463 & (3) & Deep Learning for Business Analytics \\
MGSC 483 & (3) & Analytics-Based Community Project \\
MRKT 440 & (3) & Marketing Analytics \\
MRKT 442 & (3) & Customer Analytics \\
ORGB 330 & (3) & People Analytics
\end{tabular}

Or any related undergraduate topics course (with approvals from Business Analytics and the BCom Office).

\subsection*{9.6.5.3 Bachelor of Commerce (B.Com.) - Concentration in Entrepreneurship (15 credits)}

This concentration is designed to provide students with an understanding of the key concepts and processes involved in starting and managing new ventures. It combines rigor with relevance, as all students will complete a major field project, thus providing an opportunity to apply the concepts acquired in the classroom. The concentration is multidisciplinary and integrative, as it includes courses from across areas in the Faculty. Upon completing the concentration, students will understand how to conceptualize, develop, and manage successful new ventures. The concentration is appropriate for students interested in a wide variety of new ventures, from for-profit private companies to social enterprises and cooperatives.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
MGPO 362 & (3) & Fundamentals of Entrepreneurship \\
MGPO 364 & (3) & Entrepreneurship in Practice
\end{tabular}

\section*{Complementary Courses (9 credits)}

To be chosen from:
\begin{tabular}{|c|c|c|}
\hline ACCT 361 & (3) & Management Accounting \\
\hline BUSA 300 & (3) & Case Analysis and Presentation. \\
\hline BUSA 364 & (3) & Business Law 1 \\
\hline BUSA 465 & (3) & Technological Entrepreneurship \\
\hline FINE 342 & (3) & Corporate Finance \\
\hline FINE 447 & (3) & Venture Capital and Entrepreneurial Finance \\
\hline INSY 331 & (3) & Managing and Organizing Digital Technology \\
\hline INSY 432 & (3) & Digital Business Models \\
\hline MGPO 365 & (3) & Business-Government Relations \\
\hline MGPO 432 & (3) & Topics in Entrepreneurship \\
\hline MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
\hline MGPO 440 & (3) & Strategies for Sustainability \\
\hline MGPO 445 & (3) & Industry Analysis and Competitive Strategy \\
\hline MGPO 460 & (3) & Managing Innovation \\
\hline MRKT 365 & (3) & New Products \\
\hline MRKT 451 & (3) & Marketing Research \\
\hline MRKT 455 & (3) & Sales Management \\
\hline ORGB 321 & (3) & Leadership \\
\hline
\end{tabular}

\subsection*{9.6.5.4 Bachelor of Commerce (B.Com.) - Concentration in Finance (15 credits)}

The Finance concentration has been designed to provide understanding of key concepts in finance theory, financial institutions, investment analysis, risk management, and applied techniques. Graduates find a strong demand among financial organizations, governments, and non-financial firms where they pursue careers that lead to positions such as Managing Partner, Treasurer, and V.P. Finance.

\section*{Required Courses (9 credits)}
FINE 342
(3)
Corporate Finance
\begin{tabular}{lll} 
FINE 441 & (3) & Investment Management \\
FINE 443 & (3) & Applied Corporate Finance
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

Selected from any undergraduate FINE course.

\subsection*{9.6.5.5 Bachelor of Commerce (B.Com.) - Concentration Information Technology Management ( 15 credits)}

The Information Technology Management concentration focuses on how organizations can leverage the power of IT. Navigating the digital economy, foundations in analyzing, selecting and applying technology solutions for business problems, as well as how to handle and analyze data.

\section*{Required Course (3 credits)}
INSY 333 (3) Systems Analysis and Modeling

\section*{Complementary Courses (12 credits)}

6-12 credits selected from:
\begin{tabular}{lll} 
INSY 331 & \((3)\) & Managing and Organizing Digital Technology \\
INSY 334 & \((3)\) & Design Thinking for User Experience \\
INSY 339 & (3) & Digital Consulting \\
INSY 341 & (3) & Developing Business Applications \\
INSY 431 & (3) & IT Implementation Management \\
INSY 432 & (3) & Digital Business Models \\
INSY 434 & (3) & Topics in Information Systems 1 \\
INSY 437 & (3) & Managing Data and Databases \\
INSY 440 & (3) & E-Business \\
INSY 442 & (3) & Data Analysis and Visualization \\
INSY 444 & (3) & Online Communities and Open Innovation \\
INSY 450 & (3) & Information Systems Project Management \\
INSY 455 & (3) & Technology and Innovation for Sustainability
\end{tabular}
\(0-6\) credits selected from:
\begin{tabular}{lll} 
INSY 336 & (3) & Data Handling and Coding for Analytics \\
INSY 446 & (3) & Data Mining for Business Analytics \\
INSY 448 & (3) & Text and Social Media Analytics \\
INSY 463 & (3) & Deep Learning for Business Analytics
\end{tabular}

\subsection*{9.6.5.6 Bachelor of Commerce (B.Com.) - Concentration in International Business ( 15 credits)}

The objective of the International Business Concentration is to help the student develop conceptual and analytical skills needed to formulate feasible and effective management policies in an international setting. With economic and business activity becoming increasingly internationalized, the program provides useful preparation for careers in a variety of internationally-oriented organizations, including local business firms involved in international trade, licensing, or financial arrangements; headquarters or subsidiaries of multinational companies; banks and other international financial institutions; and various governmental organizations.

\section*{Required Courses (3 credits)}

BUSA 356 (3) Management in Global Context

\section*{Complementary Courses (12 credits)}

Selected from the following:
\begin{tabular}{|c|c|c|}
\hline BUSA 391 & (3) & International Business Law \\
\hline BUSA 394 & (3) & Managing in Asia \\
\hline BUSA 395 & (3) & Managing in Europe \\
\hline BUSA 396 & (3) & Managing Internationally in Quebec \\
\hline BUSA 401 & (3) & Independent Studies in International Business \\
\hline BUSA 430 & (3) & Business Climate in Developing Countries \\
\hline BUSA 433 & (3) & Topics in International Business 1 \\
\hline BUSA 435 & (3) & Topics in International Business 2 \\
\hline BUSA 481 & (3) & Managing in North America \\
\hline FINE 482 & (3) & International Finance 1 \\
\hline FINE 492 & (3) & International Corporate Finance \\
\hline INDR 459 & (3) & Comparative Employment Relations \\
\hline MGPO 383 & (3) & International Business Policy \\
\hline MGPO 435 & (3) & The Origins of Capitalism \\
\hline MGPO 469 & (3) & Managing Globalization \\
\hline MGPO 475 & (3) & Strategies for Developing Countries \\
\hline MRKT 451 & (3) & Marketing Research \\
\hline MRKT 483 & (3) & International Marketing Management \\
\hline ORGB 380 & (3) & Cross Cultural Management \\
\hline
\end{tabular}

\subsection*{9.6.5.7 Bachelor of Commerce (B.Com.) - Concentration in Labour-Management Relations and Human Resources (15 credits)}

The objective of this concentration is to provide a general understanding of employer-employee relations and human resources, both at the micro-level and in relation to the socio-economic context in which they occur. Students interested in more intensive study of this area are urged to consider the Major program in Labour-Management Relations and Human Resources.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
INDR 294 & (3) & Introduction to Labour-Management Relations \\
INDR 496 & (3) & Collective Bargaining \\
ORGB 423 & (3) & Human Resources Management
\end{tabular}

\section*{Complementary Courses (6 credits)}

Selected from the following:
\begin{tabular}{lcl} 
INDR 449 & \((3)\) & Occupational Health and Safety \\
INDR 459 & (3) & Comparative Employment Relations \\
INDR 492 & (3) & Globalization and Labour Policy \\
INDR 494 & (3) & Labour Law \\
ORGB 321 & (3) & Leadership \\
ORGB 325 & (3) & Negotiations and Conflict Resolution \\
ORGB 330 & (3) & People Analytics \\
ORGB 401 & (3) & Leadership Practicum in Social Sector \\
ORGB 409 & (3) & Organizational Research Methods
\end{tabular}
\begin{tabular}{lll} 
ORGB 421 & (3) & Managing Organizational Change \\
ORGB 440 & (3) & Career Theory and Development \\
ORGB 525 & (3) & Compensation Management
\end{tabular}

\subsection*{9.6.5.8 Bachelor of Commerce (B.Com) - Concentration in Managing for Sustainability ( 15 credits)}

The B.Com.; Major in General Management; Managing for Sustainability Concentration focuses on conceptual and analytical skills needed to formulate and implement organizational policies that contribute to ecologically sustainable and socially responsible economic development.

The main themes of courses in the Concentration include: organizational implications of the interlinked economic, social and ecological challenges of sustainability; the integration of sustainability into traditional business functions; and leadership, stakeholder management and managing change required to achieve sustainability.

\section*{Required Course (6 credits)}
\begin{tabular}{lll} 
MGPO 440 & (3) & Strategies for Sustainability \\
MSUS 402 & (3) & Systems Thinking and Sustainability
\end{tabular}

\section*{Complementary Courses (9 credits)}

3-9 credits from the following:
\begin{tabular}{lll} 
ACCT 401 & (3) & Sustainability and Environmental Accounting \\
INSY 455 & (3) & Technology and Innovation for Sustainability \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MGSC 488 & (3) & Sustainability and Operations \\
MRKT 351 & (3) & Marketing and Society
\end{tabular}
\(0-6\) credits from the following:
\begin{tabular}{lll} 
INDR 294 & (3) & Introduction to Labour-Management Relations \\
INDR 492 & (3) & Globalization and Labour Policy \\
MGPO 365 & (3) & Business-Government Relations \\
MGPO 430 & (3) & Practicum in Not for Profit Consulting \\
MGPO 435 & (3) & The Origins of Capitalism \\
MGPO 450 & (3) & Ethics in Management \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MGSC 483 & (3) & Analytics-Based Community Project \\
MSUS 401 & (3) & Sustainability Consulting \\
MSUS 434 & (3) & Topics in Sustainability \\
ORGB 321 & (3) & Leadership \\
ORGB 325 & (3) & Negotiations and Conflict Resolution \\
ORGB 421 & (3) & Managing Organizational Change
\end{tabular}

Or any related undergraduate topics course (with approvals from the Program Mentor and the BCom Office.)

\subsection*{9.6.5.9 Bachelor of Commerce (B.Com.) - Concentration in Marketing (15 credits)}

The Marketing concentration prepares the student for a wide variety of career opportunities. Marketing graduates historically have found employment in the fields of product management, advertising, sales management, marketing management, pricing, marketing research, distribution, and retailing. The Marketing concentration provides a balance between courses focusing on fundamental, theoretical, and "need to know" material, and courses with a strong practical and applied orientation.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
MRKT 354 & (3) & Marketing Strategy \\
MRKT 451 & (3) & Marketing Research \\
MRKT 452 & (3) & Consumer Behaviour
\end{tabular}

\section*{Complementary Course (6 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
MRKT 351 & (3) & Marketing and Society \\
MRKT 355 & \((3)\) & Services Marketing \\
MRKT 357 & \((3)\) & Marketing Planning 1 \\
MRKT 365 & (3) & New Products \\
MRKT 434 & \((3)\) & Topics in Marketing 1 \\
MRKT 438 & (3) & Brand Management \\
MRKT 440 & (3) & Marketing Analytics \\
MRKT 453 & (3) & Advertising and Media \\
MRKT 455 & (3) & Sales Management \\
MRKT 456 & (3) & Business to Business Marketing \\
MRKT 459 & (3) & Retail Management \\
MRKT 483 & (3) & International Marketing Management
\end{tabular}

\subsection*{9.6.5.10 Bachelor of Commerce (B.Com.) - Concentration in Operations Management ( 15 credits)}

Operations Management is concerned with the design, planning, control, coordination, and improvement of business processes, systems, and resources integral to the creation of the firm's products and services. Emphasizing quantitative analysis and cross-functional thinking, the Operations Management concentration provides training on traditional as well as emerging operations strategies, concepts, models, and techniques that are essential to any firm in today's competitive marketplace. Operations management graduates find career opportunities in a variety of industries and fields including consulting, manufacturing, distribution, retail, transportation, health care, and public sector, among others.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
MGSC 373 & (3) & Operations Research 1 \\
MGSC 431 & (3) & Operations and Supply Chain Analysis
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits from the following:
\begin{tabular}{lll} 
MGSC 372 & \((3)\) & Advanced Business Statistics \\
MGSC 403 & (3) & Introduction to Logistics Management \\
MGSC 404 & (3) & Foundations of Decision Analytics \\
MGSC 416 & (3) & Data-Driven Models for Operations Analytics \\
MGSC 417 & (3) & Project Operations and Risk Management \\
MGSC 434 & (3) & Topics in Operations Management \\
MGSC 488 & (3) & Sustainability and Operations
\end{tabular}

\footnotetext{
or approved courses in other areas or faculties.
}

\subsection*{9.6.5.11 Bachelor of Commerce (B.Com.) - Concentration in Organizational Behaviour ( 15 credits)}

The Organizational Behaviour concentration provides an opportunity for students to increase their awareness of behavioural issues encountered in job and organizational settings, and to prepare themselves for graduate study in the behavioural sciences or for careers in general management or human resource management.

\section*{Complementary Courses (15 credits)}

Selected from the following:
\begin{tabular}{lcl} 
ORGB 321 & \((3)\) & Leadership \\
ORGB 325 & \((3)\) & Negotiations and Conflict Resolution \\
ORGB 330 & \((3)\) & People Analytics \\
ORGB 380 & \((3)\) & Cross Cultural Management \\
ORGB 409 & \((3)\) & Organizational Research Methods \\
ORGB 420 & \((3)\) & Managing Organizational Teams \\
ORGB 421 & \((3)\) & Managing Organizational Change \\
ORGB 423 & \((3)\) & Human Resources Management \\
ORGB 434 & \((3)\) & Topics in Organizational Behaviour 1 \\
ORGB 440 & \((3)\) & Career Theory and Development \\
ORGB 525 & (3) & Compensation Management
\end{tabular}

\subsection*{9.6.5.12 Bachelor of Commerce (B.Com.) - Concentration in Retail Management (15 credits)}

The Retail Management concentration will combine business fundamentals together with real-time, experiential learning opportunities recognizing the growing complexity of the retail sector. Through interaction with the state-of the-art Retail Innovation Lab, students will have the opportunity to learn firsthand about managing all levels of a retail operation using the latest technologies. The practical experience will link directly to the study of consumer behaviour, experiential marketing, omni-channel retailing, pricing analytics, efficacy of different payment systems, and global value chain management.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
MRKT 459 & (3) & Retail Management \\
RETL 402 & (3) & Innovations in Retailing \\
RETL 407 & (3) & Retail Management Project
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

Selected from the following:
\begin{tabular}{lll} 
INDR 294 & \((3)\) & Introduction to Labour-Management Relations \\
INSY 440 & \((3)\) & E-Business \\
INSY 442 & \((3)\) & Data Analysis and Visualization \\
MGSC 403 & (3) & Introduction to Logistics Management \\
MGSC 431 & (3) & Operations and Supply Chain Analysis \\
MRKT 355 & (3) & Services Marketing \\
MRKT 451 & (3) & Marketing Research \\
MRKT 452 & (3) & Consumer Behaviour \\
MRKT 455 & (3) & Sales Management \\
ORGB 423 & (3) & Human Resources Management \\
RETL 408 & (3) & Omni-Channel Retailing \\
RETL 409 & (3) & Digitization of Retailing \\
RETL 410 & (3) & Sustainable Retail and Entrepreneurship
\end{tabular}

\subsection*{9.6.5.13 Bachelor of Commerce (B.Com.) - Concentration in Strategic Management - Global Strategy (15 credits)}

There are two options offered in the Strategic Management Concentration: Global Strategy and Social Business \& Enterprise.
The Concentration in Strategic Management - Global Strategy Option provides students with the skills necessary to understand contemporary businesses in a global context, and to explore the implications of business decisions for society and the environment. Since globalization affects organizations of all types, this concentration conveys the tools necessary to understand industry structures and competitive dynamics in a global context. It provides opportunities to analyze organizational capabilities and how to enhance them, and enables students to assess the requirements of doing business in different economic and political systems. Global Strategy adds an overarching, holistic and integrated perspective to the Faculty's other concentrations and majors. Anticipated career trajectories include positions in consulting; strategic planning and analysis in multinationals and government agencies; and business development in new start-ups and small enterprises.

\section*{Complementary Courses (15 credits)}

9-15 credits selected from the following:
\begin{tabular}{lll} 
MGPO 383 & \((3)\) & International Business Policy \\
MGPO 445 & (3) & Industry Analysis and Competitive Strategy \\
MGPO 460 & (3) & Managing Innovation \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 470 & (3) & Strategy and Organization
\end{tabular}
\(0-6\) credits to be chosen from:
\begin{tabular}{|c|c|c|}
\hline BUSA 300 & (3) & Case Analysis and Presentation. \\
\hline BUSA 391 & (3) & International Business Law \\
\hline ECON 305 & (3) & Industrial Organization \\
\hline MGPO 362 & (3) & Fundamentals of Entrepreneurship \\
\hline MGPO 434 & (3) & Topics in Policy 1 \\
\hline MGPO 435 & (3) & The Origins of Capitalism \\
\hline MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
\hline MGPO 440 & (3) & Strategies for Sustainability \\
\hline MGPO 450 & (3) & Ethics in Management \\
\hline MGPO 475 & (3) & Strategies for Developing Countries \\
\hline ORGB 380 & (3) & Cross Cultural Management \\
\hline
\end{tabular}

\subsection*{9.6.5.14 Bachelor of Commerce (B.Com.) - Concentration in Strategic Management - Social Business \& Enterprise (15 credits)}

There are two options offered in the Strategic Management Concentration: Global Strategy and Social Business \& Enterprise.
The concentration in Strategic Management - Social Business \& Enterprise Option is intended for students interested in harnessing the not-for-profit, civil, and for-profit sectors to tackle social issues. Students will be challenged to reconceptualise strategy formation and implementation with an emphasis on economic development, the environment, corporate social responsibility, and social impact. The concentration will impart a comprehensive set of management skills, encompassing cross-sectoral collaboration and social entrepreneurship. It encourages students to complement their courses in Management with an array of course offerings from outside the Faculty. The concentration complements concentrations and majors in other Management areas, adding a holistic and integrated perspective. Anticipated career trajectories include positions in NGOs; international organizations such as those affiliated with the UN; social enterprise; government agencies; as well as in the fields of consulting and corporate social responsibility.

\section*{Complementary Courses (15 credits)}

9-15 credits selected from the following:
MGPO 365
(3)

Business-Government Relations
\begin{tabular}{lll} 
MGPO 438 & \((3)\) & Social Entrepreneurship and Innovation \\
MGPO 440 & \((3)\) & Strategies for Sustainability \\
MGPO 450 & (3) & Ethics in Management \\
MGPO 475 & (3) & Strategies for Developing Countries
\end{tabular}

0-6 credits chosen from the following:
(Note: no more than 3 credits may be taken at the 200 level)
\begin{tabular}{lcl} 
AGRI 411 & \((3)\) & Global Issues on Development, Food and Agriculture \\
ANTH 212 & \((3)\) & Anthropology of Development \\
BUSA 300 & \((3)\) & Case Analysis and Presentation. \\
ECON 313 & \((3)\) & Economic Development 1 \\
ECON 314 & \((3)\) & Economic Development 2 \\
INTD 200 & (3) & Introduction to International Development \\
MGPO 430 & (3) & Practicum in Not for Profit Consulting \\
MGPO 433 & (3) & Topics in Social Business and Enterprise \\
MGPO 435 & (3) & The Origins of Capitalism \\
MGPO 460 & Managing Innovation
\end{tabular}

\subsection*{9.6.6 Minors for Management Students}

The minor programs offered in the Faculties of Arts and Science may be taken in conjunction with any BCom program, unless otherwise indicated by the department. It is recommended that you meet with an appropriate departmental advisor before pursuing a minor.
It is the student's responsibility to make sure that courses taken towards the minor fulfill the minor requirements when doing a Degree Evaluation on Minerva. Students must complete a Desautels Faculty of Management Minor Approval Form listing the courses being applied to the minor and get it signed by the minor advisor in the relevant department, returning the signed form to the BCom Office. Failure to do so may result in the Minor not being granted.

For the Minor in Economics, students must complete 18 credits of material that does not overlap with Management course content. A maximum of 6 credits will be permitted within the BCom program for MGCR 293 and ECON 230D1/D2 or ECON 250D1/D2, and a maximum of 6 for MGCR 295 and ECON 330D1/D2 or ECON 352D1/D2. Students interested in this minor must obtain approval from the BCom Office.

Students considering a Minor in Mathematics, Statistics, or Computer Science must take MATH 133, MATH 140, and MATH 141 and should consult with an advisor in the appropriate department.

Students planning to take the Minor in Statistics are advised to substitute MATH 324 for MGCR 271. That course will then count as 3 credits toward the minor. If the decision to take a minor program is made after MGCR 271 has been taken, students who wish to take MATH 324 will receive three additional credits; however, MATH 324 will only count toward the 18 -credit minor requirement. Students should check for overlap between statistics courses with the BCom Student Affairs Office.

\subsection*{9.6.7 Minor for Non-Management Students}

The Desautels Faculty of Management has a Management Minor for undergraduate non-Management students to develop a variety of managerial skills that will serve them throughout their chosen careers.

The minor is 18 credits split between a fixed set of required courses and a choice amongst complementary courses. On an exceptional basis, students may be permitted a maximum of one Continuing Studies course for credit within their chosen Management minor.

The application form may be found on the Minor in Management for Non-Management Students website. The application deadline is June 1. Decisions will be communicated early July, whereby students will be informed via their McGill email address. Courses for minors must be passed with grades of C or better. Courses for minors cannot be taken under the Satisfactory/Unsatisfactory option. Students must inform their Faculty when they are approved for the minor to ensure timely graduation.

\section*{Entrepreneurship Minors for Non-Management Students}

The McGill Faculties of Agricultural and Environmental Science, Arts, Education (Kinesiology and Physical Education), Engineering, Music and Science collaborate with the Desautels Faculty of Management in offering 18 credit Minors in Entrepreneurship for McGill undergraduate students enrolled in those faculties.

Detailed information about the Minors can be found at the faculty page for Entrepreneurship Minors.

\subsection*{9.6.8 Majors}

Major programs are available in Accounting; Business Analytics; Economics; Finance; Information Technology Management; International Management; Managing for Sustainability; Marketing; Mathematics and Statistics for Management; Organizational Behaviour and Human Resources; Retail Management; Statistics; and Strategic Management.
Because of the heavier demands of major programs, students desiring to pursue a program of this type are advised to declare their intention at the beginning of the program. Only grades of C or better may count towards the major requirements.

Mentors: Please consult the Bachelor of Commerce website at mcgill.ca/desautels/programs/bcom/academics/areas-study.

\subsection*{9.6.8.1 Bachelor of Commerce (B.Com.) - Major Accounting ( 69 credits)}

The B.Com.; Major in Accounting focuses on preparing, interpreting, and utilizing the financial and managerial information of an organization. The program includes financial and managerial accounting, auditing, and taxation.

\section*{Required Courses (57 credits)}

\section*{Management Core}
\begin{tabular}{lcl} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Major}
\begin{tabular}{lcl} 
ACCT 351 & (3) & Intermediate Financial Accounting 1 \\
ACCT 352 & (3) & Intermediate Financial Accounting 2 \\
ACCT 361 & (3) & Management Accounting \\
ACCT 362 & (3) & Cost Accounting \\
ACCT 385 & (3) & Principles of Taxation \\
ACCT 455 & \((3)\) & Development of Accounting Thought
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits selected from the following:
\begin{tabular}{lcl} 
ACCT 354 & \((3)\) & Financial Statement Analysis \\
ACCT 401 & (3) & Sustainability and Environmental Accounting \\
ACCT 434 & (3) & Topics in Accounting 1 \\
ACCT 451 & (3) & Data Analytics in Capital Market \\
ACCT 452 & (3) & Financial Reporting Valuation
\end{tabular}
\begin{tabular}{lll} 
ACCT 453 & (3) & Advanced Financial Accounting \\
ACCT 463 & (3) & Management Control \\
ACCT 475 & (3) & Principles of Auditing \\
ACCT 486 & (3) & Business Taxation 2
\end{tabular}

\subsection*{9.6.8.2 Bachelor of Commerce (B.Com.) - Major Business Analytics (69 credits)}

The Major in Business Analytics offers an interdisciplinary approach to study the evolving field of management analytics with a strong emphasis on experiential learning. The major is designed to address the growing needs of organizations for business analytics, data science, and artificial intelligence. The emphasis of the program will be on managerial issues and use of state-of-the-art data analytics tools to optimize organizational decisions in a variety of managerial settings.

\section*{Required Courses (51 credits)}

\section*{Management Core}
\begin{tabular}{lcl} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Major}
\begin{tabular}{lll} 
INSY 336 & (3) & Data Handling and Coding for Analytics \\
INSY 446 & (3) & Data Mining for Business Analytics \\
MGSC 404 & (3) & Foundations of Decision Analytics
\end{tabular}

3 credits of experiential learning from the following:
\begin{tabular}{lll} 
MGSC 483 & (3) & Analytics-Based Community Project \\
RETL 407 & (3) & Retail Management Project
\end{tabular}

\section*{Complementary Courses (18 credits)}

3-6 credits from the following:
\begin{tabular}{lll} 
MGSC 401 & (3) & Statistical Foundations of Data Analytics \\
MGSC 416 & (3) & Data-Driven Models for Operations Analytics
\end{tabular}

6-9 credits of technical component from the following:
\begin{tabular}{lll} 
INSY 437 & (3) & Managing Data and Databases \\
INSY 442 & (3) & Data Analysis and Visualization \\
INSY 463 & (3) & Deep Learning for Business Analytics
\end{tabular}

3-9 credits from the following:
\begin{tabular}{lcl} 
ACCT 451 & (3) & Data Analytics in Capital Market \\
BUSA 471 & (3) & Artificial Intelligence Ethics for Business \\
FINE 460 & (3) & Financial Analytics \\
INSY 448 & (3) & Text and Social Media Analytics \\
MRKT 440 & (3) & Marketing Analytics \\
MRKT 442 & (3) & Customer Analytics \\
ORGB 330 & (3) & People Analytics
\end{tabular}

Or any related undergraduate topics course (with approvals from the Business Analytics area and the B.Com. Office).

\subsection*{9.6.8.3 Bachelor of Commerce (B.Com.) - Major Economics for Management Students (66 credits)}

The B.Com.; Major in Economics for Management Students is a planned sequence of courses designed to permit a degree of specialization in economics, including microeconomics (focusing on the study of the behaviour of individual economic agents and how the interaction of individuals results in market outcomes) and macroeconomics (focusing on economy-wide issues such as unemployment rates, money supply and inflation, as well as public policies to influence such macroeconomic aggregates). Topics include: econometrics, economic history, economic development, environmental economics, industrial organization, international trade and finance, labour economics, money and banking, and public finance.

\section*{Required Courses (48 credits)}

\section*{Management Core}
\begin{tabular}{lcl} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

Major
\begin{tabular}{lcl} 
ECON 230D1 & (3) & Microeconomic Theory \\
ECON 230D2 & (3) & Microeconomic Theory \\
ECON 332 & (3) & Macroeconomic Theory: Majors 1 \\
ECON 333 & (3) & Macroeconomic Theory - Majors 2 \\
MGCR 271 & (3) & Business Statistics \\
MGSC 372 & (3) & Advanced Business Statistics
\end{tabular}

Complementary Courses (18 credits)

Selected from other 200-, 300-, and 400-level courses in Economics (ECON), excluding courses with numbers below 210. At least 6 of these 18 credits should be taken from courses with 400 -level numbers. No more than 6 of the 18 credits may be taken at the 200 level.

\subsection*{9.6.8.4 Bachelor of Commerce (B.Com.) - Major Finance (69 credits)}

The 30-credit Finance Major has been designed to meet the increasing demand for expertise in this rapidly growing functional area of business. This major is designed to provide in-depth knowledge of finance theory, financial institutions, investment analysis, risk management, and applied techniques. Employment for graduates is most often obtained in investment and commercial banking, manufacturing and service firms, non-profit organizations and governments, and non-financial firms.

All BCom students take a Core curriculum in addition to this Major.
Required Courses ( 57 credits)

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Major}
\begin{tabular}{lcl} 
FINE 342 & \((3)\) & Corporate Finance \\
FINE 441 & \((3)\) & Investment Management \\
FINE 443 & \((3)\) & Applied Corporate Finance \\
FINE 448 & \((3)\) & Financial Derivatives \\
FINE 482 & \((3)\) & International Finance 1 \\
MGSC 372 & \((3)\) & Advanced Business Statistics
\end{tabular}

\section*{Complementary Courses (12 credits)}
\(9-12\) credits from any undergraduate FINE courses.
\(0-3\) credits from:
\begin{tabular}{lll} 
ACCT 351 & (3) & Intermediate Financial Accounting 1 \\
ACCT 352 & (3) & Intermediate Financial Accounting 2 \\
ACCT 354 & (3) & Financial Statement Analysis \\
ACCT 385 & (3) & Principles of Taxation
\end{tabular}

\subsection*{9.6.8.5 Bachelor of Commerce (B.Com.) - Major Information Technology Management ( 69 credits)}

This BCom.; Major Information Technology Management focuses on a blend of theoretical concepts, hands-on tools, and actual case studies to identify business problems and opportunities, analyze business processes, and develop and implement information systems to support them. The Program covers a variety of topics including strategic planning and investment in information technologies, analysis, design, and deployment of information systems, understanding the opportunities and challenges of web-based businesses, and managing resistance to IT-initiated changes in organization.

\section*{Required Courses (57 credits)}

\section*{Management Core}
\begin{tabular}{lcl} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Major}
\begin{tabular}{lll} 
INSY 331 & (3) & Managing and Organizing Digital Technology \\
INSY 333 & (3) & Systems Analysis and Modeling \\
INSY 341 & (3) & Developing Business Applications \\
INSY 431 & (3) & IT Implementation Management \\
INSY 437 & (3) & Managing Data and Databases \\
INSY 450 & (3) & Information Systems Project Management
\end{tabular}

\section*{Complementary Courses (12 credits)}

\section*{3-12 credits selected from:}
\begin{tabular}{lcl} 
INSY 339 & \((3)\) & Digital Consulting \\
INSY 432 & \((3)\) & Digital Business Models \\
INSY 434 & \((3)\) & Topics in Information Systems 1 \\
INSY 440 & (3) & E-Business \\
INSY 442 & (3) & Data Analysis and Visualization \\
INSY 444 & (3) & Online Communities and Open Innovation \\
INSY 455 & (3) & Technology and Innovation for Sustainability
\end{tabular}
\(0-9\) credits selected from:
INSY 336
(3)

Data Handling and Coding for Analytics
\begin{tabular}{lll} 
INSY 446 & (3) & Data Mining for Business Analytics \\
INSY 448 & (3) & Text and Social Media Analytics \\
INSY 463 & (3) & Deep Learning for Business Analytics
\end{tabular}

\subsection*{9.6.8.6 Bachelor of Commerce (B.Com.) - Major International Management (87 credits)}
(81-87 credits)
The B.Com.; Major in International Management focuses on combining business studies with regional or thematic global studies and foreign language proficiency, including the impact of managing in one of three themes:
1) Comparative Global Studies;
2) Global Politics and Economy;
3) Global Well-Being and Development.

This Major is interdisciplinary and integrative and includes an international business component, an interdisciplinary area of study that includes a Minor Concentration/Minor outside the Management Faculty, language courses, and an experiential learning experience in the form of either exchange, internship or research.

\section*{Required Courses ( 42 credits)}

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 211 & \((3)\) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & Social Context of Business.
\end{tabular}

\section*{Major}

BUSA 356
(3)

Management in Global Context

\section*{Complementary Courses (39-45 credits)}

\section*{International Business Component}

12 credits selected from the following:
\begin{tabular}{lll} 
BUSA 391 & \((3)\) & International Business Law \\
BUSA 394 & \((3)\) & Managing in Asia \\
BUSA 395 & (3) & Managing in Europe \\
BUSA 396 & (3) & Managing Internationally in Quebec \\
BUSA 401* & (3) & Independent Studies in International Business \\
BUSA 433 & (3) & Topics in International Business 1 \\
BUSA 481 & (3) & Managing in North America
\end{tabular}
\begin{tabular}{lcl} 
FINE 482 & (3) & International Finance 1 \\
FINE 492 & (3) & International Corporate Finance \\
INDR 459 & (3) & Comparative Employment Relations \\
MGPO 383 & (3) & International Business Policy \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MRKT 451 & (3) & Marketing Research \\
MRKT 483 & (3) & International Marketing Management \\
ORGB 380 & (3) & Cross Cultural Management
\end{tabular}

\section*{Experiential Learning Component}
\(0-3\) credits from the following; students must choose one of these experiential learning courses or the exchange - as there is no McGill course associated with the exchange component, credits for course(s) completed abroad will count towards courses in the B.Com. degree as determined by the program/exchange adviser.

\section*{Internship}
BUSA 497
Internship in International Business

\section*{Research}

> BUSA 401* (3) Independent Studies in International Business

\section*{International Exchange}

Students who participate in an exchange or Study Away will receive credits for courses successfully approved and completed while abroad. This will fulfill the experiential learning component, no additional credits will be granted for this option.
NOTE: There are CGPA requirements for experiential learning experiences [international exchange, internship, research]. Students must consult with a BCom Academic Advisor if they do not meet the minimum CGPA requirement.
* Only one Independent Studies course may be taken in the B.Com. degree.

\section*{Area of Study Component}

18 credits from one of the following three Streams:

\section*{Stream 1: Comparative Global Studies}

Students can choose to study a region including Africa, East Asia, Middle East, South Asia, Europe, or the Americas, or several regions from a comparative global perspective in Religious Studies, Political Science, History, or Economics. This option focuses on aspects of global society and culture from a social science perspective. This theme is suitable for students who would like to work in a specific country or region or for students who want to work for a multinational company or government organization with global interests.
B.A. Minor Concentration in African Studies (18 credits)
B.A. Minor Concentration in Canadian Studies (18 credits)
B.A. Minor Concentration in East Asian Cultural Studies (18 credits)
B.A. Minor Concentration in Economics* (18 credits)
B.A. Minor Concentration in History (18 credits)
B.A. Minor Concentration in Jewish Studies (18 credits)
B.A. Minor Concentration in Quebec Studies \& Community-Engaged Learning/

La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire ( 18 credits)
B.A. Minor Concentration in Russian Culture (18 credits)
B.A. Minor Concentration in South Asian Studies (18 credits)
B.A. Minor Concentration in World Islamic \& Middle East Studies (18 credits)

\footnotetext{
* Students should choose Economics (ECON) courses with a regional focus. Course numbers above ECON 209 (excluding ECON 295) are required, with at least 6 credits at the 300, 400, or 500 levels. Credits for the introductory sequence MGCR 293 and ECON 295 that are prerequisites for 300-level courses in economics do not count as part of this Minor concentration. ECON 227 will not count if it is taken to meet other B.Com. requirements.
}

\section*{Stream 2: Global Politics and Economy}

This theme focuses on aspects of public policy from the perspective of global transactions and finance. Students may select a minor concentration in the area of international relations and investigate policy on a global scale and its operations in the context of policy, war and peace, the economy, security, trade, human rights, and international organizations. Graduates with this option would be poised to apply their educational background to careers with world government, trade, or economic organizations, NGOs, national governments, or businesses with global interests. The choices of programs include Economics, Geography, Political Science, or a selected group of courses.
B.A. Minor Concentration in Economics (18 credits)
B.A. Minor Concentration in Political Science (18 credits)

OR

\section*{Global Governance, Conflict and Human Rights}

18 credits of the following courses with at least 6 credits at the 300 level or above:
\begin{tabular}{|c|c|c|}
\hline ANTH 212 & (3) & Anthropology of Development \\
\hline ANTH 222 & (3) & Legal Anthropology \\
\hline CANS 307 & (3) & Canada in the World \\
\hline CANS 412 & (3) & Canada and Americas Seminar \\
\hline COMS 230 & (3) & Communication and Democracy \\
\hline COMS 320 & (3) & Media and Empire \\
\hline HIST 221 & (3) & United States since 1865 \\
\hline HIST 302 & (3) & International Relations History 1: 1750-1950 \\
\hline HIST 304 & (3) & International Relations History 2: Cold War \\
\hline HIST 371 & (3) & American Civil Rights 1877-1940 \\
\hline HIST 387 & (3) & The First World War \\
\hline HIST 388 & (3) & The Second World War \\
\hline HIST 438 & (3) & Topics in Cold War History \\
\hline JWST 240 & (3) & The Holocaust \\
\hline PHIL 237 & (3) & Contemporary Moral Issues \\
\hline PHIL 334 & (3) & Ethical Theory \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 244 & (3) & International Politics: State Behaviour \\
\hline POLI 322 & (3) & Political Change in South Asia \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 360 & (3) & Security: War and Peace \\
\hline POLI 450 & (3) & Peacebuilding \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline RELG 371 & (3) & Ethics of Violence/Non-Violence \\
\hline SOCI 210 & (3) & Sociological Perspectives \\
\hline SOCI 230 & (3) & Sociology of Ethnic Relations \\
\hline SOCI 265 & (3) & War, States and Social Change \\
\hline SOCI 307 & (3) & Globalization \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline
\end{tabular}

Stream 3: Global Well-Being and Development

Broad-based, interdisciplinary topics will allow students to study current issues of social importance ranging from: poverty and inequality, health promotion and the environment, sustainability, and natural resource management. Students will be prepared to apply business practices to the protection of the vulnerable and the planet. Students will be poised to work for multinationals, governments, or non-governmental organizations.
B.A. Minor Concentration in Anthropology (18 credits)
B.A. Minor Concentration in Economics* (18 credits)
B.A. Minor Concentration in Geography (18 credits)
B.A. Minor Concentration in International Development Studies (18 credits)
B.A. Minor Concentration in Psychology (18 credits)
B.A. Minor Concentration in Social Studies of Medicine (18 credits)
B.A. Minor Concentration in Sociology (18 credits)
B.A. Minor Concentration in Environment (18 credits) [Bieler School of Environment]
B.Sc. Minor in Environment (18 credits) [Bieler School of Environment]
B.Sc. Field Study Minor (18 credits)
* Students should choose Economics (ECON) courses related to the environment, development, and health. Course numbers above ECON 209 (excluding ECON 295) are required, with at least 6 credits at the 300, 400, or 500 levels. Credits for the introductory sequence MGCR 293 and ECON 295 that are prerequisites for 300 -level courses in economics do not count as part of this Minor Concentration. ECON 227 will not count if it is taken to meet other B.Com. requirements.

\section*{Language Component}

9-12 credits chosen from the following:
9 credits of language in First- or Second-Level EAST (Asian Languages and Literature)*
or
9 credits from ISLA 221 D1/D2 Introductory Arabic**
* Students may choose to complete additional credits in Japanese, Chinese or Korean for a total of 18 credits. Only 9 credits of EAST languages will count toward the Major and any optional additional credits will count as electives or toward another component if the student has sufficient credits to complete it within their degree. Students may not exceed the total credits required to graduate in order to complete these additional language credits.
** Students with no prior knowledge of Arabic may choose two levels of Arabic. Only ISLA 221D1/D2 will count toward the Major and any additional optional credits in ISLA 322D1/D2 or ISLA 423D1/D2 will count as electives.

OR
12 credits of language courses, at the 500 level or lower, chosen from ONE of the following Subject Codes:
CLAS (Classics) [Modern Greek]
EAST (East Asian) - Third and Fourth Level
FREN (French)
FRSL (French as a Second Language)
GERM (German Studies) [German]
HISP (Hispanic Studies) [Spanish, Portuguese]
***ISLA (Middle East Studies) [Lower and Higher Intermediate Level Arabic, Turkish, Urdu, Persian]
****ITAL (Italian Studies) [Italian]
JWST (Jewish Studies) [Hebrew, Yiddish]
RUSS (Russian)
*** Students placed in Lower Intermediate Arabic will complete ISLA 322D1/D2 and ISLA 423D1/D2 for a total of 12 credits.
**** Students wishing to register for ITAL 205D1/D2 should do so in their first year as this course is open only to U0 and U1 students. ITAL 206 is open to U0, U1, and U2 students. ITAL 210D1/D2, ITAL 215D1/D2, and ITAL 216 can be taken by all students.
Note: Registration processes for language courses vary by department, but usually involve placement tests or departmental approval. Students should consult with the individual departments to ensure that they register for the appropriate level.

\subsection*{9.6.8.7 Bachelor of Commerce (B.Com) - Major Managing for Sustainability ( 69 credits)}

The B.Com.; Major in Managing for Sustainability focuses on combining management and business knowledge with a solid understanding of the interlinked economic, social and ecological challenges of achieving sustainability. It integrates management studies with fundamentals of environmental science and sustainability.

The Major includes the integration of multiple management disciplines with sustainability; fundamental concepts of environmental science, social sciences and human impacts on natural systems; and an experiential learning component in the form of a consulting engagement, internship or research project offering "real world" experience.

\section*{Required Courses ( 45 credits)}

\section*{Management Core}
\begin{tabular}{|c|c|c|}
\hline MGCR 211 & (3) & Introduction to Financial Accounting \\
\hline MGCR 222 & (3) & Introduction to Organizational Behaviour \\
\hline MGCR 250 & (3) & Expressive Analysis for Management. \\
\hline MGCR 271 & (3) & Business Statistics \\
\hline MGCR 293 & (3) & Managerial Economics \\
\hline MGCR 294 & (3) & The Firm in the Macroeconomy \\
\hline MGCR 331 & (3) & Information Technology Management \\
\hline MGCR 341 & (3) & Introduction to Finance \\
\hline MGCR 352 & (3) & Principles of Marketing \\
\hline MGCR 372 & (3) & Operations Management. \\
\hline MGCR 382 & (3) & International Business \\
\hline MGCR 423 & (3) & Strategic Management \\
\hline MGCR 460 & (3) & Social Context of Business. \\
\hline \multicolumn{3}{|l|}{Major} \\
\hline MGPO 440 & (3) & Strategies for Sustainability \\
\hline MSUS 402 & (3) & Systems Thinking and Sustainability \\
\hline
\end{tabular}

\section*{Complementary Courses (24 credits)}

3-9 credits from the following:
\begin{tabular}{lll} 
ACCT 401 & (3) & Sustainability and Environmental Accounting \\
INSY 455 & (3) & Technology and Innovation for Sustainability \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MGSC 488 & (3) & Sustainability and Operations \\
MRKT 351 & (3) & Marketing and Society
\end{tabular}

3-6 credits from the following:
\begin{tabular}{lll} 
MGPO 430 & (3) & Practicum in Not for Profit Consulting \\
MGSC 483 & (3) & Analytics-Based Community Project \\
MSUS 400 & (3) & Independent Studies in Sustainability \\
MSUS 401 & (3) & Sustainability Consulting \\
MSUS 497 & (3) & Internship in Sustainability
\end{tabular}
\(0-9\) credits from the following:
\begin{tabular}{lll} 
BUSA 451D1 & (3) & Creating Impact Through Research \\
BUSA 451D2 & (3) & Creating Impact Through Research
\end{tabular}
\begin{tabular}{lcl} 
INDR 294 & \((3)\) & Introduction to Labour-Management Relations \\
INDR 492 & (3) & Globalization and Labour Policy \\
MGPO 365 & (3) & Business-Government Relations \\
MGPO 435 & (3) & The Origins of Capitalism \\
MGPO 450 & (3) & Ethics in Management \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 475 & (3) & Strategies for Developing Countries \\
MSUS 434 & (3) & Topics in Sustainability \\
ORGB 321 & (3) & Leadership \\
ORGB 325 & (3) & Negotiations and Conflict Resolution \\
ORGB 421 & (3) & Managing Organizational Change
\end{tabular}

Or any related undergraduate topics course (with approvals from the Program Mentor and the BCom Office).

6-12 credits from the following:
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ENVR 203 & (3) & Knowledge, Ethics and Environment \\
ENVR 400 & \((3)\) & Environmental Thought
\end{tabular}

Note: ENVR courses have limited enrolment.

3 credits of environmentally-related courses. A list of Suggested Courses is provided below.

\section*{Suggested Course List}

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.
Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.
Some courses may be subject to other regulations.
This list is not exhaustive. You are encouraged to examine the course lists of the various programs in Environment for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Program Adviser.

\section*{Location Note:}

When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

\section*{Social Sciences and Policy}
\begin{tabular}{lll} 
AGEC 231 & \((3)\) & Economic Systems of Agriculture \\
AGEC 333 & (3) & Resource Economics \\
AGEC 430 & (3) & Agriculture, Food and Resource Policy \\
AGEC 442 & (3) & Economics of International Agricultural Development \\
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
ANTH 206 & (3) & Environment and Culture \\
ANTH 212 & (3) & Anthropology of Development \\
ANTH 339 & (3) & Ecological Anthropology \\
ANTH 512 & (3) & Political Ecology
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ECON 205 & (3) & An Introduction to Political Economy \\
\hline ECON 225 & (3) & Economics of the Environment \\
\hline ECON 326 & (3) & Ecological Economics \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline ENVB 437 & (3) & Assessing Environmental Impact \\
\hline ENVR 201 & (3) & Society, Environment and Sustainability \\
\hline ENVR 203 & (3) & Knowledge, Ethics and Environment \\
\hline ENVR 400 & (3) & Environmental Thought \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 210 & (3) & Global Places and Peoples \\
\hline GEOG 216 & (3) & Geography of the World Economy \\
\hline GEOG 221 & (3) & Environment and Health \\
\hline GEOG 300 & (3) & Human Ecology in Geography \\
\hline GEOG 301 & (3) & Geography of Nunavut \\
\hline GEOG 302 & (3) & Environmental Management 1 \\
\hline GEOG 303 & (3) & Health Geography \\
\hline GEOG 370 & (3) & Protected Areas \\
\hline GEOG 403 & (3) & Global Health and Environmental Change \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline NRSC 221 & (3) & Environment and Health \\
\hline PHIL 230 & (3) & Introduction to Moral Philosophy 1 \\
\hline PHIL 237 & (3) & Contemporary Moral Issues \\
\hline PHIL 334 & (3) & Ethical Theory \\
\hline PHIL 343 & (3) & Biomedical Ethics \\
\hline PHIL 348 & (3) & Philosophy of Law 1 \\
\hline POLI 212 & (3) & Government and Politics - Developed World \\
\hline POLI 227 & (3) & Developing Areas/Introduction \\
\hline POLI 345 & (3) & International Organizations \\
\hline POLI 445 & (3) & International Political Economy: Monetary Relations \\
\hline PSYC 215 & (3) & Social Psychology \\
\hline RELG 270 & (3) & Religious Ethics and the Environment \\
\hline RELG 370 & (3) & Religion and Human Rights \\
\hline SOCI 222 & (3) & Urban Sociology \\
\hline SOCI 234 & (3) & Population and Society \\
\hline SOCI 235 & (3) & Technology and Society \\
\hline SOCI 254 & (3) & Development and Underdevelopment \\
\hline SOCI 386 & (3) & Contemporary Social Movements \\
\hline URBP 201 & (3) & Planning the 21st Century City \\
\hline URBP 506 & (3) & Environmental Policy and Planning \\
\hline URBP 530 & (3) & Urban Infrastructure and Services in International Context \\
\hline URBP 551 & (3) & Urban Design and Planning \\
\hline
\end{tabular}

\section*{Natural Sciences and Technology}
** Note: you may take LSCI 230 or MIMM 211, but not both; you may take ENVB 529 or GEOG 201, but not both; you may take one of BREE 217, CIVE 323 or GEOG 322; you may take BIOL 308 or ENVB 305, but not both; you may take BIOL 465 or WILD 421 but not both; you may take EPSC 201 or EPSC 233, but not both.
\begin{tabular}{|c|c|c|}
\hline AGRI 340 & (3) & Principles of Ecological Agriculture \\
\hline ANSC 326 & (3) & Fundamentals of Population Genetics \\
\hline ANTH 311 & (3) & Primate Behaviour and Ecology \\
\hline ATOC 215 & (3) & Oceans, Weather and Climate \\
\hline BIOL 240 & (3) & Monteregian Flora \\
\hline BIOL 305 & (3) & Animal Diversity \\
\hline BIOL 308** & (3) & Ecological Dynamics \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 342 & (3) & Global Change Biology of Aquatic Ecosystems \\
\hline BIOL 418 & (3) & Freshwater Invertebrate Ecology \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 436 & (3) & Evolution and Society \\
\hline BIOL 465** & (3) & Conservation Biology \\
\hline BREE 217** & (3) & Hydrology and Water Resources \\
\hline BREE 322 & (3) & Organic Waste Management \\
\hline BREE 518 & (3) & Ecological Engineering \\
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 281 & (3) & Inorganic Chemistry 1 \\
\hline CIVE 225 & (4) & Environmental Engineering \\
\hline CIVE 323** & (3) & Hydrology and Water Resources \\
\hline CIVE 550 & (3) & Water Resources Management \\
\hline ENVB 210 & (3) & The Biophysical Environment \\
\hline ENVB 301 & (3) & Meteorology \\
\hline ENVB 305** & (3) & Population and Community Ecology \\
\hline ENVB 410 & (3) & Ecosystem Ecology \\
\hline ENVB 415 & (3) & Ecosystem Management \\
\hline ENVB 529** & (3) & GIS for Natural Resource Management \\
\hline ENVR 200 & (3) & The Global Environment \\
\hline ENVR 202 & (3) & The Evolving Earth \\
\hline EPSC 201** & (3) & Understanding Planet Earth \\
\hline EPSC \(233 * *\) & (3) & Earth and Life History \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline GEOG 200 & (3) & Geographical Perspectives: World Environmental Problems \\
\hline GEOG 201** & (3) & Introductory Geo-Information Science \\
\hline GEOG 205 & (3) & Global Change: Past, Present and Future \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 308 & (3) & Remote Sensing for Earth Observation \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GEOG 322** & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 470 & (3) & Wetlands \\
\hline LSCI 230** & (3) & Introductory Microbiology \\
\hline MICR 331 & (3) & Microbial Ecology \\
\hline MIME 320 & (3) & Extraction of Energy Resources \\
\hline MIMM 211** & (3) & Introductory Microbiology \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline NRSC 333 & (3) & Pollution and Bioremediation \\
\hline PARA 410 & (3) & Environment and Infection \\
\hline PARA 515 & (3) & Water, Health and Sanitation \\
\hline PLNT 304 & (3) & Biology of Fungi \\
\hline PLNT 305 & (3) & Plant Pathology \\
\hline PLNT 358 & (3) & Flowering Plant Diversity \\
\hline PLNT 460 & (3) & Plant Ecology \\
\hline SOIL 300 & (3) & Geosystems \\
\hline WILD 421** & (3) & Wildlife Conservation \\
\hline
\end{tabular}

\subsection*{9.6.8.8 Bachelor of Commerce (B.Com.) - Major Marketing (69 credits)}

The B.Com.; Major in Marketing is designed to provide a strong background in marketing suitable for a wide variety of careers. The program emphasizes digital marketing, marketing analytics, brand management, advertising, innovation, and sales management.

\section*{Required Courses (48 credits)}

\section*{Management Core}
\begin{tabular}{|c|c|c|}
\hline MGCR 211 & (3) & Introduction to Financial Accounting \\
\hline MGCR 222 & (3) & Introduction to Organizational Behaviour \\
\hline MGCR 250 & (3) & Expressive Analysis for Management. \\
\hline MGCR 271 & (3) & Business Statistics \\
\hline MGCR 293 & (3) & Managerial Economics \\
\hline MGCR 294 & (3) & The Firm in the Macroeconomy \\
\hline MGCR 331 & (3) & Information Technology Management \\
\hline MGCR 341 & (3) & Introduction to Finance \\
\hline MGCR 352 & (3) & Principles of Marketing \\
\hline MGCR 372 & (3) & Operations Management. \\
\hline MGCR 382 & (3) & International Business \\
\hline MGCR 423 & (3) & Strategic Management \\
\hline MGCR 460 & (3) & Social Context of Business. \\
\hline \multicolumn{3}{|l|}{Major} \\
\hline MRKT 354 & (3) & Marketing Strategy \\
\hline MRKT 451 & (3) & Marketing Research \\
\hline MRKT 452 & (3) & Consumer Behaviour \\
\hline
\end{tabular}

\section*{Complementary Courses (21 credits)}

21 credits selected from:
\begin{tabular}{lcl} 
MRKT 351 & (3) & Marketing and Society \\
MRKT 355 & (3) & Services Marketing \\
MRKT 357 & (3) & Marketing Planning 1 \\
MRKT 365 & (3) & New Products \\
MRKT 434 & (3) & Topics in Marketing 1 \\
MRKT 438 & (3) & Brand Management \\
MRKT 440 & (3) & Marketing Analytics \\
MRKT 453 & (3) & Advertising and Media \\
MRKT 455 & (3) & Sales Management \\
MRKT 456 & (3) & Business to Business Marketing \\
MRKT 459 & (3) & Retail Management \\
MRKT 483 & (3) & International Marketing Management
\end{tabular}

\subsection*{9.6.8.9 Bachelor of Commerce (B.Com.) - Major Mathematics and Statistics for Management (72 credits)}
(69-72 credits)
The B.Com.; Major in Mathematics and Statistics for Management focuses on newer methodologies and strategies to solve current and modern real-world problems.

\section*{Program Prerequisites}

Before entering the program, students must have completed the following courses [or their equivalent] if not already completed, above the program's 69-72 credits.
\(0-10\) credits from:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Required Courses (60 credits)}

\section*{Management Core}
\begin{tabular}{lcl} 
MGCR 211 & \((3)\) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Major}
\begin{tabular}{lcl} 
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 242 & (3) & Analysis 1 \\
MATH 243 & (3) & Analysis 2 \\
MATH 323 & \((3)\) & Probability \\
MGSC 372* & \((3)\) & Advanced Business Statistics \\
MGSC 373 & \((3)\) & Operations Research 1
\end{tabular}
*Or equivalent.

\section*{Complementary Courses ( \(9-12\) credits)}

9-12 credits selected from the following:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 551 & (4) & Applied Machine Learning \\
FINE 452 & (3) & Applied Quantitative Finance \\
FINE 460 & (3) & Financial Analytics \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH \(324^{*}\) & (3) & Statistics \\
MATH 423 & (3) & Applied Regression \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MGSC 403 & (3) & Introduction to Logistics Management \\
MGSC 431 & (3) & Operations and Supply Chain Analysis \\
MGSC 434** & (3) & Topics in Operations Management \\
\hline
\end{tabular}
* Students interested in upper-level statistics courses offered by the Department of Mathematics and Statistics are strongly encouraged to take this course.

Students must consult the rules for credits and sequencing for Statistics courses in the Desautels Faculty of Management Course Overlap section.
** MGSC 434 when the topic is relevant to this program and approved by the Mathematics program adviser.

\subsection*{9.6.8.10 Bachelor of Commerce (B.Com.) - Major Organizational Behaviour and Human Resources ( 69 credits)}

The B.Com.; Major in Organizational Behaviour and Human Resources focuses on analyzing and influencing repeated patterns of action in groups and organizations, including leadership, human resource management, team management and concepts of management at multiple levels of the organization. The program also includes foundational studies in one or more of the following social science disciplines: psychology, sociology, anthropology, or industrial relations.

\section*{Required Courses (42 credits)}

\section*{Management Core}

MGCR 211 (3) Introduction to Financial Accounting
\begin{tabular}{lcl} 
MGCR 222 & \((3)\) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Major}

ORGB 423
(3)

Human Resources Management

\section*{Complementary Courses (27 credits)}

18 credits from the following:
\begin{tabular}{lcl} 
ORGB 321 & \((3)\) & Leadership \\
ORGB 325 & \((3)\) & Negotiations and Conflict Resolution \\
ORGB 330 & \((3)\) & People Analytics \\
ORGB 380 & \((3)\) & Cross Cultural Management \\
ORGB 401 & \((3)\) & Leadership Practicum in Social Sector \\
ORGB 409 & \((3)\) & Organizational Research Methods \\
ORGB 420 & \((3)\) & Managing Organizational Teams \\
ORGB 421 & \((3)\) & Managing Organizational Change \\
ORGB 434 & \((3)\) & Topics in Organizational Behaviour 1 \\
ORGB 440 & \((3)\) & Career Theory and Development \\
ORGB 525 & (3) & Compensation Management
\end{tabular}

9 credits at the 300 or 400 level of PSYC, SOCI, ANTH, or INDR courses with permission of the offering unit.
Focusing on pursuing depth within a single discipline is encouraged but not required.

\subsection*{9.6.8.11 Bachelor of Commerce (B.Com.) - Major Retail Management (69 credits)}

The retail industry is experiencing a period of unparalleled changes where emerging technologies such as artificial intelligence (AI) and automation are transforming every stage of the retail journey. The Retail Management major will arm the students with valuable analytical, reasoning, management and communication skills and place them at the forefront of a fast evolving and innovated retail industry while promoting for sustainability, and long-term social and environmental benefits. Admission requirements: as per other B.Com. programs offered by the Desautels Faculty of Management.

\section*{Required Courses (57 credits)}

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management.
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MGCR 271 & (3) & Business Statistics \\
\hline MGCR 293 & (3) & Managerial Economics \\
\hline MGCR 294 & (3) & The Firm in the Macroeconomy \\
\hline MGCR 331 & (3) & Information Technology Management \\
\hline MGCR 341 & (3) & Introduction to Finance \\
\hline MGCR 352 & (3) & Principles of Marketing \\
\hline MGCR 372 & (3) & Operations Management. \\
\hline MGCR 382 & (3) & International Business \\
\hline MGCR 423 & (3) & Strategic Management \\
\hline MGCR 460 & (3) & Social Context of Business. \\
\hline \multicolumn{3}{|l|}{Major} \\
\hline MRKT 459 & (3) & Retail Management \\
\hline RETL 402 & (3) & Innovations in Retailing \\
\hline RETL 407 & (3) & Retail Management Project \\
\hline RETL 408 & (3) & Omni-Channel Retailing \\
\hline RETL 409 & (3) & Digitization of Retailing \\
\hline RETL 410 & (3) & Sustainable Retail and Entrepreneurship \\
\hline
\end{tabular}

\section*{Complementary Courses (12 credits)}

12 credits from the following:
\begin{tabular}{|c|c|c|}
\hline BUSA 465 & (3) & Technological Entrepreneurship \\
\hline FINE 447 & (3) & Venture Capital and Entrepreneurial Finance \\
\hline FINE 477 & (3) & Fintech for Business and Finance \\
\hline INDR 294 & (3) & Introduction to Labour-Management Relations \\
\hline INSY 440 & (3) & E-Business \\
\hline INSY 442 & (3) & Data Analysis and Visualization \\
\hline MGPO 440 & (3) & Strategies for Sustainability \\
\hline MGSC 403 & (3) & Introduction to Logistics Management \\
\hline MGSC 431 & (3) & Operations and Supply Chain Analysis \\
\hline MRKT 355 & (3) & Services Marketing \\
\hline MRKT 440 & (3) & Marketing Analytics \\
\hline MRKT 451 & (3) & Marketing Research \\
\hline MRKT 452 & (3) & Consumer Behaviour \\
\hline MRKT 453 & (3) & Advertising and Media \\
\hline MRKT 455 & (3) & Sales Management \\
\hline ORGB 330 & (3) & People Analytics \\
\hline ORGB 423 & (3) & Human Resources Management \\
\hline RETL 434 & (3) & Topics in Retail Management \\
\hline
\end{tabular}

\subsection*{9.6.8.12 Bachelor of Commerce (B.Com.) - Major Strategic Management ( 69 credits)}

The Strategic Management Major combines traditional topics in strategic management, such as competition and globalization, with attention to pressing social, and environmental challenges. Since the activities of contemporary businesses can no longer be considered separately from these challenges, the

Major is intended to foster a holistic view of management practice. Students will be encouraged to consider strategy formation and change for large corporations, small businesses, and social enterprises within their economic, social and environmental contexts. Because Strategic Management is a broad subject area, students are given flexibility to tailor this Major to their interests. Anticipated career trajectories are diverse, and include positions in management consulting, business development in new start-ups and small businesses; and strategic planning and analysis in large multinationals, NGOs, international organizations, and government agencies.

All BCom students take a Core curriculum in addition to this Major.

\section*{Required Courses (39 credits)}

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics \\
MGCR 293 & (3) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Complementary Courses (30 credits)}
\(9-15\) credits from the following:
\begin{tabular}{lll} 
MGPO 383 & (3) & International Business Policy \\
MGPO 445 & (3) & Industry Analysis and Competitive Strategy \\
MGPO 460 & (3) & Managing Innovation \\
MGPO 469 & (3) & Managing Globalization \\
MGPO 470 & (3) & Strategy and Organization
\end{tabular}
\(9-15\) credits from the following:
\begin{tabular}{lll} 
MGPO 365 & \((3)\) & Business-Government Relations \\
MGPO 438 & \((3)\) & Social Entrepreneurship and Innovation \\
MGPO 440 & (3) & Strategies for Sustainability \\
MGPO 450 & (3) & Ethics in Management \\
MGPO 475 & (3) & Strategies for Developing Countries
\end{tabular}
\(0-12\) credits from the following:
\begin{tabular}{lll} 
AGRI 411 & (3) & Global Issues on Development, Food and Agriculture \\
ANTH 212 & (3) & Anthropology of Development \\
BUSA 300 & (3) & Case Analysis and Presentation. \\
BUSA 391 & (3) & International Business Law
\end{tabular}
\begin{tabular}{lcl} 
ECON 305 & \((3)\) & Industrial Organization \\
ECON 313 & \((3)\) & Economic Development 1 \\
ECON 314 & (3) & Economic Development 2 \\
INTD 200 & (3) & Introduction to International Development \\
MGPO 362 & \((3)\) & Fundamentals of Entrepreneurship \\
MGPO 402 & (3) & Dynamic Cities \\
MGPO 430 & (3) & Practicum in Not for Profit Consulting \\
MGPO 433 & (3) & Topics in Social Business and Enterprise \\
MGPO 434 & (3) & Topics in Policy 1 \\
MGPO 435 & (3) & The Origins of Capitalism \\
MGSC 402 & () & \\
ORGB 380 & (3) & Cross Cultural Management
\end{tabular}

\subsection*{9.6.9 Honours}

Honours program:
- section 9.6.9.1: Bachelor of Commerce (B.Com.) - Honours Investment Management (84 credits)

Honours program is available in Investment Management. For more information on this program, please refer to mcgill.ca/desautels/programs/bcom/academics/areas-study\#areas-honours.
The difference between the Honours and Major programs is not one of quantity but rather of quality; Honours programs involve study in greater depth. Students normally register for the Honours programs in U1 but special arrangements may be made for students wishing to enter the program at the beginning of U2.

Graduation with an Honours standing normally requires a minimum CGPA of 3.00 and an average of 3.00 in the specified courses of the Honours programs, although academic units may set higher requirements for their program GPA. The minimum grade acceptable in an Honours course is B-, although academic units may set a higher requirement for grades in their program.
Honours students who satisfy the 6-credit Statistics requirement by taking MGCR 271 and MGSC 372 (or ECON 227D1/D2) must complete ECON 468 and ECON 469 to fulfil the program requirements in Economics for the following programs: Honours in Economics for Management Students, Joint Honours in Economics and Accounting, and Joint Honours in Economics and Finance.

Mentors: Please consult the Bachelor of Commerce website at: mcgill.ca/desautels/programs/bcom/academics/areas-study.

\subsection*{9.6.9.1 Bachelor of Commerce (B.Com.) - Honours Investment Management (84 credits)}

The B.Com. Honours Investment Management examines financial asset management, either on the buy side working with active portfolio allocation or on the sell side, working for brokerage firms. Rigorous training in accounting, statistics, and finance, including analyzing financial statements, performing company valuations, constructing efficient portfolios with appropriate risk profiles, and managing risk using dynamic trading strategies and derivative instruments.

The B.Com. Honours Investment Management is a limited enrolment program and is by application only for students entering their U2 year. A minimum CGPA of 3.3 is necessary for students to be eligible to apply. Additional information may be found at the BCom Student Affairs Office, or on our website. In order to graduate in Honours in Investment Management, students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.0. A grade of B- or better must be achieved in all courses counted toward this program. Students who do not satisfy all the requirements of the Honours program may still receive a Major in Finance, provided the major requirements have been met.

All B.Com. students take a Core curriculum in addition to the Honours program.

\section*{Required Courses ( 69 credits)}

\section*{Management Core}
\begin{tabular}{lll} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 250 & (3) & Expressive Analysis for Management. \\
MGCR 271 & (3) & Business Statistics
\end{tabular}
\begin{tabular}{lcl} 
MGCR 293 & \((3)\) & Managerial Economics \\
MGCR 294 & (3) & The Firm in the Macroeconomy \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

\section*{Honours}
\begin{tabular}{lll} 
ACCT 354 & \((3)\) & Financial Statement Analysis \\
FINE 342 & \((3)\) & Corporate Finance \\
FINE 440D1 & \((1.5)\) & Honours Investment Management Research Project 1 \\
FINE 440D2 & \((1.5)\) & Honours Investment Management Research Project 1 \\
FINE 441 & \((3)\) & Investment Management \\
FINE 443 & (3) & Applied Corporate Finance \\
FINE 448 & (3) & Financial Derivatives \\
FINE 450D1 & \((1.5)\) & Honours Investment Management Research Project 2 \\
FINE 450D2 & \((1.5)\) & Honours Investment Management Research Project 2 \\
FINE 451 & (3) & Fixed Income Analysis \\
FINE 482 & (3) & International Finance 1 \\
MGSC 372 & (3) & Advanced Business Statistics
\end{tabular}

\section*{Complementary Courses ( 15 credits)}

\section*{Quantitative Courses}

6-9 credits from the following:
\begin{tabular}{lcl} 
ACCT 451 & \((3)\) & Data Analytics in Capital Market \\
ACCT 452 & \((3)\) & Financial Reporting Valuation \\
FINE \(434^{*}\) & \((3)\) & Topics in Finance 1 \\
FINE \(435^{*}\) & \((3)\) & Advanced Topics in Finance \\
FINE 449 & (3) & Risk Management in Finance \\
FINE 452 & \((3)\) & Applied Quantitative Finance \\
FINE 460 & \((3)\) & Financial Analytics
\end{tabular}
* FINE 434 and FINE 435 can count as a complementary course with approval of the Academic Director.

\section*{Industry Specialization Courses}

6-9 credits from the following:
\begin{tabular}{lll} 
FINE \(434^{*}\) & \((3)\) & Topics in Finance 1 \\
FINE \(435^{*}\) & \((3)\) & Advanced Topics in Finance \\
FINE 442 & \((3)\) & Capital Markets and Institutions \\
FINE 444 & \((3)\) & Security Trading and Market Making
\end{tabular}
\begin{tabular}{lll} 
FINE 445 & \((3)\) & Real Estate Finance \\
FINE 446 & \((3)\) & Behavioural Finance \\
FINE 447 & \((3)\) & Venture Capital and Entrepreneurial Finance \\
FINE 455 & \((3)\) & Alternative Investments \\
FINE 456 & \((3)\) & Hedge Fund Strategies and Trading \\
FINE 464 & \((3)\) & Pension Funds and Retirement Systems \\
FINE 465 & \((3)\) & Sustainable Finance \\
FINE 477 & \((3)\) & Fintech for Business and Finance \\
FINE 490 & \((3)\) & Mergers and Corporate Reorganizations
\end{tabular}
* FINE 434 and FINE 435 can count as a complementary course with approval of the Academic Director.

\section*{10 Schulich School of Music}

\subsection*{10.1 About the School}

McGill's Schulich School of Music is the largest university-based school for professional musical training and music research in Canada.
McGill's Schulich School of Music is renowned for its orchestral, choral, opera, jazz, chamber, contemporary, and early music programs, and for its award-winning creative and research work in composition, music theory, musicology, music education, sound recording, and music technology.
- Pollack Hall (capacity: 600), Redpath Hall (capacity: 300 and housing the University organ), and Tanna Schulich Hall (capacity: 170) are among the busiest and best concert venues in Montreal;
- The intimate Clara Lichtenstein Hall (capacity: 50) was renovated in 2014;
- Facilities also include the Wirth Opera Studio (an opera rehearsal room), and the Multimedia Complex Suite, including the Multimedia Room (an acoustical research lab), three isolation booths, a small recording studio, and three control rooms of different sizes;
- The Marvin Duchow Music Library supports research, teaching, and learning at the Schulich School of Music through reference and information literacy services, by the acquisition and preservation of physical and online collections (more than 300,000 scores, recordings, books, and periodicals, as well as a vast number of online resources), and with a variety of study and multifunctional spaces over three floors, which cater to the needs of McGill Library users at large. The Open Lab of the Music Library is a unique service in Canada, supporting the technology, sound recording, and audiovisual editing needs of the School's faculty and students.
- The Gertrude Whitley Performance Library has performing materials for over 6,000 titles;
- The Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT) is an interfaculty, inter-university, international consortium of scholars that brings together researchers and artists working in the science and technology of music in a cutting-edge environment for integrated studies of music, acoustics, cognitive science, engineering, sound recording, performance science, and digital media.

The buildings house labs for numerous specialized functions: digital composition and electronic music, music education research, multi-channel sound recording, music perception and cognition, sound processing and control, computational modelling, and more. There are state-of-the-art classrooms, teaching studios, and over 100 practice rooms.
Current student enrolment is approximately 480 at the undergraduate level and approximately 380 at the graduate level. Teaching staff includes over 60 full-time and 140 part-time members. Students, faculty, and staff play major roles in Montreal's vibrant cultural scene, presenting approximately 600 concerts and events annually, as well as master classes, lectures, and symposia, all enhanced by active music student societies, a booking office, and engaged administrative and support staff.

\subsection*{10.2 About the Schulich School of Music (Undergraduate)}

McGill's Schulich School of Music is the largest university-based school for professional musical training and music research in Canada.
McGill's Schulich School of Music is renowned for its orchestral, choral, opera, jazz, chamber, contemporary, and early music programs, and for its award-winning creative and research work in composition, music theory, musicology, music education, sound recording, and music technology.
- Pollack Hall (capacity: 600), Redpath Hall (capacity: 300 and housing the University organ), and Tanna Schulich Hall (capacity: 170) are among the busiest and best concert venues in Montreal;
- The intimate Clara Lichtenstein Hall (capacity: 50) was renovated in 2014;
- Facilities also include the Wirth Opera Studio (an opera rehearsal room), and the Multimedia Complex Suite, including the Multimedia Room (an acoustical research lab), three isolation booths, a small recording studio, and three control rooms of different sizes;
- The Marvin Duchow Music Library supports research, teaching, and learning at the Schulich School of Music through reference and information literacy services, by the acquisition and preservation of physical and online collections (more than 300,000 scores, recordings, books, and periodicals, as well as a vast number of online resources), and with a variety of study and multifunctional spaces over three floors, which cater to the needs of McGill Library users at large. The Open Lab of the Music Library is a unique service in Canada, supporting the technology, sound recording, and audiovisual editing needs of the School's faculty and students;
- The Gertrude Whitley Performance Library has performing materials for over 6,000 titles;
- The Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT) is an interfaculty, inter-university, international consortium of scholars that brings together researchers and artists working in the science and technology of music in a cutting-edge environment for integrated studies of music, acoustics, cognitive science, engineering, sound recording, performance science, and digital media.

The buildings house labs for numerous specialized functions: digital composition and electronic music, music education research, multi-channel sound recording, music perception and cognition, sound processing and control, computational modelling, and more. There are state-of-the-art classrooms, teaching studios, and over 100 practice rooms.

Current student enrolment is approximately 480 at the undergraduate level and approximately 380 at the graduate level. Teaching staff includes over 60 full-time and 140 part-time members. Students, faculty, and staff play major roles in Montreal's vibrant cultural scene, presenting approximately 600 concerts and events annually-as well as master classes, lectures, and symposia-all enhanced by active music student societies, a booking office, and engaged administrative and support staff.

\subsection*{10.2.1 Location}
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Strathcona Music Building
555 Sherbrooke Street West
Montreal QC H3A 1E3
Canada
Telephone: 514-398-4535
Fax: 514-398-1540
Website: mcgill.ca/music

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\subsection*{10.3 Overview of Programs}

The Schulich School of Music offers degree programs leading to a Bachelor of Music (B.Mus.), and diploma programs leading to a Licentiate in Music (L.Mus.).
- The Department of Music Research offers Minors in Applied Performance Sciences, Music Composition, Music Education, Music Entrepreneurship, Music History, Music Theory, Musical Applications of Technology, and Musical Science and Technology.
- The Department of Performance offers Minors in Conducting, Early Music Performance, Jazz Arranging and Composition, and Jazz Performance.

The Schulich School of Music of McGill University also offers the opportunity to pursue courses that reflect your multiple interests through collaboration with McGill's other faculties and departments. You may wish to consider partnering your music major studies with subjects from a different music department, or from other faculties that would lead to graduating with a double major, double degrees, or minor. B.Mus. students who are interested in pursuing double majors or double degrees should consult this website: mcgill.ca/music/programs/double.

Please refer to section 10.6: Browse Academic Units \& Programs for a full list of program offerings.

\subsection*{10.3.1 Degrees and Diplomas Offered}

\subsection*{10.3.1.1 Bachelor of Music (B.Mus.)}

The Bachelor of Music degree (B.Mus.) may be obtained in any one of the following fields:
- Faculty Program Music
- Faculty Program Music - Jazz
- Music Composition
- Music Education - available only as a component of the Concurrent B.Mus./B.Ed. program
- Music History
- Music Theory
- Performance
- Early Music Performance
- Jazz Performance

\subsection*{10.3.1.2 Faculty Programs}
- section 10.6.1.4: Bachelor of Music (B.Mus.) - Faculty Program Music (123 credits)
- section 10.6.1.5: Bachelor of Music (B.Mus.) - Faculty Program Music - Jazz (123 credits)

These programs are designed to accommodate students who are interested in combining studies in music with studies in other disciplines; who are interested in a pattern of specialization not provided in the established major programs; or who are undecided about the area of music in which they wish to specialize. All of the above B.Mus. programs normally require at least three years of study following completion of the Quebec Diploma of Collegial Studies or four years of study following completion of secondary school elsewhere.

\subsection*{10.3.1.3 Minor Programs}

The Schulich School of Music offers various music minor programs. Courses in these minors may be applied as music/free electives in a Bachelor of Music program. Please refer to each program's description for admission requirements and further details.
- section 10.6.2.7: Bachelor of Music (B.Mus.) - Minor Applied Performance Sciences (18 credits)
- section 10.6.1.7: Bachelor of Music (B.Mus.) - Minor Composition (18 credits)
- section 10.6.2.8: Bachelor of Music (B.Mus.) - Minor Conducting (18 credits)
- section 10.6.2.9: Bachelor of Music (B.Mus.) - Minor Early Music Performance ( 18 credits)
- section 10.6.2.10: Bachelor of Music (B.Mus.) - Minor Jazz Arranging and Composition (18 credits)
- section 10.6.2.11: Bachelor of Music (B.Mus.) - Minor Jazz Performance (18 credits)
- section 10.6.1.8: Bachelor of Music (B.Mus.) - Minor Music Education (18 credits)
- section 10.6.1.9: Bachelor of Music (B.Mus.) - Minor Music Entrepreneurship (18 credits)
- section 10.6.1.10: Bachelor of Music (B.Mus.) - Minor Music History (18 credits)
- section 10.6.1.11: Bachelor of Music (B.Mus.) - Minor Music Theory (18 credits)
- section 10.6.1.12: Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology (18 credits)
- section 10.6.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits)

Minor offered through the Desautels Faculty of Management for non-Management students are available to B.Mus. students that have completed the necessary prerequisites. Further information on the minor listed below can be found at Desautels Faculty of Management \(>\) Undergraduate \(>\) Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.7: Minor for Non-Management Students.
- : Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) (18 credits)

Minor programs in Music are also available to undergraduate students in other faculties subject to the home faculty's approval.

\subsection*{10.3.1.4 Master of Music (M.Mus.)}

The Master of Music degree (M.Mus.) is available in Composition, Performance, and Sound Recording. Specializations offered within the Performance option are:
- piano
- guitar
- orchestral instruments (including orchestral training)
- organ
- conducting
- collaborative piano
- opera and voice
- early music
- jazz

\subsection*{10.3.1.5 M.Mus. Performance (Prerequisite Courses)}

Students wishing to prepare for the Master of Music in Performance should include, in their Bachelor of Music program, the courses listed under section 10.6.2.15: Special Prerequisite Courses for M.Mus. in Performance.

\subsection*{10.3.1.6 M.Mus. Sound Recording (Prerequisite Courses)}

Students wishing to prepare for the Master of Music in Sound Recording should include, in their Bachelor of Music program, the courses listed under section 10.6.1.6: Special Prerequisite Courses for M.Mus. in Sound Recording.

\subsection*{10.3.1.7 Master of Arts (M.A.)}

The Master of Arts degree is available as a thesis option in Music Education, Music Technology, Musicology (with an option in Gender and Women's Studies), and Theory (with an option in Gender and Women's Studies). The thesis option may take one of two forms in Music Education and Theory: the standard thesis and the research paper-based thesis that includes a more substantial course load. Students in Music Technology and Musicology only have a standard thesis available as an option.

\subsection*{10.3.1.8 Licentiate in Music (L.Mus.)}

The Licentiate in Music is offered in Performance and is designed for advanced instrumentalists and singers who wish to concentrate on their practical subject while limiting their theoretical studies to basic areas in Music History, Music Theory, and Musicianship. This program normally requires three years of study. For more information, please see:
- section 10.6.2.12: Licentiate in Music (L.Mus.) - Major Performance Piano (93 credits)
- section 10.6.2.13: Licentiate in Music (L.Mus.) - Major Performance (All Instruments except Piano, Voice and Jazz) (93 credits)
- section 10.6.2.14: Licentiate in Music (L.Mus.) - Major Performance Voice ( 105 credits)

\subsection*{10.3.1.9 Graduate Certificate in Performance Choral Conducting}

The Graduate Certificate in Performance - Choral Conducting is designed for choral conductors wishing to perfect their technical, pedagogical, and musical skills. This flexible program allows conductors to develop their craft while maintaining their professional activities. The program includes group tutorial instruction in conducting, ensemble participation, and complementary courses offering the opportunity to focus on conducting technique, rehearsal pedagogy, or performance practice. Enrolment is limited.

\subsection*{10.3.1.9.1 Graduate Diploma in Performance}

The Graduate Diploma in Performance is a one-year graduate diploma that allows excellent musicians to refine their technique and master repertoire through intensive coaching, practice, and performance projects.

Designed as a polishing diploma, the program prepares musicians for professional careers as soloists, opera singers, collaborative pianists, chamber, jazz and orchestral musicians, or for further graduate studies in performance. Flexible program requirements enable a range of performance options including solo, chamber, recording, orchestral auditions, and creative collaborations.

\subsection*{10.3.1.10 Post-Graduate Artist Diploma}

The Post-Graduate Artist Diploma is the uppermost diploma offered at the Schulich School of Music.
This program is tailored for artist performers wishing to achieve the highest level of artistry in their craft through intensive coaching, practicing, and performance projects. Candidates are preparing for stage careers as soloists and orchestral musicians, opera singers, collaborative pianists, and chamber ensembles.

\subsection*{10.3.1.11 Doctor of Music (D.Mus.)}

The Doctor of Music degree is offered in Composition and Performance Studies.

\subsection*{10.3.1.12 Doctor of Philosophy (Ph.D.)}

The Doctor of Philosophy degree is available in Applied Performance Science, Composition, Interdisciplinary Studies, Music - Gender and Women Studies , Music Education, Musicology, Music Technology, Performance Science, Sound Recording, and Music Theory.
For details regarding master's and doctoral programs, please consult the Schulich School of Music at Graduate and Postdoctoral Studies.

\subsection*{10.3.2 Scholarships, Competitions, Prizes, and Financial Aid}

The Schulich School of Music offers a range of prestigious scholarships based on academic and performance achievements. The Schulich Scholarship, the Lloyd Carr-Harris String Scholarship, the Student Excellence Award, and the Derek H. Davis Scholarship are renewable awards valued between \(\$ 2,000\) and \(\$ 12,000\) granted at the time of admission. In addition, we have introduced two new entrance scholarships that may be renewable, the Mills-Tyrrell Best in the West Entrance Scholarship and the Lalonde Scholarship in Jazz. There is no application process for these scholarships. Students who are newly admitted in a Bachelor of Music (B.Mus.) or Licentiate in Music (L.Mus.) program will automatically be considered for these renewable awards and other types of entrance scholarships.

In addition to the renewable scholarships, the Schulich School of Music offers an extensive list of merit-based awards and prizes for returning B.Mus. and L.Mus. students. No application is required for these merit-based awards. These awards are given on the basis of a student's record for the academic session ending in April and are tenable during the following academic year beginning in September. Students must have successfully completed a minimum of 27 graded credits, excluding summer courses and courses completed under the Satisfactory/Unsatisfactory ( \(\mathrm{S} / \mathrm{U}\) ) option, in the academic year preceding the award. Most scholarships are disbursed twice a year, once at the beginning of Fall term and the other at the beginning of Winter term. The awards will only be released on the condition that the student is enrolled full-time at McGill University. Students whose records contain outstanding incompletes (K or KE grade) or deferrals (L grade) will not be considered for these scholarships.

Detailed scholarship opportunities for new and returning students can be found in Music Tuition and Funding. mcgill.ca/music/resources/undergraduate/finance.

The Schulich School of Music also offers a range of competitions for students across all music disciplines. Winners for these competitions may receive funding to support travel, projects, research, and performance opportunities. See Competitions and Prizes page at mcgill.ca/music/resources/competitions-awards for detail.

The Scholarship and Student Aid Office administers other types of financial aid in support of music students' learning activities. See Scholarships and Student Aid mcgill.ca/studentaid for detailed information on financial support open to McGill students.

\subsection*{10.3.3 Summer Studies}

The Schulich School of Music offers summer courses. These courses are generally given in an intensive one-month session between May and July. Students can register for summer courses starting early March.

Students may take a maximum of 12 credits during the Summer session. Those wishing to take more than 6 credits in any one month must obtain permission from the Music Student Affairs Office.

Students who wish to take summer courses for transfer credits in a university outside of Quebec must apply for an Independent Study Away (ISA). Application details for ISA is found on Schulich School of Music's Learning Abroad website.

Information concerning course offerings and registration may be obtained from the McGill Summer Studies Office website.

\subsection*{10.3.4 Music Courses and Music Minor Programs for Students in Other Faculties}

The following music minors are open to students from all faculties. Students should verify with their home faculties if they are permitted to take courses in these minors towards their degree.
- section 10.6.1.1: Bachelor of Music (B.Mus.) - Major Composition (124 credits)
- section 10.6.1.8: Bachelor of Music (B.Mus.) - Minor Music Education (18 credits)
- section 10.6.1.9: Bachelor of Music (B.Mus.) - Minor Music Entrepreneurship (18 credits)
- section 10.6.1.10: Bachelor of Music (B.Mus.) - Minor Music History (18 credits)
- section 10.6.1.11: Bachelor of Music (B.Mus.) - Minor Music Theory (18 credits)
- section 10.6.1.12: Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology (18 credits)
- section 10.6.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits)

Aside from the music minors, students from other faculties may also register for one or more music courses as electives for their degree program. A list of music electives open to all undergraduate students can be found on Schulich School of Music's Electives website.

In addition to music electives, students from other faculties may also be eligible to register for some ensemble courses. Small ensembles (MUEN courses which carry 1 -credit) are not open to students who are not in a B.Mus. or L.Mus. program. Students must pass an audition before registering for MUEN courses. Audition dates and requirements are found on the Ensembles website. Most ensemble auditions take place once a year, between late August and early September. Ensembles open to students from other faculties include Jazz Vocal Workshop (MUEN 563), McGill Wind Orchestra (MUEN 590), Choral Ensembles (MUEN 593), Jazz Ensembles (MUEN 595), McGill Symphony Orchestra (MUEN 597), etc. Students outside the Schulich School of Music should verify with their faculty advisors if they may take MUEN courses for credits towards their degree program.

Faculty of Arts \(>\) Undergraduate \(>\) Browse Academic Units \& Programs

\subsection*{10.4 Admission}

As you plan for the next step in your education, we would be pleased to assist you in providing further information and guidance. You are invited to register for a tour of the Schulich School of Music, led by a current Schulich student. To do so, please visit the following page, where you can also view other upcoming events of interest: mcgill.ca/music/admissions/visits. All information is confidential and will be used solely for Schulich School of Music recruiting purposes.

\subsection*{10.4.1 Application Procedures}

All inquiries regarding admission should be directed to:
Music Admissions Office
Schulich School of Music, McGill University
555 Sherbrooke Street West
Montreal QC H3A 1E3
Telephone: 514-398-4546
Fax: 514-398-8873
Email: undergraduateadmissions.music@mcgill.ca
Full information, including access to the web-based application form, is available at mcgill.ca/music/admissions.

In order to ensure proper consideration, web applications for the Fall Term (September) must be submitted by January 15. The School does not normally admit students in the Winter Term (January). Please consult the Music Admissions Office for exceptions. Applications received after these deadlines will be considered if places are still available.
1. Application information should include detailed descriptions of the applicant's musical background, training, and statement of intent-including diplomas, certificates, and/or transcripts;
2. Applicants applying to the Music Education concurrent program are asked to submit a second letter of recommendation. References for Music Education should comment on an applicant's potential to be a music teacher;
3. All supporting documents for undergraduate applications can be submitted online—see mcgill.ca/music/admissions/undergraduate/materials for required materials;
4. Once an admission decision is made, official transcripts are required to complete the admission file;
5. All screening (due January 15) and recorded auditions (due February 1) should be submitted electronically directly to the Schulich School of Music: forms.music.mcgill.ca/audition.

Applicants are advised that satisfying the entrance requirements does not guarantee admission where instrumental and/or program places are limited.

\subsection*{10.4.2 Music Entrance Requirements}

The minimum music entrance requirements are the equivalent of McGill Conservatory Collegial I Instrument or Voice (Performance applicants: Collegial II) and Secondary V Theory and Ear Training.

\section*{Approximate Equivalents to Entrance Requirements in Practical Subjects (McGill Conservatory Collegial I - Instrument/Voice)}

Quebec CEGEPs
Toronto Conservatory Grade 9
Western Board Grade 9
Mount Allison Grade 9
Associated Board of the Royal Schools of Music

The above listing is intended only as a general guide. Admissibility to any program is determined by audition and academic record. Students wishing to major in Performance should be approximately two years more advanced, and be able to demonstrate potential as performers at their audition.

All applicants in all jazz instruments who select the on-campus audition option on their application form will be required to submit screening video material for preselection by January 15. Following a review of these recordings, selected applicants will be invited to attend a live audition. No live audition will be scheduled in any jazz instrument until recordings have been received and reviewed. All applicants must perform an audition of approximately 15 minutes in duration. The student should choose material that will represent different musical periods and reveal musicianship and technical proficiency to their best advantage.
Consult the Music Admissions' website at mcgill.ca/music/admissions/undergraduate/auditions for specific information on entrance audition requirements and dates.

All applicants who apply to an undergraduate music research or performance program at McGill must play an instrument (including voice) and audition. Applicants have the option of attending an on-campus audition or submitting a recorded video audition. One does not take priority over the other. All applicants have equal opportunities for admissions.

Applicants for Composition are asked to submit two or three samples of their written work. In addition to the statement of intent, composition applicants are asked to submit a brief written statement (1-page) or recorded video (max 3-minutes), that discusses their musical background and the compositions they have submitted in their portfolio.
Music Education applicants are asked to outline reasons for wishing to enter the Music Education field in their statement of intent, and have a letter of reference sent from someone attesting to their suitability for teaching.

All screening, audition recordings and composition samples should be submitted electronically to the Schulich School of Music. Please consult the Music Admissions' website at mcgill.ca/music/admissions/undergraduate/materials for instructions on how to submit this material.

\subsection*{10.4.3 Academic Entrance Requirements}

\subsection*{10.4.3.1 Bachelor of Music}

An applicant's entrance audition and academic record are considered when making an admission decision. As a limit is placed upon the number of students who are admitted for study in a particular instrument or program, fulfilment of the minimum entrance requirements does not guarantee acceptance. Proof of English proficiency may be required of non-Canadian students whose mother tongue is not English. It is the applicant's responsibility to make the necessary arrangements to take these exams before the application deadline. TOEFL, IELTS, and Duolingo English Test are accepted exams.

\subsection*{10.4.3.2 CEGEP Applicants}

Students are expected to obtain the Quebec Diploma of College Studies (Diplôme d'études collégiales (DEC)) in the Music Concentration or equivalent. Applicants with a DCS/DEC in a field other than Music must have the equivalent Music prerequisites and/or performance experience. The minimum overall average required is \(75 \%\). CEGEP graduates are considered for admission to a three-year or a four-year program.

\subsection*{10.4.3.3 Canadian High School (excluding Quebec) Applicants}

Applicants are expected to obtain a high school graduation diploma that leads to university admission in the student's home province. Ontario high school students are normally expected to have obtained a minimum of six pre-university ( \(4 \mathrm{U}, 4 \mathrm{M}\) ) courses; at least four of the six must have been taken at the 4 U level. There are no specific non-Music prerequisite courses required, and the minimum overall average should be \(75 \%\). Canadian high school graduates are admitted to a four-year program.

\subsection*{10.4.3.4 U.S. High School Applicants}

Applicants are expected to obtain a high school graduation diploma that meets the requirements for university/college admission in the U.S. The minimum overall average required is B+. There are no specific non-Music prerequisite courses, SAT, or Achievement Test results required. Some credit will be granted for Advanced Placement Examinations in appropriate subjects. U.S. high school graduates are admitted to a four-year program.

\subsection*{10.4.3.5 International Applicants}

In general, applicants must be eligible for admission to university in their country of origin and have above-average grades. Students who have completed an International Baccalaureate, a French Baccalaureate, or a minimum of three GCE "A" (Advanced) Level examinations are considered for admission into a three-year program. Normally, applicants with five GCE "O" (Ordinary) Level results, plus one year of schooling beyond the Ordinary Level, are admitted to a four-year program. Applicants with qualifications from other systems will be considered for either a three-year or a four-year program.

\subsection*{10.4.3.6 Transfer Students}

Transfer students are considered on the basis of both their university or college work and previous studies. Normally, students are expected to complete a full year of university studies prior to applying for admission, and to be in good standing as defined by the university previously attended. The minimum overall average required is a CGPA of 3.00 . Transfer credits for non-Music courses in which a grade of C or better has been received are granted following an evaluation of the student's transcript. Transfer credits, with certain restrictions, are granted for music complementary or elective courses following an evaluation of the student's transcript (a higher grade may often be required). Transfer students must complete a minimum of 60 credits at McGill in order to obtain a degree.

\subsection*{10.4.3.7 Mature Students}

Applicants who are at least 21 years of age and are Canadian citizens or Permanent Residents at or before registration, who have not met the high school or CEGEP academic requirements, and who are able to demonstrate exceptional talent in their discipline may be considered for admission. Such applicants may reside anywhere in Canada. All available academic/educational documents must be submitted. An interview may be required.

\subsection*{10.4.3.8 Special Students}

Special Students do not need to fulfil any of the academic requirements outlined previously, but are required to have the necessary music prerequisites for the courses concerned. The minimum requirement is a bachelor's degree in music or equivalent. Registration is subject to the availability of space in the course(s) concerned. Special Students are normally not entitled to lessons in an instrument or in voice. Registration is permitted for one year only, after which time the student must apply for admission to either a degree or diploma program.

\subsection*{10.4.3.9 Visiting Students}

Individuals wishing to take courses at McGill for credit at another university may be admitted as Visiting Students provided they have the prerequisites for the course(s) concerned and have official permission from their home university.

\subsection*{10.4.4 Diploma Programs}

\subsection*{10.4.4.1 L.Mus. (All Applicants)}

For admission to the Licentiate program, the applicant must have completed secondary school. The applicant's music qualifications must be equivalent to McGill Conservatory Collegial II Instrument or Voice and Secondary V Theory/Ear Training. An entrance audition is required. This program is normally three years in length. The Licentiate diploma is also an excellent option for applicants who may have completed a non-music degree(s) and wish to pursue performance studies before applying to a graduate program.

\subsection*{10.4.5 Music Placement Examinations}

All new Bachelor of Music or Licentiate in Music students, including students from other faculties who are interested in pursuing a music minor with prerequisites, may sit diagnostic placement examinations in theory (courses with MUTH or MUJZ prefixes) and musicianship (courses with MUSP prefixes) if they wish to register for 200 -level courses in these subjects. Placement examinations take place once a year during the Summer.

Students may also be exempt from MUHL 186 Western Musical Traditions or MUJZ 187 Jazz History Survey if they have successfully completed equivalent history courses at another college or university, or have passed the Royal Conservatory of Music (RCM) History exam. See Transfer Credits FAQs for more information.

For a precise schedule and exam descriptions, refer to Placement Exams.

\subsection*{10.4.6 Readmission}

Students who are not on a Leave of Absence, and have no course registrations in Fall and/or Winter semester are considered inactive students. In order to continue in the program, they must submit a program readmission request before the application deadline for the semester when they wish to resume studies. In certain cases, students may be required to pass another audition before they can be readmitted in the program.

Detailed information on readmission policy and application procedure for Bachelor of Music and Licentiate in Music programs are found in Music's Program Transfer and Readmission website.

\subsection*{10.4.7 Tuition Fees, Practical Instruction Fees, and Lesson Quotas}

The typical annual tuition fee for a Bachelor of Music (B.Mus.) or Licentiate in Music (L.Mus.) student can be found on the Student Accounts website.
B.Mus. and L.Mus. students who are registered in practical instruction (MUIN courses) have Music Private Lesson Fee added to the regular per-credit tuition fee rate. The current fee rate for the Music Private Lesson Fee is found in Schulich School of Music fees. When a student is registered for practical instruction, such as MUIN 180 ( 3 credits), they will be billed the per-credit tuition fee rate for 3 credits plus the Music Private Lesson Fee for one semester of private lessons, which equates to 13 weeks of 1 -hour private instruction with the instrumental or vocal teacher.

Each music program has a practical instruction quota for different student categories. See Table 1: Practical Instruction Quota for detail. Students may request an additional year of practical instruction in addition to the required practical instruction in their program. This additional year of practical instruction can be taken as elective lessons (MUIN 110, MUIN 111) and may be used to fulfill the elective requirements in a B.Mus. program. Elective lessons are optional and are billed the same way as required practical instruction in a program. More information on elective lessons is found on Schulich School of Music Electives website.

Students may request a second year of elective lessons (MUIN 210, MUIN 211) beyond the program's practical instruction quota by permission of the Department of Performance. Practical instruction taken above the program's practical instruction quota will be subject to a post-quota Music Supplemental Private Lesson Fee in addition to the regular fees associated with practical instruction.

\section*{Table 1: Practical Instruction Quota}
\begin{tabular}{llll} 
Maximum Number of Years of Practical Instruction & & \\
\begin{tabular}{lll} 
Student category (based on Academic \\
Entrance Qualifications)
\end{tabular} & \begin{tabular}{l} 
All B.Mus. Performance \\
programs, including Jazz \\
Performance
\end{tabular} & \begin{tabular}{l} 
B.Mus. \\
Composion/EducationFacily/Facily \\
Jazz/History/Theory \\
programs
\end{tabular} & All L.Mus. programs
\end{tabular}

\subsection*{10.5 Academic Policies in the Schulich School of Music}

This section contains information on the following academic topics:
- section 10.5.1: General Academic Requirements
- section 10.5.2: Academic Requirements by Program
- section 10.5.3: Academic Standing
- section 10.5.4: Ensemble Policy and Regulations
- section 10.5.5: Accompanist Program
- section 10.5.6: Academic Category
- section 10.5.7: Auditing
- section 10.5.8: Electives
- section 10.5.8.3: Non-Music Electives
- section 10.5.9: Distance Education (Online) Courses
- section 10.5.10: Course Changes \& Withdrawal
- section 10.5.11: Incompletes
- section 10.5.12: Examinations
- section 10.5.12.2: Supplemental Exams
- section 10.5.12.3: Reassessments and Rereads
- section 10.5.13: Graduation Requirements
- section 10.5.13.1: Graduation Honours

\subsection*{10.5.1 General Academic Requirements}

Students are required to be punctual at all classes and lessons. Grades in academic subjects are calculated on the basis of class work, examinations, and other course-related tasks as described in the class syllabus. Students risk failure in the subject concerned if they miss examinations or class work without a valid excuse provided in a timely manner.

We strongly recommend that students follow the sample course sequence published on their respective program's website at mcgill.ca/music/programs so they can complete program requirements within the standard four-year time frame (B.Mus. students) or three-year time frame (L.Mus. students). It is particularly important for students to pass the required core courses in a timely manner and in strict sequence, as they provide structured training in the professional competencies crucial to your success in our programs and in the field of music. Students who do not pass their core courses or meet other program requirements according to the standard time frames risk not being permitted to register for lessons and/or ensembles until core courses and program requirements are completed. Students also risk delaying their graduation if they fail to complete the required courses in the recommended program sequence.

In general, C is the passing grade for a required course which is a prerequisite to another course in the program. Practical subjects and concentration courses in certain music programs have a higher minimum grade requirement. See Academic Requirements by Program for detail.

In addition, B.Mus. and L.Mus. students are required to attain a term grade point average (TGPA) of 2.0 in addition to keeping a cumulative grade point average (CGPA) of 2.0 in order to continue in the program. See Academic Standing for detail.

\subsection*{10.5.2 Academic Requirements by Program}

In addition to the general academic requirements, the programs below have additional requirements students must abide by for successful program continuation.

\section*{B.Mus. Composition}

All B.Mus. Composition students must attain a minimum grade of B- in all courses with MUCO prefixes in order to continue in the program.
The Composition area may recommend students to transfer to another B.Mus. program if they fail to meet this requirement. Students may consult with a Program Advisor to determine their eligibility to transfer to another B.Mus. program.

\section*{B.Mus. Performance}

Students in all B.Mus. Performance programs must attain a minimum grade of B- in all practical instruction/exams and ensembles to continue in the program.
The faculty will issue students an academic warning if they fail to meet this requirement. Students having received a warning are permitted to continue in their admitted program providing they do not get another grade lower than B-in a practical instruction/exam (MUIN courses) and/or ensembles (MUEN courses) in subsequent terms. Students failing to meet these requirements will be asked to transfer to another program. Students may also consult with a Program Advisor to determine their eligibility to transfer to another B.Mus. program offered by the Department of Music Research.

\section*{B.Mus. Jazz Performance}

All B.Mus. Jazz Performance students must attain a minimum grade of B- in all jazz (MUJZ)courses, as well as in all practical instruction/exams (MUIN courses) and ensembles (MUEN courses) to continue in the program.

The faculty will issue students an academic warning if they fail to meet these requirements. Students having received a warning are permitted to continue in the admitted program as long as they abide by the probationary conditions. Students failing to meet the probationary condition will be asked to transfer to the B.Mus. Faculty Jazz concentration program. They may also consult with a Program Advisor to determine their eligibility to transfer to another B.Mus. program offered by the Department of Music Research.

\section*{L.Mus. Programs}

Students in all L.Mus. Performance programs must attain a minimum grade of A- in all practical instruction/exams (MUIN courses) and ensembles (MUEN courses) to continue in the program.
The faculty will issue students an academic warning if they fail to meet this requirement. Students having received a warning are permitted to continue in their admitted program providing they do not get another grade lower than A- in a practical instruction/exam and/or ensemble in subsequent terms. Students failing to meet these requirements will be asked to withdraw from the licentiate program.

\subsection*{10.5.3 Academic Standing}

In addition to meeting the program-specific academic conditions stipulated above, students are expected to maintain Satisfactory Academic Standing for program continuation.
Academic Standing is based primarily on students' cumulative grade point average (CGPA), but may also be affected by their term grade point average (TGPA). Academic Standing, assessed after the end of each term, determines if students will be allowed to continue their studies in the next term and if any conditions will be attached to their registration.

Decisions about Academic Standing in the Fall term are based only on grades that are available in January. Grades for courses in which students have deferred examinations and Fall term grades for courses that span the Fall and Winter terms do not affect Academic Standing for the Fall term, even though they will ultimately affect students' Fall TGPA. Therefore, Academic Standings for the Fall term are designated as Interim and should be interpreted as advisory; moreover, Interim Standings will not appear on external transcripts. Interim Standing decisions are mentioned below only if the rules for them differ from those for regular Standing decisions.

\section*{Satisfactory/Interim Satisfactory Standing}

Students in Satisfactory Standing may continue in their program.
- New students are admitted to Satisfactory Standing.
- Students with a CGPA of 2.00 or greater are in Satisfactory Standing.

\section*{Probationary/Interim Probationary Standing}

Students in Probationary Standing may continue in their program, but must carry a reduced load (maximum 12 credits per term) and raise their TGPA and CGPA to return to Satisfactory Standing. They should see their Program Advisor to review their course options.

Students in Interim Probationary Standing may continue in their program, but should evaluate their course load and reduce it as appropriate. They are strongly advised to meet with a Program Advisor to review their program status before the add/drop deadline in each term.
- Students who were previously in Satisfactory Standing will be placed in Probationary Standing if their CGPA falls below 1.99.
- Students who were previously in Probationary Standing will remain in Probationary Standing if their CGPA falls between 1.50 and 1.99 and their TGPA is 2.50 or higher, although the TGPA requirement will not apply to the Summer term.
- Students who were previously in Interim Unsatisfactory Standing will be placed in Probationary Standing if their CGPA falls between 1.50 and 1.99 and their TGPA is 2.50 or higher.
- Students who were previously in Unsatisfactory Standing and who were readmitted to the Faculty by the Associate Dean (Academic and Student Affairs) will be placed in Probationary Standing if their CGPA is less than 2.00 , but if they satisfy relevant conditions specified in their condition of readmission.

\section*{Unsatisfactory Readmitted Standing}

Students who were previously in Unsatisfactory Standing and who were readmitted to the Faculty by the Associate Dean (Academic and Student Affairs) will have their Standing changed to Unsatisfactory Readmitted Standing. Their course load is specified in their letter of readmission, as are the conditions they must meet to be allowed to continue in their program. They should see a Program Advisor to discuss their course selection.

\section*{Unsatisfactory/Interim Unsatisfactory Standing}

Students in Interim Unsatisfactory Standing may continue in their program, but should evaluate their course load and reduce it accordingly. They are strongly advised to meet with a Program Advisor to review their program status before the add/drop deadline in each term.

Students in Unsatisfactory Standing who have failed to meet the minimum standards set by the Faculty may not continue in their program and their registration will be cancelled.

Appeals for readmission by students in Unsatisfactory Standing should be addressed to the Associate Dean (Academic and Student Affairs) no later than the readmission application deadlines published on the website mcgill.ca/music/resources/undergraduate/academic-actions/program-transfer-and-readmission. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (e.g., medical or other documentation). Students in Unsatisfactory Standing for the second time must withdraw permanently.
Normally, supplemental examinations are not permitted; however, students in Unsatisfactory Standing may appeal to the Associate Dean (Academic and Student Affairs) for permission to write a supplemental examination, clearly stating the reasons for special consideration and providing proof, as appropriate.
- Students will be placed in Unsatisfactory Standing (Winter or Summer term) or Interim Unsatisfactory Standing (Fall term) if their CGPA falls or remains below 1.50.
- For the Fall and Winter terms, students who were previously in Probationary, Unsatisfactory Readmitted, or Interim Unsatisfactory Standing will be placed in Unsatisfactory Standing if their TGPA falls below 2.50 and their CGPA is below 2.00.
- Students who were previously in Unsatisfactory Standing and who were readmitted to the Faculty by the Associate Dean (Academic and Student Affairs) who have not at least satisfied the conditions to attain Probationary Standing that were specified in the letter of readmission will be placed in Unsatisfactory Standing.

\section*{Incomplete Standing}

Students will have an incomplete standing when there are no final grades assigned to incomplete courses from previous semester(s), such as deferred exam (courses with grade of "L"), approved extensions (courses with grade of "K"), or Supplementals.
Students with Incomplete Standings in the Winter or Summer term may register for the Fall term, but their Standing must be resolved by the end of the course change period for that term. Students whose Incomplete Standing changes to Satisfactory or Probationary may continue in their program. Students whose Standing changes to Unsatisfactory Standing may not continue in their program.

Students whose Standing changes to Unsatisfactory and who wish to ask for permission to continue in their program must make a request to the Associate Dean (Academic and Student Affairs) as soon as they are placed in Unsatisfactory Standing. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (e.g., medical or other documentation).
Students whose Standing is still Incomplete by the end of the course change period should immediately consult with the Music Student Affairs Office.

\subsection*{10.5.4 Ensemble Policy and Regulations}

\subsection*{10.5.4.1 Preamble}

The ensemble program is designed to provide an enriched and cohesive curriculum in practical musicianship for every student. Much of this training is accomplished in ensembles (instrumental, choral ensemble, or specialized) for the duration of a student's studies.
Students are responsible for checking their program requirements carefully in order to verify and fulfil large and small ensemble requirements; the Performance Department does not follow the particular enrolment of any student's participation in their large or small ensembles.

Note: In some documentation, large ensembles are referred to as "basic" ensembles, and small ensembles are referred to as "assigned" ensembles.

For each program's large and small ensemble requirements, students should refer to the appropriate section of the eCalendar's Music Undergraduate section (all undergraduate and licentiate requirements are found under section 10.6.2: Department of Performance and section 10.6.1: Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program. Graduate programs are found in the Music Graduate and Postdoctoral Studies section).

\section*{Small Ensembles:}

Information on small ensembles for orchestral instruments can be found on the Chamber Music website. Jazz majors should refer to the Jazz Combos section. Additional information on other types of small ensembles can be found on the Other Ensembles section of the School of Music's Ensembles website.
Students should refer to the ensembles website and the program description for clarification on ensemble requirements by program.
Note: In all cases where the term "director" of an ensemble is used, it is understood to mean the conductor, director, stage director, or coach of the ensemble.

The following policy and regulations apply to all students performing in all ensembles, large or small, required, complementary, or elective. They apply also to all students who have been assigned to an ensemble for any reason, including conducting students, composers- and arrangers-in-residence, and others.

\subsection*{10.5.4.2 Large Ensembles and Small Ensembles}

For ensemble purposes, the orchestral instruments include:
- flute
- oboe
- clarinet
- bassoon
- saxophone
- french horn
- trumpet
- trombone
- tuba
- percussion
- harp
- violin
- viola
- cello
- double bass

Voice majors may choose from a group of vocal and choral ensembles appropriate to the level of their development.
In all programs which specify small ensembles, the following are considered small ensembles:
\begin{tabular}{ll} 
Small Ensembles & \\
MUEN 540 & Chamber Music Project 1 \\
MUEN 541 & Chamber Music Project 2 \\
MUEN 553 & Vocal Chamber Ensemble \\
MUEN 556 & Introduction to Collaborative Piano 1 \\
MUEN 557 & Introduction to Collaborative Piano 2 \\
MUEN 560 & Chamber Music Ensemble \\
MUEN 562 & Guitar Ensemble \\
MUEN 570 574 & Jazz Combo \\
MUEN 5ro-Cuban / Brazilian Jazz Combo \\
MUEN 578 & Song Interpretation 1 \\
MUEN 579 & Song Interpretation 2 \\
MUEN 580 & Early Music Ensemble \\
MUEN 581 & Introduction to Ensemble Playing for Pianists \\
MUEN 582 & Piano Ensembles \\
MUEN 584 & Studio Accompanying \\
MUEN 585 & Sonata Masterclass \\
MUEN 591 & Brass Consort \\
MUEN 598 & Percussion Ensembles \\
\hline
\end{tabular}

Note: Beethoven Orchestra (MUEN 567) does not count toward small ensemble credits.

\subsection*{10.5.4.3 Additional Ensembles}

Additional ensembles chosen by students in non-performance programs to reflect their particular interests may, with departmental approval, be applied as music and/or free elective credit. Students in performance may apply a maximum of four ensemble credits as complementary performance courses. Students electing an ensemble will normally be required to participate in the ensemble placement auditions and will be placed accordingly.

\subsection*{10.5.4.4 Assignments and Auditions}

Auditions for large and small ensembles are mandatory for participation in the ensemble. Information on all auditions for ensembles can be found on the ensembles website.
Students who cannot participate in the ensemble auditions at the times indicated on the website must contact the ensemble resource supervisor at least two (2) weeks before the date of the audition. The students must submit-in writing-reasons for their lack of availability and, if applicable, submit a recording of their audition materials prior to the day of the auditions. If students miss an audition with an accepted reason, but do not deliver the audition materials to the department, or if students miss an audition for reasons unacceptable to the Performance Department, they will not be allowed to audition and their assignment will be left entirely to the discretion of the Performance Department. The students may also be subject to grade penalties in the ensemble to which they are assigned.
Students will be notified of their assignments by email from either their instructor or the Ensemble Resource Office. Reassignments may be made from time to time during a term and will be communicated to students. Students registered in an instrumental program who are not assigned a large ensemble following the ensemble placement auditions should take a choral ensemble as their large ensemble.

\subsection*{10.5.4.5 Commitment}

Ensembles are courses. Each student who has registered for an ensemble, or who has been assigned to an ensemble, has made a commitment to the ensemble and is required to be available to attend all rehearsals, concerts, performances, field trips, recordings, and other activities, which constitute the course
requirements of that ensemble. If rehearsals outside of class meeting times occur, advance notice will be given. These additional rehearsals will be avoided when possible.

\subsection*{10.5.4.6 Failing Grade}

A failing grade in any of the ensembles (large, small, complementary, or elective) obliges the student to make up the credit during a later semester. A subsequent failure in the same course may result in the student being required to withdraw from the program.

\subsection*{10.5.4.7 Request to be Excused from a Rehearsal}

Musicians are required to inform the Ensemble Resource Administrator at ensembles.music@mcgill.ca of any possible professional engagements before they get placed into ensembles. Any student who cannot attend a Large Ensemble rehearsal is required to fill out an Absence Request Form as soon as they learn of their conflict.

Note: For Opera McGill policies, please contact stephen.hargreaves@mcgill.ca. For jazz and early music large ensemble policies, please contact the instructor.

If a student has been excused for a rehearsal, they are responsible to find a substitute to cover their part during the absence, unless discussed with the Director.
Important: Only two absences in the entire concert cycle will be permitted (excused or unexcused); if a student foresees they will need to miss more than two rehearsals, efforts should be made to be reassigned into a different program. No permission is given to be excused from a dress rehearsal or the concert itself.

Missing more than two rehearsals per concert cycle will prevent the student from participating in that concert cycle. In such a situation, the student will either receive a lower grade, be reassigned to another program when possible, or be asked to complete additional work to make up for the missed concert cycle. If a student has a legitimate excuse (e.g., an illness) that results in more than two absences, they should contact Student Affairs at studentaffairs.music@ mcgill.ca to explore whether they are eligible for a late withdrawal.
Students who are unable to play/sing because of an injury or illness should still attend the rehearsal when possible.
Students who are experiencing academic or physical barriers and have a documented disability, mental health condition, chronic health condition, or other impairment are encouraged to register with Student Accessibility and Achievement.

Absences or tardiness without an approved Ensemble Excuse Form will result in a final mark deduction as follows:
Excused absences (up to 2 per concert cycle) result in no loss of grade
A tardy* (10 minutes or less) to rehearsal without approval will result in loss the of one grade point (i.e., B to B-)
An absence (more than 10 minutes late) without approval will result in the loss of one entire letter grade (i.e., A to B)
* Please note, arriving after or during the warm-up or the tuning note is considered tardy.

Students may be excused from a rehearsal of an ensemble for the following reasons; however, submitting a form with one of these reasons does not guarantee approval of a request:

\section*{Reason for Absence}
- Sickness, or emergency medical or dental work

Important Note: Any student who is experiencing pain while playing or singing should inform their practical teacher and the Director of their ensemble(s), and should seek appropriate medical attention. Students should not be reluctant to admit to injury; it is entirely acceptable for students to be excused from ensemble rehearsal(s) for health reasons. The School does not want students to perform with pain or injury. If students are experiencing pain while playing, then they are permitted to sit in rehearsal in their assigned place without playing in the rehearsal.
- An audition for a permanent professional engagement, graduate school, or a summer program
- A master class
- A major competition
- A professional engagement deemed by the Music School to be very important for a student's developing career
- Family emergency or an especially important family occasion (e.g., weddings, funerals)
- A field trip for another ensemble or class
- An authorized McGill function
- Religious Holy Days and Commitments

\section*{Actions Required}

Submit online form in advance (if possible) or within three (3) days of returning to school.

Email the ensemble director and manager before the absence.

Submit online absence request form in advance and within 48 hours (two days) of the missed rehearsal. Failure to do so will result in an unexcused absence.

Email the ensemble director and the manager before the absence.

\subsection*{10.5.4.8 Preparation}

If the director of an ensemble is not satisfied with the quality of the student's preparation for rehearsals, the director shall first warn the student. This warning shall be communicated by the director to the Ensemble Resource Supervisor and Area Coordinator, who shall inform the student in writing. If, in the director's opinion, this lack of preparation continues, further action will be taken to remedy the situation.

For any particular performance, if—after a written warning to the student(s) with copies to the Ensemble Resource Supervisor, practical instruction teacher, Area Coordinator, and Department Chair-the director, in consultation with their sectional coaches, feels that the performance of a student or group of students will not meet a certain minimum standard established by the director, the director may cancel a student's participation in a performance.
Students who are required to withdraw from an ensemble for reasons of lack of preparation will be given a grade F, which will be reflected in their grade point average (GPA).

\subsection*{10.5.4.9 Withdrawal}

Withdrawal for any reason obliges the student to make up the credit(s) during a later term.

\subsection*{10.5.4.10 Exemption from a Required Ensemble}

In order to be given permission not to participate in a required ensemble for a term or part thereof, a student must meet one of the following four criteria:
1. The student must be a participant in a major national or international competition, or (in the case of voice students) be given a significant role with a recognized performing arts ensemble, and (in the case of all students) have completed the minimum number of required terms of the ensemble, and have the permission of:
- their practical teacher;
- the Area Coordinator;
- the director of the ensemble; or
2. The student must have completed all program requirements except the final exam on their instrument; or
3. The student must have completed all musical requirements of their program, having only non-music and/or free electives remaining; or
4. The student must have a significant medical reason.

Note: Permission to not participate in a required or complementary ensemble for a term or part thereof is not an exemption and does not satisfy any credit requirements for a degree.

\subsection*{10.5.4.11 Rotation in Large Ensembles}

When possible, and to help ensure equal opportunity and experience for students in the large instrumental ensembles, the seating of students in these ensembles may be rotated periodically throughout the term or year. The director of the ensemble, along with the guidance of the Area Coordinator and/or practical instruction teachers, will determine whether or not rotation is possible.

\subsection*{10.5.4.12 Transfer Credits}

The previous ensemble participation of students coming to McGill from other universities will be recognized if their ensemble experience was similar to that required by the Schulich School of Music; determination of this experience will be approved by the Area Coordinator and the Department Chair. In general, transfer credit is made on a term-for-term basis (not by credits) and usually does not exceed two (2) terms. Students are normally not permitted to reduce the large ensemble training requirements of their McGill program to less than the number of terms required for them to complete the rest of their program. In such cases, transfer credit may be given as music and/or free elective credit for students in non-performance programs. Students in performance may apply a maximum of four credits as complementary performance courses.

\subsection*{10.5.4.13 Large Ensemble Extra Credits}

Based on the admitted program, large ensemble credits accumulated above the minimum may be applied as music and/or free elective credits. In addition, students in performance may apply a maximum of four MUEN credits as complementary performance courses. Participation in additional large or small ensembles implies that the same policies will apply.

\subsection*{10.5.4.14 Performance Library}

Students are responsible for the music that has been loaned to them for their use, and for its return in good condition to the Gertrude Whitley Performance Library. Students will be required to pay for the replacement of any music that has been lost, stolen, or damaged, and a hold on a student's Minerva account can be placed by the Performance librarian should music or fines not be handed in to the library.

\subsection*{10.5.5 Accompanist Program}

Bachelor of Muisc (B.Mus.) and Licentiate in Music (L.Mus.) students registered for practical instruction (including elective practical instruction) in one of the eligible instruments may request Accompanist Funding for a designated set of hours. Further details are available from the Accompanist Funding Program website.

\subsection*{10.5.6 Academic Category}

All Music students are registered in one of the following categories:

\section*{Academic Categories}

Major: B.Mus. candidates may choose one or more of several majors as described under section 10.6: Browse Academic Units \& Programs.
Faculty Program: a B.Mus. program which allows for cross-disciplinary studies. Students may combine another major or minor offered by the Schulich School of Music or other faculty in this program (see section 10.6.1.4: Bachelor of Music (B.Mus.) - Faculty Program Music (123 credits) and section 10.6.1.5: Bachelor of Music (B.Mus.) - Faculty Program Music - Jazz (123 credits)).
L.Mus.: Diploma programs are designed for advanced instrumentalists and singers who wish to concentrate on their practical subject.

Special: those who are not proceeding towards a degree or diploma.
Visiting: those taking courses at McGill for credit towards a degree at another university.
Exchange: those taking courses at McGill as an exchange student from one of McGill's approved list of bilateral exchange partners.

\subsection*{10.5.7 Auditing}

Students are not permitted to audit a course with credit(s) without officially registering. This includes ensembles (courses with MUEN prefix).
For information on auditing, see University Regulations and Resources > Undergraduate \(>\) Registration > section 1.3.2.7: Auditing of Courses.

\subsection*{10.5.8 Electives}

\subsection*{10.5.8.1 Electives}

The Schulich School of Music has three types of electives in a Bachelor of Music (B.Mus.) program: non-music electives, music electives and free electives. An updated list of suggested electives for music students is found on the Electives website.

\subsection*{10.5.8.2 Music Electives}

Unless otherwise specified, any Music course that is not a required course in the student's program can be counted as a Free and/or Music Elective in the B.Mus. program subject to prerequisites, program restriction, and room in the course. Ensemble credits accumulated above the minimum may be applied as Free and/or Music Elective credits with limitations depending on the program.

Courses in a Music minor or second Music major can also count as Music electives

\subsection*{10.5.8.3 Non-Music Electives}

Non-Music Electives are undergraduate-level courses administered by a faculty other than the Schulich School of Music. These may include arts and science courses such as French language, psychology, political science, computer science, etc. Students are permitted to take more than the assigned number of non-music electives in their program. Overflow of non-music electives in a Bachelor of Music (B.Mus.) program is counted as free electives.

Courses in a minor offered by Arts, Science and Management can also count as non-music and/or free electives.

\subsection*{10.5.8.4 Free Electives}

Free Electives can be a mix of music and non-music electives.

\subsection*{10.5.9 Distance Education (Online) Courses}

Students may take a maximum of 6 credits of non-Music elective courses taught through distance education toward their B.Mus. degree at McGill. Courses taught through distance education from institutions other than McGill will be approved as transfer credits under the following conditions:
- The course is given by a government-accredited, degree-granting institution acceptable to McGill.
- The course must be assessed by the department which oversees the subject and be approved on McGill's Course Equivalency Database (see mcgill.ca/students/transfercredit/course-equivalency).
- The course counts for credit toward degrees granted at the institution giving the course.
- Prior approval for the course is obtained from the Music Student Affairs office.

\subsection*{10.5.10 Course Changes \& Withdrawal}

Students are permitted to change courses and/or sections of a course during the add/drop period in each term. This is referred to as the official Course Change period. Course and section changes are made by the student, using Minerva to access their record directly. Contact Music Student Affairs Office if you are unable to change a course or section. For more information, see University Regulations and Resources > Undergraduate > Registration > section 1.3.3: Course Change Period.

Late course change requests, including section changes, if approved, will be charged the applicable Late Course Change Fee. No charge will be made for late changes imposed by the Faculty. If students' registrations must be corrected after the Course Change period to bring their records into conformity with the courses they are actually taking, the students will be charged the late fee. For complete information on administrative fee charges and fines, please consult the Student Accounts website.

Small ensembles such as chamber music (MUEN 560), jazz combo (MUEN 570) and early music (MUEN 580) have multiple sections based on group assignments at the beginning of each semester. It is students' responsibility to ensure they are registered in the correct ensemble section before the add/drop deadline. Failure to enroll in the accurate ensemble section will lead to a failing grade of J due to registration error.

\section*{Course Withdrawal}

Students are not permitted to withdraw from practical instruction, practical exams (courses with MUIN prefixes) and/or ensembles (courses with MUEN prefixes) without instructor or departmental approval. For most other courses, students may withdraw from one or more courses on Minerva before the course withdrawal deadlines. In such cases, the student's mark in the course will be W . This grade does not affect the student's cumulative grade point average (CGPA). For more information, consult Important Dates.

Depending on when the student withdrew from a course online, the student may be eligible for a refund. For information on the Refund Policy, consult University Regulations and Resources > Undergraduate > Registration > section 1.3.3.1: Course Withdrawal.

\section*{Late Course Withdrawal}

Students are expected to abide by the University's course withdrawal deadlines. It is only under extenuating circumstances students may appeal for a course withdrawal after the course withdrawal without refund deadline. Late course withdrawal requests must be submitted before the end of the semester for which the course is taken.

\subsection*{10.5.11 Incompletes}

At the discretion of the instructor, a mark of K (Incomplete) may be given to a student who, due to extenuating circumstances, has not finished the coursework on time. The deadline for completion and submission of the required work shall be set by the instructor but may not be later than four months after the K was given. If the final grade is not received within the specified timeline (as agreed by the instructor and student), the mark will be changed to KF (Incomplete Failed), unless an extension has been granted (KE). Completion of the course will cause the K to be replaced on official transcripts by the mark earned. Courses marked with a K do not get counted towards eligible credits for in-course scholarships consideration.

Students who did not withdraw from a course before the course withdrawal deadline, or abandon a course without formally withdrawing, will receive a grade of J ; a failing grade for not successfully meeting the course requirements.

In exceptional cases, when research or an assignment cannot be completed for reasons beyond the student's control, students may be given permission by the Associate Dean (Academic and Student Affairs) to leave a course permanently Incomplete (without penalty). The symbol K will be replaced by KK, in which case the student's grade point average will be calculated without the inclusion of this course.

\subsection*{10.5.12 Examinations}

The following information pertains to examinations for students in the Schulich School of Music.

\subsection*{10.5.12.1 Deferrals}

Deferred examinations are permitted in the case of illness or other exceptional circumstances.
- Music students requesting a deferred examination in academic courses for a final exam offered during the official final exam period must submit the Request for a Deferred Examination in Minerva.
- Students requesting a deferred examination in a practical music examination must email the Performance Department directly to re-schedule the exam.

Supporting evidence such as an appropriate medical note is required. The supporting documents must be submitted to the Music Student Affairs Office no later than five business days from the date of the final exam. For all exam deferral requests except for practical music examination (practical exam with MUIN prefix), an \(L\) (deferred) will appear in place of a grade if the request is approved. The grade obtained in the deferred examination will replace the grade of L (deferred) on the official transcript.

Deferred examinations in academic courses without a final exam during the official exam period are given at the discretion of the instructor. A deferred examination in a Music practical examination will be held during the next examination period.

Deferred examinations in academic courses are normally held during the March Study Break for Fall term deferrals and in August for Winter Term deferrals. See the Exams website for more information. It is the student's responsibility to check the date, time, and place of the deferred examination.

A mark of \(L\) (deferred) not cleared by early May makes the student ineligible for in-course scholarships.

Students who are unable to write a deferred exam due to extenuating circumstance must contact the Music Student Affairs Office immediately to discuss the next steps. Deferred examinations cannot be written at a later date. Students who have failed to complete a deferred exam will have a final grade of J (absent), which will negatively impact TGPA/CGPA.

\subsection*{10.5.12.2 Supplemental Exams}

Supplemental exams in Music courses may be given at the discretion of the instructor or the Department Chair. A student who receives a mark below \(30 \%\) in a course is not permitted to take a supplemental examination but must repeat the course.

If an instructor or a Department Chair recommends a supplemental exam for Bachelor of Music (B.Mus.) and Licentiate in Music (L.Mus.) students, they are required to apply for a supplemental exam through Music's Student Affairs Office. B.Mus. and L.Mus. students do not submit the request using Minerva's supplemental examination request form. Final grade for a supplemental exam does not replace the original grade a student has received for the course.

Students are subject to a supplemental exam fee if the request is approved.

\subsection*{10.5.12.3 Reassessments and Rereads}

Students may request reassessments of term work or rereads of final exams. In either case, students should first consult the instructor for clarification on an assessment and to request a possible grade adjustment if deemed eligible. If a satisfactory conclusion cannot be reached, students may contact the Student Affairs Office (studentaffairs.music@mcgill.ca) in writing to apply for a reassessment. A formal re-evaluation will be conducted by a qualified and impartial evaluator.
- Grades may either be raised or lowered as a result of a reread/reassessment; the final course grade following a reread/reassessment takes precedence, whether it is higher or lower.

Students must submit a reread/reassessment request by the following deadlines:
- March 31 of the subsequent year for fall courses;
- July 31 of the same year for winter courses; or
- November 30 of the same year for summer courses.

No late applications for rereads/reassessments will be accepted.

\subsection*{10.5.13 Graduation Requirements}
1. The successful completion of all courses and proficiency requirements as specified in the candidate's program is required to meet graduation requirements. Students registered in two programs must fulfil all requirements for both programs. A minimum grade of C (or higher, depending on the program) must be achieved in all required courses, all complementary courses specified by course number, and all prerequisite or corequisite courses. A grade of D (non-continuation pass) is acceptable only in elective courses that are not prerequisite or corequisite to other required courses in the program.
2. Students must attain a minimum cumulative grade point average (CGPA) of 2.00 in order to graduate from a Bachelor of Music (B.Mus.) or a Licentiate in Music (L.Mus.).
3. For students with advanced standing and/or transfer credits, they are required to earn a minimum of credits in residence at McGill University (B.Mus.: 60 credits, L.Mus.: 48 credits) in order to be eligible to graduate.

For more information on applying to graduate, see mcgill.ca/graduation/applying.

\subsection*{10.5.13.1 Graduation Honours}

For information on the designation of Dean's Honour List awarded at graduation, see University Regulations and Resources \(>\) Undergraduate \(>\) Graduation > Graduation Honours > section 1.9.3.1: Dean's Honour List.

For information on the designation of Distinction awarded at graduation, see University Regulations and Resources \(>\) Undergraduate \(>\) Graduation \(>\) Graduation Honours > section 1.9.3.2: Distinction.

Departments may recommend that students be awarded Outstanding Achievement in recognition of superior performance on an instrument or voice or in an academic discipline.

\section*{10.6 \\ Browse Academic Units \& Programs}

The Department of Music Research offers undergraduate degrees (Bachelor of Music) in Music Composition, Music Education, Music History, Theory, and the Faculty Program. The Department also offers Minors in Music History, Composition, Music Education, Music Entrepreneurship, Music Theory, and two Minors in the area of Music Technology.

The Department of Performance offers undergraduate degrees (Bachelor of Music) in Performance, Early Music Performance, and Jazz Performance; diploma programs in Licentiate in Music; and Minors in Conducting, Early Music Performance, Jazz Arranging and Composition, and Jazz Performance.

\subsection*{10.6.1 Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program}

At both the undergraduate and graduate levels, the Department embraces the disciplines of Composition, Music Education, Music History, and Theory; Music Technology and Sound Recording. The philosophy of the Department is to encourage integration of the disciplines as much as possible within the learning process in each program of study: the development of basic musicianship, the absorption of the grammar and syntax of musical discourse, and the study of the world of ideas are understood as interconnected.

Major programs offer the student some focus with the flexibility to pursue other areas of interest. The Faculty program is intended to offer an option for individual and creative plans of study. All of the Department's programs give a solid grounding in analytic, synthetic, and writing skills that are useful preparation not only for the music profession but also for professions as diverse as law, journalism, management, and librarianship.
The Music Education program combines an orientation towards a professional career in primary and secondary schools with sensitivity to broader intellectual frameworks against which teachers should understand their roles. This program is offered concurrently with the B.Ed., Music (see section 10.6.3: B.Mus./B.Ed. Bachelor of Music and Bachelor of Education Concurrent Program).

The Department also offers a Minor in Music Composition, a Minor in Music Education, Music Entrepreneurship, Music History, Music Theory, Musical Applications of Technology, and Musical Science and Technology to Music students and to students who seek to place their work in larger context. Several of the Minors are open to students from other faculties.
For each program, all courses listed are required courses unless otherwise indicated.

\subsection*{10.6.1.1 Bachelor of Music (B.Mus.) - Major Composition (124 credits)}

The Bachelor of Music (B.Mus.); Major in Composition program offers students a solid grounding in the basics of classical music composition for instruments and voices, with or without electronics. This is achieved through lecture courses and tutorials (private composition lessons in the third and fourth years of the program). The study of topics related to music theory helps to hone students' compositional technique, while the study of topics related to music history helps to develops students' critical thinking skills. Free elective courses allow students either to focus on an area of secondary interest as a minor degree, or to pursue a broader range of course offerings, either within or outside the Schulich School of Music. To ensure consistent performance throughout their program, students are required to achieve a minimum grade of B- in courses given by the Composition Area.

\section*{Program Prerequisites - Freshman Program ( 32 credits)}

32 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
4 credits of Large Ensemble
6 credits of Non-Music Electives

\section*{Prerequisite Courses}

22 credits, all of the courses below:
Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lcl} 
MUHL 186 & \((3)\) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses ( 61 credits)}

\section*{Composition}
\begin{tabular}{lll} 
MUCO 241 & (3) & Tonal Composition 1A \\
MUCO 242 & (3) & Tonal Composition 1B
\end{tabular}
\begin{tabular}{lcl} 
MUCO 245 & (2) & Composition 1A \\
MUCO 246 & \((3)\) & Composition 1B \\
MUCO 261 & \((3)\) & Orchestration 1 \\
MUCO 340D1 & \((2)\) & Composition 2 \\
MUCO 340D2 & \((2)\) & Composition 2 \\
MUCO 341 & (3) & Digital Studio Composition 1 \\
MUCO 342 & (3) & Digital Studio Composition 2 \\
MUCO 360 & (3) & Orchestration 2 \\
MUCO 440D1 & (2) & Composition 3 \\
MUCO 440D2 & (2) & Composition 3 \\
MUCO 460 & (3) & Advanced Digital Studio Composition 1 \\
MUCO 541 & (3) & Topics in Composition \\
MUCO 575 &
\end{tabular}

\section*{Theory}
\begin{tabular}{lll} 
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4 \\
MUSP 346 & (2) & Post-Tonal Musicianship
\end{tabular}

\section*{Music History}

MUHL 286
(3)

Critical Thinking About Music

\section*{Performance/practical lessons}
\begin{tabular}{lll} 
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 283 & (1) & BMus Concentration Final Examination
\end{tabular}

\section*{Professional Development}
MUPD 235
(1)
Music as a Profession 2

\section*{Complementary Courses (13 credits)}

\section*{Music Theory}

3 credits from the following:
\begin{tabular}{lll} 
MUTH 202 & (3) & Modal Counterpoint 1 \\
MUTH 204 & (3) & Tonal Counterpoint 1
\end{tabular}

\section*{Music History}

6 credits from the following:
\begin{tabular}{lll} 
MUHL 385 & (3) & Early Twentieth-Century Music \\
MUHL 391 & (3) & Canadian Music \\
MUHL 392 & (3) & Music since 1945
\end{tabular}

\section*{Performance/ensemble}

4 credits from the following:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & \((2)\) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & \((2)\) & McGill Wind Orchestra \\
MUEN 592 & \((2)\) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & \((2)\) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Elective Courses (18 credits)}

3 credits of non-Music Electives.
15 credits of Free Electives.
Recommended but not required courses:
\begin{tabular}{lcl} 
MUCO 462 & \((3)\) & Advanced Tonal Writing \\
MUCO 542 & (3) & Advanced Digital Studio Composition 2 \\
MUHL 388 & \((3)\) & Opera After 1900 \\
MUTH 302 & (3) & Modal Counterpoint 2 \\
MUTH 304 & (3) & Tonal Counterpoint 2 \\
MUTH 322 & (3) & Topics in Post-Tonal Analysis \\
MUTH 528 & (3) & Schenkerian Theory and Analysis \\
MUTH 538 & (3) & Mathematical Models for Musical Analysis \\
MUTH 539 & (3) & Topics in Advanced Writing Techniques
\end{tabular}

\subsection*{10.6.1.2 Bachelor of Music (B.Mus.) - Major Music History (124 credits)}

The Bachelor of Music (B.Mus.); Major in Music History requires 124 credits. This program focuses on the place of music in different cultural contexts, the social conditions of musicians, the evolution of performing styles, and the different ways music can project meaning and reflect identity, including the parameters of different musical styles and musical syntax. Exposure to a wide variety of repertoire in the Western classical tradition as well as to jazz and popular idioms.
Music History provides excellent preparation not only for graduate study in musicology, but also for a considerable range of professional training programs including journalism, information sciences, arts administration, and teaching.

The Bachelor of Music (B.Mus.); Major in Music History program requires 92 credits (plus 32 credits for the Freshman requirement for out-of-province students).

\section*{Program Prerequisites - Freshman Program (32 credits)}

32 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses

\section*{4 credits of Large Ensemble}

6 credits of Non-Music Electives

\section*{Prerequisite Courses}

22 credits, all of the courses below:
Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lcl} 
MUHL 186 & \((3)\) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses ( 23 credits)}

History
MUHL 286 (3) Critical Thinking About Music

Theory
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

Musicianship
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

Performance
\begin{tabular}{lll} 
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 283 & \((1)\) & BMus Concentration Final Examination
\end{tabular}

\section*{Music Professional Development}
MUPD 235 (1) Music as a Profession 2

\section*{Complementary Courses ( 36 credits)}

\section*{History}

27 credits selected from Group I, II, and III, with a minimum of 6 credits from each group.

\section*{Group I}
\begin{tabular}{lll} 
MUHL 377 & (3) & Baroque Opera \\
MUHL 380 & \((3)\) & Medieval Music \\
MUHL 381 & \((3)\) & Renaissance Music \\
MUHL 382 & \((3)\) & Baroque Music \\
MUHL 383 & \((3)\) & Classical Music \\
MUHL 395 & (3) & Keyboard Literature before 1750 \\
MUHL 591D1 & \((1.5)\) & Paleography \\
MUHL 591D2 & \((1.5)\) & Paleography \\
MUPP 381 & \((3)\) & Topics in Performance Practice \\
MUTH 426 & (3) & Topics in Early Music Analysis
\end{tabular}

\section*{Group II}
\begin{tabular}{lcl} 
MUHL 366 & \((3)\) & The Era of the Fortepiano \\
MUHL 384 & \((3)\) & Romantic Music \\
MUHL 385 & (3) & Early Twentieth-Century Music \\
MUHL 387 & (3) & Opera from Mozart to Puccini \\
MUHL 388 & (3) & Opera After 1900 \\
MUHL 389 & (3) & Orchestral Literature \\
MUHL 390 & (3) & The German Lied \\
MUHL 391 & (3) & Canadian Music \\
MUHL 392 & (3) & Music since 1945 \\
MUHL 396 & (3) & Era of the Modern Piano
\end{tabular}

\section*{Group III}
\begin{tabular}{lcl} 
MUHL 314 & (3) & Women in Music: A Cross-Cultural Perspective \\
MUHL 330 & (3) & Music and Film \\
MUHL 362 & (3) & Popular Music \\
MUHL 370 & (3) & History of Recorded Music \\
MUHL 375 & (3) & Introduction to Ethnomusicology \\
MUHL 393 & (3) & History of Jazz \\
MUHL 529 & (3) & Proseminar in Musicology \\
MUHL 592 & (3) & Popular Music Studies
\end{tabular}

\section*{Theory}

3 credits from courses with a prefix of MUTH at the 200 or 300 level.

\section*{Musicianship}

2 credits from:
\begin{tabular}{lll} 
MUSP 324 & (2) & Musicianship for Strings \\
MUSP 330 & (2) & Musicianship for Woodwinds \\
MUSP 335 & (2) & Musicianship for Brass
\end{tabular}
\begin{tabular}{lll} 
MUSP 346 & \((2)\) & Post-Tonal Musicianship \\
MUSP 350 & \((2)\) & Musicianship for Pianists \\
MUSP 353 & \((2)\) & Musicianship for Voice \\
MUSP 354 & \((2)\) & Introduction to Improvisation and Ornamentation \\
MUSP 355 & \((2)\) & Musicianship for Percussion \\
MUSP 361 & \((2)\) & Topics in Musicianship \\
MUSP 381 & \((2)\) & Singing Renaissance Notation
\end{tabular}

\section*{Performance}

Basic Ensemble
4 credits from:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & \((2)\) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & \((2)\) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Elective Courses (33 credits)}

9 credits of non-Music courses.
24 credits of courses to be chosen freely (excluding those with MUAR prefix)

\subsection*{10.6.1.3 Bachelor of Music (B.Mus.) - Major Theory (124 credits)}

The Bachelor of Music (B.Mus.); Major Theory program requires 124 credits and features coursework centered in the development of models and methods of musical languages. How specific pieces of music are put together and how this may be generalized to relate to the way other pieces of music are composed. Theory incorporates a combination of writing skills and analysis. Specialization in such subjects as the application of mathematical models to music analysis and Renaissance-style counterpoint.

\section*{Program Prerequisites - Freshman Program (32 credits)}

32 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
4 credits of Large Ensembles
6 credits of Non-Music Electives

\section*{Prerequisite Courses}

22 credits, select all of the courses below:
Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lll} 
MUHL 186 & (3) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1
\end{tabular}
\begin{tabular}{lll} 
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses ( 25 credits)}

\section*{Theory}
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4 \\
MUSP 346 & (2) & Post-Tonal Musicianship
\end{tabular}

\section*{Music History}

MUHL 286
(3)

Critical Thinking About Music

\section*{Performance}

BMus Practical Lessons 3
MUIN 281
BMus Practical Lessons 4
MUIN 283
(1)

BMus Concentration Final Examination

\section*{Professional Development}
MUPD 235

Music as a Profession 2

\section*{Complementary Courses (40 credits)}

\section*{Theory}

6 credits selected from:
\begin{tabular}{lll} 
MUTH 202 & (3) & Modal Counterpoint 1 \\
MUTH 204 & (3) & Tonal Counterpoint 1 \\
MUTH 302 & (3) & Modal Counterpoint 2 \\
MUTH 304 & (3) & Tonal Counterpoint 2
\end{tabular}

6 credits selected from:
\begin{tabular}{lll} 
MUTH 321 & (3) & Topics in Tonal Analysis \\
MUTH 322 & (3) & Topics in Post-Tonal Analysis
\end{tabular}
\begin{tabular}{lll} 
MUTH 426 & (3) & Topics in Early Music Analysis \\
MUTH 541 & (3) & Topics in Popular Music Analysis
\end{tabular}

6 credits selected from:
\begin{tabular}{lll} 
MUTH 526 & (3) & Methods in Tonal Theory and Analysis \\
MUTH 528 & (3) & Schenkerian Theory and Analysis \\
MUTH 529 & (3) & Proseminar in Music Theory \\
MUTH 538 & (3) & Mathematical Models for Musical Analysis
\end{tabular}

12 credits selected from courses not taken above and the following:
\begin{tabular}{lll} 
MUCO 462 & (3) & Advanced Tonal Writing \\
MUCO 575 & (3) & Topics in Composition \\
MUTH 539 & (3) & Topics in Advanced Writing Techniques
\end{tabular}

\section*{Music History}

6 credits from courses with a prefix of MUHL or MUPP.

\section*{Performance}

4 credits selected from:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & \((2)\) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & \((2)\) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Elective Courses (27 credits)}

9 credits of non-Music Electives.
18 credits of free Electives.

\subsection*{10.6.1.4 Bachelor of Music (B.Mus.) - Faculty Program Music (123 credits)}

The Bachelor of Music (B.Mus.) - Faculty Program Music requires 123 credits and has been designed to accommodate those students who are either undecided about the area of music in which they wish to specialize, or who are interested in a pattern of specialization not provided in the established major programs, or who are interested in combining studies in music with studies in other disciplines. Students registered in the Faculty Program may, with the approval of a staff adviser, design their own programs around specific interests or develop programs with a broader base by incorporating courses from other disciplines and faculties.

\section*{Program Prerequisites - Freshman Program (32 credits)}

32 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite courses
4 credits of Large Ensemble

6 credits of non-Music electives

\section*{Prerequisite Courses}

22 credits, all of the courses below:
Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lcl} 
MUHL 186 & \((3)\) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses (23 credits)}

\section*{Theory}
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

\section*{Music History}

MUHL 286
(3)

Critical Thinking About Music

\section*{Performance}
\begin{tabular}{lll} 
MUIN 280 & (2.5) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 283 & (1) & BMus Concentration Final Examination
\end{tabular}

\section*{Professional Development}
MUPD 235 (1) Music as a Profession 2

\section*{Complementary Courses (12 credits)}

\section*{Music History}

6 credits from courses with a prefix of MUHL or MUPP at the 300 level or higher.

\section*{Musicianship}

2 credits from:
\begin{tabular}{lcl} 
MUSP 324 & \((2)\) & Musicianship for Strings \\
MUSP 330 & \((2)\) & Musicianship for Woodwinds \\
MUSP 335 & \((2)\) & Musicianship for Brass \\
MUSP 346 & \((2)\) & Post-Tonal Musicianship \\
MUSP 350 & \((2)\) & Musicianship for Pianists \\
MUSP 353 & (2) & Musicianship for Voice \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 355 & (2) & Musicianship for Percussion \\
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

\section*{Performance}

4 credits from:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & \((2)\) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & \((2)\) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Elective Courses (56 credits)}

20 credits of Music Electives.
3 credits of non-Music Electives.
33 credits of Free Electives.

\subsection*{10.6.1.5 Bachelor of Music (B.Mus.) - Faculty Program Music - Jazz (123 credits)}

The Bachelor of Music (B.Mus.); Faculty Program in Music; Jazz requires 123 credits and has been designed to accommodate students who trained as jazz musicians and who are interested in a pattern of specialization not provided in the established major programs, or who are interested in combining studies in music with studies in other disciplines. Students registered in the Faculty Program in Music; Jazz may, with the approval of a staff adviser, design their own programs around specific interests or develop programs with a broader base by incorporating courses from other disciplines and faculties.

\section*{Program Prerequisites - Freshman Program (32 credits)}

32 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite courses
4 credits of Large Ensemble
6 credits of non-Music electives

\section*{Prerequisite Courses}

22 credits, all of the courses below:
Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lcl} 
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & \((3)\) & BMus Practical Lessons 2 \\
MUJZ 160 & \((3)\) & Jazz Materials 1 \\
MUJZ 161 & \((3)\) & Jazz Materials 2 \\
MUJZ 170 & (1) & Jazz Keyboard Proficiency 1 \\
MUJZ 171 & \((1)\) & Jazz Keyboard Proficiency 2 \\
MUJZ 187 & (3) & Jazz History Survey \\
MUPD 135 & \((1)\) & Music as a Profession 1 \\
MUSP 123 & (2) & Jazz Ear Training 1 \\
MUSP 124 & (2) & Jazz Ear Training 2
\end{tabular}

\section*{Required Courses ( 26 credits)}

\section*{Theory}
\begin{tabular}{lcl} 
MUJZ 262 & (3) & Applied Jazz Theory \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2 \\
MUTH 250 & (3) & Theory and Analysis 3
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUJZ 213 & (2) & Fundamentals of Jazz Improvisation 1 \\
MUJZ 214 & (2) & Fundamentals of Jazz Improvisation 2
\end{tabular}

\section*{Music History}
MUHL 286
(3)
Critical Thinking About Music

\section*{Performance}
\begin{tabular}{lll} 
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 283 & \((1)\) & BMus Concentration Final Examination
\end{tabular}

\section*{Professional Development}
MUPD 235 (1) Music as a Profession 2

\section*{Complementary Courses (12 credits)}

\section*{Music History}

6 credits from courses with a prefix of MUHL or MUPP.

\section*{Musicianship}

2 credits from:
\begin{tabular}{lll} 
MUJZ 323 & (2) & Advanced Jazz Ear Training \\
MUSP 324 & (2) & Musicianship for Strings
\end{tabular}
\begin{tabular}{lcl} 
MUSP 330 & \((2)\) & Musicianship for Woodwinds \\
MUSP 335 & \((2)\) & Musicianship for Brass \\
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 350 & (2) & Musicianship for Pianists \\
MUSP 353 & (2) & Musicianship for Voice \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 355 & (2) & Musicianship for Percussion \\
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

\section*{Performance}

4 credits from:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & \((2)\) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & \((2)\) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Elective Courses (53 credits)}

20 credits of Music Electives
3 credits of non-Music Electives.
30 credits of Free Electives

\subsection*{10.6.1.6 Special Prerequisite Courses for M.Mus. in Sound Recording}

Students wishing to follow this package of prerequisite courses while registered in the Faculty Program or in any other B.Mus. program must notify the Sound Recording Area Coordinator of their intent to do so.

Special Prerequisite Courses for M.Mus. Sound Recording
\begin{tabular}{lll} 
Schulich School of Music - Required Courses & Credits (18) \\
MUCO 260 & Instruments of the Orchestra & 3 \\
MUMT 250 & Music Perception and Cognition & Introduction to Electronics \\
MUSR 232 & Introduction to Music Recording & 3 \\
MUSR 300D1/D2 & Introduction to Electroacoustics & 3 \\
MUSR 339 & Physics of Music & 6 \\
Faculty of Science - Required Course & Credits (3) \\
PHYS 224 & & 3 \\
One of the following: & Fundamentals of New Media & Credits (3) \\
MUMT 202 & Introduction to Digital Audio & 3 \\
MUMT 203 & & 3
\end{tabular}

\section*{Special Prerequisite Courses for M.Mus. Sound Recording}
\begin{tabular}{lll} 
One of the following: & Credits (3) \\
MUMT 302 & New Media Production 1 & 3 \\
MUPD 204 & Production for Digital Media 1 & 3
\end{tabular}

TOTAL: 27 Credits

For the most up-to-date information about special prerequisite courses for the M.Mus. in Sound Recording, consult the Sound Recording Program website.
\(\theta\)
Note: Students admitted as a Special Student in the prerequisite package for Sound Recording must meet with the Sound Recording Adviser prior to registration. In order to be considered for admission to the Master of Music in Sound Recording, students must attain a minimum grade of B in all of the above courses and must have a B.Mus. degree with a minimum CGPA of 3.00.

\subsection*{10.6.1.7 Bachelor of Music (B.Mus.) - Minor Composition (18 credits)}

The Minor Composition is available to all students with approval (with the exception of students in the Major Composition.) This option will take the place of music and/or free electives.

\section*{Required Courses ( 9 credits)}
\begin{tabular}{lll} 
MUCO 230 & (3) & The Art of Composition \\
MUCO 260 & (3) & Instruments of the Orchestra \\
MUCO 341 & (3) & Digital Studio Composition 1
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits selected from
\begin{tabular}{lll} 
MUHL 385 & (3) & Early Twentieth-Century Music \\
MUHL 391 & (3) & Canadian Music \\
MUHL 392 & (3) & Music since 1945 \\
MUTH 322 & (3) & Topics in Post-Tonal Analysis \\
MUTH 539 & (3) & Topics in Advanced Writing Techniques
\end{tabular}

\subsection*{10.6.1.8 Bachelor of Music (B.Mus.) - Minor Music Education (18 credits)}

The Minor in Music Education is available to all students, with the exception of students in the concurrent B.Mus.; Major in Music Education/B.Ed.; Major in Music Elementary and Secondary program, subject to the approval of the Schulich School of Music. This Minor will take the place of free electives. The Minor Music Education has limited enrolment. Students must choose complementary courses from one of the three available streams.

\section*{Required Courses (3 credits)}

MUGT 401 (3) Issues in Music Education

\section*{Complementary Courses (15 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
MUCT 235 & \((3)\) & Vocal Techniques \\
MUCT 315 & (3) & Choral Conducting 1 \\
MUGT 205 & (3) & Psychology of Music \\
MUGT 354 & (3) & Music for Children \\
MUGT 355 & (3) & Music in Early Childhood \\
MUGT 358 & (3) & General Music for Adults and Teenagers \\
MUIT 201 & (3) & String Techniques \\
MUIT 202 & (3) & Woodwind Techniques
\end{tabular}
\begin{tabular}{lcl} 
MUIT 203 & \((3)\) & Brass Techniques \\
MUIT 204 & \((3)\) & Percussion Techniques \\
MUIT 250 & \((3)\) & Guitar Techniques \\
MUIT 302 & (3) & Advanced Wind Techniques \\
MUIT 315 & (3) & Instrumental Conducting \\
MUIT 356 & (3) & Jazz Instruction: Philosophy and Techniques
\end{tabular}

9 credits selected from undergraduate-level courses with a prefix of MUCT, MUGT, MUIT.

\subsection*{10.6.1.9 Bachelor of Music (B.Mus.) - Minor Music Entrepreneurship (18 credits)}

This Minor is a collaboration between the Schulich School of Music and Desautels Faculty of Management. It is designed to provide music students with an understanding of how to conceptualize, develop, and manage successful new ventures; manage their careers as performers, music teachers and arts administrators; and develop skills in marketing, fundraising, publicizing, and financing. The program covers the essentials of management and is multidisciplinary and integrative.
This Minor is restricted to B.Mus. students who have completed one year of studies and have a minimum CGPA of 3.0. The minor has limited enrolment; interested students should contact the Music Research Department to apply for admission. Students in this Minor are not permitted to take the Desautels Minors in Management, Marketing, Finance or Operations Management (for Non-Management Students).

\section*{Required Courses ( 9 credits)}
\begin{tabular}{lll} 
INTG 215 & (3) & Entrepreneurship Essentials for Non-Management Students \\
MGPO 362 & (3) & Fundamentals of Entrepreneurship \\
MUPD 350 & (3) & Applied Projects for Musicians
\end{tabular}

\section*{Complementary Courses (9 credits)}

3 credits from the following:
\begin{tabular}{lcl} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business \\
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

3-6 credits chosen from the following:
\begin{tabular}{lll} 
MUMT 301 & (3) & Music and the Internet \\
MUPD 200 & (3) & Introduction to Music Marketing \\
MUPD 201 & (3) & Business Fundamentals for Musicians \\
MUPD 475* & (3) & Special Project: Professional Development 3 \\
MUSR 200 & (3) & Audio Recording Essentials \\
MUSR 201 & (3) & Audio Production Essentials
\end{tabular}
* To be counted towards the Minor in Music Entrepreneurship, the internship placement or project must be approved as having an entrepreneurial focus.
\(0-3\) credits chosen from the following:
\begin{tabular}{lll} 
BUSA 465 & (3) & Technological Entrepreneurship \\
MGPO 364 & (3) & Entrepreneurship in Practice \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
PSYC 471 & (3) & Human Motivation
\end{tabular}

\subsection*{10.6.1.10 Bachelor of Music (B.Mus.) - Minor Music History (18 credits)}

The Minor Music History is available to all students (with the exception of students in the Major in Music History program). This option will take the place of music electives and/or free electives, as well as history, literature, and performance practice complementary courses.

\section*{Complementary Courses}

Music History
18 credits selected from MUHL or MUPP prefix at the 300 level or higher.

\subsection*{10.6.1.11 Bachelor of Music (B.Mus.) - Minor Music Theory (18 credits)}

The Minor in Music Theory is available to all students, with the exception of students in the Major Theory, subject to approval of the Schulich School of Music. This Minor will take the place of free electives in Music programs.

\section*{Complementary Courses (18 credits)}

18 credits from the following:
\begin{tabular}{lll} 
MUCO 462 & (3) & Advanced Tonal Writing \\
MUCO 575 & (3) & Topics in Composition \\
MUJZ 260 & (3) & Jazz Arranging 1 \\
MUJZ 261 & (3) & Jazz Arranging 2 \\
MUMT 250 & (3) & Music Perception and Cognition \\
MUTH 202 & (3) & Modal Counterpoint 1 \\
MUTH 204 & (3) & Tonal Counterpoint 1 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 302 & (3) & Modal Counterpoint 2 \\
MUTH 304 & (3) & Tonal Counterpoint 2 \\
MUTH 321 & (3) & Topics in Tonal Analysis \\
MUTH 322 & (3) & Topics in Post-Tonal Analysis \\
MUTH 350 & (3) & Theory and Analysis 5 \\
MUTH 426 & (3) & Topics in Early Music Analysis \\
MUTH 526 & (3) & Methods in Tonal Theory and Analysis \\
MUTH 528 & (3) & Schenkerian Theory and Analysis \\
MUTH 529 & (3) & Proseminar in Music Theory \\
MUTH 538 & (3) & Mathematical Models for Musical Analysis \\
MUTH 539 & (3) & Topics in Advanced Writing Techniques \\
MUTH 541 & (3) & Topics in Popular Music Analysis \\
\hline
\end{tabular}

\subsection*{10.6.1.12 Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology (18 credits)}

The goal of this Minor is to provide instruction in practical and creative applications of technology for musical purposes. This program will help prepare students for production-oriented jobs in the creative arts.
This program is open to students from any discipline and has no prerequisites other than familiarity with computers. Applications will only be considered for fall admission. Late applications will not be accepted and no students will be admitted to the Minor in January. Registration will be limited to available lab space. To apply, submit an online application through the Music website: www.mcgill.ca/music/programs/minor/mat.

Students will be selected on the basis of their previous background or experience in music technology and/or sound recording, their computer programming skills, their expressed interest in the program, and their Cumulative Grade Point Average.

Advising for the Minor is available from the Area Chair for the Music Technology Program. Further information on this program is available on the Music Technology website at: http://www.music.mcgill.ca/musictech/programmes_and_admissions.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
MUMT 202 & (3) & Fundamentals of New Media \\
MUMT 250 & (3) & Music Perception and Cognition \\
MUMT 302 & (3) & New Media Production 1 \\
PHYS 224 & (3) & Physics of Music
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
MUMT 301 & (3) & Music and the Internet \\
MUMT 303 & (3) & New Media Production 2 \\
MUPD 204 & (3) & Production for Digital Media 1 \\
MUSR 200 & (3) & Audio Recording Essentials \\
MUSR 232 & (3) & Introduction to Electronics \\
MUSR 300D1* & (3) & Introduction to Music Recording \\
MUSR 300D2* & (3) & Introduction to Music Recording \\
MUSR 339 & &
\end{tabular}
*MUSR 300D1/MUSR 300D2 has limited enrollment and should be selected together. This course is generally restricted to students in the Sound Recording Qualifying Year program. Students interested in taking this course should contact the Sound Recording Area Coordinator to seek permission to register.

\subsection*{10.6.1.13 Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits)}

This Minor focuses on interdisciplinary topics in science and technology as applied to music. The goal of the program is to help prepare students for commercial jobs in the audio technology sector and/or for subsequent graduate research study. This Minor is designed to serve students who already have a good background in the sciences and prior experience with Math and Computer Science courses.

Applications will only be considered for fall admission. Late applications will not be accepted and no students will be admitted to the Minor in January. Registration will be limited to available lab space. Selection is based on previous experience in math, computer programming, and related sciences, expressed interest in the program, and Cumulative Grade Point Average. To apply, submit an online application through the Music website: www.mcgill.ca/music/programs/minor/mst.

Advising for the Minor is available from the Area Chair for the Music Technology program. Further information on this program is available on the Music Technology website at: http://www.music.mcgill.ca/musictech/programmes_and_admissions.

\section*{Required Courses ( 15 credits)}

15 credits, select all of the following:
\begin{tabular}{lll} 
MUMT 203 & (3) & Introduction to Digital Audio \\
MUMT 250 & (3) & Music Perception and Cognition \\
MUMT 306 & (3) & Music and Audio Computing 1 \\
MUMT 307 & (3) & Music and Audio Computing 2 \\
MUMT 501 & (3) & Digital Audio Signal Processing
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits selected from:
\begin{tabular}{lll} 
MUMT 502 & (3) & Senior Project: Music Technology \\
PHYS 224 & (3) & Physics of Music
\end{tabular}

\subsection*{10.6.2 Department of Performance}

The Department offers undergraduate and graduate degree programs leading to the B.Mus., M.Mus., and D.Mus., and diploma programs leading to the L.Mus., Graduate Diploma in Performance, and Post-Graduate Artist Diploma. Programs include regular practical instruction available on all instruments, a comprehensive range of large instrumental and choral ensembles, and a highly developed small ensemble program in all areas of study. The Department's ensembles present a full season of performances on campus and regularly travel for appearances in important North American centres. In recent years, McGill ensembles have performed at Montreal's Maison symphonique and Monument-National, Toronto's Koerner Hall and Canadian Opera Company, as well as Ottawa's National Arts Centre, Quebec City's Grand Théâtre, and New York's Carnegie Hall and Lincoln Center. Many concerts are live-streamed and have been broadcast by the CBC.

Performance specialization is available in: Violin, Viola, Cello, Double Bass, Guitar, Harp, Flute, Oboe, Clarinet, Saxophone, Bassoon, Horn, Trumpet, Trombone, Euphonium, Tuba, Percussion, Piano, Organ, Harpsichord, Voice, Historical Instruments (Baroque, Classical, Romantic String, Wind, Brass, and Keyboard Instruments), Conducting (Choral and Instrumental), and Jazz (Bass, Drums, Flute, Guitar, Piano, Saxophone, Trombone, Trumpet, Vibraphone, Violin, Voice).

\section*{For each program, all courses listed are REQUIRED courses unless otherwise indicated.}

\subsection*{10.6.2.1 Bachelor of Music (B.Mus.) - Major Performance Piano (125 credits)}

The Bachelor of Music; Major Performance (Piano) program provides comprehensive training in the practical and theoretical elements of music. Throughout the program, students receive individual instruction and participate in large and small ensembles.

The Bachelor of Music (B.Mus.) - Major Performance (Piano) program requires 91 credits (plus 34 credits for the freshman requirement for out-of-province students).

Special Requirements:
Continuation in the program requires a minimum grade of B - in practical instruction/exams and ensembles.
Program Prerequisites - Freshman Program (34 credits)
34 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
2 credits of Assigned Small Ensemble
4 credits of Large Ensemble
6 credits of Non-Music Electives
Prerequisite Courses
22 credits, all of the courses below:
Note: Students who can demonstrate through auditions, placement tests, and equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.

Students who have been admitted to a degree or diploma program with keyboard as their principal instrument are exempt from MUSP 170 and MUSP 171; see section on Keyboard Proficiency testing for complete information.
\begin{tabular}{lcl} 
MUHL 186 & \((3)\) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses ( 45 credits)}

Performance
MUIN 280
(2.5)

BMus Practical Lessons 3
\begin{tabular}{lll} 
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 282 & \((1)\) & BMus Performance Examination 1 \\
MUIN 333 & \((0)\) & Piano Techniques 2 \\
MUIN 369 & \((0)\) & Concerto \\
MUIN 380 & \((2.5)\) & BMus Practical Lessons 5 \\
MUIN 381 & \((2.5)\) & BMus Practical Lessons 6 \\
MUIN 382 & \((1)\) & BMus Performance Examination 2 \\
MUIN 433 & \((0)\) & Piano Techniques 3 \\
MUIN 480 & \((2)\) & BMus Practical Lessons 7 \\
MUIN 481 & (2) & BMus Practical Lessons 8 \\
MUIN 482 & (2) & BMus Performance Examination 3 \\
MUPG 350 & \((2)\) & Introduction to Piano Pedagogy \\
MUPG 356 & \((2)\) & Piano Repertoire Studies 1 \\
MUPG 357 & (2) & Piano Repertoire Studies 2 \\
MUPG 541 & (2) & Senior Piano Seminar 1 \\
MUPG 542 & (2) & Senior Piano Seminar 2
\end{tabular}

Theory
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

Musicianship
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

Music History
MUHL 286
(3)

Critical Thinking About Music

Professional Development
MUPD 235
(1)
Music as a Profession 2

\section*{Complementary Courses (20 credits)}

Performance
Large Ensemble during the first four terms ( 2 credits x 4 semesters).
8 credits* from:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MUEN 593 & (2) & Choral Ensembles \\
\hline MUEN 594 & (2) & Contemporary Music Ensemble \\
\hline MUEN 595 & (2) & Jazz Ensembles \\
\hline MUEN 597 & (2) & McGill Symphony Orchestra \\
\hline \multicolumn{3}{|l|}{4 credits* from:} \\
\hline MUEN 540 & (.5) & Chamber Music Project 1 \\
\hline MUEN 541 & (.5) & Chamber Music Project 2 \\
\hline MUEN 556 & (1) & Introduction to Collaborative Piano 1 \\
\hline MUEN 557 & (1) & Introduction to Collaborative Piano 2 \\
\hline MUEN 560 & (1) & Chamber Music Ensemble \\
\hline MUEN 569 & (1) & Tabla Ensemble \\
\hline MUEN 578 & (1) & Song Interpretation 1 \\
\hline MUEN 579 & (1) & Song Interpretation 2 \\
\hline MUEN 581 & (1) & Introduction to Ensemble Playing for Pianists \\
\hline MUEN 582 & (1) & Piano Ensembles \\
\hline MUEN 584 & (1) & Studio Accompanying \\
\hline MUEN 585 & (1) & Sonata Masterclass \\
\hline \multicolumn{3}{|l|}{* All ensembles courses under MUEN may be taken in multiple terms.} \\
\hline \multicolumn{3}{|l|}{Musicianship} \\
\hline \multicolumn{3}{|l|}{2 credits from:} \\
\hline MUSP 346 & (2) & Post-Tonal Musicianship \\
\hline MUSP 355 & (2) & Musicianship for Percussion \\
\hline MUSP 361 & (2) & Topics in Musicianship \\
\hline
\end{tabular}

Music History/Literature/Performance Practice (6 credits)
Selected from courses with a prefix of MUHL or MUPP at the 300-level or above.

3 credits from courses with a MUHL or MUPP prefix

\section*{Elective Courses (26 credits)}

3 credits of Non-Music Electives
23 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

\subsection*{10.6.2.2 Bachelor of Music (B.Mus.) - Major Performance Voice (123 credits)}

The Bachelor of Music; Major Performance (Voice) program focuses on vocal pedagogy, repertoire coaching, linguist, theory, and musicology to strengthen artistry in professional singing. In addition to recitals and masterclasses, students are encouraged to take advantage of diverse solo performance opportunities in Opera, Early Music Ensembles, Song Interpretation, a comprehensive Choral Program, the annual McGill Concerto and Wirth Vocal Competitions, and outside venues in Montreal.

The Bachelor of Music (B.Mus.) - Major Performance (Voice) program requires 91 credits (plus 32 credits for the Freshman requirement for out-of-province students).
Special Requirements:
Continuation in the program requires a minimum grade of B - in practical instruction/exams, ensembles, and voice coaching.

\section*{Program Prerequisites - Freshman Program (32 credits)}

32 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
4 credits of Large Ensemble
6 credits of Non-Music Electives
Prerequisite Courses
22 credits, all of the courses below:
Note: Applicants who can demonstrate through auditions and placement tests that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lcl} 
MUHL 186 & \((3)\) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses (44 credits)}
\begin{tabular}{lll} 
Performance & & \\
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 282 & \((1)\) & BMus Performance Examination 1 \\
MUIN 380 & \((2.5)\) & BMus Practical Lessons 5 \\
MUIN 381 & \((2.5)\) & BMus Practical Lessons 6 \\
MUIN 382 & \((1)\) & BMus Performance Examination 2 \\
MUIN 480 & \((2)\) & BMus Practical Lessons 7 \\
MUIN 481 & \((2)\) & BMus Practical Lessons 8 \\
MUIN 482 & (2) & BMus Performance Examination 3
\end{tabular}

Diction
\begin{tabular}{lll} 
MUPG 209 & \((1)\) & Introduction to Lyric Diction \\
MUPG 210 & \((2)\) & Italian Diction \\
MUPG 211 & \((2)\) & French Diction \\
MUPG 212 & \((2)\) & English Diction \\
MUPG 213 & (2) & German Diction
\end{tabular}

Prior to, or concurrent with registration in the corresponding Diction courses, the Voice Major must furnish evidence of having completed English Second Language courses, ITAL 205D1/ITAL 205D2, GERM 202, and FRSL 207, or their equivalent. This language requirement may be fulfilled by appropriate high school or CEGEP courses, or as part of the non-music and/or free elective requirements or by extra university courses.

Theory
MUTH 250
(3)
Theory and Analysis 3
MUTH 251
(3)
Theory and Analysis 4
MUTH 350
(3)
Theory and Analysis 5
Musicianship
MUSP 240
(2)
Musicianship Training 3
MUSP 241
(2)
Musicianship Training 4
Music History/Literature
MUHL 286
(3)
Critical Thinking About Music
Professional Development
MUPD 235
(1)
Music as a Profession 2

\section*{Complementary Courses (27 credits)}

Performance
10 credits* of complementary performance selected from:
\begin{tabular}{lcl} 
MUEN 454 & (2) & Introductory Opera Repertoire Experience \\
MUEN 496 & (2) & Opera Studio \\
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 569 & (1) & Tabla Ensemble \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 578 & (1) & Song Interpretation 1 \\
MUEN 579 & (1) & Song Interpretation 2 \\
MUEN 580 & (1) & Early Music Ensemble \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble
\end{tabular}
* All ensemble courses under MUEN may be taken in multiple terms

9 credits of complementary performance selected from:
\begin{tabular}{lcl} 
MUIN 300 & (2) & Voice Coaching 1 \\
MUIN 301 & (2) & Voice Coaching 2 \\
MUPG 296 & (1) & Acting for Voice \\
MUPG 297 & (1) & Movement for Voice \\
MUPG 300 & (2) & Music Performance Strategies \\
MUPG 309 & (1) & Advanced Diction \\
MUPG 353 & (2) & Song Repertoire Class \\
MUPG 380 & (2) & Oratorio Class \\
MUPG 453 & \((2)\) & Contemporary Repertoire for Voice
\end{tabular}

MUEN courses at the 400 or 500 level (maximum 4 credits)

\section*{Musicianship}

2 credits from
\begin{tabular}{lll} 
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 353 & (2) & Musicianship for Voice \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

Music History/Literature/Performance Practice
6 credits from:
\begin{tabular}{lll} 
MUHL 377 & (3) & Baroque Opera \\
MUHL 387 & (3) & Opera from Mozart to Puccini \\
MUHL 388 & (3) & Opera After 1900 \\
MUHL 390 & (3) & The German Lied
\end{tabular}

\section*{Elective Courses (20 credits)}

3 credits of non-Music Electives
17 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

\subsection*{10.6.2.3 Bachelor of Music (B.Mus.) - Major Performance (Orchestral Instruments) (125 credits)}

The Bachelor of Music; Major Performance (Orchestral Instruments) program provides comprehensive training in the practical and theoretical elements of music. Throughout the program, students receive individual instruction, participate in chamber music and other small ensembles, and perform in large ensembles such as the McGill Symphony Orchestra, Contemporary Music Ensemble, and Wind Orchestra.

The Bachelor of Music (B.Mus.) - Major Performance (Orchestral Instruments) program requires 91 credits (plus 34 credits for the Freshman requirement for out-of-province students).

Special Requirements:
1. Continuation in the program requires a minimum grade of B - in practical instruction/exams and ensembles.
2. Students majoring in violin, viola, or cello must commence basic ensemble training with two terms of MUEN 565 String Quartet Seminar.

Program Prerequisites - Freshman Program (34 credits)
34 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
2 credits of Assigned Small Ensemble
4 credits of Large Ensemble
6 credits of Non-Music Electives
Prerequisite Courses
22 credits, all of the courses below:
Note: Applicants who can demonstrate through auditions and placement tests that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lll} 
MUHL 186 & (3) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 140 & (2) & Musicianship Training 1
\end{tabular}
\begin{tabular}{lll} 
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses (35 credits)}

Performance
\begin{tabular}{lll} 
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 282 & \((1)\) & BMus Performance Examination 1 \\
MUIN 380 & \((2.5)\) & BMus Practical Lessons 5 \\
MUIN 381 & \((2.5)\) & BMus Practical Lessons 6 \\
MUIN 382 & \((1)\) & BMus Performance Examination 2 \\
MUIN 480 & \((2)\) & BMus Practical Lessons 7 \\
MUIN 481 & \((2)\) & BMus Practical Lessons 8 \\
MUIN 482 & \((2)\) & BMus Performance Examination 3
\end{tabular}

Theory
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

Musicianship
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

Music History
MUHL 286
(3)
Critical Thinking About Music

Professional Development
MUPD 235
(1)
Music as a Profession 2

\section*{Complementary Courses (33 credits)}

\section*{Performance}

12 credits*( 2 credits per term; as assigned by audition) from Large ensembles:
\begin{tabular}{lll} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 565 & (2) & String Quartet Seminar \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill
\end{tabular}
\begin{tabular}{lll} 
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

4 credits *(1 credit per term; as assigned by audition) from small ensembles:
\begin{tabular}{lll} 
MUEN 540 & (.5) & Chamber Music Project 1 \\
MUEN 541 & (.5) & Chamber Music Project 2 \\
MUEN 560 & (1) & Chamber Music Ensemble \\
MUEN 569 & (1) & Tabla Ensemble \\
MUEN 580 & \((1)\) & Early Music Ensemble \\
MUEN 598 & \((1)\) & Percussion Ensembles
\end{tabular}
* All ensemble courses under MUEN may be taken in multiple terms.

9 credits chosen from:
MUEN courses at the 400 or 500 level (maximum of 4 credits)
\begin{tabular}{|c|c|c|}
\hline MUIN 269 & (1) & Classical Concerto Exam \\
\hline MUPG 229 & (1) & Traditional Drumming 1: Rudiments \\
\hline MUPG 300 & (2) & Music Performance Strategies \\
\hline MUPG 325 & (2) & Improvisation for String Players \\
\hline MUPG 326 & (2) & Introduction to String Pedagogy \\
\hline MUPG 328 & (1) & Introduction to Percussion Pedagogy \\
\hline MUPG 329 & (1) & Traditional Drumming 2: Hand Drumming \\
\hline MUPG 331 & (2) & Introduction to Woodwind Pedagogy \\
\hline MUPG 336 & (2) & Introduction to Brass Pedagogy \\
\hline MUPG 410 & (1) & Violin Orchestral Excerpts \\
\hline MUPG 411 & (1) & Viola Orchestral Excerpts \\
\hline MUPG 412 & (1) & Cello Orchestral Excerpts \\
\hline MUPG 413 & (1) & Double Bass Orchestral Excerpts \\
\hline MUPG 414 & (1) & Woodwinds Orchestral Excerpts \\
\hline MUPG 415 & (1) & Brass Orchestral Excerpts \\
\hline MUPG 416 & (1) & Percussion Orchestral Excerpts \\
\hline MUPG 425 & (2) & Extended Techniques - Strings \\
\hline MUPG 429 & (2) & Percussion Seminar \\
\hline MUPG 431 & (2) & Extended Techniques - Woodwinds \\
\hline MUPG 435 & (2) & Extended Techniques - Brass \\
\hline MUPG 473 & (1) & Special Project in Performance \\
\hline MUPG 474 & (2) & Special Project in Performance \\
\hline MUPG 571 & (1) & Free Improvisation 1 \\
\hline MUPG 572D1 & (.5) & Free Improvisation 2 \\
\hline
\end{tabular}

MUPG 572D2
(.5)

Free Improvisation 2
(Percussionists must include MUEN 569, MUPG 328, MUPG 329)

\section*{Musicianship}

2 credits from:
\begin{tabular}{lll} 
MUSP 324 & (2) & Musicianship for Strings \\
MUSP 330 & (2) & Musicianship for Woodwinds \\
MUSP 335 & (2) & Musicianship for Brass \\
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 355 & (2) & Musicianship for Percussion \\
MUSP 361 & (2) & Topics in Musicianship
\end{tabular}

Music History/Literature/Performance Practice
6 credits of courses with a MUHL or MUPP prefix
Percussionists must include:
MUHL 392
(3)
Music since 1945

\section*{Elective Courses (23 credits)}

3 credits of non-Music Electives
20 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)
10.6.2.4 Bachelor of Music (B.Mus.) - Major Early Music Performance (Baroque Violin, Viola, Cello, Viola da Gamba, Flute, Recorder, Oboe, Organ, Harpsichord and Early Brass Instruments) (125 credits)

The Bachelor of Music; Major Early Music Performance program provides comprehensive training in historical performance practice and in performance on a period instrument. The program combines individual lessons and ensembles with the study of historical approaches to performance in its various activities - workshops, master classes, guest lectures, and research projects.

The Bachelor of Music (B.Mus.); Major Early Music Performance program requires 91 credits (plus 34 credits for the Freshman requirement for out-of-province students).

Special Requirements:
Continuation in the program requires a minimum grade of B- in practical instruction/exams and ensembles.
Program Prerequisites - Freshman Program (34 credits)
34 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
2 credits of Assigned Small Ensemble
4 credits of Large Ensemble
6 credits of Non-Music Electives
Prerequisite Courses
22 credits, all of the courses below:
Note: Applicants who can demonstrate through auditions and placement tests that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lll} 
MUHL 186 & (3) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1
\end{tabular}
\begin{tabular}{lll} 
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses (41 credits)}

Performance
\begin{tabular}{lll} 
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 282 & \((1)\) & BMus Performance Examination 1 \\
MUIN 380 & \((2.5)\) & BMus Practical Lessons 5 \\
MUIN 381 & \((2.5)\) & BMus Practical Lessons 6 \\
MUIN 382 & \((1)\) & BMus Performance Examination 2 \\
MUIN 480 & \((2)\) & BMus Practical Lessons 7 \\
MUIN 481 & \((2)\) & BMus Practical Lessons 8 \\
MUIN 482 & \((2)\) & BMus Performance Examination 3
\end{tabular}

Theory
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5 \\
MUTH 426 & (3) & Topics in Early Music Analysis
\end{tabular}

Musicianship
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

Music History/Literature/Performance Practice
\begin{tabular}{lll} 
MUHL 286 & (3) & Critical Thinking About Music \\
MUPP 381 & (3) & Topics in Performance Practice
\end{tabular}

Professional Development
MUPD 235 (1) Music as a Profession 2

\section*{Complementary Courses (27 credits)}

Performance
12 credits*( 2 credits per term; as assigned by audition) from large ensembles:
MUEN 563 (2) Jazz Vocal Workshop
\begin{tabular}{|c|c|c|}
\hline MUEN 572 & (2) & Cappella Antica \\
\hline MUEN 573 & (2) & Baroque Orchestra \\
\hline MUEN 587 & (2) & Cappella McGill \\
\hline MUEN 590 & (2) & McGill Wind Orchestra \\
\hline MUEN 592 & (2) & Chamber Jazz Ensemble \\
\hline MUEN 593 & (2) & Choral Ensembles \\
\hline MUEN 594 & (2) & Contemporary Music Ensemble \\
\hline MUEN 595 & (2) & Jazz Ensembles \\
\hline MUEN 597 & (2) & McGill Symphony Orchestra \\
\hline \multicolumn{3}{|l|}{4 credits* (1 credit per term)} \\
\hline MUEN 569 & (1) & Tabla Ensemble \\
\hline MUEN 580 & (1) & Early Music Ensemble \\
\hline \multicolumn{3}{|l|}{* All ensemble courses under MUEN may be taken in multiple terms.} \\
\hline \multicolumn{3}{|l|}{6 credits from:} \\
\hline \multicolumn{3}{|l|}{Baroque Instruments} \\
\hline \multicolumn{3}{|l|}{MUEN prefix - maximum 4 credits} \\
\hline MUPG 473 & (1) & Special Project in Performance \\
\hline MUPG 474 & (2) & Special Project in Performance \\
\hline MUPG 475 & (3) & Special Project in Performance \\
\hline \multicolumn{3}{|l|}{OR} \\
\hline \multicolumn{3}{|l|}{Harpsichord} \\
\hline MUPG 272D1 & (2) & Continuo \\
\hline MUPG 272D2 & (2) & Continuo \\
\hline MUPG 372D1 & (1) & Continuo \\
\hline MUPG 372D2 & (1) & Continuo \\
\hline \multicolumn{3}{|l|}{OR} \\
\hline \multicolumn{3}{|l|}{Organ} \\
\hline \multicolumn{3}{|l|}{MUEN prefix - maximum 2 credits} \\
\hline MUPG 272D1 & (2) & Continuo \\
\hline MUPG 272D2 & (2) & Continuo \\
\hline MUPG 473 & (1) & Special Project in Performance \\
\hline MUPG 474 & (2) & Special Project in Performance \\
\hline \multicolumn{3}{|l|}{Musicianship} \\
\hline \multicolumn{3}{|l|}{2 credits from:} \\
\hline MUSP 346 & (2) & Post-Tonal Musicianship \\
\hline MUSP 354 & (2) & Introduction to Improvisation an \\
\hline
\end{tabular}
\begin{tabular}{lll} 
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

History/Literature/Performance Practice
3 credits from:
\begin{tabular}{lll} 
MUHL 377 & (3) & Baroque Opera \\
MUHL 380 & (3) & Medieval Music \\
MUHL 381 & \((3)\) & Renaissance Music \\
MUHL 382 & \((3)\) & Baroque Music \\
MUHL 383 & \((3)\) & Classical Music \\
MUHL 395 & \((3)\) & Keyboard Literature before 1750 \\
MUHL 591D1 & \((1.5)\) & Paleography \\
MUHL 591D2 & \((1.5)\) & Paleography
\end{tabular}

\section*{Elective Courses (23 credits)}

3 credits of non-Music Electives
20 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

\subsection*{10.6.2.5 Bachelor of Music (B.Mus.) - Major Early Music Performance (Voice) (126 credits)}

The Bachelor of Music; Major Early Music Performance (Voice) program provides comprehensive training in historical performance practice and in singing period repertoire. The program combines individual lessons and ensembles with the study of historical approaches to performance in its various activities workshops, master classes, guest lectures, and research projects.

The Bachelor of Music (B.Mus.); Major Early Music Performance (Voice) program requires 92 credits (plus 34 credits for the Freshman requirement for out-of-province students).

Special Requirements:
1. Continuation in the program requires a minimum grade of B - in practical instruction/exams and ensembles.

Program Prerequisites - Freshman Program (34 credits)
34 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
2 credits of Assigned Small Ensemble
4 credits of Large Ensemble
6 credits of Non-Music Electives
Prerequisite Courses
22 credits, all of the courses below:
Note: Students who can demonstrate through auditions and placement tests that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.
\begin{tabular}{lll} 
MUHL 186 & \((3)\) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2
\end{tabular}
\begin{tabular}{lll} 
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses (54 credits)}
\begin{tabular}{lll} 
Performance & & \\
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 282 & \((1)\) & BMus Performance Examination 1 \\
MUIN 300 & \((2)\) & Voice Coaching 1 \\
MUIN 301 & \((2)\) & Voice Coaching 2 \\
MUIN 380 & \((2.5)\) & BMus Practical Lessons 5 \\
MUIN 381 & \((2.5)\) & BMus Practical Lessons 6 \\
MUIN 382 & \((1)\) & BMus Performance Examination 2 \\
MUIN 480 & \((2)\) & BMus Practical Lessons 7 \\
MUIN 481 & (2) & BMus Practical Lessons 8 \\
MUIN 482 & (2) & BMus Performance Examination 3
\end{tabular}

Diction
\begin{tabular}{lll} 
MUPG 209 & \((1)\) & Introduction to Lyric Diction \\
MUPG 210 & \((2)\) & Italian Diction \\
MUPG 211 & \((2)\) & French Diction \\
MUPG 212 & \((2)\) & English Diction \\
MUPG 213 & \((2)\) & German Diction
\end{tabular}

Prior to, or concurrent with registration in the corresponding Diction courses, the Bachelor of Music; Major Early Music Performance (Voice) must furnish evidence of having completed English Second Language courses, ITAL 205D1/ITAL 205D2, GERM 202, and FRSL 207, or their equivalent. This language requirement may be fulfilled by appropriate high school or CEGEP courses, or as part of the non-music and/or free elective requirements above, or by extra university courses.

Theory
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5 \\
MUTH 426 & (3) & Topics in Early Music Analysis
\end{tabular}

Musicianship
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

Music History/Literature/Performance Practice
MUHL 286
(3)
Critical Thinking About Music
MUPP 381
(3)
Topics in Performance Practice

Professional Development
MUPD 235 (1) Music as a Profession 2

\section*{Complementary Courses (15 credits)}

Performance
10 credits* of complementary performance selected from:
\begin{tabular}{lcl} 
MUEN 454 & \((2)\) & Introductory Opera Repertoire Experience \\
MUEN 496 & \((2)\) & Opera Studio \\
MUEN 553 & (1) & Vocal Chamber Ensemble \\
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 569 & (1) & Tabla Ensemble \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 578 & (1) & Song Interpretation 1 \\
MUEN 579 & (1) & Song Interpretation 2 \\
MUEN 580 & (1) & Early Music Ensemble \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble
\end{tabular}
* All ensemble courses under MUEN may be taken in multiple terms.

Musicianship
2 credits from:
\begin{tabular}{lll} 
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 353 & (2) & Musicianship for Voice \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

\section*{Music History}

3 credits from:
\begin{tabular}{lll} 
MUHL 377 & \((3)\) & Baroque Opera \\
MUHL 380 & \((3)\) & Medieval Music \\
MUHL 381 & \((3)\) & Renaissance Music \\
MUHL 382 & \((3)\) & Baroque Music \\
MUHL 383 & \((3)\) & Classical Music \\
MUHL 395 & \((3)\) & Keyboard Literature before 1750 \\
MUHL 591D1 & \((1.5)\) & Paleography \\
MUHL 591D2 & \((1.5)\) & Paleography
\end{tabular}

\section*{Elective Courses (23 credits)}

3 credits of non-Music Electives

20 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

\subsection*{10.6.2.6 Bachelor of Music (B.Mus.) - Major Performance Jazz (126 credits)}

The Bachelor of Music; Major in Performance Jazz provides comprehensive training for jazz musicians. The curriculum includes jazz theory and harmony, keyboard, history, performance practice, improvisation, composition, and arranging. Throughout the program, students receive individual instruction and participate in jazz orchestras, ensembles, and combos.

Special Requirements:
1. Students majoring in Jazz Performance must achieve a minimum grade of B- in all Jazz courses and Practical Instruction/Exams, including Jazz Combo and Ensembles.
2. Students are permitted to study with the same teacher for the assigned practical instruction for a maximum of two consecutive years.

\section*{Program Prerequisites - Freshman Program (34 credits)}

34 credits selected as described below, in consultation with the Program Adviser:
22 credits of Prerequisite Courses
2 credits of MUEN 570 Jazz Combo
4 credits of Large Ensemble
6 credits of Non-Music Electives

\section*{Prerequisite Courses}

22 credits, all of the courses below:
Note: Students who can demonstrate through auditions, placement tests, or equivalencies that they have mastered the material in any of the courses listed below, will be exempt from them and may proceed to more advanced courses.
Incoming jazz guitarists and pianists are automatically exempt from MUJZ 170 and MUJZ 171.
\begin{tabular}{lcl} 
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUJZ 160 & (3) & Jazz Materials 1 \\
MUJZ 161 & (3) & Jazz Materials 2 \\
MUJZ 170 & (1) & Jazz Keyboard Proficiency 1 \\
MUJZ 171 & (1) & Jazz Keyboard Proficiency 2 \\
MUJZ 187 & (3) & Jazz History Survey \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUSP 123 & (2) & Jazz Ear Training 1 \\
MUSP 124 & (2) & Jazz Ear Training 2
\end{tabular}

\section*{Required Courses (53 credits)}

Performance
\begin{tabular}{lll} 
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 282 & \((1)\) & BMus Performance Examination 1 \\
MUIN 380 & \((2.5)\) & BMus Practical Lessons 5 \\
MUIN 381 & \((2.5)\) & BMus Practical Lessons 6 \\
MUIN 382 & \((1)\) & BMus Performance Examination 2 \\
MUIN 480 & \((2)\) & BMus Practical Lessons 7 \\
MUIN 481 & \((2)\) & BMus Practical Lessons 8 \\
MUIN 482 & \((2)\) & BMus Performance Examination 3
\end{tabular}

Small Ensemble
MUEN 570*
(1)
Jazz Combo
*This course is taken in four semesters for 4 credits.

Jazz Improvisation
Instrumental majors:
\begin{tabular}{lll} 
MUJZ 223 & (3) & Jazz Improvisation/Musicianship 1 \\
MUJZ 224 & (3) & Jazz Improvisation/Musicianship 2 \\
MUJZ 423 & (3) & Jazz Improvisation/Musicianship 3 \\
MUJZ 424 & (3) & Jazz Improvisation/Musicianship 4
\end{tabular}

OR

Vocal majors:
\begin{tabular}{lcl} 
MUJZ 225 & (3) & Jazz Vocal Improvisation 1 \\
MUJZ 226 & (3) & Jazz Vocal Improvisation 2 \\
MUJZ 325 & (3) & Jazz Vocal Improvisation 3 \\
MUJZ 326 & (3) & Jazz Vocal Improvisation 4
\end{tabular}

Jazz Theory
\begin{tabular}{lll} 
MUJZ 260 & (3) & Jazz Arranging 1 \\
MUJZ 261 & (3) & Jazz Arranging 2 \\
MUJZ 340 & (3) & Jazz Composition 1 \\
MUJZ 341 & (3) & Jazz Composition 2
\end{tabular}

History/Literature/Performance Practice
MUHL 286 (3) Critical Thinking About Music

MUJZ 493
(3)

Jazz Performance Practice

Professional Development
MUPD 235
(1)
Music as a Profession 2

\section*{Complementary Courses (14-18 credits)}

Performance
Small Ensemble
MUEN 570* (1) Jazz Combo
*Taken in two semesters for 2 credits.

OR
MUEN 574*
(1)

Afro-Cuban/Brazilian Jazz Combo
*Taken in two semesters for 2 credits.

\section*{Large Ensemble}

Note: students playing Rhythm Section instruments (piano,guitar, bass, drums, vibraphone) can substitute 4 credits of large ensemble with free electives).
8-12 credits from*:
* All ensemble courses under MUEN may be taken in multiple terms.
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Advanced Jazz}

Instrumental majors:
4 credits from either MUJZ 440 and MUJZ 441, or MUJZ 461D1/D2:
\begin{tabular}{lll} 
MUJZ 440 & (2) & Advanced Jazz Composition 1 \\
MUJZ 441 & (2) & Advanced Jazz Composition 2 \\
MUJZ 461D1 & (2) & Advanced Jazz Arranging \\
MUJZ 461D2 & (2) & Advanced Jazz Arranging
\end{tabular}

OR

Vocal majors:
MUJZ 425
(2) Jazz Vocal Repertoire 1
MUJZ 426
(2)
Jazz Vocal Repertoire 2

\section*{Elective Courses (21-25 credits)}

3 credits of non-Music Electives.
18-22 credits of Free Electives (may not include courses with a MUEN prefix); students playing Rhythm Section instruments may take up to 22 Free Electives.

\subsection*{10.6.2.7 Bachelor of Music (B.Mus.) - Minor Applied Performance Sciences (18 credits)}

The B.Mus.; Minor in Applied Performance Sciences is an introduction to key topics in performance science and how they are applied to music practice, performance, creation, and education. The program offers opportunities to explore new intersections between music and applied sciences by examining topics related to optimal performance, healthy playing and singing, as well as physical, psychological, and social determinants in music development, learning, and performance, and applied research approaches. This program focuses on developing scientific awareness and applying scientific knowledge to music learning, performing, and teaching practices.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
MUGT 205 & (3) & Psychology of Music \\
MUGT 350 & () & \\
MUGT 405 & () &
\end{tabular}
MUPG 300
(2)
Music Performance Strategies

\section*{Complementary Courses ( 6 credits)}

Special Projects:
3 credits from:
\begin{tabular}{lll} 
MUGT 475* & (3) & Special Project \\
MUPD 475* & (3) & Special Project: Professional Development 3 \\
MUPG 475* & (3) & Special Project in Performance
\end{tabular}

Interdisciplinary courses
3 credits from:
\begin{tabular}{lll} 
EDKP 250 & \((3)\) & Introductory Principles in Applied Kinesiology \\
EDKP 292 & \((3)\) & Nutrition and Wellness \\
EDKP 293 & (3) & Anatomy and Physiology \\
MUPG 296 & (1) & Acting for Voice \\
MUPG 297 & (1) & Movement for Voice \\
MUPG \(563^{* *}\) & (1) & Topics in Performance 1 \\
MUPG \(564^{* *}\) & (2) & Topics in Performance 2 \\
MUPG \(565^{* *}\) & (3) & Topics in Performance 3 \\
PSYC 100 & (3) & Introduction to Psychology \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
PSYC 311 & Human Cognition and the Brain
\end{tabular}
** When topic is relevant to applied performance sciences.

\subsection*{10.6.2.8 Bachelor of Music (B.Mus.) - Minor Conducting (18 credits)}

The B.Mus. Minor in Conducting contains two streams-orchestral conducting and choral conducting-which offer students an opportunity to develop technical skills in orchestral or choral conducting and rehearsal techniques. Students are admitted by audition and upon successful completion of the conducting entrance exam for the Minor. Enrolment is limited and is not open to U0 students.

\section*{Required Course (4 credits)}
MUIN 384
(1)
Conducting Minor Project

3 credits from the following:
MUPG 580
(1.5)
Rehearsal Techniques for Conductors

\section*{Complementary Courses ( \(\mathbf{1 4}\) credits)}

14 credits from one of the two streams

\section*{Orchestral Stream}

4 credits from the following:
\begin{tabular}{lll} 
MUPG 315D1 & (2) & Introduction to Orchestral Conducting \\
MUPG 315D2 & (2) & Introduction to Orchestral Conducting
\end{tabular}

\section*{Large Ensembles}

4 credits from the following:
\begin{tabular}{lcl} 
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

6 credits from the following:
\begin{tabular}{lcl} 
MUCO 261 & \((3)\) & Orchestration 1 \\
MUCO 360 & \((3)\) & Orchestration 2 \\
MUHL 383 & \((3)\) & Classical Music \\
MUHL 384 & (3) & Romantic Music \\
MUHL 385 & (3) & Early Twentieth-Century Music \\
MUHL 387 & (3) & Opera from Mozart to Puccini \\
MUHL 388 & (3) & Opera After 1900 \\
MUHL 391 & (3) & Canadian Music \\
MUHL 392 & (3) & Music since 1945
\end{tabular}

\section*{Choral Stream}

4 credits from the following:
\begin{tabular}{lll} 
MUPG 316D1 & (2) & Introduction to Choral Conducting \\
MUPG 316D2 & (2) & Introduction to Choral Conducting
\end{tabular}

Large Ensembles
4 credits from the following:
\begin{tabular}{lll} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 593 & (2) & Choral Ensembles
\end{tabular}

6 credits from the following:
\begin{tabular}{lcl} 
MUCO 261 & \((3)\) & Orchestration 1 \\
MUCT 235 & (3) & Vocal Techniques \\
MUHL 377 & (3) & Baroque Opera \\
MUHL 380 & (3) & Medieval Music \\
MUHL 381 & (3) & Renaissance Music \\
MUHL 382 & (3) & Baroque Music \\
MUHL 383 & (3) & Classical Music \\
MUHL 384 & (3) & Romantic Music \\
MUHL 385 & (3) & Early Twentieth-Century Music
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MUHL 387 & (3) & Opera from Mozart to Puccini \\
\hline MUHL 388 & (3) & Opera After 1900 \\
\hline MUHL 390 & (3) & The German Lied \\
\hline MUHL 391 & (3) & Canadian Music \\
\hline MUHL 392 & (3) & Music since 1945 \\
\hline MUHL 591D1 & (1.5) & Paleography \\
\hline MUHL 591D2 & (1.5) & Paleography \\
\hline MUPG 209 & (1) & Introduction to Lyric Diction \\
\hline MUPG 210 & (2) & Italian Diction \\
\hline MUPG 211 & (2) & French Diction \\
\hline MUPG 212 & (2) & English Diction \\
\hline MUPG 213 & (2) & German Diction \\
\hline MUTH 202 & (3) & Modal Counterpoint 1 \\
\hline MUTH 204 & (3) & Tonal Counterpoint 1 \\
\hline MUTH 302 & (3) & Modal Counterpoint 2 \\
\hline MUTH 304 & (3) & Tonal Counterpoint 2 \\
\hline
\end{tabular}

\subsection*{10.6.2.9 Bachelor of Music (B.Mus.) - Minor Early Music Performance (18 credits)}

The Minor in Early Music Performance offers an opportunity for B.Mus. students to learn the elements of early music performance practice, and to play an early music instrument or to sing early music.

\section*{Required Courses (3 credits)}
\begin{tabular}{lll} 
MUIN 272 & (0) & Performance Minor Examination 1 \\
MUPP 381 & (3) & Topics in Performance Practice
\end{tabular}

\section*{Complementary Courses (15 credits)}

6 credits from the following:
\begin{tabular}{lcl} 
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 580 & (1) & Early Music Ensemble \\
MUPD 560 & (1) & Music Information and Research Skills \\
MUPG 272D1* & (2) & Continuo \\
MUPG 272D2* & (2) & Continuo
\end{tabular}
* must be taken by Harpsichord students

3 credits from the following:
\begin{tabular}{lll} 
MUHL 366 & \((3)\) & The Era of the Fortepiano \\
MUHL 377 & (3) & Baroque Opera \\
MUHL 380 & (3) & Medieval Music \\
MUHL 381 & (3) & Renaissance Music \\
MUHL 382 & (3) & Baroque Music \\
MUHL 383 & (3) & Classical Music \\
MUHL 395 & (3) & Keyboard Literature before 1750
\end{tabular}
\begin{tabular}{lcl} 
MUHL 591D1 & \((1.5)\) & Paleography \\
MUHL 591D2 & \((1.5)\) & Paleography \\
MUTH 202 & \((3)\) & Modal Counterpoint 1 \\
MUTH 204 & \((3)\) & Tonal Counterpoint 1 \\
MUTH 302 & \((3)\) & Modal Counterpoint 2 \\
MUTH 304 & \((3)\) & Tonal Counterpoint 2 \\
MUTH 426 & \((3)\) & Topics in Early Music Analysis
\end{tabular}

6 credits from the following (for Voice students only):
\begin{tabular}{lcl} 
MUIN 302 & (1.5) & Early Music Minor Repertoire Coaching 1 \\
MUIN 303 & \((1.5)\) & Early Music Minor Repertoire Coaching 2 \\
MUIN 304 & \((1.5)\) & Early Music Minor Repertoire Coaching 3 \\
MUIN 305 & \((1.5)\) & Early Music Minor Repertoire Coaching 4
\end{tabular}

OR

6 credits from the following (for Instrumental students only):
\begin{tabular}{lll} 
MUIN 270 & (3) & Practical Lessons Performance Minor 1 \\
MUIN 271 & \((3)\) & Practical Lessons Performance Minor 2 \\
MUIN 273 & \((1.5)\) & Practical Lessons Performance Minor 3 \\
MUIN 274 & \((1.5)\) & Practical Lessons Performance Minor 4 \\
MUIN 275 & \((1.5)\) & Practical Lessons Performance Minor 5 \\
MUIN 276 & \((1.5)\) & Practical Lessons Performance Minor 6 \\
MUIN 302 & \((1.5)\) & Early Music Minor Repertoire Coaching 1 \\
MUIN 303 & \((1.5)\) & Early Music Minor Repertoire Coaching 2 \\
MUIN 304 & \((1.5)\) & Early Music Minor Repertoire Coaching 3 \\
MUIN 305 & \((1.5)\) & Early Music Minor Repertoire Coaching 4
\end{tabular}

\subsection*{10.6.2.10 Bachelor of Music (B.Mus.) - Minor Jazz Arranging and Composition (18 credits)}

The Minor in Jazz Arranging and Composition allows B.Mus. students who are not Jazz majors to explore the jazz idiom with an emphasis on arranging composition and jazz theory. In theory courses, students are trained in fundamental jazz materials, compose jazz tunes, and develop analytical skills; in arranging courses, they gain practical experience by writing for various small and large jazz ensembles; and in the jazz history course, they explore the repertoire and history of the jazz tradition. The program is aimed primarily at classical students who love jazz and who have already acquired facility with rudimentary classical materials.

\section*{Required Courses ( 18 credits)}
\begin{tabular}{lcl} 
MUJZ 160 & (3) & Jazz Materials 1 \\
MUJZ 161 & (3) & Jazz Materials 2 \\
MUJZ 187 & (3) & Jazz History Survey \\
MUJZ 260 & (3) & Jazz Arranging 1 \\
MUJZ 261 & (3) & Jazz Arranging 2 \\
MUJZ 262 & (3) & Applied Jazz Theory
\end{tabular}

\subsection*{10.6.2.11 Bachelor of Music (B.Mus.) - Minor Jazz Performance (18 credits)}

The Minor in Jazz Performance offers students the opportunity to develop abilities in instrumental and vocal jazz through a combination of theoretical and practical courses.

\section*{Required Courses (18 credits)}
\begin{tabular}{lll} 
MUEN 570* & (1) & Jazz Combo \\
MUIN 273 & \((1.5)\) & Practical Lessons Performance Minor 3 \\
MUIN 274 & \((1.5)\) & Practical Lessons Performance Minor 4 \\
MUJZ 160 & (3) & Jazz Materials 1 \\
MUJZ 161 & \((3)\) & Jazz Materials 2 \\
MUJZ 213 & \((2)\) & Fundamentals of Jazz Improvisation 1 \\
MUJZ 214 & \((2)\) & Fundamentals of Jazz Improvisation 2 \\
MUJZ 262 & (3) & Applied Jazz Theory \\
*2 credits in MUEN 570. & &
\end{tabular}

\subsection*{10.6.2.12 Licentiate in Music (L.Mus.) - Major Performance Piano (93 credits)}

The Licentiate in Music (L.Mus.) Major Performance Piano is a 93 -credit program.
Special Requirements:
1. Continuation in the program requires a minimum grade of A - in practical instruction/exams and ensembles.
2. Candidates must take the L.Mus. Performance 1 Examination at the end of their first year of study and the L.Mus. Performance 2 and 3 Examinations in each of the next two years if they hope to complete the program in the normal length of time.

\section*{Required Performance (52 credits)}
\begin{tabular}{|c|c|c|}
\hline MUIN 250 & (6) & L.Mus. Practical Instruction 1 \\
\hline MUIN 251 & (6) & L.Mus. Practical Instruction 2 \\
\hline MUIN 252 & (4) & L.Mus. Performance 1 Examination \\
\hline MUIN 333 & (0) & Piano Techniques 2 \\
\hline MUIN 350 & (6) & L.Mus. Practical Instruction 3 \\
\hline MUIN 351 & (6) & L.Mus. Practical Instruction 4 \\
\hline MUIN 352 & (4) & L.Mus. Performance 2 Examination \\
\hline MUIN 369 & (0) & Concerto \\
\hline MUIN 433 & (0) & Piano Techniques 3 \\
\hline MUIN 450 & (4) & L.Mus. Practical Instruction 5 \\
\hline MUIN 451 & (4) & L.Mus. Practical Instruction 6 \\
\hline MUIN 452 & (8) & L.Mus. Performance 3 Examination \\
\hline MUPG 541 & (2) & Senior Piano Seminar 1 \\
\hline MUPG 542 & (2) & Senior Piano Seminar 2 \\
\hline
\end{tabular}

\section*{Complementary Performance (14 credits)}

Large Ensemble - during the first four terms ( 2 credits x 4 semesters).
14 credits selected as follows:

8 credits from:
MUEN 563
(2)
Jazz Vocal Workshop
\begin{tabular}{lcl} 
MUEN 572 & (2) & Cappella Antica \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

6 credits from:
\begin{tabular}{lcl} 
MUEN 540 & (.5) & Chamber Music Project 1 \\
MUEN 541 & \((.5)\) & Chamber Music Project 2 \\
MUEN 556 & \((1)\) & Introduction to Collaborative Piano 1 \\
MUEN 557 & \((1)\) & Introduction to Collaborative Piano 2 \\
MUEN 560 & \((1)\) & Chamber Music Ensemble \\
MUEN 578 & (1) & Song Interpretation 1 \\
MUEN 579 & (1) & Song Interpretation 2 \\
MUEN 581 & (1) & Introduction to Ensemble Playing for Pianists \\
MUEN 582 & (1) & Piano Ensembles \\
MUEN 584 & (1) & Studio Accompanying \\
MUEN 585 & (1) & Sonata Masterclass
\end{tabular}

\section*{Complementary Musicianship (2 credits)}

2 credits from:
\begin{tabular}{lll} 
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 350 & (2) & Musicianship for Pianists \\
MUSP 361 & (2) & Topics in Musicianship
\end{tabular}

\section*{Required Courses (25 credits)}

25 credits of required courses selected as follows:
9 credits of Theory
10 credits of Musicianship
6 credits of History

\section*{Theory}
\begin{tabular}{lll} 
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2 \\
MUTH 250 & (3) & Theory and Analysis 3
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2
\end{tabular}
\begin{tabular}{lll} 
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

\section*{History}
\begin{tabular}{lll} 
MUHL 186 & (3) & Western Musical Traditions \\
MUHL 286 & (3) & Critical Thinking About Music
\end{tabular}

\subsection*{10.6.2.13 Licentiate in Music (L.Mus.) - Major Performance (All Instruments except Piano, Voice and Jazz) ( 93 credits)}

The Licentiate in Music (L.Mus.) Major Performance in All Instruments except Piano, Voice, and Jazz is a 93-credit program.
Ensemble Requirements:
1. Students majoring in violin, viola, or cello must commence their assigned ensembles with four terms of string quartets.
2. Violin Majors will be required to complete two terms of ensemble playing on viola.

Special Requirements:
1. Continuation in the program requires a minimum grade of A- in practical instruction/exams and ensembles.
2. Students must take the L.Mus. Performance 1 Examination at the end of their first year of study and the L.Mus. Performance 2 and 3 Examinations in each of the next two years if they hope to complete the program in the normal length of time.

\section*{Required Performance (48 credits)}

48 credits selected as follows:
\begin{tabular}{|c|c|c|}
\hline MUIN 250 & (6) & L.Mus. Practical Instruction 1 \\
\hline MUIN 251 & (6) & L.Mus. Practical Instruction 2 \\
\hline MUIN 252 & (4) & L.Mus. Performance 1 Examination \\
\hline MUIN 350 & (6) & L.Mus. Practical Instruction 3 \\
\hline MUIN 351 & (6) & L.Mus. Practical Instruction 4 \\
\hline MUIN 352 & (4) & L.Mus. Performance 2 Examination \\
\hline MUIN 450 & (4) & L.Mus. Practical Instruction 5 \\
\hline MUIN 451 & (4) & L.Mus. Practical Instruction 6 \\
\hline MUIN 452 & (8) & L.Mus. Performance 3 Examination \\
\hline
\end{tabular}

\section*{Complementary Performance (18 credits)}

Large Ensemble Training - during every term of enrolment as a full-time or part-time student.
18 credits selected as follows:

12 credits from:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 565 & (2) & String Quartet Seminar \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles
\end{tabular}
\begin{tabular}{lll} 
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\begin{abstract}
Assigned Small Ensemble - during every term of enrolment as a full-time or part-time student.
6 credits from:
\end{abstract}
\begin{tabular}{lcl} 
MUEN 540 & \((.5)\) & Chamber Music Project 1 \\
MUEN 541 & \((.5)\) & Chamber Music Project 2 \\
MUEN 560 & (1) & Chamber Music Ensemble \\
MUEN 562 & \((1)\) & Guitar Ensemble \\
MUEN 580 & \((1)\) & Early Music Ensemble \\
MUEN 585 & (1) & Sonata Masterclass \\
MUEN 589 & (1) & Woodwind Ensembles \\
MUEN 591 & \((1)\) & Brass Consort \\
MUEN 598 & \((1)\) & Percussion Ensembles
\end{tabular}

\section*{Required Courses ( 25 credits)}

25 credits of required courses selected as follows:
9 credits of Theory
10 credits of Musicianship
6 credits of History

\section*{Theory}
\begin{tabular}{lll} 
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2 \\
MUTH 250 & (3) & Theory and Analysis 3
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

\section*{History}
MUHL 186
(3) Western Musical Traditions
MUHL 286
(3)
Critical Thinking About Music

\section*{Complementary Musicianship}

2 credits from:
MUSP 324
(2)
Musicianship for Strings
\begin{tabular}{lcl} 
MUSP 330 & (2) & Musicianship for Woodwinds \\
MUSP 335 & (2) & Musicianship for Brass \\
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 355 & (2) & Musicianship for Percussion \\
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

\subsection*{10.6.2.14 Licentiate in Music (L.Mus.) - Major Performance Voice (105 credits)}

The Licentiate in Music (L.Mus.) Major Performance Voice is a 105-credit program.
Special Requirements:
1. Continuation in the program requires a minimum grade of A- in practical instruction/exams, ensembles, and voice coaching.
2. Candidates must take the L.Mus. Performance 1 Examination at the end of their first year of study and the L.Mus. Performance 2 and 3 Examinations in each of the next two years if they hope to complete the program in the normal length of time.

\section*{Required Performance (48 credits)}
\begin{tabular}{lll} 
MUIN 250 & \((6)\) & L.Mus. Practical Instruction 1 \\
MUIN 251 & \((6)\) & L.Mus. Practical Instruction 2 \\
MUIN 252 & \((4)\) & L.Mus. Performance 1 Examination \\
MUIN 350 & (6) & L.Mus. Practical Instruction 3 \\
MUIN 351 & (6) & L.Mus. Practical Instruction 4 \\
MUIN 352 & (4) & L.Mus. Performance 2 Examination \\
MUIN 450 & (4) & L.Mus. Practical Instruction 5 \\
MUIN 451 & (4) & L.Mus. Practical Instruction 6 \\
MUIN 452 & (8) & L.Mus. Performance 3 Examination
\end{tabular}

\section*{Complementary Performance (21 credits)}

Large Ensemble Training - during every term of enrolment as a full-time or part-time student.
12 credits from:
\begin{tabular}{lcl} 
MUEN 496 & \((2)\) & Opera Studio \\
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 578 & (1) & Song Interpretation 1 \\
MUEN 579 & (1) & Song Interpretation 2 \\
MUEN 580 & (1) & Early Music Ensemble \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble
\end{tabular}

9 credits from:
MUEN courses at the 400 or 500 level (maximum 4 credits).
\begin{tabular}{lll} 
MUIN 300 & (2) & Voice Coaching 1 \\
MUIN 301 & (2) & Voice Coaching 2
\end{tabular}
\begin{tabular}{lll} 
MUPG 296 & \((1)\) & Acting for Voice \\
MUPG 297 & \((1)\) & Movement for Voice \\
MUPG 309 & \((1)\) & Advanced Diction \\
MUPG 353 & \((2)\) & Song Repertoire Class \\
MUPG 380 & \((2)\) & Oratorio Class \\
MUPG 453 & \((2)\) & Contemporary Repertoire for Voice
\end{tabular}

\section*{Complementary Musicianship (2 credits)}

2 credits from:
\begin{tabular}{lll} 
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 353 & (2) & Musicianship for Voice \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

\section*{Required Courses (34 credits)}

\section*{Diction ( 9 credits)}
\begin{tabular}{lcl} 
MUPG 209 & \((1)\) & Introduction to Lyric Diction \\
MUPG 210 & \((2)\) & Italian Diction \\
MUPG 211 & \((2)\) & French Diction \\
MUPG 212 & \((2)\) & English Diction \\
MUPG 213 & \((2)\) & German Diction
\end{tabular}

\section*{Theory (9 credits)}
\begin{tabular}{lll} 
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2 \\
MUTH 250 & (3) & Theory and Analysis 3
\end{tabular}

\section*{Musicianship (10 credits)}
\begin{tabular}{lll} 
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

\section*{History (6 credits)}
\begin{tabular}{lll} 
MUHL 186 & (3) & Western Musical Traditions \\
MUHL 286 & (3) & Critical Thinking About Music
\end{tabular}

\subsection*{10.6.2.15 Special Prerequisite Courses for M.Mus. in Performance}

\section*{Master of Music (M.Mus.) Performance: Early Music (Thesis)}
MUPD 560 (1) Introduction to Research Methods in Music

3 credits from the following:
MUHL 377 (3) Baroque Opera

MUHL 380
(3) Medieval Music

MUHL 381
(3) Renaissance Music

MUHL 382
(3) Baroque Music

MUHL 383
(3) Classical Music

MUHL 395
(3) Keyboard Literature before 1750

MUPP 381
(3) Topics in Performance Practice

MUTH 426
(3) Topics in Early Music Analysis

Harpsichord students:
\begin{tabular}{lcl} 
MUPG 272D1/D2 & (4) & Continuo \\
MUPG 372D1/D2 & (2) & Continuo \\
Organ/Lute students: & & \\
MUPG 272D1/D2 & (4) & Continuo \\
Voice students: & (2) & Italian Diction (or equivalent) \\
MUPG 210 & (2) & French Diction (or equivalent) \\
MUPG 211 & (2) & English Diction (or equivalent) \\
MUPG 212 & (2) & German Diction (or equivalent) \\
MUPG 213 &
\end{tabular}

Master of Music (M.Mus.) Performance: Orchestral Instruments and Guitar (Thesis)
MUPD 560 (1) Introduction to Research Methods in Music
Master of Music (M.Mus.) Performance: Collaborative Piano (Thesis)
MUPD 560 (1) Introduction to Research Methods in Music
4 credits from the following:
MUPG 210
(2) Italian Diction

MUPG 211
(2) French Diction

MUPG 212
(2) English Diction

MUPG 213
(2) German Diction

6 credits from the following:
MUHL 372 (3) Solo Song Outside Germany and Austria
MUHL 377
(3) Baroque Opera

MUHL 387
(3) Opera from Mozart to Puccini

MUHL 388
(3) Opera After 1900

MUHL 390
(3) The German Lied

\section*{Master of Music (M.Mus.) Performance: Piano (Thesis)}
MUPD 560 (1) Introduction to Research Methods in Music
\begin{tabular}{lll} 
Master of Music (M.Mus.) Performance: Opera and Voice (Thesis) \\
MUPD 560 & (1) & Introduction to Research Methods in Music \\
MUPG 210 & (2) & Italian Diction \\
MUPG 211 & (2) & French Diction \\
MUPG 212 & (2) & English Diction \\
MUPG 213 & (2) & German Diction \\
3 credits from the following: & (3) & \\
MUHL 372 & (3) & Baroque Opera \\
MUHL 377 & (3) & Opera from Mozart to Puccini \\
MUHL 387 & (3) & Opera After 1900 \\
MUHL 388 & (3) & The German Lied \\
MUHL 390 &
\end{tabular}

\section*{Master of Music (M.Mus.) Performance: Organ and Church Music (Thesis)}
\begin{tabular}{ll} 
MUPD 560 & (1) Introduction to Research Methods in Music \\
MUPG 272D1/D2 & (4) Continuo
\end{tabular}

Master of Music (M.Mus.) Performance: Conducting (Thesis)
\begin{tabular}{lll} 
MUPD 560 & (1) & Introduction to Research Methods in Music \\
MUSP 500D1/D2 & (2) & Keyboard for Professional Practice
\end{tabular}

Choral Conducting:
MUCO 261
(3) Orchestration 1

2 credits from the following:
\begin{tabular}{lll} 
MUPG 210 & (2) & Italian Diction \\
MUPG 211 & (2) & French Diction \\
MUPG 212 & (2) & English Diction \\
MUPG 213 & (2) & German Diction
\end{tabular}
Instrumental Conducting:
3 credits from the following:
MUCO 261
MUCO 360

Master of Music (M.Mus.) Performance: Jazz Performance (Thesis)
\begin{tabular}{lll} 
MUJZ 187 & (3) & Jazz History Survey \\
MUJZ 440D1/D2 & (4) & Advanced Jazz Composition \\
MUJZ 461D1/D2 & (4) & Advanced Jazz Arranging \\
MUJZ 493 & (3) & Jazz Performance Practice
\end{tabular}

\subsection*{10.6.3 B.Mus./B.Ed. Bachelor of Music and Bachelor of Education Concurrent Program}

The Bachelor of Education in Music (B.Ed. Music) mcgill.ca/dise/teachercert/musicis an integrated 152-credit program of initial teacher training that leads to certification as a teacher in the Province of Quebec. This program is only open to students who have completed a Bachelor of Music (B.Mus.) or its equivalent, and normally students receive significant advanced standing in the program such that the B.Ed. Music program can be completed in two and a half years. Applicants to B.Ed. Music should choose Faculty of Education (Music) as the faculty which offers the program when submitting an application for an undergraduate program. Students who do not have an equivalent B.Mus. should complete the concurrent Bachelor of Music (B.Mus.) - Major Music Education and Bachelor of Education (B.Ed.) - Music Elementary and Secondary mcgill.ca/music/programs/bmus/bmus-bed. The concurrent program is comprised of 170 credits, and combines academic studies in music, professional studies and field experience. Students normally take five years to complete the concurrent program. The two degrees are awarded during the same convocation period. Applicants to the B.Mus./B.Ed. concurrent program should select Schulich School of Music as the faculty when applying for this program.

Students in the concurrent B.Mus./B.Ed. or B.Ed. Music who receive an F or J in any Field Experience course are placed in Unsatisfactory Standing. Although they may complete their term, they are required to withdraw from the program.

\subsection*{10.6.3.1 Concurrent Bachelor of Music (B.Mus.) - Major Music Education and Bachelor of Education (B.Ed.) - Music Elementary and Secondary ( 170 credits)}

The Concurrent B.Mus./B.Ed. combines the Bachelor of Music (Major Music Education) with the Bachelor of Education (Music Elementary and Secondary).
Requirements are normally completed in five years and lead to certification as a school teacher in the Province of Quebec. Out-of-province students (or those without Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the Concurrent program) are required to complete 170 credits, normally in six years.

Applicants who already hold a Bachelor of Music degree from a North American university should apply directly to the Bachelor of Education in Music Elementary and Secondary (B.Ed. Music) program offered by the Faculty of Education https://www.mcgill.ca/dise/progs/music.

Notes:
1. Students majoring in Music Education in the jazz stream may take Jazz Arranging 1 (MUJZ 260) with the permission of the instructor, per available space in the course, and if they have the prerequisite, MUJZ 161. Alternatively, they may be asked to register for a different jazz stream course upon the recommendation of the Jazz Area Chair and/or the Music Education Area Chair.
2. In addition to meeting prerequisites/co-requisites for MUCO 230 or MUCO 261, students must obtain the relevant instructor's permission, per available space in the course, prior to registration. MUCO 260 is waived as a prerequisite for MUCO 230.

The B.Mus. Major Music Education program in the Schulich School of Music focuses on the development of prospective music educators as musicians. This is achieved both through core music history, theory, musicianship, and performance courses, as well as through different instrumental, vocal, and conducting techniques courses. Laboratory experiences provide an opportunity to develop facility with basic music rehearsing/teaching techniques, with emphasis on the ability to diagnose and correct technical and musical problems. The B.Ed. Music Elementary and Secondary program in the Faculty of Education focuses on the development of the musicians as educators. This is achieved through courses in educational foundations, music pedagogy, pedagogical support, and a practicum component comprised of four field experiences and supporting professional seminars.

The components of the 137-credit Concurrent Bachelor of Music - Major Music Education and Bachelor of Education - Music Elementary and Secondary (excluding the 33-credit Freshman Program) are as follows:

58 credits in Education
71 credits in Music
8 free elective credits

\section*{Program Prerequisites - Freshman Program}

32 credits distributed as follows:

\section*{Prerequisite Courses}

4 credits of Large Ensemble
6 credits of non-Music electives
and 22 credits in the following course list:
Students who can demonstrate through placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses. The list of courses for which students may take a diagnostic test to seek exemption can be found on the placement exam website.
\begin{tabular}{lcl} 
MUHL 186 & \((3)\) & Western Musical Traditions \\
MUIN 180 & (3) & BMus Practical Lessons 1 \\
MUIN 181 & (3) & BMus Practical Lessons 2 \\
MUPD 135 & (1) & Music as a Profession 1 \\
MUPD 235 & (1) & Music as a Profession 2 \\
MUSP 140 & (2) & Musicianship Training 1 \\
MUSP 141 & (2) & Musicianship Training 2 \\
MUSP 170 & (1) & Musicianship (Keyboard) 1 \\
MUSP 171 & (1) & Musicianship (Keyboard) 2 \\
MUTH 150 & (3) & Theory and Analysis 1 \\
MUTH 151 & (3) & Theory and Analysis 2
\end{tabular}

\section*{Required Courses - Music Components (48 credits)}

\section*{Music Education}
\begin{tabular}{lcl} 
MUCT 235 & (3) & Vocal Techniques \\
MUGT 215 & (1) & Basic Conducting Techniques \\
MUGT 354 & (3) & Music for Children \\
MUGT 358 & (3) & General Music for Adults and Teenagers \\
MUGT 401 & (3) & Issues in Music Education \\
MUIT 202 & (3) & Woodwind Techniques \\
MUIT 203 & (3) & Brass Techniques \\
MUIT 204 & (3) & Percussion Techniques \\
MUIT 356 & (3) & Jazz Instruction: Philosophy and Techniques
\end{tabular}

\section*{Theory}
\begin{tabular}{lll} 
MUTH 250 & (3) & Theory and Analysis 3 \\
MUTH 251 & (3) & Theory and Analysis 4 \\
MUTH 350 & (3) & Theory and Analysis 5
\end{tabular}

\section*{Musicianship}
\begin{tabular}{lll} 
MUSP 240 & (2) & Musicianship Training 3 \\
MUSP 241 & (2) & Musicianship Training 4
\end{tabular}

\section*{Music History}
MUHL 286
(3)
Critical Thinking About Music

\section*{Performance}
\begin{tabular}{lll} 
MUIN 280 & \((2.5)\) & BMus Practical Lessons 3 \\
MUIN 281 & \((2.5)\) & BMus Practical Lessons 4 \\
MUIN 283 & (1) & BMus Concentration Final Examination
\end{tabular}

\section*{Professional Development}
MUPD 235 (1) Music as a Profession 2

\section*{Complementary Courses - Music Components (24 credits)}

\section*{Composition/Arranging}

3 credits from:
\begin{tabular}{lll} 
MUCO 230 & (3) & The Art of Composition \\
MUCO 261 & (3) & Orchestration 1 \\
MUJZ 260 & (3) & Jazz Arranging 1
\end{tabular}

Music Education

3 credits from:
MUIT 201
(3) String Techniques
MUIT 250
(3)
Guitar Techniques

3 credits from:
\begin{tabular}{lll} 
MUCT 315 & (3) & Choral Conducting 1 \\
MUIT 315 & (3) & Instrumental Conducting
\end{tabular}

3 credits from courses with a prefix of MUIT or MUGT.

\section*{Musicianship}

2 credits from:
\begin{tabular}{lcl} 
MUSP 324 & \((2)\) & Musicianship for Strings \\
MUSP 330 & \((2)\) & Musicianship for Woodwinds \\
MUSP 335 & (2) & Musicianship for Brass \\
MUSP 346 & (2) & Post-Tonal Musicianship \\
MUSP 350 & (2) & Musicianship for Pianists \\
MUSP 353 & (2) & Musicianship for Voice \\
MUSP 354 & (2) & Introduction to Improvisation and Ornamentation \\
MUSP 355 & (2) & Musicianship for Percussion \\
MUSP 361 & (2) & Topics in Musicianship \\
MUSP 381 & (2) & Singing Renaissance Notation
\end{tabular}

\section*{Music History}

6 credits from courses with a prefix of MUHL or MUPP.

\section*{Performance}

4 credits from:
\begin{tabular}{lcl} 
MUEN 563 & (2) & Jazz Vocal Workshop \\
MUEN 572 & (2) & Cappella Antica \\
MUEN 573 & (2) & Baroque Orchestra \\
MUEN 587 & (2) & Cappella McGill \\
MUEN 590 & (2) & McGill Wind Orchestra \\
MUEN 592 & (2) & Chamber Jazz Ensemble \\
MUEN 593 & (2) & Choral Ensembles \\
MUEN 594 & (2) & Contemporary Music Ensemble \\
MUEN 595 & (2) & Jazz Ensembles \\
MUEN 597 & (2) & McGill Symphony Orchestra
\end{tabular}

\section*{Electives Courses (8 credits)}

8 credits of free electives

\section*{Required Courses - Education Component (49 credits)}
\begin{tabular}{|c|c|c|}
\hline EDEA 206 & (1) & 1st Year Professional Seminar \\
\hline EDEA 208 & (1) & Second Professional Seminar (Music) \\
\hline EDEA 407 & (3) & Final Year Professional Seminar Music \\
\hline EDEA 442 & (3) & Methods in Music Education 1 \\
\hline EDEA 472 & (3) & Methods in Music Education 2 \\
\hline EDEC 215 & (0) & English Exam for Teacher Certification \\
\hline EDEC 247 & (3) & Policy Issues in Quebec and Indigenous Education \\
\hline EDEC 260 & (3) & Philosophical Foundations \\
\hline EDEC 262 & (3) & Media, Technology and Education \\
\hline EDES 350 & (3) & Classroom Practices \\
\hline EDFE 205 & (2) & First Field Experience (Music) \\
\hline EDFE 208 & (3) & Second Field Experience (Music) \\
\hline EDFE 308 & (8) & Third Field Experience (Music) \\
\hline EDFE 407 & (7) & Fourth Field Experience (Music) \\
\hline EDPE 300 & (3) & Educational Psychology \\
\hline EDPI 341 & (3) & Instruction in Inclusive Schools \\
\hline
\end{tabular}

\section*{Required Indigenous Studies Course}

EDEC 233
(3) Indigenous Education
or any other course with Indigenous Studies content approved by the Faculty of Education.

\section*{Complementary Courses - Education Components (6 credits)}

Complementary Courses - Education Components

3 credits from:
\begin{tabular}{lll} 
EDEC 248 & (3) & Equity and Education \\
EDEC 249 & (3) & Global Education and Social Justice
\end{tabular}

3 credits from:
EDEE 355
(3)
Classroom-based Evaluation
EDPE 304
(3)
Measurement and Evaluation

\subsection*{10.6.4 Minor in Management}

The Desautels Faculty of Management offers a minor for non-Management students that allow undergraduates to develop a variety of managerial skills that will serve them throughout their chosen careers.

Detailed information on the minor listed below can be found on the Desautels Faculty of Management website and at Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.7: Minor for Non-Management Students.
- : Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) (18 credits)

Students must submit an online application to apply for this minor for non-Management students. Contact the Desautels Faculty of Management for more information.

\section*{10.7 \\ Practical Instruction (MUIN courses)}

Students in the Schulich School of Music may receive practical instruction in the principal instrument or voice in their major studies, as part of a music performance minor or as elective lessons in a second instrument, subject to approval of the Department of Performance. Practical Instruction is also known as private lessons, and is designated by MUIN subject codes which has additional music fees tied to the regular tuition. Students are entitled to a maximum number of terms of lessons, which varies by program. See : Tuition Fees, Practical Instruction Fees and Lesson Quota for more information.

\section*{(1) Practical Instruction in Major Studies}

Students enrolled in a Bachelor of Music (B.Mus.) and Licentiate in Music (L.Mus.) program need to complete the required practical instruction in their program.

\section*{(2) Practical Instruction in Music Minor}
B.Mus. students enrolled in a jazz performance minor or early music performance minor can register for practical instruction in the minor in addition to the required practical instruction in their major program.

\section*{(3) Practical Instruction in a Second Instrument}
B.Mus. and L.Mus. students may apply for practical instruction on an instrument other than their major studies, subject to the approval of the Department of Performance. Practical instruction in a second instrument is also known as elective lessons. Students are permitted to take up to a maximum of four terms of elective lessons during their program. The first two terms of elective lessons (MUIN 110, MUIN 111) are billed in a similar fashion as the required practical instruction, while a Supplemental Music Private Lesson Fee for second instrument will be levied on the third (MUIN 210) and fourth (MUIN 211) term of elective lessons.
Application details for practical instruction in a second instrument is found on the Elective website.
Students are not permitted to only register for practical instruction in any given semester. Students are expected to register for other required academic course(s) for the program in the same semester for which they are taking practical instruction.
All new and returning students must submit a Practical Instruction Request Form by the assigned deadline if they wish to register for practical instruction and/or voice coaching lessons in the following academic year. Students cannot add MUIN courses on Minerva. The faculty will add the MUIN practical instruction registration to the student records once the practical instruction request has been approved. Students must register for at least one course in the academic year before the faculty can add MUIN course(s) to their records.

\subsection*{10.7.1 Practical Assignment and Lessons}

\subsection*{10.7.1.1 Registration/Withdrawal}

Registration for practical instruction (MUIN lesson course numbers) is not available on Minerva. Students are reminded to submit an Online Practical Instruction Request Form by the specified deadlines. Practical Instruction will then be added onto students' records.

Students cannot withdraw from practical instruction on Minerva; they must notify the Department of Performance of their intention to withdraw by emailing teacherpreference.music@mcgill.ca. For deadlines, refer to section 10.5.10: Course Changes \& Withdrawal.

\subsection*{10.7.1.2 Assignment of Teachers}

The assignment of students to teachers for practical instruction is the responsibility of the Chair of the Department of Performance. Student requests for specific teachers will be taken into consideration whenever possible.
It is understood that returning students will study with the same teacher unless prior arrangements have been made with the Chair of the Department in consultation with the teachers concerned. However, those students who do not return the Online Practical Instruction Request (including Voice Coaching) by the specified deadline cannot be guaranteed the teacher of their choice, and they will be assessed a late fee of \(\$ \mathbf{5 0}\). Teacher assignments will be made soon after the period of enrolment and confirmed during the first week of classes. Following this assignment, it is the students' responsibility to contact their teachers and arrange lesson times.

Individual lessons missed as a consequence of the instructor's absence will be made up at the mutual convenience of the instructor and student. Lessons missed as a result of the student's absence will be made up only if notice of cancellation has been given 48 hours in advance, or if a doctor's certificate is produced and prior notice of the cancellation is given.

Note: Students who are taking practical instruction in fulfilment of the requirements for any degree or diploma are required to study with teachers on the staff of the Schulich School of Music.

\subsection*{10.7.2 Examinations and Goals in Practical Instruction}

Different levels of achievement are required of students depending upon the program of study for which they are registered. These levels are defined in part by the difficulty of material and length of the program required at the various examinations, and in part by the examiners' assessment of how well the student plays this material.
In general, there are five categories of practical study:
- Concentration Study
- Major Study
- Licentiate Study
- Postgraduate Study
- Elective Study

\subsection*{10.7.2.1 Concentration Study}

\section*{Students in the:}
- B.Mus. Faculty Program;
- Faculty Program - Jazz concentration; or
- Major in Music Composition, Music Education, Music History, or Music Theory
are obliged to present one examination in order to fulfil the practical requirement of these programs: the Concentration Final Examination (MUIN 283). Grades of C or higher in all practical requirements are mandatory for continuation in the program.
The sequence would normally be:

\section*{Concentration Study Sequence}
\begin{tabular}{ll} 
MUIN 180 & BMus Practical Lessons 1 \\
MUIN 181 & BMus Practical Lessons 2 \\
MUIN 280 & BMus Practical Lessons 3 \\
MUIN 281 & BMus Practical Lessons 4 \\
MUIN 283 & BMus Concentration Final Examination
\end{tabular}

\section*{Examination:}

\section*{BMus Concentration Final Examination (MUIN 283)}

Purpose: To determine that the student is sufficiently accomplished to qualify for the degree of Bachelor of Music. In the event that the student is inadequately prepared, the panel may recommend to the department in which the student is registered that: a) the student be asked to withdraw from the program; or b) the student be permitted to redo the examination.
Panel: A minimum of two staff members (not including the teacher), one of whom must be from the area. The panel is appointed by the Chair of the Department of Performance. At the discretion of the Departmental Chair, the teacher may be included on panels of three or more examiners.
Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

\subsection*{10.7.2.2 Major Study}

A student majoring in Performance must show talent for this field before being admitted to the program. The practical requirement for these programs comprises examinations and recitals as specified in the programs.
10.7.2.2.1 B.Mus. Major in Performance, Major in Early Music Performance, and Major in Jazz Performance

The sequence would normally be:
\begin{tabular}{ll} 
Major Study Sequence & \\
MUIN 180 & BMus Practical Lessons 1 \\
MUIN 181 & BMus Practical Lessons 2 \\
MUIN 280 & BMus Practical Lessons 3 \\
MUIN 281 & BMus Practical Lessons 4 \\
MUIN 282 & BMus Performance Examination 1 \\
\hline MUIN 380 & BMus Practical Lessons 5 \\
MUIN 333 & Piano Techniques 2 (pianists only) \\
MUIN 381 & BMus Practical Lessons 6 \\
MUIN 382 & BMus Performance Examination 2 \\
\hline MUIN 480 & BMus Practical Lessons 7
\end{tabular}

\section*{Major Study Sequence}
\begin{tabular}{ll} 
MUIN 433 & Piano Techniques 3 (pianists only) \\
MUIN 481 & BMus Practical Lessons 8 \\
MUIN 482 & BMus Performance Examination 3 \\
\hline MUIN 369 & Concerto (mandatory test for pianists)
\end{tabular}

\section*{Examinations:}

\section*{BMus Performance Examination 1 (MUIN 282)}

Purpose: To assess the student's progress in the practical area and determine whether or not the student may continue in the program. The panel may recommend to the Department that the student be: a) asked to withdraw from the program; b) permitted to continue to the BMus Performance Examination 2.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.
Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

\section*{BMus Performance Examination 2 (MUIN 382)}

Purpose: To assess the student's ability to perform a program of sufficient length and suitable repertoire as specified in the requirements for each instrument.
Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.
Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

\section*{BMus Performance Examination 3 (MUIN 482)}

Purpose: All recitals are to be performed in public before a jury and are intended to demonstrate technical mastery of their instrument/voice as well as an understanding of different musical styles appropriate to their level of study.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance. Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

\subsection*{10.7.2.3 Licentiate Study}

Students must show talent for this field before being admitted to the program. Grades of A- or higher in all practical requirements are mandatory for continuation in the program.
10.7.2.3.1 L.Mus. Performance

The sequence would normally be:

\section*{Licentiate Study Sequence}
\begin{tabular}{ll} 
MUIN 250 & L.Mus. Practical Instruction 1 \\
MUIN 251 & L.Mus. Practical Instruction 2 \\
MUIN 252 & L.Mus. Performance 1 Examination \\
\hline MUIN 350 & L.Mus. Practical Instruction 3 \\
MUIN 333 & Piano Techniques 2 (pianists only) \\
MUIN 351 & L.Mus. Practical Instruction 4 \\
MUIN 352 & L.Mus. Performance 2 Examination \\
\hline MUIN 450 & L.Mus. Practical Instruction 5 \\
MUIN 433 & Piano Techniques 3 (pianists only) \\
MUIN 451 & L.Mus. Practical Instruction 6 \\
MUIN 452 & L.Mus. Performance 3 Examination \\
\hline MUIN 369 & Concerto (mandatory test for pianists)
\end{tabular}

Examinations:

\section*{L.Mus. Performance 1 Examination (MUIN 252)}

Purpose: To assess the student's progress in the practical area and determine whether or not the student may continue in the program. The panel may recommend to the Department that the student be: a) asked to withdraw from the program; or b) permitted to continue to the L.Mus. Performance 2 Exam.
Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.
Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

\section*{L.Mus. Performance 2 Examination (MUIN 352)}

Purpose: The recital is a public presentation, before a jury, intended to demonstrate competence in public solo performance. Non-keyboard performers and singers must use appropriate accompaniment.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.
Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

\section*{L.Mus. Performance 3 Examination (MUIN 452)}

Purpose: All recitals are to be performed in public before a jury and are intended to demonstrate technical mastery of their instrument/voice as well as an understanding of different musical styles appropriate to their level of study.
Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance. Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

\subsection*{10.7.2.4 Postgraduate Study}

Master of Music (M.Mus.), Graduate Artist Diploma (Gr.Art.Dip.), Graduate Diploma in Performance (Gr.Dip.), and Doctor of Music (D.Mus.) candidates should consult the graduate program requirements.

\subsection*{10.7.2.5 Elective Practical Instruction}

Bachelor of Music (B.Mus.) or Licentiate in Music (L.Mus.) students may request for an additional year of practical instruction in their major instrument/voice beyond the required practical instruction for their program. This additional year of practical instruction may be offered as elective lessons. Alternately, students may request to take practical instruction in a second instrument which is also known as elective lesson.
Elective practical instruction is also known as elective lessons. Elective practical instruction courses have an MUIN prefix.
Students may elect to pursue further practical instruction in an instrument/voice beyond a program's curricular requirements.
Additional student fees ( section 10.4.7: Tuition Fees, Practical Instruction Fees, and Lesson Quotas) may apply when students apply for elective practical instruction.

For more information about elective practical instruction, visit the Elective Lessons website.

\subsection*{10.8 Practical Examinations}

Practical exams are concentration or performance exams with an MUIN prefix. Students cannot add MUIN courses on Minerva. They must submit an application form to apply for a practical exam.
Details of specific examination requirements and practical exam application form for each area:
- Brass
- Early Music
- Guitar
- Harp
- Jazz
- Organ
- Percussion
- Piano
- Strings
- Voice
- Woodwinds
are available on the area's program webpage at mcgill.ca/music/programs or may be obtained from the Department of Performance office.

\subsection*{10.8.1 Application for Practical Examination}

Practical examinations and recitals must be presented in one of the official final examination periods. See Important Dates for Fall and Winter; Bachelor of Music (B.Mus.) or Licentiate in Music (L.Mus.) students in their final year may request for a final practical exam/recital (MUIN 283, MUIN 482 or MUIN 452) for early September subject to the approval of the Department of Performance. September final practical exams will be recorded as a summer course. E.g. A final recital scheduled for early September 2025 will be recorded for Summer 2025 semester.

All students wishing to present a required practical examination should register for the exam by the online application deadline given below. Registrations after that date will be accepted with permission of the Department of Performance up to the deadlines stated below.

Students are responsible for:
1. reviewing their area's examination requirements and, in consultation with their assigned practical instructor, deciding on appropriate material to perform at the examination;
2. completing the online examination application form to submit the details pertinent to their examination level by the deadline specified below.

Applications may be withdrawn without penalty any time up to the withdrawal deadline given below. Permission to withdraw from a practical examination after the withdrawal deadline will normally be granted only in the case of illness. A medical certificate must be submitted to the Department of Performance Office within seven days after the withdrawal request has been received. Withdrawal from a practical examination on other than medical grounds must be authorized by the Chair of the Department of Performance.
\begin{tabular}{lll} 
Examination Period & Online Application Deadline* & Withdrawal Deadline \\
Fall & October 15, 2024 & November 15, 2024 \\
Winter & February 15, 2025 & March 15, 2025
\end{tabular}

\section*{Special Procedures for September Exams (Graduating Students Only):}

The September examination period is available only for Summer graduands. No supplemental examinations will be given at this time. Registration for September examinations is not available on Minerva. Contact the Department of Performance Office for information.
\begin{tabular}{lll} 
Examination Period & Application*/Recital Program Deadline & Withdrawal Deadline \\
\hline September 7-9, 2024 & May 31, 2024 & August 1, 2024
\end{tabular}
* Applications received after these deadlines will only be accepted with special permission from the Chair of the Department of Performance, and on payment of a \(\$ 50\) late application fee.

\subsection*{10.8.2 Examination Marking}

The final mark for any practical examination is the average of all the marks submitted by the individual examiners. In addition, however, at least half of the examiners on the panel must pass the student in order to continue to the next level of examination.
The passing grades for examinations are:
- in L.Mus. programs: A-
- in B.Mus. Major Performance programs: B-
- in Concentration Study programs: C

In instances where the average mark is a passing grade but a majority of the panel has failed the student, the final mark will be the letter grade immediately below the required passing grade.

\section*{11 Faculty of Science}

\subsection*{11.1 About the Faculty of Science}

The Faculty of Science aims to be a leader in finding solutions critical to economic and human development, including key questions in the environmental sciences, new materials, and new technologies.
To help us achieve these goals, the Faculty has recruited the best scientific minds of this generation and is committed to ensuring that our undergraduate and graduate students receive an education that prepares them for a lifetime of accomplishment. Not only will these new recruits perform key research work, they will also take on an equally important task: teaching the scientists and leaders of tomorrow. Over the next decade, many of these dynamic young
academics will become world leaders in their disciplines. The process has already begun in fields as diverse as neuroscience, astrophysics, green chemistry, and earth system science.

Moreover, the Faculty is transforming the way science is taught, with an increased emphasis on student/professor interaction and outreach. This approach emphasizes hands-on research at the undergraduate level and a more personal, one-on-one style between professors and students that traditionally did not begin until the graduate level.
The Faculty counts undergraduate students as one of its key strengths. The calibre of McGill's undergraduates is very high-they boast the highest average entrance grades in Canada-and the Faculty understands that these brilliant young minds are the key to its future.

\subsection*{11.2 Programs and Teaching in Science}

The Faculty of Science is committed to providing outstanding teaching and research facilities. The Faculty draws on its involvement in cutting-edge research to ensure teaching excellence at the undergraduate level. Professors who spearhead projects that change people's understanding of the world teach regularly at the undergraduate level. Furthermore, research-based independent study courses offer you the opportunity to contribute to your professors' work, rather than just learn about it.

In an effort to supplement classroom learning with real life experience, the Faculty of Science has increased opportunities for undergraduate students to participate in fieldwork. All B.Sc. programs can include an internship component. This is on top of the many undergraduate students the Faculty hires for Work Study projects and other research programs. As a McGill Science student, you have an opportunity to get involved in the structuring of your own education.

The Faculty of Science offers programs leading to the degree of Bachelor of Science (B.Sc.). Admission is selective; fulfilment of the minimum requirements does not guarantee acceptance. Admission criteria are described in the Undergraduate Admissions Guide found at mcgill.ca/undergraduate-admissions/apply.
There are also two Diploma programs offered in Science. The Diploma in Environment, in Bieler School of Environment \(>\) Undergraduate \(>\) Browse Academic Programs > section 7.5.7.1: Diploma (Dip.) Environment ( 30 credits), is a 30-credit program available to holders of a B.Sc. or B.A. or equivalent. The Diploma in Meteorology is a one-year program available to holders of a degree in Mathematics, Engineering, Physics, and other appropriate disciplines who wish to qualify for a professional career in Meteorology; see section 11.12.3: Atmospheric and Oceanic Sciences (ATOC) > section 11.12.3.8: Diploma (Dip.) Meteorology ( 30 credits). All credits for these diplomas must be completed at McGill.
Finally, the Faculties of Arts and Science jointly offer the Bachelor of Arts and Science (B.A. \& Sc.) degree, which is described in the Bachelor of Arts \& Science section of the eCalendar.

\subsection*{11.3 About the Faculty of Science (Undergraduate)}

\subsection*{11.3.1 Location}

Dawson Hall
853 Sherbrooke Street West
Montreal QC H3A 0G5
Canada
Telephone: 514-398-5442
Faculty website: mcgill.ca/science
Instagram: @mcgillscience
Science Office for Undergraduate Student Advising (SOUSA): mcgill.ca/science/undergraduate/advice/sousa
The Science Office for Undergraduate Student Advising (SOUSA) is located in Dawson Hall, room 405. SOUSA serves students in the B.Sc. and B.A. \& Sc. degrees.

\subsection*{11.3.2 McGill's Faculty of Science}
- McGill's second-largest faculty: consisting of 15 schools and departments focused on teaching, research, and outreach—including the Redpath Museum, one of Canada's oldest museums-and more than a dozen research centres and institutes.
- Students: nearly 5,000 undergraduate and over 1,000 graduate students.
- Over 270 faculty members, including tenured and tenure-track professors.
- Has ties with ten Nobel laureates: seven were Faculty of Science graduates, while three winners were either Science faculty members or staff.
- Canadian leader in astrophysics and cosmology, climate change and extreme weather, green chemistry, life sciences (developmental biology), earth systems science, biodiversity and conservation, nanoscience, social neuroscience, sustainability science, and artificial intelligence.
- Offers students a variety of Field Study opportunities, which take students out of the traditional classroom environment and into a world of strong interdisciplinary, international, and research-based education. Students have opportunities to work with local and Indigenous communities, governmental agencies, and NGOs in a wide range of places, including East Africa, Barbados, and Panama.
- Offers the Fessenden Professorships and Prizes in Science Innovation, the first such endowed program in Canada, to encourage and support the commercialization of research in science conducted by world-class scholars.
- McGill's most multidisciplinary faculty, which conducts teaching and research in collaboration with many of the University's other faculties, including Medicine, Engineering, Music, Arts, Education, and Management.
- State-of-the-art facilities including the \(\mathbf{\$ 1 2 0}\) million McGill Life Sciences Research Complex, consisting of the Francesco Bellini Building and Cancer Research Building, which are physically linked to the McIntyre Medical and Stewart Biology Buildings.
- Established Canada's first comprehensive Earth System Science Program, to study and research new forms of energy and gain a better understanding of climate change and natural hazards.
- The Tomlinson Project in University-Level Science Education (T-PULSE) conducts groundbreaking university-level science education research, and develops innovative and effective teaching methods for science instructors.
- The Office of Science Education pioneers new approaches to educational development by working with students, staff, and faculty to increase the use of evidence-based pedagogy in the Faculty of Science.
- The Science Undergraduate Research Awards encourage top students to pursue research projects during their degree program.

\subsection*{11.3.3 Science Office for Undergraduate Student Advising (SOUSA)}

The Science Office for Undergraduate Student Advising (SOUSA) provides ongoing advice and guidance on academic issues related to programs, degree requirements, registration, course change, withdrawal, deferred exams, supplemental exams, Academic Standing, inter- and intra-faculty transfer, year or term away, transfer credits, second programs, second degrees, and graduation.

Every student in the B.Sc. degree is assigned an advisor in SOUSA. The advisor's name appears near the top of the Unofficial Transcript on Minerva. Students can contact their advisor directly or email: advisor.science@mcgill.ca.
SOUSA advisors provide assistance with degree planning and are a valuable referral source. They are a good place to start for students who are not certain where to address their questions. They also offer help managing academic situations during periods of personal, financial, or medical problems, by working with students to identify various possibilities and strategies for making informed decisions.

Special requests can be made, in writing, to the Associate Dean, Student Affairs.
The Committee on Student Standing (CSS) will consider appeals of the Associate Dean's decisions. For information about CSS, see the Associate Dean, Student Affairs' assistant.

\subsection*{11.4 Faculty Admission Requirements}

For information about admission requirements for the B.Sc., please refer to the Undergraduate Admissions Guide, found at mcgill.ca/undergraduate-admissions/apply.

For information about interfaculty transfers, refer to University Regulations and Resources > Undergraduate > Registration > section 1.3.6: Interfaculty Transfer as well as the relevant information posted on the SOUSA Student Handbook under Degree Transfers at mcgill.ca/science/undergraduate/handbook.

\subsection*{11.5 Faculty Degree Requirements}

\section*{Each student in the Faculty of Science must be aware of the Faculty regulations as stated in this publication and on the McGill, Science, and SOUSA websites.}

While departmental and faculty advisors and staff are always available to give advice and guidance, the ultimate responsibility for completeness and correctness of course selection and registration; for compliance with, and completion of, program and degree requirements; and for the observance of regulations and deadlines, rests with you. It is your responsibility to seek guidance from the Science Office for Undergraduate Student Advising (SOUSA) if in any doubt; misunderstanding or misapprehension will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.

To be eligible for a B.Sc. degree, you must fulfil all Faculty and program requirements as indicated below:
```

Faculty and program requirements
section 11.5.1: Minimum Credit Requirement
section 11.5.2: Residency Requirement
Refer to University Regulations and Resources > Undergraduate > Student Records > section 1.5.3: Grading and Grade Point Averages (GPA)
section 11.5.3: Time and Credit Limit for the Completion of the Degree
section 11.5.4: Program Requirements
section 11.5.5: Course Requirements

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\subsection*{11.5.1 Minimum Credit Requirement}

The minimum credit requirement for your degree is determined at the time of acceptance and is specified in your letter of admission.
Students are normally admitted to a four-year degree requiring the completion of 120 credits.

\subsection*{11.5.1.1 Advanced Standing}

Advanced Standing of up to 30 credits may be granted to students who obtain satisfactory results in International Baccalaureate, French Baccalaureate, Advanced Levels, Advanced Placement tests, or the Diploma of College Studies (DCS). Quebec students with a DCS in Science are granted 30 credits Advanced Standing and will have normally completed the equivalent of - and are therefore exempt from-the basic science courses in biology, chemistry, mathematics, and physics. Students with satisfactory results in International Baccalaureate, French Baccalaureate, Advanced Levels, and Advanced Placement tests may be exempt from some or all of the basic science courses. Students will not be given additional credit toward their degree for any McGill course where the content overlaps substantially with any other course for which they have already received credit, such as for Advanced Standing results.

AP Examination results with a score of 4 or 5 must be declared by the student at the time of initial registration at the University.
For more information about Advanced Standing, consult: mcgill.ca/transfercredit.

\subsection*{11.5.1.2 Equivalencies for Non-Basic Science Courses}

Note that equivalencies for some non-basic science courses, such as CHEM 212 and CHEM 222 and PSYC 204, are granted on a per-CEGEP basis. In some cases, a grade greater than the minimum passing grade may be required. For more information about equivalences for non-basic Science courses, please consult: mcgill.ca/transfercredit/prospective/cegep.

If the CEGEP and/or course is not listed on this website, refer to your SOUSA advisor at mcgill.ca/science/undergraduate/advice/sousa.

\subsection*{11.5.1.3 Readmission after Interruption of Studies for a Period of Five Consecutive Years or More}

Students who are readmitted after interrupting their studies for a period of five consecutive years or more may be required to complete a minimum of 60 credits and satisfy the requirements of a program. In this case, a new CGPA will be calculated. The Associate Dean, Student Affairs for Science, in consultation with the appropriate department, may approve a lower minimum for students who had completed 60 credits or more before interrupting their studies.

Students who are readmitted after a period of absence are subject to the program and degree requirements in effect at the time of readmission. The Associate Dean, Student Affairs for Science, in consultation with the department, may approve exemption from any new requirements.

\subsection*{11.5.2 Residency Requirement}

To obtain a B.Sc. degree, students must satisfy the following residency requirements: a minimum of 60 credits of courses used to satisfy the B.Sc. degree requirements must be taken and passed at McGill, exclusive of any courses completed as part of the Science Freshman/Foundation Year program; see section 11.12.1: B.Sc. Freshman/Foundation Year Program. At least two-thirds of all departmental program requirements (Honours, Major, Core Science Components, or Minor) must normally be completed at McGill not including courses completed in a prior McGill degree. Exceptionally, students in major concentrations or interfaculty or honours programs who pursue an approved Study Away or Exchange program may-with prior approval from both their department and the Associate Dean, Student Affairs, Faculty of Science-be exempted from the two-thirds rule. In addition, some departments may require that their students complete specific components of their program at McGill.

The residency requirement for diploma programs is 30 credits completed at McGill.

\subsection*{11.5.3 Time and Credit Limit for the Completion of the Degree}

Students who need 96 or fewer credits to complete their degree requirements are expected to complete their degree in no more than eight terms after their initial registration for the degree.

Students in the Freshman/Foundation Year Program become subject to these regulations one year after their initial registration. Students who wish to exceed this time limit must submit their request in writing (by email) to their Faculty advisor, to be approved by the Associate Dean, Student Affairs, of the Faculty of Science.

Students registered in the B.Sc. are expected to complete the requirements of their program and degree within 120 credits. Students will receive credit for all courses (subject to degree regulations) taken up to and including the semester in which they obtain 120 credits. Students who want to remain at McGill beyond that semester must submit their request in writing (by email) to their Faculty advisor, to be approved by the Associate Dean, Student Affairs, Faculty of Science. Permission for exceeding the time and/or credit limits will normally be granted only for valid academic reasons, such as a change of program (subject to departmental approval) and part-time status. If permission is granted, students will receive credit only for required and complementary courses necessary to complete their program requirements.

Students who have been granted Advanced Standing for the International Baccalaureate, Advanced Placement examinations, GCE A-Levels, French Baccalaureate, and other qualifications may complete 120 credits following admission, as per the University regulations described in University Regulations and Resources \(>\) Student Records \(>\) section 1.5.6.1: Advanced Standing Transfer Credits.

\subsection*{11.5.4 Program Requirements}

The Faculty of Science offers a vast array of study and research opportunities at the undergraduate level, and it is very important that students familiarize themselves with all the alternatives available before deciding on a program of study. For an overview of programs offered in the B.Sc., see the Faculty of Science Programs of Study at mcgill.ca/science/undergraduate/programs.

\subsection*{11.5.4.1 Liberal, Major, and Honours Programs}

As a Science student, if you need 96 or fewer credits to complete your degree requirements, you are required to select your courses in each term with a view to timely completion of your degree and program requirements. You must register in one of the following types of departmental programs leading to the degree of Bachelor of Science:

\subsection*{11.5.4.1.1 Liberal Programs}

Liberal programs provide students with the opportunity to study the core of one science discipline along with a breadth component from another area of science or from many other disciplines. In a liberal program, you must complete a Core Science Component (CSC) (45-50 credits), plus a breadth component (at least 18 credits). The requirements for the CSC are given under departmental sections of this publication whenever applicable.

For the breadth component, you must complete one of the following:
- Minor program (18-24 credits) - one of the programs listed in section 11.9.2: Minor Programs.
- Arts Minor or Major concentration (18 or 36 credits) - one of the programs listed in section 11.9.5: Arts Major and Minor Concentrations Open to Science Students.
- A Core Science Component in a second area (45-50 credits) - at least 24 credits must be distinct from the courses used to satisfy the primary CSC. Note that a second CSC can be selected from any of the Science groups.

\subsection*{11.5.4.1.2 Major Programs}

Major programs are more specialized than liberal programs and are usually centred on a specific discipline or department.

\subsection*{11.5.4.1.3 Honours Programs}

Honours programs typically involve an even higher degree of specialization, often include supervised research, and require students to maintain a high academic standard. Although honours programs are specially designed to prepare you for graduate studies, graduates of the other degree programs may also be admissible to many graduate schools. If you intend to pursue graduate studies in your discipline, you should consult a departmental advisor regarding the appropriate selection of courses in your field.

\subsection*{11.5.4.2 Minor and Minor Concentration Programs}

In addition to the liberal, major, and honours degree programs, students in the Faculty of Science may select a minor or approved minor concentration program. These are coherent sequences of courses in a given discipline or interdisciplinary area that may be taken in addition to the courses required for the degree program.

Science minor concentrations consist of up to 24 credits.
Arts minor concentrations consist of 18 credits.
A minimum of 18 new credits must be completed in the minor or minor concentration.
For a list of minor programs, see section 11.9.2: Minor Programs; for minor concentrations that are approved for Science students, see section 11.9.5: Arts Major and Minor Concentrations Open to Science Students.

\subsection*{11.5.4.3 Other Second Programs}

In addition to a major or honours program, students may pursue a second major or honours program, or an Arts major concentration program. Each major or honours program must contain a minimum of 36 credits that are distinct from the courses used to satisfy the other program.

\subsection*{11.5.4.4 Special Designations}

The Faculty of Science recognizes Bachelor of Science (B.Sc.) students who have gone beyond a typical B.Sc. experience by awarding certain special designations to their student record and degree at graduation.

\subsection*{11.5.4.4.1 B.Sc. Global Designation}

For details on the B.Sc. Global Designation, students should refer to mcgill.ca/science/undergraduate/programs/bsc-global.

\subsection*{11.5.4.4.2 Internship Program Designation}

All B.Sc. programs can include an internship component. For more details, students should refer to section 11.11: Science Internships and Field Studies and mcgill.ca/science/undergraduate/internships-field/internships.

\subsection*{11.5.4.5 Bieler School of Environment}

The Faculty of Science is one of the four faculties in partnership with the Bieler School of Environment. For more information, see Bieler School of Environment .

\subsection*{11.5.5 Course Requirements}

All required and complementary courses used to fulfil program requirements, including the basic Science requirements, must be completed with a grade of C or better. Students who fail to obtain a Satisfactory grade in a required course must either pass the supplemental examination in the course or do additional work for a supplemental grade, if these options are available, or repeat the course. Course substitution will be allowed only in special cases; students should consult their academic advisor.

Normally, students are permitted to repeat a failed course only once (failure is considered to be a grade of less than C or the administrative failures of J and KF). If a required course is failed a second time, students must submit an appeal in writing (by email) to their Faculty advisor, to obtain permission from the Associate Dean, Student Affairs, Faculty of Science to take the course a third time. If permission is denied by the Associate Dean and/or by the Committee on Student Standing on appeal, students must withdraw from the program. If the failed course is a complementary course required by the program, students may choose to replace it with another appropriate complementary course. If you choose to substitute another complementary course for a complementary course in which a D was received, credit for the first course will still be given, but as an elective. If you repeat a required course in which a D was received, credit will be given only once.
Full details of the course requirements for all programs offered are given in each unit's section together with the locations of departmental advisory offices, program directors, and telephone numbers should further information be required.

\subsection*{11.5.5.1 Course Overlap}

You will not receive additional credit towards your degree for any course that overlaps in content with a course for which you have already received credit at McGill, CEGEP, at another university, or Advanced Placement exams, Advanced Level results, International Baccalaureate Diploma, or French Baccalaureate. It is your responsibility to consult with a faculty advisor in Arts Academic Advising (OASIS), the Science Office for Undergraduate Student Advising (SOUSA), or the department offering the course as to whether or not credit can be obtained and to be aware of exclusion clauses specified in the course description in this publication. Please refer to the following website for specific information about Advanced Standing credits and McGill course exemptions: mcgill.ca/transfercredit.
Sometimes, the same course is offered by two different departments. Such courses are called "double-prefix" courses. When such courses are offered simultaneously, you should take the course offered by the department in which you are obtaining your degree. For example, in the case of double-prefix courses CHEM XYZ and PHYS XYZ, Chemistry students take CHEM XYZ and the Physics students take PHYS XYZ. If a double-prefix course is offered by different departments in alternate years, you may take whichever course best fits your schedule.

Note for Arts students: Credit for computer courses offered by the School of Computer Science is governed by rules specified in each individual course description.

Note for Science, and Bachelor of Arts and Science students: Credit for statistics courses offered by faculties other than Arts and Science requires the permission of the Associate Dean (Student Affairs), Science, except for students in the B.Sc. Major in Environment, who may take required statistics courses in the Faculty of Agricultural and Environmental Sciences necessary to satisfy their program requirements. Credit for computer courses offered by faculties other than Science requires the permission of the Associate Dean (Student Affairs) Science, and will be granted only under exceptional circumstances.

Credit for statistics courses for Arts, Science, and Bachelor of Arts and Science students will be given with the following stipulations:
- Credit will be given for only one of the following introductory statistics courses: AEMA 310, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, EDPE 375, GEOG 202, MATH 203, MGCR 271, MGCR 273, POTH 204, SOCI 350.
- Students who have already received credit for PSYC 204 will not receive credit for any of the following: AEMA 310, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, EDPE 375, GEOG 202, MATH 203, MGCR 271, MGCR 273, POTH 204, SOCI 350.
- Credit will be given for only one of the following intermediate statistics courses: AEMA 411, ECON 227D1/D2, ECON 257D1/D2, GEOG 351, MATH 204, PSYC 305, SOCI 461, with the exception that you may receive credit for both PSYC 305 and ECON 227D1/D2 or ECON 257D1/D2.
- Students who have already received credit for MATH 324 or MATH 357 will not receive credit for any of the following: AEMA 310, AEMA 411, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, GEOG 202, GEOG 351, MATH 203, MATH 204, MGCR 271, MGCR 273, PSYC 204, PSYC 305, SOCI 350.
- For 500-level statistics courses not listed above, students must consult a program/department advisor to ensure that no significant overlap exists. Where such overlap exists with a course for which the student has already received credit, credit for the 500 -level course will not be allowed.

\subsection*{11.5.5.2 Courses Outside the Faculties of Arts and of Science}

Students in the Faculty of Science should consult the statement of regulations (see below) for taking courses outside the Faculties of Arts and of Science. A list of approved/restricted courses in other faculties can be found in the The Faculty of Science's Undergraduate Handbook (Section 3.2.2 List of approved and restricted courses outside the Faculty of Science). Students may take courses on the approved list and may not, under any circumstances, take courses on the restricted list for credit. Requests for permission to take courses that are not on either list should be submitted in writing (by email) to the Faculty advisor (SOUSA), to be approved by the Associate Dean (Student Affairs), Science.
The regulations are as follows:
- Students may take only 6 credits per year, up to 18 credits in all, of courses outside the Faculties of Arts and of Science.
- Courses offered in the Faculty of Science or in the Faculty of Arts are found in the eCalendar's All Courses search, when filtered by "Faculty of Science" or by "Faculty of Arts".
- Courses in other faculties that are considered as taught by Science (e.g., BIOT, EXMD, and PHAR) are so designated as offered by the Faculty of Science in the eCalendar's All Courses search.
- Courses in Music are considered as outside the Faculties of Arts and of Science, except MUAR courses, which are considered Arts courses.
- All courses listed in the Religious Studies (RELG) section are considered courses in Arts and Science except for courses restricted to B.Th. or S.T.M. students and courses that require permission from the Chair of the B.Th. Committee.
- Students should consult the list of restricted courses outside of the Faculties of Arts and of Science in the Science Undergraduate Handbook (Section 3.2.2 List of approved and restricted courses outside the Faculty of Science).
- Students must have the necessary prerequisites and permission of the instructor for such courses.
- Credit for computer and statistics courses offered by faculties other than Arts and Science require the permission of the Associate Dean (Student Affairs), Science, and will be granted only under exceptional circumstances. Requests must be submitted in writing (by email) to the Faculty (SOUSA) advisor.
- If a students uses Minerva to register for a course that exceeds the specified limitations or is not approved, the course will be flagged for no credit after the course change period.
- Credit will not be given for any "how to" courses offered by other faculties that are intended to provide practical or professional training in specific applied areas. Examples include courses that teach the use of certain computer packages (databases, spreadsheets, etc.) or computer languages (SQL, COBOL, FORTRAN, etc.); machine shop or electronic shop courses; technical drawing courses; and professional practice courses.
- Students in the Bieler School of Environment may exceed the 18 -credit limit for courses outside the Faculties of Arts and of Science, provided that all such courses are necessary to complete their program of study.
- Students in the Major in Software Engineering may exceed the 18 -credit limit for courses outside the Faculties of Arts and of Science, provided that all such courses are necessary to complete their program of study.
- Students in the B.Sc. Liberal Program taking a Major Concentration in Music may exceed the 18-credit limit for courses outside the Faculties of Arts and of Science, provided that all such courses are necessary to complete their program of study, up to a maximum of 36 Music credits.
- The 18 -credit limit applies to students taking the Minor in Nutrition; equivalent courses in Science should be taken instead of courses in the Faculty of Agricultural and Environmental Sciences.

\subsection*{11.5.5.3 Correspondence, Distance Education, or Web-Based Courses}

Science students may obtain transfer credit for correspondence, distance education, or web-based courses if they receive prior approval from the appropriate McGill department for the course content and prior approval from the Science Office of Undergraduate Student Advising for the method of delivery and evaluation. Consult the Science Undergraduate Handbook (Section 4.5 Transfer Credits) for details and instructions.
Courses taught through distance education from institutions other than McGill will only be considered for transfer credits under the following conditions:
- The course is given by a government-accredited, degree-granting institution acceptable to McGill.
- The course counts for credit toward degrees granted at the institution giving the course.
- The combined total of regular course credits and distance education course credits do not exceed the permitted maximum number of credits per term according to Faculty regulations.
- Courses taught through distance education may not be used to complete program requirements, except on an individual basis when serious, documented circumstances warrant it.

\subsection*{11.5.5.4 Courses in English as a Second Language (ESL)}

ESL courses are only open to students whose primary language is not English and who have studied for fewer than five years in English-language secondary institutions. Students in the B.Sc. may take a maximum of 12 credits, including academic writing courses for non-anglophones, from the list of ESL courses in the McGill Writing Centre.

\subsection*{11.5.5.5 First-Year Seminars: Registration}

Registration for First-Year Seminars is limited to students in their first year of study at McGill, i.e., newly admitted students in U0 or U1. These courses are designed to provide a closer interaction with professors and better working relations with peers than is available in large introductory courses. These seminars endeavour to teach the latest scholarly developments and expose participants to advanced research methods. Registration is on a first-come, first-served basis. The maximum number of students in any seminar is 25 , although some are limited to fewer than that.
You may take only one First-Year Seminar. If you register for more than one, you will be obliged to withdraw from all but one of them. Please consult the departmental listings for course descriptions and availability.

\section*{First-Year Seminars}
CHEM 199 FYS: Why Chemistry?
EPSC \(199 \quad\) FYS: Earth \& Planetary Exploration

PSYC 199 FYS: Mind-Body Medicine
PSYT 199 FYS: Mental Illness and the Brain
The First-Year Seminars offered by the Faculty of Arts are also open to Science students. For a complete listing, please consult Faculty of Arts \(>\) Undergraduate > Browse Aca demic Units \& Programs > section 3.9.1: First-Year Seminars.

\subsection*{11.5.5.6 Course Credit Weight}

The credit assigned to a particular course should reflect the amount of effort it demands of a student. One credit equals about 45 hours of work. This may be a combination of lecture, laboratory, tutorial, and conference time plus personal study hours. Personal study hours may include required activities, group activities, time spent doing assignments, and preparing and reviewing for a course.

\subsection*{11.6 Advising}

Students who need 96 or fewer credits to complete their degree requirements must consult an academic advisor in their intended department of study to obtain advice and approval of their course selection. Quebec students with a Diploma of Collegial Studies in Science have normally taken the equivalent of, and are therefore exempt from, the 100-level basic science courses in Biology, Chemistry, Mathematics, and Physics. Such students may also be exempt from some 200-level courses. Students with satisfactory results in International Baccalaureate, French Baccalaureate, Advanced Levels, and Advanced Placement tests may also be exempt from some or all of the Science Freshman/Foundation year courses. Regardless of how many advanced standing credits received, students are responsible for ensuring their Freshman/Foundation Year science program requirements are met. To facilitate program planning, students must contact their Faculty (SOUSA) advisor for course approval before finalizing their first year courses. For a detailed description of advising and registration procedures, refer to University Regulations \& Resources > Undergraduate > section 1.11: Undergraduate Advising and section 1.3: Registration; the McGill website for newly admitted undergraduate students; the SOUSA New Student website; and your department's website.

Students who need 97-120 credits to complete their degree requirements will normally be registered in a Freshman/Foundation Year program until they complete their first year. Students must consult a Faculty advisor in the Science Office for Undergraduate Student Advising (SOUSA) to obtain advice and approval of their course selection. For a detailed description of advising and registration procedures as a Freshman/Foundation Year student, refer to the website for newly admitted undergraduate students, and the SOUSA's New Student website.
Advising for all returning students takes place in March for the upcoming academic year. For more information, refer to the SOUSA website.

\subsection*{11.7 Freshman/Foundation Year Interest Groups}

Freshman (Foundation Year) Interest Groups (FIGs) are groups of approximately 25 U0 students and U1 students in their first semester, in the B.Sc. or B.A. \& Sc., led by a Faculty of Science academic advisor and an upper-year undergraduate student. They meet once every two weeks in the Fall or Winter semester (or weekly for half the semester) to discuss a wide range of topics, such as science in the news, program choices, undergraduate research opportunities, or various aspects of life in Montreal. The purpose of a FIG is to ease the transition to McGill and Montreal and to provide an opportunity to interact with an advisor and with other U0 students in a small group. FIGs carry no credit and there is no charge. For more information and on how to register: Bachelor of Science students, refer to the Accepted Student website B.Sc. Freshman/Foundation Year course selection section on FIGs; Bachelor or Arts \& Science students, refer to the Accepted Student website B.A. \& Sc. Freshman/Foundation Year course selection section on FIGs.

\subsection*{11.8 Examinations}

Students should refer to University Regulations and Resources > Undergraduate > section 1.6: Examinations: General Information for information about final examinations and deferred examinations. Note that for the Faculty of Science, University Regulations and Resources > Undergraduate > Examinations: General Information > Final Examinations > section 1.6.3.1: Final Examinations: University Regulations Concerning Final Examinations applies to courses up to and including the 500 level.
The exam schedules are posted on the McGill website at mcgill.ca/exams, normally one month after the start of classes for the Tentative Exam schedule, and two months after the start of classes for the Final Exam schedule.
Students are warned not to make travel arrangements to leave Montreal prior to the scheduled end of any examination period.

\subsection*{11.9 Overview of Programs Offered}
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Programs Offered programs, honours programs, and joint honours programs
section 11.9.2: Minor Programs
section 11.9.3: Bachelor of Arts and Science
section 11.9.4: Internships, Field Studies, and Global Designation
section 11.9.5: Arts Major and Minor Concentrations Open to Science Students

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section 11.9.1: Bachelor of Science Program Groups, which may include liberal program - Core Science Components, major programs, joint major

\subsection*{11.9.1 Bachelor of Science Program Groups}

Science students admitted after September 2009 are limited to choosing liberal, majors, or honours programs within the Science group to which they were admitted, but may continue to choose freely from all available minor programs. Students pursuing a Liberal Science Program - Core Science Component (CSC) may also select a second CSC from any group. See section 11.5.4.1: Liberal, Major, and Honours Programs.
The groups within the B.Sc. are:
- section 11.9.1.1: Biological, Biomedical \& Life Sciences Group
- section 11.9.1.2: Bio-Physical-Computational Sciences Group
- section 11.9.1.3: Neuroscience Group
- section 11.9.1.4: Physical, Earth, Math \& Computer Science Group

A list of specific programs in each group is available via the above links. To change to a major or honours program in another Science group, students must make an Intra-Faculty Transfer application. For additional information on the degree transfer process, please refer to this link: mcgill.ca/science/undergraduate/academic-advising/inter-faculty-and-intra-faculty-transfers.

\subsection*{11.9.1.1 Biological, Biomedical \& Life Sciences Group 11.9.1.1.1 Liberal Program - Core Science Components}
- Anatomy and Cell Biology: section 11.12.2.3: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Anatomy and Cell Biology (48 credits)
- Biochemistry: section 11.12.4.3: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Biochemistry (47 credits)
- Biology: section 11.12.5.6: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Biology (47 credits)
- Microbiology and Immunology: section 11.12.23.3: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Microbiology and Immunology (50 credits)
- Physiology: section 11.12.31.3: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Physiology (50 credits)
- Psychology: section 11.12.33.6: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Psychology (45 credits)

\subsection*{11.9.1.1.2 Major Programs}
- Anatomy and Cell Biology: section 11.12.2.4: Bachelor of Science (B.Sc.) - Major Anatomy and Cell Biology (67 credits)
- Biochemistry: section 11.12.4.4: Bachelor of Science (B.Sc.) - Major Biochemistry ( 64 credits)
- Biology: section 11.12.5.7: Bachelor of Science (B.Sc.) - Major Biology (59 credits)
- Biology - Quantitative Biology: section 11.12.5.8: Bachelor of Science (B.Sc.) - Major Biology - Quantitative Biology (73 credits)
- Microbiology and Immunology: section 11.12.23.4: Bachelor of Science (B.Sc.) - Major Microbiology and Immunology ( 66 credits)
- Pharmacology: section 11.12.29.4: Bachelor of Science (B.Sc.) - Major Pharmacology (67 credits)
- Physiology: section 11.12.31.4: Bachelor of Science (B.Sc.) - Major Physiology ( 66 credits)
- Psychology: section 11.12.33.7: Bachelor of Science (B.Sc.) - Major Psychology (54 credits)

\subsection*{11.9.1.1.3 Honours Programs}
- Anatomy and Cell Biology: section 11.12.2.5: Bachelor of Science (B.Sc.) - Honours Anatomy and Cell Biology (73 credits)
- Biochemistry: section 11.12.4.5: Bachelor of Science (B.Sc.) - Honours Biochemistry ( 73 credits)
- Biology: section 11.12.5.10: Bachelor of Science (B.Sc.) - Honours Biology (72 credits)
- Biology - Quantitative Biology: section 11.12.5.11: Bachelor of Science (B.Sc.) - Honours Biology - Quantitative Biology (79 credits)
- Immunology (Interdepartmental): section 11.12.18.3: Bachelor of Science (B.Sc.) - Honours Immunology (Interdepartmental) (75 credits)
- Microbiology and Immunology: section 11.12.23.5: Bachelor of Science (B.Sc.) - Honours Microbiology and Immunology (72 credits)
- Pharmacology - application required, see departmental section for information: section 11.12.29.5: Bachelor of Science (B.Sc.) - Honours Pharmacology (76 credits)
- Physiology: section 11.12.31.7: Bachelor of Science (B.Sc.) - Honours Physiology ( 75 credits)
- Psychology: section 11.12.33.8: Bachelor of Science (B.Sc.) - Honours Psychology ( 60 credits)

\subsection*{11.9.1.2 Bio-Physical-Computational Sciences Group 11.9.1.2.1 Major Programs}
- Biology and Mathematics: section 11.12.5.9: Bachelor of Science (B.Sc.) - Major Biology and Mathematics (76 credits)
- Computer Science and Biology: section 11.12.9.11: Bachelor of Science (B.Sc.) - Major Computer Science and Biology (74 credits)
- Physiology and Mathematics: section 11.12.31.5: Bachelor of Science (B.Sc.) - Major Physiology and Mathematics (79 credits)
- Physiology and Physics: section 11.12.31.6: Bachelor of Science (B.Sc.) - Major Physiology and Physics (82 credits)

\subsection*{11.9.1.2.2 Honours Program}
- Computer Science and Biology: section 11.12.9.15: Bachelor of Science (B.Sc.) - Honours Computer Science and Biology (77 credits)

\subsection*{11.9.1.3 Neuroscience Group 11.9.1.3.1 Major Program}
- Neuroscience - application required, see section 11.12.26: Neuroscience for information, and section 11.12.26.4: Bachelor of Science (B.Sc.) - Major Neuroscience ( 65 credits)

\subsection*{11.9.1.3.2 Honours Program}
- Neuroscience - application required, see section 11.12.26: Neuroscience for information, and section 11.12.26.5: Bachelor of Science (B.Sc.) - Honours Neuroscience (74 credits)

\subsection*{11.9.1.4 Physical, Earth, Math \& Computer Science Group 11.9.1.4.1 Liberal Program - Core Science Components}
- Atmospheric Science: section 11.12.3.4: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Atmospheric and Oceanic Sciences (48 credits)
- Chemistry - General option: section 11.12.7.6: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Chemistry - General (49 credits)
- Computer Science: section 11.12.9.7: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Computer Science (45 credits)
- Earth and Planetary Sciences: section 11.12.10.6: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Earth and Planetary Sciences (45 credits)
- Geography: section 11.12.17.6: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Geography (49 credits)
- Mathematics: section 11.12.22.8: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Mathematics (45 credits)
- Physics: section 11.12.30.7: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Physics (45 credits)
- Software Engineering: section 11.12.9.8: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Software Engineering (49 credits)
- Statistics: section 11.12.22.9: Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Statistics (48 credits)

\subsection*{11.9.1.4.2 Major Programs}
- Atmospheric Science: section 11.12.3.5: Bachelor of Science (B.Sc.) - Major Atmospheric Science (62 credits)
- Chemistry: section 11.12.7.7: Bachelor of Science (B.Sc.) - Major Chemistry (59 credits)
- Chemistry - Bio-organic option: section 11.12.7.8: Bachelor of Science (B.Sc.) - Major Chemistry - Bio-organic (63 credits)
- Chemistry - Biophysical option: section 11.12.7.9: Bachelor of Science (B.Sc.) - Major Chemistry: Biophysical Chemistry ( 66 credits)
- Computer Science: section 11.12.9.9: Bachelor of Science (B.Sc.) - Major Computer Science ( 63 credits)
- Computer Science - Computer Games option: section 11.12.9.12: Bachelor of Science (B.Sc.) - Major Computer Science - Computer Games (65 credits)
- Earth System Science: section 11.12.11.4: Bachelor of Science (B.Sc.) - Major Earth System Science (57 credits)
- Environment - Atmospheric Environment and Air Quality domain: : Bachelor of Science (B.Sc.) - Major Environment - Atmospheric Environment and Air Quality ( 60 credits)
- Environment - Biodiversity and Conservation domain: section 7.5.4.1.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Biodiversity and Conservation ( 63 credits)
- Environment - Earth Sciences and Economics domain: : Bachelor of Science (B.Sc.) - Major Environment - Earth Sciences and Economics (66 credits)
- Environment - Ecological Determinants of Health domain - Cellular: section 7.5.4.2.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Ecological Determinants of Health - Cellular (63 credits)
- Environment - Ecological Determinants of Health domain - Population: section 7.5.4.2.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Ecological Determinants of Health- Population (63 credits)
- Environment - Environmetrics domain: section 7.5.4.3.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Environmetrics ( 63 credits)
- Environment - Food Production and Environment domain: section 7.5.4.4.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Food Production and Environment (63 credits)
- Environment - Land Surface Processes and Environmental Change domain: section 7.5.4.5.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment-Land Surface Processes and Environmental Change (63 credits)
- Environment - Renewable Resource Management domain: section 7.5.4.6.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Renewable Resource Management (63 credits)
- Environment - Water Environments and Ecosystems domain - Biological: section 7.5.4.7.1: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Water Environments \& Ecosystems - Biological (60 credits)
- Environment - Water Environments and Ecosystems domain - Physical: section 7.5.4.7.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Water Environments and Ecosystems - Physical (63 credits)
- Geography: section 11.12.17.7: Bachelor of Science (B.Sc.) - Major Geography (58 credits)
- Geology: section 11.12.10.7: Bachelor of Science (B.Sc.) - Major Geology (66 credits)
- Mathematics: section 11.12.22.10: Bachelor of Science (B.Sc.) - Major Mathematics (54 credits)
- Physics - Biological option: section 11.12.30.9: Bachelor of Science (B.Sc.) - Major Physics: Biological Physics (82 credits)
- Physics: section 11.12.30.8: Bachelor of Science (B.Sc.) - Major Physics ( 63 credits)
- Software Engineering: section 11.12.9.13: Bachelor of Science (B.Sc.) - Major Software Engineering (63 credits)
- Statistics: section 11.12.22.11: Bachelor of Science (B.Sc.) - Major Statistics (54 credits)

\subsection*{11.9.1.4.3 Joint Major Programs}
- Atmospheric Science and Physics: section 11.12.3.6: Bachelor of Science (B.Sc.) - Major Atmospheric Science and Physics (67 credits)
- Mathematics and Computer Science - see Mathematics and Statistics: section 11.12.22.12: Bachelor of Science (B.Sc.) - Major Mathematics and Computer Science (72 credits)
- Physics and Computer Science - see Physics: section 11.12.30.11: Bachelor of Science (B.Sc.) - Major Physics and Computer Science (66 credits)
- Physics and Geophysics: section 11.12.30.10: Bachelor of Science (B.Sc.) - Major Physics and Geophysics (69 credits)
- Statistics and Computer Science: section 11.12.22.13: Bachelor of Science (B.Sc.) - Major Statistics and Computer Science (72 credits)

\subsection*{11.9.1.4.4 Honours Programs}
- Applied Mathematics: section 11.12.22.14: Bachelor of Science (B.Sc.) - Honours Applied Mathematics ( 63 credits)
- Atmospheric Science: section 11.12.3.7: Bachelor of Science (B.Sc.) - Honours Atmospheric Science (75 credits)
- Chemistry: section 11.12.7.10: Bachelor of Science (B.Sc.) - Honours Chemistry ( 71 credits)
- Chemistry - Bio-organic option: section 11.12.7.11: Bachelor of Science (B.Sc.) - Honours Chemistry - Bio-organic (75 credits)
- Computer Science: section 11.12.9.14: Bachelor of Science (B.Sc.) - Honours Computer Science ( 75 credits)
- Earth System Science: section 11.12.11.5: Bachelor of Science (B.Sc.) - Honours Earth System Science (66 credits)
- Environment: section 7.5.5.2: Bachelor of Science (B.Sc.) - Honours Environment (72 credits)
- Geography: section 11.12.17.8: Bachelor of Science (B.Sc.) - Honours Geography ( 66 credits)
- Geology: section 11.12.10.8: Bachelor of Science (B.Sc.) - Honours Geology (75 credits)
- Mathematics: section 11.12.22.15: Bachelor of Science (B.Sc.) - Honours Mathematics ( 63 credits)
- Physics: section 11.12.30.12: Bachelor of Science (B.Sc.) - Honours Physics (81 credits)
- Planetary Sciences: section 11.12.10.9: Bachelor of Science (B.Sc.) - Honours Planetary Sciences (78 credits)
- Software Engineering: section 11.12.9.16: Bachelor of Science (B.Sc.) - Honours Software Engineering (75 credits)
- Statistics: section 11.12.22.16: Bachelor of Science (B.Sc.) - Honours Statistics (63 credits)

\subsection*{11.9.1.4.5 Joint Honours Programs}
- Mathematics and Computer Science: section 11.12.22.18: Bachelor of Science (B.Sc.) - Honours Mathematics and Computer Science ( 78 credits)
- Mathematics and Physics: section 11.12.30.14: Bachelor of Science (B.Sc.) - Honours Mathematics and Physics (81 credits)
- Physics and Chemistry: section 11.12.30.15: Bachelor of Science (B.Sc.) - Honours Physics and Chemistry (80 credits)
- Physics and Computer Science: section 11.12.30.16: Bachelor of Science (B.Sc.) - Honours Physics and Computer Science (81 credits)
- Statistics and Computer Science: section 11.12.22.17: Bachelor of Science (B.Sc.) - Honours Statistics and Computer Science (79 credits)

\subsection*{11.9.2 Minor Programs}

\section*{Minor Programs}

Atmospheric Science: section 11.12.3.3: Bachelor of Science (B.Sc.) - Minor Atmospheric Science (18 credits)
Biology: section 11.12.5.5: Bachelor of Science (B.Sc.) - Minor Biology (25 credits)
Biotechnology: section 11.12.6.5: Bachelor of Science (B.Sc.) - Minor Biotechnology (for Science Students) (24 credits)
Chemical Engineering: section 11.12.7.5: Bachelor of Science (B.Sc.) - Minor Chemical Engineering (24 credits)
Chemistry: section 11.12.7.4: Bachelor of Science (B.Sc.) - Minor Chemistry (20 credits)

\section*{Minor Programs}

Cognitive Science: section 11.12.8.2: Bachelor of Science (B.Sc.) - Minor Cognitive Science (24 credits)
Computer Science: section 11.12.9.6: Bachelor of Science (B.Sc.) - Minor Computer Science (24 credits)
Earth System Science: section 11.12.11.3: Bachelor of Science - Minor Earth System Science (18 credits)
Education for Science Students: section 11.12.35.3: Bachelor of Science (B.Sc.) - Minor Education for Science Students (18 credits)
Electrical Engineering: section 11.12.30.6: Bachelor of Science (B.Sc.) - Minor Electrical Engineering (24 credits)
Entrepreneurship for Science Students: section 11.12.12.2: Bachelor of Science (B.Sc.) - Minor Entrepreneurship for Science Students (18 credits)
Environment: section 7.5.1.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Minor Environment ( 18 credits)

Field Study: section 11.12.15.1: Field Studies - Minor Field Studies (18 credits)
General Science: section 11.12.16.3: Bachelor of Science (B.Sc.) - Minor General Science (18 credits)
Geochemistry: section 11.12.10.5: Bachelor of Science (B.Sc.) - Minor Geochemistry (18 credits)
Geography: section 11.12.17.4: Bachelor of Science (B.Sc.) - Minor Geography (18 credits)
Geographic Information Systems and Remote Sensing: section 4.11.17.6: Bachelor of Science (B.Sc.) - Minor GIS \& Remote Sensing (18 credits)
Geology: section 11.12.10.4: Bachelor of Science (B.Sc.) - Minor Geology (18 credits) (previously named Earth and Planetary Sciences)
Human Nutrition - see Faculty of Agricultural \& Environmental Sciences > Undergraduate \(>\) Browse Academic Programs \(>\) Minor Programs \(>\) section 2.5.6.10: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Human Nutrition (24 credits)

Interdisciplinary Life Sciences: section 11.12.19.3: Bachelor of Science (B.Sc.) - Minor Interdisciplinary Life Sciences (24 credits)
Kinesiology: section 11.12.20.3: Bachelor of Science (B.Sc.) - Minor Kinesiology (24 credits)
Management for Non-Management Students: section 11.12.21.1: Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) (18 credits)

Mathematics: section 11.12.22.6: Bachelor of Science (B.Sc.) - Minor Mathematics (24 credits)
Musical Applications of Technology - see Schulich School of Music > Undergraduate > Browse Academic Units \& Programs > Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program > section 10.6.1.12: Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology ( 18 credits)

Musical Science and Technology - see Schulich School of Music > Undergraduate > Browse Academic Units \& Programs > Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program > section 10.6.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits)

Natural History: section 11.12.34.3: Bachelor of Science (B.Sc.) - Minor Natural History (24 credits)
Neuroscience: section 11.12.26.3: Bachelor of Science (B.Sc.) - Minor Neuroscience (25 credits)
Pharmacology: section 11.12.29.3: Bachelor of Science (B.Sc.) - Minor Pharmacology (24 credits)
Physics: section 11.12.30.5: Bachelor of Science (B.Sc.) - Minor Physics (18 credits)
Psychology: section 11.12.33.5: Bachelor of Science (B.Sc.) - Minor Psychology ( 24 credits)
Statistics: section 11.12.22.7: Bachelor of Science (B.Sc.) - Minor Statistics (27 credits)

\section*{Notes:}
1. The Minor in Chemical Engineering is only available to students in Chemistry.
2. The Minor in Electrical Engineering is only available to students in the Major program in Physics.
3. The Minor in General Science is only available to students in B.Sc. Liberal programs.

\subsection*{11.9.3 Bachelor of Arts and Science}

Please see Bachelor of Arts and Science for details.

\subsection*{11.9.4 Internships, Field Studies, and Global Designation}

For opportunities to enhance your degree with hands-on experience, visit section 11.11: Science Internships and Field Studies.

\subsection*{11.9.5 Arts Major and Minor Concentrations Open to Science Students}

For more information, please see the relevant departmental entries in Faculty of Arts > Undergraduate.

\subsection*{11.9.5.1 Major Concentrations}

\section*{Major Concentrations}

African Studies: section 3.9.21.1.3: Bachelor of Arts (B.A.) - Major Concentration African Studies (36 credits)
Anthropology: section 3.9.4.6: Bachelor of Arts (B.A.) - Major Concentration Anthropology (36 credits)
Art History: section 3.9.5.6: Bachelor of Arts (B.A.) - Major Concentration Art History (36 credits)
Classics: section 3.9.17.8: Bachelor of Arts (B.A.) - Major Concentration Classics (36 credits)
East Asian Studies: section 3.9.8.6: Bachelor of Arts (B.A.) - Major Concentration East Asian Studies (36 credits)
Economics: section 3.9.9.4: Bachelor of Arts (B.A.) - Major Concentration Economics ( 36 credits)
English - Cultural Studies: section 3.9.12.9: Bachelor of Arts (B.A.) - Major Concentration English - Cultural Studies (36 credits)
English - Drama and Theatre: section 3.9.12.8: Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre (36 credits)
English - Literature: section 3.9.12.7: Bachelor of Arts (B.A.) - Major Concentration English - Literature (36 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies: section 3.9.15.4: Bachelor of Arts (B.A.) - Major Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (36 credits)

Geography (Urban Studies): section 4.11.17.9: Bachelor of Arts (B.A.) - Major Concentration Geography (Urban Studies) (36 credits)
German Studies: section 3.9.23.13: Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)
Hispanic Languages: section 3.9.23.17: Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)
History: section 3.9.17.4: Bachelor of Arts (B.A.) - Major Concentration History (36 credits)
International Development Studies: section 3.9.20.5: Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)
Italian Studies: section 3.9.23.21: Bachelor of Arts (B.A.) - Major Concentration Italian Studies (36 credits)
Jewish Studies: section 3.9.22.4: Bachelor of Arts (B.A.) - Major Concentration Jewish Studies (36 credits)
Langue et littérature françaises - Études et pratiques littéraires: section 3.9.25.8: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)

Langue et littérature françaises - Traduction: section 3.9.25.9: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises
- Traduction (36 crédits)

Latin American \& Caribbean Studies: section 3.9.23.29.5: Bachelor of Arts (B.A.) - Major Concentration Latin American \& Caribbean Studies (36 credits)

Linguistics: section 3.9.24.5: Bachelor of Arts (B.A.) - Major Concentration Linguistics (36 credits)
Music (available to students in B.Sc. Liberal only): section 3.9.29.6: Bachelor of Arts (B.A.) - Major Concentration Music (36 credits)
Philosophy: section 3.9.30.4: Bachelor of Arts (B.A.) - Major Concentration Philosophy (36 credits)
Political Science: section 3.9.31.6: Bachelor of Arts (B.A.) - Major Concentration Political Science (36 credits)
Religious Studies: section 3.9.33.10: Bachelor of Arts (B.A.) - Major Concentration Religious Studies (36 credits)
Russian: section 3.9.23.26: Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)
Sociology: section 3.9.38.5: Bachelor of Arts (B.A.) - Major Concentration Sociology (36 credits)
World Islamic and Middle East Studies: section 3.9.21.2.8: Bachelor of Arts (B.A.) - Major Concentration World Islamic \& Middle East Studies (36 credits)

\subsection*{11.9.5.2 Minor Concentrations}

\section*{Minor Concentrations}

African Studies: section 3.9.21.1.2: Bachelor of Arts (B.A.) - Minor Concentration African Studies (18 credits)
Anthropology: section 3.9.4.5: Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)
Arabic Language: section 3.9.21.2.3: Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits)

\section*{Minor Concentrations}

Art History: section 3.9.5.4: Bachelor of Arts (B.A.) - Minor Concentration Art History (18 credits)
Canadian Studies: section 3.9.19.6: Bachelor of Arts (B.A.) - Minor Concentration Canadian Studies (18 credits)
Classics: section 3.9.17.7: Bachelor of Arts (B.A.) - Minor Concentration Classics (18 credits)
Communication Studies - see Art History and Communication Studies: section 3.9.5.5: Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)

East Asian Language and Literature: section 3.9.8.3: Bachelor of Arts (B.A.) - Minor Concentration East Asian Language and Literature (18 credits)
East Asian Cultural Studies: section 3.9.8.4: Bachelor of Arts (B.A.) - Minor Concentration East Asian Cultural Studies (18 credits)
East Asian Language, Supplementary: section 3.9.8.5: Bachelor of Arts (B.A.) - Supplementary Minor Concentration East Asian Language (18 credits)
Economics: section 3.9.9.3: Bachelor of Arts (B.A.) - Minor Concentration Economics ( 18 credits)
English - Cultural Studies: section 3.9.12.6: Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)
English - Drama and Theatre: section 3.9.12.5: Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)
English - Literature: section 3.9.12.4: Bachelor of Arts (B.A.) - Minor Concentration English - Literature (18 credits)
Gender, Sexuality, Feminist, \& Social Justice Studies: section 3.9.15.3: Bachelor of Arts (B.A.) - Minor Concentration Gender, Sexuality, Feminist, \& Social Justice Studies (18 credits)

Geography: section 3.9.16.4: Bachelor of Arts (B.A.) - Minor Concentration Geography ( 18 credits)
Geography (Urban Studies): section 3.9.16.5: Bachelor of Arts (B.A.) - Minor Concentration Geography (Urban Studies) (18 credits)
German Language: section 3.9.23.11: Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits)
German Studies: section 3.9.23.12: Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)
Health Geography: section 3.9.16.7: Bachelor of Arts (B.A.) - Minor Concentration Health Geography (18 credits)
Hispanic Studies: section 3.9.23.16: Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)
History: section 3.9.17.3: Bachelor of Arts (B.A.) - Minor Concentration History ( 18 credits)
History and Philosophy of Science: section 3.9.30.7.2: Bachelor of Arts (B.A.) - Minor Concentration History and Philosophy of Science (18 credits)
International Development Studies: section 3.9.20.4: Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)
Italian Studies: section 3.9.23.20: Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits)
Jewish Studies: section 3.9.22.3: Bachelor of Arts (B.A.) - Minor Concentration Jewish Studies (18 credits)
Langue et littérature françaises - Études et pratiques littéraires: section 3.9.25.5: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et littérature françaises - Études et pratiques littéraires (18 crédits)

Langue et littérature françaises - Langue française: section 3.9.25.4: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue \& littérature françaises - Langue française ( 18 crédits)

Langue et littérature françaises - Traduction: section 3.9.25.6: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et litt. françaises Traduction (18 crédits)
Latin American \& Caribbean Studies: section 3.9.23.29.4: Bachelor of Arts (B.A.) - Minor Concentration Latin American \& Caribbean Studies (18 credits)

Linguistics: section 3.9.24.4: Bachelor of Arts (B.A.) - Minor Concentration Linguistics (18 credits)
Music: section 3.9.29.5: Bachelor of Arts (B.A.) - Minor Concentration Music (18 credits)
Persian Language: section 3.9.21.2.4: Bachelor of Arts (B.A.) - Minor Concentration Persian Language (18 credits)
Philosophy: section 3.9.30.3: Bachelor of Arts (B.A.) - Minor Concentration Philosophy ( 18 credits)
Political Science: section 3.9.31.5: Bachelor of Arts (B.A.) - Minor Concentration Political Science (18 credits)
Québec Studies: section 4.11.19.3: Bachelor of Arts (B.A.) - Minor Concentration Quebec Studies \& Community-Engaged Learning/ La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire (18 credits)

Russian: section 3.9.23.24: Bachelor of Arts (B.A.) - Minor Concentration Russian (18 credits)
Russian Culture: section 3.9.23.25: Bachelor of Arts (B.A.) - Minor Concentration Russian Culture (18 credits)
Social Studies of Medicine: section 3.9.36.3: Bachelor of Arts (B.A.) - Minor Concentration Social Studies of Medicine (18 credits)
Sociology: section 3.9.38.4: Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)

\section*{Minor Concentrations}

South Asian Studies: section 3.9.17.11: Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)
Turkish Language: section 3.9.21.2.5: Bachelor of Arts (B.A.) - Minor Concentration Turkish Language (18 credits)
Urdu Language: section 3.9.21.2.6: Bachelor of Arts (B.A.) - Minor Concentration Urdu Language (18 credits)
World Cinemas: section 3.9.12.18.2: Bachelor of Arts (B.A.) - Minor Concentration World Cinemas (18 credits)
World Islamic \& Middle East Studies: section 3.9.21.2.7: Bachelor of Arts (B.A.) - Minor Concentration World Islamic \& Middle East Studies (18 credits)

\subsection*{11.10 Undergraduate Research Opportunities}

McGill is a research-intensive university and research is therefore a cornerstone of undergraduate science education. Most Bachelor of Science students take part in research during their undergraduate studies, and there are many undergraduate research opportunities at McGill, in affiliated hospitals, at other universities, and in the field. Many of these are organized through formal courses or programs organized by the Faculty of Science or its departments. For more information, see the following:
- section 11.10.1: Research Project Courses
- section 11.10.1.1: "396" Undergraduate Research Project Courses
- section 11.10.2: Undergraduate Student Research Awards - such as the Tri-Agency USRA and SURA programs
- section 11.10.3: Undergraduate Poster Showcase
- section 11.10.4: Getting Involved in Research as an Undergraduate
- Dean's Multidisciplinary Undergraduate Research List - see description in University Regulations and Resources \(>\) Undergraduate \(>\) Graduation \(>\) Graduation Honours > section 1.9.3.3: Faculty of Science Dean's Multidisciplinary Undergraduate Research List.

Because internships and field study programs may include a research component, please also refer to: section 11.11: Science Internships and Field Studies.

\subsection*{11.10.1 Research Project Courses}

Departments offer a variety of research-based courses that allow you to perform research under the supervision of a McGill researcher for academic credit. Depending on the unit, courses featuring undergraduate research may bear names such as: majors project, honours project, advanced lab, independent research, technical project, independent study, or research project and seminar. For more information, refer to the research course list at mcgill.ca/science/research/undergraduate-research/researchcourses or browse the course listings at mcgill.ca/study/courses/search. Research courses can also help you qualify for the Dean's Multidisciplinary Undergraduate Research List or the B.Sc. Global Designation.

\subsection*{11.10.1.1 "396" Undergraduate Research Project Courses}
" 396 " undergraduate research project courses are offered by all undergraduate science departments and schools: ANAT 396, ATOC 396, BIOC 396, BIOL 396, etc. Some other programs and departments also offer 396 courses: COGS 396 (Cognitive Science), ENVR 396 (Environment), FSCI 396, FSCI 397, FSCI 398 D1/D2 (Science Teaching and Learning), HGEN 396 (Human Genetics), MDPH 396 (Medical Physics), NSCI 396 (Neuroscience), and PATH 396 (Pathology). There is also a BASC 396 course specifically for B.A. \& Sc. students.

They are elective courses, which can be taken outside your own department, and generally can be taken after one term of undergraduate studies.
Please find more information, including the 396 research project approval form, at mcgill.ca/science/research/undergraduate-research/science-research-courses. Registration requires approval from both the supervisor and the relevant department. Information on the FSCI courses can be found here: mcgill.ca/ose/fsci-396.

\subsection*{11.10.2 Undergraduate Student Research Awards}

The following award programs fund undergraduate student research projects at McGill (and sometimes off-campus), usually in the summer.
Please also consult mcgill.ca/science/research/undergraduate-research for any new programs that may have been added.

\subsection*{11.10.2.1 Tri-Agency Undergraduate Student Research Awards: NSERC USRA, SSHRC USRA, CIHR USRA}

The Undergraduate Student Research Awards (USRA) program is meant to nurture your interest and potential for a research career, and to encourage you to undertake graduate studies. It is an opportunity to gain research experience in an academic setting, while receiving financial support. Recipients engage in a research and development activity, under the supervision of a professor. The Undergraduate Student Research Awards (USRA) program is funded jointly by Canada's three national research granting agencies: the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes of Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC). This program is also offered at other universities across Canada. To apply, you must be a Canadian citizen, a permanent resident of Canada, or a protected person.

Please refer to mcgill.ca/science/research/undergraduate-research/nserc for more information.

\subsection*{11.10.2.2 SURA: Science Undergraduate Research Awards}

Science Undergraduate Research Awards (SURAs) are for both Canadian and international McGill students registered in a science undergraduate program. SURA recipients will engage in full-time research and development activity under the supervision of a McGill professor and will gain research experience in an exciting academic setting, while receiving financial support. First offered in summer 2007, SURAs are made possible by funding from generous donors, participating research supervisors, and the Faculty of Science. SURAs are similar to the USRA program; however, international McGill students may also apply.

Please refer to mcgill.ca/science/research/undergraduate-research/sura for more information.

\subsection*{11.10.3 Undergraduate Poster Showcase}

Each year, the Faculty of Science hosts the Undergraduate Poster Showcase to celebrate the work of undergraduate students. This initiative, sponsored by the Office of Science Education, is an opportunity for students to develop academic skills and present research, projects, and assignments completed inside or outside of class.
All McGill community members, and friends and family are welcome to attend.
For more details, please refer to mcgill.ca/ose/undergraduate-poster-showcase.

\subsection*{11.10.4 Getting Involved in Research as an Undergraduate}

\section*{Opportunities at McGill}

Departments and individual researchers at McGill offer various opportunities for undergraduate students to get involved in research. These arrangements may be voluntary or remunerated by academic credit or income.

Some are formal programs that you can find more information about in the eCalendar at Faculty of Science \(>\) Undergraduate \(>\) Undergraduate Research Opportunities:
- section 11.10.1: Research Project Courses
- section 11.10.1.1: "396" Undergraduate Research Project Courses
- section 11.10.2: Undergraduate Student Research Awards

Others come about through informal discussions between students and professors.
For more information on finding research opportunities at McGill, including tips for contacting researchers, visit mcgill.ca/science/research/undergraduate-research/finding-opportunities.

\section*{Internships and Field Studies}

Some science internships and field study programs include a research component. Refer to section 11.11: Science Internships and Field Studies for more information.

\section*{Beyond McGill}

You may also want to look for opportunities funded or offered by external foundations or institutions, research agencies, other academic institutions, or scholarly societies. Examples include: a provincial cancer research society, the science funding agency of another country which you wish to visit or where you hold citizenship, research hospitals or universities in another city, or an international psychological association.

\subsection*{11.11 Science Internships and Field Studies}

The Science Internships \& Field Studies Office promotes field studies and internship opportunities to interested students seeking hands-on experience. The office coordinates the field study semesters offered through the Faculty of Science and provides information on internship opportunities to students who are in Science programs at McGill. Whether you decide to participate in a field study semester or apply classroom theory to practice, the Science Internships \& Field Studies Office will offer you assistance in your decision.
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Burnside Hall, Room }72
805 Sherbrooke Street West
Montreal QC H3A 0B9
Telephone: 514-398-1063; 514-398-8365
Email: ifso.science@mcgill.ca
Website:mcgill.ca/science/undergraduate

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\subsection*{11.11.1 Internship Program: Industrial Practicum (IP) and Internship Year in Science (IYS)}

The Internship Program is open to all Science undergraduate students, as well as qualified students in undergraduate Arts or Arts \& Science programs majoring in Environment, Computer Science, Software Engineering, Geography, Mathematics, and Psychology. Participating in an internship offers you the
chance to add a practical element to your studies, solidify your career goals, gain some valuable experience, and earn money. Internships may have a basis in research.

To be eligible to apply:
- You must be registered as a full time student before and after the IP or the IYS is completed.
- You must have completed at least 27 credits and have at least 12 credits remaining in your degree program.
- Your CGPA must be 2.7 or higher.
- International McGill students are eligible to apply to summer IP and IYS positions (unless otherwise indicated on the job posting). Restrictions apply; interested students should visit the Internships \& Field Studies Office's website at mcgill.ca/science/undergraduate/internships-field for details.

The program features the Industrial Practicum (4 months) and the Internship Year in Science ( \(8,12,16\) months).

\section*{Internship Program Designation}

The Internship Program will also give you the opportunity to enhance your degree: if you are a student in the Faculty of Science and you complete two Industrial Practica (IP) or participate in an Internship Year in Science (IYS), the name of your program will change to include the Internship Program designation (e.g., Bachelor of Science - Computer Science - Internship Program).

For more information on IP and IYS, please see mcgill.ca/science/undergraduate/internships-field/internships.

\subsection*{11.11.2 Field Study Semester Programs}

McGill's Field Study Semester programs (in Africa, Arctic, Barbados, and Panama) are research-based, as are many shorter field courses offered by the Departments of Biology, Earth \& Planetary Sciences, and Geography. See mcgill.ca/science/undergraduate/internships-field/field for more information about these programs.

\subsection*{11.11.3 B.Sc. Global Designation}

The above internship and study abroad opportunities form part of a special B.Sc. Global Designation awarded to eligible students at graduation; visit mcgill.ca/science/undergraduate/programs/bsc-global for more information.

\subsection*{11.12 Browse Academic Units and Programs}

\section*{What is a Major Program?}

A major is a versatile, comprehensive primary area of study. Most major programs require about two-thirds of a student's total credits. With the remaining credits, students can choose electives, or they may want to use those additional credits to take a minor, which can be chosen from a wide variety of areas both within and outside Science.

\section*{What is an Honours Program?}

Honours programs typically involve an even higher degree of specialization than majors, include supervised research, and require students to maintain a high academic standard. An honours program provides solid preparation for graduate school. With an honours program, students will have fewer elective credits.

\section*{What is a B.Sc. Liberal Program?}

This is a flexible and modular program. Students combine a core science component (CSC) in a Science discipline with a breadth component, which may be a minor from a wide variety of areas, a major concentration from the Faculty of Arts, or a second CSC from any group in Science. The Liberal program should be considered by students who do not want to overly specialize and still want room left over for elective courses.

\section*{What about Joint Programs?}

The Faculty of Science also has quite a few joint programs. These programs combine two different disciplines, which allow students to gain expertise in two fields.

\section*{What about Interdisciplinary Programs?}

There are many ways to create interdisciplinary programs in the Faculty of Science. Students can add a minor to a major or honours program, they can take a liberal program that contains both a core science component and a breadth component, or they can select an explicit interdisciplinary major. The Faculty of Science offers three such interdisciplinary programs: Earth System Science, Environment, and Neuroscience.

\subsection*{11.12.1 B.Sc. Freshman/Foundation Year Program}

Students who need 97-120 credits (four years) to complete their degree requirements must register in the Science Freshman/Foundation Year program, which is designed to provide the basic science foundation for their subsequent three-year liberal, major, or honours program. For a detailed description of the Science Freshman/Foundation Year program, consult section 11.12.1.1: Bachelor of Science (B.Sc.) - Freshman/Foundation Year (30 credits) and, importantly, the Accepted Student website for Science students.

Students who have completed the Diploma of College Studies, Advanced Placement exams, Advanced Levels, the International Baccalaureate, the French Baccalaureate, or McGill placement examinations may receive exemption and/or credit for all or part of the basic science courses in biology, chemistry,
mathematics, and physics. Similarly, students who have completed courses at other universities or colleges may receive exemptions and/or credits. Consult megill.caltransfercredit/prospective for more information.

\subsection*{11.12.1.1 Bachelor of Science (B.Sc.) - Freshman/Foundation Year (30 credits)}

Students who need 97-120 credits to complete their degree requirements will normally be registered in the Science Freshman/Foundation Year until they complete their first year. They must consult an adviser in the Science Office for Undergraduate Student Advising (SOUSA) to obtain advice and approval of their course selection.

Full details are available on the SOUSA website at http://www.mcgill.ca/science/student/newstudents/u0. Academic advising is also available by email. The address is newstudentadvising.science@mcgill.ca.
Students normally complete 30 credits which must include at least seven courses from the list of Approved Freshman/Foundation Year Science Courses, selected as follows:

\section*{General Math and Science Breadth}

Six of the Freshman/Foundation Year courses to satisfy one of the following:
Option 1) 2 courses from MATH and 4 courses from BIOL, CHEM or PHYS;
or
Option 2) 3 courses from MATH and 3 courses from BIOL, CHEM or PHYS.

\section*{Science Complementary}

The seventh course is chosen from the list of Approved Freshman/Foundation Year Science Courses.
Notes:
1. Students who have not studied all of Biology, Chemistry, and Physics at the grade 12 level or equivalent are strongly advised to include at least one course in the missing discipline in their Freshman/Foundation Year.
2. Many students will complete more than seven courses from the Approved Freshman/Foundation Year Science Courses list, particularly those who wish to leave several options open for their choice of major.
3. Students entering the Freshman/Foundation Year should be aware of the department specific requirements when selecting their courses. Detailed advising information is available at http://www.mcgill.ca/science/student/newstudents/u0/bscfreshman/specific.
4. The maximum number of courses per term, required, complementary, and elective, is five.
5. Some medical and dental schools have specific freshman course requirements. Check the admission requirements of the school(s) to which you intend to apply.

\section*{List of approved Freshman/Foundation Year Science Courses}

Select the approved courses according to the instructions above.
\begin{tabular}{lcl} 
ATOC 100 & \((3)\) & Extreme-Weather and Climate-Change Physics \\
BIOL 111 & \((3)\) & Principles: Organismal Biology \\
BIOL 112 & \((3)\) & Cell and Molecular Biology \\
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120* & \((4)\) & General Chemistry 2 \\
COMP 202 & (3) & Foundations of Programming \\
ESYS 104 & (3) & The Earth System \\
GEOG 205 & (3) & Global Change: Past, Present and Future \\
MATH 133 & (3) & Linear Algebra and Geometry \\
PSYC 100 & (3) & Introduction to Psychology
\end{tabular}
* CHEM 120 is not open to students who have taken CHEM 115.

First calculus course, one of:
MATH 139 (4) Calculus 1 with Precalculus
\begin{tabular}{lll} 
MATH 140 & (3) & Calculus 1 \\
MATH 150 & (4) & Calculus A
\end{tabular}

Second calculus course, one of:
\begin{tabular}{lll} 
MATH 141 & (4) & Calculus 2 \\
MATH 151 & (4) & Calculus B
\end{tabular}

First physics course, one of:
PHYS 101
Introductory Physics - Mechanics
PHYS 131
Mechanics and Waves

Second physics course, one of:
\begin{tabular}{lll} 
PHYS 102 & (4) & Introductory Physics - Electromagnetism \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

\section*{Electives}

Students wishing to take elective courses may choose them from introductory courses offered by departments in the Faculties of Science or of Arts. A list of recommended courses is found at http://www.mcgill.ca/science/student/newstudents/u0/bscfreshman/suggested-elective-courses. Certain courses offered by other faculties may also be taken, but some restrictions apply. Consult the SOUSA website at http://www.mcgill.ca/science/student/continuingstudents/bsc/outside/ for more information about taking courses from other faculties.

\subsection*{11.12.2 Anatomy and Cell Biology (ANAT)}

\subsection*{11.12.2.1 Location}

Strathcona Anatomy and Dentistry Building, Rooms M21-M31
3640 University Street
Montreal, Quebec H3A 0C7
Telephone: 514-398-6350
Website: mcgill.ca/anatomy

\subsection*{11.12.2.2 About Anatomy and Cell Biology}

The Department of Anatomy and Cell Biology offers courses that deal with:
- cell biology
- histology
- embryology
- neuroanatomy
- gross anatomy

The honours program is designed as the first phase in the training of career cell and molecular biologists. The major and liberal programs offer decreasing levels of specialization in Anatomy and Cell Biology but with a broader base in other biological sciences. These programs also form a sound background for graduate studies in anatomy and cell biology, or for further professional training, including medical school and other health programs. A B.Sc. in Anatomy and Cell Biology provides an excellent preparation for technical and administrative positions in laboratories of universities, research institutions, hospitals, and pharmaceutical and biotechnological industries.

The department is equipped to perform protein purification; recombinant DNA technology; micro-injection of molecules into single cells; cytochemical, immunocytochemical, and fluorescent analysis and electron microscopy; proteomics; and genomics. The department has a well-equipped centre for electron microscopy as well as a centre for confocal and immunofluorescence. The department's cryo-electron microscope facility is unique and provides cutting edge technology with which to apply fundamental discoveries to therapeutic applications. Human anatomy classes are taught in the fully-equipped cadaver lab and students have access to 3D printers and other learning tools.

\subsection*{11.12.2.3 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Anatomy and Cell Biology (48 credits)}

The B.Sc.; Liberal Program - Core Science Component in Anatomy and Cell Biology is a flexible program that focuses on the fundamentals of cell and molecular biology and human anatomy. The program includes a range of biomedical science disciplines such as biology, experimental medicine, pharmacology and neurobiology. Students may complete this program with a minimum of 47 credits or a maximum of 48 credits depending on their choice of complementary courses.

\section*{Required Courses ( 32 credits)}

Note: ANAT 261 must be taken in U1.
* Students who have taken the equivalent of CHEM 212 and/or MATH 203 in CEGEP (as defined at http://www.mcgill.ca/students/courses/plan/transfer/) are exempt and must replace these credits with elective course credits to satisfy the total credit requirement for their degree.
\begin{tabular}{lcl} 
ANAT 212 & \((3)\) & Molecular Mechanisms of Cell Function \\
ANAT 214 & \((3)\) & Systemic Human Anatomy \\
ANAT 261 & (4) & Introduction to Dynamic Histology \\
ANAT 262 & (3) & Introductory Molecular and Cell Biology \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

One of the following statistics courses:
\begin{tabular}{lll} 
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{Complementary Courses (16 credits)}

Students complete a minimum of 15 or a maximum of 16 complementary course credits selected as follows:

9 credits of advanced anatomy courses (AAC) selected from:
\begin{tabular}{lcl} 
ANAT 314 & \((3)\) & Human Musculoskeletal Anatomy \\
ANAT 321 & \((3)\) & Circuitry of the Human Brain \\
ANAT 322 & \((3)\) & Neuroendocrinology \\
ANAT 365 & \((3)\) & Cellular Trafficking \\
ANAT 381 & \((3)\) & Experimental Embryology \\
ANAT 514 & \((3)\) & Advanced Human Anatomy Laboratory \\
ANAT 565 & \((3)\) & Diseases-Membrane Trafficking \\
NEUR 310 & \((3)\) & Cellular Neurobiology
\end{tabular}

6-7 credits of biologically oriented courses (BOC) selected from:
\begin{tabular}{lll} 
ANAT 314 & \((3)\) & Human Musculoskeletal Anatomy \\
ANAT 321 & \((3)\) & Circuitry of the Human Brain \\
ANAT 322 & \((3)\) & Neuroendocrinology \\
ANAT 365 & \((3)\) & Cellular Trafficking \\
ANAT 381 & (3) & Experimental Embryology
\end{tabular}
\begin{tabular}{lll} 
ANAT 565 & \((3)\) & Diseases-Membrane Trafficking \\
BIOL 300 & \((3)\) & Molecular Biology of the Gene \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 303 & (3) & Developmental Biology \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 314 & (3) & Molecular Biology of Cancer \\
BIOL 320 & (3) & Evolution of Brain and Behaviour \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
EXMD 504 & (3) & Biology of Cancer \\
NEUR 310 & (3) & Cellular Neurobiology \\
NEUR 502 & (3) & Basic and Clinical Aspects of Neuroimmunology \\
PATH 300 & (3) & Human Disease \\
PHAR 300 & (3) & Drug Action \\
PHAR 301 & (3) & Drugs and Disease
\end{tabular}

\subsection*{11.12.2.4 Bachelor of Science (B.Sc.) - Major Anatomy and Cell Biology (67 credits)}

The B.Sc.; Major in Anatomy and Cell Biology focuses on the fundamentals of biomedical science, with a strong foundation in cell and molecular biology, as well as the essential concepts of human anatomy. The program includes a wide range of biomedical science disciplines such as experimental medicine, microbiology and immunology, pharmacology and physiology.

\section*{Required Courses (43 credits)}

Note: ANAT 261 must be taken in U1.
* Students who have taken the equivalent of CHEM 212, CHEM 222, and/or MATH 203 in CEGEP (as defined at http://www.mcgill.ca/students/courses/plan/transfer/) are exempt and must replace these credits with elective course credits to satisfy the total credit requirement for their degree.
\begin{tabular}{lcl} 
ANAT 212 & \((3)\) & Molecular Mechanisms of Cell Function \\
ANAT 214 & (3) & Systemic Human Anatomy \\
ANAT 261 & (4) & Introduction to Dynamic Histology \\
ANAT 262 & (3) & Introductory Molecular and Cell Biology \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

One of the following statistics courses:
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 203* & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{Complementary Courses ( 24 credits)}

Complementary courses are selected as follows with a minimum of 6 credits at the 400 level or higher:
\begin{tabular}{lll}
12 credits of advanced anatomy courses (AAC) selected from: \\
ANAT 314 & (3) & Human Musculoskeletal Anatomy \\
ANAT 321 & \((3)\) & Circuitry of the Human Brain \\
ANAT 322 & \((3)\) & Neuroendocrinology \\
ANAT 365 & \((3)\) & Cellular Trafficking \\
ANAT 381 & (3) & Experimental Embryology \\
ANAT 416 & (3) & Development, Disease and Regeneration \\
ANAT 458 & (3) & Membranes and Cellular Signaling \\
ANAT 514 & (3) & Advanced Human Anatomy Laboratory \\
ANAT 541 & (3) & Cell and Molecular Biology of Aging \\
ANAT 565 & (3) & Diseases-Membrane Trafficking \\
NEUR 310 & Cellular Neurobiology
\end{tabular}

12 credits of biologically oriented courses (BOC) selected from:
\begin{tabular}{|c|c|c|}
\hline ANAT 314 & (3) & Human Musculoskeletal Anatomy \\
\hline ANAT 321 & (3) & Circuitry of the Human Brain \\
\hline ANAT 322 & (3) & Neuroendocrinology \\
\hline ANAT 365 & (3) & Cellular Trafficking \\
\hline ANAT 381 & (3) & Experimental Embryology \\
\hline ANAT 416 & (3) & Development, Disease and Regeneration \\
\hline ANAT 458 & (3) & Membranes and Cellular Signaling \\
\hline ANAT 541 & (3) & Cell and Molecular Biology of Aging \\
\hline ANAT 565 & (3) & Diseases-Membrane Trafficking \\
\hline BIOC 311 & (3) & Metabolic Biochemistry \\
\hline BIOC 312 & (3) & Biochemistry of Macromolecules \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOC 503 & (3) & Biochemistry of Immune Diseases \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 313 & (3) & Eukaryotic Cell Biology \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 320 & (3) & Evolution of Brain and Behaviour \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline BIOL 518 & (3) & Advanced Topics in Cell Biology \\
\hline BIOL 520 & (3) & Gene Activity in Development \\
\hline BIOL 524 & (3) & Topics in Molecular Biology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 544 & (3) & Genetic Basis of Life Span \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BIOL 546 & (3) & Genetics of Model Systems \\
\hline BIOL 551 & (3) & Principles of Cellular Control \\
\hline BIOL 575 & (3) & Human Biochemical Genetics \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline BIOT 505 & (3) & Selected Topics in Biotechnology \\
\hline COMP 204 & (3) & Computer Programming for Life Sciences \\
\hline EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
\hline EXMD 502 & (3) & Advanced Endocrinology 1 \\
\hline EXMD 503 & (3) & Advanced Endocrinology 02 \\
\hline EXMD 504 & (3) & Biology of Cancer \\
\hline EXMD 506 & (3) & Advanced Applied Cardiovascular Physiology \\
\hline EXMD 507 & (3) & Advanced Applied Respiratory Physiology \\
\hline EXMD 508 & (3) & Advanced Topics in Respiration \\
\hline MIMM 314 & (3) & Intermediate Immunology \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline MIMM 324 & (3) & Fundamental Virology \\
\hline MIMM 387 & (3) & The Business of Science \\
\hline MIMM 413 & (3) & Parasitology \\
\hline MIMM 414 & (3) & Advanced Immunology \\
\hline MIMM 465 & (3) & Bacterial Pathogenesis \\
\hline MIMM 466 & (3) & Viral Pathogenesis \\
\hline MIMM 509 & (3) & Inflammatory Processes \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline PATH 300 & (3) & Human Disease \\
\hline PHAR 300 & (3) & Drug Action \\
\hline PHAR 301 & (3) & Drugs and Disease \\
\hline PHAR 303 & (3) & Principles of Toxicology \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHAR 563 & (3) & Endocrine Pharmacology \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
\hline PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
\hline PHGY 314 & (3) & Integrative Neuroscience \\
\hline PHGY 451 & (3) & Advanced Neurophysiology \\
\hline PHGY 502 & (3) & Exercise Physiology \\
\hline PHGY 508 & (3) & Advanced Renal Physiology \\
\hline PHGY 513 & (3) & Translational Immunology \\
\hline PHGY 515 & (3) & Blood-Brain Barrier in Health and Disease \\
\hline PHGY 516 & (3) & Physiology of Blood \\
\hline PHGY 518 & (3) & Artificial Cells \\
\hline PHGY 552 & (3) & Cellular and Molecular Physiology \\
\hline PHGY 556 & (3) & Topics in Systems Neuroscience \\
\hline PSYT 455 & (3) & Neurochemistry \\
\hline
\end{tabular}

\subsection*{11.12.2.5 Bachelor of Science (B.Sc.) - Honours Anatomy and Cell Biology (73 credits)}

Students should register at the Major level in U1 and, if accepted, may enter the Honours program at the beginning of U2. To enter the program, the student must obtain a CGPA of at least 3.20 at the end of U1. For promotion to the U3 year of the Honours program, or for entry into the program at this level, the student must have a CGPA of at least 3.20 at the end of their U2 year. It is expected that at the beginning of the third year, the students who wish to continue in the Honours program will be those who feel that they are seriously interested in a career in Cell Biology. The Honours degree will be recommended after successful completion of the program with a CGPA of at least 3.20.

\section*{Required Courses ( 52 credits)}

Note: ANAT 261 must be taken in U1.
* Students who have taken the equivalent of CHEM 212, CHEM 222, and/or MATH 203 in CEGEP (as defined at http://www.mcgill.ca/transfercredit/) are exempt and must replace these credits with elective course credits to satisfy the total credit requirement for their degree.
\begin{tabular}{lcl} 
ANAT 212 & \((3)\) & Molecular Mechanisms of Cell Function \\
ANAT 214 & \((3)\) & Systemic Human Anatomy \\
ANAT 261 & \((4)\) & Introduction to Dynamic Histology \\
ANAT 262 & \((3)\) & Introductory Molecular and Cell Biology \\
ANAT 432 & \((9)\) & Honours Research Project \\
BIOL 200 & \((3)\) & Molecular Biology \\
BIOL 202 & \((3)\) & Basic Genetics \\
BIOL 301 & \((4)\) & Cell and Molecular Laboratory \\
CHEM 212* & \((4)\) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

One of the following statistics courses:
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 203* & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{Complementary Courses ( 21 credits)}

Complementary courses are selected as follows with a minimum of 6 credits at the 400 level or higher:

18 credits of advanced anatomy courses (AAC) selected from:
* Note: Students may take either ANAT 321 OR ANAT 323.
\begin{tabular}{lcl} 
ANAT 314 & \((3)\) & Human Musculoskeletal Anatomy \\
ANAT \(321^{* *}\) & \((3)\) & Circuitry of the Human Brain \\
ANAT 322 & \((3)\) & Neuroendocrinology \\
ANAT \(323^{* *}\) & \((3)\) & Clinical Neuroanatomy \\
ANAT 365 & \((3)\) & Cellular Trafficking \\
ANAT 381 & \((3)\) & Experimental Embryology \\
ANAT 416 & \((3)\) & Development, Disease and Regeneration \\
ANAT 458 & (3) & Membranes and Cellular Signaling
\end{tabular}
\begin{tabular}{lll} 
ANAT 514 & (3) & Advanced Human Anatomy Laboratory \\
ANAT 541 & (3) & Cell and Molecular Biology of Aging \\
ANAT 542 & (3) & Transmission Electron Microscopy of Biological Samples \\
ANAT 565 & (3) & Diseases-Membrane Trafficking \\
NEUR 310 & (3) & Cellular Neurobiology
\end{tabular}

3 credits of biologically oriented courses (BOC) selected from:
\begin{tabular}{|c|c|c|}
\hline ANAT 314 & (3) & Human Musculoskeletal Anatomy \\
\hline ANAT 321 & (3) & Circuitry of the Human Brain \\
\hline ANAT 322 & (3) & Neuroendocrinology \\
\hline ANAT 323 & (3) & Clinical Neuroanatomy \\
\hline ANAT 365 & (3) & Cellular Trafficking \\
\hline ANAT 381 & (3) & Experimental Embryology \\
\hline ANAT 416 & (3) & Development, Disease and Regeneration \\
\hline ANAT 458 & (3) & Membranes and Cellular Signaling \\
\hline ANAT 541 & (3) & Cell and Molecular Biology of Aging \\
\hline ANAT 542 & (3) & Transmission Electron Microscopy of Biological Samples \\
\hline ANAT 565 & (3) & Diseases-Membrane Trafficking \\
\hline BIOC 311 & (3) & Metabolic Biochemistry \\
\hline BIOC 312 & (3) & Biochemistry of Macromolecules \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOC 503 & (3) & Biochemistry of Immune Diseases \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 313 & (3) & Eukaryotic Cell Biology \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 320 & (3) & Evolution of Brain and Behaviour \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline BIOL 518 & (3) & Advanced Topics in Cell Biology \\
\hline BIOL 520 & (3) & Gene Activity in Development \\
\hline BIOL 524 & (3) & Topics in Molecular Biology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 544 & (3) & Genetic Basis of Life Span \\
\hline BIOL 546 & (3) & Genetics of Model Systems \\
\hline BIOL 551 & (3) & Principles of Cellular Control \\
\hline BIOL 575 & (3) & Human Biochemical Genetics \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline BIOT 505 & (3) & Selected Topics in Biotechnology \\
\hline COMP 204 & (3) & Computer Programming for Life Sciences \\
\hline EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EXMD 502 & (3) & Advanced Endocrinology 1 \\
\hline EXMD 503 & (3) & Advanced Endocrinology 02 \\
\hline EXMD 504 & (3) & Biology of Cancer \\
\hline EXMD 506 & (3) & Advanced Applied Cardiovascular Physiology \\
\hline EXMD 507 & (3) & Advanced Applied Respiratory Physiology \\
\hline EXMD 508 & (3) & Advanced Topics in Respiration \\
\hline MIMM 314 & (3) & Intermediate Immunology \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline MIMM 324 & (3) & Fundamental Virology \\
\hline MIMM 387 & (3) & The Business of Science \\
\hline MIMM 413 & (3) & Parasitology \\
\hline MIMM 414 & (3) & Advanced Immunology \\
\hline MIMM 465 & (3) & Bacterial Pathogenesis \\
\hline MIMM 466 & (3) & Viral Pathogenesis \\
\hline MIMM 509 & (3) & Inflammatory Processes \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline NEUR 502 & (3) & Basic and Clinical Aspects of Neuroimmunology \\
\hline PATH 300 & (3) & Human Disease \\
\hline PHAR 300 & (3) & Drug Action \\
\hline PHAR 301 & (3) & Drugs and Disease \\
\hline PHAR 303 & (3) & Principles of Toxicology \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHAR 563 & (3) & Endocrine Pharmacology \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
\hline PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
\hline PHGY 314 & (3) & Integrative Neuroscience \\
\hline PHGY 451 & (3) & Advanced Neurophysiology \\
\hline PHGY 502 & (3) & Exercise Physiology \\
\hline PHGY 508 & (3) & Advanced Renal Physiology \\
\hline PHGY 513 & (3) & Translational Immunology \\
\hline PHGY 515 & (3) & Blood-Brain Barrier in Health and Disease \\
\hline PHGY 516 & (3) & Physiology of Blood \\
\hline PHGY 518 & (3) & Artificial Cells \\
\hline PHGY 552 & (3) & Cellular and Molecular Physiology \\
\hline PHGY 556 & (3) & Topics in Systems Neuroscience \\
\hline PSYT 455 & (3) & Neurochemistry \\
\hline PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders \\
\hline
\end{tabular}

\subsection*{11.12.3 Atmospheric and Oceanic Sciences (ATOC)}

\subsection*{11.12.3.1 Location}

Burnside Hall, Room 305
```

805 Sherbrooke Street West
Montreal QC H3A 0B9
Telephone: 514-398-3764
Fax: 514-398-6115
Email: info.aos@mcgill.ca
Website: mcgill.ca/meteo

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\subsection*{11.12.3.2 About Atmospheric and Oceanic Sciences}

The Department of Atmospheric and Oceanic Sciences offers, at the undergraduate level, a broad range of courses in atmospheric chemistry, atmospheric physics, meteorology, ocean and atmosphere dynamics, and climate. The study of atmospheric and oceanic sciences is based largely on physics and applied mathematics. All required courses except those at the introductory level generally have prerequisites or corequisites in physics, mathematics, and atmospheric science.
One of the goals of the discipline is to develop the understanding necessary to improve our ability to predict the weather. Another important area of study focuses on the changes in global and regional climate caused by the changing chemical composition of the atmosphere. The approach to the study of climate change is quantitative in the Department of Atmospheric and Oceanic Sciences. Like other physical sciences, atmospheric and oceanic sciences attempt to create theoretical models of their complex processes as a means of analyzing the motion and composition of the air, seawater, and sea ice; thermodynamic behaviours; and the interaction of the atmosphere and ocean with the other components of the climate system such as land and ice sheets.

From one viewpoint, the atmosphere and ocean may be studied as a large volume of gas or liquid by the methods of fluid mechanics: wind or currents, circulation patterns, turbulence, and energy and momentum exchanges are the ideas employed in this approach. Alternatively, the atmosphere and ocean may be studied from the point of view of their detailed physical processes: how water condenses in the air; how seawater freezes to form sea ice; how cloud droplets make rain; how sunlight warms the surface of the Earth; how heat is exchanged between the ocean and the atmosphere; and how the atmosphere and ocean interact to shape the weather and climate. A comprehensive understanding requires both viewpoints, and these are reflected in the curriculum.
The Department of Atmospheric and Oceanic Sciences offers six programs:
- section 11.12.3.3: Minor in Atmospheric Science
- section 11.12.3.4: Liberal Program - Core Science Component Atmospheric and Oceanic Sciences
- section 11.12.3.5: Major in Atmospheric Sciences
- section 11.12.3.6: Major in Atmospheric Science and Physics
- section 11.12.3.7: Honours in Atmospheric Science
- section 11.12.3.8: Diploma in Meteorology

The Honours program is meant for students with high standing. It is based on courses similar to those in the Major program, but includes a mandatory research course and provides many opportunities to take advanced courses. The Major program, although somewhat less intensive, provides solid foundations in atmospheric science.Both the Honours and Major programs lead to a broad range of career opportunities in the public and private sectors (e.g. forecasting, renewable energy, reinsurance, environmental consulting) equip the student to undertake postgraduate study in atmospheric and oceanic sciences at any of the leading universities. The Department also offers a special one-year Diploma in Meteorology program to B.Sc. or B.Eng. graduates recognized by Environment and Climate Change Canada, allowing graduates to pursue a professional career as a meterologist. Academic positions in teaching and research are available to M.Sc. and Ph.D. graduates.
Students interested in any of the undergraduate programs should contact:
Carolina Dufour, Undergraduate Program Advisor
Email: carolina.dufour@mcgill.ca

\subsection*{11.12.3.3 Bachelor of Science (B.Sc.) - Minor Atmospheric Science (18 credits)}

The B.Sc.; Minor in Atmospheric Science is intended to provide the basics of the atmospheric and oceanic properties and circulation, in connection with weather phenomena and the climate system.

\section*{Complementary Courses (18 credits)}

\section*{9-15 selected from:}
\begin{tabular}{lll} 
ATOC 214 & \((3)\) & Introduction: Physics of the Atmosphere \\
ATOC 215 & (3) & Oceans, Weather and Climate \\
ATOC \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
ATOC 309 & (3) & Weather Radars and Satellites \\
ATOC 312 & (3) & Rotating Fluid Dynamics \\
ATOC 315 & (3) & Thermodynamics and Convection
\end{tabular}
\begin{tabular}{lll} 
ATOC 357 & (3) & Atmospheric and Oceanic Science Laboratory \\
ATOC \(404^{* *}\) & (3) & Climate Physics \\
CHEM \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
PHYS \(404^{* *}\) & (3) & Climate Physics
\end{tabular}
* Note: Students may select ATOC 219 or CHEM 219 but not both.
**Note: Students may select ATOC 404 or PHYS 404 but not both.

3-9 credits selected from:
\begin{tabular}{lll} 
ATOC 512 & \((3)\) & Atmospheric and Oceanic Dynamics \\
ATOC 513 & (3) & Waves and Stability \\
ATOC 515 & (3) & Turbulence in Atmosphere and Oceans \\
ATOC 517 & (3) & Boundary Layer Meteorology \\
ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
ATOC 521 & (3) & Cloud Physics \\
ATOC 525 & (3) & Atmospheric Radiation \\
ATOC 531 & (3) & Dynamics of Current Climates \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 548 & (3) & Mesoscale Meteorology \\
ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
ATOC 558 & (3) & Numerical Methods and Laboratory \\
ATOC 568 & (3) & Ocean Physics
\end{tabular}
11.12.3.4 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Atmospheric and Oceanic Sciences (48 credits)

The B.Sc.; Liberal Program - Core Science Component in Atmospheric and Oceanic Sciences provides a solid foundation of knowledge relevant for the physical science of the atmosphere and oceans with application to weather and climate. The program may be completed in 45 or 48 credits

\section*{Required Courses (21 credits)}
\begin{tabular}{lll} 
ATOC 214 & \((3)\) & Introduction: Physics of the Atmosphere \\
ATOC 312 & (3) & Rotating Fluid Dynamics \\
ATOC 315 & (3) & Thermodynamics and Convection \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Complementary Courses (24-27 credits)}

Note: All students are encouraged to consult with the Undergraduate Adviser for help selecting from among the complementary courses.

3-6 credits selected from:
\begin{tabular}{lll} 
ATOC 215 & (3) & Oceans, Weather and Climate \\
ATOC 219 & (3) & Introduction to Atmospheric Chemistry
\end{tabular}

\footnotetext{
3 credits selected from:
}
\begin{tabular}{lll} 
ATOC 357 & (3) Atmospheric and Oceanic Science Laboratory \\
PHYS 257 & (3) & Experimental Methods 1
\end{tabular}

3 credits selected from:
PHYS 230
(3) Dynamics of Simple Systems
PHYS 251
(3)
Honours Classical Mechanics 1

3 credits selected from:
\begin{tabular}{lll} 
PHYS 232 & (3) & Heat and Waves \\
PHYS 253 & (3) & Thermal Physics
\end{tabular}
\(12-15\) credits selected from (at least 6 of which must be ATOC):
\begin{tabular}{lll} 
ATOC 309 & \((3)\) & Weather Radars and Satellites \\
ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
ATOC 513 & (3) & Waves and Stability \\
ATOC 515 & (3) & Turbulence in Atmosphere and Oceans \\
ATOC 517 & (3) & Boundary Layer Meteorology \\
ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
ATOC 521 & (3) & Cloud Physics \\
ATOC 525 & (3) & Atmospheric Radiation \\
ATOC 531 & (3) & Dynamics of Current Climates \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 541 & (3) & Synoptic Meteorology 2 \\
ATOC 546 & (3) & Current Weather Discussion \\
ATOC 548 & (3) & Mesoscale Meteorology \\
ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
ATOC 558 & (3) & Numerical Methods and Laboratory \\
ATOC 568 & (3) & Ocean Physics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 319 & (3) & Partial Differential Equations \\
PHYS 333 & PHYS 340 &
\end{tabular}

\subsection*{11.12.3.5 Bachelor of Science (B.Sc.) - Major Atmospheric Science ( 62 credits)}
(60-63 credits)
The B.Sc.; Major in Atmospheric Science provides the fundamentals of atmospheric physics and dynamics along with applications to weather and climate problems. The program includes the choice of a wide selection of topics spanning from atmospheric chemistry, to weather forecasting and climate dynamics. The program may be completed in 60-63 credits.

Required Courses ( \(\mathbf{2 4}\) credits)
ATOC 214 (3) Introduction: Physics of the Atmosphere
\begin{tabular}{lll} 
ATOC 312 & \((3)\) & Rotating Fluid Dynamics \\
ATOC 315 & (3) & Thermodynamics and Convection \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Complementary Courses (36-39 credits)}

Note: Students are required to fulfill the core complementary requirements along with one of the four streams listed below. In cases of overlap, each course can only be used once toward the satisfaction of the core complementary courses or the chosen stream.

\section*{Core (21-22 credits)}

3-6 credits selected from:
\begin{tabular}{|c|c|c|}
\hline ATOC 215 & (3) & Oceans, Weather and Climate \\
\hline ATOC 219* & (3) & Introduction to Atmospheric Chemistry \\
\hline CHEM 219* & (3) & Introduction to Atmospheric Chemistry \\
\hline \multicolumn{3}{|l|}{* If chosen, students may take ATOC 219 or CHEM 219.} \\
\hline \multicolumn{3}{|l|}{3 credits selected from:} \\
\hline ATOC 357 & (3) & Atmospheric and Oceanic Science Laboratory \\
\hline PHYS 257 & (3) & Experimental Methods 1 \\
\hline \multicolumn{3}{|l|}{3 credits selected from:} \\
\hline PHYS 230 & (3) & Dynamics of Simple Systems \\
\hline PHYS 251 & (3) & Honours Classical Mechanics 1 \\
\hline \multicolumn{3}{|l|}{3 credits selected from:} \\
\hline PHYS 232 & (3) & Heat and Waves \\
\hline PHYS 253 & (3) & Thermal Physics \\
\hline
\end{tabular}

6-10 credits selected from:
\begin{tabular}{lcl} 
CHEM 213 & \((3)\) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
CHEM 367 & (3) & Instrumental Analysis 1 \\
CHEM 575 & (3) & Chemical Kinetics \\
COMP 551 & (4) & Applied Machine Learning \\
MATH 203* & (3) & Principles of Statistics 1 \\
MATH 317 & (3) & Numerical Analysis \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 323 & (3) & Probability \\
MATH 324* & (3) & Statistics
\end{tabular}
\begin{tabular}{lcl} 
PHYS 333 & \((3)\) & Thermal and Statistical Physics \\
PHYS \(340^{* *}\) & (3) & Majors Electricity and Magnetism \\
PHYS \(342 * * *\) & (3) & Majors Electromagnetic Waves \\
PHYS \(350^{* *}\) & (3) & Honours Electricity and Magnetism \\
PHYS 352*** & (3) & Honours Electromagnetic Waves
\end{tabular}
* If chosen, students may take either MATH 203 or MATH 324.
** If chosen, students may take either PHYS 340 or PHYS 350.
*** If chosen, students may take either PHYS 342 and PHYS 352.

\section*{15-17 credits from one of the following streams:}

\section*{Weather Analysis and Forecasting Stream (16-17 credits)}

13 credits from:
\begin{tabular}{lll} 
ATOC 309 & (3) & Weather Radars and Satellites \\
ATOC 521 & (3) & Cloud Physics \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 541 & (3) & Synoptic Meteorology 2 \\
ATOC 546 & (1) & Current Weather Discussion
\end{tabular}

3-4 credits selected from:
\begin{tabular}{lll} 
ATOC 404+ & (3) & Climate Physics \\
ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
ATOC 513 & (3) & Waves and Stability \\
ATOC 517 & (3) & Boundary Layer Meteorology \\
ATOC 525 & (3) & Atmospheric Radiation \\
ATOC 531 & (3) & Dynamics of Current Climates \\
ATOC 548 & (3) & Mesoscale Meteorology \\
ATOC 558 & (3) & Numerical Methods and Laboratory \\
ATOC 568 & (3) & Ocean Physics \\
ESYS 300 & (3) & Investigating the Earth System \\
ESYS 301 & (3) & Earth System Modelling \\
GEOG 322 & (3) & Environmental Hydrology \\
GEOG 372 & (3) & Running Water Environments \\
MATH 555++ & (4) & Fluid Dynamics \\
PHYS 404+ & (3) & Climate Physics \\
PHYS 432++ & (3) & Physics of Fluids \\
PHYS 512 & (3) & Computational Physics with Applications
\end{tabular}
+ If chosen, students may take either ATOC 404 or PHYS 404.
++ If chosen, students may take either PHYS 432 or MATH 555.

\section*{Climate Science Stream (15 credits)}

6 credits from:
ATOC 404+
(3)
Climate Physics
\begin{tabular}{lll} 
ATOC 531 & (3) & Dynamics of Current Climates \\
PHYS 404+ & (3) & Climate Physics \\
+ If chosen, students may take either ATOC 404 or PHYS 404. \\
A credits (at least 6 credits must be ATOC courses) selected from: \\
ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
ATOC 513 & (3) & Waves and Stability \\
ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
ATOC 521 & (3) & Cloud Physics \\
ATOC 525 & (3) & Atmospheric Radiation \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 558 & (3) & Numerical Methods and Laboratory \\
ATOC 568 & (3) & Ocean Physics \\
EPSC 513 & (3) & Climate and the Carbon Cycle \\
ESYS 300 & (3) & Investigating the Earth System \\
ESYS 301 & (3) & (3) \\
GEOG 322 & (3) & Environmental Hydrology \\
GEOG 372 & (3) & Punning Water Environments Modelling \\
MATH 323 & PHYS 512 &
\end{tabular}

\section*{Atmospheric Chemistry and Physics Stream (15 credits)}
\begin{tabular}{lcl} 
ATOC 309 & \((3)\) & Weather Radars and Satellites \\
ATOC 404+ & \((3)\) & Climate Physics \\
ATOC 517 & \((3)\) & Boundary Layer Meteorology \\
ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
ATOC 521 & \((3)\) & Cloud Physics \\
CHEM 213 & \((3)\) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 273 & \((3)\) & Introductory Physical Chemistry 2: Kinetics and Methods \\
PHYS 404+ & \((3)\) & Climate Physics \\
PHYS 512 & \((3)\) & Computational Physics with Applications
\end{tabular}
+ If chosen, students may take either ATOC 404 or PHYS 404.

\section*{General Stream (15-17 credits)}

15-17 credits (at least 12 credits must be ATOC courses) selected from:
\begin{tabular}{lll} 
ATOC 309 & \((3)\) & Weather Radars and Satellites \\
ATOC 404+ & (3) & Climate Physics \\
ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
ATOC 513 & (3) & Waves and Stability \\
ATOC 517 & (3) & Boundary Layer Meteorology \\
ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
ATOC 521 & (3) & Cloud Physics
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ATOC 525 & (3) & Atmospheric Radiation \\
\hline ATOC 531 & (3) & Dynamics of Current Climates \\
\hline ATOC 540 & (3) & Synoptic Meteorology 1 \\
\hline ATOC 541 & (3) & Synoptic Meteorology 2 \\
\hline ATOC 546 & (1) & Current Weather Discussion \\
\hline ATOC 548 & (3) & Mesoscale Meteorology \\
\hline ATOC 558 & (3) & Numerical Methods and Laboratory \\
\hline ATOC 568 & (3) & Ocean Physics \\
\hline CHEM 367 & (3) & Instrumental Analysis 1 \\
\hline CHEM 575 & (3) & Chemical Kinetics \\
\hline EPSC 513 & (3) & Climate and the Carbon Cycle \\
\hline ESYS 300 & (3) & Investigating the Earth System \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline GEOG 322 & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline MATH 555++ & (4) & Fluid Dynamics \\
\hline PHYS 404+ & (3) & Climate Physics \\
\hline PHYS 432++ & (3) & Physics of Fluids \\
\hline PHYS 512 & (3) & Computational Physics with Applications \\
\hline
\end{tabular}
11.12.3.6 Bachelor of Science (B.Sc.) - Major Atmospheric Science and Physics ( 67 credits)
(66-67 credits)
The B.Sc.; Major in Atmospheric Science and Physics provides a solid study in meteorology, atmospheric physics, or related fields.
The program is jointly offered by the Department of Physics and the Department of Atmospheric and Oceanic Sciences. Students should consult undergraduate advisers in both departments.

\section*{Required Courses (54 credits)}
\begin{tabular}{|c|c|c|}
\hline ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
\hline ATOC 215 & (3) & Oceans, Weather and Climate \\
\hline ATOC 309 & (3) & Weather Radars and Satellites \\
\hline ATOC 312 & (3) & Rotating Fluid Dynamics \\
\hline ATOC 315 & (3) & Thermodynamics and Convection \\
\hline COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
\hline MATH 222 & (3) & Calculus 3 \\
\hline MATH 223 & (3) & Linear Algebra \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 315 & (3) & Ordinary Differential Equations \\
\hline PHYS 230 & (3) & Dynamics of Simple Systems \\
\hline PHYS 232 & (3) & Heat and Waves \\
\hline PHYS 241 & (3) & Signal Processing \\
\hline PHYS 257 & (3) & Experimental Methods 1 \\
\hline PHYS 333 & (3) & Thermal and Statistical Physics \\
\hline
\end{tabular}
\begin{tabular}{lll} 
PHYS 340 & (3) & Majors Electricity and Magnetism \\
PHYS 342 & (3) & Majors Electromagnetic Waves \\
PHYS 346 & (3) & Majors Quantum Physics
\end{tabular}

\section*{Complementary Courses (12-13 credits)}

3 credits selected from:
\begin{tabular}{lll} 
ATOC 357 & (3) & Atmospheric and Oceanic Science Laboratory \\
PHYS 258 & (3) & Experimental Methods 2
\end{tabular}

9-10 credits selected from:
\begin{tabular}{|c|c|c|}
\hline ATOC 357 & (3) & Atmospheric and Oceanic Science Laboratory \\
\hline ATOC 404* & (3) & Climate Physics \\
\hline ATOC 480 & (3) & Honours Research Project \\
\hline ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
\hline ATOC 513 & (3) & Waves and Stability \\
\hline ATOC 515 & (3) & Turbulence in Atmosphere and Oceans \\
\hline ATOC 517 & (3) & Boundary Layer Meteorology \\
\hline ATOC 521 & (3) & Cloud Physics \\
\hline ATOC 525 & (3) & Atmospheric Radiation \\
\hline ATOC 531 & (3) & Dynamics of Current Climates \\
\hline ATOC 540 & (3) & Synoptic Meteorology 1 \\
\hline ATOC 541 & (3) & Synoptic Meteorology 2 \\
\hline ATOC 548 & (3) & Mesoscale Meteorology \\
\hline ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
\hline ATOC 558 & (3) & Numerical Methods and Laboratory \\
\hline ATOC 568 & (3) & Ocean Physics \\
\hline COMP 551 & (4) & Applied Machine Learning \\
\hline PHYS 331 & (3) & Topics in Classical Mechanics \\
\hline PHYS 339 & (3) & Measurements Laboratory in General Physics \\
\hline PHYS 404* & (3) & Climate Physics \\
\hline PHYS 432 & (3) & Physics of Fluids \\
\hline PHYS 434 & (3) & Optics \\
\hline PHYS 449 & (3) & Majors Research Project \\
\hline PHYS 512 & (3) & Computational Physics with Applications \\
\hline
\end{tabular}

\subsection*{11.12.3.7 Bachelor of Science (B.Sc.) - Honours Atmospheric Science (75 credits)}

72-75 credits
The B.Sc.; Honours in Atmospheric Science provides advanced training in atmospheric science, and it includes a research component.
Students can be admitted to the Honours program after completion of the U1 year of the Major in Atmospheric Science program with a minimum GPA of 3.30. Students having completed a U1 year in a different program with high standing may be admitted to the Honours program on the recommendation of that department.

Required Courses ( 27 credits)
\begin{tabular}{lll} 
ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
ATOC 312 & (3) & Rotating Fluid Dynamics \\
ATOC 315 & (3) & Thermodynamics and Convection \\
ATOC 480 & (3) & Honours Research Project \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Complementary Courses (45-48 credits)}

Note: Students are required to fulfill the core complementary requirements along with one of the four streams listed below. In cases of overlap, each course can only be used once toward the satisfaction of the core complementary courses or the chosen stream.

\section*{Core ( \(\mathbf{2 4 - 2 5}\) credits) ( \(\mathbf{2 4}\) credits)}

3-6 credits selected from:
\begin{tabular}{lll} 
ATOC 215 & (3) & Oceans, Weather and Climate \\
ATOC \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
CHEM \(219^{*}\) & (3) & Introduction to Atmospheric Chemistry \\
* If chosen, students may take either ATOC 219 or CHEM 219.
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
ATOC 357 & (3) & Atmospheric and Oceanic Science Laboratory \\
PHYS 257 & (3) & Experimental Methods 1
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 251 & (3) & Honours Classical Mechanics 1
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
PHYS 232 & (3) & Heat and Waves \\
PHYS 253 & (3) & Thermal Physics
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
MATH 319 & (3) & Partial Differential Equations
\end{tabular}

6-10 credits selected from:
\begin{tabular}{lll} 
CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
CHEM 367 & (3) & Instrumental Analysis 1 \\
CHEM 575 & (3) & Chemical Kinetics
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline COMP 551 & (4) & Applied Machine Learning \\
\hline MATH 203* & (3) & Principles of Statistics 1 \\
\hline MATH 317 & (3) & Numerical Analysis \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline MATH 323 & (3) & Probability \\
\hline MATH 324 & (3) & Statistics \\
\hline PHYS 333 & (3) & Thermal and Statistical Physics \\
\hline PHYS 340** & (3) & Majors Electricity and Magnetism \\
\hline PHYS 342*** & (3) & Majors Electromagnetic Waves \\
\hline PHYS 350** & (3) & Honours Electricity and Magnetism \\
\hline PHYS 352*** & (3) & Honours Electromagnetic Waves \\
\hline \multicolumn{3}{|l|}{* If chosen, students may take either MATH 203 or MATH 324.} \\
\hline \multicolumn{3}{|l|}{** If chosen, students may take either PHYS 340 or PHYS 350.} \\
\hline *** If chosen, st & ake & 342 or PHYS 352. \\
\hline
\end{tabular}

\section*{21-23 credits from one of the following four streams:}

\section*{Weather Analysis and Forecasting Stream (22-23 credits)}

16 credits from:
\begin{tabular}{lll} 
ATOC 309 & \((3)\) & Weather Radars and Satellites \\
ATOC 512 & \((3)\) & Atmospheric and Oceanic Dynamics \\
ATOC 521 & (3) & Cloud Physics \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 541 & (3) & Synoptic Meteorology 2 \\
ATOC 546 & \((1)\) & Current Weather Discussion
\end{tabular}

6-7 credits selected from:

ATOC 404+
(3)

ATOC 513
ATOC 515
ATOC 517

ATOC 531
(3)

ATOC 557
(3)

ATOC 568
ESYS 300
ESYS 301
MATH 555++
PHYS 404+
PHYS 432++
PHYS 512
(3)
(3)
))
(3) Earth System Modelling
(4) Fluid Dynamics
(3) Climate Physics

Physics of Fluids
Computational Physics with Applications
+ If chosen, students may take either ATOC 404 or PHYS 404.
++ If chosen, students may take either PHYS 432 or MATH 555.

\section*{Climate Science Stream (21-22 credits)}

15 credits from:
\begin{tabular}{|c|c|c|}
\hline ATOC 404+ & (3) & Climate Physics \\
\hline ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
\hline ATOC 531 & (3) & Dynamics of Current Climates \\
\hline MATH 323 & (3) & Probability \\
\hline MATH 324 & (3) & Statistics \\
\hline PHYS 404+ & (3) & Climate Physics \\
\hline \multicolumn{3}{|l|}{+ If chosen, students may take either ATOC 404 or PHYS 404.} \\
\hline \multicolumn{3}{|l|}{If chosen, students may take either MATH 203 or MATH 324.} \\
\hline \multicolumn{3}{|l|}{6-7 credits ( 3 credits must be an ATOC course) selected from:} \\
\hline ATOC 513 & (3) & Waves and Stability \\
\hline ATOC 515 & (3) & Turbulence in Atmosphere and Oceans \\
\hline ATOC 521 & (3) & Cloud Physics \\
\hline ATOC 525 & (3) & Atmospheric Radiation \\
\hline ATOC 540 & (3) & Synoptic Meteorology 1 \\
\hline ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
\hline ATOC 558 & (3) & Numerical Methods and Laboratory \\
\hline ATOC 568 & (3) & Ocean Physics \\
\hline EPSC 513 & (3) & Climate and the Carbon Cycle \\
\hline ESYS 300 & (3) & Investigating the Earth System \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 555++ & (4) & Fluid Dynamics \\
\hline PHYS 432++ & (3) & Physics of Fluids \\
\hline PHYS 512 & (3) & Computational Physics with Applications \\
\hline
\end{tabular}

\section*{Atmospheric Chemistry and Physics Stream (21 credits)}

15 credits from:
\begin{tabular}{lll} 
ATOC 309 & (3) & Weather Radars and Satellites \\
ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
ATOC 521 & (3) & Cloud Physics \\
CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods
\end{tabular}

6 credits selected from:
\begin{tabular}{lll} 
ATOC 404+ & (3) & Climate Physics \\
ATOC 512 & (3) & Atmospheric and Oceanic Dynamics
\end{tabular}
\begin{tabular}{lcl} 
ATOC 513 & (3) & Waves and Stability \\
ATOC 517 & (3) & Boundary Layer Meteorology \\
ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
ATOC 525 & (3) & Atmospheric Radiation \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
ATOC 558 & (3) & Numerical Methods and Laboratory \\
CHEM 367 & (3) & Instrumental Analysis 1 \\
CHEM 575 & (3) & Chemical Kinetics \\
EPSC 513 & (3) & Climate and the Carbon Cycle \\
MATH 423 & (3) & Applied Regression \\
PHYS 404+ & (3) & Climate Physics \\
PHYS 512 & (3) & Computational Physics with Applications
\end{tabular}
+ If chosen, students may take either ATOC 404 or PHYS 404.
General Stream (21-22 credits)
(at least 15 credits must be ATOC courses) selected from:
\begin{tabular}{|c|c|c|}
\hline ATOC 309 & (3) & Weather Radars and Satellites \\
\hline ATOC 404+ & (3) & Climate Physics \\
\hline ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
\hline ATOC 513 & (3) & Waves and Stability \\
\hline ATOC 517 & (3) & Boundary Layer Meteorology \\
\hline ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
\hline ATOC 521 & (3) & Cloud Physics \\
\hline ATOC 525 & (3) & Atmospheric Radiation \\
\hline ATOC 531 & (3) & Dynamics of Current Climates \\
\hline ATOC 540 & (3) & Synoptic Meteorology 1 \\
\hline ATOC 541 & (3) & Synoptic Meteorology 2 \\
\hline ATOC 546 & (1) & Current Weather Discussion \\
\hline ATOC 548 & (3) & Mesoscale Meteorology \\
\hline ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
\hline ATOC 558 & (3) & Numerical Methods and Laboratory \\
\hline ATOC 568 & (3) & Ocean Physics \\
\hline CHEM 367 & (3) & Instrumental Analysis 1 \\
\hline CHEM 575 & (3) & Chemical Kinetics \\
\hline EPSC 513 & (3) & Climate and the Carbon Cycle \\
\hline ESYS 300 & (3) & Investigating the Earth System \\
\hline ESYS 301 & (3) & Earth System Modelling \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 555++ & (4) & Fluid Dynamics \\
\hline PHYS 404+ & (3) & Climate Physics \\
\hline PHYS 432++ & (3) & Physics of Fluids \\
\hline PHYS 512 & (3) & Computational Physics with Applications \\
\hline
\end{tabular}
+ If chosen, students may take either ATOC 404 or PHYS 404.
++ If chosen, students may take either PHYS 432 or MATH 555.

\subsection*{11.12.3.8 Diploma (Dip.) Meteorology ( 30 credits)}

The Department offers an intensive, one-year program in theoretical and applied meteorology to B.Sc. or B.Eng. graduates of suitable standing in physics, applied mathematics or other appropriate disciplines, leading to a Diploma in Meteorology. The program is designed for students with little or no previous background in meteorology who wish to direct their experience to atmospheric or environmental applications, or who need to fulfill academic prerequisites in meteorology to qualify for employment. For further information, contact the Undergraduate Program Director (https://www.mcgill.ca/meteo/facultystaff/staff

An exemption of up to 6 credits may be allowed for courses already taken. Students granted such exemptions are required to add complementary courses from an approved list to maintain a total credit count of 30 completed at McGill.

\section*{Required Courses ( 15 credits)}
\begin{tabular}{lll} 
ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
ATOC 521 & (3) & Cloud Physics \\
ATOC 531 & (3) & Dynamics of Current Climates \\
ATOC 540 & (3) & Synoptic Meteorology 1 \\
ATOC 541 & (3) & Synoptic Meteorology 2
\end{tabular}

\section*{Complementary Courses (15 credits)}

6 credits selected from the courses below.
* Students may take either ATOC 519 or CHEM 519.
\begin{tabular}{lll} 
ATOC 309 & (3) & Weather Radars and Satellites \\
ATOC 315 & (3) & Thermodynamics and Convection \\
ATOC 519* & (3) & Advances in Chemistry of Atmosphere \\
CHEM 519* & (3) & Advances in Chemistry of Atmosphere
\end{tabular}

9 credits ordinarily selected from:
* Students take either PHYS 432 or MATH 555.
\begin{tabular}{lcl} 
ATOC 513 & \((3)\) & Waves and Stability \\
ATOC 515 & \((3)\) & Turbulence in Atmosphere and Oceans \\
ATOC 517 & (3) & Boundary Layer Meteorology \\
ATOC 525 & (3) & Atmospheric Radiation \\
ATOC 548 & (3) & Mesoscale Meteorology \\
ATOC 557 & (3) & Research Methods: Atmospheric and Oceanic Science \\
MATH 317 & (3) & Numerical Analysis \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 555* & (4) & Fluid Dynamics \\
PHYS 331 & (3) & Topics in Classical Mechanics \\
PHYS 340 & (3) & Majors Electricity and Magnetism \\
PHYS 342 & (3) & Majors Electromagnetic Waves \\
PHYS 432* & (3) & Physics of Fluids
\end{tabular}

\subsection*{11.12.3.9 Atmospheric and Oceanic Sciences (ATOC) Related Programs 11.12.3.9.1 Internship Year in Science (IYS)}

IYS is a pregraduate work experience program available to eligible students and normally taken between their U2 and U3 years. For more information, see section 11.11: Science Internships and Field Studies and visit mcgill.ca/science/undergraduate/internships-field/internships.
The following programs are also available with an internship component:
- Major in Atmospheric Science
- Honours in Atmospheric Science

\subsection*{11.12.3.9.2 Earth System Science Interdepartmental Major}

This program is offered by the Department of Atmospheric and Oceanic Sciences; Earth and Planetary Sciences; and Geography.
Students in the Department of Atmospheric and Oceanic Sciences interested in this program should contact Professor Bruno Tremblay (bruno.tremblay@mcgill.ca). For more information, see section 11.12.11: Earth System Science (ESYS).

\subsection*{11.12.4 Biochemistry (BIOC)}

\subsection*{11.12.4. Location}
McIntyre Medical Building
3655 Promenade Sir-William-Osler, Room 905
Montreal QC H3G 1Y6
Telephone: 514-398-7262
Email: zhannat.sakijanova@mcgill.ca
Website: mcsill.ca/biochemistry

\subsection*{11.12.4.2 About Biochemistry}

\section*{What is Biochemistry?}

Biochemistry is the application of chemistry to the study of biological processes at the cellular and molecular level. It emerged as a distinct discipline around the beginning of the 20th century when scientists combined chemistry, physiology, and biology to investigate the chemistry of living systems.
- The study of life in its chemical processes: Biochemistry is both a life science and a chemical science-it explores the chemistry of living organisms and the molecular basis for the changes occurring in living cells. It uses the methods of chemistry, physics, molecular biology, and immunology to study the structure and behaviour of the complex molecules found in biological material and the ways these molecules interact to form cells, tissues, and whole organisms. Biochemistry graduates are interested, for example, in mechanisms of brain function, cellular multiplication and differentiation, communication within and between cells and organs, and the chemical bases of inheritance and disease. The biochemistry student seeks to determine how specific molecules such as proteins, nucleic acids, lipids, vitamins, and hormones function in such processes. Particular emphasis is placed on regulation of chemical reactions in living cells.
- An essential science: Biochemistry has become the foundation for understanding all biological processes. It has provided explanations for the causes of many diseases in humans, animals, and plants. It can frequently suggest ways by which such diseases may be treated or cured.
- A practical science: Because biochemistry seeks to unravel the complex chemical reactions that occur in a wide variety of life forms, it provides the basis for practical advances in medicine, veterinary medicine, agriculture, and biotechnology. It underlies and includes such exciting new fields as molecular genetics and bioengineering. The knowledge and methods developed by biochemistry scientists are applied in all fields of medicine, in agriculture, and in many chemical- and health-related industries. Biochemistry is also unique in providing teaching and research opportunities in both protein structure/function and genetic engineering, the two basic components of the rapidly expanding field of biotechnology.
- A varied science: As the broadest of the basic sciences, biochemistry includes many subspecialties such as neurochemistry, bioorganic chemistry, clinical biochemistry, physical biochemistry, molecular genetics, biochemical pharmacology, and immunochemistry. Recent advances in these areas have created links among technology, chemical engineering, and biochemistry.

The Department of Biochemistry offers three undergraduate programs:
- Liberal Program

This is the most flexible of the departmental programs offered, providing students with a useful concentration in biochemistry while allowing them to pursue a minor in another speciality or to broaden their education in the sciences.
- Major

The Major program becomes more specialized in biochemistry during the final two years. This program requires skills and insight from all areas of chemistry, and from other areas such as biology, physiology, microbiology and immunology, statistics, and pharmacology. For students aiming for a professional career in the biological sciences or in medicine, these programs can lead to postgraduate studies and research careers in hospital, university, or industrial laboratories.
- Honours

The Honours program in Biochemistry combines the substantial background given by the Major program with a challenging opportunity to carry out laboratory research projects in the U3 year. These courses provide students with research experience under the supervision of a professor in the Department. Honours students intending to pursue an M.Sc. in Biochemistry may be interested in the B.Sc./M.Sc. track, which offers a streamlined path to a graduate degree.

Our Major and Honours programs provide a sound background for students aiming for a professional career in biochemistry. The less specialized Liberal program allows students to select courses in other fields of interest. The Liberal program provides students with the opportunity to study the core of one science discipline along with a breadth component from another area of science or from many other disciplines; for more information, see Faculty of Science > Undergraduate > Faculty Degree Requirements > Program Requirements > section 11.5.4.1: Liberal, Major, and Honours Programs.

During the first year, each program provides introductory lecture and laboratory courses in biochemistry, as well as basic courses in cell and molecular biology and organic and physical chemistry. In the second and third years, the programs offer an expanded focus in biochemistry through lecture courses, a second laboratory course in biochemistry, and opportunities to carry out research projects in faculty members' laboratories through our BIOC 396, BIOC 462, and BIOC 491 courses. Students can also take a variety of complementary courses in other biological, biomedical, and chemical disciplines in their second and third years.
Increasingly complex technology requires training in both chemistry and biology. As well, the combination of chemistry, molecular biology, enzymology, and genetic engineering in our programs provides the essential background and training in biotechnology. With this, our graduates can work in a variety of positions in industry and health. These range from \(R \& D\) in the chemical and pharmaceutical industries, to testing and research in government and hospital laboratories, to management. Many graduates pursue higher degrees in research and attain academic positions in universities and colleges.
Additional information is available on the Department of Biochemistry website.

\subsection*{11.12.4.3 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Biochemistry (47 credits)}

\section*{U1 Required Courses (23 credits)}
* Students with CEGEP-level credit for CHEM 212 and/or CHEM 222 should replace these courses with elective courses.
\begin{tabular}{lcl} 
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOC 220 & (3) & Laboratory Methods in Biochemistry and Molecular Biology 1 \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2
\end{tabular}

\section*{U1 Complementary Courses** (6 credits)}
** Complementary courses listed for U1 and U2 may be taken in later years if necessary to accommodate courses that must be taken in U1 and U2 as part of the breadth component of the program.
6 credits selected from:
\begin{tabular}{lll} 
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
MIMM 211 & (3) & Introductory Microbiology \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

\section*{U2 Required Courses (12 credits)}
\begin{tabular}{lll} 
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOC 312 & (3) & Biochemistry of Macromolecules \\
BIOC 320 & (3) & Laboratory Methods in Biochemistry and Molecular Biology 2 \\
CHEM 302 & (3) & Introductory Organic Chemistry 3
\end{tabular}

\section*{U2 Complementary Courses** (3 credits)}
** Complementary courses listed for U1 and U2 may be taken in later years if necessary to accommodate courses that must be taken in U1 and U2 as part of the breadth component of the program.
\begin{tabular}{lcl}
3 credits selected from: & \\
BIOL 373 & \((3)\) & Biometry \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 297 & (1) & Introductory Analytical Chemistry Laboratory \\
COMP 202 & (3) & Foundations of Programming \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 222 & (3) & Calculus 3 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{U3 Complementary Courses (3 credits)}

3 credits selected from:
\begin{tabular}{lll} 
BIOC 450 & (3) & Protein Structure and Function \\
BIOC 454 & (3) & Nucleic Acids
\end{tabular}

\subsection*{11.12.4.4 Bachelor of Science (B.Sc.) - Major Biochemistry (64 credits)}

Students may transfer into the Major program at any time, provided they have met all course requirements.

\section*{U1 Required Courses ( 23 credits)}
* Note: Students with CEGEP-level credit for the equivalents of CHEM 212 and/or CHEM 222 (see http://www.mcgill.ca/students/courses/plan/transfer/ for accepted equivalents) may not take these courses at McGill and should replace them with elective courses to satisfy the total credit requirement for their degree.
\begin{tabular}{lcl} 
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOC 220 & (3) & Laboratory Methods in Biochemistry and Molecular Biology 1 \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2
\end{tabular}

\section*{U1 Complementary Courses (6 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
MIMM 211 & (3) & Introductory Microbiology \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

\section*{U2 Required Courses (20 credits)}
\begin{tabular}{lll} 
ANAT 262 & (3) & Introductory Molecular and Cell Biology \\
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOC 312 & (3) & Biochemistry of Macromolecules \\
BIOC 320 & (3) & Laboratory Methods in Biochemistry and Molecular Biology 2
\end{tabular}
\begin{tabular}{lll} 
CHEM 214 & (3) & Physical Chemistry/Biological Sciences 2 \\
CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
CHEM 362 & (2) & Advanced Organic Chemistry Laboratory
\end{tabular}

\section*{U2 Complementary Courses ( 3 credits)}

3 credits selected from:
\begin{tabular}{lcl} 
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 373 & (3) & Biometry \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
COMP 202 & \((3)\) & Foundations of Programming \\
COMP 204 & \((3)\) & Computer Programming for Life Sciences \\
MATH 203 & \((3)\) & Principles of Statistics 1 \\
MATH 222 & \((3)\) & Calculus 3 \\
PSYC 204 & \((3)\) & Introduction to Psychological Statistics
\end{tabular}

\section*{U3 Required Courses (6 credits)}
\begin{tabular}{lll} 
BIOC 450 & (3) & Protein Structure and Function \\
BIOC 454 & (3) & Nucleic Acids
\end{tabular}

\section*{U3 Complementary Courses ( 6 credits)}

\section*{3-6 credits selected from:}
\begin{tabular}{lll} 
BIOC 458 & (3) & Membranes and Cellular Signaling \\
BIOC 470 & (3) & Lipids and Lipoproteins in Disease \\
BIOC 491 & (6) & Independent Research \\
BIOC 503 & (3) & Biochemistry of Immune Diseases \\
PSYT 455 & (3) & Neurochemistry
\end{tabular}

The remainder, if any, to be selected from the following list:
\begin{tabular}{|c|c|c|}
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 304 & (3) & Evolution \\
\hline BIOL 313 & (3) & Eukaryotic Cell Biology \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline CHEM 267 & (3) & Introductory Chemical Analysis \\
\hline CHEM 482 & (3) & Organic Chemistry: Natural Products \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline CHEM 532 & (3) & Structural Organic Chemistry \\
\hline CHEM 552 & (3) & Physical Organic Chemistry \\
\hline CHEM 572 & (3) & Synthetic Organic Chemistry \\
\hline EXMD 502 & (3) & Advanced Endocrinology 1 \\
\hline MIMM 324 & (3) & Fundamental Virology \\
\hline
\end{tabular}
PHAR 300
(3)
PHGY 311
Drug Action
Channels, Synapses and Hormones

\subsection*{11.12.4.5 Bachelor of Science (B.Sc.) - Honours Biochemistry (73 credits)}

Admission to the Honours program will not be granted until U2. Students who wish to enter the Honours program in U2 should follow the U1 Major program. Those who satisfactorily complete the U1 Major program with a GPA of at least 3.20 and a mark of B- or better in every required course are eligible for admission to the Honours program.

Students seeking admission to the Honours program must obtain permission from the Departmental Student Affairs Officer, Christine Laberge (christine.laberge@mcgill.ca), during the Add/Drop period in September of their second year.
Promotion to U3 year is based on satisfactory completion of U2 courses with a GPA of at least 3.20 and a mark of B- or better in every required course. In borderline cases, the marks received in BIOC 311 and BIOC 312 will be of particular importance for continuation in the U3 Honours year.
For graduation in the Honours program, students must complete a minimum of 90 credits, pass all required courses with no grade less than B-, and achieve a CGPA of at least 3.20.

\section*{U1 Required Courses ( 23 credits)}
* Note: Students with CEGEP-level credit for the equivalents of CHEM 212 and/or CHEM 222 (see http://www.mcgill.ca/students/courses/plan/transfer/ for accepted equivalents) may not take these courses at McGill and should replace them with elective courses to satisfy the total credit requirement for their degree.
\begin{tabular}{lcl} 
BIOC 212 & \((3)\) & Molecular Mechanisms of Cell Function \\
BIOC 220 & (3) & Laboratory Methods in Biochemistry and Molecular Biology 1 \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2
\end{tabular}

\section*{U1 Complementary Courses (6 credits)}

6 credits selected from:
\begin{tabular}{lll} 
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
MIMM 211 & (3) & Introductory Microbiology \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

\section*{U2 Required Courses ( 20 credits)}
\begin{tabular}{lll} 
ANAT 262 & \((3)\) & Introductory Molecular and Cell Biology \\
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOC 312 & \((3)\) & Biochemistry of Macromolecules \\
BIOC 320 & \((3)\) & Laboratory Methods in Biochemistry and Molecular Biology 2 \\
CHEM 214 & \((3)\) & Physical Chemistry/Biological Sciences 2 \\
CHEM 302 & \((3)\) & Introductory Organic Chemistry 3 \\
CHEM 362 & \((2)\) & Advanced Organic Chemistry Laboratory
\end{tabular}

U2 Complementary Courses ( 3 credits)
\begin{tabular}{lcl}
3 credits selected from: & \\
BIOL 309 & \((3)\) & Mathematical Models in Biology \\
BIOL 373 & \((3)\) & Biometry \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
COMP 202 & (3) & Foundations of Programming \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 222 & \((3)\) & Calculus 3 \\
PSYC 204 & \((3)\) & Introduction to Psychological Statistics
\end{tabular}

\section*{U3 Required Courses (15 credits)}
\begin{tabular}{lll} 
BIOC 404 & (3) & Biophysical Methods in Biochemistry \\
BIOC 450 & (3) & Protein Structure and Function \\
BIOC 454 & (3) & Nucleic Acids \\
BIOC 462 & (6) & Research Laboratory in Biochemistry
\end{tabular}

\section*{U3 Complementary Courses (6 credits)}

3-6 credits selected from:
\begin{tabular}{lll} 
BIOC 458 & (3) & Membranes and Cellular Signaling \\
BIOC 470 & (3) & Lipids and Lipoproteins in Disease \\
BIOC 491 & (6) & Independent Research \\
BIOC 503 & (3) & Biochemistry of Immune Diseases \\
PSYT 455 & (3) & Neurochemistry
\end{tabular}

The remainder, if any, to be selected from the following list:
\begin{tabular}{|c|c|c|}
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 304 & (3) & Evolution \\
\hline BIOL 313 & (3) & Eukaryotic Cell Biology \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline CHEM 267 & (3) & Introductory Chemical Analysis \\
\hline CHEM 482 & (3) & Organic Chemistry: Natural Products \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline CHEM 532 & (3) & Structural Organic Chemistry \\
\hline CHEM 552 & (3) & Physical Organic Chemistry \\
\hline CHEM 572 & (3) & Synthetic Organic Chemistry \\
\hline EXMD 502 & (3) & Advanced Endocrinology 1 \\
\hline EXMD 503 & (3) & Advanced Endocrinology 02 \\
\hline MIMM 324 & (3) & Fundamental Virology \\
\hline PHAR 300 & (3) & Drug Action \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline
\end{tabular}

\subsection*{11.12.4.6 Biochemistry (BIOC) Related Programs \\ 11.12.4.6.1 Interdepartmental Honours in Immunology}

For more information, see section 11.12.18: Immunology. This program is offered by the Departments of Biochemistry, Microbiology and Immunology, and Physiology.

Students interested in the program should contact:
Dr. C. Piccirillo
Microbiology and Immunology
Telephone: 514-934-1934, ext. 76143
Email: ciro.piccirillo@mcgill.ca
OR
Dr. Monroe Cohen
Physiology
Telephone: 514-398-4342
Email: monroe.cohen@mcgill.ca

\subsection*{11.12.5 Biology (BIOL)}

\subsection*{11.12.5.1 Location}

Stewart Biology Building, Room N7/9B
1205 avenue Docteur Penfield
Montreal QC H3A 1B1
Website: mcgill.ca/biology
Undergraduate Advisor
Telephone: 514-398-4109
Email: nancy.nelson@mcgill.ca
Website: mcgill.ca/biology/undergraduate-studies/advising-planning/biology-advising

\subsection*{11.12.5.2 About Biology}

Biology is the study of living things at the molecular, cellular, organismal, and ecosystem levels. It deals with fundamental questions such as:
- the origin and evolution of plants and animals;
- interactions between living organisms and their environment;
- mechanisms of embryonic development;
- structure and function of the living cell and individual molecules within it;
- molecular basis of inheritance;
- biochemical and genetic basis of human diseases; and
- how the brain and the nervous system control behaviour.

The study of biology also has vast practical applications. The knowledge, methods, and concepts developed through research in the various fields of biology are applied extensively in agriculture, medicine, pharmaceutical development, biotechnology, genetic engineering, environmental protection, and wildlife management.

The Department of Biology offers:
- Liberal program;
- Major program;
- Joint Majors with Computer Science and with Mathematics;
- Honours program;
- Joint Honours with Computer Science;
- Minor program;
- Minor concentration in Science for Arts students;
- Biology Major and Honours option in Quantitative Biology; as well as
- Major and Minor concentrations in the B.A. \& Sc.

The programs in Biology provide you with an introduction to the broad spectrum of Biological Sciences in contrast to more specialized programs in Biochemistry, Microbiology, Pharmacology, Physiology, and Anatomy and Cell Biology. The B.Sc. degree in Biology prepares you for a wide range of employment opportunities as well as entry to professional schools in medicine, veterinary science, dentistry, agriculture, nursing, education, and library science. It also provides a solid background for those interested in careers related to environmental protection, wildlife management, biotechnology, and genetic engineering. The B.Sc. degree in Biology can also lead to post-graduate studies and research careers in universities, research institutes, hospitals, and industrial or governmental laboratories.

The Department of Biology's well-equipped research laboratories are located in the Stewart Biology Building, 1205 Docteur Penfield Avenue and in the adjacent Bellini Life Sciences Building. Due to massive renovations that began in the Fall of 2017, only the North Wing of the Stewart Building is currently in use and freshman biology labs have temporarily moved into the Duff Medical Building. The Department includes many biologists who are international leaders in their research fields, but who nevertheless remain deeply committed to undergraduate education. We have outstanding infrastructure for cell, developmental, and neurobiology research, and extensive links to biomedical scientists throughout McGill and all over the world. Our ecology and evolutionary biology group is also internationally prominent and dedicated to studying aquatic and terrestrial ecosystems.

Our core undergraduate program will expose you to the broad areas of biology at all of these levels of complexity. At the same time you will be able to focus on topics related to your specific interests through complementary and elective courses. Beyond the large introductory classes, our class sizes are relatively small and you will have lots of opportunities for contact with your instructors; this is one of our strengths! Biology's teaching and research resources are extended by affiliation with the Redpath Museum, the hospitals and research institutes of the McGill University Health Centre, the Montreal Neurological Institute, the Sheldon Biotechnology Institute, and the Smithsonian Tropical Research Institute in Panama. Field courses enable you to study biology in a natural setting, in local ecosystems (e.g., at McGill's Gault Nature Reserve), and in distant ones such as Barbados, Panama, and East Africa. The Biology Department is also deeply committed to providing individual research experiences to its undergraduates. U2- and U3-level students, not just Honours program students, can carry out semester- or year-long independent study projects for course credit in Biology department research labs. Numerous summer opportunities are also available.

Undergraduate students are represented by the MBSU (McGill Biology Students Union) in the Departmental Assembly and in Standing Committees.
Note to those interested in the B.A. \& Sc. program: Both a major and a minor concentration in Biology are available to students pursuing the B.A. \& Sc. degree. These concentrations are described in Bachelor of Arts and Science > Undergraduate >Browse Academic Units \& Programs > section 4.11.6: Biology.

\subsection*{11.12.5.3 Preprogram Requirements}

Requirements for the Major and Honours programs in Biology are:
- two courses in elementary biology;
- two courses in general chemistry;
- two courses in mathematics (as per the Freshman science requirements);
- one or two courses in physics (mechanics and electromagnetism), depending on your choice of upper year courses.

Students entering the B.A. \& Sc., the Liberal program, and the Biology Science Minor have the same biology, chemistry, and mathematics requirements. The physics requirements will vary according to their future direction. Note that satisfying the minimum Freshman science requirements does not necessarily qualify students for medical or dental school admissions requirements.

Students planning to take one of the joint majors or the Quantitative Biology Major or Honours options should consult:
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Undergraduate Advisor
Stewart Biology Building, Room N7/9B
Telephone: 514-398-4109
Email: nancy.nelson@mcgill.ca
Website: mcgill.ca/biology/undergraduate-studies/advising-planning/biology-advising

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to ensure they are taking the appropriate prerequisites.

\subsection*{11.12.5.4 Biology Concentrations}

Note: The concentrations set out below are only guidelines for specialized training. They do not constitute sets of requirements.

Note: Courses used to satisfy the complementary course components of the Major program must be at the 300+ level. Any 200 level courses listed below must be taken as electives.

Note: Please see guidelines and policies for taking courses outside Arts and Science at mcgill.ca/science/undergraduate/handbook\#bsc-outside-course-restrictions.

If you are interested in advanced studies in any biological discipline, you are strongly advised to develop your skills in computing as appropriate. As an aid to students wishing to specialize, key and suggested courses are listed by discipline.

\subsection*{11.12.5.4.1 CEEB: Conservation, Ecology, Evolution, and Behaviour}

BIOL 304, BIOL 305, BIOL 308, BIOL 309, BIOL 310, BIOL 311, BIOL 320, BIOL 324, BIOL 331, BIOL 334D1,D2, BIOL 335, BIOL 352, BIOL 363, BIOL 377, BIOL 396, BIOL 413, BIOL 418, BIOL 427, BIOL 428, BIOL429, BIOL 432, BIOL 436, BIOL 441, BIOL 451, BIOL 465, BIOL 466, BIOL 467, BIOL 468D1/D2, BIOL 469D1/D2, BIOL 507, BIOL 510, BIOL 515, BIOL 517, BIOL 540, BIOL 553, BIOL 569, BIOL 573, BIOL 592, BIOL 594, GEOG 302, GEOG 305, GEOG 308, GEOG 322, GEOG 470, REDM 400; MAC CAMPUS: PARA 424, PLNT 358, PLNT 460, WILD 307, WILD 350, WILD 415, WILD 420, WILD 421
11.125.4.1.1 MCDB: Molecular, Cellular, and Developmental Biology

BIOL 300, BIOL 301, BIOL 302, BIOL 303, BIOL 306, BIOL 309, BIOL 313, BIOL 314, BIOL 316, BIOL 324, BIOL 370, BIOL 377, BIOL 396, BIOL 413, BIOL 416, BIOL 466, BIOL 467, BIOL 468D1/D2, BIOL 469D1/D2, BIOL 518, BIOL 520, BIOL 524, BIOL 544, BIOL 546, BIOL 551, BIOL 565, BIOL 568, BIOL 569, BIOL 575, BIOL 588, BIOL 592, BIOC 311, HGEN 400, MIMM 314
11.125.4.1.1.1 NBB: Neurobiology and Behaviour

BIOL 300, BIOL 303, BIOL 304, BIOL 305, BIOL 306, BIOL 307, BIOL 309, BIOL 320, BIOL 377, BIOL 389, BIOL 413, BIOL 414, BIOL 466, BIOL 467, BIOL 468D1/D2, BIOL 469D1/D2, BIOL 506, BIOL 507, BIOL 517, BIOL 530, BIOL 532, BIOL 580, BIOL 588, BIOL 592, ANAT 321, ANAT
322, NEUR 310, PHAR 562, PHGY 311, PHGY 314, PHGY 425, PHGY 451, PHGY 556, PSYC 311, PSYC 318, PSYC 342, PSYC 410, PSYC 470 , PSYC 455, PSYT 500

\subsection*{11.12.5.5 Bachelor of Science (B.Sc.) - Minor Biology ( 25 credits)}

The Minor Biology may be taken in conjunction with any primary program in the Faculty of Science (other than programs offered by the Department of Biology). Students are advised to consult the undergraduate adviser in Biology as early as possible (preferably during their first year), in order to plan their course selection.

See Nancy Nelson, Stewart Biology Building, 514-398-4109, email: nancy.nelson@mcgill.ca.
6 credits of overlap are allowed between the Minor and the primary program.

\section*{Required Courses (15 credits)}
\begin{tabular}{lll} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics \\
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 215 & (3) & Introduction to Ecology and Evolution
\end{tabular}

\section*{Complementary Courses (10 credits)}

Students complete a minimum of 9 or a maximum of 10 complementary course credits depending on their choice of complementary courses.

To include:
CHEM 212* (4) Introductory Organic Chemistry 1

Plus an additional two courses from the Biology department's course offerings, at the 300 level or above.
* Students who have already taken CHEM 212 or its equivalent will choose another appropriate course, to be approved by the Biology Adviser.

\subsection*{11.12.5.6 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Biology (47 credits)}

The Liberal Program - Core Science Component Biology is a flexible program focusing on the fundamentals of biology. Topics include a range of biological concepts spanning molecules and cells to organisms and ecosystems, including development, behaviour and evolution. This program is well suited to students with varied interests who do not want to focus solely on biology in their studies.

Students may complete this program with a minimum of 45 credits or a maximum of 47 credits depending on their choice of complementary courses.

\section*{Required Courses ( 24 credits)}
\begin{tabular}{lll} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 205 & (3) & Functional Biology of Plants and Animals
\end{tabular}
\begin{tabular}{lll} 
BIOL 206 & (3) & Methods in Biology \\
BIOL 215 & (3) & Introduction to Ecology and Evolution \\
BIOL 216 & (3) & Biology of Behaviour \\
BIOL 302 & (3) & Fundamentals of Genetics and Genomics \\
COMP 204 & (3) & Computer Programming for Life Sciences
\end{tabular}

\section*{Complementary Courses (21-23 credits)}

Core (6-8 credits)
3 or 4 credits selected from:
\begin{tabular}{lll} 
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1
\end{tabular}
* If a student has already taken CHEM 212 or its equivalent, the credits can be made up with CHEM 204, CHEM 222, or a 3- or 4-credit Biology complementary course to be approved by the Biology Adviser.

3 or 4 credits selected from:
BIOL 301
(4)
Cell and Molecular Laboratory
BIOL 311
Advanced Methods in Organismal Biology

\section*{Other ( 15 credits)}

15 credits of Biology complementary courses at the 300-500 levels, including at least 3 credits at the 400-500 levels. Up to 6 credits may be from non-BIOL science courses, with Adviser permission. Up to 6 credits of independent research may be included.

\subsection*{11.12.5.7 Bachelor of Science (B.Sc.) - Major Biology (59 credits)}

The Biology Major covers a range of fundamental biological concepts spanning molecules and cells to organisms and ecosystems, including development, behaviour and evolution. The areas of focus include: (1) molecular, cellular and developmental biology, (2) conservation, ecology and evolution, and (3) neurobiology and behaviour.

\section*{Required Courses (31 credits)}
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 206 & (3) & Methods in Biology \\
BIOL 215 & \((3)\) & Introduction to Ecology and Evolution \\
BIOL 216 & (3) & Biology of Behaviour \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 302 & (3) & Fundamentals of Genetics and Genomics \\
BIOL 311 & (3) & Advanced Methods in Organismal Biology \\
COMP 204 & (3) & Computer Programming for Life Sciences
\end{tabular}

\section*{Complementary Courses (27-28 credits)}

Core 12-13 credits
3 or 4 credits selected from CHEM block:
\begin{tabular}{lll} 
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1
\end{tabular}
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* If a student has already taken CHEM 212 or its equivalent, the credits can be made up with CHEM 204, or CHEM 222, or a 3- or 4-credit Biology
complementary course to be approved by the Biology Adviser.
9 credits (3 credits from each of Blocks A, B and C):
Block A-Ecology and Evolution:

| BIOL 304 | (3) | Evolution |
| :--- | :---: | :--- |
| BIOL 305 | (3) | Animal Diversity |
| BIOL 308 | $(3)$ | Ecological Dynamics |

Block B-Molecular and Cellular:
BIOL 300
BIOL 303
(3)
Molecular Biology of the Gene
Developmental Biology
BIOL 313
Eukaryotic Cell Biology
Block C-Neuro/Behaviour:
BIOL 306
Neural Basis of Behaviour
BIOL 307
Behavioural Ecology

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\section*{Other ( 15 credits)}

15 credits other Biology courses at the 300-500 levels, of which 6 credits must be at the 400-500 levels; may include up to 6 credits of research, and may include up to 6 credits of other non-BIOL science courses subject to Adviser approval.

\subsection*{11.12.5.8 Bachelor of Science (B.Sc.) - Major Biology - Quantitative Biology (73 credits)}

Interdisciplinary research that draws from the natural and physical sciences is an important aspect of modern biology. The Quantitative Biology option is designed for students with a deep interest in biology who wish to gain a strong grounding in physical sciences and their application to biological questions. The program has two options: an ecology and evolutionary biology stream, and a physical biology stream. Both streams provide a balance of theory and experimental components.

Students may complete this program with a minimum of 68 credits or a maximum of 73 credits depending on whether MATH 222 and CHEM 212 are completed.

\section*{Advising notes for U0 students}

It is highly recommended that freshman BIOL, CHEM, MATH, and PHYS courses be selected with the Program Adviser to ensure they meet the core requirements of the Quantitative Biology option.
This program is recommended for U1 students achieving a CGPA of 3.20 or better; and entering CEGEP students with a Math/Science R-score of 28.0 or better.

\section*{Required Courses ( 43 credits)}

\section*{Bio-Physical Sciences Core (31 credits)}
\begin{tabular}{lcl} 
BIOL 219 & \((4)\) & Introduction to Physical Molecular and Cell Biology \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
COMP 202** & (3) & Foundations of Programming \\
MATH 222* & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}
\begin{tabular}{lll} 
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}
*Students who have taken the equivalent of CHEM 212 or MATH 222 can make up the credits with a complementary 3 or 4 credit course in consultation with a stream adviser.
**Students who have sufficient knowledge of programming should take COMP 250 Introduction to Computer Science rather than COMP 202.

\section*{Biology (6 credits)}
\begin{tabular}{lll} 
BIOL 202 & (3) & Basic Genetics \\
BIOL 215 & (3) & Introduction to Ecology and Evolution
\end{tabular}

\section*{Physics (6 credits)}
PHYS 230
(3)
Dynamics of Simple Systems
PHYS 232
(3)
Heat and Waves

\section*{Course Requirements for Quantitative Biology Streams (21 credits)}

21 credits from one of the following two streams:

\section*{Stream 1: Theoretical Ecology and Evolutionary Biology (21 credits)}

Biology
\begin{tabular}{lll} 
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 206 & (3) & Methods in Biology \\
BIOL 304 & (3) & Evolution \\
BIOL 308 & (3) & Ecological Dynamics
\end{tabular}

Field Courses - 3 credits from the following list or any other field course with permission:
\begin{tabular}{lll} 
BIOL 240 & \((3)\) & Monteregian Flora \\
BIOL 331 & (3) & Ecology/Behaviour Field Course \\
BIOL 432 & \((3)\) & Limnology
\end{tabular}

6 credits chosen from the following list of courses at the 400 level or above:
* Students choose either both BIOL 596 and BIOL 597, or BIOL 598.
\begin{tabular}{lcl} 
BIOL 432 & \((3)\) & Limnology \\
BIOL 434 & \((3)\) & Theoretical Ecology \\
BIOL 435 & (3) & Natural Selection \\
BIOL 465 & (3) & Conservation Biology \\
BIOL 509 & (3) & Methods in Molecular Ecology \\
BIOL 510 & (3) & Advances in Community Ecology \\
BIOL 515 & (3) & Advances in Aquatic Ecology \\
BIOL 540 & (3) & Ecology of Species Invasions \\
BIOL 594 & (3) & Advanced Evolutionary Ecology \\
BIOL 596* & (1) & Advanced Experimental Design \\
BIOL 597* & (2) & Advanced Biostatistics
\end{tabular}

BIOL 598*
(3)

Advanced Design and Statistics

\section*{Stream 2: Physical Biology ( 21 credits)}
\begin{tabular}{lll} 
BIOL 319 & (3) & Introduction to Biophysics \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications \\
PHYS 346 & (3) & Majors Quantum Physics
\end{tabular}

300-level complementary courses: 6 credits from the following:
\begin{tabular}{lll} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 303 & (3) & Developmental Biology \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 313 & (3) & Eukaryotic Cell Biology
\end{tabular}

500-level complementary courses: 6 credits from the following:
\begin{tabular}{lll} 
BIOL 518 & (3) & Advanced Topics in Cell Biology \\
BIOL 520 & (3) & Gene Activity in Development \\
BIOL 524 & (3) & Topics in Molecular Biology \\
BIOL 530 & (3) & Advances in Neuroethology \\
BIOL 551 & (3) & Principles of Cellular Control \\
BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology
\end{tabular}

\section*{Complementary Courses}

Quantitative Biology - Theoretical Ecology and Evolutionary Biology, and Physical Biology streams
9 credits from the following:
Recommendations for either Theoretical Ecology and Evolutionary Biology or Physical Biology streams
\begin{tabular}{lcl} 
BIOL 466 & \((3)\) & Independent Research Project 1 \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 350* & (3) & Numerical Computing \\
COMP 364 & (3) & Computer Tools for Life Sciences \\
MATH 235** & (3) & Algebra 1 \\
MATH 240** & (3) & Discrete Structures \\
MATH 314 & (3) & Advanced Calculus \\
MATH 317* & (3) & Numerical Analysis \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 348 & (3) & Euclidean Geometry \\
MATH 437 & (3) & Mathematical Methods in Biology
\end{tabular}
MATH 447 Introduction to Stochastic Processes
* Students may take COMP 350 OR MATH 317.
**MATH 235 or MATH 240 are required for COMP 251 .

Recommendations for Physical Biology stream
\begin{tabular}{lcl} 
BIEN 310 & \((3)\) & Introduction to Biomolecular Engineering \\
BIEN 320 & \((3)\) & Molecular, Cellular and Tissue Biomechanics \\
BIEN 340 & \((3)\) & Transport Phenomena in Biological Systems 2 \\
BIEN 510 & (3) & Engineered Nanomaterials for Biomedical Applications \\
BIEN 530 & (3) & Imaging and Bioanalytical Instrumentation \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
PHYS 242* & (2) & Electricity and Magnetism \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 342 & (3) & Majors Electromagnetic Waves \\
PHYS 434 & (3) & Optics \\
PHYS 519 & (3) & Advanced Biophysics \\
PHYS 534 & (3) & Nanoscience and Nanotechnology
\end{tabular}
* PHYS 242 is required for PHYS 342 and PHYS 434.

Recommendations for Theoretical Ecology and Evolutionary Biology stream
\begin{tabular}{lll} 
BIOL 310 & \((3)\) & Biodiversity and Ecosystems \\
BIOL 324 & \((3)\) & Ecological Genetics \\
MATH 242 & \((3)\) & Analysis 1 \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 423 & (3) & Applied Regression \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications
\end{tabular}

\subsection*{11.12.5.9 Bachelor of Science (B.Sc.) - Major Biology and Mathematics (76 credits)}

This program is built on a selection of mathematics and biology courses that recognize mathematical biology as a field of research, with three streams within biology: Ecology and Evolutionary Ecology, Molecular Evolution, and Neurosciences.

Advising notes for U0 students:
It is highly recommended that freshman BIOL, CHEM, MATH, and PHYS courses be selected with the Program Adviser to ensure they meet the core requirements of the program.

This program is recommended for U1 students achieving a CGPA of 3.2 or better, and entering CEGEP students with a Math/Science R-score of 28.0 or better.

\section*{Required Courses (37 credits)}

\section*{Bio-Physical Sciences Core}

28 credits
BIOL 219
(4) Introduction to Physical Molecular and Cell Biology
BIOL 301
Cell and Molecular Laboratory
\begin{tabular}{lcl} 
BIOL 395 & (1) & Quantitative Biology Seminar \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
COMP 202** & (3) & Foundations of Programming \\
MATH 222* & (3) & Calculus 3 \\
MATH 223*** & (3) & Linear Algebra \\
MATH 247*** & (3) & Honours Applied Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 323 & (3) & Probability
\end{tabular}
* If a student has already taken CHEM 212 or its equivalent, or MATH 222 or its equivalent, the credits can be made up with a complementary course in consultation with the Program Adviser.
** Students who have sufficient knowledge in a programming language should take COMP 250 ( 3 credits) "Introduction to Computer Science" rather than COMP 202.
*** Students may take either MATH 223 or MATH 247.

\section*{Biology and Mathematics Core}

9 credits
\begin{tabular}{lll} 
BIOL 215 & (3) & Introduction to Ecology and Evolution \\
MATH 242 & (3) & Analysis 1 \\
MATH 243 & (3) & Analysis 2
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 9}\) credits)}

For the 39 credits, students complete 21 credits of BIOL, NEUR, PHGY, PSYC courses including one of three streams (Ecology and Evolutionary Ecology, Molecular Evolution, Neurosciences) and 18 credits of MATH courses.

\section*{Math or Biology Research Course}

Note: Students selecting a BIOL course count this toward their 21 credits of BIOL, NEUR, PHGY, PSYC courses while students selecting a MATH course count this toward their 18 credits of MATH courses.
3-6 credits from the following Math or Biology research courses:
\begin{tabular}{lll} 
BIOL 466 & \((3)\) & Independent Research Project 1 \\
BIOL 467 & \((3)\) & Independent Research Project 2 \\
BIOL 468 & (6) & Independent Research Project 3 \\
MATH 410 & (3) & Majors Project
\end{tabular}

Of the remaining complementary courses, at least 6 credits must be at the 400 level or above.

\section*{Math Courses}

15 credits (if MATH 410 was selected as a research course) or 18 credits of MATH courses chosen from Stream 1 or 2 and from "Remaining Math Courses" as follows:

\section*{Stream 1: Theory}

12 credits from the following courses:
* Students may take either MATH 317 or MATH 327.
\begin{tabular}{lll} 
MATH 314 & (3) & Advanced Calculus \\
MATH \(317 *\) & (3) & Numerical Analysis \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos
\end{tabular}
MATH 327*
(3)
Matrix Numerical Analysis

\section*{Stream 2: Statistics}

9 credits from the following:
\begin{tabular}{lll} 
MATH 324 & (3) & Statistics \\
MATH 423 & (3) & Applied Regression \\
MATH 447 & (3) & Introduction to Stochastic Processes
\end{tabular}

\section*{Remaining Math Courses}

Remaining 3-9 credits of MATH courses may be chosen from any of the two preceding sequences and/or from the following list:
\begin{tabular}{lll} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 437 & (3) & Mathematical Methods in Biology \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications
\end{tabular}

\section*{BIOL, NEUR, PHGY, PHYS, PSYC Courses}

18 credits (if 3 credit BIOL course was selected as a research course) or 15 credits (if 6 credit BIOL research course was selected) of BIOL, NEUR, PHGY, PHYS, PSYC courses including one of three streams.
Note: Some courses in the streams may have prerequisites.

\section*{Ecology and Evolutionary Ecology Stream}

At least 15 credits selected as follows:

3 credits of:
BIOL 206
(3)
Methods in Biology

3 credits from the following field courses or any other field course with permission:
BIOL 240
(3) Monteregian Flora
BIOL 331
(3) Ecology/Behaviour Field Course
BIOL 334D1
(1.5) Applied Tropical Ecology
BIOL 334D2
(1.5) Applied Tropical Ecology
BIOL 432
(3) Limnology
BIOL 573
Vertebrate Palaeontology Field Course

At least 9 credits chosen from the following list
\begin{tabular}{lcl} 
BIOL 202 & (3) & Basic Genetics \\
BIOL 205 & \((3)\) & Functional Biology of Plants and Animals \\
BIOL 304 & \((3)\) & Evolution \\
BIOL 305 & \((3)\) & Animal Diversity \\
BIOL 308 & \((3)\) & Ecological Dynamics
\end{tabular}
\begin{tabular}{lcl} 
BIOL 310 & (3) & Biodiversity and Ecosystems \\
BIOL 324 & (3) & Ecological Genetics \\
BIOL 434 & (3) & Theoretical Ecology \\
BIOL 509 & (3) & Methods in Molecular Ecology \\
BIOL 569 & (3) & Developmental Evolution \\
BIOL 594 & (3) & Advanced Evolutionary Ecology
\end{tabular}

\section*{Molecular Evolution Stream}

At least 15 credits selected as follows:

3 credits
BIOL 202
(3)
Basic Genetics

At least 12 credits selected from the following list:
\begin{tabular}{lcl} 
BIOL 303 & \((3)\) & Developmental Biology \\
BIOL 304 & \((3)\) & Evolution \\
BIOL 313 & \((3)\) & Eukaryotic Cell Biology \\
BIOL 518 & \((3)\) & Advanced Topics in Cell Biology \\
BIOL 569 & (3) & Developmental Evolution \\
BIOL 592 & \((3)\) & Integrated Bioinformatics
\end{tabular}

\section*{Neurosciences Stream}

At least 15 credits selected as follows:

3 credits from:
BIOL 306
(3)
Neural Basis of Behaviour
\begin{tabular}{lcl} 
At least 12 credits selected from: & \\
BIOL 320 & (3) & Evolution of Brain and Behaviour \\
BIOL 389 & (3) & Laboratory in Neurobiology \\
BIOL 530 & (3) & Advances in Neuroethology \\
BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
NEUR 310 & (3) & Cellular Neurobiology \\
NEUR 507 & (3) & Topics in Radionuclide Imaging \\
NEUR 570 & (3) & Human Brain Imaging \\
PHGY 314 & (3) & Integrative Neuroscience \\
PHGY 425 & (3) & Analyzing Physiological Systems \\
PHGY 552 & (3) & Cellular and Molecular Physiology \\
PSYC 427 & (3) & Sensorimotor Neuroscience \\
PSYT 455 & (3) & Neurochemistry \\
PSYT 502 & (3) & Brain Evolution and Psychiatry
\end{tabular}

\section*{Remaining BIOL, NEUR, PHGY, PSYC}

For the remaining BIOL, NEUR, PHGY, PSYC complementary course credits, if any, students top up their credits to the necessary 18-21 credits with any course listed in the above three streams. Other relevant courses may be substituted with the approval of the Program Adviser.

\subsection*{11.12.5.10 Bachelor of Science (B.Sc.) - Honours Biology (72 credits)}

The Honours program in Biology is intended for students who are interested in gaining a concentrated research experience. A broad range of fundamental biological concepts spanning molecules and cells to organisms and ecosystems, including development, behaviour and evolution is supplemented with research in a chosen area. Potential areas of focus include: (1) molecular, cellular and developmental biology, (2) conservation, ecology and evolution, and (3) neurobiology and behaviour.

Acceptance into the Honours program at the end of U2 requires a CGPA of 3.50 and approval of a 9- or 12-credit Independent Studies proposal (see listing of BIOL 479D1/BIOL 479D2, BIOL 480D1/BIOL 480D2 for details). For an Honours degree, a minimum CGPA of 3.50 at Graduation and adherence to the program as outlined below are the additional requirements.
First Class Honours will be awarded to students graduating with a CGPA of 3.75 or better, and having successfully completed the Honours program

\section*{Required Courses (35 credits)}
\begin{tabular}{lcl} 
BIOL 200 & \((3)\) & Molecular Biology \\
BIOL 201 & (3) & Cell Biology and Metabolism \\
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 206 & (3) & Methods in Biology \\
BIOL 215 & (3) & Introduction to Ecology and Evolution \\
BIOL 216 & (3) & Biology of Behaviour \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 302 & (3) & Fundamentals of Genetics and Genomics \\
BIOL 311 & (3) & Advanced Methods in Organismal Biology \\
BIOL 499D1 & (2) & Honours Seminar in Biology \\
BIOL 499D2 & (2) & Honours Seminar in Biology \\
COMP 204 & (3) & Computer Programming for Life Sciences
\end{tabular}

\section*{Complementary Courses (36-37 credits)}

\section*{Core 12-13 credits:}

3 or 4 credits selected from CHEM block:
\begin{tabular}{lll} 
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1
\end{tabular}

\footnotetext{
* If a student has already taken CHEM 212 or its equivalent, the credits can be made up with CHEM 204, CHEM 222, or a 3- or 4-credit Biology complementary course to be approved by the Biology Adviser.
}

9 credits (3 credits from each of Block A, Block B and Block C):
Block A- Ecology and Evolution:
\begin{tabular}{lll} 
BIOL 304 & (3) & Evolution \\
BIOL 305 & (3) & Animal Diversity \\
BIOL 308 & (3) & Ecological Dynamics
\end{tabular}

Block B- Molecular and Cellular:
\begin{tabular}{lll} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 303 & (3) & Developmental Biology
\end{tabular}

Eukaryotic Cell Biology

Block C-Neuro/Behaviour:
\begin{tabular}{lll} 
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 307 & (3) & Behavioural Ecology
\end{tabular}

Honours Block (9-12 credits)
\begin{tabular}{lll} 
BIOL 479D1 & (4.5) & Honours Research Project 1 \\
BIOL 479D2 & \((4.5)\) & Honours Research Project 1
\end{tabular}

OR

BIOL 480D1
Honours Research Project 2
BIOL 480D2
Honours Research Project 2

Other (12-15 credits)
15 credits of Biology courses at the 300-500 levels if taking BIOL 479D1/D2, or 12 credits if taking BIOL 480D1/D2. With permission of the Biology Adviser, up to 6 credits may be taken from other science department courses ( \(300-500\) levels). Up to 3 credits of previous independent research courses may be included. Must include 6 credits of 400-500 levels.

\subsection*{11.12.5.11 Bachelor of Science (B.Sc.) - Honours Biology - Quantitative Biology (79 credits)}

79 credits
Interdisciplinary research that draws from the natural and physical sciences is an important aspect of modern biology. The Quantitative Biology (QB) Honours option is designed for students with a deep interest in biology who wish to gain a strong grounding in physical sciences and their application to biological questions through both coursework and a research project. The QB B.Sc. Honours option has two streams: a theoretical ecology and evolutionary biology stream and a physical biology stream. Both streams provide a balance of theory and experimental components that along with a research component will provide outstanding preparation for graduate training. Students must attain a 3.50 CGPA to enter and to complete the Honours program. First Class Honours will be awarded to students in the QB Honours option graduating with a CGPA of 3.75 or greater.
Students may complete this program with a minimum of 74 credits or a maximum of 79 credits depending on whether MATH 222 and CHEM 212 are completed.

\section*{Advising notes for U0 students}

It is highly recommended that freshman BIOL, CHEM, MATH, and PHYS courses be selected with the Program Adviser to ensure they meet the core requirements of the Quantitative Biology option.

This program is recommended for U1 students achieving a CGPA of 3.20 or better; and entering CEGEP students with a Math/Science R-score of 28.0 or better.

\section*{Required Courses (49 credits)}

\section*{Bio-Physical Sciences Core (31 credits)}
\begin{tabular}{lcl} 
BIOL 219 & \((4)\) & Introduction to Physical Molecular and Cell Biology \\
BIOL 301 & \((4)\) & Cell and Molecular Laboratory \\
BIOL 395 & \((1)\) & Quantitative Biology Seminar \\
CHEM 212* & \((4)\) & Introductory Organic Chemistry 1 \\
COMP 202** & \((3)\) & Foundations of Programming \\
MATH 222*** & \((3)\) & Calculus 3 \\
MATH 223*** & \((3)\) & Linear Algebra \\
MATH 247** & \((3)\) & Honours Applied Linear Algebra
\end{tabular}
\begin{tabular}{lcl} 
MATH 315+ & (3) & Ordinary Differential Equations \\
MATH 323++ & (3) & Probability \\
MATH 324+++ & (3) & Statistics \\
MATH 325+ & (3) & Honours Ordinary Differential Equations \\
MATH 356++ & (3) & Honours Probability \\
MATH 357++++ & (3) & Honours Statistics
\end{tabular}
* Students who have taken the equivalent of CHEM 212 or MATH 222 can make up the credits with complementary 3 or 4 credit courses in consultation with a stream adviser.
** Students who have sufficient knowledge of programming should take COMP 250 Introduction to Computer Science rather than COMP 202.
*** Students take MATH 223 or MATH 247.
+ Students take MATH 315 or MATH 325.
++ Students take MATH 323 or MATH 356.
+++ Students take MATH 324 or MATH 357.
Note: 6 credits of either MATH or PHYS courses to be taken at the honours level. Honours equivalents of core Math and Physics courses are listed. All 500-level Math courses are considered as honours courses and can be applied to the 6 credit requirement.

\section*{Biology (6 credits)}
BIOL 202
(3)
Basic Genetics
BIOL 215
(3)
Introduction to Ecology and Evolution

\section*{Research Component (6 credits)}
BIOL 468
(6)
Independent Research Project 3

\section*{Physics (6 credits)}

6 credits from:
\begin{tabular}{lcl} 
PHYS 230* & (3) & Dynamics of Simple Systems \\
PHYS 232** & (3) & Heat and Waves \\
PHYS 251* & (3) & Honours Classical Mechanics 1 \\
PHYS 253** & (3) & Thermal Physics
\end{tabular}
* Students take PHYS 230 or PHYS 251.
** Students take PHYS 232 or PHYS 253.

\section*{Course Requirements for Quantitative Biology Streams}

21 credits from one of the following two streams:

\section*{Stream 1: Theoretical Ecology and Evolutionary Biology (21 credits)}

Biology
12 credits from the following:
\begin{tabular}{lll} 
BIOL 205 & (3) & Functional Biology of Plants and Animals \\
BIOL 206 & (3) & Methods in Biology \\
BIOL 304 & (3) & Evolution \\
BIOL 308 & (3) & Ecological Dynamics
\end{tabular}

\section*{Field Courses}

3 credits from the following list or any other field course with permission:
\begin{tabular}{|c|c|c|}
\hline BIOL 240 & (3) & Monteregian Flora \\
\hline BIOL 331 & (3) & Ecology/Behaviour Field Course \\
\hline BIOL 432 & (3) & Limnology \\
\hline \multicolumn{3}{|l|}{6 credits chosen from the following list of courses at the 400 level or above:} \\
\hline \multicolumn{3}{|l|}{* Students choose either both BIOL 596 and BIOL 597, or BIOL 598.} \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 434 & (3) & Theoretical Ecology \\
\hline BIOL 435 & (3) & Natural Selection \\
\hline BIOL 465 & (3) & Conservation Biology \\
\hline BIOL 509 & (3) & Methods in Molecular Ecology \\
\hline BIOL 510 & (3) & Advances in Community Ecology \\
\hline BIOL 515 & (3) & Advances in Aquatic Ecology \\
\hline BIOL 540 & (3) & Ecology of Species Invasions \\
\hline BIOL 594 & (3) & Advanced Evolutionary Ecology \\
\hline BIOL 596* & (1) & Advanced Experimental Design \\
\hline BIOL 597* & (2) & Advanced Biostatistics \\
\hline BIOL 598* & (3) & Advanced Design and Statistics \\
\hline
\end{tabular}

\section*{Stream 2: Physical Biology}

21 credits

9 credits from:
\begin{tabular}{lll} 
BIOL 319* & (3) & Introduction to Biophysics \\
PHYS 319* & (3) & Introduction to Biophysics \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications \\
PHYS 346 & (3) & Majors Quantum Physics
\end{tabular}
* Students choose either BIOL 319 or PHYS 319

300-level complementary courses
6 credits from the following:
\begin{tabular}{lll} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 303 & (3) & Developmental Biology \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 313 & (3) & Eukaryotic Cell Biology
\end{tabular}

500-level complementary courses
6 credits from the following:
\begin{tabular}{lll} 
BIOL 518 & (3) & Advanced Topics in Cell Biology \\
BIOL 520 & (3) & Gene Activity in Development \\
BIOL 524 & (3) & Topics in Molecular Biology \\
BIOL 530 & (3) & Advances in Neuroethology \\
BIOL 551 & (3) & Principles of Cellular Control \\
BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology
\end{tabular}

\section*{Complementary Courses (9 credits)}

Recommendations for either Theoretical Ecology and Evolutionary Biology or Physical Biology streams
\begin{tabular}{lll} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 350* & (3) & Numerical Computing \\
COMP 364 & (3) & Computer Tools for Life Sciences \\
MATH \(235^{* *}\) & (3) & Algebra 1 \\
MATH \(240^{* *}\) & (3) & Discrete Structures \\
MATH 314 & (3) & Advanced Calculus \\
MATH \(317^{*}\) & (3) & Numerical Analysis \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 348 & (3) & Euclidean Geometry \\
MATH 437 & (3) & Mathematical Methods in Biology \\
MATH 447 & (3) & Introduction to Stochastic Processes
\end{tabular}
* Students may take COMP 350 OR MATH 317.
** MATH 235 or MATH 240 are required for COMP 251.

Recommendations for Physical Biology stream
\begin{tabular}{lcl} 
BIEN 310 & \((3)\) & Introduction to Biomolecular Engineering \\
BIEN 320 & \((3)\) & Molecular, Cellular and Tissue Biomechanics \\
BIEN 340 & \((3)\) & Transport Phenomena in Biological Systems 2 \\
BIEN 510 & (3) & Engineered Nanomaterials for Biomedical Applications \\
BIEN 530 & (3) & Imaging and Bioanalytical Instrumentation \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
PHYS 242* & (2) & Electricity and Magnetism \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 342 & (3) & Majors Electromagnetic Waves \\
PHYS 413 & (3) & Physical Basis of Physiology \\
PHYS 434 & (3) & Optics \\
PHYS 519 & (3) & Advanced Biophysics \\
PHYS 534 & (3) & Nanoscience and Nanotechnology \\
* PHYS 242 is required for PHYS 342 and PHYS 434.
\end{tabular}

Recommendations for Theoretical Ecology and Evolutionary Biology stream
\begin{tabular}{lcl} 
BIOL 310 & \((3)\) & Biodiversity and Ecosystems \\
BIOL 324 & \((3)\) & Ecological Genetics \\
MATH 242 & (3) & Analysis 1 \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 423 & (3) & Applied Regression \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications
\end{tabular}

\subsection*{11.12.5.12 Biology (BIOL) Related Programs and Study Semesters 11.125.121 Joint Major in Computer Science and Biology}

For more information, see section 11.12.9.11: Bachelor of Science (B.Sc.) - Major Computer Science and Biology (74 credits).

\subsection*{11.125.122 Joint Honours in Computer Science and Biology}

For more information, see section 11.12.9.15: Bachelor of Science (B.Sc.) - Honours Computer Science and Biology (77 credits).

\subsection*{11.125.123 Panama Field Study Semester}

The program is a joint venture between McGill University and the Smithsonian Tropical Research Institute (STRI) in Panama. For more information, see Study Abroad \& Field Studies > Undergraduate > Field Study Semesters and Off-Campus Courses > Field Study Minor > section 12.2.1.5: Panama Field Study Semester. You can also visit the following website for details: mcgill.ca/science/undergraduate/internships-field/field.

\subsection*{11.125.124 Africa Field Study Semester}

The Department of Geography, Faculty of Science, coordinates the 15-credit interdisciplinary Africa Field Study Semester; see Study Abroad \& Field Studies \(>\) Undergraduate > Field Study Semesters and Off-Campus Courses > Field Study Minor > section 12.2.1.1: Africa Field Study Semester. You can also visit the following website for details: mcgill.ca/science/undergraduate/internships-field/field.

\subsection*{11.12.6 Biotechnology (BIOT)}

\subsection*{11.12.6.1 Location}

McIntyre Medical Building
3655 Promenade Sir-William-Osler, Room 1325
Montreal, QC H3G 1Y6

\subsection*{11.12.6.2 About Biotechnology}

Biotechnology-the science of understanding, selecting, and promoting useful organisms and specific gene products for commercial and therapeutic purposes-is the success story of this generation. It demands a broad comprehension of biology and engineering, as well as detailed knowledge of at least one basic subject such as molecular genetics, protein chemistry, microbiology, or chemical engineering.
The Minor in Biotechnology is offered by the Faculties of Engineering and of Science, and students combine the minor with the regular departmental major, or honours, or liberal program. The minor emphasizes an area relevant to biotechnology which is complementary to the main program.
Students should identify their interest in the Biotechnology Minor to their departmental academic advisor and to the program advisor of the minor and, at the time of registration for the U2 year, should declare their intent to embark on the minor. Before registering for the minor, and with the agreement of the academic advisor, students must submit their course list to the program supervisor, who will certify that the student's complete program conforms to the requirements for the minor. Students should ensure that they will have fulfilled the prerequisite requirements for the courses selected.
The course BIOT 505 Selected Topics in Biotechnology is considered as taught by the Faculty of Science.

\subsection*{11.12.6.3 General Regulations}

To obtain the Minor in Biotechnology, students must:
- satisfy the requirements both for the departmental program and for the minor;
- complete 24 credits, 18 of which must be exclusively for the minor program, and outside of their primary program;
- obtain a grade of C or better in the courses presented for the minor.

\subsection*{11.12.6.4 Biotechnology (BIOT) Minor Program}

\section*{Program Supervisor}

Audrey Moores
Maass Chemistry Building
801 Sherbrooke St. West Montreal, QC, H3A 0B8
Telephone: 514-398-4654
Email: audrey.moores@mcgill.ca

\section*{Program Advisor}

Chantal Grignon
Life Sciences Building
3649 Sir William Osler, Montreal, QC, H3G 0B1
Telephone: 514-398-3622
Email: chantal.grignon@mcgill.ca

\subsection*{11.12.6.5 Bachelor of Science (B.Sc.) - Minor Biotechnology (for Science Students) (24 credits)}

To obtain the Minor Biotechnology, Science students must:
a) satisfy both the requirements for the departmental program and for the Minor;
b) complete 24 credits, 18 of which must be exclusively for the Minor program.*
* Approved substitutions must be made for any of the required courses which are part of the student's main program.

\section*{Required Courses ( \(\mathbf{1 5}\) credits)}
* Students may take either BIOL 201 or BIOC 212.
\begin{tabular}{lcl} 
BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics \\
BIOT 505 & (3) & Selected Topics in Biotechnology \\
MIMM 211 & (3) & Introductory Microbiology
\end{tabular}

\section*{Complementary Courses ( 9 credits)}

9 credits selected from courses outside the department of the student's main program. Students may select three courses from one of the lists below, or may choose three alternate courses with adviser approval.

\section*{Biomedicine}
\begin{tabular}{lll} 
ANAT 541 & (3) & Cell and Molecular Biology of Aging \\
EXMD 504 & (3) & Biology of Cancer \\
PATH 300 & (3) & Human Disease
\end{tabular}

\section*{Chemical Engineering}
\begin{tabular}{lll} 
CHEE 200 & (3) & Chemical Engineering Principles 1 \\
CHEE 204 & (3) & Chemical Engineering Principles 2 \\
CHEE 474 & (3) & Biochemical Engineering
\end{tabular}

\section*{Chemistry}
\begin{tabular}{lll} 
CHEM 482 & (3) & Organic Chemistry: Natural Products \\
CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
CHEM 552 & (3) & Physical Organic Chemistry
\end{tabular}

\section*{General}

FACC 300
(3)

Engineering Economy

\section*{Immunology}
\begin{tabular}{lll} 
ANAT 261 & \((4)\) & Introduction to Dynamic Histology \\
BIOC 503 & (3) & Biochemistry of Immune Diseases \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
MIMM 414 & (3) & Advanced Immunology \\
PHGY 513 & (3) & Translational Immunology
\end{tabular}

\section*{Management}
ECON 208
Microeconomic Analysis and Applications
Introduction to Financial Accounting
Introduction to Finance
Principles of Marketing
Operations Management.

\section*{Microbiology}
\begin{tabular}{lcl} 
MIMM 323 & (3) & Microbial Physiology \\
MIMM 324 & (3) & Fundamental Virology \\
MIMM 413 & (3) & Parasitology \\
MIMM 465 & (3) & Bacterial Pathogenesis \\
MIMM 466 & (3) & Viral Pathogenesis
\end{tabular}

\section*{Molecular Biology (Biology)}
\begin{tabular}{lll} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 314 & (3) & Molecular Biology of Cancer \\
BIOL 520 & (3) & Gene Activity in Development \\
BIOL 524 & (3) & Topics in Molecular Biology \\
BIOL 551 & (3) & Principles of Cellular Control
\end{tabular}

\section*{Molecular Biology (Biochemistry)}
\begin{tabular}{lll} 
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOC 312 & (3) & Biochemistry of Macromolecules \\
BIOC 450 & (3) & Protein Structure and Function \\
BIOC 454 & (3) & Nucleic Acids
\end{tabular}
PSYT 455 (3) Neurochemistry

\section*{Physiology}
\begin{tabular}{lll} 
EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
EXMD 502 & (3) & Advanced Endocrinology 1 \\
EXMD 503 & (3) & Advanced Endocrinology 02 \\
PHAR 562 & (3) & Neuropharmacology \\
PHAR 563 & (3) & Endocrine Pharmacology \\
PHGY 518 & (3) & Artificial Cells
\end{tabular}

\section*{Pollution}
\begin{tabular}{lll} 
CHEE 593 & (3) & Industrial Water Pollution Control \\
CIVE 225 & (4) & Environmental Engineering \\
CIVE 430 & (3) & Water Treatment and Pollution Control \\
CIVE 557 & (3) & Microbiology for Environmental Engineering
\end{tabular}
11.12.6.6 Biotechnology (BIOT) Related Programs 11.12.6.6.1 Program for Students in the Faculty of Engineering

See Faculty of Engineering > Undergraduate > Browse Academic Units \& Programs > Minor Programs > section 6.9.10.5: Bachelor of Engineering (B.Eng.) - Minor Biotechnology (for Engineering Students) ( 24 credits) for details.

\subsection*{11.12.7 Chemistry (CHEM)}

\subsection*{11.12.7.1 Location}

Otto Maass Chemistry Building
801 Sherbrooke Street West
Montreal QC H3A 0B8
Departmental Office: Room 322
Telephone: 514-398-6999
Website: mcgill.ca/chemistry
Student advising: mcgill.ca/chemistry/current-undergraduate-students/advising.

\subsection*{11.12.7.2 Office for Science and Society}

The office for Science and Society is dedicated to the promotion of critical thinking and the presentation of practical scientific information to the public, educators, and students in an accurate and responsible fashion. The office answers queries from the public as well as from the media, with a view toward establishing scientific accuracy. The office also offers a variety of educational and interesting presentations on scientific topics and its members contribute to a number of courses under the umbrella of "The World of Chemistry".

\section*{Director}

Joseph A. Schwarcz

\section*{Members}

Ariel Fenster; David N. Harpp

\subsection*{11.12.7.3 About Chemistry}

Chemistry is both a pure science, offering a challenging intellectual pursuit, and an applied science whose technology is of fundamental importance to the economy and society. Modern chemists seek an understanding of the structure and properties of atoms and molecules to predict and interpret the properties
and transformations of matter and the energy changes that accompany those transformations. Many of the concepts of physics and mathematics are basic to chemistry, while chemistry is of fundamental importance to many other disciplines, such as the biological and medical sciences, geology, metallurgy, etc.

A degree in chemistry leads to a wide variety of professional vocations. The large science-based industries (petroleum refining, plastics, pharmaceuticals, etc.) all employ chemists in research, development, and quality control. Many federal and provincial departments and agencies employ chemists in research and testing laboratories. Such positions are expected to increase with the currently growing concern for the environment and for consumer protection. A background in chemistry is also useful as a basis for advanced study in other related fields, such as medicine and the biological sciences. For a business career, a B.Sc. in Chemistry can profitably be combined with a master's degree in Business Administration, or a study of law for work as a patent lawyer or forensic scientist.

Chemistry courses at the university level are traditionally divided into four areas of specialization:
1. organic chemistry, dealing with the compounds of carbon;
2. inorganic chemistry, concerned with the chemistry and compounds of elements other than carbon;
3. analytical chemistry, which deals with the identification of substances and the quantitative measurement of their compositions; and
4. physical chemistry, which treats the physical laws, kinetics, and energetics governing chemical reactions, behaviour of materials, and molecular structure.

Naturally, there is a great deal of overlap between these different areas, and the boundaries are becoming increasingly blurred. After a general course at the introductory level, courses in organic, inorganic, analytical, and physical chemistry are offered throughout the university years. Since chemistry is an experimental science, laboratory classes accompany most undergraduate courses. In addition, courses are offered in polymer, theoretical, green, nano, and biological chemistry to upper-year undergraduates.

There are two main programs in the Department of Chemistry: Honours and Major. There are also a number of B.Sc. Liberal and other programs available. Interested students may inquire about these at the Student Advisory Office, Room 118A, Pulp \& Paper Building, or see mcgill.ca/chemistry/current-undergraduate-students/advising.

\subsection*{11.12.7.4 Bachelor of Science (B.Sc.) - Minor Chemistry ( 20 credits)}

The goal of this minor program is to provide interested B.Sc. students with a good grounding in chemistry through an introduction to one of the traditional sub-disciplines in chemistry (analytical, inorganic, organic, and physical).

\section*{Required Courses ( 13 credits)}
* Denotes courses with CEGEP equivalents.

If any of the required courses are part of your primary program or were taken at CEGEP, then they must be substituted by courses from the minor options list that are not part of your primary program. The total number of credits exclusive to the minor is at least 19 .
\begin{tabular}{lll} 
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 281 & (3) & Inorganic Chemistry 1
\end{tabular}

\section*{Complementary Courses}
\begin{tabular}{lcl} 
6-7 credits \(* *\) & & \\
CHEM 214 & \((3)\) & Physical Chemistry/Biological Sciences 2 \\
CHEM 219 & \((3)\) & Introduction to Atmospheric Chemistry \\
CHEM 222* & \((4)\) & Introductory Organic Chemistry 2 \\
CHEM 302 & \((3)\) & Introductory Organic Chemistry 3 \\
CHEM 319 & (3) & Chemistry of Energy, Storage and Utilization \\
CHEM 334 & \((3)\) & Advanced Materials \\
CHEM 381 & \((3)\) & Inorganic Chemistry 2 \\
CHEM 462 & \((3)\) & Green Chemistry
\end{tabular}
** Any level 300-500 CHEM course can be substituted for courses within this list.

\subsection*{11.12.7.5 Bachelor of Science (B.Sc.) - Minor Chemical Engineering ( 24 credits)}

The B.Sc.; Minor in Chemical Engineering is designed for Chemistry students who wish to study the problems of process engineering and its related subjects, and the important link between molecular sciences and industrial processing. This Minor will not provide requirements for registration as a licensed (professional) engineer.

\section*{Required Courses (18 credits)}
\begin{tabular}{lll} 
CHEE 200 & (3) & Chemical Engineering Principles 1 \\
CHEE 204 & (3) & Chemical Engineering Principles 2 \\
CHEE 220 & (3) & Chemical Engineering Thermodynamics \\
CHEE 314 & (3) & Fluid Mechanics \\
CHEE 315 & (3) & Heat and Mass Transfer \\
CHEE 351 & (3) & Separation Processes
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits selected from any undergraduate courses offered by Chemical Engineering, excluding the following courses: CHEE 363, CHEE 456, CHEE 494, CHEE 495 and CHEE 496.

\subsection*{11.12.7.6 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Chemistry - General (49 credits)}

\section*{Program Prerequisites}

PRE-PROGRAM REQUIREMENTS:
Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

\section*{Required Basic Core Courses ( 26 credits)}

The required courses in this program consist of 26 credits in chemistry and mathematics listed below. The courses marked with an asterisk (*) are omitted from the program of students who have successfully completed them at the CEGEP level. Students from outside Quebec or transfer students should consult the Academic Adviser.

See http://www.mcgill.ca/chemistry/current-undergraduate-students/advising/.
The Liberal Program: Core Science Component Chemistry - General Option is not certified by the Ordre des chimistes du Québec. Students interested in pursuing a career in Chemistry in Quebec are advised to take an appropriate B.Sc. program in Chemistry.
A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 during U1 is strongly recommended.
* Denotes courses with CEGEP equivalents.
** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.
\begin{tabular}{lll} 
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 213 & \((3)\) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
CHEM 267 & \((3)\) & Introductory Chemical Analysis \\
CHEM 273 & \((3)\) & Introductory Physical Chemistry 2: Kinetics and Methods \\
CHEM 281 & \((3)\) & Inorganic Chemistry 1 \\
CHEM 381 & \((3)\) & Inorganic Chemistry 2 \\
MATH 222** & (3) & Calculus 3
\end{tabular}

\section*{General Option Courses (17 credits)}
\begin{tabular}{lll} 
CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
CHEM 345 & (3) & Introduction to Quantum Chemistry \\
CHEM 367 & (3) & Instrumental Analysis 1 \\
CHEM 377 & (3) & Instrumental Analysis 2 \\
CHEM 392 & (3) & Experimental Chemistry 1
\end{tabular}

\section*{Complementary Course (6 credits)}

6 credits from:
\begin{tabular}{lll} 
CHEM 355 & (3) & Applications of Quantum Chemistry \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

Chemistry courses at the \(300+\) level.

\subsection*{11.12.7.7 Bachelor of Science (B.Sc.) - Major Chemistry (59 credits)}

\section*{Program Prerequisites}

PRE-PROGRAM REQUIREMENTS:
Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

\section*{Required Courses (53 credits)}

The required courses in this program consist of 53 credits in chemistry, physics and mathematics, listed below. The courses marked with an asterisk ( \(*\) ) are omitted from the program of students who have successfully completed them at the CEGEP level but the Chemistry courses must be replaced by courses in that discipline if students wish to be eligible for admission to the Ordre des chimistes du Québec. Students from outside Quebec or transfer students should consult the Academic Adviser.
See http://www.mcgill.ca/chemistry/current-undergraduate-students/advising/.
A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 during U1 is also strongly recommended. Physics PHYS 242 should be completed during U2.
* Denotes courses with CEGEP equivalents.
** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.
\begin{tabular}{|c|c|c|}
\hline CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
\hline CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 267 & (3) & Introductory Chemical Analysis \\
\hline CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
\hline CHEM 281 & (3) & Inorganic Chemistry 1 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 332 & (3) & Biological Chemistry \\
\hline CHEM 345 & (3) & Introduction to Quantum Chemistry \\
\hline CHEM 355 & (3) & Applications of Quantum Chemistry \\
\hline CHEM 365 & (2) & Statistical Thermodynamics \\
\hline CHEM 367 & (3) & Instrumental Analysis 1 \\
\hline CHEM 377 & (3) & Instrumental Analysis 2 \\
\hline CHEM 381 & (3) & Inorganic Chemistry 2 \\
\hline CHEM 392 & (3) & Experimental Chemistry 1 \\
\hline CHEM 493 & (2) & Advanced Physical Chemistry Laboratory \\
\hline MATH 222 ** & (3) & Calculus 3 \\
\hline PHYS 242 & (2) & Electricity and Magnetism \\
\hline
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits of Chemistry (CHEM) courses at the 400 level or higher, or MATH 315 plus 3 credits of Chemistry courses at the 400 level or higher.

\subsection*{11.12.7.8 Bachelor of Science (B.Sc.) - Major Chemistry - Bio-organic (63 credits)}

\section*{Program Prerequisites}

PRE-PROGRAM REQUIREMENTS:
Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

\section*{Required Courses (57 credits)}

The required courses in this program consist of 60 credits in chemistry, biology and mathematics, listed below. The courses marked with an asterisk \(\left(^{*}\right)\) are omitted from the program of students who have successfully completed them at the CEGEP level but the Chemistry courses must be replaced by courses in that discipline if students wish to be eligible for admission to the Ordre des chimistes du Québec. Students from outside Quebec or transfer students should consult the Academic Adviser.

See http://www.mcgill.ca/chemistry/current-undergraduate-students/advising/.
A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 during U1 is also strongly recommended.
* Denotes courses with CEGEP equivalents.
** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.
\begin{tabular}{|c|c|c|}
\hline BIOL 200 & (3) & Molecular Biology \\
\hline BIOL 201 & (3) & Cell Biology and Metabolism \\
\hline CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
\hline CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 267 & (3) & Introductory Chemical Analysis \\
\hline CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
\hline CHEM 281 & (3) & Inorganic Chemistry 1 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 345 & (3) & Introduction to Quantum Chemistry \\
\hline CHEM 355 & (3) & Applications of Quantum Chemistry \\
\hline CHEM 367 & (3) & Instrumental Analysis 1 \\
\hline CHEM 377 & (3) & Instrumental Analysis 2 \\
\hline CHEM 381 & (3) & Inorganic Chemistry 2 \\
\hline CHEM 392 & (3) & Experimental Chemistry 1 \\
\hline CHEM 493 & (2) & Advanced Physical Chemistry Laboratory \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline MATH \(2222^{*}\) & (3) & Calculus 3 \\
\hline PHYS 242 & (2) & Electricity and Magnetism \\
\hline
\end{tabular}

\section*{Complementary Course (6 credits)}

6 credits from:
\begin{tabular}{lll} 
BIOL 202 & (3) & Basic Genetics \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
CHEM 365 & (2) & Statistical Thermodynamics
\end{tabular}
\begin{tabular}{lcl} 
MATH 315 & (3) & Ordinary Differential Equations \\
MIMM 211 & (3) & Introductory Microbiology \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

\subsection*{11.12.7.9 Bachelor of Science (B.Sc.) - Major Chemistry: Biophysical Chemistry ( 66 credits)}

This program trains students in the fundamentals of chemistry and develops the physical science, computational, and mathematical skills needed for advanced biophysical chemistry research in the biomedical and biotechnology industries. The program features integrative, interdisciplinary courses in bio-physical sciences.

\section*{Program Prerequisites}

Pre-Program Requirements: Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

\section*{Required Courses (59 credits)}

The courses marked with an asterisk (*) are omitted from the program of students who have successfully completed them at the CEGEP level. Students completing the program will not be eligible for admission to the Ordre des chimistes du Québec without additional chemistry electives. This program is not currently accredited by the Canadian Society for Chemistry.

Completion of Mathematics MATH 222 and MATH 315 during U1 is strongly recommended.
* Denotes courses with CEGEP equivalents.
** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.
Bio-Physical Sciences Core
\begin{tabular}{lcl} 
BIOL 219 & \((4)\) & Introduction to Physical Molecular and Cell Biology \\
BIOL 319 & \((3)\) & Introduction to Biophysics \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
MATH 222** & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 323 & (3) & Probability \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications
\end{tabular}

Chemistry
\begin{tabular}{lcl} 
CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
CHEM 281 & (3) & Inorganic Chemistry 1 \\
CHEM 345 & (3) & Introduction to Quantum Chemistry \\
CHEM 355 & (3) & Applications of Quantum Chemistry \\
CHEM 367 & (3) & Instrumental Analysis 1 \\
CHEM 377 & (3) & Instrumental Analysis 2 \\
CHEM 493 & (2) & Advanced Physical Chemistry Laboratory
\end{tabular}

\section*{Complementary Courses}
(6-7 credits)
3 credits of:
\begin{tabular}{lcl} 
CHEM 302 & \((3)\) & Introductory Organic Chemistry 3 \\
CHEM 381 & \((3)\) & Inorganic Chemistry 2 \\
& & \\
3-4 credits of: & & \\
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 316 & (3) & Biomembranes and Organelles \\
BIOL 551 & (3) & Principles of Cellular Control \\
CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
CHEM 381 & (3) & Inorganic Chemistry 2 \\
CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
CHEM 514 & (3) & Biophysical Chemistry \\
CHEM 520 & (3) & Methods in Chemical Biology \\
CHEM 555 & (3) & Magnetic Resonance Spectroscopy \\
CHEM 575 & (3) & Chemical Kinetics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering
\end{tabular}

\subsection*{11.12.7.10 Bachelor of Science (B.Sc.) - Honours Chemistry (71 credits)}

Note: Attainment of the Honours degree requires a CGPA of at least 3.00.

\section*{Program Prerequisites}

\section*{PRE-PROGRAM REQUIREMENTS:}

Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

\section*{Required Courses (53 credits)}

The required courses in this program consist of 56 credits in chemistry, physics and mathematics, listed below. The courses marked with an asterisk \(\left(^{*}\right)\) are omitted from the program of students who have successfully completed them at the CEGEP level but the Chemistry courses must be replaced by courses in that discipline if students wish to be eligible for admission to the Ordre des chimistes du Québec. Students from outside Quebec or transfer students should consult the Academic Adviser.
See http://www.mcgill.ca/chemistry/current-undergraduate-students/advising/.
A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 during U1 is also strongly recommended. Physics PHYS 242 should be completed during U2.
* Denotes courses with CEGEP equivalents.
** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.
\begin{tabular}{lll} 
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 222* & (4) & Introductory Organic Chemistry 2
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CHEM 267 & (3) & Introductory Chemical Analysis \\
\hline CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
\hline CHEM 281 & (3) & Inorganic Chemistry 1 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 332 & (3) & Biological Chemistry \\
\hline CHEM 345 & (3) & Introduction to Quantum Chemistry \\
\hline CHEM 355 & (3) & Applications of Quantum Chemistry \\
\hline CHEM 365 & (2) & Statistical Thermodynamics \\
\hline CHEM 367 & (3) & Instrumental Analysis 1 \\
\hline CHEM 377 & (3) & Instrumental Analysis 2 \\
\hline CHEM 381 & (3) & Inorganic Chemistry 2 \\
\hline CHEM 392 & (3) & Experimental Chemistry 1 \\
\hline CHEM 493 & (2) & Advanced Physical Chemistry Laboratory \\
\hline MATH 222** & (3) & Calculus 3 \\
\hline PHYS 242 & (2) & Electricity and Magnetism \\
\hline
\end{tabular}

\section*{Complementary Courses (18 credits)}

\section*{6 credits of research*:}
* Students may take up to 12 Research Project credits but only 6 of these may be used to fulfil the program requirement.
CHEM 470
Research Project 1
CHEM 480
Undergraduate Research Project 2

12 credits of additional Chemistry courses as follows:
6 credits of Chemistry courses at the 300 level or higher, or MATH 315 plus 3 credits of Chemistry courses at the 300 level or higher, and
6 credits of Chemistry courses at the 400 level or higher.

\subsection*{11.12.7.11 Bachelor of Science (B.Sc.) - Honours Chemistry - Bio-organic (75 credits)}

Note: Attainment of the Honours degree requires a CGPA of at least 3.00.

\section*{Program Prerequisites}

PRE-PROGRAM REQUIREMENTS:
Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

\section*{Required Courses ( 57 credits)}

The required courses in this program consist of 57 credits in chemistry, biology and mathematics, listed below. The courses marked with an asterisk \((*)\) are omitted from the program of students who have successfully completed them at the CEGEP level but the Chemistry courses must be replaced by courses in that discipline if students wish to be eligible for admission to the Ordre des chimistes du Québec. Students from outside Quebec or transfer students should consult the Academic Adviser.
See http://www.mcgill.ca/chemistry/current-undergraduate-students/advising/.
A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 during U1 is also strongly recommended.
* Denotes courses with CEGEP equivalents.
** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.
\begin{tabular}{|c|c|c|}
\hline BIOL 200 & (3) & Molecular Biology \\
\hline BIOL 201 & (3) & Cell Biology and Metabolism \\
\hline CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
\hline CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 267 & (3) & Introductory Chemical Analysis \\
\hline CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
\hline CHEM 281 & (3) & Inorganic Chemistry 1 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 345 & (3) & Introduction to Quantum Chemistry \\
\hline CHEM 355 & (3) & Applications of Quantum Chemistry \\
\hline CHEM 367 & (3) & Instrumental Analysis 1 \\
\hline CHEM 377 & (3) & Instrumental Analysis 2 \\
\hline CHEM 381 & (3) & Inorganic Chemistry 2 \\
\hline CHEM 392 & (3) & Experimental Chemistry 1 \\
\hline CHEM 493 & (2) & Advanced Physical Chemistry Laboratory \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline MATH 222** & (3) & Calculus 3 \\
\hline PHYS 242 & (2) & Electricity and Magnetism \\
\hline
\end{tabular}

\section*{Complementary Courses (18 credits)}

18 credits selected as follows:
6 credits of research*:
* Students may take up to 12 Research Project credits but only 6 of these may be used to fulfil the program requirement.
\begin{tabular}{lll} 
CHEM 470 & (6) & Research Project 1 \\
CHEM 480 & (3) & Undergraduate Research Project 2
\end{tabular}

9 credits from the following:
\begin{tabular}{lcl} 
BIOL 202 & \((3)\) & Basic Genetics \\
BIOL 301 & \((4)\) & Cell and Molecular Laboratory \\
CHEM 365 & \((2)\) & Statistical Thermodynamics \\
MATH 315 & \((3)\) & Ordinary Differential Equations \\
MIMM 211 & \((3)\) & Introductory Microbiology \\
MIMM 214 & \((3)\) & Introductory Immunology: Elements of Immunity \\
MIMM 314 & \((3)\) & Intermediate Immunology \\
MIMM 323 & \((3)\) & Microbial Physiology \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}
and 3 credits of additional Chemistry courses at the 400 level or higher.

\subsection*{11.12.7.12 Bachelor of Science (B.Sc.) - Honours Chemistry: Biophysical Chemistry ( 75 credits)}

This program trains students in the fundamentals of chemistry and develops the physical science, computational, and mathematical skills needed for advanced biophysical chemistry research in the biomedical and biotechnology industries. The program features integrative, interdisciplinary courses in bio-physical sciences.

\section*{Program Prerequisites}

Note: Attainment of the Honours degree requires a CGPA of at least 3.00.
Pre-Program Requirements: Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

\section*{Required Courses (65 credits)}

The courses marked with an asterisk \(\left({ }^{*}\right)\) are omitted from the program of students who have successfully completed them at the CEGEP level. Students completing the program will not be eligible for admission to the Ordre des chimistes du Québec without additional chemistry electives. This program is not currently accredited by the Canadian Society for Chemistry.

Completion of Mathematics MATH 222 and MATH 315 during U1 is strongly recommended.
* Denotes courses with CEGEP equivalents.
** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.
Bio-Physical Sciences Core
\begin{tabular}{lcl} 
BIOL 219 & (4) & Introduction to Physical Molecular and Cell Biology \\
BIOL 319 & (3) & Introduction to Biophysics \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
MATH 222** & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 323 & (3) & Probability \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications
\end{tabular}

Chemistry
\begin{tabular}{lcl} 
CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
CHEM 267 & (3) & Introductory Chemical Analysis \\
CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
CHEM 281 & (3) & Inorganic Chemistry 1 \\
CHEM 345 & (3) & Introduction to Quantum Chemistry \\
CHEM 355 & (3) & Applications of Quantum Chemistry \\
CHEM 367 & (3) & Instrumental Analysis 1 \\
CHEM 377 & (3) & Instrumental Analysis 2 \\
CHEM 470 & (6) & Research Project 1 \\
CHEM 493 & (2) & Advanced Physical Chemistry Laboratory \\
PHYS 242 & (2) & Electricity and Magnetism
\end{tabular}

\section*{Complementary Courses}

\section*{(9-10 credits)}

3 credits of:
\begin{tabular}{lll} 
CHEM 302 & \((3)\) & Introductory Organic Chemistry 3 \\
CHEM 381 & \((3)\) & Inorganic Chemistry 2 \\
6-7 credits of: & \\
BIOL 300 & \\
BIOL 301 & (3) & Molecular Biology of the Gene \\
BIOL 316 & (3) & Cell and Molecular Laboratory \\
BIOL 551 & (3) & Piomembranes and Organelles \\
CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
CHEM 381 & (3) & Inorganic Chemistry 2 \\
CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
CHEM 514 & (3) & Biophysical Chemistry \\
CHEM 520 & (3) & Methods in Chemical Biology \\
CHEM 555 & (3) & Magnetic Resonance Spectroscopy \\
CHEM 575 & (3) & Chemical Kinetics \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering
\end{tabular}

\subsection*{11.12.7.13 Chemistry (CHEM) Related Programs \\ 11.127.13.1 Joint Honours in Physics and Chemistry}

For more information, see section 11.12.30: Physics (PHYS).

\subsection*{11.12.8 Cognitive Science}

\subsection*{11.12.8.1 About Cognitive Science}

Cognitive Science is the interdisciplinary study of intelligent behaviour in humans, animals, and machines. It encompasses the traditional disciplines of Computer Science, Linguistics, Neuroscience, Philosophy and Psychology. By taking a computational view of the mind, Cognitive Science seeks to establish a mechanistic understanding of the mental processes underpinning intelligent behaviour, inform our understanding of our mind, and guide the design and development of intelligent systems.

Students wishing to complete the Minor in Cognitive Science should contact the Cognitive Science Program Advisor if there are any questions about the requirements. Please refer to mcgill.ca/cogsci for advising information.

\subsection*{11.12.8.2 Bachelor of Science (B.Sc.) - Minor Cognitive Science (24 credits)}

The Minor Cognitive Science is intended to allow students in the Faculty of Arts or the Faculty of Science to explore the interdisciplinary study of cognition. The goal is to understand the principles of intelligence with the hope that this will lead to a better understanding of the mind and learning.

Students wishing to complete this Minor should contact the Cognitive Science Program Adviser if there are any questions about the requirements at https://www.mcgill.ca/science/undergraduate/advice/sousa.

\section*{Required Course ( 3 credits)}
PSYC 433
(3)
Cognitive Science

\section*{Complementary Courses (21 credits)}

Note:
Students must take a minimum of 6 credits at the 400 to 500 level.
Students may not take any courses from their home department(s).
Students complete a minimum of 9 credits each in two areas.

\section*{Computer Science and Mathematics}
\begin{tabular}{lcl} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 230 & (3) & Logic and Computability \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 330 & (3) & Theory of Computation \\
COMP 527 & (3) & Logic and Computation \\
MATH 240 & (3) & Discrete Structures \\
MATH 318 & (3) & Mathematical Logic
\end{tabular}

\section*{Linguistics}

Any course at the 300, 400 or 500 level from the department of Linguistics, or:
\begin{tabular}{lll} 
LING 201 & (3) & Introduction to Linguistics \\
LING 210 & (3) & Introduction to Speech Science \\
LING 260 & (3) & Meaning in Language
\end{tabular}

\section*{Philosophy}
\begin{tabular}{lcl} 
PHIL 210 & \((3)\) & Introduction to Deductive Logic 1 \\
PHIL 221 & (3) & Introduction to History and Philosophy of Science 2 \\
PHIL 306 & (3) & Philosophy of Mind \\
PHIL 310 & (3) & Intermediate Logic \\
PHIL 311 & (3) & Philosophy of Mathematics \\
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 411 & (3) & Topics in Philosophy of Logic and Mathematics \\
PHIL 415 & (3) & Philosophy of Language \\
PHIL 441 & (3) & Philosophy of Science 2 \\
PHIL 474 & (3) & Phenomenology
\end{tabular}

\section*{Psychology}
\begin{tabular}{lcl} 
PSYC 212 & \((3)\) & Perception \\
PSYC 213 & \((3)\) & Cognition \\
PSYC 301 & \((3)\) & Animal Learning and Theory \\
PSYC 304 & \((3)\) & Child Development \\
PSYC 310 & \((3)\) & Intelligence \\
PSYC 311 & \((3)\) & Human Cognition and the Brain \\
PSYC 315 & \((3)\) & Computational Psychology \\
PSYC 319 & \((3)\) & Computational Models - Cognition \\
PSYC 340 & (3) & Psychology of Language \\
PSYC 410 & (3) & Special Topics in Neuropsychology \\
PSYC 413 & & Cognitive Development
\end{tabular}

\subsection*{11.12.9 Computer Science (COMP)}

\subsection*{11.12.9.1 Location}

\author{
Main Office \\ McConnell Engineering Building, Room 318 \\ 3480 University Street \\ Montreal QC H3A 0E9 \\ Telephone: 514-398-7071 \\ Fax: 514-398-3883 \\ Undergraduate Student Affairs Office \\ McConnell Engineering Building, Room 320 \\ 3480 University Street \\ Montreal QC H3A 0E9 \\ Telephone: 514-398-7071 ext. 00739 \\ Fax: 514-398-3883 \\ Email: ugrad-sec@cs.mcgill.ca \\ Website: cs.mcgill.ca
}

\subsection*{11.12.9.2 About Computer Science}

Computer Science covers the theory and practice behind the design and implementation of computer and information systems. Fundamental to computer science are questions about how to describe, process, manage, and analyze information and computation. A fundamental building block is the study of algorithms. An algorithm presents a detailed sequence of actions solving a particular task. A computer program is the implementation of an algorithm in a specific programming language, which enables a computer to execute the algorithm. Software generally refers to a computer program or a set of related computer programs.

Based on the building blocks of computational thinking and programming, computer science is split into many different areas. Examples are:
- The study of algorithms and data structures
- Programming languages and methodology
- Theory of computation
- Software engineering (the design of large software systems)
- Computer architecture (the structure of the hardware)
- Communication between computers
- Operating systems (the software that shields users from the underlying hardware)
- Database systems (software that handles large amounts of data efficiently)
- Artificial intelligence and Machine Learning (algorithms inspired by human information processing)
- Computer vision (algorithms that let computers see and recognize their environment)
- Computer graphics
- Robotics (algorithms that control robots)
- Computational biology (algorithms and methods that address problems inspired by biology)

Computer science also plays an important role in many other fields, including biology, physics, engineering, business, music, and neuroscience, where it is necessary to process and reason about large amounts of data. Computer science is strongly related to mathematics, linguistics, and engineering.
A degree in computer science offers excellent job prospects. The use of computers and specialized software plays a crucial role in business, science, and our personal life. Computer science graduates are in high demand. Computer scientists find jobs in software development, consulting, research, and project management. As computer scientists often develop the software for a specific application domain (e.g., business, engineering, medicine), they must be prepared and willing to get to know their application area.
The School of Computer Science offers a wide range of programs. Most programs start with the same set of basic courses allowing students to decide on their exact program once they get a basic understanding of the discipline. Within the Faculty of Science, there are:
- Major, Honours, Liberal, and Minor programs in Computer Science;
- Major in Computer Science: Artificial Intelligence Concentration;
- Major, Honours, and Liberal programs in Software Engineering;
- Major in Computer Science: Computer Games Option;
- Major and Honours in Mathematics and Computer Science (see section 11.12.22: Mathematics and Statistics (MATH));
- Major and Honours in Statistics and Computer Science (see section 11.12.22: Mathematics and Statistics (MATH));
- Major and Honours in Physics and Computer Science (see section 11.12.30: Physics (PHYS) ;
- Major and Honours in Computer Science and Biology (see section 11.12.5: Biology (BIOL)).

The School also offers a Major Concentration and Minor concentrations in Computer Science, and a Major Concentration in Software Engineering through the Faculty of Arts (see Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.7: Computer Science), or as part of a Bachelor of Arts and Science (see Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs > section 4.11.9: Computer Science).

The School's courses are available as electives to Engineering students. Engineering students interested in a minor in Computer Science should consult Faculty of Engineering > Undergraduate > Browse Academic Units \& Programs > Minor Programs > section 6.9.10.7: Computer Science Courses and Minor Program.
Most course instructors are faculty members of the School that do research in the areas they teach. The school favours interactive teaching practices where students get to know their professors and have the opportunity to do cutting-edge research. Some graduate courses in Computer Science are available to suitably qualified senior undergraduates. The School offers large computing labs in the Lorne Trottier Building, which is dedicated to undergraduate students.
All students planning to enter Computer Science programs are strongly encouraged to make an appointment with an academic advisor through the School's Undergraduate Student Affairs Office (see cs.mcgill.ca/undergrad/program/advising/).

\subsection*{11.12.9.3 Internship Opportunities}

Students who want to get practical experience in industry before graduation are encouraged to participate in one of the following internship programs:
- The Internship Year in Science (IYS) is offered for a duration of 8, 12, or 16 months. It will be reflected on the student's transcript and is included in the program name (Bachelor of Science - Internship Program).
- The Industrial Practicum (IP) has a duration of four months and is usually carried out starting in May. It will appear as a 0 -credit, Pass/Fail course on the student's transcript. If a student completes two IPs, the program name will change to include the word "internship".

For more information on these opportunities, consult section 11.11: Science Internships and Field Studies or mcgill.ca/science/undergraduate/internships-field/internships.

\subsection*{11.12.9.4 Research Opportunities}

Computer science undergraduates have excellent opportunities to participate in research. Each summer, several awards are available, such as the NSERC Undergraduate Student Research Awards; these offer financial support for a research experience in an academic setting. Other research assistantship and volunteering opportunities in research labs are also available.

Students may also take undergraduate research project courses such as COMP 396 Undergraduate Research Project, COMP 400 Project in Computer Science, and COMP 401 Project in Biology and Computer Science. Students who have participated in substantial and broad undergraduate research may qualify for the Dean's Multidisciplinary Undergraduate Research List at graduation time. For more information, consult University Regulations \& Resources \(>\) Undergraduate >Graduation > Graduation Honours > section 1.9.3.3: Faculty of Science Dean's Multidisciplinary Undergraduate Research List.

\subsection*{11.12.9.5 Admissions}

Students intending to pursue a program in Computer Science or Software Engineering should have a reasonable mathematical background and should have completed MATH 140 (or MATH 150), MATH 141 (or MATH 151), and MATH 133, or their CEGEP equivalents. These three mathematics courses should have been completed with at least an average of B-. A background in computer science is not necessary as students may start their studies with the introductory course COMP 202 or COMP 204 or COMP 208. For example, taking COMP 202 in the Freshman year, or completing an equivalent course in CEGEP, would be an asset that would allow students to take more advanced courses earlier in their program.
More information about the admission process and programs is available on the School of Computer Science website at cs.mcgill.ca.

\subsection*{11.12.9.6 Bachelor of Science (B.Sc.) - Minor Computer Science ( \(\mathbf{2 4}\) credits)}

Students must obtain approval from their main program adviser, and are also strongly encouraged to speak with a School of Computer Science adviser before choosing complementary courses. A particular course selection must be approved before the student registers for their final term of studies.
Students should note that COMP 251 is a prerequisite for many upper level COMP courses. Upper level COMP courses may have prerequisites that are not part of the Minor such as MATH 222, MATH 223, or MATH 323. Students will not get credit for these courses toward the Minor.
Students may receive up to 6 credits toward the Minor by taking certain approved courses outside the School of Computer Science. These courses must have a high computer science content and must be approved by the School of Computer Science in advance. If a student's Major program requires Computer Science courses, up to 6 credits of Computer Science courses may be used to fulfill both Major and Minor requirements.

\section*{Required Courses ( 9 credits)}
* Students who have sufficient knowledge of computer programming do not need to take COMP 202, but it must be replaced with an additional computer science complementary course.
\begin{tabular}{lll} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{1 5}\) credits)}

15 credits selected from the courses below and computer science courses at the 300 level or above (except COMP 364 and COMP 396).
\begin{tabular}{lll} 
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\subsection*{11.12.9.7 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Computer Science (45 credits)}

This program provides an introduction to the principles of computer science and offers opportunity to get insight into some of its sub-areas. Having only 45 credits, it allows students to combine it with minor or major concentrations in other disciplines.

\section*{Required Courses (18 credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202, but it must be replaced with an additional computer science complementary course.
\begin{tabular}{lll} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 7}\) credits)}

3 credits from each of the groups A, B, C, and D.

Group A
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}

Group B
\begin{tabular}{lll} 
MATH 223 & (3) & Linear Algebra \\
MATH 318 & (3) & Mathematical Logic \\
MATH 340 & (3) & Discrete Mathematics
\end{tabular}

Group C
\begin{tabular}{lll} 
COMP 330 & (3) & Theory of Computation \\
COMP 350 & (3) & Numerical Computing \\
COMP 360 & (3) & Algorithm Design
\end{tabular}

Group D
\begin{tabular}{lll} 
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design
\end{tabular}

An additional 3 credits may be selected from Group A or B.
The remaining complementary credits must be selected from any COMP courses at the 300 level or above except COMP 364 and COMP 396.

\subsection*{11.12.9.8 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Software Engineering (49 credits)}

This program covers a core of programming and software engineering courses and allows students to select courses that aim at practical aspects of software development.

\section*{Required Courses ( \(\mathbf{3 6}\) credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202 and can replace it with additional computer science complementary course credits.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 310 & (3) & Operating Systems \\
COMP 361D1 & (3) & Software Engineering Project \\
COMP 361D2 & (3) & Software Engineering Project \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Complementary Courses (13 credits)}

3 credits selected from:
\begin{tabular}{lcl} 
COMP 330 & \((3)\) & Theory of Computation \\
COMP 360 & \((3)\) & Algorithm Design \\
& & \\
10 credits from: & \((1)\) & Introduction to C++ \\
COMP 322 & \((3)\) & Concurrent Programming \\
COMP 409 & (3) & Database Systems \\
COMP 421 & \((4)\) & Compiler Design \\
COMP 520 & (3) & Formal Verification \\
COMP 525 & (4) & Software Architecture \\
COMP 529 & (3) & Model-Driven Software Development \\
COMP 533 & (4) & Computer Networks 1 \\
COMP 535 & (3) & Software Requirements Engineering \\
ECSE 326 &
\end{tabular}
\begin{tabular}{lll} 
ECSE 437 & (3) & Software Delivery \\
ECSE 539 & (4) & Advanced Software Language Engineering
\end{tabular}

Or any COMP courses at the 300 level or above (excluding COMP 364 and COMP 396.)

\subsection*{11.12.9.9 Bachelor of Science (B.Sc.) - Major Computer Science ( 63 credits)}

This program is the standard Major program offered by the School of Computer Science. It provides a broad introduction to the principles of computer science and offers ample opportunity to acquire in-depth knowledge of several sub-disciplines. At the same time, its credit requirements allow students to take an additional minor.

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from taking COMP 202.

\section*{Required Courses (33 credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 310 & (3) & Operating Systems \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Complementary Courses (30 credits)}

Students should talk to an academic adviser before choosing their complementary courses.

At least 6 credits selected from:
\begin{tabular}{lll} 
COMP 330 & (3) & Theory of Computation \\
COMP 350 & (3) & Numerical Computing \\
COMP 360 & (3) & Algorithm Design
\end{tabular}

3-9 credits selected from:
* Must include at least one of MATH 323 and MATH 340.
\begin{tabular}{lll} 
MATH 318 & (3) & Mathematical Logic \\
MATH 323* & (3) & Probability \\
MATH 324 & (3) & Statistics \\
MATH 340* & (3) & Discrete Mathematics
\end{tabular}

At least 6 credits at the 400 -level or above.

The remaining credits selected from computer science courses at the 300 level or above (except COMP 364 and COMP 396) and ECSE 539.
Note: Students have to make sure that they have the appropriate prerequisites when choosing upper-level courses.

\subsection*{11.12.9.10 Bachelor of Science (B.Sc.) - Major Computer Science - Artificial Intelligence ( 63 credits)}

The B.Sc.; Major in Computer Science: Artificial Intelligence focuses on topics that relate to artificial intelligence and machine learning, including both foundations and applications. Students may complete this program with a minimum of 63 credits or a maximum of 68 credits.

\section*{Required Courses (39-42 credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 424 & (3) & Artificial Intelligence \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}

\section*{Complementary Courses (24-26 credits)}

Group A:
6 credits selected from:
\begin{tabular}{lll} 
COMP 330 & (3) & Theory of Computation \\
COMP 350 & (3) & Numerical Computing \\
COMP 360 & (3) & Algorithm Design
\end{tabular}

Group B:
3 credits selected from:
\begin{tabular}{lll} 
COMP 310 & (3) & Operating Systems \\
COMP 421 & (3) & Database Systems
\end{tabular}

Group C:
3 or 4 credits selected from:
\begin{tabular}{lll} 
COMP 451 & (3) & Fundamentals of Machine Learning \\
COMP 551 & (4) & Applied Machine Learning
\end{tabular}

Group D:
3 credits selected from:
\begin{tabular}{lll} 
COMP 345 & (3) & From Natural Language to Data Science \\
COMP 370 & (3) & Introduction to Data Science
\end{tabular}

Group E:
3 or 4 credits selected from:
\begin{tabular}{lll} 
COMP 417 & \((3)\) & Introduction Robotics and Intelligent Systems \\
COMP 445 & \((3)\) & Computational Linguistics \\
COMP 511 & (4) & Network Science \\
COMP 514 & (4) & Applied Robotics \\
COMP 545 & (4) & Natural Language Understanding with Deep Learning \\
COMP 549 & (3) & Brain-Inspired Artificial Intelligence \\
COMP 550 & (3) & Natural Language Processing \\
COMP 558 & (4) & Fundamentals of Computer Vision \\
COMP 562 & (4) & Theory of Machine Learning \\
COMP 565 & (4) & Machine Learning in Genomics and Healthcare \\
COMP 579 & (4) & Reinforcement Learning \\
COMP 585 & (4) & Intelligent Software Systems \\
ECSE 552 & (4) & Deep Learning \\
ECSE 557 & (3) & Introduction to Ethics of Intelligent Systems
\end{tabular}

Group F:
6 credits of COMP courses at the 300 level or above (except COMP 396).

\subsection*{11.12.9.11 Bachelor of Science (B.Sc.) - Major Computer Science and Biology (74 credits)}

This program will focus on the fundamentals of biology and will give them computational and mathematical skills needed to manage, analyze, and model large biological datasets. Integrative features of the program include interdisciplinary introductory and seminar courses in bio-physical sciences, and a joint independent studies project.
Students may complete this program with a minimum of 63 credits and maximum of 74 credits depending upon whether they take COMP 202/204, CHEM 212, MATH 222, and COMP 462 versus COMP 561.

Program prerequisites: U0 (freshman) students should take: BIOL 111-112, CHEM 110-120, MATH 133, MATH 140-141 or MATH 150-151, PHYS 101-102 or PHYS 131-142. Note that MATH 150-151 provides equivalence for required course MATH 222.
Students who do not have a background in computer programming at the level of COMP 202 or COMP 204 must take one of these courses. COMP 204 is considered equivalent to COMP 202 as a prerequisite for COMP 206 and COMP 250.

\section*{Required Courses ( 46 credits)}

36-46 credits:

\section*{Bio-Physical Sciences Core}
\begin{tabular}{lcl} 
BIOL 219 & (4) & Introduction to Physical Molecular and Cell Biology \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
COMP 202** & (3) & Foundations of Programming \\
MATH 222* & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 323 & (3) & Probability
\end{tabular}

\section*{Computer Science and Mathematics}
\begin{tabular}{lll} 
COMP 204** & (3) & Computer Programming for Life Sciences \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Biology}
BIOL 202
(3)
Basic Genetics
BIOL 215
Introduction to Ecology and Evolution

\section*{Required Joint Courses}
COMP 401
(3)
Project in Biology and Computer Science
* Students with CEGEP-level credit for the equivalents of MATH 222 and/or CHEM 212 (see http://www.mcgill.ca/students/courses/plan/transfer/ for accepted equivalents) may not take these courses at McGill and should replace them with elective courses to satisfy the total credit requirement for their degree.
** Students may take either COMP 202 or COMP 204, but not both. Students who have sufficient knowledge in a programming language are not required to take these courses.

\section*{Complementary Courses}

27-28 credits
3-4 credits from the following:
\begin{tabular}{lll} 
COMP 462 & (3) & Computational Biology Methods \\
COMP 561 & (4) & Computational Biology Methods and Research \\
3-6 from the following: & & \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 324 & (3) & Statistics
\end{tabular}

The remaining 18-21 credits is to be chosen from the following, with at least 9 credits at the 400 level or above.

\section*{Computer Science Block}

9-12 credits from the following, with 3-6 credits at the 400 level or above.
Note: All COMP courses at the 400 level or above (except COMP 400, 401, 402, 499, 462, and 561).
\begin{tabular}{lcl} 
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 307 & (2) & Principles of Web Development \\
COMP 310 & (3) & Operating Systems \\
COMP 322 & (1) & Introduction to C++ \\
COMP 330 & (3) & Theory of Computation \\
COMP 350 & (3) & Numerical Computing \\
COMP 360 & (3) & Algorithm Design \\
COMP 361D1* & (3) & Software Engineering Project
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline COMP 361D2* & (3) & Software Engineering Project \\
\hline \multicolumn{3}{|l|}{* Students must take both COMP 361D1 and COMP 361D2.} \\
\hline \multicolumn{3}{|l|}{Biology Block} \\
\hline \multicolumn{3}{|l|}{9-12 credits from the following, with 3-6 credits at the 400 level or above:} \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 304 & (3) & Evolution \\
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 308 & (3) & Ecological Dynamics \\
\hline BIOL 309 & (3) & Mathematical Models in Biology \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 313 & (3) & Eukaryotic Cell Biology \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 316 & (3) & Biomembranes and Organelles \\
\hline BIOL 319 & (3) & Introduction to Biophysics \\
\hline BIOL 320 & (3) & Evolution of Brain and Behaviour \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline BIOL 389 & (3) & Laboratory in Neurobiology \\
\hline BIOL 395 & (1) & Quantitative Biology Seminar \\
\hline BIOL 416 & (3) & Genetics of Mammalian Development \\
\hline BIOL 434 & (3) & Theoretical Ecology \\
\hline BIOL 435 & (3) & Natural Selection \\
\hline BIOL 509 & (3) & Methods in Molecular Ecology \\
\hline BIOL 518 & (3) & Advanced Topics in Cell Biology \\
\hline BIOL 520 & (3) & Gene Activity in Development \\
\hline BIOL 524 & (3) & Topics in Molecular Biology \\
\hline BIOL 530 & (3) & Advances in Neuroethology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 546 & (3) & Genetics of Model Systems \\
\hline BIOL 551 & (3) & Principles of Cellular Control \\
\hline BIOL 568 & (3) & Topics on the Human Genome \\
\hline BIOL 569 & (3) & Developmental Evolution \\
\hline BIOL 575 & (3) & Human Biochemical Genetics \\
\hline BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline
\end{tabular}

\subsection*{11.12.9.12 Bachelor of Science (B.Sc.) - Major Computer Science - Computer Games ( 65 credits)}

This program is a specialization within Computer Science. It fulfils all the basic requirements of the Major Computer Science. The program focuses on topics that are important to understanding the technology behind computer games and to gaining experience in software development and design needed for computer game development.
Students may complete this program with a minimum of 62 credits or a maximum of 65 credits depending on whether they are exempt from taking COMP 202.

\section*{Required Courses}
(46-49 credits)
\begin{tabular}{lll} 
* Students who have sufficient knowledge in a programming language do not need to take COMP 202. \\
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 310 & (3) & Operating Systems \\
COMP 322 & (3) & Introduction to C++ \\
COMP 330 & (3) & Theory of Computation \\
COMP 361 D1 & (3) & Software Engineering Project \\
COMP 361 D2 & (4) & Software Engineering Project \\
COMP 557 & (3) & Fundamentals of Computer Graphics \\
MATH 222 & (3) & (3) \\
MATH 223 & (3) & Discrete Structures \\
MATH 240 & Probability \\
MATH 323 & &
\end{tabular}

\section*{Complementary Courses (16 credits)}

3 credits selected from:
\begin{tabular}{lll} 
COMP 350 & (3) & Numerical Computing \\
COMP 360 & (3) & Algorithm Design
\end{tabular}

At least 7 credits selected from:
\begin{tabular}{lcl} 
COMP 308 & (1) & Computer Systems Lab \\
COMP 424 & (3) & Artificial Intelligence \\
COMP 521 & (4) & Modern Computer Games \\
COMP 529 & (4) & Software Architecture \\
COMP 533 & (3) & Model-Driven Software Development \\
COMP 551 & (4) & Applied Machine Learning \\
COMP 559 & (4) & Fundamentals of Computer Animation
\end{tabular}

At least 6 credits selected from:
\begin{tabular}{lll} 
COMP 409 & (3) & Concurrent Programming \\
COMP 421 & (3) & Database Systems \\
COMP 535 & (4) & Computer Networks 1
\end{tabular}

\subsection*{11.12.9.13 Bachelor of Science (B.Sc.) - Major Software Engineering ( 63 credits)}

This program provides a broad introduction to the principles of computer science and covers in depth the design and development of software systems. Students may complete this program with a maximum of 63 credits or a minimum of 60 credits if they are exempt from taking COMP 202.

\section*{Required Courses}

36-39 credits
* Students who have sufficient knowledge in a programming language do not need to take COMP 202.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 310 & (3) & Operating Systems \\
COMP 361D1 & (3) & Software Engineering Project \\
COMP 361D2 & (3) & Software Engineering Project \\
ECSE 429 & (3) & Software Validation \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

9 credits selected from Groups A and B, with at least 3 credits selected from each:
15 credits selected from Groups C and D, with at least 9 credits selected from Group C, and at least 3 credits selected from Group D.

\section*{Group A:}
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}

\section*{Group B:}
\begin{tabular}{lll} 
COMP 330 & (3) & Theory of Computation \\
COMP 360 & (3) & Algorithm Design
\end{tabular}

\section*{Group C: Software Engineering Specialization}
* Students may select either COMP 409 or ECSE 420, but not both.
\begin{tabular}{lcl} 
COMP 409* & (3) & Concurrent Programming \\
COMP 523 & (3) & Language-based Security \\
COMP 525 & (3) & Formal Verification \\
COMP 529 & (4) & Software Architecture \\
COMP 533 & (3) & Model-Driven Software Development \\
COMP 555 & (4) & Information Privacy \\
ECSE 326 & (3) & Software Requirements Engineering
\end{tabular}
\begin{tabular}{lll} 
ECSE \(420^{*}\) & (3) & Parallel Computing \\
ECSE 424 & (3) & Human-Computer Interaction \\
ECSE 437 & (3) & Software Delivery \\
ECSE 539 & (4) & Advanced Software Language Engineering
\end{tabular}
\begin{tabular}{lcl} 
Group D: Applications & & \\
COMP 350 & (3) & Numerical Computing \\
COMP 417 & \((3)\) & Introduction Robotics and Intelligent Systems \\
COMP 421 & (3) & Database Systems \\
COMP 424 & (3) & Artificial Intelligence \\
COMP 512 & (4) & Distributed Systems \\
COMP 520 & (4) & Compiler Design \\
COMP 521 & (4) & Modern Computer Games \\
COMP 535 & (4) & Computer Networks 1 \\
COMP 551 & (4) & Applied Machine Learning \\
COMP 557 & (4) & Fundamentals of Computer Graphics \\
COMP 558 & (4) & Fundamentals of Computer Vision \\
COMP 585 & (4) & Intelligent Software Systems
\end{tabular}

\subsection*{11.12.9.14 Bachelor of Science (B.Sc.) - Honours Computer Science (75 credits)}

Students may complete this program with a minimum of 72 credits or a maximum of 75 credits depending if they are exempt from taking COMP 202.
Honours students must maintain a CGPA of at least 3.00 during their studies and at graduation.

\section*{Required Courses (48 credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202.
** Students take either MATH 340 or MATH 350.
\begin{tabular}{lll} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 252 & (3) & Honours Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 310 & (3) & Operating Systems \\
COMP 330 & (3) & Theory of Computation \\
COMP 350 & (3) & Numerical Computing \\
COMP 362 & (3) & Honours Algorithm Design \\
COMP 400 & (3) & Project in Computer Science \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures \\
MATH \(340^{* *}\) & (3) & Discrete Mathematics \\
MATH \(350 * *\) & (3) & Honours Discrete Mathematics
\end{tabular}

\section*{Complementary Courses (27 credits)}

6 credits selected from:
\begin{tabular}{lll} 
MATH 318 & (3) & Mathematical Logic \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}

The remaining credits selected from computer science courses at the 300 level or above (except COMP 364 and COMP 396) and ECSE 539. At least 12 credits must be at the 500 level.

\subsection*{11.12.9.15 Bachelor of Science (B.Sc.) - Honours Computer Science and Biology (77 credits)}

This program focuses on the fundamentals of biology with a focus on molecular biology, and gives them computational and mathematical skills needed to manage, analyze, and model large biological datasets. Compared to the Joint Major counterpart, this program requires additional research credits and a larger number of advanced courses. Students must maintain a minimum CGPA of 3.5. To graduate with First Class Honours, the CGPA must be at least 3.75 .

Students may complete this program with a minimum of 67 and a maximum of 77 credits, depending upon whether they take COMP 202/204, CHEM 212, MATH 222.

Program Prerequisites: U0 (freshman) students should take: BIOL 111-112, CHEM 110-120, MATH 133, MATH 140-141 or MATH 150-151, PHYS 101-102 or PHYS 131-142. Note that MATH 150-151 provides equivalence for required course MATH 222.

Students who do not have a background in computer programming at the level of COMP 202 or COMP 204 must take one of these courses. COMP 204 is considered equivalent to COMP 202 as a prerequisite for COMP 206 and COMP 250.

\section*{Required Courses}

43-53 credits:

\section*{Bio-Physical Sciences Core}
\begin{tabular}{lcl} 
BIOL 219 & (4) & Introduction to Physical Molecular and Cell Biology \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
COMP 202** & (3) & Foundations of Programming \\
MATH 222* & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 323 & (3) & Probability
\end{tabular}

\section*{Computer Science and Mathematics}
\begin{tabular}{lll} 
COMP 204** & (3) & Computer Programming for Life Sciences \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 252*** & (3) & Honours Algorithms and Data Structures \\
COMP 561 & (4) & Computational Biology Methods and Research \\
MATH 240 & \((3)\) & Discrete Structures
\end{tabular}

\section*{Biology}
\begin{tabular}{lll} 
BIOL 202 & (3) & Basic Genetics \\
BIOL 215 & (3) & Introduction to Ecology and Evolution
\end{tabular}

\section*{Joint Courses}
\begin{tabular}{lll} 
COMP 402D1 & (3) Honours Project in Computer Science and Biology \\
COMP 402D2 & (3) & Honours Project in Computer Science and Biology
\end{tabular}

\begin{abstract}
* Students with CEGEP-level credit for the equivalents of MATH 222 and/or CHEM 212 (see http://www.mcgill.ca/students/courses/plan/transfer/ for accepted equivalents) may not take these courses at McGill and should replace them with elective courses to satisfy the total credit requirement for their degree.
** Students may take either COMP 202 or COMP 204, but not both. Students who have sufficient knowledge of programming are not required to take these courses.
\end{abstract}

\section*{Complementary Courses (24 credits)}

3-6 credits from the following:
\begin{tabular}{lll} 
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 324 & (3) & Statistics
\end{tabular}

The remaining 18-21 credits to be chosen from the following, with at least 9 credits at the 400 level or above:

\section*{Computer Science Block}
\(9-12\) credits from the following, with at least 3 credits at the 400 level or above.
\begin{tabular}{lcl} 
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 307 & (2) & Principles of Web Development \\
COMP 310 & (3) & Operating Systems \\
COMP 322 & (1) & Introduction to C++ \\
COMP 330 & (3) & Theory of Computation \\
COMP 350 & (3) & Numerical Computing \\
COMP 360 & (3) & Algorithm Design \\
COMP 361D1^ & (3) & Software Engineering Project \\
COMP 361D2^ & (3) & Software Engineering Project
\end{tabular}

All COMP courses at the 400 level or above except COMP 400, 401, 402, 462, 561.
*** Students with credit for COMP 251 cannot take COMP 252, and must instead include at least 6 credits at the 400-level or above, 3 credits of which must be at the 500 -level.
\({ }^{\wedge}\) Students must take both COMP 361D1 and COMP 361D2 or neither.

\section*{Biology Block}

9-12 credits from the following, with 3-6 credits at the 400 level or above:
\begin{tabular}{lcl} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 303 & (3) & Developmental Biology \\
BIOL 304 & (3) & Evolution \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 308 & (3) & Ecological Dynamics \\
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 310 & (3) & Biodiversity and Ecosystems \\
BIOL 313 & (3) & Eukaryotic Cell Biology
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 316 & (3) & Biomembranes and Organelles \\
\hline BIOL 319 & (3) & Introduction to Biophysics \\
\hline BIOL 320 & (3) & Evolution of Brain and Behaviour \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline BIOL 389 & (3) & Laboratory in Neurobiology \\
\hline BIOL 395 & (1) & Quantitative Biology Seminar \\
\hline BIOL 416 & (3) & Genetics of Mammalian Development \\
\hline BIOL 434 & (3) & Theoretical Ecology \\
\hline BIOL 435 & (3) & Natural Selection \\
\hline BIOL 509 & (3) & Methods in Molecular Ecology \\
\hline BIOL 518 & (3) & Advanced Topics in Cell Biology \\
\hline BIOL 520 & (3) & Gene Activity in Development \\
\hline BIOL 524 & (3) & Topics in Molecular Biology \\
\hline BIOL 530 & (3) & Advances in Neuroethology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 546 & (3) & Genetics of Model Systems \\
\hline BIOL 551 & (3) & Principles of Cellular Control \\
\hline BIOL 568 & (3) & Topics on the Human Genome \\
\hline BIOL 569 & (3) & Developmental Evolution \\
\hline BIOL 575 & (3) & Human Biochemical Genetics \\
\hline BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline
\end{tabular}

\subsection*{11.12.9.16 Bachelor of Science (B.Sc.) - Honours Software Engineering (75 credits)}

This program provides a more challenging and research-oriented version of the Major Software Engineering program.
Students may complete this program with a maximum of 75 credits or a minimum of 72 credits if they are exempt from taking COMP 202.
Honours students must maintain a CGPA of at least 3.00 during their studies and at graduation.

\section*{Required Courses}

39-42 credits
* Students who have sufficient knowledge in a programming language do not need to take COMP 202.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 303 & (3) & Software Design \\
COMP 310 & (3) & Software Engineering Project \\
COMP 361D1 & (3) & Software Engineering Project \\
COMP 361D2 &
\end{tabular}
\begin{tabular}{lll} 
COMP 400 & (4) & Project in Computer Science \\
ECSE 429 & (3) & Software Validation \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures
\end{tabular}

\section*{Complementary Courses ( 33 credits)}

At least 9 credits must be from Groups A and B, with at least 3 credits from each:
At least 18 credits must be from Groups C and D , with at least 9 credits from Group C and at least 6 credits from Group D.
At least 12 credits must be from COMP courses at the 500 level or above.

\section*{Group A:}
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}

\section*{Group B:}
\begin{tabular}{lll} 
COMP 330 & (3) & Theory of Computation \\
COMP 360 & (3) & Algorithm Design
\end{tabular}

\section*{Group C: Software Engineering Specialization}
* Students may select either COMP 409 or ECSE 420, but not both.
\begin{tabular}{lcl} 
COMP 409* & (3) & Concurrent Programming \\
COMP 523 & (3) & Language-based Security \\
COMP 525 & (3) & Formal Verification \\
COMP 529 & (4) & Software Architecture \\
COMP 533 & (3) & Model-Driven Software Development \\
COMP 555 & (4) & Information Privacy \\
ECSE 326 & (3) & Software Requirements Engineering \\
ECSE 420* & (3) & Parallel Computing \\
ECSE 424 & (3) & Human-Computer Interaction \\
ECSE 437 & (3) & Software Delivery \\
ECSE 539 & (4) & Advanced Software Language Engineering
\end{tabular}

\section*{Group D: Applications}
\begin{tabular}{lcl} 
COMP 350 & (3) & Numerical Computing \\
COMP 417 & (3) & Introduction Robotics and Intelligent Systems \\
COMP 421 & (3) & Database Systems \\
COMP 424 & (3) & Artificial Intelligence \\
COMP 512 & (4) & Distributed Systems \\
COMP 520 & (4) & Compiler Design \\
COMP 521 & (4) & Modern Computer Games \\
COMP 535 & (4) & Computer Networks 1 \\
COMP 551 & (4) & Applied Machine Learning
\end{tabular}
\begin{tabular}{lll} 
COMP 557 & (4) & Fundamentals of Computer Graphics \\
COMP 558 & (4) & Fundamentals of Computer Vision \\
COMP 585 & (4) & Intelligent Software Systems
\end{tabular}

\subsection*{11.12.9.17 Computer Science (COMP) Related Programs \\ 11.129.17.1 Major and Honours in Mathematics and Computer Science}

For more information, see section 11.12.22: Mathematics and Statistics (MATH). Honours students must consult an Honours advisor in both departments.

\subsection*{11.129.172 Major and Honours in Statistics and Computer Science}

For more information, see section 11.12.22: Mathematics and Statistics (MATH). Honours students must consult an Honours advisor in both departments.

\subsection*{11.129.17.3 Major and Honours in Physics and Computer Science}

For more information, see section 11.12.30: Physics (PHYS). Honours students must consult an Honours advisor in both departments.

\subsection*{11.129.17.4 Minor in Cognitive Science}

Students following Major or Honours programs in Computer Science may want to consider the Minor in Cognitive Science. For more information, see section 11.12.8: Cognitive Science.

\subsection*{11.12.10 Earth and Planetary Sciences (EPSC)}

\subsection*{11.12.10.1 Location}

\author{
Frank Dawson Adams Building \\ 3450 University Street, Room 238 \\ Montreal QC H3A 0E8 \\ Telephone: 514-398-6767 \\ Fax: 514-398-4680 \\ Email: grad.eps@mcgill.ca \\ Website: mcgill.ca/eps
}

\subsection*{11.12.10.2 About Earth and Planetary Sciences}

Earth and Planetary Sciences is a multidisciplinary field that includes the solid Earth and its hydrosphere and extends to the neighbouring terrestrial planets. Principles of chemistry, physics, and mathematics are applied to elucidate the complex and diverse planetary processes at play as we seek to understand how planets like the Earth changed over time and continue to evolve.

Career opportunities are many and diverse in the Earth and Planetary Sciences. Graduates of the major and honours in geology are often hired by resource exploration and extraction companies (industrial minerals; fossil and nuclear fuels; geothermal energy; ore deposits of base, precious, and critical metals). Knowledge of geochemistry and hydrogeology is also valued in the environmental consulting sector. Industry or government agencies may hire undergraduate students during the summer months, providing them with both financial benefits and first-hand geoscientific experience. Career opportunities in planetary science can also be found in universities and research organizations.

The Department has a full-time staff of 18 professors and one faculty lecturer. There are approximately 70 graduate and 20-30 undergraduate students registered in the various programs offered. Classes are therefore small at all levels, resulting in an informal and friendly atmosphere throughout the department, in which most of the faculty and students interact on a first-name basis. Emphasis is placed equally on quality teaching and research, providing undergraduate students with a rich and exciting environment in which to explore and learn.

\subsection*{11.12.10.3 Undergraduate Studies}

The undergraduate curriculum is designed to provide both a strong foundation in the physical sciences and the flexibility to create an individualized program in preparation for careers in industry, teaching, or research. In addition to the major and honours undergraduate programs, the department is one of the three departments that actively contribute to the Earth System Science Interdepartmental program, and also offers a Joint Major in Physics and Geophysics, which combines a rigorous mathematics and physics curriculum with exposure to the geosciences.

The Minor in Geology offers students from other departments the opportunity to discover the earth sciences in the classroom and in the field, while the Minor in Geochemistry is designed for chemistry major students who want to apply chemical principles to the study of planetary processes.

Students in a B.A. program may choose Earth and Planetary Sciences as their area of specialization for the Minor Concentration for Arts Students.
Students interested in any of the programs should inquire at:
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Frank Dawson Adams Building
3450 University Street, Room 238
Telephone: 514-398-6767
Website: mcgill.ca/eps/programs/undergraduate-programs

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or should consult the Director of Undergraduate Studies:
Professor Jeanne Paquette
Frank Dawson Adams Building
3450 University Street, Room 214
Telephone: 514-398-4402
Email: jeanne.paquette@mcgill.ca

\subsection*{11.12.10.4 Bachelor of Science (B.Sc.) - Minor Geology (18 credits)}

The Minor Geology offers students from other departments the opportunity to obtain exposure to the Earth Sciences.

\section*{Required Courses ( 6 credits)}
\begin{tabular}{lll} 
EPSC 210 & (3) & Introductory Mineralogy \\
EPSC 212 & (3) & Introductory Petrology
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits, one of:
\begin{tabular}{lll} 
EPSC 201 & (3) & Understanding Planet Earth \\
EPSC 233 & (3) & Earth and Life History
\end{tabular}

9 credits selected from the list below and other 300-level and higher courses in Earth and Planetary Sciences may be substituted with permission.
\begin{tabular}{lcl} 
EPSC 231 & \((3)\) & Field School 1 \\
EPSC 303 & \((3)\) & Structural Geology \\
EPSC 334 & \((3)\) & Invertebrate Paleontology \\
EPSC 350 & \((3)\) & Tectonics \\
EPSC 452 & \((3)\) & Mineral Deposits \\
EPSC 561 & \((3)\) & Ore-forming Processes
\end{tabular}

\subsection*{11.12.10.5 Bachelor of Science (B.Sc.) - Minor Geochemistry (18 credits)}

The Minor in Geochemistry focuses on the chemistry of Earth's lithosphere, its reactivity in contact with the atmosphere and/or the hydrosphere, and the chemistry of extra-terrestrial materials.
The appropriate background in chemistry is required: (CHEM 110 and CHEM 120, or their equivalent) and calculus (MATH 139 and MATH 141, or their equivalent).

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
EPSC 201 & (3) & Understanding Planet Earth \\
EPSC 210 & (3) & Introductory Mineralogy \\
EPSC 212 & \((3)\) & Introductory Petrology
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits selected from:
\begin{tabular}{lll} 
EPSC 220 & (3) & Principles of Geochemistry \\
EPSC 501 & (3) & Crystal Chemistry \\
EPSC 519 & (3) & Isotopes in Earth and Environmental Science \\
EPSC 549 & (3) & Hydrogeology
\end{tabular}
\begin{tabular}{lll} 
EPSC 570 & (3) & Cosmochemistry \\
EPSC 590 & (3) & Applied Geochemistry Seminar
\end{tabular}

\subsection*{11.12.10.6 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Earth and Planetary Sciences ( 45 credits)}

The B.Sc. (Liberal) program in Earth and Planetary Sciences provides the graduate with a solid core of knowledge of Geology, Geophysics, Earth Systems Science, and Planetary Science while allowing for a broadening of the student's educational experience with courses from the other sciences or the arts. The program is flexible, allowing students to assemble a truly interdisciplinary degree.

\section*{Required Courses (21 credits)}
\begin{tabular}{lcl} 
EPSC 210 & \((3)\) & Introductory Mineralogy \\
EPSC 212 & \((3)\) & Introductory Petrology \\
EPSC 220 & \((3)\) & Principles of Geochemistry \\
EPSC 231 & \((3)\) & Field School 1 \\
EPSC 233 & \((3)\) & Earth and Life History \\
EPSC 303 & \((3)\) & Structural Geology \\
EPSC 320 & \((3)\) & Elementary Earth Physics
\end{tabular}

\section*{Complementary Courses (24 credits)}

3 credits, one of:
\begin{tabular}{lll} 
EPSC 331 & (3) & Field School 2 \\
EPSC 341 & (3) & Field School 3
\end{tabular}
plus 21 credits chosen from the following:
Note: Courses at the 300 or higher level in other departments in the Faculties of Science and Engineering may also be used as complementary credits, with the permission of the Director of undergraduate studies.
\begin{tabular}{|c|c|c|}
\hline EPSC 334 & (3) & Invertebrate Paleontology \\
\hline EPSC 340 & (3) & Earth and Planetary Inference \\
\hline EPSC 350 & (3) & Tectonics \\
\hline EPSC 355 & (3) & Sedimentary Geology \\
\hline EPSC 423 & (3) & Igneous Petrology \\
\hline EPSC 425 & (3) & Sediments to Sequences \\
\hline EPSC 435 & (3) & Applied Geophysics \\
\hline EPSC 445 & (3) & Metamorphic Petrology \\
\hline EPSC 452 & (3) & Mineral Deposits \\
\hline EPSC 501 & (3) & Crystal Chemistry \\
\hline EPSC 519 & (3) & Isotopes in Earth and Environmental Science \\
\hline EPSC 530 & (3) & Volcanology \\
\hline EPSC 547 & (3) & Modelling Geochemical Processes \\
\hline EPSC 548 & (3) & Igneous Petrogenetic Mechanisms \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline EPSC 550 & (3) & Selected Topics 1 \\
\hline EPSC 551 & (3) & Selected Topics 2 \\
\hline EPSC 552 & (3) & Selected Topics 3 \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
EPSC 561 & \((3)\) & Ore-forming Processes \\
EPSC 567 & \((3)\) & Advanced Volcanology \\
EPSC 570 & \((3)\) & Cosmochemistry \\
EPSC 590 & \((3)\) & Applied Geochemistry Seminar \\
ESYS 300 & \((3)\) & Investigating the Earth System \\
ESYS 301 & \((3)\) & Earth System Modelling \\
ESYS 500 & \((3)\) & Earth System Applications
\end{tabular}

\subsection*{11.12.10.7 Bachelor of Science (B.Sc.) - Major Geology ( 66 credits)}

The program curriculum provides a rigorous foundation in the fundamental earth science subjects and in the advanced subjects relevant to exploration for energy resources, industrial and ore minerals, and to environmental geosciences. The program meets the academic requirements shared by the professional orders for geologists and environmental geoscientists in most Canadian provinces. It also offers students the opportunity to take courses or acquire experience in areas of current research. It is a path to a wide range of careers in industry, teaching and research in earth sciences.

\section*{Required Courses (30 credits)}
\begin{tabular}{lcl} 
EPSC 210 & \((3)\) & Introductory Mineralogy \\
EPSC 212 & \((3)\) & Introductory Petrology \\
EPSC 220 & \((3)\) & Principles of Geochemistry \\
EPSC 231 & \((3)\) & Field School 1 \\
EPSC 233 & \((3)\) & Earth and Life History \\
EPSC 240 & \((3)\) & Geology in the Field \\
EPSC 303 & \((3)\) & Structural Geology \\
EPSC 320 & \((3)\) & Elementary Earth Physics \\
EPSC 340 & \((3)\) & Earth and Planetary Inference \\
MATH 222 & \((3)\) & Calculus 3
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 6}\) credits)}

15 credits of advanced earth science
\begin{tabular}{lcl} 
EPSC 334 & \((3)\) & Invertebrate Paleontology \\
EPSC 355 & \((3)\) & Sedimentary Geology \\
EPSC 423 & \((3)\) & Igneous Petrology \\
EPSC 425 & \((3)\) & Sediments to Sequences \\
EPSC 445 & \((3)\) & Metamorphic Petrology \\
EPSC 452 & \((3)\) & Mineral Deposits
\end{tabular}

3 credits of field school
\begin{tabular}{lll} 
EPSC 331 & (3) & Field School 2 \\
EPSC 341 & (3) & Field School 3
\end{tabular}

3 credits of environmental and ore-forming processes
\begin{tabular}{lll} 
EPSC 513 & (3) & Climate and the Carbon Cycle \\
EPSC 519 & (3) & Isotopes in Earth and Environmental Science \\
EPSC 549 & (3) & Hydrogeology
\end{tabular}
\begin{tabular}{lll} 
EPSC 561 & (3) & Ore-forming Processes \\
EPSC 590 & (3) & Applied Geochemistry Seminar
\end{tabular}

15 credits of other specializations can be drawn from the categories above or from:
\begin{tabular}{lcl} 
EPSC 350 & (3) & Tectonics \\
EPSC 435 & (3) & Applied Geophysics \\
EPSC 470D1 & (3) & Undergraduate Thesis Research \\
EPSC 470D2 & (3) & Undergraduate Thesis Research \\
EPSC 482 & (3) & Research in Earth and Planetary Sciences \\
EPSC 501 & (3) & Crystal Chemistry \\
EPSC 503 & (3) & Advanced Structural Geology \\
EPSC 520 & (3) & Earthquake Physics and Geology \\
EPSC 525 & (3) & Microbiology of the Earth System \\
EPSC 530 & (3) & Volcanology \\
EPSC 540 & () & Crustal Rheology \\
EPSC 547 & (3) & Modelling Geochemical Processes \\
EPSC 548 & (3) & Igneous Petrogenetic Mechanisms \\
EPSC 550 & (3) & Selected Topics 1 \\
EPSC 551 & (3) & Selected Topics 2 \\
EPSC 552 & (3) & Selected Topics 3 \\
EPSC 567 & (3) & Advanced Volcanology
\end{tabular}

Other ATOC, EPSC, ESYS, GEOG, MATH and MIME courses may also be used, with the permission of the Director of undergraduate studies, if they meet the academic requirements of professional orders in most Canadian provinces.

\subsection*{11.12.10.8 Bachelor of Science (B.Sc.) - Honours Geology (75 credits)}

The program curriculum is designed to provide a rigorous foundation in the fundamental earth science disciplines and in the advanced subjects relevant to fundamental and applied research in exploration for energy resources or industrial and ore minerals, and in environmental geosciences. The program meets the academic requirements shared by the professional orders for geologists and environmental geoscientists in most Canadian provinces. It is intended to provide an excellent preparation for graduate work in the earth sciences but offers enough flexibility to prepare for a wide range of careers in industry and teaching.

Required Courses (42 credits)
\begin{tabular}{lcl} 
EPSC 210 & \((3)\) & Introductory Mineralogy \\
EPSC 212 & \((3)\) & Introductory Petrology \\
EPSC 220 & \((3)\) & Principles of Geochemistry \\
EPSC 231 & \((3)\) & Field School 1 \\
EPSC 233 & \((3)\) & Earth and Life History \\
EPSC 240 & \((3)\) & Geology in the Field \\
EPSC 303 & (3) & Structural Geology \\
EPSC 320 & (3) & Elementary Earth Physics \\
EPSC 340 & (3) & Earth and Planetary Inference \\
EPSC 480D1 & (3) & Honours Research Thesis \\
EPSC 480D2 & (3) & Honours Research Thesis \\
MATH 222 & \((3)\) & Calculus 3
\end{tabular}
\begin{tabular}{lll} 
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{3 3}\) credits)}

15 credits of advanced earth science
\begin{tabular}{lcl} 
EPSC 334 & (3) & Invertebrate Paleontology \\
EPSC 355 & (3) & Sedimentary Geology \\
EPSC 423 & (3) & Igneous Petrology \\
EPSC 425 & (3) & Sediments to Sequences \\
EPSC 445 & \((3)\) & Metamorphic Petrology \\
EPSC 452 & \((3)\) & Mineral Deposits
\end{tabular}

3 credits of field school
\begin{tabular}{lll} 
EPSC 331 & (3) & Field School 2 \\
EPSC 341 & (3) & Field School 3
\end{tabular}

3 credits of environmental and ore-forming processes
\begin{tabular}{lll} 
EPSC 513 & (3) & Climate and the Carbon Cycle \\
EPSC 519 & (3) & Isotopes in Earth and Environmental Science \\
EPSC 549 & (3) & Hydrogeology \\
EPSC 561 & (3) & Ore-forming Processes \\
EPSC 590 & (3) & Applied Geochemistry Seminar
\end{tabular}

12 credits of other specializations can be drawn from the categories above or from:
\begin{tabular}{lcl} 
EPSC 350 & \((3)\) & Tectonics \\
EPSC 435 & \((3)\) & Applied Geophysics \\
EPSC 501 & \((3)\) & Crystal Chemistry \\
EPSC 503 & \((3)\) & Advanced Structural Geology \\
EPSC 510 & \((3)\) & Geodynamics \\
EPSC 520 & (3) & Earthquake Physics and Geology \\
EPSC 530 & (3) & Volcanology \\
EPSC 547 & (3) & Modelling Geochemical Processes \\
EPSC 548 & (3) & Igneous Petrogenetic Mechanisms \\
EPSC 550 & (3) & Selected Topics 1 \\
EPSC 551 & (3) & Selected Topics 2 \\
EPSC 552 & (3) & Selected Topics 3 \\
EPSC 567 & (3) & Advanced Volcanology
\end{tabular}

Courses from other departments may also be used, with the permission of the Director of undergraduate studies, when they meet the academic requirements of professional orders in most Canadian provinces.

\subsection*{11.12.10.9 Bachelor of Science (B.Sc.) - Honours Planetary Sciences (78 credits)}

The program curriculum is designed to provide a rigorous foundation in physical sciences and the flexibility to create an individualized program in preparation for careers in industry, teaching, and research. It is intended to provide an excellent preparation for graduate work in the earth and planetary sciences.
Note: Honours students must maintain a CGPA equal to or greater than 3.20.

\section*{Required Courses (66 credits)}
\begin{tabular}{|c|c|c|}
\hline EPSC 210 & (3) & Introductory Mineralogy \\
\hline EPSC 212 & (3) & Introductory Petrology \\
\hline EPSC 220 & (3) & Principles of Geochemistry \\
\hline EPSC 231 & (3) & Field School 1 \\
\hline EPSC 233 & (3) & Earth and Life History \\
\hline EPSC 240 & (3) & Geology in the Field \\
\hline EPSC 303 & (3) & Structural Geology \\
\hline EPSC 320 & (3) & Elementary Earth Physics \\
\hline EPSC 340 & (3) & Earth and Planetary Inference \\
\hline EPSC 350 & (3) & Tectonics \\
\hline EPSC 423 & (3) & Igneous Petrology \\
\hline EPSC 480D1 & (3) & Honours Research Thesis \\
\hline EPSC 480D2 & (3) & Honours Research Thesis \\
\hline EPSC 510 & (3) & Geodynamics \\
\hline EPSC 570 & (3) & Cosmochemistry \\
\hline MATH 222 & (3) & Calculus 3 \\
\hline MATH 223 & (3) & Linear Algebra \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 315 & (3) & Ordinary Differential Equations \\
\hline MATH 317 & (3) & Numerical Analysis \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline PHYS 340 & (3) & Majors Electricity and Magnetism \\
\hline
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits from:
\begin{tabular}{lll} 
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 251 & (3) & Honours Classical Mechanics 1
\end{tabular}
plus 9 credits (three courses) chosen from the following:
Note: Courses at the 300 level or higher in other departments in the Faculties of Science and Engineering may also be used as complementary credits, with the permission of the Director of undergraduate studies.
\begin{tabular}{lll} 
EPSC 334 & \((3)\) & Invertebrate Paleontology \\
EPSC 425 & (3) & Sediments to Sequences \\
EPSC 445 & (3) & Metamorphic Petrology \\
EPSC 501 & (3) & Crystal Chemistry \\
EPSC 519 & (3) & Isotopes in Earth and Environmental Science
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EPSC 520 & (3) & Earthquake Physics and Geology \\
\hline EPSC 530 & (3) & Volcanology \\
\hline EPSC 540 & () & Crustal Rheology \\
\hline EPSC 547 & (3) & Modelling Geochemical Processes \\
\hline EPSC 548 & (3) & Igneous Petrogenetic Mechanisms \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline EPSC 550 & (3) & Selected Topics 1 \\
\hline EPSC 551 & (3) & Selected Topics 2 \\
\hline EPSC 552 & (3) & Selected Topics 3 \\
\hline EPSC 561 & (3) & Ore-forming Processes \\
\hline EPSC 567 & (3) & Advanced Volcanology \\
\hline EPSC 590 & (3) & Applied Geochemistry Seminar \\
\hline
\end{tabular}

\subsection*{11.1210.10 Earth and Planetary Sciences (EPSC) Related Programs 11.1210101 Joint Major in Physics and Geophysics}

For more information, see section 11.12.30: Physics (PHYS).

\subsection*{11.1210102 Earth System Science Interdepartmental Major}

This program is offered by the Departments of Atmospheric and Oceanic Sciences; Earth and Planetary Sciences; and Geography. Students in the Department of Earth and Planetary Sciences who are interested in this program should contact Professor William Minarik (william.minarik@mcgill.ca).
For more information, see section 11.12.11: Earth System Science (ESYS).

\subsection*{11.1210103 Earth System Science Interdepartmental Honours}

This program is offered by the Departments of Atmospheric and Oceanic Sciences; Earth and Planetary Sciences; and Geography. Students in the Department of Earth and Planetary Sciences who are interested in this program should contact Professor William Minarik (william.minarik@mcgill.ca).
For more information, see section 11.12.11: Earth System Science (ESYS).

\subsection*{11.12.11 Earth System Science (ESYS)}

\subsection*{11.12.11.1 Location}

Program Advisor
Dr. William Minarik
Frank Dawson Adams, Room 215
Telephone: 514-398-2596
Email: william.minarik@mcgill.ca
Website: mcgill.ca/earthsystemscience

\subsection*{11.12.11.2 About Earth System Science}

The McGill interdepartmental Major program in Earth System Science (ESYS) is designed to equip students with the skills and knowledge to address six "Grand Challenges" that are fundamental to our understanding of the way in which the Earth operates. These Grand Challenges are being tackled with scientific and technological innovation and interdisciplinary research, creating bountiful employment opportunities for ESYS graduates in industry, research institutions, and government. They are:
- Global biogeochemical cycles;
- Climate variability and change;
- Land use and land cover change;
- Energy and resources;
- Earth hazards: volcanoes, earthquakes, and hurricanes; and
- Earth-atmosphere observation, analysis, and prediction.

Many of our graduates go on to M.Sc. or Ph.D. programs in a variety of scientific fields that address these grand challenges, including those arising from the interaction of human activities and natural systems.

Career opportunities after a B.Sc. are diverse and increasing. Our graduates work for environmental consulting firms (assessing suitable sites for new industrial facilities and predicting their environmental impact, and cleaning contaminated sites), research groups in re-insurance firms (evaluating risks of natural disasters), in product life cycle management (studying energy and resources use, and the effect of recycling or waste disposal), and software companies that develop algorithms to assist farmers on choices of crops and soil management practices, and business owners with inventory management.

The Honours program in Earth System Science (ESYS) prepares students for graduate studies in a wide range of transdisciplinary programs that address these challenges.

The ESS programs are offered jointly by the Department of section 11.12.3: Atmospheric and Oceanic Sciences (ATOC), the Department of section 11.12.10: Earth and Planetary Sciences (EPSC), and the Department of section 11.12.17: Geography (GEOG).

The individual departments, their disciplines, and specific courses offered by them are described in their respective entries in this publication.

\subsection*{11.12.11.3 Bachelor of Science - Minor Earth System Science (18 credits)}

The Minor in Earth System Science combines interdisciplinary knowledge with quantitative tools to explore global connections between the atmosphere, oceans, solid Earth, and the dynamic ecological and human processes at the Earth surface. The program aims to provide fundamental understanding relevant to navigating the challenges of sustainability and climate change, and addresses timescales ranging from the vastness of Earth history to the fast-moving events of the Anthropocene.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ESYS 200 & (3) & Earth System Processes \\
ESYS 300 & (3) & Investigating the Earth System \\
ESYS 301 & (3) & Earth System Modelling \\
ESYS 500 & (3) & Earth System Applications
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

6 credits ( 3 credits from two of the three ESYS Departments: EPSC, ATOC, or GEOG), at the 300 level or higher, in consultation with the ESS student adviser.

\subsection*{11.12.11.4 Bachelor of Science (B.Sc.) - Major Earth System Science (57 credits)}

The Major in Earth System Science (ESYS) is offered jointly by the following departments:
Atmospheric and Oceanic Sciences (ATOC)
Earth and Planetary Sciences (EPSC)

\section*{Geography (GEOG)}

Earth System Science (ESYS) views Earth as a single integrated system that provides a unifying context to examine the interrelationships between all components of the Earth system. The approach concentrates on the nature of linkages among the biological, chemical, human, and physical subsystems of the Earth. Earth System Science primarily involves studying the cycling of matter and energy through the atmosphere, biosphere, cryosphere, exosphere, and hydrosphere. It examines the dynamics and interrelationships among these processes at time scales that range from billions of years to days, and seeks to understand how these interrelationships have changed over time.

\section*{Required Courses (18 credits)}
\begin{tabular}{lcl} 
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
ESYS 200 & (3) & Earth System Processes \\
ESYS 300 & (3) & Investigating the Earth System \\
ESYS 301 & (3) & Earth System Modelling \\
ESYS 500 & (3) & Earth System Applications \\
MATH 222 & (3) & Calculus 3
\end{tabular}

\section*{Complementary Courses (39 credits)}

3 credits from the following:
\begin{tabular}{lll} 
EPSC 340 & (3) & Earth and Planetary Inference \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
ATOC 219 & (3) & Introduction to Atmospheric Chemistry
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
EPSC 210 & (3) & Introductory Mineralogy \\
EPSC 220 & (3) & Principles of Geochemistry
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
GEOG 308 & (3) & Remote Sensing for Earth Observation \\
GEOG 314 & (3) & Geospatial Analysis \\
GEOG 428 & (3) & Earth System Geographic Information Science
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
GEOG 203 & (3) & Environmental Systems
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
BIOL 215 & (3) & Introduction to Ecology and Evolution \\
ENVR 202 & (3) & The Evolving Earth
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
ANTH 339 & (3) & Ecological Anthropology \\
GEOG 217 & (3) & Cities in the Modern World \\
GEOG 221 & (3) & Environment and Health \\
GEOG 300 & (3) & Human Ecology in Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods
\end{tabular}

\footnotetext{
15 credits from the following course list, with at least 3 credits from each of subject codes ATOC, EPSC, and GEOG. At least 9 of the 15 credits must be at the 400 level or higher.

Note: Courses at the 300 level or higher in other departments in the Faculties of Science and Engineering may also be used as complementary credits, with the permission of an academic adviser.
}
\begin{tabular}{lll} 
ATOC 215 & (3) & Oceans, Weather and Climate \\
ATOC 309 & (3) & Weather Radars and Satellites \\
ATOC 312 & (3) & Rotating Fluid Dynamics
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ATOC 315 & (3) & Thermodynamics and Convection \\
\hline ATOC 404 & (3) & Climate Physics \\
\hline ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
\hline ATOC 513 & (3) & Waves and Stability \\
\hline ATOC 515 & (3) & Turbulence in Atmosphere and Oceans \\
\hline ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
\hline ATOC 521 & (3) & Cloud Physics \\
\hline ATOC 525 & (3) & Atmospheric Radiation \\
\hline ATOC 531 & (3) & Dynamics of Current Climates \\
\hline ATOC 540 & (3) & Synoptic Meteorology 1 \\
\hline ATOC 541 & (3) & Synoptic Meteorology 2 \\
\hline BIOL 308 & (3) & Ecological Dynamics \\
\hline BIOL 309 & (3) & Mathematical Models in Biology \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 434 & (3) & Theoretical Ecology \\
\hline BIOL 441 & (3) & Biological Oceanography \\
\hline BIOL 465 & (3) & Conservation Biology \\
\hline BIOL 540 & (3) & Ecology of Species Invasions \\
\hline BIOL 573 & (3) & Vertebrate Palaeontology Field Course \\
\hline BREE 217 & (3) & Hydrology and Water Resources \\
\hline BREE 319 & (3) & Engineering Mathematics \\
\hline BREE 509 & (3) & Hydrologic Systems and Modelling. \\
\hline BREE 510 & (3) & Watershed Systems Management \\
\hline BREE 515 & (3) & Soil Hydrologic Modelling \\
\hline BREE 533 & (3) & Water Quality Management \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline EPSC 212 & (3) & Introductory Petrology \\
\hline EPSC 320 & (3) & Elementary Earth Physics \\
\hline EPSC 331 & (3) & Field School 2 \\
\hline EPSC 334 & (3) & Invertebrate Paleontology \\
\hline EPSC 340 & (3) & Earth and Planetary Inference \\
\hline EPSC 341 & (3) & Field School 3 \\
\hline EPSC 350 & (3) & Tectonics \\
\hline EPSC 355 & (3) & Sedimentary Geology \\
\hline EPSC 423 & (3) & Igneous Petrology \\
\hline EPSC 425 & (3) & Sediments to Sequences \\
\hline EPSC 445 & (3) & Metamorphic Petrology \\
\hline EPSC 452 & (3) & Mineral Deposits \\
\hline EPSC 519 & (3) & Isotopes in Earth and Environmental Science \\
\hline EPSC 525 & (3) & Microbiology of the Earth System \\
\hline EPSC 530 & (3) & Volcanology \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline EPSC 549 & (3) & Hydrogeology \\
\hline EPSC 561 & (3) & Ore-forming Processes \\
\hline EPSC 567 & (3) & Advanced Volcanology \\
\hline EPSC 590 & (3) & Applied Geochemistry Seminar \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 305 & (3) & Soils and Environment \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322 & (3) & Environmental Hydrology \\
\hline GEOG 351 & (3) & Quantitative Methods \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 401 & (3) & Socio-Environmental Systems: Theory and Simulation \\
\hline GEOG 414 & (3) & Advanced Geospatial Analysis \\
\hline GEOG 470 & (3) & Wetlands \\
\hline GEOG 495 & (3) & Field Studies - Physical Geography \\
\hline GEOG 499 & (3) & Subarctic Field Studies \\
\hline GEOG 505 & (3) & Global Biogeochemistry \\
\hline GEOG 506 & (3) & Advanced Geographic Information Science \\
\hline GEOG 523 & (3) & Global Ecosystems and Climate \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline GEOG 535 & (3) & Remote Sensing and Interpretation \\
\hline GEOG 536 & (3) & Geocryology \\
\hline GEOG 537 & (3) & Advanced Fluvial Geomorphology \\
\hline GEOG 550 & (3) & Historical Ecology Techniques \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 315* & (3) & Ordinary Differential Equations \\
\hline MATH 317 & (3) & Numerical Analysis \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline MATH 323 & (3) & Probability \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 437 & (3) & Mathematical Methods in Biology \\
\hline MATH 447 & (3) & Introduction to Stochastic Processes \\
\hline MATH 525 & (4) & Sampling Theory and Applications \\
\hline PHYS 331 & (3) & Topics in Classical Mechanics \\
\hline PHYS 340 & (3) & Majors Electricity and Magnetism \\
\hline PHYS 342 & (3) & Majors Electromagnetic Waves \\
\hline PHYS 404 & (3) & Climate Physics \\
\hline PHYS 432 & (3) & Physics of Fluids \\
\hline
\end{tabular}
* MATH 315 is a required course for the B.Sc. Honours Earth System Science.
11.12.11.5 Bachelor of Science (B.Sc.) - Honours Earth System Science (66 credits)

The Honours in Earth System Science (ESYS) is offered jointly by the following departments:
Atmospheric and Oceanic Sciences (ATOC)

\section*{Earth and Planetary Sciences (EPSC)}

Geography (GEOG)
A rigorous foundation in earth system science and the flexibility to create an individualized program in preparation for careers in industry, teaching, and research. It is also intended to provide an excellent preparation for graduate work in earth system science. A CGPA of 3.20 or higher is required for registration in and graduation from this program.
"First Class Honours" is awarded to students who obtain a minimum cumulative grade point average of 3.70 , a minimum program GPA of 3.20 , and a minimum grade of B+ in ESYS 300, ESYS 301, and ESYS 500.

\section*{Required Courses ( 27 credits)}
\begin{tabular}{lcl} 
ENVR 201 & \((3)\) & Society, Environment and Sustainability \\
ESYS 200 & (3) & Earth System Processes \\
ESYS 300 & (3) & Investigating the Earth System \\
ESYS 301 & (3) & Earth System Modelling \\
ESYS 480D1 & (3) & Honours Research Project \\
ESYS 480D2 & (3) & Honours Research Project \\
ESYS 500 & (3) & Earth System Applications \\
MATH 222 & (3) & Calculus 3 \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Complementary Courses (39 credits)}

3 credits from the following:
\begin{tabular}{lll} 
EPSC 340 & (3) & Earth and Planetary Inference \\
MATH 203 & (3) & Principles of Statistics 1
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
ATOC 214 & (3) & Introduction: Physics of the Atmosphere \\
ATOC 219 & (3) & Introduction to Atmospheric Chemistry
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
EPSC 210 & (3) & Introductory Mineralogy \\
EPSC 220 & (3) & Principles of Geochemistry
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
GEOG 308 & (3) & Remote Sensing for Earth Observation \\
GEOG 314 & (3) & Geospatial Analysis \\
GEOG 428 & (3) & Earth System Geographic Information Science
\end{tabular}

3 credits from the following:
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
GEOG 203 & (3) & Environmental Systems
\end{tabular}

3 credits from the following:
BIOL 215
(3)
Introduction to Ecology and Evolution
ENVR 202
The Evolving Earth

3 credits from the following:
\begin{tabular}{lll} 
ANTH 339 & \((3)\) & Ecological Anthropology \\
GEOG 217 & (3) & Cities in the Modern World \\
GEOG 221 & (3) & Environment and Health \\
GEOG 300 & (3) & Human Ecology in Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods
\end{tabular}

15 credits from the following course list, with at least 3 credits from each of subject codes ATOC, EPSC, and GEOG. At least 9 of the 15 credits must be at the 400 level or higher.
Note: Courses at the 300 level or higher in other departments in the Faculties of Science and Engineering may also be used as complementary credits, with the permission of an academic adviser.
\begin{tabular}{|c|c|c|}
\hline ATOC 215 & (3) & Oceans, Weather and Climate \\
\hline ATOC 309 & (3) & Weather Radars and Satellites \\
\hline ATOC 312 & (3) & Rotating Fluid Dynamics \\
\hline ATOC 315 & (3) & Thermodynamics and Convection \\
\hline ATOC 404 & (3) & Climate Physics \\
\hline ATOC 512 & (3) & Atmospheric and Oceanic Dynamics \\
\hline ATOC 513 & (3) & Waves and Stability \\
\hline ATOC 515 & (3) & Turbulence in Atmosphere and Oceans \\
\hline ATOC 519 & (3) & Advances in Chemistry of Atmosphere \\
\hline ATOC 521 & (3) & Cloud Physics \\
\hline ATOC 525 & (3) & Atmospheric Radiation \\
\hline ATOC 531 & (3) & Dynamics of Current Climates \\
\hline ATOC 540 & (3) & Synoptic Meteorology 1 \\
\hline ATOC 541 & (3) & Synoptic Meteorology 2 \\
\hline BIOL 308 & (3) & Ecological Dynamics \\
\hline BIOL 309 & (3) & Mathematical Models in Biology \\
\hline BIOL 310 & (3) & Biodiversity and Ecosystems \\
\hline BIOL 432 & (3) & Limnology \\
\hline BIOL 434 & (3) & Theoretical Ecology \\
\hline BIOL 441 & (3) & Biological Oceanography \\
\hline BIOL 465 & (3) & Conservation Biology \\
\hline BIOL 540 & (3) & Ecology of Species Invasions \\
\hline BIOL 573 & (3) & Vertebrate Palaeontology Field Course \\
\hline BREE 217 & (3) & Hydrology and Water Resources \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BREE 319 & (3) & Engineering Mathematics \\
\hline BREE 509 & (3) & Hydrologic Systems and Modelling. \\
\hline BREE 510 & (3) & Watershed Systems Management \\
\hline BREE 515 & (3) & Soil Hydrologic Modelling \\
\hline BREE 533 & (3) & Water Quality Management \\
\hline ECON 347 & (3) & Economics of Climate Change \\
\hline ECON 405 & (3) & Natural Resource Economics \\
\hline EPSC 212 & (3) & Introductory Petrology \\
\hline EPSC 320 & (3) & Elementary Earth Physics \\
\hline EPSC 331 & (3) & Field School 2 \\
\hline EPSC 334 & (3) & Invertebrate Paleontology \\
\hline EPSC 340 & (3) & Earth and Planetary Inference \\
\hline EPSC 341 & (3) & Field School 3 \\
\hline EPSC 350 & (3) & Tectonics \\
\hline EPSC 355 & (3) & Sedimentary Geology \\
\hline EPSC 423 & (3) & Igneous Petrology \\
\hline EPSC 425 & (3) & Sediments to Sequences \\
\hline EPSC 445 & (3) & Metamorphic Petrology \\
\hline EPSC 452 & (3) & Mineral Deposits \\
\hline EPSC 519 & (3) & Isotopes in Earth and Environmental Science \\
\hline EPSC 525 & (3) & Microbiology of the Earth System \\
\hline EPSC 530 & (3) & Volcanology \\
\hline EPSC 549 & (3) & Hydrogeology \\
\hline EPSC 561 & (3) & Ore-forming Processes \\
\hline EPSC 567 & (3) & Advanced Volcanology \\
\hline EPSC 590 & (3) & Applied Geochemistry Seminar \\
\hline GEOG 272 & (3) & Earth's Changing Surface \\
\hline GEOG 305 & (3) & Soils and Environment \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322 & (3) & Environmental Hydrology \\
\hline GEOG 351 & (3) & Quantitative Methods \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 401 & (3) & Socio-Environmental Systems: Theory and Simulation \\
\hline GEOG 414 & (3) & Advanced Geospatial Analysis \\
\hline GEOG 470 & (3) & Wetlands \\
\hline GEOG 495 & (3) & Field Studies - Physical Geography \\
\hline GEOG 499 & (3) & Subarctic Field Studies \\
\hline GEOG 505 & (3) & Global Biogeochemistry \\
\hline GEOG 506 & (3) & Advanced Geographic Information Science \\
\hline GEOG 523 & (3) & Global Ecosystems and Climate \\
\hline GEOG 530 & (3) & Global Land and Water Resources \\
\hline GEOG 535 & (3) & Remote Sensing and Interpretation \\
\hline GEOG 536 & (3) & Geocryology \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline GEOG 537 & (3) & Advanced Fluvial Geomorphology \\
\hline GEOG 550 & (3) & Historical Ecology Techniques \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 317 & (3) & Numerical Analysis \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline MATH 323 & (3) & Probability \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 437 & (3) & Mathematical Methods in Biology \\
\hline MATH 447 & (3) & Introduction to Stochastic Processes \\
\hline MATH 525 & (4) & Sampling Theory and Applications \\
\hline PHYS 331 & (3) & Topics in Classical Mechanics \\
\hline PHYS 340 & (3) & Majors Electricity and Magnetism \\
\hline PHYS 342 & (3) & Majors Electromagnetic Waves \\
\hline PHYS 404 & (3) & Climate Physics \\
\hline PHYS 432 & (3) & Physics of Fluids \\
\hline
\end{tabular}

\subsection*{11.12.12 Entrepreneurship for Science Students}

\subsection*{11.12.12.1 About Entrepreneurship for Science Students}

This Minor is geared toward Science students with an interest in entrepreneurship and key business topics. The set of six courses will introduce them to concepts and skills needed to effectively complement the technical expertise obtained. These concepts and skills form the basis of successful companies in the high technology sector, be they start-ups, or small- or medium-sized enterprises.

\subsection*{11.12.12.2 Bachelor of Science (B.Sc.) - Minor Entrepreneurship for Science Students (18 credits)}

The Bachelor of Science; Minor in Entrepreneurship is a collaboration of the Faculty of Science and the Desautels Faculty of Management. The program focuses on an entrepreneurial mindset to see opportunity in the world and provides training in an entrepreneurial method to bring opportunities for change to life. This program takes a democratized approach to entrepreneurship, with exposure to the diverse manifestations of entrepreneurship in the world including but not limited to new ventures, social enterprise, tech start-ups, cooperatives, corporate venturing, side hustles, and passion projects. The program emphasizes self-directed learning and experiential education. The program includes group projects with live start-ups in the McGill entrepreneurial ecosystem, and exploration of pathways to launch an entrepreneurial initiative.

\section*{Required Courses (9 credits)}
\begin{tabular}{lll} 
INTG 215 & (3) & Entrepreneurship Essentials for Non-Management Students \\
MGPO 362 & (3) & Fundamentals of Entrepreneurship \\
MGPO 364 & (3) & Entrepreneurship in Practice
\end{tabular}

\section*{Complementary Courses (9 credits)}

3 credits from the following:
\begin{tabular}{lcl} 
MGCR 211 & (3) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341 & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372 & (3) & Operations Management. \\
MGCR 382 & (3) & International Business
\end{tabular}
\begin{tabular}{lll} 
MGCR 423 & (3) & Strategic Management \\
MGCR 460 & (3) & Social Context of Business.
\end{tabular}

6 credits from the following:
\begin{tabular}{lll} 
BUSA 465 & (3) & Technological Entrepreneurship \\
MGPO 438 & (3) & Social Entrepreneurship and Innovation \\
MIMM 387 & (3) & The Business of Science
\end{tabular}

\subsection*{11.12.13 Environment}

Science students who are interested in studying the environment should refer to Bieler School of Environment > Undergraduate.
- Minor: section 7.5.1: Minor in Environment
- Major: section 7.5.4: Major in Environment - B.Sc.(Ag.Env.Sc.) and B.Sc. or : Major in Environment - B.Sc.
- Honours: section 7.5.5: Honours Environment
- Diploma: section 7.5.7: Diploma Environment

\subsection*{11.12.14 Experimental Medicine (EXMD)}

\subsection*{11.12.14.1 Location}

Division of Experimental Medicine
Department of Medicine
1001 Decarie Boulevard
Montreal QC H4A 3J1
Canada
Telephone: 514-934-1934, ext. 34699, 34700 or 36465
Email: experimental.medicine@mcgill.ca
Website: mcgill.ca/expmed

\subsection*{11.12.14.2 About Experimental Medicine}

Experimental Medicine is a Division of the Department of Medicine. There are no B.Sc. programs in Experimental Medicine, but the EXMD courses listed below are considered as courses taught by the Faculty of Science.

\section*{Experimental Medicine Courses}
\begin{tabular}{lcl} 
EXMD 401 & \((3)\) & Physiology and Biochemistry Endocrine Systems \\
EXMD 501 & (3) & Clinical Applications of Regenerative Medicine \\
EXMD 502 & (3) & Advanced Endocrinology 01 \\
EXMD 503 & (3) & Advanced Endocrinology 02 \\
EXMD 504 & \((3)\) & Biology of Cancer \\
EXMD 505 & (3) & Directed Readings in Regenerative Medicine \\
EXMD 506 & (3) & Advanced Applied Cardiovascular Physiology \\
EXMD 507 & (3) & Advanced Applied Respiratory Physiology \\
EXMD 508 & (3) & Advanced Topics in Respiration \\
EXMD 509 & (3) & Gastrointestinal Physiology and Pathology \\
EXMD 510 & (3) & Bioanalytical Separation Methods \\
EXMD 511 & (3) & Joint Venturing with Industry
\end{tabular}

\subsection*{11.12.15 Field Study}

For details about the available Field Study Semesters, see Field Study Programs .

\subsection*{11.12.15.1 Field Studies - Minor Field Studies ( 18 credits)}

Students participating in any one of the field study semesters, i.e., the Africa Field Study Semester, the Barbados Field Study Semester, the Barbados Interdisciplinary Tropical Studies (BITS) Field Study Semester, McGill Arctic Field Study Semester, or the Panama Field Study Semester may complete the 18-credit Minor in Field Studies.

The Minor consists of the 15 credits of a field study semester plus three additional complementary credits chosen by the student in consultation with their departmental adviser and/or the Field Study Minor adviser.

For students in the B.Sc. Liberal Program, the Field Studies Minor can serve as the breadth component.
Program descriptions for each of the field study semesters are provided below.
Note: The field study semesters are not degree programs. Credits may be counted toward McGill degrees with the permission of program advisers. Students who complete a field study semester may consult the Field Study Minor adviser about completing the Minor program as part of their McGill degree.

\section*{Africa Field Study Semester (15 credits)}

The Africa Field Study Semester (AFSS) is run through McGill's Canadian Field Study in Africa Program (CFSIA).
The AFSS provides one term of integrated field study in East Africa, with emphasis on environmental conservation, culture change, and sustainable development. Students investigate challenges of sustaining biological diversity and social justice in African environments subject to cultural change, economic development, and environmental stress. Cultural and ecological variation is examined in highland, montane, rangeland, desert, riverine, salt- and fresh-water lake, coastal, and urban settings.

\section*{Africa Field Study Semester - Required Courses}

\section*{6 credits}

Students select one course titled "Research in Society and Development in Africa" and one course titled "Research in Ecology and Development in Africa" from the courses below.
\begin{tabular}{lll} 
ANTH 451 & (3) & Research in Society and Development in Africa \\
BIOL 451 & (3) & Research in Ecology and Development in Africa \\
GEOG 451 & (3) & Research in Society and Development in Africa \\
NRSC 451 & (3) & Research in Ecology and Development in Africa
\end{tabular}

\section*{Africa Field Study Semester - Complementary Courses}

9 credits from:
* Note: Courses marked with an asterisk ("*") are offered on a rotational basis, at least 3 credits annually.
\begin{tabular}{|c|c|c|}
\hline ANTH 411 & (3) & Primate Studies and Conservation \\
\hline ANTH 416 & (3) & Environment/Development: Africa \\
\hline BIOL 428 & (3) & Biological Diversity in Africa \\
\hline BIOL 429 & (3) & East African Ecology \\
\hline GEOG 404* & (3) & Environmental Management 2 \\
\hline GEOG 408 & (3) & Geography of Development \\
\hline GEOG 423 & (3) & Dilemmas of Development \\
\hline HIST 498 & (3) & Independent Research \\
\hline NRSC 405 & (3) & Natural History of East Africa \\
\hline NUTR 404 & (3) & Nutrition Field Studies in East Africa \\
\hline REDM 405 & (3) & Natural History of East Africa \\
\hline WILD 420* & (3) & Ornithology \\
\hline
\end{tabular}

\section*{Barbados Field Study Semester (15 credits)}

The Barbados Field Study Semester (BFSS) offers a unique opportunity to study at McGill University's campus in the tropics, the Bellairs Research Institute in Barbados. The focus of this field study semester is the study of sustainability science, with emphasis on the Caribbean, which includes: a different climate and culture, field research, and conducting an applied research project. Project work is conducted with local partners and focuses on sustainability in Barbados.

\section*{Barbados Field Study Semester - Required Courses}

15 credits
\begin{tabular}{lll} 
ATOC 341 & (3) & Caribbean Climate and Weather \\
BIOL 343 & (3) & Biodiversity in the Caribean \\
FSCI 444 & (6) & Barbados Research Project \\
GEOG 340 & (3) & Sustainability in the Caribbean
\end{tabular}

\section*{Barbados Interdisciplinary Tropical Studies Field Semester (15 credits)}

The Barbados Interdisciplinary Tropical Studies (BITS) Field Semester is an activity-filled, hands-on experience for students with an interest in international studies with a Caribbean flavour. The focus is on sustainable agri-food, nutrition, and energy production on a tropical island with a tourist-based economy. It is offered annually (in the Summer). It consists of two 2-hour orientation sessions conducted on the Macdonald campus and at the Bellairs Research Institute in Barbados, followed by three 3-credit and one 6-credit project courses at Bellairs Research Institute. This program integrates intensive course work with group project work and contributes to the formation of professionals with planning, managing, decision-making, and communication skills. The program addresses a global need for experienced professionals capable of interacting with various levels of government, non-governmental organizations, and the private sector. BITS welcomes applications from senior undergraduate students from across the University.

\section*{Barbados Interdisciplinary Tropical Studies Field Semester - Required Courses}

15 credits
\begin{tabular}{lll} 
AEBI 421 & \((3)\) & Tropical Horticultural Ecology \\
AEBI 423 & \((3)\) & Sustainable Land Use \\
AEBI 425 & \((3)\) & Tropical Energy and Food \\
AEBI 427 & (6) & Barbados Interdisciplinary Project
\end{tabular}

\section*{Panama Field Study Semester (15 credits)}

This program is offered in Panama with the support of the Smithsonian Tropical Research Institute (STRI).
Hands-on experience is gained through research projects organized around multidisciplinary environmental issues. The nature of these projects will centre on practical environmental problems/questions important for Panama. Students will form teams that will work with Panamanian institutions (NGO, governmental, or research).

There is a one- or two-day period of transition and 13 weeks of course attendance in Panama. Field trips will be integrated into each of the courses offered.

\section*{Panama Field Study Semester - Required Courses}

9 credits
BIOL 553
(3) Neotropical Environments
ENVR 451
Research in Panama

\section*{Panama Field Study Semester - Complementary Courses}

6 credits
Complementary courses change from year to year. Students will register for the 6 credits offered the Winter of their participation in the field study semester. First Winter semester complementary courses:
\begin{tabular}{lll} 
AGRI 550 & (3) & Sustained Tropical Agriculture \\
GEOG 498 & (3) & Humans in Tropical Environments
\end{tabular}

Second Winter semester complementary courses:
\begin{tabular}{lll} 
GEOG 404 & (3) & Environmental Management 2 \\
HIST 510 & (3) & Environmental History of Latin America (Field)
\end{tabular}

\section*{McGill Arctic Field Study Semester}

\section*{Required Courses ( 15 credits)}

9 credits
\begin{tabular}{lll} 
ATOC 373 & (3) & Arctic Climate and Climate Change \\
EPSC 373 & (3) & Arctic Geology \\
GEOG 373 & (3) & Arctic Geomorphology
\end{tabular}
and 6 credits from
\begin{tabular}{lll} 
ATOC 473 & \((6)\) & Artic Field Research \\
EPSC 473 & \((6)\) & Arctic Field Research \\
GEOG 473 & \((6)\) & Arctic Field Research
\end{tabular}

\section*{Minor Field Studies - Complementary Course}

In consultation with their departmental adviser and/or the Field Study Minor adviser, students who have completed one of the field study semesters described above may select a 3-credit complementary course to complete the requirements for the Minor and ask for it to be added to their academic records.

\subsection*{11.12.16 General Science}

\subsection*{11.12.16.1 Location}

Interdisciplinary Programs Advisor
Curtis Sharman
Email: curtis.sharman@mcgill.ca

\subsection*{11.12.16.2 About the General Science Minor}

The Minor in General Science is only open to students in a B.Sc. Liberal program. Students interested in completing this Minor must consult with the Advisor for this program. See the program description in section 11.12.16.3: Bachelor of Science (B.Sc.) - Minor General Science (18 credits) for more information.

\subsection*{11.12.16.3 Bachelor of Science (B.Sc.) - Minor General Science (18 credits)}

The Minor General Science is restricted to students in the B.Sc. Liberal program and may be used for the breadth component in this option. Students should consult their program adviser for their core science component and the Interdisciplinary Programs Adviser when selecting courses for this Minor.

\section*{Complementary Courses (18 credits)}

Courses are to be chosen according to the following guidelines:
All courses must be offered by the Faculty of Science and must be at or above the 200 level*.
All courses must be different from the student's core science component courses.
Two options:
9 credits at the 300 level or above and at least 9 credits outside the student's core science component subject.
or
12 credits at the 300 level or above and at least 6 credits outside the student's core science component subject.
* Note: All Undergraduate research project courses with the 396 or 397 course number cannot be used toward the Minor General Science.

\subsection*{11.12.17 Geography (GEOG)}

\subsection*{11.12.17.1 Location}

Burnside Hall, Room 305
805 Sherbrooke Street West
Montreal QC H3A 0B9
Telephone: 514-398-4951
Email: undergrad.geog@mcgill.ca
Website: mcgill.calgeography

\subsection*{11.12.17.2 About Geography}

The Department of Geography offers programs in both Arts and Science.
Refer to Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.16: Geography (GEOG) for B.A. programs in Geography, including Urban Studies.

Refer to Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs > section 4.11.17: Geography(GEOG) for B.A. \& Sc. programs in Geography.
The Department of Geography offers the B. A. \& Sc. interfaculty programs in Sustainability, Science and Society in partnership with the Bieler School of Environment. These programs are described in Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs > section 4.11.34: Sustainability, Science and Society.

Geography is a broad, holistic discipline; both a natural and a social science because it examines people and their environment and serves as a bridge between physical and cultural processes.

Human geography is concerned with the political, economic, social, and cultural processes and resource practices that create spatial patterns and define particular places.

Physical geography integrates disciplines such as climatology, geomorphology, geology, biology, hydrology, ecology, soil science, and even marine science.
Whether considering greenhouse gas emissions, the spread of disease, or threats to biodiversity, geographers are interested in where things happen, why, and with what consequences. Our graduates go on to careers in environmental consulting, social agencies, or non-governmental organizations. Skills in Geographic Information Science (GIS) are very marketable. Students are well prepared for graduate work in social sciences, urban planning, and environmental studies at leading schools.

\subsection*{11.12.17.3 Prerequisites and Student Advising}

There are no prerequisites for entrance to the B.Sc. Geography programs. Students who are interested in these programs should contact the Geography undergraduate advisor at advisor.geog@mcgill.ca.

\subsection*{11.12.17.4 Bachelor of Science (B.Sc.) - Minor Geography ( 18 credits)}

The Minor Geography is expandable into the B.Sc. Major Geography.
The Minor Geography is designed to provide students in the Faculty of Science with an overview of basic elements of geography at the introductory and advanced level.

This Minor permits no overlap with any other programs.

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & \((3)\) & Earth's Changing Surface
\end{tabular}

\section*{Complementary Courses ( 12 credits)}

3 credits of Geography courses at the 200 level below.
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 210 & (3) & Global Places and Peoples \\
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 217 & (3) & Cities in the Modern World \\
GEOG 221 & (3) & Environment and Health
\end{tabular}

9 credits from any Geography course at the 300 level or above.

\subsection*{11.12.17.5 Bachelor of Science (B.Sc.) - Minor GIS \& Remote Sensing (18 credits)}

The Minor GIS \& Remote Sensing program provides B.Sc. students with the fundamentals of geospatial tools and technologies.

\section*{Required Course ( 6 credits)}
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 314 & (3) & Geospatial Analysis
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits selected from:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
GEOG 333 & (3) & Introduction to Programming for Spatial Sciences
\end{tabular}

3 credits selected from:
\begin{tabular}{lcl} 
ATOC 309* & (3) & Weather Radars and Satellites \\
GEOG 308* & (3) & Remote Sensing for Earth Observation \\
GEOG 414* & Advanced Geospatial Analysis \\
& & \\
6 credits selected from: & & \\
ATOC 309* & (3) & Weather Radars and Satellites \\
COMP 250 & (3) & Introduction to Computer Science \\
ESYS 300 & (3) & Investigating the Earth System \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
GEOG 308* & (3) & Principles of Geospatial Web \\
GEOG 384* & (3) & Advanced Geospatial Analysis \\
GEOG \(414^{*}\) & (3) & Earth System Geographic Information Science \\
GEOG 428 & (3) & Advanced Geographic Information Science \\
GEOG 506 & (3) & Remote Sensing and Interpretation \\
GEOG 535 &
\end{tabular}
* may be taken in either list of complementary courses, but credits from one group may not be doubled-counted in the other.

\subsection*{11.12.17.6 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Geography (49 credits)}

This is the Core Science Component in Geography for the B.Sc. Liberal. Required courses provide a foundation in Geography (which takes a holistic approach to environmental sciences, distinguished by its incorporation of human and climatic elements). By completing these courses, students will be armed with the prerequisites for 300-level courses in Geography. Our set of complementary courses provides students with necessary analytical skills and a broad background in physical geography. The 300-level courses in the complementary set prepare students for advanced study at the 400 and 500 level.

\section*{Required Courses ( 13 credits)}
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & (3) & Earth's Changing Surface \\
GEOG 290 & (1) & Local Geographical Excursion \\
GEOG 351 & (3) & Quantitative Methods
\end{tabular}

\section*{Complementary Courses (36 credits)}

3 credits of statistics*
* Note: Credit given for statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

9 credits of systematic physical geography
\begin{tabular}{lll} 
GEOG 305 & \((3)\) & Soils and Environment \\
GEOG 321 & \((3)\) & Climatic Environments \\
GEOG 322 & \((3)\) & Environmental Hydrology \\
GEOG 372 & \((3)\) & Running Water Environments \\
GEOG 373 & \((3)\) & Arctic Geomorphology \\
GEOG 470 & \((3)\) & Wetlands
\end{tabular}

Students must take a total of 9 credits from the next 2 blocks; they will choose 6 credits from one block and 3 credits from the other, depending on their training focus.

3 or 6 credits of environmental analysis/techniques
\begin{tabular}{lll} 
GEOG 308 & (3) & Remote Sensing for Earth Observation \\
GEOG 314 & (3) & Geospatial Analysis \\
GEOG 384 & (3) & Principles of Geospatial Web \\
GEOG 414 & (3) & Advanced Geospatial Analysis
\end{tabular}

3 or 6 credits (In Environment, Earth System and Sustainability Sciences)
\begin{tabular}{lcl} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth \\
ESYS 200 & (3) & Earth System Processes \\
ESYS 300 & Investigating the Earth System \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 360 & (3) & Analyzing Sustainability \\
GEOG 460 & (3) & Research in Sustainability
\end{tabular}

9 credits on human-environment linkages
\begin{tabular}{lll} 
GEOG 210 & (3) & Global Places and Peoples \\
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 217 & \((3)\) & Cities in the Modern World
\end{tabular}
\begin{tabular}{lll} 
GEOG 221 & \((3)\) & Environment and Health \\
GEOG 303 & \((3)\) & Health Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods \\
GEOG 311 & \((3)\) & Economic Geography \\
GEOG 315 & \((3)\) & Urban Transportation Geography
\end{tabular}

3 credits of field courses:
\begin{tabular}{lll} 
GEOG 495 & (3) & Field Studies - Physical Geography \\
GEOG 496 & (3) & Geographical Excursion \\
GEOG 499 & (3) & Subarctic Field Studies
\end{tabular}

3 credits of approved advanced courses in Geography, or elsewhere in the Faculty of Science that have been approved by the Program Adviser, including any geography courses from the above complementary lists.
Geography Approved Course List - Major, Honours and Liberal Programs
\begin{tabular}{lcl} 
GEOG 401 & \((3)\) & Socio-Environmental Systems: Theory and Simulation \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 505 & (3) & Global Biogeochemistry \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 523 & (3) & Global Ecosystems and Climate \\
GEOG 530 & (3) & Global Land and Water Resources \\
GEOG 535 & (3) & Remote Sensing and Interpretation \\
GEOG 536 & (3) & Geocryology \\
GEOG 537 & (3) & Advanced Fluvial Geomorphology \\
GEOG 550 & (3) & Historical Ecology Techniques \\
GEOG 555 & (3) & Ecological Restoration
\end{tabular}

\subsection*{11.12.17.7 Bachelor of Science (B.Sc.) - Major Geography (58 credits)}

The BSc Major in Geography provides students with strong training in the theory and tools of physical geography. Students will explore the science of how physical, chemical, and biological processes interact at various spatial and temporal scales to produce distinct environments over the planet, and study different suites of ecosystem services while investigating sustainability challenges for human communities that depend on them. The program includes core training in systematic areas of physical geography (geomorphology, hydrology, soil biogeochemistry, biogeography and climatology), field courses providing hands on exposure to environmental data collection, and courses in quantitative techniques and in GIS and Remote Sensing..

\section*{Required Courses ( 13 credits)}
\begin{tabular}{lll} 
GEOG 201 & (3) & Introductory Geo-Information Science \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & (3) & Earth's Changing Surface \\
GEOG 290 & (1) & Local Geographical Excursion \\
GEOG 351 & (3) & Quantitative Methods
\end{tabular}

\section*{Complementary Courses (45 credits)}

3 credits of statistics:
Note: Credit given for statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{|c|c|c|}
\hline BIOL 373 & (3) & Biometry \\
\hline GEOG 202 & (3) & Statistics and Spatial Analysis \\
\hline MATH 203 & (3) & Principles of Statistics 1 \\
\hline PSYC 204 & (3) & Introduction to Psychological Statistics \\
\hline SOCI 350 & (3) & Statistics in Social Research \\
\hline \multicolumn{3}{|l|}{9 credits of systematic physical geography:} \\
\hline GEOG 305 & (3) & Soils and Environment \\
\hline GEOG 321 & (3) & Climatic Environments \\
\hline GEOG 322 & (3) & Environmental Hydrology \\
\hline GEOG 372 & (3) & Running Water Environments \\
\hline GEOG 373 & (3) & Arctic Geomorphology \\
\hline GEOG 470 & (3) & Wetlands \\
\hline \multicolumn{3}{|l|}{3 credits of field courses:} \\
\hline \multicolumn{3}{|l|}{(Field course availability is determined each year in February.)} \\
\hline GEOG 495 & (3) & Field Studies - Physical Geography \\
\hline GEOG 496 & (3) & Geographical Excursion \\
\hline GEOG 499 & (3) & Subarctic Field Studies \\
\hline
\end{tabular}

Students must take a total of 15 credits from the next 2 blocks; they will choose 9 credits from one block and 6 credits from the other block, depending on their training focus.

6 or 9 credits of environmental analysis/techniques
\begin{tabular}{lll} 
GEOG 308 & (3) & Remote Sensing for Earth Observation \\
GEOG 314 & (3) & Geospatial Analysis \\
GEOG 384 & (3) & Principles of Geospatial Web \\
GEOG 414 & (3) & Advanced Geospatial Analysis \\
GEOG 428 & (3) & Earth System Geographic Information Science
\end{tabular}

6 or 9 credits in (Environment, Earth System and Sustainability sciences)
\begin{tabular}{lcl} 
ENVR 200 & \((3)\) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & \((3)\) & The Evolving Earth \\
ESYS 200 & (3) & Earth System Processes \\
ESYS 300 & (3) & Investigating the Earth System \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 360 & (3) & Analyzing Sustainability \\
GEOG 460 & \((3)\) & Research in Sustainability
\end{tabular}

9 credits on human-environment linkages
\begin{tabular}{lcl} 
GEOG 210 & \((3)\) & Global Places and Peoples \\
GEOG 216 & (3) & Geography of the World Economy \\
GEOG 217 & (3) & Cities in the Modern World \\
GEOG 221 & (3) & Environment and Health \\
GEOG 303 & (3) & Health Geography \\
GEOG 310 & (3) & Development and Livelihoods \\
GEOG 311 & (3) & Economic Geography \\
GEOG 315 & (3) & Urban Transportation Geography
\end{tabular}

6 credits of approved advanced courses in Geography, or elsewhere in the Faculty of Science that have been approved by the Program Adviser, including any geography courses from the above complementary lists.

Admission to 500-level courses in Geography requires the instructor's permission. It is not advisable to take more than one 500-level course in a term.

\section*{Geography Approved Course List - Major, Honours and Liberal Programs}
\begin{tabular}{lll} 
GEOG 401 & \((3)\) & Socio-Environmental Systems: Theory and Simulation \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 505 & (3) & Global Biogeochemistry \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 523 & (3) & Global Ecosystems and Climate \\
GEOG 530 & (3) & Global Land and Water Resources \\
GEOG 535 & (3) & Remote Sensing and Interpretation \\
GEOG 536 & (3) & Geocryology \\
GEOG 537 & (3) & Advanced Fluvial Geomorphology \\
GEOG 550 & (3) & Historical Ecology Techniques \\
GEOG 555 & (3) & Ecological Restoration
\end{tabular}

\subsection*{11.12.17.8 Bachelor of Science (B.Sc.) - Honours Geography ( 66 credits)}

The Honours program provides specialize systematic training in physical geography. In addition to the Faculty of Science 3.00 CGPA requirement, students in a Geography Honours program must maintain a program GPA of 3.30 and complete a 6 -credit Honours thesis.

\section*{Required Courses (21 credits)}
\begin{tabular}{lcl} 
GEOG 201 & \((3)\) & Introductory Geo-Information Science \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & \((3)\) & Earth's Changing Surface \\
GEOG 351 & (3) & Quantitative Methods \\
GEOG 381 & (3) & Geographic Thought and Practice \\
GEOG 491D1 & (3) & Honours Research \\
GEOG 491D2 & (3) & Honours Research
\end{tabular}

\section*{Complementary Courses (45 credits)}

9 credits on human-environment linkages
\begin{tabular}{lll} 
GEOG 210 & (3) & Global Places and Peoples \\
GEOG 216 & (3) & Geography of the World Economy
\end{tabular}
\begin{tabular}{lll} 
GEOG 217 & (3) & Cities in the Modern World \\
GEOG 221 & (3) & Environment and Health \\
GEOG 303 & (3) & Health Geography \\
GEOG 310 & \((3)\) & Development and Livelihoods \\
GEOG 311 & \((3)\) & Economic Geography \\
GEOG 315 & \((3)\) & Urban Transportation Geography
\end{tabular}

3 credits of statistics*, one of:
* Note: Credit given for statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{lcl} 
BIOL 373 & (3) & Biometry \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
SOCI 350 & (3) & Statistics in Social Research
\end{tabular}

9 credits of systematic physical geography:
\begin{tabular}{lll} 
GEOG 305 & (3) & Soils and Environment \\
GEOG 321 & \((3)\) & Climatic Environments \\
GEOG 322 & \((3)\) & Environmental Hydrology \\
GEOG 372 & \((3)\) & Running Water Environments \\
GEOG 470 & \((3)\) & Wetlands
\end{tabular}

3 credits of field courses:
\begin{tabular}{lll} 
GEOG 495 & \((3)\) & Field Studies - Physical Geography \\
GEOG 496 & \((3)\) & Geographical Excursion \\
GEOG 499 & (3) & Subarctic Field Studies
\end{tabular}

Students must take a total of 15 credits from the next 2 blocks; they will choose 9 credits from one block and 6 credits from the other block, depending on their training focus

6 or 9 credits of environmental analysis/techniques
\begin{tabular}{lll} 
GEOG 308 & \((3)\) & Remote Sensing for Earth Observation \\
GEOG 314 & (3) & Geospatial Analysis \\
GEOG 384 & \((3)\) & Principles of Geospatial Web \\
GEOG 414 & (3) & Advanced Geospatial Analysis \\
GEOG 428 & (3) & Earth System Geographic Information Science
\end{tabular}

6 or 9 credits (In Environment, Earth Science and Sustainability sciences)
\begin{tabular}{lll} 
ENVR 200 & (3) & The Global Environment \\
ENVR 201 & (3) & Society, Environment and Sustainability \\
ENVR 202 & (3) & The Evolving Earth
\end{tabular}
\begin{tabular}{lll} 
ESYS 200 & (3) & Earth System Processes \\
ESYS 300 & (3) & Investigating the Earth System \\
GEOG 302 & (3) & Environmental Management 1 \\
GEOG 360 & (3) & Analyzing Sustainability \\
GEOG 460 & (3) & Research in Sustainability
\end{tabular}

6 credits of approved advanced courses in Geography, or elsewhere in the Faculty of Science that have been approved by the Program Adviser, including any geography courses from the above complementary lists.
Geography Approved Course List - Major, Honours and Liberal Programs
\begin{tabular}{lll} 
GEOG 401 & \((3)\) & Socio-Environmental Systems: Theory and Simulation \\
GEOG 404 & \((3)\) & Environmental Management 2 \\
GEOG 505 & (3) & Global Biogeochemistry \\
GEOG 506 & (3) & Advanced Geographic Information Science \\
GEOG 523 & (3) & Global Ecosystems and Climate \\
GEOG 530 & (3) & Global Land and Water Resources \\
GEOG 535 & (3) & Remote Sensing and Interpretation \\
GEOG 536 & (3) & Geocryology \\
GEOG 537 & (3) & Advanced Fluvial Geomorphology \\
GEOG 550 & (3) & Historical Ecology Techniques \\
GEOG 555 & (3) & Ecological Restoration
\end{tabular}

\subsection*{11.12.17.9 Geography (GEOG) Related Programs and Study Semesters}

The following programs, as well as several other opportunities for field study, are offered by the Faculty of Science. For further information, refer to mcgill.ca/mcgillabroad/students-going-abroad/plan-and-prepare/field-study-semester or the Science Internship \& Field Studies Office.

\subsection*{11.1217.9.1 Africa Field Study Semester}

The Africa program introduces students to East Africa specifically with a view to increasing their understanding of the goals, circumstances, challenges, and opportunities of people living in the areas visited. For more information, see mcgill.ca/africa.

\subsection*{11.1217.92 Barbados Field Study Semester}

The Barbados program is offered on McGill's Caribbean campus at the Bellairs Research Institute. Students participating in the BFSS learn about the Sustainable Development Goals (SDGs) of the United Nations, with a focus on the sustainable development of Barbados and Small Island Developing States (SIDS). For more information, see mcgill.ca/bfss.

\subsection*{11.1217.9.3 Panama Field Study Semester}

The Panama program is a joint venture between McGill University and the Smithsonian Tropical Research Institute (STRI) and addresses Latin America's social and tropical environmental issues. For more information, see mcgill.ca/pfss.

\subsection*{11.1217.9.4 Arctic Field Study Semester}

The primary mission of the McGill Arctic Field Studies is to train a future generation of northern specialists and leaders who are able to understand and address the rapidly changing polar environment in a scientifically and culturally responsible manner. For more information, see mcgill.calarctic.

\subsection*{11.1217.9.5 Earth System Science Interdepartmental Major}

This interdepartmental program is offered by the Departments of Atmospheric and Oceanic Sciences, Earth and Planetary Sciences, and Geography.
Science students interested in this program should contact the ESYS Program adviser:
William (Bill) Minarik
Telephone: 514-398-2596
Email: william.minarik@mcgill.ca
For more information, see section 11.12.11: Earth System Science (ESYS).

\subsection*{11.1217.9. Sustainability, Science and Society - Bachelor of Arts and Science (B.A. \& Sc.)}

The Interfaculty Program in Sustainability, Science and Society as well as the Honours in Sustainability, Science and Society is open only to students in the B.A. \& Sc. degree.

Students in the Department of Geography interested in this program should contact:
Michelle Maillet
Email: advisor.geog@mcgill.ca
For more information about these programs, see Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs > section 4.11.34: Sustainability, Science, and Society.

\subsection*{11.12.18 Immunology}

\subsection*{11.12.18.1 Location}

McGill University Health Centre - Glen Site
1001 Decarie Boulevard, Bloc E, Office EM23248
Montreal QC H3G 1A4
or

McIntyre Medical Sciences Building, Room 1136
3655 Promenade Sir-William-Osler
Montreal QC H3G 1Y6

\subsection*{11.12.18.2 About Immunology}

Three departments offer the Honours program in Immunology, combining elements of each:
- section 11.12.4: Biochemistry (BIOC)
- section 11.12.23: Microbiology and Immunology (MIMM)
- section 11.12.31: Physiology (PHGY)

The program is a demanding one which will prepare students for graduate work in immunology.
Students who do not maintain Honours standing must transfer their registration to a program in one of the three participating departments.
Apply to:
Department of Physiology
McIntyre Medical Sciences Building, Room 1136
3655 Promenade Sir-Willam-Osler, Montreal QC H3G 1Y6
Telephone: 514-398-4342
Email: monroe.cohen@mcgill.ca
or
Department Microbiology and Immunology
McGill University Health Centre - Glen Site
1001 Decarie Boulevard, Bloc E, Office EM23248
Montreal QC H3G 1A4
Telephone: 514-934-1934, ext. 76143
Email: undergrad.microimm@mcgill.ca.

\subsection*{11.12.18.3 Bachelor of Science (B.Sc.) - Honours Immunology (Interdepartmental) (75 credits)}

IHI is a 75-credit program involving the Departments of Biochemistry; Microbiology and Immunology; and Physiology, and incorporates elements from each of these disciplines. Immunology is a key area of biomedical research and is critical to our understanding of the patho-physiology of many immune-mediated diseases. This program provides an excellent foundation for students interested in pursuing a career in biomedical research and/or medicine.

The program consists of 48 required credits of basic science courses, covering cell and molecular biology; microbiology and immunology; biochemistry; and physiology. There are also 27 complementary credits which allow for specialization in immunology and related disciplines. To graduate from IHI, students must have a minimum CGPA of 3.30 and pass five immunology courses (MIMM 214, MIMM 314, MIMM 414, PHGY 419D1 and D2, PHGY 513, and one of BIOC 503, MIMM 509, PHGY 531) with a minimum grade of B.

\section*{Required Courses (48 credits)}

\section*{U1 Required Courses}

20 credits selected as follows:
* Students select either BIOC 212 or BIOL 201.
** Students select either PHGY 209 or MIMM 211.
\begin{tabular}{lcl} 
BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
MIMM 211** & (3) & Introductory Microbiology \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
PHGY 209** & (3) & Mammalian Physiology 1
\end{tabular}

\section*{U2 Required Courses}

13 credits from the following:
\begin{tabular}{lll} 
ANAT 261 & (4) & Introduction to Dynamic Histology \\
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOC 312 & (3) & Biochemistry of Macromolecules \\
MIMM 314 & (3) & Intermediate Immunology
\end{tabular}

\section*{U3 Required Courses}

15 credits from the following:
\begin{tabular}{lll} 
MIMM 414 & (3) & Advanced Immunology \\
PHGY 419D1 & (4.5) & Immunology Research Project \\
PHGY 419D2 & (4.5) & Immunology Research Project \\
PHGY 513 & (3) & Translational Immunology
\end{tabular}

\section*{Complementary Courses (27 credits)}

\section*{U1 Complementary Courses}

6 credits chosen in the following manner.
3 credits selected from:
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}
plus 3 credits selected from the following:
* Students take either PHGY 209 or MIMM 211.
** Students take either CHEM 203 or CHEM 204.
ANAT 214
(3) Systemic Human Anatomy
ANAT 262
(3)
Introductory Molecular and Cell Biology
\begin{tabular}{lcl} 
BIOL 202 & \((3)\) & Basic Genetics \\
BIOL 205 & \((3)\) & Functional Biology of Plants and Animals \\
BIOL 304 & \((3)\) & Evolution \\
CHEM 203** & \((3)\) & Survey of Physical Chemistry \\
CHEM 204** & \((3)\) & Physical Chemistry/Biological Sciences 1 \\
COMP 204 & \((3)\) & Computer Programming for Life Sciences \\
COMP 250 & \((3)\) & Introduction to Computer Science \\
MATH 204 & \((3)\) & Principles of Statistics 2 \\
MIMM 211** & \((3)\) & Introductory Microbiology \\
MIMM 212 & (3) & Laboratory in Microbiology \\
PHGY 209** & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

\section*{U2 Complementary Courses}

12 credits chosen as follows:
6 credits selected from:
Students may take
* BIOC 220 and BIOC 320, or
** MIMM 384 and MIMM 385, or
*** PHGY 212 and PHGY 213 and BIOL 301
\begin{tabular}{lll} 
BIOC \(220^{*}\) & (3) & Laboratory Methods in Biochemistry and Molecular Biology 1 \\
BIOC \(320^{*}\) & (3) & Laboratory Methods in Biochemistry and Molecular Biology 2 \\
BIOL \(301^{* * *}\) & (4) & Cell and Molecular Laboratory \\
MIMM \(384^{* *}\) & (3) & Molecular Microbiology Laboratory \\
MIMM \(385^{* *}\) & (3) & Laboratory in Immunology \\
PHGY \(212^{* * *}\) & (1) & Introductory Physiology Laboratory 1 \\
PHGY \(213^{* * *}\) & (1) & Introductory Physiology Laboratory 2
\end{tabular}
plus 6 credits, selected from:
* Students take either BIOL 309 or MATH 315, but not both.
\begin{tabular}{lcl} 
ANAT 365 & (3) & Cellular Trafficking \\
BIOL 300 & \((3)\) & Molecular Biology of the Gene \\
BIOL \(309^{*}\) & \((3)\) & Mathematical Models in Biology \\
BIOL 314 & \((3)\) & Molecular Biology of Cancer \\
CHEM 302 & \((3)\) & Introductory Organic Chemistry 3 \\
MATH 222 & \((3)\) & Calculus 3 \\
MATH 315* & \((3)\) & Ordinary Differential Equations \\
MIMM 323 & (3) & Microbial Physiology \\
MIMM 324 & (3) & Fundamental Virology \\
PATH 300 & (3) & Human Disease \\
PHAR 300 & (3) & Drug Action \\
PHAR 301 & (3) & Drugs and Disease
\end{tabular}
\begin{tabular}{lll} 
PHAR 303 & (3) & Principles of Toxicology \\
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}

\section*{U3 Complementary Courses}

9 credits of U3 complementary courses chosen in the following manner:

3 credits selected from:
\begin{tabular}{lll} 
BIOC 503 & (3) & Biochemistry of Immune Diseases \\
MIMM 509 & (3) & Inflammatory Processes \\
PHGY 531 & (3) & Topics in Applied Immunology
\end{tabular}
plus 6 credits selected from:
* Students take either ANAT 458 or BIOC 458, but not both.
\begin{tabular}{lll} 
ANAT 458* & (3) & Membranes and Cellular Signaling \\
BIOC 404 & (3) & Biophysical Methods in Biochemistry \\
BIOC 450 & (3) & Protein Structure and Function \\
BIOC 454 & (3) & Nucleic Acids \\
BIOC 458* & (3) & Membranes and Cellular Signaling \\
BIOC 503 & (3) & Biochemistry of Immune Diseases \\
BIOL 520 & (3) & Gene Activity in Development \\
EXMD 504 & (3) & Biology of Cancer \\
MIMM 413 & (3) & Parasitology \\
MIMM 465 & (3) & Bacterial Pathogenesis \\
MIMM 466 & (3) & Viral Pathogenesis \\
MIMM 509 & (3) & Inflammatory Processes \\
NEUR 502 & (3) & Basic and Clinical Aspects of Neuroimmunology \\
PHAR 503 & (3) & Drug Discovery and Development 1 \\
PHAR 504 & (3) & Drug Discovery and Development 2 \\
PHGY 488 & (3) & Stem Cell Biology \\
PHGY 531 & (3) & Topics in Applied Immunology \\
PHGY 552 & (3) & Cellular and Molecular Physiology
\end{tabular}

\subsection*{11.12.19 Interdisciplinary Life Sciences}
11.12.19.1 Location

Interdisciplinary Programs Advisor
Curtis Sharman
Email: curtis.sharman@mcgill.ca

\subsection*{11.12.19.2 About the Interdisciplinary Life Sciences Minor}

The Interdisciplinary Life Sciences Minor allows students to obtain exposure to Life Sciences and life science related areas. Students must consult with the advisor to review course selection.

Please note: Students studying in Anatomy and Cell Biology; Biochemistry; Honours Immunology; Microbiology and Immunology; Neuroscience; Pharmacology; and Physiology are not permitted to complete this Minor.

\subsection*{11.12.19.3 Bachelor of Science (B.Sc.) - Minor Interdisciplinary Life Sciences (24 credits)}

The Interdisciplinary Life Sciences Minor will allow students from the earth, physical, math, and computational science areas to broaden their studies with some basic life sciences, health social science, and empirical technological science. The Minor is 24 credits and allows students flexibility in their course selections. Students must take 9 credits from an extensive list of basic life science courses, 3 credits from an extensive list of health and social science courses, and 3 credits from an empirical and technological science list. The remaining 9 credits may be taken from courses listed in any of the three categories.

Please note: Students studying in Anatomy and Cell Biology; Biochemistry; Honours Immunology; Microbiology and Immunology; Neuroscience; Pharmacology; and Physiology are not permitted to complete this Minor.

Interested students should contact the Interdisciplinary Programs Adviser.

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

The 24 credits required for this program must satisfy the following criteria:
At least 18 credits must be outside the student's main discipline.
Depth requirement:
at least 6 credits must be at the 300 level or above.
Breadth requirement:
at least 9 credits must be taken from the Basic Life Sciences List,
at least 3 credits from the Health Social Sciences List,
at least 3 credits from the Empirical Science and Technology List.
The remaining 9 credits may be selected from any of the lists.

\section*{Basic Life Sciences}

At least 9 credits from:
* Students take either ANAT 212 or BIOC 212, but not both.
\begin{tabular}{|c|c|c|}
\hline ANAT 212* & (3) & Molecular Mechanisms of Cell Function \\
\hline ANAT 214 & (3) & Systemic Human Anatomy \\
\hline ANAT 261 & (4) & Introduction to Dynamic Histology \\
\hline ANAT 262 & (3) & Introductory Molecular and Cell Biology \\
\hline ANAT 321 & (3) & Circuitry of the Human Brain \\
\hline ANAT 365 & (3) & Cellular Trafficking \\
\hline ANAT 381 & (3) & Experimental Embryology \\
\hline BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
\hline BIOC 311 & (3) & Metabolic Biochemistry \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOL 200 & (3) & Molecular Biology \\
\hline BIOL 201 & (3) & Cell Biology and Metabolism \\
\hline BIOL 202 & (3) & Basic Genetics \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 301 & (4) & Cell and Molecular Laboratory \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 320 & (3) & Evolution of Brain and Behaviour \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
\hline CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline CHEM 503 & (3) & Drug Discovery \\
\hline EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
\hline MIMM 211 & (3) & Introductory Microbiology \\
\hline MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
\hline MIMM 314 & (3) & Intermediate Immunology \\
\hline MIMM 323 & (3) & Microbial Physiology \\
\hline MIMM 324 & (3) & Fundamental Virology \\
\hline MIMM 387 & (3) & The Business of Science \\
\hline MIMM 465 & (3) & Bacterial Pathogenesis \\
\hline MIMM 466 & (3) & Viral Pathogenesis \\
\hline NSCI 201 & (3) & Introduction to Neuroscience 2 \\
\hline NUTR 307 & (3) & Metabolism and Human Nutrition \\
\hline PATH 300 & (3) & Human Disease \\
\hline PHAR 300 & (3) & Drug Action \\
\hline PHAR 301 & (3) & Drugs and Disease \\
\hline PHAR 303 & (3) & Principles of Toxicology \\
\hline PHAR 503 & (3) & Drug Discovery and Development 1 \\
\hline PHAR 504 & (3) & Drug Discovery and Development 2 \\
\hline PHGY 209 & (3) & Mammalian Physiology 1 \\
\hline PHGY 210 & (3) & Mammalian Physiology 2 \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
\hline PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
\hline PHGY 314 & (3) & Integrative Neuroscience \\
\hline PSYC 211 & (3) & Introductory Behavioural Neuroscience \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline
\end{tabular}

\section*{Health Social Science}

At least 3 credits from:
\begin{tabular}{lll} 
ANTH 204 & (3) & Anthropology of Meaning \\
ANTH 227 & (3) & Medical Anthropology \\
ANTH 302 & (3) & New Horizons in Medical Anthropology
\end{tabular}
\begin{tabular}{lll} 
ANTH 314 & \((3)\) & Psychological Anthropology 01 \\
ECON 440 & \((3)\) & Health Economics \\
GEOG 221 & \((3)\) & Environment and Health \\
GEOG 303 & \((3)\) & Health Geography \\
HIST 249 & \((3)\) & Health and the Healer in Western History \\
HIST 335 & (3) & Science and Medicine in Canada \\
HIST 350 & (3) & Science and the Enlightenment \\
HIST 381 & (3) & Colonial Africa \\
HIST 424 & (3) & Gender, Sexuality and Medicine \\
HSEL 308 & (3) & Issues in Women's Health \\
HSEL 309 & (3) & Women's Reproductive Health \\
PHIL 237 & (3) & Contemporary Moral Issues \\
PHIL 343 & (3) & Biomedical Ethics \\
POLI 417 & (3) & Health Care Systems in Comparative Perspective \\
PSYC 215 & (3) & Selected Topics in Sociology of Biomedical Knowledge Canada \\
PSYC 304 & (3) & Social Psychology \\
SOCI 525 & (3) 515 & (3)
\end{tabular}

\section*{Empirical Science and Technology}

At least 3 credits from:
* Students who have already received credit for MATH 324 will NOT receive credit for GEOG 202, MATH 203, PSYC 204, BIOL 373, MATH 204, or PSYC 305.

Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.
\begin{tabular}{lcl} 
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 373 & (3) & Biometry \\
COMP 202 & (3) & Foundations of Programming \\
COMP 364 & (3) & Computer Tools for Life Sciences \\
COMP 462 & (3) & Computational Biology Methods \\
GEOG 202 & (3) & Statistics and Spatial Analysis \\
MATH 203 & (3) & Principles of Statistics 1 \\
MATH 204 & (3) & Principles of Statistics 2
\end{tabular}
\begin{tabular}{lll} 
MATH 323 & (3) & Probability \\
MATH 324* & (3) & Statistics \\
PSYC 204 & (3) & Introduction to Psychological Statistics \\
PSYC 305 & (3) & Statistics for Experimental Design
\end{tabular}

\subsection*{11.12.20 Kinesiology for Science Students}

\subsection*{11.12.20.1 Location}

Department of Kinesiology and Physical Education
Currie Gymnasium
475 Pine Avenue West, 2nd Floor
Montreal QC H2W 1S4
Telephone: 514-398-2357
Fax: 514-398-4186
Email: studentaffairs.kpe@mcgill.ca
Website: mcgill.ca/edu-kpe/programs/ug/bsckinminor
Program Advisor: Nada Abu-Merhy; studentaffairs.kpe@mcgill.ca

\subsection*{11.12.20.2 About Kinesiology for Science Students}

Students planning a career in the health sciences, whether as a health professional or a biomedical researcher, will find courses in Kinesiology to be of interest from both theoretical and applied perspectives. There is a focus on the benefits of physical activity for health and well-being, as well as appropriate prescription of exercise in the treatment of various diseases, injuries, and disabilities. Courses deal with both prevention and rehabilitation.

Students are not permitted to enrol in more than the 18 credits of EDKP courses required for the Minor in Kinesiology for Science Students.

\subsection*{11.12.20.3 Bachelor of Science (B.Sc.) - Minor Kinesiology (24 credits)}

The Minor Kinesiology is designed to provide students in B.Sc. programs with basic but comprehensive knowledge of scientific bases of human physical activity and its relationship with health and well-being.
Students registered in the Minor Kinesiology may not take additional courses outside the Faculties of Arts and of Science.
This minor program requires an application due to limited enrolment space. Please see http://www.mcgill.ca/isa/faculty-advising/minor-programs for procedures and deadlines.

\section*{Required Courses ( 15 credits)}
\begin{tabular}{lll} 
EDKP 206 & (3) & Biomechanics of Human Movement \\
EDKP 261 & (3) & Motor Development \\
EDKP 395 & (3) & Exercise Physiology \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits, three of the following courses:
\begin{tabular}{lcl} 
EDKP 330 & \((3)\) & Physical Activity and Public Health \\
EDKP 394 & \((3)\) & Historical Perspectives \\
EDKP 396 & \((3)\) & Adapted Physical Activity \\
EDKP 405 & \((3)\) & Sport in Society \\
EDKP 444 & \((3)\) & Ergonomics \\
EDKP 445 & \((3)\) & Exercise Metabolism \\
EDKP 446 & \((3)\) & Physical Activity and Ageing
\end{tabular}
\begin{tabular}{lll} 
EDKP 447 & \((3)\) & Motor Control \\
EDKP 448 & (3) & Exercise and Health Psychology \\
EDKP 449 & \((3)\) & Neuromuscular and Inflammatory Pathophysiology \\
EDKP 485 & \((3)\) & Cardiopulmonary Exercise Pathophysiology \\
EDKP 495 & \((3)\) & Scientific Principles of Training \\
EDKP 498 & \((3)\) & Sport Psychology \\
EDKP 542 & \((3)\) & Environmental Exercise Physiology \\
EDKP 566 & (3) & Advanced Biomechanics Theory
\end{tabular}

\subsection*{11.12.21 Management for Science Students}

The Desautels Faculty of Management offers a minor program : Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) ( 18 credits open for application to students in the Faculty of Science. Please refer to Desautels Faculty of Management \(>\) Undergraduate \(>\) Overview of Programs Offered by the Desautels Faculty of Management > section 9.6.7: Minor for Non-Management Students for detailed information about program requirements and applying.

Also available to Science students is the Minor in Entrepreneurship for Science students; see section 11.12.12: Entrepreneurship for Science Students. Students in this Minor are not permitted to take the Desautels Minors in Finance, Management, Marketing, or Operations Management (for Non-Management students).

\subsection*{11.12.21.1 Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) (18 credits)}

The Minor Management consists of 18 credits of Management courses and is currently offered to non-Management students in the following Faculties: Arts, Engineering, Science, Agricultural \& Environmental Sciences, Music, Religious Studies, and Kinesiology.

This Minor is designed to provide non-management students with the opportunity to obtain basic knowledge in various aspects of management.

\section*{Complementary Courses (18 credits)}

9 credits selected from:
\begin{tabular}{lcl} 
MGCR 211 & \((3)\) & Introduction to Financial Accounting \\
MGCR 222 & (3) & Introduction to Organizational Behaviour \\
MGCR 271** & (3) & Business Statistics \\
MGCR 293*** & (3) & Managerial Economics \\
MGCR 331 & (3) & Information Technology Management \\
MGCR 341* & (3) & Introduction to Finance \\
MGCR 352 & (3) & Principles of Marketing \\
MGCR 372* & (3) & Operations Management. \\
MGCR 382 & (3) & International Business
\end{tabular}

9 credits selected from any Management courses not already chosen from the first list or any 300- or 400-level Management courses for which prerequisites have been met.
* Prerequisite: MGCR 271, Business Statistics, or another equivalent Statistics course approved by the Program Adviser.
\(*^{*} 3\) credits of statistics: Students who have taken an equivalent Statistics course in another faculty may not count those credits towards the Minor; an additional 3-credit complementary course must be chosen from the course list above.
*** Students who have taken an equivalent Economics course in another faculty may not count those credits toward the Minor; an additional 3-credit complementary course must be chosen from the course list above.
Note: Students should select their Statistics course only after consulting the "Course Overlap" section in the Faculty of Arts, the "Course Overlap" section in the Faculty of Science, and the "Course Overlap" section in the Desautels Faculty of Management to avoid overlapping Statistics courses.

\subsection*{11.12.22 Mathematics and Statistics (MATH)}

\subsection*{11.12.22.1 Location}

Burnside Hall, Room 1005
805 Sherbrooke Street West
Montreal QC H3A 0B9
Telephone: 514-398-3800
Website: mcgill.ca/mathstat

\subsection*{11.12.22.2 About Mathematics and Statistics}

Mathematics and statistics are omnipresent in today's world of information and technology. Their theories, models, and methods are integral to the way we analyze, understand, and build the world around us. They play a key role in nearly every effort to push the boundaries of science, engineering, medicine, and social sciences, and contribute-in a major way-to solving some of the most pressing human, environmental, and economic problems of our time.

The Department of Mathematics and Statistics is one of the oldest and most distinguished of its kind in Canada. It is home to active, internationally acclaimed, and award-winning researchers in the three principal subdisciplines in the mathematical sciences.

Pure mathematics is concerned with abstract structures and concepts mainly with respect to their intrinsic and technical nature, although many areas in pure mathematics have developed from questions in science and technology. Core areas of expertise in pure mathematics include algebra, analysis, geometry, number theory, and topology.

Applied mathematics develops and utilizes advanced mathematical methods to solve problems in a broad range of applications in science, technology, engineering, computer science, and business. Core areas of expertise in applied mathematics include discrete mathematics, game theory, machine learning, graph theory, mathematical physics, numerical analysis, optimization, and probability.

Statistics is motivated by the need to extract information from data, to quantify uncertainty, and to make predictions about random phenomena. To do this effectively, sophisticated mathematical and probabilistic techniques and computational tools are needed. Core areas of expertise include Bayesian inference, biostatistics, computational statistics, extreme-value analysis, high-dimensional data modelling, multivariate analysis, and survival analysis.

\subsection*{11.12.22.3 Undergraduate Program Options}

Our programs provide a broad and solid mathematical and statistical education that paves the way to many interesting career options in academia, government, and industry. Top students typically get admitted to prestigious graduate schools around the world and often become leaders in their areas of research in academic or industrial settings. Our graduates at all levels are in high demand in government departments, health research centers, banks, insurance and pharmaceutical companies, statistical agencies, and multinational high-technology industries.
There are two popular undergraduate streams. The Honours programs in Mathematics, Applied Mathematics, Statistics (including Joint Honours with Physics or Computer Science) are at an advanced level for students who wish to specialize their studies in the mathematical sciences. The Honours stream is well suited for students who intend to move on to graduate school and essential for those who are envisaging research careers in the mathematical sciences. The Major programs in Mathematics and Statistics are less intense and more flexible, leaving room for a Minor or a second Major Concentration in another discipline. The Major stream is particularly suited for students whose future creative activity will involve Mathematics, Statistics, or Data Science and its applications in another area. With satisfactory performance in an appropriate selection of courses, the Major Statistics program can lead to the professional accreditation A.Stat. from the Statistical Society of Canada, which is regarded as the entry level requirement for a statistician practicing in Canada. Several Joint Major programs and a Liberal program are also available.
Furthermore, the Desautels Faculty of Management offers the B.Com. degree with a Major in Mathematics.
Students considering programs in Mathematics and Statistics are encouraged to contact the Department of Mathematics and Statistics to arrange for academic advising.

\subsection*{11.12.22.4 Research Opportunities}

During their undergraduate degree, students in the Department of Mathematics and Statistics are encouraged to engage in research. The two main opportunities are:
- Funded summer research projects allowing students to engage in state-of-the art research with faculty members
- Opportunities for hands-on experience with data analysis offered through the Statistical Consulting Service

\subsection*{11.12.22.5 Internship Opportunities}

Students who want to get practical experience in industry before graduation are encouraged to participate in one of the following internship programs:
- The Internship Year in Science (IYS) is an option offered for a duration of 8, 12, or 16 months. It is reflected on the transcript and included in the program name (Bachelor of Science - Internship Program). Eligible students usually take this program between their U2 and U3 years.
- The Industrial Practicum (IP) has a duration of four months and is usually carried out starting in May. It will appear as a 0 -credit, Pass/Fail course on your transcript.

For more information on these opportunities, consult mcgill.ca/science/undergraduate/internships-field.

\subsection*{11.12.22.6 Bachelor of Science (B.Sc.) - Minor Mathematics ( \(\mathbf{2 4}\) credits)}

The Minor may be taken in conjunction with any primary program in the Faculty of Science (other than programs in Mathematics). Students should declare their intention to follow the Minor Mathematics at the beginning of the penultimate year and should obtain approval for the selection of courses to fulfil the requirements for the Minor from the Departmental Chief Adviser (or delegate).

It is strongly recommended that students in the Minor program take MATH 323. The remaining credits may be freely chosen from the required and complementary courses for majors and honours students in Mathematics, with the obvious exception of courses that involve duplication of material. Alternatively, up to 6 credits may be allowed for appropriate courses from other departments.
Generally, no more than 6 credits of overlap are permitted between the Minor and the primary program. However, with an approved choice of substantial courses, the overlap restriction may be relaxed to 9 credits for students whose primary program requires 60 credits or more, and to 12 credits when the primary program requires 72 credits or more.

\section*{Required Courses ( 9 credits)}
* MATH 223 may be replaced by MATH 235 and MATH 236. In this case, the complementary credit requirement is reduced by 3 credits.
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 223* & (3) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations
\end{tabular}

\section*{Complementary Courses ( 15 credits)}

15 credits selected from the required and complementary courses for majors and honours students in Mathematics, with MATH 323 strongly recommended; alternatively, up to 6 credits may be allowed for appropriate courses from other departments.

\subsection*{11.12.22.7 Bachelor of Science (B.Sc.) - Minor Statistics (27 credits)}
(24-27 credits)
Students may complete this program with a minimum of 24 credits or a maximum of 27 credits.
The Minor may be taken in conjunction with any primary program in the Faculty of Science (other than those with a main component in Statistics). Students should declare their intention to follow the Minor Statistics at the beginning of the penultimate year and must obtain approval for the selection of courses to fulfil the requirements for the Minor from the Departmental Chief Adviser (or delegate).

All courses counted towards the Minor must be passed with a grade of C or better. Generally, no more than 6 credits of overlap are permitted between the Minor and the primary program. However, with an approved choice of substantial courses, the overlap restriction may be relaxed to 9 credits for students whose primary program requires 60 credits or more, and to 12 credits when the primary program requires 72 credits or more.

\section*{Required Courses ( 15 credits)}
\begin{tabular}{lll} 
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics \\
MATH 423 & (3) & Applied Regression
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{9 - 1 2}\) credits)}

9-12 credits selected from:
\begin{tabular}{lcl} 
CHEM 593 & (3) & Statistical Mechanics \\
COMP 451 & (3) & Fundamentals of Machine Learning \\
COMP 551 & (4) & Applied Machine Learning \\
GEOG 351 & (3) & Quantitative Methods \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 427 & (3) & Statistical Quality Control
\end{tabular}
\begin{tabular}{lll} 
MATH 447 & \((3)\) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 556 & (4) & Mathematical Statistics 1 \\
MATH 557 & (4) & Mathematical Statistics 2 \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MATH 562 & (4) & Theory of Machine Learning \\
PHYS 362 & (3) & Statistical Mechanics \\
PHYS 559 & (3) & Advanced Statistical Mechanics \\
SOCI 504 & (3) & Quantitative Methods 1
\end{tabular}

No more than 6 credits from the above list of complementary courses may be taken outside the Department of Mathematics and Statistics.

\subsection*{11.12.22.8 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Mathematics ( 45 credits)}

The B.Sc.; Liberal Program - Core Science Component in Mathematics provides a general overview of Mathematics, including a rigorous foundation and exploration of the different branches of Mathematics,

\section*{Program Prerequisites}

Students entering the Core Science Component in Mathematics are normally expected to have completed the courses below or their equivalents. Otherwise, they will be required to make up any deficiencies in these courses over and above the 45 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Guidelines for Selection of Courses}

The following informal guidelines should be discussed with the student's adviser. Where appropriate, Honours courses may be substituted for equivalent Major courses. Students planning to pursue graduate studies are encouraged to make such substitutions.
Students interested in computer science are advised to choose courses from the following: MATH 317, MATH 318, MATH 327, MATH 328, MATH 335, MATH 340, MATH 417 and to complete the Computer Science Minor.
Students interested in probability and statistics are advised to take MATH 204, MATH 324, MATH 423, MATH 447, MATH 523, MATH 525.
Students interested in applied mathematics should take MATH 317, MATH 319, MATH 324, MATH 326, MATH 327, MATH 417.
Students considering a career in secondary school teaching are advised to take MATH 318, MATH 328, MATH 338, MATH 346, MATH 348.
Students interested in careers in business, industry or government are advised to select courses from the following list:
MATH 317, MATH 319, MATH 327, MATH 329, MATH 417, MATH 423, MATH 430, MATH 447, MATH 523, MATH 525.

\section*{Required Courses ( 27 credits)}
* Students may select either MATH 249 or MATH 316 but not both.
** Students who have successfully completed a course equivalent to MATH 222 with a grade of C or better may omit MATH 222, but must replace it with 3 credits of complementary courses.
\begin{tabular}{lll} 
MATH \(222^{* *}\) & (3) & Calculus 3 \\
MATH 235 & (3) & Algebra 1 \\
MATH 236 & (3) & Algebra 2 \\
MATH 242 & (3) & Analysis 1
\end{tabular}
\begin{tabular}{lcl} 
MATH 243 & \((3)\) & Analysis 2 \\
MATH \(249^{*}\) & (3) & Honours Complex Variables \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH \(316^{*}\) & (3) & Complex Variables \\
MATH 323 & \((3)\) & Probability
\end{tabular}

\section*{Complementary Courses (18 credits)}

6 credits selected from:
\begin{tabular}{lll} 
MATH 317 & \((3)\) & Numerical Analysis \\
MATH 324 & (3) & Statistics \\
MATH 335 & (3) & Groups, Tilings and Algorithms \\
MATH 340 & (3) & Discrete Mathematics
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{12 credits selected from:} \\
\hline MATH 204 & (3) & Principles of Statistics 2 \\
\hline MATH 208 & (3) & Introduction to Statistical Computing \\
\hline MATH 308 & (3) & Fundamentals of Statistical Learning \\
\hline MATH 318 & (3) & Mathematical Logic \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 327 & (3) & Matrix Numerical Analysis \\
\hline MATH 329 & (3) & Theory of Interest \\
\hline MATH 338 & (3) & History and Philosophy of Mathematics \\
\hline MATH 346 & (3) & Number Theory \\
\hline MATH 348 & (3) & Euclidean Geometry \\
\hline MATH 352 & (1) & Problem Seminar \\
\hline MATH 378 & (3) & Nonlinear Optimization \\
\hline MATH 410 & (3) & Majors Project \\
\hline MATH 417 & (3) & Linear Optimization \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 430 & (3) & Mathematical Finance \\
\hline MATH 447 & (3) & Introduction to Stochastic Processes \\
\hline MATH 451 & (3) & Introduction to General Topology \\
\hline MATH 463 & (3) & Convex Optimization \\
\hline MATH 523 & (4) & Generalized Linear Models \\
\hline MATH 524 & (4) & Nonparametric Statistics \\
\hline MATH 525 & (4) & Sampling Theory and Applications \\
\hline MATH 545 & (4) & Introduction to Time Series Analysis \\
\hline
\end{tabular}

\subsection*{11.12.22.9 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Statistics (48 credits)}
( 45 or 48 credits)
This program provides training in statistics, with a solid mathematical core, and basic training in computing. With strong performance in an appropriate selection of courses, this program can lead to "A.Stat." professional accreditation from the Statistical Society of Canada, which is regarded as the entry level requirement for Statisticians practising in Canada.

Students may complete this program with a minimum of 45 credits or a maximum of 48 credits.

\section*{Program Prerequisites}

Students entering the Core Science Component in Statistics are normally expected to have completed the courses below or their equivalents. Otherwise they will be required to make up any deficiencies in these courses over and above the 45 credits required for the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Required Courses (27 credits)}
* Students who have successfully completed a course equivalent to MATH 222 with a grade of C or better may omit MATH 222, but must replace it with 3 credits of complementary courses.
** Students who have sufficient knowledge in a programming language do not need to take COMP 202, but must replace it by either COMP 250 or COMP 350.
***MATH 236 is an equivalent prerequisiste to MATH 223 for required and complementary Computer Science courses listed below.
+ Students have to take MATH 204 prior to MATH 324.
\begin{tabular}{lcl} 
COMP 202** & (3) & Foundations of Programming \\
MATH 204+ & \((3)\) & Principles of Statistics 2 \\
MATH 222* & \((3)\) & Calculus 3 \\
MATH 235 & \((3)\) & Algebra 1 \\
MATH 236*** & (3) & Algebra 2 \\
MATH 242 & \((3)\) & Analysis 1 \\
MATH 323 & \((3)\) & Probability \\
MATH 324+ & \((3)\) & Statistics \\
MATH 423 & \((3)\) & Applied Regression
\end{tabular}

\section*{Complementary Courses (18 or 21 credits)}
\(0-3\) credits from:
MATH 203* (3) Principles of Statistics 1

A student who has not completed the equivalent of MATH 203 on entering the program must consult and academic adviser and take MATH 203 in the first semester, increasing the total number of program credits from 45 to 48 .

At least 6 credits selected from:
* If chosen, students can take either MATH 317 or COMP 350, but not both.
\begin{tabular}{lcl} 
COMP 250 & (3) & Introduction to Computer Science \\
COMP 350* & (3) & Numerical Computing \\
MATH 243 & (3) & Analysis 2 \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 316 & (3) & Complex Variables
\end{tabular}
\begin{tabular}{lcl} 
MATH \(317^{*}\) & \((3)\) & Numerical Analysis \\
MATH 326 & \((3)\) & Nonlinear Dynamics and Chaos \\
MATH 327 & \((3)\) & Matrix Numerical Analysis \\
MATH 329 & (3) & Theory of Interest \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 350 & (3) & Honours Discrete Mathematics \\
MATH 378 & (3) & Nonlinear Optimization \\
MATH 417 & (3) & Linear Optimization \\
MATH 430 & (3) & Mathematical Finance \\
MATH 463 & (3) & Convex Optimization
\end{tabular}

At least 9 credits selected from:
*If chosen, students can take at most one of MATH 410, MATH 420, MATH 527D1/D2, and WCOM 314.
\begin{tabular}{lcl} 
COMP 551 & (4) & Applied Machine Learning \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 410* & (3) & Majors Project \\
MATH 420* & (3) & Independent Study \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (3) & Statistical Data Science Practicum \\
MATH 527D1* & (3) & Statistical Data Science Practicum \\
MATH 527D2* & (4) & Introduction to Time Series Analysis \\
MATH 545 & (4) & Mathematical Statistics 1 \\
MATH 556 & (4) & Mathematical Statistics 2 \\
MATH 557 & (4) & Design of Experiments \\
MATH 558 & (4) & Bayesian Theory and Methods \\
MATH 559 & (4) & Topics in Probability and Statistics \\
MATH 598 & (3) & Communicating Science \\
WCOM 314* &
\end{tabular}

\subsection*{11.122210 Bachelor of Science (B.Sc.) - Major Mathematics (54 credits)}

The B.Sc.; Major in Mathematics provides a general overview of Mathematics including a rigorous foundation and the exploration of the different branches of Mathematics.

\section*{Program Prerequisites}

Students entering the Major program are normally expected to have completed the courses below or their equivalents. Otherwise, they will be required to make up any deficiencies in these courses over and above the 54 credits of required courses.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Guidelines for Selection of Courses in the Major Program}

The following informal guidelines should be discussed with the student's adviser. Where appropriate, Honours courses may be substituted for equivalent Major courses. Students planning to pursue graduate studies are encouraged to make such substitutions.

Students interested in computer science are advised to choose courses from the following: MATH 317, MATH 318, MATH 327, MATH 335, MATH 340, MATH 417 and to complete the Computer Science Minor.

Students interested in probability and statistics are advised to take MATH 204, MATH 324, MATH 423, MATH 447, MATH 523, MATH 525.
Students interested in applied mathematics should take MATH 317, MATH 319, MATH 324, MATH 326, MATH 327, MATH 417.
Students considering a career in secondary school teaching are advised to take MATH 318, MATH 338, MATH 346, MATH 348.
Students interested in careers in business, industry or government are advised to select courses from the following list:
MATH 317, MATH 319, MATH 327, MATH 329, MATH 417, MATH 423, MATH 430, MATH 447, MATH 523, MATH 525.

\section*{Required Courses ( \(\mathbf{2 7}\) credits)}

Note: Students who have done well in MATH 235 and MATH 242 should consider entering the Honours stream by registering in MATH 251 and MATH 255 instead of MATH 236 and MATH 243.
* Students may select either MATH 249 or MATH 316 but not both.
** Students who have successfully completed a course equivalent to MATH 222 with a grade of C or better may omit MATH 222, but must replace it with 3 credits of complementary courses.
\begin{tabular}{lcl} 
MATH \(222^{* *}\) & \((3)\) & Calculus 3 \\
MATH 235 & \((3)\) & Algebra 1 \\
MATH 236 & \((3)\) & Algebra 2 \\
MATH 242 & \((3)\) & Analysis 1 \\
MATH 243 & \((3)\) & Analysis 2 \\
MATH 249* & \((3)\) & Honours Complex Variables \\
MATH 314 & \((3)\) & Advanced Calculus \\
MATH 315 & \((3)\) & Ordinary Differential Equations \\
MATH 316* & \((3)\) & Complex Variables \\
MATH 323 & \((3)\) & Probability
\end{tabular}

\section*{Complementary Courses (27 credits)}

6-12 credits selected from the following:
\begin{tabular}{lll} 
MATH 317 & (3) & Numerical Analysis \\
MATH 324 & (3) & Statistics \\
MATH 335 & (3) & Groups, Tilings and Algorithms \\
MATH 340 & (3) & Discrete Mathematics
\end{tabular}

15-21 credits selected from the following: at least 6 credits must be at the 400 or 500 level.
\begin{tabular}{lcl} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 318 & (3) & Mathematical Logic \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 329 & (3) & Theory of Interest
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MATH 338 & (3) & History and Philosophy of Mathematics \\
\hline MATH 346 & (3) & Number Theory \\
\hline MATH 348 & (3) & Euclidean Geometry \\
\hline MATH 352 & (1) & Problem Seminar \\
\hline MATH 378 & (3) & Nonlinear Optimization \\
\hline MATH 410 & (3) & Majors Project \\
\hline MATH 417 & (3) & Linear Optimization \\
\hline MATH 423 & (3) & Applied Regression \\
\hline MATH 427 & (3) & Statistical Quality Control \\
\hline MATH 430 & (3) & Mathematical Finance \\
\hline MATH 447 & (3) & Introduction to Stochastic Processes \\
\hline MATH 451 & (3) & Introduction to General Topology \\
\hline MATH 463 & (3) & Convex Optimization \\
\hline MATH 478 & (3) & Computational Methods in Applied Mathematics \\
\hline MATH 523 & (4) & Generalized Linear Models \\
\hline MATH 525 & (4) & Sampling Theory and Applications \\
\hline MATH 545 & (4) & Introduction to Time Series Analysis \\
\hline
\end{tabular}

If necessary, 6 additional credits in Mathematics or related disciplines selected in consultation with the Adviser.

\subsection*{11.122211 Bachelor of Science (B.Sc.) - Major Statistics (54 credits)}

The program provides training in statistics, with a solid mathematical core, and basic training in computing. With satisfactory performance in an appropriate selection of courses, this program can lead to the professional accreditation A. Stat from the Statistical Society of Canada, which is regarded as the entry level requirement for a Statistician practicing in Canada. The students may complete this program with 54-57 credits.

\section*{Program Prerequisites}

Students entering the Major in Statistics program are normally expected to have completed the courses below or their equivalents. Otherwise they will be required to make up any deficiencies in these courses over and above the 54 credits of program courses.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

In addition, a student that has not completed the equivalent of MATH 203 upon entering the program must consult an academic adviser. If a student is advised to take MATH 203, this course has to be taken as a complementary course in the first semester, increasing the total number of program credits from 54 to 57.

Students are strongly advised to complete all required courses and all Part I complementary courses by the end of U2, except for MATH 423 and MATH 523.

Students interested in the professional accreditation should consult an academic adviser.
Where appropriate, Honours courses may be substituted for equivalent Major courses. Students planning to pursue graduate studies are encouraged to make such substitutions, and to take MATH 556 and MATH 557 as complementary courses.

\section*{Required Courses (34 credits)}
* Students must take MATH 204 before taking MATH 324.
** Students who have successfully completed a course equivalent to MATH 222 with a grade of C or better may omit MATH 222, but must replace it with MATH 314.
*** MATH 236 is an equivalent prerequisite to MATH 223 for required and complementary Computer Science courses listed below.
\begin{tabular}{lll} 
MATH 204* & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing
\end{tabular}
\begin{tabular}{lcl} 
MATH \(222^{* *}\) & \((3)\) & Calculus 3 \\
MATH 235 & \((3)\) & Algebra 1 \\
MATH \(236^{* * *}\) & \((3)\) & Algebra 2 \\
MATH 242 & \((3)\) & Analysis 1 \\
MATH 243 & \((3)\) & Analysis 2 \\
MATH 323 & (3) & Probability \\
MATH 324* & (3) & Statistics \\
MATH 423 & \((3)\) & Applied Regression \\
MATH 523 & \((4)\) & Generalized Linear Models
\end{tabular}

\section*{Complementary Courses (20-23 credits)}
\(0-3\) credits selected from:
MATH \(203 \quad\) (3) Principles of Statistics 1

Part I: 6 credits selected from:
* If chosen, students take either MATH 317 or COMP 350, but not both.
\begin{tabular}{lll} 
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 350* & (3) & Numerical Computing \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 316 & (3) & Complex Variables \\
MATH 317* & (3) & Numerical Analysis \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 329 & (3) & Theory of Interest \\
MATH 340 & (3) & Discrete Mathematics \\
MATH 350 & (3) & Honours Discrete Mathematics \\
MATH 378 & (3) & Nonlinear Optimization \\
MATH 417 & (3) & Linear Optimization \\
MATH 430 & (3) & Mathematical Finance \\
MATH 463 & (3) & Convex Optimization
\end{tabular}

Part II: 14 credits selected from:
* If chosen, students can at most one of MATH 410, MATH 420, MATH 527D1/D2, and WCOM 314.
+ If chosen, students can take either COMP 451 or COMP 551, but not both.
\begin{tabular}{lll} 
COMP 451+ & (3) & Fundamentals of Machine Learning \\
COMP 551+ & (4) & Applied Machine Learning \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 410* & (3) & Majors Project \\
MATH 420* & (3) & Independent Study
\end{tabular}
\begin{tabular}{lll} 
MATH 427 & \((3)\) & Statistical Quality Control \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 527D1* & (3) & Statistical Data Science Practicum \\
MATH 527D2* & (3) & Statistical Data Science Practicum \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 556 & (4) & Mathematical Statistics 1 \\
MATH 557 & (4) & Mathematical Statistics 2 \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MATH 598 & (4) & Topics in Probability and Statistics \\
WCOM 314* & (3) & Communicating Science
\end{tabular}

\subsection*{11.122212 Bachelor of Science (B.Sc.) - Major Mathematics and Computer Science (72 credits)}

The B.Sc.; Major in Mathematics and Computer Science emphasizes fundamental skills in mathematics and computer science, while exploring the interaction between the two fields.

\section*{Program Prerequisites}

Students entering the Joint Major in Mathematics and Computer Science are normally expected to have completed the courses below or their equivalents. Otherwise, they will be required to make up any deficiencies in these courses over and above the 72 credits of courses in the program specification.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Required Courses (54 credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202 but can replace it with an additional Computer Science complementary course.
** Student cannot replace MATH 317 with COMP 350.
\begin{tabular}{lll} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 310 & (3) & Operating Systems \\
COMP 330 & (3) & Theory of Computation \\
COMP 360 & (3) & Algorithm Design \\
MATH 222 & (3) & Calculus 3 \\
MATH 235 & (3) & Algebra 1 \\
MATH 236 & (3) & Algebra 2 \\
MATH 242 & (3) & Analysis 1 \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 317** & (3) & Numerical Analysis
\end{tabular}
\begin{tabular}{lll} 
MATH 318 & (3) & Mathematical Logic \\
MATH 323 & (3) & Probability \\
MATH 340 & (3) & Discrete Mathematics
\end{tabular}

\section*{Complementary Courses (18 credits)}

9 credits from the following.
Other MATH courses, at the undergraduate level, not included in this list may be chosen in consultation with an adviser.
\begin{tabular}{lll} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 319 & (3) & Partial Differential Equations \\
MATH 324 & (3) & Statistics \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 329 & (3) & Theory of Interest \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MATH 346 & (3) & Number Theory \\
MATH 348 & (3) & Euclidean Geometry \\
MATH 378 & (3) & Nonlinear Optimization \\
MATH 410 & (3) & Majors Project \\
MATH 417 & (3) & Linear Optimization \\
MATH 423 & (3) & Applied Regression \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 430 & (3) & Mathematical Finance \\
MATH 447 & (3) & Introduction to Stochastic Processes \\
MATH 463 & (3) & Convex Optimization \\
MATH 478 & (3) & Computational Methods in Applied Mathematics
\end{tabular}

9 credits selected from Computer Science courses at the 300 level or above (except COMP 364 and COMP 396) and ECSE 508.

\subsection*{11.122213 Bachelor of Science (B.Sc.) - Major Statistics and Computer Science (72 credits)}

This program provides students with a solid training in both computer science and statistics together with the necessary mathematical background. As statistical endeavours involve ever increasing amounts of data, some students may want training in both disciplines.

\section*{Program Prerequisites}

Students entering the Joint Major in Statistics and Computer Science are normally expected to have completed the courses below or their equivalents. Otherwise they will be required to make up any deficiencies in these courses over and above the 72 credits of required courses.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Required Courses (51 credits)}
* Students who have sufficient knowledge in a programming language do not need to take COMP 202 but can replace it with an additional Computer Science complementary course.
** Students take either COMP 350 or MATH 317, but not both.
*** Students take either MATH 223 or MATH 236, but not both.

Both courses are equivalent as prerequisites for required and complementary Computer Science courses listed below.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 251 & (3) & Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 330 & (3) & Theory of Computation \\
COMP 350** & (3) & Numerical Computing \\
COMP 360 & (3) & Algorithm Design \\
MATH 222 & (3) & Lalculus 3 \\
MATH 223*** & (3) & Algebra 1 Algebra \\
MATH 235 & (3) & Algebra 2 \\
MATH 236*** & (3) & Analysis 1 \\
MATH 242 & (3) & Advanced Calculus \\
MATH 314 & (3) & Numerical Analysis \\
MATH 317** & (3) & Probability \\
MATH 323 & (3) & Statistics \\
MATH 324 & (3) & Applied Regression \\
MATH 423 & &
\end{tabular}

\section*{Complementary Courses (21 credits)}

12 credits in Mathematics selected from:
* If chosen, students take either MATH 340 or MATH 350, but not both.
** MATH 578 and COMP 540 cannot both be taken for program credit.
+ In order to receive credit for MATH 204, students must take it before MATH 324.
++ If chosen, students can take one of MATH 410, and MATH 527D1/D2, but not both.
\begin{tabular}{lcl} 
MATH 204+ & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 327 & (3) & Matrix Numerical Analysis \\
MATH 340* & (3) & Discrete Mathematics \\
MATH 350* & (3) & Honours Discrete Mathematics \\
MATH 352 & (1) & Problem Seminar \\
MATH 410++ & (3) & Majors Project \\
MATH 427 & (3) & Statistical Quality Control \\
MATH 447 & (4) & Introduction to Stochastic Processes \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Sampling Theory and Applications \\
MATH 525 & (3) & Statistical Data Science Practicum \\
MATH 527D1++ & (3) & Statistical Data Science Practicum \\
MATH 527D2++ &
\end{tabular}
\begin{tabular}{lll} 
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MATH 578** & (4) & Numerical Analysis 1 \\
MATH 598 & (4) & Topics in Probability and Statistics
\end{tabular}

9 credits in Computer Science selected as follows:
At least 6 credits selected from:
\begin{tabular}{lcl} 
COMP 424 & \((3)\) & Artificial Intelligence \\
COMP 462 & \((3)\) & Computational Biology Methods \\
COMP \(540^{* *}\) & \((4)\) & Matrix Computations \\
COMP 547 & (4) & Cryptography and Data Security \\
COMP 551 & (4) & Applied Machine Learning \\
COMP 564 & (3) & Advanced Computational Biology Methods and Research \\
COMP 566 & (3) & Discrete Optimization 1 \\
COMP 567 & (3) & Discrete Optimization 2
\end{tabular}

The remaining Computer Science credits are selected from COMP courses at the 300 level or above (except COMP 396) and ECSE 508.

\subsection*{11.122214 Bachelor of Science (B.Sc.) - Honours Applied Mathematics (63 credits)}

The B.Sc.; Honours in Applied Mathematics provides an in-depth training, at the honours level, in "discrete" or "continuous" applied mathematics. It gives the foundations and necessary tools to explore some areas such as numerical analysis, continuous and discrete optimization, graph theory, discrete probability. The program also provides the background required to pursue interdisciplinary research at the interface between mathematics and other fields such as biology, physiology, and the biomedical sciences. This program may be completed with a minimum of 60 credits or a maximum of 63 credits.

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from MATH 222.

\section*{Program Prerequisites}

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

In particular, MATH 150/MATH 151 and MATH 140/MATH 222 are considered equivalent.
Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63 . Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.
Note: COMP 202—or an equivalent introduction to computer programming course—is a program prerequisite. U0 students may take COMP 202 as a Freshman Science course; new U1 students should take it as an elective in their first semester.
Students who transfer to Honours in Applied Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.
To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

\section*{Required Courses}

\section*{(36-39 credits)}
* Students with limited programming experience should take COMP 202 or COMP 204 or COMP 208 or equivalent before COMP 250.
** Students select either MATH 251 or MATH 247, but not both.
*** Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.
\begin{tabular}{|c|c|c|}
\hline COMP 250* & (3) & Introduction to Computer Science \\
\hline COMP 252 & (3) & Honours Algorithms and Data Structures \\
\hline MATH 222*** & (3) & Calculus 3 \\
\hline MATH 247** & (3) & Honours Applied Linear Algebra \\
\hline MATH 251** & (3) & Honours Algebra 2 \\
\hline MATH 255 & (3) & Honours Analysis 2 \\
\hline MATH 325 & (3) & Honours Ordinary Differential Equations \\
\hline MATH 350 & (3) & Honours Discrete Mathematics \\
\hline MATH 356 & (3) & Honours Probability \\
\hline MATH 357 & (3) & Honours Statistics \\
\hline MATH 358 & (3) & Honours Advanced Calculus \\
\hline MATH 376 & (3) & Honours Nonlinear Dynamics \\
\hline MATH 470 & (3) & Honours Research Project \\
\hline MATH 475 & (3) & Honours Partial Differential Equations \\
\hline
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 4}\) credits)}

3 credits selected from:
MATH 242
(3) Analysis 1
MATH 254+
(3)
Honours Analysis 1

3 credits from:
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH 245+ & (3) & Honours Algebra 1
\end{tabular}
+ It is strongly recommended that students take both MATH 245 and MATH 254. Advising Notes: Students interested in continuous applied mathematics are urged to choose these as part of their Complementary Courses: MATH 454, MATH 455 and MATH 478, and are advised to choose additional courses from MATH 387, MATH 397, MATH 555, MATH 574, MATH 578, MATH 579, MATH 580, MATH 581. Students interested in discrete applied mathematics are advised to choose from these as part of their Complementary Courses: COMP 362, COMP 490, MATH 456, MATH 457, MATH 517, MATH 547, MATH 550, MATH 552.

3 credits selected from:
MATH 249
(3) Honours Complex Variables

MATH 466
(3)

Honours Complex Analysis

3 credits selected from:
\begin{tabular}{lll} 
MATH 387 & (3) & Honours Numerical Analysis \\
MATH 397 & (3) & Honours Matrix Numerical Analysis
\end{tabular}

0-6 credits from the following courses for which no Honours equivalent exists.
MATH 204
(3)
Principles of Statistics 2
MATH 208
(3)
Introduction to Statistical Computing
\begin{tabular}{lcl} 
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 329 & (3) & Theory of Interest \\
MATH 338 & (3) & History and Philosophy of Mathematics \\
MATH 430 & (3) & Mathematical Finance \\
MATH 451 & (3) & Introduction to General Topology \\
MATH 478 & (3) & Computational Methods in Applied Mathematics
\end{tabular}
\(0-12\) credits selected from:
\begin{tabular}{lcl} 
COMP 362 & (3) & Honours Algorithm Design \\
MATH 352 & (1) & Problem Seminar \\
MATH 365 & (3) & Honours Groups, Tilings and Algorithms \\
MATH 377 & (3) & Honours Number Theory \\
MATH 398 & (3) & Honours Euclidean Geometry \\
MATH 454++ & (3) & Honours Analysis 3 \\
MATH 455 & (3) & Honours Analysis 4 \\
MATH 456 & (3) & Honours Algebra 3 \\
MATH 457 & (3) & Honours Algebra 4 \\
MATH 458 & (3) & Honours Differential Geometry \\
MATH 462 & (3) & Honours Mathematics for Machine Learning \\
MATH 480 & (3) & Honours Independent Study \\
MATH 488 & (3) & Honours Set Theory
\end{tabular}
++ Not open to students who have taken MATH 354.
All MATH 500-level courses.
Other courses with the permission of the Department.

\subsection*{11.122215 Bachelor of Science (B.Sc.) - Honours Mathematics ( 63 credits)}

The B.Sc.; Honours in Mathematics provides an in-depth training, at the honours level, in mathematics. It gives the foundations and tools needed to explore diverse areas of mathematics such as analysis, number theory, geometry, geometric group theory, and probability. This program may be completed with a minimum of 60 credits or a maximum of 63 credits.

\section*{Program Prerequisites}

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

In particular, MATH 150/MATH 151 and MATH 140/MATH 141/MATH 222 are considered equivalent.
Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63 . Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.

Students who transfer to Honours in Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.
To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

\section*{Required Courses ( 45 credits)}

45 credits
+ Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.
* Not open to students who have taken MATH 354.
\begin{tabular}{lcl} 
MATH 222+ & (3) & Calculus 3 \\
MATH 251 & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2 \\
MATH 325 & (3) & Honours Ordinary Differential Equations \\
MATH 356 & \((3)\) & Honours Probability \\
MATH 357 & (3) & Honours Statistics \\
MATH 358 & (3) & Honours Advanced Calculus \\
MATH 454* & (3) & Honours Analysis 3 \\
MATH 455 & (3) & Honours Analysis 4 \\
MATH 456 & (3) & Honours Algebra 3 \\
MATH 457 & (3) & Honours Algebra 4 \\
MATH 458 & (3) & Honours Differential Geometry \\
MATH 466 & (3) & Honours Complex Analysis \\
MATH 470 & (3) & Honours Research Project \\
MATH 475 & (3) & Honours Partial Differential Equations
\end{tabular}

\section*{Complementary Courses ( 15 credits)}

3 credits selected from:
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH \(254^{* *}\) & (3) & Honours Analysis 1
\end{tabular}
** It is strongly recommended that students take MATH 254.

3 credits selected from:
MATH 235
(3) Algebra 1
MATH \(245^{* *}\)
(3)
Honours Algebra 1
** It is strongly recommended that students take both MATH 245 and MATH 254.
\(0-6\) credits from the following courses for which no Honours equivalent exists:
\begin{tabular}{lcl} 
MATH 204 & (3) & Principles of Statistics 2 \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH 308 & (3) & Fundamentals of Statistical Learning \\
MATH 329 & (3) & Theory of Interest \\
MATH 338 & \((3)\) & History and Philosophy of Mathematics \\
MATH 378 & (3) & Nonlinear Optimization \\
MATH 430 & \((3)\) & Mathematical Finance \\
MATH 463 & \((3)\) & Convex Optimization
\end{tabular}

6-12 credits selected from:
COMP 250++
(3)
Introduction to Computer Science
\begin{tabular}{lcl} 
COMP 252 & \((3)\) & Honours Algorithms and Data Structures \\
MATH 350 & (3) & Honours Discrete Mathematics \\
MATH 352 & (1) & Problem Seminar \\
MATH 365 & (3) & Honours Groups, Tilings and Algorithms \\
MATH 376 & (3) & Honours Nonlinear Dynamics \\
MATH 377 & (3) & Honours Number Theory \\
MATH 387 & (3) & Honours Numerical Analysis \\
MATH 397 & (3) & Honours Matrix Numerical Analysis \\
MATH 398 & (3) & Honours Euclidean Geometry \\
MATH 462 & (3) & Honours Mathematics for Machine Learning \\
MATH 480 & (3) & Honours Independent Study \\
MATH 488 & (3) & Honours Set Theory
\end{tabular}
all MATH 500-level courses.
++ Students with limited programming experience should take COMP 202 or COMP 204 or COMP 208 or equivalent before COMP 250.
Students may select other courses with the permission of the Department.

\subsection*{11.122216 Bachelor of Science (B.Sc.) - Honours Statistics (63 credits)}

The B.Sc.: Honours in Statistics provides training, at the honours level, in statistics, with a solid mathematical core, and basic training in computing. With a suitable selection of complementary courses, the program can focus on probability, mathematical statistics, applied statistics, actuarial science and finance, or data science. With satisfactory performance in an appropriate selection of courses, this program can lead to the professional accreditation A.Stat from the Statistical Society of Canada, which is regarded as the entry level requirement for a Statistician practicing in Canada.

\section*{Program Requirements (63 credits)}

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending on whether or not they are required to take MATH 222.

\section*{Program Prerequisites}

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses or their equivalents:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

In particular, MATH 150/MATH 151 and MATH 140/MATH 141/MATH 222 are considered equivalent.

\section*{Required Courses (28-31 credits)}
* Students with limited programming experience should take COMP 202/COMP 204/COMP 208 or equivalent before COMP 250.
** Students select either MATH 251 or MATH 247, but not both.
*** Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.

\begin{abstract}
Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63 . Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.

Note: Students with limited knowledge of computer programming should take COMP 202/COMP 204/COMP 208 or equivalent before COMP 250. U0 students may take COMP 202 as a Freshman Science course; new U1 students should take one of these courses as an elective in their first semester.
Note: Students who wish to take MATH 204 as a complementary course are strongly advised to take MATH 203 beforehand, in their first semester or their first year.
Students who transfer to Honours in Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.
To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.
\end{abstract}
\begin{tabular}{lcl} 
COMP 250* & (3) & Introduction to Computer Science \\
MATH 208 & (3) & Introduction to Statistical Computing \\
MATH \(222^{* * *}\) & (3) & Calculus 3 \\
MATH 235 & (3) & Algebra 1 \\
MATH 247** & (3) & Honours Applied Linear Algebra \\
MATH 251** & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2 \\
MATH 356 & (3) & Honours Probability \\
MATH 357 & (3) & Honours Statistics \\
MATH 470 & (3) & Honours Research Project \\
MATH 533 & (4) & Regression and Analysis of Variance
\end{tabular}

\section*{Complementary Courses (32 credits)}

Advising notes:
- Students wishing to pursue mathematical statistics in graduate school are advised to take MATH 587 and recommended to take honours mathematics courses as complementary courses in Part II, in particular MATH 358, MATH 454 (preferably prior to MATH 587), and MATH 455.
- Students wishing to pursue applied statistics and/or careers as statisticians in industry or government are advised to take MATH 523, MATH 524, MATH 547, at least one of MATH 525 and MATH 558, and as many courses as possible from Part III of the list of Complementary Courses below. Students interested in obtaining the A-Stat accreditation from the Statistical Society of Canada should discuss their course selection with the academic adviser.
-Students with interest in probability are advised to choose from the following as part of their Complementary Courses: MATH 547, MATH 587, MATH 589.
- Students with interest in actuarial science are advised to choose from the following as part of their Complementary Courses: MATH 329, MATH 430, MATH 524, MATH 545, MATH 547.
- Students with interest in data science and machine learning are advised to choose from the following as part of their Complementary Courses: COMP 206, COMP 251, COMP 370, COMP 424, COMP 551, MATH 308, MATH 350, MATH 378, MATH 462 and MATH 517,MATH 562, and MATH 563.

Part I: 3 credits selected from:
* It is strongly recommended that students take MATH 254.
MATH 242
(3) Analysis 1
MATH 254*
(3)
Honours Analysis 1

Part II: 6-11 credits in mathematics and computer science selected from:
+ Students can select either MATH 248 or MATH 358, but not both.
++ Students may obtain credit for both MATH 455 and MATH 587.
\begin{tabular}{lll} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 252 & (3) & Honours Algorithms and Data Structures \\
MATH 248+ & (3) & Honours Vector Calculus \\
MATH 325 & (3) & Honours Ordinary Differential Equations \\
MATH 350 & (3) & Honours Discrete Mathematics \\
MATH 352 & (1) & Problem Seminar \\
MATH 358+ & (3) & Honours Advanced Calculus \\
MATH 376 & (3) & Honours Nonlinear Dynamics \\
MATH 387 & (3) & Honours Numerical Analysis \\
MATH 397 & (3) & Honours Matrix Numerical Analysis \\
MATH 398 & (3) & Honours Euclidean Geometry
\end{tabular}
\begin{tabular}{lcl} 
MATH 454 & (3) & Honours Analysis 3 \\
MATH 455++ & (3) & Honours Analysis 4 \\
MATH 458 & (3) & Honours Differential Geometry \\
MATH 466 & (3) & Honours Complex Analysis \\
MATH 475 & (3) & Honours Partial Differential Equations \\
MATH 478 & (3) & Computational Methods in Applied Mathematics \\
MATH 480 & (3) & Honours Independent Study \\
MATH 527D1 & (3) & Statistical Data Science Practicum \\
MATH 527D2 & (3) & Statistical Data Science Practicum
\end{tabular}
and any 500-level course offered by the Department of Mathematics and Statistics not listed in Part III below.

Part III: 18-23 credits in probability and statistics selected as follows:
15-23 credits selected from:
+++ Students must take MATH 204 before taking MATH 357 or MATH 533. Moreover, it is strongly advised to take MATH 203 before taking MATH 204.
\begin{tabular}{lll} 
MATH 204+++ & (3) & Principles of Statistics 2 \\
MATH 308 & \((3)\) & Fundamentals of Statistical Learning \\
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 547 & (4) & Stochastic Processes \\
MATH 556 & (4) & Mathematical Statistics 1 \\
MATH 557 & (4) & Mathematical Statistics 2 \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods \\
MATH 587 & (4) & Advanced Probability Theory 1 \\
MATH 589 & (4) & Advanced Probability Theory 2
\end{tabular}
\(0-3\) credits from the following courses for which no Honours equivalent exists:
\begin{tabular}{lll} 
MATH 329 & (3) & Theory of Interest \\
MATH 378 & (3) & Nonlinear Optimization \\
MATH 427 & (3) & Statistical Quality Control
\end{tabular}
\(0-8\) credits selected from:
+++ Students may select either MATH 594 or MATH 598 but not both.
\begin{tabular}{lll} 
COMP 370 & (3) & Introduction to Data Science \\
COMP 424 & (3) & Artificial Intelligence \\
COMP 451 & (3) & Fundamentals of Machine Learning \\
COMP 551 & (4) & Applied Machine Learning \\
COMP 579 & (4) & Reinforcement Learning
\end{tabular}
\begin{tabular}{lll} 
COMP 588 & (4) & Probabilistic Graphical Models \\
MATH 430 & (3) & Mathematical Finance \\
MATH 462 & (3) & Honours Mathematics for Machine Learning \\
MATH 562 & (4) & Theory of Machine Learning \\
MATH 594+++ & (4) & Topics in Mathematics and Statistics \\
MATH 598+++ & (4) & Topics in Probability and Statistics
\end{tabular}

\subsection*{11.122217 Bachelor of Science (B.Sc.) - Honours Statistics and Computer Science (79 credits)}

The program provides a rigorous training in the area of Computer Science and Statistics at the honours level. Exploration of the interactions between the two fields.

Students may complete this program with a minimum of 76 credits or a maximum of 79 credits depending on whether or not they are exempt from taking COMP 202.

\section*{Program Prerequisites}

Students entering the Joint Honours in Statistics and Computer Science are normally expected to have completed the courses below or their equivalents. Otherwise, they will be required to make up any deficiencies in these courses over and above the 76-79 credits of courses in the program.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2
\end{tabular}

\section*{Required Courses (43 credits)}
* Students who have sufficient knowledge in a programming language are not required to take COMP 202.
** Students take either MATH 251 or MATH 247, but not both.
\begin{tabular}{lcl} 
COMP 202* & (3) & Foundations of Programming \\
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 252 & (3) & Honours Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 330 & (3) & Theory of Computation \\
COMP 362 & (3) & Honours Algorithm Design \\
MATH 247** & (3) & Honours Applied Linear Algebra \\
MATH 248 & (3) & Honours Vector Calculus \\
MATH 251** & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2 \\
MATH 356 & (3) & Honours Probability \\
MATH 357 & (3) & Honours Statistics \\
MATH 533 & (4) & Regression and Analysis of Variance
\end{tabular}

\section*{Complementary Courses (36 credits)}

3 credits selected from:
MATH 242
(3) Analysis 1
MATH 254*
(3)
Honours Analysis 1

3 credits selected from:
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH \(245^{*}\) & (3) & Honours Algebra 1
\end{tabular}
* It is strongly recommended that students take both MATH 245 and MATH 254.

3 credits selected from:
\begin{tabular}{lll} 
MATH 387 & (3) & Honours Numerical Analysis \\
MATH 397 & (3) & Honours Matrix Numerical Analysis
\end{tabular}

8-12 credits selected from:
\begin{tabular}{lcl} 
MATH 523 & (4) & Generalized Linear Models \\
MATH 524 & (4) & Nonparametric Statistics \\
MATH 525 & (4) & Sampling Theory and Applications \\
MATH 527D1 & (3) & Statistical Data Science Practicum \\
MATH 527D2 & (3) & Statistical Data Science Practicum \\
MATH 556 & (4) & Mathematical Statistics 1 \\
MATH 557 & (4) & Mathematical Statistics 2 \\
MATH 558 & (4) & Design of Experiments \\
MATH 559 & (4) & Bayesian Theory and Methods
\end{tabular}

0-4 credits selected from:
** MATH 578 and COMP 540 cannot both be taken for program credit.
\begin{tabular}{lll} 
MATH 350 & \((3)\) & Honours Discrete Mathematics \\
MATH 352 & \((1)\) & Problem Seminar \\
MATH 454 & \((3)\) & Honours Analysis 3 \\
MATH 462 & \((3)\) & Honours Mathematics for Machine Learning \\
MATH 545 & (4) & Introduction to Time Series Analysis \\
MATH 563 & (4) & Honours Convex Optimization \\
MATH \(578^{* *}\) & (4) & Numerical Analysis 1 \\
MATH 587 & (4) & Advanced Probability Theory 1 \\
MATH 594 & (4) & Topics in Mathematics and Statistics
\end{tabular}

6-15 credits selected from:

At least 6 credits selected from:
\begin{tabular}{lcl} 
COMP 424 & (3) & Artificial Intelligence \\
COMP 462 & (3) & Computational Biology Methods \\
COMP \(540^{* *}\) & (4) & Matrix Computations \\
COMP 547 & (4) & Cryptography and Data Security \\
COMP 551 & (4) & Applied Machine Learning
\end{tabular}
\begin{tabular}{lll} 
COMP 552 & (4) & Combinatorial Optimization \\
COMP 564 & (3) & Advanced Computational Biology Methods and Research \\
COMP 566 & (3) & Discrete Optimization 1 \\
COMP 567 & (3) & Discrete Optimization 2
\end{tabular}
\(0-9\) credits selected from Computer Science courses selected from COMP courses at the 300 level or above excluding COMP 396.

\subsection*{11.122218 Bachelor of Science (B.Sc.) - Honours Mathematics and Computer Science (78 credits)}

The B.Sc.; Honours in Mathematics and Computer Science provides a rigorous training, at the honours level, in mathematics and computer science, while exploring the interaction between the two fields. This program may be completed with a minimum of 72 credits or a maximum of 78 credits.

\section*{Program Prerequisites}

Students must consult an Honours adviser in both departments to ensure that they have sufficient background to enter the program. The minimum requirements are the following courses or their equivalencies:
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

In particular, MATH 150/MATH151 and MATH 140/MATH 141/MATH 222 are considered equivalent.
To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

\section*{Required Courses}

\section*{(33-36 credits)}
* Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.
\begin{tabular}{lcl} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
COMP 252 & (3) & Honours Algorithms and Data Structures \\
COMP 273 & (3) & Introduction to Computer Systems \\
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 310 & (3) & Operating Systems \\
COMP 330 & (3) & Theory of Computation \\
COMP 362 & (3) & Honours Algorithm Design \\
MATH 222* & (3) & Calculus 3 \\
MATH 251 & (3) & Honours Algebra 2 \\
MATH 255 & (3) & Honours Analysis 2 \\
MATH 350 & (3) & Honours Discrete Mathematics
\end{tabular}

\section*{Complementary Courses}

39-42 credits
0-3 credits selected from:
\begin{tabular}{lll} 
COMP \(202 * *\) & (3) & Foundations of Programming \\
COMP \(204^{* *}\) & (3) & Computer Programming for Life Sciences \\
COMP \(208^{* *}\) & (3) & Computer Programming for Physical Sciences and Engineering
\end{tabular}

\footnotetext{
** Students who have sufficient knowledge of computer programming are not required to take COMP 202/COMP 204/COMP 208.
}

3 credits selected from:
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH \(254^{* * *}\) & (3) & Honours Analysis 1
\end{tabular}

3 credits selected from:
\begin{tabular}{lll} 
MATH 235 & (3) & Algebra 1 \\
MATH \(245^{* * *}\) & (3) & Honours Algebra 1
\end{tabular}
*** It is strongly recommended that students take both MATH 245 and MATH 254.

3 credits selected from:
\begin{tabular}{lll} 
MATH 248 & (3) & Honours Vector Calculus \\
MATH 358 & (3) & Honours Advanced Calculus
\end{tabular}

9-18 credits selected from:
+ Not open to students who have taken MATH 354.
\begin{tabular}{lll} 
MATH 356 & \((3)\) & Honours Probability \\
MATH 357 & \((3)\) & Honours Statistics \\
MATH 387 & \((3)\) & Honours Numerical Analysis \\
MATH 454+ & (3) & Honours Analysis 3 \\
MATH 455 & (3) & Honours Analysis 4 \\
MATH 456 & (3) & Honours Algebra 3 \\
MATH 457 & (3) & Honours Algebra 4
\end{tabular}

0-9 credits should be selected from honours courses and 500-level courses given by the Department of Mathematics and Statistics.
12 credits in Computer Science, selected from Computer Science courses at the 300 level or above excluding COMP 364 and COMP 396. ECSE 508 may also be taken.
11.122219 Mathematics and Statistics (MATH) Related Programs 11.122219.1 Major in Biology and Mathematics

For more information, see section 11.12.5: Biology (BIOL) > section 11.12.5.9: Bachelor of Science (B.Sc.) - Major Biology and Mathematics (76 credits).

\subsection*{11.1222192 Major in Physiology and Mathematics}

For more information, see section 11.12.31: Physiology (PHGY) > section 11.12.31.5: Bachelor of Science (B.Sc.) - Major Physiology and Mathematics (79 credits).

\subsection*{11.1222193 Honours Program in Mathematics and Physics}

For more information, see section 11.12.30: Physics (PHYS) > section 11.12.30.14: Bachelor of Science (B.Sc.) - Honours Mathematics and Physics (81 credits).

\subsection*{11.12.23 Microbiology and Immunology (MIMM)}

\subsection*{11.12.23.1 Location}

Duff Medical Building, Room 511
3775 University Street
Montreal QC H3A 2B4
Telephone: 514-398-3915

\section*{Email: undergrad.microimm@mcgill.ca \\ Website: mcgill.ca/microimm}

\subsection*{11.12.23.2 About Microbiology and Immunology}

Microbiology is the study of microorganisms such as bacteria, viruses, unicellular eukaryotes, and parasites. Microorganisms play an important role in human and animal disease; food production (bread, cheese, wine); decay and spoilage; and contamination and purification of water and soil. Microbiologists study these tiny, self-replicating machines to understand the basic principles of life: growth, metabolism, cell division, control of gene expression, and response to environmental stimuli. Microbiologists are also concerned with controlling or harnessing microorganisms for the benefit of people, by isolating antibiotics or producing vaccines to protect against disease, and by developing and perfecting microorganisms for industrial uses.

Immunology is the study of the molecular and cellular basis of host resistance and immunity to external agents such as pathogenic microorganisms. Immunologists study the mechanisms by which the body recognizes foreign antigens, generates appropriate antibodies to an enormously diverse spectrum of antigens, and sequesters and kills invading microorganisms. Their discoveries lead to vaccination against disease; transfusions and organ transplants; and treatments for allergies; cancer; autoimmune diseases; and immune-deficiency diseases such as AIDS. Antibodies may soon be used in conjunction with antibiotics or chemical agents as specific "magic bullets" to diagnose disease and attack microbes and cancers.

The disciplines of microbiology and immunology are natural partners in research, and both fields use the modern methods of cell biology, molecular biology, and genetics to study basic life processes. The members of the Department of Microbiology and Immunology conduct research in:
- microbial physiology and genetics;
- microbial pathogenesis;
- molecular virology;
- cellular and molecular immunology;
- parasitology.

Students registered in the Department are therefore exposed to these related areas and receive an excellent background in basic biology and chemistry, as well as in the more applied areas of biotechnology and medicine.

Many opportunities exist for careers in basic or applied microbiology and immunology, medical microbiology, environmental microbiology, and biotechnology They include positions in industry (pharmaceutical and biotechnology), hospitals, universities, and government (environment, public health, and energy). A degree in microbiology also provides an excellent basis for entering professional and postgraduate programs in medicine, dentistry, veterinary sciences, research, and education.

Course and program information is available on our the MIMM website.
All new students should attend a departmental orientation/advising session in August. Please check mcgill.ca/microimm/students/undergraduate-studies/advising for dates.

\subsection*{11.12.23.3 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Microbiology and Immunology ( \(\mathbf{5 0}\) credits)}

\section*{U1 Required Courses (19 credits)}
* Students who have taken CHEM 212 in CEGEP are exempt and must replace these credits with an elective course(s).
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
MIMM 211 & (3) & Introductory Microbiology \\
MIMM 212 & (3) & Laboratory in Microbiology \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity
\end{tabular}

\section*{U1 Complementary Course (3 credits)}

3 credits, select one from:
BIOC 212
(3)
Molecular Mechanisms of Cell Function
BIOL 201
(3)
Cell Biology and Metabolism

\section*{U1, U2, or U3 Required Course (3 credits)}

3 credits, select one from:
BIOL 373
Biometry
\begin{tabular}{lll} 
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{U2 Required Courses (16 credits)}
\begin{tabular}{lcl} 
MIMM 301 & (1) & Scientific Writing Skills in MIMM \\
MIMM 314 & (3) & Intermediate Immunology \\
MIMM 323 & (3) & Microbial Physiology \\
MIMM 324 & (3) & Fundamental Virology \\
MIMM 384 & (3) & Molecular Microbiology Laboratory \\
MIMM 385 & (3) & Laboratory in Immunology
\end{tabular}

\section*{U3 Complementary Courses ( 6 credits)}

6 credits selected from:
\begin{tabular}{lcl} 
MIMM 387 & (3) & The Business of Science \\
MIMM 413 & (3) & Parasitology \\
MIMM 414 & (3) & Advanced Immunology \\
MIMM 465 & (3) & Bacterial Pathogenesis \\
MIMM 466 & (3) & Viral Pathogenesis \\
MIMM 509 & (3) & Inflammatory Processes
\end{tabular}

\section*{U1, U2 or U3 Complementary Courses (3 credits)}

3 credits selected from:
* Students who have taken CHEM 212 or CHEM 222 in CEGEP must replace it with another complementary course.
\begin{tabular}{|c|c|c|}
\hline ANAT 261 & (4) & Introduction to Dynamic Histology \\
\hline ANAT 262 & (3) & Introductory Molecular and Cell Biology \\
\hline ANAT 365 & (3) & Cellular Trafficking \\
\hline ANAT 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOC 311 & (3) & Metabolic Biochemistry \\
\hline BIOC 312 & (3) & Biochemistry of Macromolecules \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 454 & (3) & Nucleic Acids \\
\hline BIOC 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 309 & (3) & Mathematical Models in Biology \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOT 505 & (3) & Selected Topics in Biotechnology \\
\hline CHEM 203 & (3) & Survey of Physical Chemistry \\
\hline CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
\hline CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline COMP 204 & (3) & Computer Programming for Life Sciences \\
\hline COMP 206 & (3) & Introduction to Software Systems \\
\hline
\end{tabular}
\begin{tabular}{lll} 
COMP 250 & (3) & Introduction to Computer Science \\
EXMD 504 & (3) & Biology of Cancer \\
MIMM 387 & (3) & The Business of Science \\
MIMM 390 & (3) & SEA-PHAGES: Phage Discovery \\
MIMM 391 & (3) & SEA-PHAGES: Genome Annotation \\
MIMM 413 & (3) & Parasitology \\
MIMM 414 & (3) & Advanced Immunology \\
MIMM 465 & (3) & Bacterial Pathogenesis \\
MIMM 466 & (3) & Viral Pathogenesis \\
MIMM 496D1 & (3) & Microbiology Advanced Research Project \\
MIMM 496D2 & (3) & Immunology Advanced Research Project \\
MIMM 497D1 & (3) & Immunology Advanced Research Project \\
MIMM 497D2 & (3) & Inflammatory Processes \\
MIMM 509 & (3) & Human Disease \\
PATH 300 & (3) & Drug Action \\
PHAR 300 & (3) & Drugs and Disease \\
PHAR 301 & (3) & Mammalian Physiology 1 \\
PHGY 209 & (3) & Mammalian Physiology 2 \\
PHGY 210 & &
\end{tabular}

\subsection*{11.12.23.4 Bachelor of Science (B.Sc.) - Major Microbiology and Immunology ( 66 credits)}

The Major program is designed for students who want to acquire a substantial background in microbiology and immunology and related disciplines (chemistry, biology, biochemistry) which will prepare them for professional schools, graduate education, or entry into jobs in industry or research institutes.

\section*{U1 Required Courses (26 credits)}
* Students who have taken CHEM 212 in CEGEP are exempt and must replace these credits with an elective course(s).
** Students who have taken CHEM 222 in CEGEP are exempt and must replace these credits with an elective course(s).
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222** & (4) & Introductory Organic Chemistry 2 \\
MIMM 211 & (3) & Introductory Microbiology \\
MIMM 212 & (3) & Laboratory in Microbiology \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity
\end{tabular}

One of:

BIOC 212
BIOL 201

Molecular Mechanisms of Cell Function
Cell Biology and Metabolism

\section*{U1, U2, or U3 Required Course (3 credits)}

One of:
BIOL 373
(3) Biometry
\begin{tabular}{lll} 
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{U2 Required Courses (19 credits)}
\begin{tabular}{lcl} 
BIOC 311 & \((3)\) & Metabolic Biochemistry \\
MIMM 301 & (1) & Scientific Writing Skills in MIMM \\
MIMM 314 & (3) & Intermediate Immunology \\
MIMM 323 & (3) & Microbial Physiology \\
MIMM 324 & (3) & Fundamental Virology \\
MIMM 384 & (3) & Molecular Microbiology Laboratory \\
MIMM 385 & (3) & Laboratory in Immunology
\end{tabular}

\section*{U3 Required Course (3 credits)}
MIMM 413
(3)
Parasitology

\section*{U3 Complementary Courses (6 credits)}

6 credits selected from:
\begin{tabular}{lll} 
MIMM 414 & (3) & Advanced Immunology \\
MIMM 465 & (3) & Bacterial Pathogenesis \\
MIMM 466 & (3) & Viral Pathogenesis
\end{tabular}

\section*{Complementary Courses (9 credits)}

9 credits selected from:
* Students may select either ANAT 458 or BIOC 458, but not both.
\begin{tabular}{lll} 
ANAT 261 & \((4)\) & Introduction to Dynamic Histology \\
ANAT 262 & \((3)\) & Introductory Molecular and Cell Biology \\
ANAT 365 & (3) & Cellular Trafficking \\
ANAT 458* & (3) & Membranes and Cellular Signaling \\
BIOC 312 & (3) & Biochemistry of Macromolecules \\
BIOC 450 & (3) & Protein Structure and Function \\
BIOC 454 & (3) & Nucleic Acids \\
BIOC 458* & (3) & Membranes and Cellular Signaling \\
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 314 & (3) & Selected Topics in Biotechnology Biology of Cancer \\
BIOT 505 & (3) & Survey of Physical Chemistry \\
CHEM 203 & (3) & Physical Chemistry/Biological Sciences 1 \\
CHEM 204 & (3) & Introductory Organic Chemistry 3 \\
CHEM 302 & (3) & Computer Programming for Life Sciences \\
COMP 204 & (3) & Introduction to Software Systems \\
COMP 206 & (3) & Introduction to Computer Science \\
COMP 250 & &
\end{tabular}
\begin{tabular}{lll} 
EXMD 504 & (3) & Biology of Cancer \\
MIMM 387 & (3) & The Business of Science \\
MIMM 390 & (3) & SEA-PHAGES: Phage Discovery \\
MIMM 391 & (3) & SEA-PHAGES: Genome Annotation \\
MIMM 414 & (3) & Advanced Immunology \\
MIMM 465 & (3) & Bacterial Pathogenesis \\
MIMM 466 & (3) & Viral Pathogenesis \\
MIMM 496D1 & (3) & Microbiology Advanced Research Project \\
MIMM 496D2 & (3) & Microbiology Advanced Research Project \\
MIMM 497D1 & (3) & Immunology Advanced Research Project \\
MIMM 497D2 & (3) & Immunology Advanced Research Project \\
MIMM 509 & (3) & Inflammatory Processes \\
PATH 300 & (3) & Human Disease \\
PHAR 300 & (3) & Drug Action \\
PHAR 301 & (3) & Drugs and Disease \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

\subsection*{11.12.23.5 Bachelor of Science (B.Sc.) - Honours Microbiology and Immunology (72 credits)}

The Honours program is designed to offer, in addition to the substantial background given by the Major program, a significant research experience in a laboratory within the Department during the U3 year. Students are prepared for this independent research project by following an advanced laboratory course in U2. This program is intended to prepare students for graduate study in microbiology and immunology or related fields, but could also be chosen by students intending to enter medical research after medical school, or intending to enter the job market in a laboratory research environment.

Students intending to apply to Honours must follow the Major program in U1 and U2 and must obtain a CGPA of at least 3.50 at the end of their U2 year. For graduation in Honours, students must pass all required courses with a C or better, and achieve a sessional GPA of at least 3.30 in the U3 year.

\section*{U1 Required Courses (26 credits)}
* Students who have taken CHEM 212 in CEGEP are exempt and must replace these credits with an elective course(s).
** Students who have taken CHEM 222 in CEGEP are exempt and must replace these credits with an elective course(s).
\begin{tabular}{lcl} 
BIOL 200 & \((3)\) & Molecular Biology \\
BIOL 202 & \((3)\) & Basic Genetics \\
CHEM 212* & \((4)\) & Introductory Organic Chemistry 1 \\
CHEM 222** & \((4)\) & Introductory Organic Chemistry 2 \\
MIMM 211 & \((3)\) & Introductory Microbiology \\
MIMM 212 & \((3)\) & Laboratory in Microbiology \\
MIMM 214 & \((3)\) & Introductory Immunology: Elements of Immunity
\end{tabular}

One of:

BIOC 212
BIOL 201

Molecular Mechanisms of Cell Function
Cell Biology and Metabolism

\section*{U1, U2, or U3 Required Course (3 credits)}

One of:
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 203 & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

\section*{U2 Required Courses (19 credits)}
\begin{tabular}{lcl} 
BIOC 311 & \((3)\) & Metabolic Biochemistry \\
MIMM 301 & (1) & Scientific Writing Skills in MIMM \\
MIMM 314 & (3) & Intermediate Immunology \\
MIMM 323 & (3) & Microbial Physiology \\
MIMM 324 & (3) & Fundamental Virology \\
MIMM 384 & (3) & Molecular Microbiology Laboratory \\
MIMM 385 & (3) & Laboratory in Immunology
\end{tabular}

\section*{U3 Required Courses (15 credits)}
\begin{tabular}{lcl} 
MIMM 413 & (3) & Parasitology \\
MIMM 501D1* & (6) & Honours Research Project in Immunology \\
MIMM 501D2* & (6) & Honours Research Project in Immunology \\
MIMM 502D1* & (6) & Honours Research Project in Microbiology \\
MIMM 502D2* & (6) & Honours Research Project in Microbiology
\end{tabular}
* Students take either MIMM 501D1 and MIMM 501D2 or MIMM 502D1 and MIMM 502D2.

\section*{U3 Complementary Courses (6 credits)}

6 credits selected from:
\begin{tabular}{lll} 
MIMM 414 & (3) & Advanced Immunology \\
MIMM 465 & (3) & Bacterial Pathogenesis \\
MIMM 466 & (3) & Viral Pathogenesis
\end{tabular}

\section*{Complementary Courses (3 credits)}

3 credits selected from:
\begin{tabular}{|c|c|c|}
\hline ANAT 261 & (4) & Introduction to Dynamic Histology \\
\hline ANAT 262 & (3) & Introductory Molecular and Cell Biology \\
\hline ANAT 365 & (3) & Cellular Trafficking \\
\hline ANAT 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOC 312 & (3) & Biochemistry of Macromolecules \\
\hline BIOC 404 & (3) & Biophysical Methods in Biochemistry \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 454 & (3) & Nucleic Acids \\
\hline BIOC 458 & (3) & Membranes and Cellular Signaling \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 309 & (3) & Mathematical Models in Biology \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 520 & (3) & Gene Activity in Development \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BIOT 505 & (3) & Selected Topics in Biotechnology \\
\hline CHEM 203 & (3) & Survey of Physical Chemistry \\
\hline CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline COMP 204 & (3) & Computer Programming for Life Sciences \\
\hline COMP 206 & (3) & Introduction to Software Systems \\
\hline COMP 250 & (3) & Introduction to Computer Science \\
\hline EXMD 504 & (3) & Biology of Cancer \\
\hline MIMM 387 & (3) & The Business of Science \\
\hline MIMM 390 & (3) & SEA-PHAGES: Phage Discovery \\
\hline MIMM 391 & (3) & SEA-PHAGES: Genome Annotation \\
\hline MIMM 414 & (3) & Advanced Immunology \\
\hline MIMM 465 & (3) & Bacterial Pathogenesis \\
\hline MIMM 466 & (3) & Viral Pathogenesis \\
\hline MIMM 509 & (3) & Inflammatory Processes \\
\hline PATH 300 & (3) & Human Disease \\
\hline PHAR 300 & (3) & Drug Action \\
\hline PHAR 301 & (3) & Drugs and Disease \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHAR 563 & (3) & Endocrine Pharmacology \\
\hline PHGY 209 & (3) & Mammalian Physiology 1 \\
\hline PHGY 210 & (3) & Mammalian Physiology 2 \\
\hline PSYT 455 & (3) & Neurochemistry \\
\hline
\end{tabular}

\subsection*{11.12.23.6 Microbiology and Immunology (MIMM) Related Programs 11.1223.6.1 Interdepartmental Honours in Immunology}

For more information, see section 11.12.18: Immunology.
This program is offered by the departments of Biochemistry, Microbiology and Immunology, and Physiology.
Students interested in immunology may choose between this Honours program and the Honours program of the Department of Microbiology and Immunology.
Details of this program may also be obtained from:

Department of Physiology
McIntyre Medical Sciences Building, Room 1136
Telephone: 514-398-4342
OR

Department of Microbiology and Immunology
McGill University Health Centre, Glen Site
1001 Decarie Boulevard, Bloc E, Office EM23248
Email: undergrad.microimm@mcgill.ca

\subsection*{11.12.24 Music for Science Students}

\subsection*{11.12.24.1 Location}
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Strathcona Music Building
5 5 5 Sherbrooke Street West
Montreal QC H3A 1E3

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Telephone: 514-398-4535
Fax: 514-398-1540
Website: mcgill.ca/music

\subsection*{11.12.24.2 About Music}

The Schulich School of Music offers some programs that are open to students in the Faculty of Science. For more information, see Schulich School of Music > Undergraduate > section 10.6: Browse Academic Units \& Programs.

\subsection*{11.12.24.3 Music Related Programs 11.1224.3.1 Minor in Musical Applications of Technology and Minor in Musical Science and Technology}

Science students may apply for admission to:
- Minor in Musical Applications of Technology - see Schulich School of Music > Undergraduate >Browse Academic Units \& Programs > Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program > section 10.6.1.12: Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology ( 18 credits)
- Minor in Musical Science and Technology - see Schulich School of Music > Undergraduate > Browse Academic Units \& Programs > Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program > section 10.6.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits)

Enrolment in Music Technology programs is highly restricted. Interested applicants must submit an online application via the Schulich School of Music website by the assigned deadline of each academic year. Late applications will not be accepted and no students will be admitted in January. Successful applicants will be notified by email before the end of June. Registration will be limited to available lab space.

\subsection*{11.12.25 Neurology and Neurosurgery (NEUR)}

\subsection*{11.12.25.1 Location}

Montreal Neurological Institute and Hospital
3801 University Street, Room 140
Montreal QC H3A 2B4
Website: mcgill.ca/neuro

\subsection*{11.12.25.2 About Neurology and Neurosurgery}

There are no B.Sc. programs in Neurology and Neurosurgery, but the course NEUR 310 Cellular Neurobiology, which is part of the Minor in Neuroscience, is taught by the Faculty of Science.

Students wishing to obtain more information about Neurology and Neurosurgery can refer to the Faculty of Medicine and Health Sciences' Neurology and Neurosurgery page.

\subsection*{11.12.26 Neuroscience}

\subsection*{11.12.26.1 Location}

Department of Physiology
Dawson Hall, 4th floor
853 Sherbrooke Street West
Montreal QC H4A 0G5
Email: prospective.neuroscience@mcgill.ca
Website: mcgill.ca/neuroscience

\section*{Neuroscience Program Advisor}

Curtis Sharman
Email: curtis.sharman@mcgill.ca
Website: mcgill.ca/neuroscience

\subsection*{11.12.26.2 About Neuroscience}

Neuroscience is a multidisciplinary science devoted to understanding the nervous system. The brain is one of the most complex systems in the universe, and understanding how it functions is among the most challenging questions in science. Scientists are investigating the brain at many levels, from the molecules at synapses to complex forms of behaviour, and use methods of inquiry that are drawn from a number of disciplines, including molecular and cellular biology, physiology, behavioural sciences and cognitive psychology, computer science, and artificial intelligence. In addition, scientists are investigating the nervous
systems of many different animals, from simple invertebrates to humans. These wide-ranging investigations are providing a clearer understanding of how neurons work; how they communicate with one another; how they are organized into local or distributed networks; how the connections between neurons are established and change with experience; and how neuronal function is influenced by pharmacological agents and during disease states. As a result, we are gaining deeper insights into the neural basis of mental activity, as well as developing new therapeutic approaches to alleviate neurological and psychological diseases.

\subsection*{11.12.26.3 Bachelor of Science (B.Sc.) - Minor Neuroscience (25 credits)}
"Please note: this Minor is only available to students studying in the faculty of Science."
This Minor is intended to provide students with a basic understanding of how the nervous system functions. The Minor is composed of 24-25 credits: 9 required and 15-16 complementary. For the 15-16 complementary credits, at least 12-13 must be from outside the student's home department and at least 6 of the \(12-13\) must be at the 400 or 500 level.

Note 1: A maximum of 6-7 credits can be counted for both the student's primary program and for the Minor in Neuroscience.

\section*{Required Courses (9 credits)}
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
NSCI 200 & (3) & Introduction to Neuroscience 1 \\
NSCI 201 & (3) & Introduction to Neuroscience 2
\end{tabular}

\section*{Complementary Courses (16 credits)}

15-16 credits selected as follows:
- At least 12-13 credits must be from outside the student's home department.
- At least 6 of the 12-13 credits have to be at the 400 or 500 level.
\(0-10\) credits from the following list of 200- and 300-level courses:
* Students may select ANAT 212 or BIOC 212 or BIOL 201.
** Students may select either BIOL 306 or PHGY 314.
Note 2: Since CHEM 212 is a prerequisite/corequisite for NSCI 200 and BIOL 200, students must take CHEM 212 if they have not yet done so.
\begin{tabular}{lcl} 
ANAT 212* & (3) & Molecular Mechanisms of Cell Function \\
BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics \\
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 306** & (3) & Neural Basis of Behaviour \\
BIOL 320 & (3) & Evolution of Brain and Behaviour \\
BIOL 389 & (3) & Laboratory in Neurobiology \\
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
NEUR 310 & (3) & Cellular Neurobiology \\
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 314** & (3) & Integrative Neuroscience \\
PSYC 302 & (3) & The Psychology of Pain \\
PSYC 311 & (3) & Human Cognition and the Brain \\
PSYC 315 & (3) & Computational Psychology \\
PSYC 317 & (3) & Genes and Behaviour \\
PSYC 318 & (3) & Behavioural Neuroscience 2 \\
PSYC 342 & (3) & Hormones and Behaviour
\end{tabular}

6-15 credits from the following list of 400- and 500-level courses:
\begin{tabular}{lll} 
BIOL 530 & (3) & Advances in Neuroethology \\
BIOL 532 & (3) & Developmental Neurobiology Seminar \\
BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
NEUR 502 & (3) & Basic and Clinical Aspects of Neuroimmunology \\
PHGY 425 & (3) & Analyzing Physiological Systems \\
PHGY 451 & (3) & Advanced Neurophysiology \\
PHGY 520 & (3) & Ion Channels \\
PHGY 524 & (3) & Chronobiology \\
PHGY 556 & (3) & Topics in Systems Neuroscience \\
PSYC 410 & (3) & Special Topics in Neuropsychology \\
PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
PSYC 427 & (3) & Sensorimotor Neuroscience \\
PSYC 433 & (3) & Cognitive Science \\
PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
PSYC 470 & (3) & Memory and Brain \\
PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
PSYC 514 & (3) & Neurobiology of Memory \\
PSYC 522 & (3) & Neurochemistry and Behaviour \\
PSYC 526 455 & (3) & Advances in Visual Perception \\
PSYT 500 & (3) & \\
PSYT 505 & Neurobiology of Schizophrenia \\
\hline
\end{tabular}

\subsection*{11.12.26.4 Bachelor of Science (B.Sc.) - Major Neuroscience (65 credits)}

The Neuroscience Major is a focused program for students interested in how the nervous system functions. It is highly interdisciplinary and borrows principles and methodologies from a number of fields including: biology, biochemistry, physiology, psychology, mathematics, physics, computer science, and immunology. To ensure that they have the appropriate foundation, students are required to take 29 credits in lower-level courses from physiology, biology, mathematics, computer science, psychology, and ethics. The program offers students a concentrated selection of 15 credits to be taken from one of three areas of current scientific activities in the neurosciences: Cell/Molecular, Neurophysiology/Computation, or Cognition/Behaviour. In addition, students select 21 credits from a wide array of complementary courses to obtain more specialized training in areas of neuroscience that best suit their interests.

Enrolment in the Neuroscience Major is limited to a total of 50 students per year. U0 students seeking admission to this program should consult the neuroscience website for admissions requirements and should have completed the courses listed below or their equivalents.

\section*{Program Prerequisites}

Students may complete this program with a minimum of 65 or a maximum of 67 credits.
Notes on admission to the Neuroscience Major program: Enrolment in the Neuroscience Major is limited to a total of 50 students per year. U0 students seeking admission to this program should consult the neuroscience website for admissions requirements and should have completed the courses listed below or equivalent.
* Students complete one of MATH 139, MATH 140 OR MATH 150.
** Students complete one of either MATH 141 OR MATH 151.
*** Students complete one of either PHYS 101 OR PHYS 131.
+++ Students complete one of either PHYS 102 OR PHYS 142.
BIOL 112
(3)
Cell and Molecular Biology
CHEM 110
General Chemistry 1
\begin{tabular}{lcl} 
CHEM 120 & \((4)\) & General Chemistry 2 \\
MATH \(139^{*}\) & \((4)\) & Calculus 1 with Precalculus \\
MATH \(140^{*}\) & \((3)\) & Calculus 1 \\
MATH \(141^{* *}\) & \((4)\) & Calculus 2 \\
MATH \(150^{*}\) & \((4)\) & Calculus A \\
MATH \(151^{* *}\) & \((4)\) & Calculus B \\
PHYS \(101^{* * *}\) & \((4)\) & Introductory Physics - Mechanics \\
PHYS \(102+++\) & (4) & Introductory Physics - Electromagnetism \\
PHYS \(131^{* * *}\) & (4) & Mechanics and Waves \\
PHYS \(142+++\) & Electromagnetism and Optics
\end{tabular}

\section*{Core Required Courses ( 20 credits)}

Note: Students who have successfully completed an equivalent of CHEM 212 in CEGEP or elsewhere must replace these credits with a 3-credit elective course to satisfy the total credit requirement for the Neuroscience Major.
\begin{tabular}{lcl} 
BIOL 200 & \((3)\) & Molecular Biology \\
CHEM 212 & \((4)\) & Introductory Organic Chemistry 1 \\
NSCI 200 & \((3)\) & Introduction to Neuroscience 1 \\
NSCI 201 & \((3)\) & Introduction to Neuroscience 2 \\
NSCI 300 & \((3)\) & Neuroethics \\
NSCI 400D1 & \((.5)\) & Neuroscience Seminar \\
NSCI 400D2 & \((.5)\) & Neuroscience Seminar \\
PSYC 311 & \((3)\) & Human Cognition and the Brain
\end{tabular}

\section*{Complementary Courses (45-47 credits)}

3 credits from:
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 324 & (3) & Statistics \\
PSYC 305 & (3) & Statistics for Experimental Design
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 204 & (3) & Computer Programming for Life Sciences
\end{tabular}

3 credits from:
Note: Students who have successfully completed an equivalent to MATH 222 at CEGEP or elsewhere, must replace these credits with a 3-credit elective course to satisfy the total credit requirement for the Neuroscience Major.
\begin{tabular}{lll} 
BIOL 309 & (3) & Mathematical Models in Biology \\
MATH 222 & (3) & Calculus 3
\end{tabular}

\section*{Streams}

15 credits selected from one of the following streams:

\section*{A. Cell and Molecular Stream}

9 credits as follows:
\begin{tabular}{lll} 
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOL 202 & (3) & Basic Genetics \\
PHGY 311 & (3) & Channels, Synapses and Hormones
\end{tabular}

3 credits from:
BIOC 212
(3)
Molecular Mechanisms of Cell Function
BIOL 201
(3)
Cell Biology and Metabolism

3 credits from:
\begin{tabular}{lll} 
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
PHAR 300 & (3) & Drug Action
\end{tabular}

\section*{B. Neurophysiology/Neural Computation Stream}

3 credits as follows:
PHGY 311
(3)
Channels, Synapses and Hormones

3 credits as follows:
\begin{tabular}{lll} 
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOL 201 & (3) & Cell Biology and Metabolism
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
BIOL 306 & (3) & Neural Basis of Behaviour \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}

6 credits from:
Note: Students who have successfully completed an equivalent to MATH 222 at CEGEP or elsewhere, must replace these credits with a 3-credit elective course to satisfy the total credit requirement for the Neuroscience Major.
\begin{tabular}{lll} 
ANAT 321 & \((3)\) & Circuitry of the Human Brain \\
BIOL 309 & (3) & Mathematical Models in Biology \\
COMP 206** & (3) & Introduction to Software Systems \\
COMP 250 & (3) & Introduction to Computer Science \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra
\end{tabular}

\section*{C. Cognitive/Behavioural Stream}

6 credits as follows:
\begin{tabular}{lll} 
PSYC 213 & (3) & Cognition \\
PSYC 318 & (3) & Behavioural Neuroscience 2
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
BIOL 306 & (3) & Neural Basis of Behaviour \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}

6 credits from:
\begin{tabular}{lll} 
ANAT 321 & (3) & Circuitry of the Human Brain \\
PSYC 302 & (3) & The Psychology of Pain \\
PSYC 317 & (3) & Genes and Behaviour \\
PSYC 342 & \((3)\) & Hormones and Behaviour
\end{tabular}

\section*{Other Complementary Courses}

21-23 credits chosen as follows:
3-16 credits from:
\begin{tabular}{lll} 
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 389 & (3) & Laboratory in Neurobiology \\
NSCI 410D1 & (3) & Independent Research 1 \\
NSCI 410D2 & \((3)\) & Independent Research 1 \\
NSCI 420D1 & \((4.5)\) & Independent Research 2 \\
NSCI 420D2 & \((4.5)\) & Independent Research 2
\end{tabular}
\(5-20\) of the credits should be taken from the following lists. At least 15 of the 21-23 credits must be at the 400 - or 500-level, which could include the above NSCI 410D1/NSCID2 or NSCI 420D1/NSCI 420D2 research courses:

200- and 300-level courses:
* Students take either BIOL 201 OR BIOC 212, but not both.
** Students take either COMP 206 or COMP 250, but not both.
\begin{tabular}{lcl} 
ANAT 321 & \((3)\) & Circuitry of the Human Brain \\
BIOC 212* & (3) & Molecular Mechanisms of Cell Function \\
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOL 201* & (3) & Cell Biology and Metabolism \\
BIOL 202 & (3) & Basic Genetics \\
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 307 & (3) & Behavioural Ecology \\
BIOL 320 & (3) & Evolution of Brain and Behaviour \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
COMP 206** & (3) & Introduction to Software Systems \\
COMP 250** & (3) & Introduction to Computer Science \\
MATH 223 & (3) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
\hline MIMM 314 & (3) & Intermediate Immunology \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline PHAR 300 & (3) & Drug Action \\
\hline PHGY 210 & (3) & Mammalian Physiology 2 \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 314 & (3) & Integrative Neuroscience \\
\hline PSYC 213 & (3) & Cognition \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline
\end{tabular}
\(400-\) and 500-level courses:
\begin{tabular}{|c|c|c|}
\hline BIOL 414 & (3) & Invertebrate Brain Circuits and Behaviours \\
\hline BIOL 506 & (3) & Neurobiology of Learning \\
\hline BIOL 530 & (3) & Advances in Neuroethology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline BMDE 519 & (3) & Biomedical Signals and Systems \\
\hline COMP 546 & (4) & Computational Perception \\
\hline MATH 437 & (3) & Mathematical Methods in Biology \\
\hline MIMM 414 & (3) & Advanced Immunology \\
\hline MIMM 509 & (3) & Inflammatory Processes \\
\hline NEUR 502 & (3) & Basic and Clinical Aspects of Neuroimmunology \\
\hline NEUR 503 & (3) & Computational Neuroscience \\
\hline NEUR 507 & (3) & Topics in Radionuclide Imaging \\
\hline NEUR 550 & (3) & Free Radical Biomedicine \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHGY 425 & (3) & Analyzing Physiological Systems \\
\hline PHGY 451 & (3) & Advanced Neurophysiology \\
\hline PHGY 513 & (3) & Translational Immunology \\
\hline PHGY 520 & (3) & Ion Channels \\
\hline PHGY 524 & (3) & Chronobiology \\
\hline PHGY 556 & (3) & Topics in Systems Neuroscience \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline
\end{tabular}
\begin{tabular}{lll} 
PSYC 444 & \((3)\) & Sleep Mechanisms and Behaviour \\
PSYC 470 & (3) & Memory and Brain \\
PSYC 502 & (3) & Psychoneuroendocrinology \\
PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
PSYC 513 & (3) & Human Decision-Making \\
PSYC 514 & (3) & Neurobiology of Memory \\
PSYC 522 & (3) & Neurochemistry and Behaviour \\
PSYC 526 & (3) & Advances in Visual Perception \\
PSYC 529 & (3) & Music Cognition \\
PSYT 455 & (3) & Neurochemistry \\
PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders
\end{tabular}

\subsection*{11.12.26.5 Bachelor of Science (B.Sc.) - Honours Neuroscience (74 credits)}

The Honours program is intended for students who are interested in laboratory-based research and in acquiring a foundation in each of the 3 streams of the Neuroscience Major Program (cell and molecular; neurophysiology and computational; and cognition and behaviour). Students are admitted to the program after one year in a major.

Applicants must have taken a minimum of 27 graded credits in their U1 year, must have a CGPA of at least 3.5, and must have obtained minimum grades of B+ in both NSCI 200 and NSCI 201, as well as a minimum grade of C in BIOL 200, BIOC 212 or BIOL 201, and CHEM 212. Additional requirements for applying are provided on the Neuroscience website: (www.mcgill.ca/neuroscience). Meeting the minimum requirements does not guarantee admission to the Honours Neuroscience program.

To graduate from the program, students must have a CGPA of 3.30 and a minimum grade of B+ in NSCI 300, NSCI 400, and NSCI 430D1/D2.
"First Class Honours" is awarded to students who obtain a minimum cumulative grade point average of 3.70, a minimum program GPA of 3.30 , and a minimum grade of B+ in NSCI 300, NSCI 400, and NSCI 430D1/D2.

\section*{Required Courses (38 credits)}

Note: Students who have successfully completed an equivalent of CHEM 212 in CEGEP or elsewhere must replace these credits with a 3-credit elective course to satisfy the total credit requirement for Honours Neuroscience.
\begin{tabular}{lcl} 
BIOC 311 & \((3)\) & Metabolic Biochemistry \\
BIOL 200 & \((3)\) & Molecular Biology \\
CHEM 212 & \((4)\) & Introductory Organic Chemistry 1 \\
NSCI 200 & \((3)\) & Introduction to Neuroscience 1 \\
NSCI 201 & \((3)\) & Introduction to Neuroscience 2 \\
NSCI 300 & \((3)\) & Neuroethics \\
NSCI 400D1 & \((.5)\) & Neuroscience Seminar \\
NSCI 400D2 & \((.5)\) & Neuroscience Seminar \\
NSCI 430D1 & (4.5) & Honours Research Project \\
NSCI 430D2 & (3) & Honours Research Project \\
PHGY 311 & (3) & Humnels, Synapses and Hormones \\
PSYC 311 & (3) & Behavioural Neuroscience 2 \\
PSYC 318 & &
\end{tabular}

\section*{Complementary Courses (36 credits)}

3 credits from:
\begin{tabular}{lll} 
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOL 201 & (3) & Cell Biology and Metabolism
\end{tabular}

3 credits from:
\begin{tabular}{lcl} 
COMP 202 & (3) & Foundations of Programming \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
& & \\
3 credits from: & (3) & Biometry \\
BIOL 373 & (3) & Statistics \\
MATH 324 & (3) & Statistics for Experimental Design \\
PSYC 305 &
\end{tabular}

\section*{3 credits from:}

Note: Students who have successfully completed an equivalent to MATH 222 at CEGEP or elsewhere, must replace these credits with a 3-credit elective course to satisfy the total credit requirement for Honours Neuroscience.
\begin{tabular}{lll} 
BIOL 309 & (3) & Mathematical Models in Biology \\
MATH 222 & (3) & Calculus 3
\end{tabular}

3 credits from:
\begin{tabular}{lll} 
ANAT 321 & (3) & Circuitry of the Human Brain \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}

21 credits should be taken from the following lists. At least 15 of the 21 credits must be taken at the 400 - or 500-level.
\begin{tabular}{lll} 
200- and 300-level courses: \\
*Students may take either COMP 206 or COMP 250, but not both. \\
BIOL 202 & \((3)\) & Basic Genetics \\
BIOL 300 & \((3)\) & Molecular Biology of the Gene \\
BIOL 301 & \((4)\) & Cell and Molecular Laboratory \\
BIOL 306 & \((3)\) & Neural Basis of Behaviour \\
BIOL 307 & (3) & Behavioural Ecology \\
BIOL 320 & (3) & Evolution of Brain and Behaviour \\
BIOL 389 & (3) & Laboratory in Neurobiology \\
CHEM 222 & (3) & Introductory Organic Chemistry 2 \\
COMP \(206 *\) & Introduction to Software Systems \\
COMP \(250^{*}\) & (3) & Introduction to Computer Science \\
MATH 223 & (3) & Linear Algebra \\
MATH 315 & (3) & Ordinary Differential Equations \\
MATH 323 & (3) & Probability \\
MATH 324 & (3) & Statistics \\
MIMM 214 & (3) & Introductory Immunology: Elements of Immunity \\
MIMM 314 & Intermediate Immunology
\end{tabular}
\begin{tabular}{lcl} 
NEUR 310 & \((3)\) & Cellular Neurobiology \\
PHAR 300 & \((3)\) & Drug Action \\
PHGY 210 & \((3)\) & Mammalian Physiology 2 \\
PHGY 314 & \((3)\) & Integrative Neuroscience \\
PSYC 213 & \((3)\) & Cognition \\
PSYC 302 & \((3)\) & The Psychology of Pain \\
PSYC 315 & \((3)\) & Computational Psychology \\
PSYC 317 & \((3)\) & Genes and Behaviour \\
PSYC 319 & \((3)\) & Computational Models - Cognition \\
PSYC 342 & \((3)\) & Hormones and Behaviour
\end{tabular}

400- and 500-level courses:
\begin{tabular}{|c|c|c|}
\hline BIOL 414 & (3) & Invertebrate Brain Circuits and Behaviours \\
\hline BIOL 506 & (3) & Neurobiology of Learning \\
\hline BIOL 530 & (3) & Advances in Neuroethology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 580 & (3) & Genetic Approaches to Neural Systems \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline BMDE 519 & (3) & Biomedical Signals and Systems \\
\hline COMP 546 & (4) & Computational Perception \\
\hline MATH 437 & (3) & Mathematical Methods in Biology \\
\hline MIMM 414 & (3) & Advanced Immunology \\
\hline MIMM 509 & (3) & Inflammatory Processes \\
\hline NEUR 502 & (3) & Basic and Clinical Aspects of Neuroimmunology \\
\hline NEUR 503 & (3) & Computational Neuroscience \\
\hline NEUR 507 & (3) & Topics in Radionuclide Imaging \\
\hline NEUR 550 & (3) & Free Radical Biomedicine \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHGY 425 & (3) & Analyzing Physiological Systems \\
\hline PHGY 451 & (3) & Advanced Neurophysiology \\
\hline PHGY 513 & (3) & Translational Immunology \\
\hline PHGY 520 & (3) & Ion Channels \\
\hline PHGY 524 & (3) & Chronobiology \\
\hline PHGY 556 & (3) & Topics in Systems Neuroscience \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline
\end{tabular}
\begin{tabular}{lll} 
PSYC 513 & (3) & Human Decision-Making \\
PSYC 514 & (3) & Neurobiology of Memory \\
PSYC 522 & (3) & Neurochemistry and Behaviour \\
PSYC 526 & (3) & Advances in Visual Perception \\
PSYC 529 & (3) & Music Cognition \\
PSYT 455 & (3) & Neurochemistry \\
PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders
\end{tabular}

\subsection*{11.12.27 Nutrition (NUTR)}

\subsection*{11.12.27.1 Location}

\author{
School of Human Nutrition \\ Macdonald-Stewart Building, Room MS2-045 \\ 21,111 Lakeshore Road \\ Sainte-Anne-de-Bellevue QC H9X 3V9 \\ Website: mcgill.ca/nutrition
}

\subsection*{11.12.27.2 About Nutrition}

The School of Human Nutrition offers a Minor in Human Nutrition which can be taken by Science students; see Faculty of Agricultural and Environmental Sciences > Undergraduate > Overview of Programs Offered > section 2.4.6: Bachelor of Science in Nutritional Sciences - B.Sc.(Nutr.Sc.) (Overview).

NUTR 307 is considered as a course taught by the Faculty of Science.

\subsection*{11.12.28 Pathology (PATH)}

\subsection*{11.12.28.1 Location}

Department of Pathology
Duff Medical Building, B wing
3775 University Street
Montreal QC H3A 2B4
Telephone: 514-398-3045
Website: mcgill.ca/pathology

\subsection*{11.12.28.2 About Pathology}

Pathology is the specialized study of disease and is therefore one of the most multi-disciplinary fields of research in biomedical science. Courses in Pathology build on prior knowledge of cell and molecular biology and human physiology to examine the causes and consequences of specific diseases. Symptoms and therapies are linked to alterations from the cellular level to effects on the entire body.
Research in Pathology employs experimental techniques common to all areas of modern biology and in return, it contributes beneficial knowledge to many other disciplines. Our scientists collaborate with colleagues in physiology, pharmacology, biochemistry, anatomy, microbiology, and medicine to pursue this goal. We also collaborate with our clinical pathologists who evaluate human tissue samples to diagnose disease. Their contribution can provide a unique advantage in investigating the pathogenesis of disease, and this is particularly encouraged by the Experimental Pathology Unit (EPU) in our department. Various forms of cancer are a major focus within our laboratories due to the high prevalence of cancer in Canada, but research in Pathology targets all forms of disease as well as the study of toxicants and drug-induced disorders.
There are no B.Sc. programs in Pathology, but several undergraduate courses are available. Students from various biomedical science programs are drawn to the study of Pathology because it integrates their knowledge from other courses to provide a deeper understanding of the causes and consequences of diseases-an understanding that is relevant to everyday life as well as to their future career plans. The courses are an excellent preparation for careers in industry, hospitals, universities, government, and education where a knowledge of disease processes can be applied. They also provide a solid background for professional and postgraduate programs in medicine, dentistry, veterinary medicine, and many areas of advanced research.
Students who are interested in investigating disease at the graduate level can apply for the MSc or the PhD program in Pathology. For more information on Pathology programs, please visit the Department of Pathology website. Undergraduate courses PATH 300 (Human Disease), PATH 396 (Ugrad Research Project), and PATH 504 (Disease in Depth) are considered as courses taught by the Faculty of Science.

\subsection*{11.12.29 Pharmacology and Therapeutics (PHAR)}

\subsection*{11.12.29.1 Location}

McIntyre Medical Building, Room 1325
3655 Promenade Sir-William-Osler
Montreal QC H3G 1Y6
Telephone: 514-398-3623
Website: mcgill.ca/pharma

\subsection*{11.12.29.2 About Pharmacology and Therapeutics}

Pharmacology is the science that deals with all aspects of drugs and their interactions with living organisms. Thus, it involves the physical and chemical properties of drugs, their biochemical and physiological effects, mechanisms of action, pharmacokinetics, and therapeutic and other uses. Since the word "drug" encompasses all chemical substances that produce an effect on living cells, pharmacology is evidently a very extensive subject.

Pharmacology is a multidisciplinary science. It has developed its own set of principles and methods to study the mode of the action of drugs, but it has also utilized many techniques and approaches from various disciplines including biochemistry, physiology, anatomy, and molecular biology, as well as others. Pharmacology encompasses a number of different areas such as:
- pharmacogenomics;
- molecular biology;
- bioinformatics;
- neuropharmacology;
- reproductive pharmacology;
- endocrine pharmacology;
- receptor pharmacology;
- cardiovascular pharmacology;
- toxicology;
- developmental pharmacology;
- autonomic pharmacology;
- biochemical pharmacology;
- therapeutics.

Training in pharmacology is conducted at both the undergraduate and graduate levels. Because of its breadth, students may be attracted to the subject from a variety of viewpoints; this includes those completing a bachelor's degree in any number of basic science disciplines, such as biology, zoology, chemistry, physics, biochemistry, microbiology, anatomy, and physiology. At the undergraduate level, seven lecture courses are offered. A course involving research projects in pharmacology is also available to provide students with the opportunity to get first-hand experience in a pharmacology research laboratory. These courses provide students with knowledge concerning the actions of drugs on living systems and insight into approaches to basic pharmacological research.

\subsection*{11.12.29.3 Bachelor of Science (B.Sc.) - Minor Pharmacology (24 credits)}

The Minor Pharmacology is intended for students registered in a complementary B.Sc. program who are interested in a focused introduction to specialized topics in pharmacology to prepare them for professional schools, graduate education, or entry into jobs in industry or research institutes.

Students should declare their intent to enter the Minor in Pharmacology at the beginning of their U2 year. They must consult with, and obtain the approval of, the Coordinator for the Minor Program in the Department of Pharmacology and Therapeutics. Please contact the Student Affairs Coordinator: Chantal Grignon (undergradstudies.pharmacology@mcgill.ca; 514-398-3622).

All courses in the Minor program must be passed with a minimum grade C or better. Generally, no more than 6 credits of overlap are permitted between the Minor and the primary program.

\section*{Required Courses (6 credits)}

PHAR 300
(3) Drug Action

PHAR 301
Drugs and Disease

\section*{Complementary Courses (18 credits)}

3 credits selected from the following:

BIOC 212
(3)

BIOL 200
BIOL 201
(3)

Molecular Mechanisms of Cell Function
Molecular Biology
Cell Biology and Metabolism

3 credits selected from the following:
\begin{tabular}{lll} 
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2
\end{tabular}

12 credits selected from the following:
\begin{tabular}{lcl} 
PHAR 303 & (3) & Principles of Toxicology \\
PHAR 503* & (3) & Drug Discovery and Development 1 \\
PHAR 504 & (3) & Drug Discovery and Development 2 \\
PHAR 505* & (3) & Structural Pharmacology \\
PHAR 508 & (3) & Drug Discovery and Development 3 \\
PHAR 510 & (3) & New Advances in Antimicrobial \\
PHAR 540 & (3) & Advances in Industrial Biotechnology \\
PHAR 562 & (3) & Neuropharmacology \\
PHAR 563 & (3) & Endocrine Pharmacology \\
PHAR 565 & (3) & Epigenetic Drugs and Targets \\
PHAR 599D1** & (3) & Pharmacology Research Project \\
PHAR 599D2** & (3) & Pharmacology Research Project
\end{tabular}
* Students may take either PHAR 503 or PHAR 505.
** PHAR 599D1 and PHAR 599D2 are taken together.

\subsection*{11.12.29.4 Bachelor of Science (B.Sc.) - Major Pharmacology (67 credits)}

This program incorporates extensive studies in Pharmacology with a strong component of related biomedical sciences, providing a solid preparation for employment opportunities or for entry into graduate or professional training programs. Students must consult the Student Affairs Coordinator upon entering the program and every year thereafter to verify courses and progress.

\section*{Required Courses (40 credits)}

U1
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
PHAR 200 & (1) & Introduction to Pharmacology 1 \\
PHAR 201 & (1) & Introduction to Pharmacology 2 \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2 \\
PHGY 212 & (1) & Introductory Physiology Laboratory 1 \\
PHGY 213 & (1) & Introductory Physiology Laboratory 2
\end{tabular}

\footnotetext{
* Students who have taken the equivalent of CHEM 212, CHEM 222, and/or MATH 203 in CEGEP (as defined at:
http://www.mcgill.ca/students/transfercredit/prospective/cegep) are exempt and may not take these courses at McGill. Students must replace these credits with appropriate complementary course credits to satisfy the total credit requirements for their degree.
}

U2
\begin{tabular}{lcl} 
BIOC 311 & (3) & Metabolic Biochemistry \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
PHAR 300 & (3) & Drug Action \\
PHAR 301 & (3) & Drugs and Disease \\
PHAR 303 & \((3)\) & Principles of Toxicology
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{2 7}\) credits)}

3 credits, one of (recommended to be taken in Year 1):
\begin{tabular}{lll} 
ANAT 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOL 201 & (3) & Cell Biology and Metabolism
\end{tabular}

3 credits, one of (usually in Year 2):
\begin{tabular}{lll} 
CHEM 203 & (3) & Survey of Physical Chemistry \\
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1
\end{tabular}

3 credits, one of (usually in Year 2):
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 203* & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

9 credits selected from the following Pharmacology courses:
\begin{tabular}{lcl} 
PHAR 503** & (3) & Drug Discovery and Development 1 \\
PHAR 504 & (3) & Drug Discovery and Development 2 \\
PHAR 505** & (3) & Structural Pharmacology \\
PHAR 508 & (3) & Drug Discovery and Development 3 \\
PHAR 510 & (3) & New Advances in Antimicrobial \\
PHAR 540 & (3) & Advances in Industrial Biotechnology \\
PHAR 562 & (3) & Neuropharmacology \\
PHAR 563 & (3) & Endocrine Pharmacology \\
PHAR 565 & (3) & Epigenetic Drugs and Targets
\end{tabular}

9 credits selected from the following courses:
Committee approval is required to substitute a science course not in the list
below.
\begin{tabular}{lll} 
ANAT 321 & (3) & Circuitry of the Human Brain \\
ANAT 322 & (3) & Neuroendocrinology \\
ANAT 365 & (3) & Cellular Trafficking \\
ANAT 381+ & (3) & Experimental Embryology
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline ANAT 458* & (3) & Membranes and Cellular Signaling \\
\hline BIEN 510 & (3) & Engineered Nanomaterials for Biomedical Applications \\
\hline BIOC 312 & (3) & Biochemistry of Macromolecules \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 454 & (3) & Nucleic Acids \\
\hline BIOC 458* & (3) & Membranes and Cellular Signaling \\
\hline BIOC 470*** & (3) & Lipids and Lipoproteins in Disease \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline BIOT 505 & (3) & Selected Topics in Biotechnology \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 334 & (3) & Advanced Materials \\
\hline CHEM 462 & (3) & Green Chemistry \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline CHEM 503 & (3) & Drug Discovery \\
\hline CHEM 522 & (3) & Stereochemistry \\
\hline CHEM 552 & (3) & Physical Organic Chemistry \\
\hline COMP 204 & (3) & Computer Programming for Life Sciences \\
\hline EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
\hline EXMD 504 & (3) & Biology of Cancer \\
\hline EXMD 509*** & (3) & Gastrointestinal Physiology and Pathology \\
\hline EXMD 511 & (3) & Joint Venturing with Industry \\
\hline HGEN 400*** & (3) & Genetics in Medicine \\
\hline MIMM 387 & (3) & The Business of Science \\
\hline MIMM 414 & (3) & Advanced Immunology \\
\hline MIMM 466++ & (3) & Viral Pathogenesis \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline PARA 410 & (3) & Environment and Infection \\
\hline PATH 300 & (3) & Human Disease \\
\hline PHAR 503** & (3) & Drug Discovery and Development 1 \\
\hline PHAR 504 & (3) & Drug Discovery and Development 2 \\
\hline PHAR 505** & (3) & Structural Pharmacology \\
\hline PHAR 508 & (3) & Drug Discovery and Development 3 \\
\hline PHAR 510 & (3) & New Advances in Antimicrobial \\
\hline PHAR 522D1^ & (3) & Fundamentals of Disease Therapy \\
\hline PHAR 522D2^ & (3) & Fundamentals of Disease Therapy \\
\hline PHAR 524 & (3) & Clinical Mentorship \\
\hline PHAR 540 & (3) & Advances in Industrial Biotechnology \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHAR 563 & (3) & Endocrine Pharmacology \\
\hline
\end{tabular}
\begin{tabular}{lcl} 
PHAR 565 & (3) & Epigenetic Drugs and Targets \\
PHAR 599D1^^ & (3) & Pharmacology Research Project \\
PHAR 599D2^^ & (3) & Pharmacology Research Project \\
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
PHGY 314 & (3) & Integrative Neuroscience \\
PHGY 425+ & (3) & Analyzing Physiological Systems \\
PHGY 520 & (3) & Chronobiology \\
PHGY 524 & (3) & Population Health and Epidemiology \\
PPHS 501 & (3) & The Psychology of Pain \\
PSYC 302 & (3) & Statistics for Experimental Design \\
PSYC 305*** & (3) & Human Cognition and the Brain \\
PSYC 311 & (3) & Genes and Behaviour \\
PSYC 317*** & (3) & Behavioural Neuroscience 2 \\
PSYC 318*** & (3) & Issues in Drug Dependence \\
PSYT 301 & (3) & Neurochemistry \\
PSYT 455 & (3) & Advances: Neurobiology of Mental Disorders \\
PSYT 500 & (3) & Writing Research Articles \\
REDM 410 & (3) &
\end{tabular}

Note:
* Students may take either ANAT 458 or BIOC 458.
** Students may take either PHAR 503 or PHAR 505.
*** Access to these courses is not guaranteed.
+ Open to students who have the prerequisites.
++ Access to these courses is not guaranteed. Open to students who have the prerequisites.
^ If chosen, PHAR 522D1 and PHAR 522D2 are taken together.
\(\wedge \wedge\) If chosen, PHAR 599D1 and PHAR 599D2 are taken together.

\subsection*{11.12.29.5 Bachelor of Science (B.Sc.) - Honours Pharmacology (76 credits)}

The Honours program is designed as a preparation for graduate studies and research. In addition to the strong training provided by the Major program, it requires students to have direct research experience in a chosen area during their final year of study. Acceptance into the Honours program takes place in the Winter term of U2 and requires a CGPA of 3.50. Students who wish to enter the Honours program should follow the Major program; those who satisfactorily complete the first three terms with a CGPA of at least 3.50 and a mark of B+ or higher in core Pharmacology courses (PHAR 300, PHAR 301, and PHAR 303) are eligible for admission. Applications can be obtained from the office of the Department of Pharmacology in the McIntyre Medical Building or on the Departmental website.

\section*{Required Courses (46 credits)}

U1
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
PHAR 200 & (1) & Introduction to Pharmacology 1 \\
PHAR 201 & (1) & Introduction to Pharmacology 2 \\
PHGY 209 & (3) & Mammalian Physiology 1
\end{tabular}
\begin{tabular}{lcl} 
PHGY 210 & (3) & Mammalian Physiology 2 \\
PHGY 212 & (1) & Introductory Physiology Laboratory 1 \\
PHGY 213 & (1) & Introductory Physiology Laboratory 2 \\
& & \\
U2 & (3) & Metabolic Biochemistry \\
BIOC 311 & (4) & Cell and Molecular Laboratory \\
BIOL 301 & (3) & Drug Action \\
PHAR 300 & (3) & Drugs and Disease \\
PHAR 301 & (3) & Principles of Toxicology \\
PHAR 303 & & \\
U3 & & \\
PHAR 598D1 & (3) & Honours Pharmacology Research Project \\
PHAR 598D2 & (3) &
\end{tabular}
* Students who have taken the equivalent of CHEM 212, CHEM 222, and/or MATH 203 in CEGEP (as defined at :
http://www.mcgill.ca/students/transfercredit/prospective/cegep) are exempt and may not take these courses at McGill. Students must replace these credits with appropriate complementary course credits to satisfy the total credit requirements for their degree.

\section*{Complementary Courses (30 credits)}

3 credits, one of (highly recommended in Year 1):
\begin{tabular}{lll} 
ANAT 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOL 201 & (3) & Cell Biology and Metabolism
\end{tabular}

3 credits, one of (usually in Year 2):
\begin{tabular}{lll} 
CHEM 203 & (3) & Survey of Physical Chemistry \\
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1
\end{tabular}

3 credits, one of (usually in Year 2):
\begin{tabular}{lll} 
BIOL 373 & (3) & Biometry \\
MATH 203* & (3) & Principles of Statistics 1 \\
PSYC 204 & (3) & Introduction to Psychological Statistics
\end{tabular}

12 credits selected from the following Pharmacology courses:
\begin{tabular}{lcl} 
PHAR 390 & (3) & Laboratory in Pharmacology \\
PHAR 503** & (3) & Drug Discovery and Development 1 \\
PHAR 504 & (3) & Drug Discovery and Development 2 \\
PHAR 505** & (3) & Structural Pharmacology \\
PHAR 508 & (3) & Drug Discovery and Development 3 \\
PHAR 510 & (3) & New Advances in Antimicrobial \\
PHAR 540 & (3) & Advances in Industrial Biotechnology
\end{tabular}
\begin{tabular}{lll} 
PHAR 562 & (3) & Neuropharmacology \\
PHAR 563 & (3) & Endocrine Pharmacology \\
PHAR 565 & (3) & Epigenetic Drugs and Targets
\end{tabular}

9 credits selected for the following science courses:
Committee approval is required to substitute a science course not in the list below.
\begin{tabular}{|c|c|c|}
\hline ANAT 321 & (3) & Circuitry of the Human Brain \\
\hline ANAT 322 & (3) & Neuroendocrinology \\
\hline ANAT 365 & (3) & Cellular Trafficking \\
\hline ANAT 381+ & (3) & Experimental Embryology \\
\hline ANAT 458* & (3) & Membranes and Cellular Signaling \\
\hline BIEN 510 & (3) & Engineered Nanomaterials for Biomedical Applications \\
\hline BIOC 312 & (3) & Biochemistry of Macromolecules \\
\hline BIOC 450 & (3) & Protein Structure and Function \\
\hline BIOC 454 & (3) & Nucleic Acids \\
\hline BIOC 458* & (3) & Membranes and Cellular Signaling \\
\hline BIOC 470*** & (3) & Lipids and Lipoproteins in Disease \\
\hline BIOL 300 & (3) & Molecular Biology of the Gene \\
\hline BIOL 303 & (3) & Developmental Biology \\
\hline BIOL 306 & (3) & Neural Basis of Behaviour \\
\hline BIOL 314 & (3) & Molecular Biology of Cancer \\
\hline BIOL 370 & (3) & Human Genetics Applied \\
\hline BIOT 505 & (3) & Selected Topics in Biotechnology \\
\hline CHEM 302 & (3) & Introductory Organic Chemistry 3 \\
\hline CHEM 334 & (3) & Advanced Materials \\
\hline CHEM 462+ & (3) & Green Chemistry \\
\hline CHEM 502 & (3) & Advanced Bio-Organic Chemistry \\
\hline CHEM 503 & (3) & Drug Discovery \\
\hline CHEM 522 & (3) & Stereochemistry \\
\hline CHEM 552 & (3) & Physical Organic Chemistry \\
\hline COMP 204 & (3) & Computer Programming for Life Sciences \\
\hline EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
\hline EXMD 504 & (3) & Biology of Cancer \\
\hline EXMD 509*** & (3) & Gastrointestinal Physiology and Pathology \\
\hline EXMD 511 & (3) & Joint Venturing with Industry \\
\hline HGEN 400*** & (3) & Genetics in Medicine \\
\hline MIMM 387 & (3) & The Business of Science \\
\hline MIMM 414 & (3) & Advanced Immunology \\
\hline MIMM 466++ & (3) & Viral Pathogenesis \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline PARA 410 & (3) & Environment and Infection \\
\hline PATH 300 & (3) & Human Disease \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PHAR 390 & (3) & Laboratory in Pharmacology \\
\hline PHAR 503** & (3) & Drug Discovery and Development 1 \\
\hline PHAR 504 & (3) & Drug Discovery and Development 2 \\
\hline PHAR 505** & (3) & Structural Pharmacology \\
\hline PHAR 508 & (3) & Drug Discovery and Development 3 \\
\hline PHAR 510 & (3) & New Advances in Antimicrobial \\
\hline PHAR 522D1^ & (3) & Fundamentals of Disease Therapy \\
\hline PHAR 522D2^ & (3) & Fundamentals of Disease Therapy \\
\hline PHAR 524 & (3) & Clinical Mentorship \\
\hline PHAR 540 & (3) & Advances in Industrial Biotechnology \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHAR 563 & (3) & Endocrine Pharmacology \\
\hline PHAR 565 & (3) & Epigenetic Drugs and Targets \\
\hline PHGY 311 & (3) & Channels, Synapses and Hormones \\
\hline PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
\hline PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
\hline PHGY 314 & (3) & Integrative Neuroscience \\
\hline PHGY 425+ & (3) & Analyzing Physiological Systems \\
\hline PHGY 520 & (3) & Ion Channels \\
\hline PHGY 524 & (3) & Chronobiology \\
\hline PPHS 501 & (3) & Population Health and Epidemiology \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 305*** & (3) & Statistics for Experimental Design \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC \(317{ }^{* * *}\) & (3) & Genes and Behaviour \\
\hline PSYC 318*** & (3) & Behavioural Neuroscience 2 \\
\hline PSYT 301 & (3) & Issues in Drug Dependence \\
\hline PSYT 455 & (3) & Neurochemistry \\
\hline PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders \\
\hline REDM 410 & (3) & Writing Research Articles \\
\hline \multicolumn{3}{|l|}{Note:} \\
\hline \multicolumn{3}{|l|}{* Students may take either ANAT 458 or BIOC 458.} \\
\hline \multicolumn{3}{|l|}{**Students may take either PHAR 503 or PHAR 505.} \\
\hline \multicolumn{3}{|l|}{*** Access to these courses is not guaranteed} \\
\hline \multicolumn{3}{|l|}{+ Open to students who have the prerequisites} \\
\hline \multicolumn{3}{|l|}{++ Access to these courses is not guaranteed. Open to students who have the prerequisites.} \\
\hline \multicolumn{3}{|l|}{\({ }^{\wedge}\) If chosen, PHAR 522D1 and PHAR 522D2 are taken together.} \\
\hline
\end{tabular}

\subsection*{11.12.30 Physics (PHYS)}

\subsection*{11.12.30.1 Location}

Rutherford Physics Building, Room 108
3600 University Street
Montreal QC H3A 2T8

Telephone: 514-398-6477
Email: chairsec.physics@mcgill.ca
Website: physics.mcgill.ca

\subsection*{11.12.30.2 About Physics}

Physics is in many ways the parent of the other natural sciences and its discoveries and laws continually affect their development. Its range and scope extend in space and time from subnuclear particles to the universe itself. The subfields of physics-such as mechanics, thermodynamics, electricity, atomic physics, and quantum mechanics, to mention but a few-permeate all other scientific disciplines. People trained in physics are employed in industry, government, and educational systems where they find many challenges as teachers, researchers, administrators, and in the rapidly developing area of scientific business.

The two main undergraduate programs in physics at McGill are the Honours and the Major. The Honours program is highly specialized and the courses are very demanding. This program is appropriate for students who wish to make an in-depth study of the subject in preparation for graduate work and an academic or professional career in physics. The three multidisciplinary honours programs-in Mathematics and Physics, in Physics and Chemistry, and in Physics and Computer Science-are even more specialized and demanding. They are intended for students who wish to develop a strong basis in both physics and the other discipline and are intended as preparation for graduate work and a professional or academic career. Although these programs have a bias for theoretical work, they are broad enough and strong enough to prepare students for further study in either experimental physics or respectively mathematics, chemistry, or computer science.
The Major program, on the other hand, offers a broad training in classical and modern physics and yet leaves room for the student to take a meaningful sequence of courses in other areas. It is intended primarily for students who wish to pursue careers in fields for which physics provides a basis. However, this program also provides a preparation for graduate studies.

It is possible for students to transfer from the Major program to the Honours program after the first year of studies; see section 11.12.30.8: Bachelor of Science (B.Sc.) - Major Physics ( 63 credits).

There are also a number of other Major programs offered jointly with other departments:
- Atmospheric Sciences and Physics;
- Physics and Computer Science;
- Physics and Geophysics;
- Physiology and Physics;
and Minor programs:
- Electrical Engineering, available only to students in the Physics Major;
- Minor in Physics.

The Concentration program allows students a greater focus in biological physics. There is also a core Physics component of the Liberal Science program, for students less interested in a specialized education.

Students from outside of the Province of Quebec will ordinarily register in the Science Freshman program. Physics offers two sequences of courses for this program, described below.

The list of pre- and corequisites is not absolute. In many cases, permission of the Department may be sought to have a specific prerequisite waived. The procedure is to ask the professor in charge of the course to review the request for such a waiver. The prerequisites of the 100 -level courses are described in the following section entitled Science Freshman program.
Students interested in any of the Physics programs should contact the Department for an advisor.
A Science Major Concentration in physics is available to students pursuing the B.A. \& Sc. degree. This Major Concentration is described in Bachelor of Arts \& Science > Undergraduate > Browse Academic Units \& Programs > section 4.11.28: Physics.

\subsection*{11.12.30.3 Internship Year in Science (IYS)}

IYS is a pregraduate work experience program available to eligible students and normally taken between their U2 and U3 years. For more information, see section 11.11: Science Internships and Field Studies.
The following programs are also available with an internship component:
- Major in Physics
- Major Program in Atmospheric Science and Physics
- Major Program in Physics and Computer Science
- Major Program in Physics and Geophysics
- Honours in Physics
- Honours Program in Physics and Chemistry
- Honours Program in Physics and Computer Science
- Honours Program in Physics and Mathematics

\subsection*{11.12.30.4 Science Freshman Program}

Students entering McGill with a Quebec CEGEP profile in Science will normally begin their programs in Physics with courses at the 200 level.
Students without this profile should normally take courses PHYS 131 and PHYS 142 if they have previously taken physics at the high school level and should be taking differential calculus concurrently with PHYS 131 and integral calculus concurrently with PHYS 142. Those students who have not previously taken physics at the high school level and who intend to do programs in the Biological Sciences may instead take courses PHYS 101 and PHYS 102. All students are expected to have reasonable fluency in algebra, geometry, and trigonometry at the high school level. If this is not the case, then MATH 112 should be taken concurrently with PHYS 101. Those for whom this is not necessary are advised to take MATH 139 concurrently with PHYS 101.

\subsection*{11.12.30.5 Bachelor of Science (B.Sc.) - Minor Physics (18 credits)}

The 18 -credit Minor permits no overlap with any other programs. It contains no Mathematics courses, although many of the courses in it have Math pre- or corequisites. It will, therefore, be particularly appropriate to students in Mathematics, but it is also available to any Science student with the appropriate mathematical background.

Students in certain programs (e.g., the Major Chemistry) will find that there are courses in the Minor that are already part of their program, or that they may not take for credit because of a substantial overlap of material with a course or courses in their program. After consultation with an adviser, such students may complete the Minor by substituting any other physics course(s) from the Major or Honours Physics programs.

\section*{Required Course (3 credits)}
PHYS 257 (3) Experimental Methods 1

\section*{Complementary Courses ( 15 credits)}

15 credits to be selected as follows:

One of:
\begin{tabular}{lll} 
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 251 & (3) & Honours Classical Mechanics 1
\end{tabular}

One of:
\begin{tabular}{lll} 
PHYS 232 & (3) & Heat and Waves \\
PHYS 253 & (3) & Thermal Physics
\end{tabular}

One of:
\begin{tabular}{lll} 
PHYS 241 & (3) & Signal Processing \\
PHYS 258 & (3) & Experimental Methods 2
\end{tabular}

One of:
\begin{tabular}{lll} 
PHYS 224 & (3) & Physics of Music \\
PHYS 228 & (3) & Energy and the Environment \\
PHYS 260 & (3) & Modern Physics and Relativity \\
PHYS 320 & (3) & Introductory Astrophysics \\
PHYS 346 & (3) & Majors Quantum Physics
\end{tabular}

One of:
PHYS 340
(3) Majors Electricity and Magnetism

PHYS 350
Honours Electricity and Magnetism

\subsection*{11.12.30.6 Bachelor of Science (B.Sc.) - Minor Electrical Engineering ( \(\mathbf{2 4}\) credits)}

This Minor program is currently under review. Students are encouraged to contact Department of Electrical \& Computer Engineering for detailed information. [Program registration done by Student Affairs Office]

The Minor program does not carry professional recognition. Only students who satisfy the requirements of the Major Physics are eligible for this Minor. Students registered for this option cannot count PHYS 241 toward the requirements of the Major in Physics, and should replace this course by another Physics or Mathematics course. Students who select ECSE 334 in the Minor cannot count PHYS 328 toward the requirements of the Major in Physics, and should replace this course by another Physics or Mathematics course.

\section*{Required Courses (12 credits)}
\begin{tabular}{lll} 
ECSE 200 & (3) & Electric Circuits 1 \\
ECSE 210 & \((3)\) & Electric Circuits 2 \\
ECSE 303 & (3) & Signals and Systems 1 \\
ECSE 330 & (3) & Introduction to Electronics
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits from the following and 9 credits of ECSE courses at the 200, 300, or 400 level subject to approval by the Department of Electrical and Computer Engineering.
ECSE 305
(3) Probability and Random Signals 1
ECSE 334
Introduction to Microelectronics

\subsection*{11.12.30.7 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Physics (45 credits)}

The B.Sc.; Liberal Program - Core Science Component in Physics offers an overview of key physics topics, focusing on fundamentals. Topics include dynamics, electricity and magnetism, quantum mechanics, experimental methods and more. This program allows students also pursue a minor or major concentration in another discipline.

\section*{Program Prerequisites}

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.
\begin{tabular}{lll} 
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

One of:
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
BIOL 112 & (3) & Cell and Molecular Biology
\end{tabular}

MATH 133 and either MATH 140/141 or MATH 150/151.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

\section*{Required Courses ( 36 credits)}
\begin{tabular}{lcl} 
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations \\
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 232 & (3) & Heat and Waves \\
PHYS 241 & (3) & Signal Processing \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 333 & (3) & Thermal and Statistical Physics \\
PHYS 340 & (3) & Majors Electricity and Magnetism \\
PHYS 346 & (3) & Majors Quantum Physics
\end{tabular}

\section*{Complementary Courses ( 9 credits)}

9 credits selected from:
\begin{tabular}{lll} 
PHYS 328 & \((3)\) & Electronics \\
PHYS 331 & (3) & Topics in Classical Mechanics \\
PHYS 339 & (3) & Measurements Laboratory in General Physics \\
PHYS 342 & (3) & Majors Electromagnetic Waves \\
PHYS 434 & \((3)\) & Optics \\
PHYS 447 & \((3)\) & Applications of Quantum Mechanics
\end{tabular}

\subsection*{11.12.30.8 Bachelor of Science (B.Sc.) - Major Physics (63 credits)}

The B.Sc.; Major in Physics program covers a range of fundamental physical concepts from classical physics to modern topics relevant to contemporary research. The program may be completed in 60-63 credits.

\section*{Program Prerequisites}

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.
\begin{tabular}{lll} 
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
MATH 133 & (3) & Linear Algebra and Geometry \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

7-8 credits from:
\begin{tabular}{lll} 
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

Note: Either MATH 140 and MATH 141 or MATH 150 and MATH 151.
Required Courses (45 credits)
\begin{tabular}{|c|c|c|}
\hline COMP 208* & (3) & Computer Programming for Physical Sciences and Engineering \\
\hline MATH 223 & (3) & Linear Algebra \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 315 & (3) & Ordinary Differential Equations \\
\hline PHYS 230 & (3) & Dynamics of Simple Systems \\
\hline PHYS 232 & (3) & Heat and Waves \\
\hline PHYS 241 & (3) & Signal Processing \\
\hline PHYS 257 & (3) & Experimental Methods 1 \\
\hline PHYS 258 & (3) & Experimental Methods 2 \\
\hline PHYS 331 & (3) & Topics in Classical Mechanics \\
\hline PHYS 339 & (3) & Measurements Laboratory in General Physics \\
\hline PHYS 340 & (3) & Majors Electricity and Magnetism \\
\hline PHYS 342 & (3) & Majors Electromagnetic Waves \\
\hline PHYS 346 & (3) & Majors Quantum Physics \\
\hline PHYS 447 & (3) & Applications of Quantum Mechanics \\
\hline
\end{tabular}

\section*{Complementary Courses (15-18 credits)}
\(0-3\) credits from:
MATH 222*
(3)
Calculus 3
* Students who did not complete an equivalent to MATH 222 on entering the program must take this course.

3 credits from:
\begin{tabular}{lll} 
PHYS 329 & (3) & Statistical Physics with Biophysical Applications \\
PHYS 333 & (3) & Thermal and Statistical Physics
\end{tabular}

12 credits from:
\begin{tabular}{lcl} 
PHYS 319 & \((3)\) & Introduction to Biophysics \\
PHYS 320 & \((3)\) & Introductory Astrophysics \\
PHYS 321 & (3) & Data Science and Observational Astrophysics \\
PHYS 328 & (3) & Electronics \\
PHYS 359 & (3) & Advanced Physics Laboratory 1 \\
PHYS 404 & (3) & Climate Physics \\
PHYS 432 & (3) & Physics of Fluids \\
PHYS 434 & (3) & Optics \\
PHYS 449^ & (3) & Majors Research Project \\
PHYS 459D1**^ & (3) & Honours Research Thesis \\
PHYS 459D2**^ & (3) & Honours Research Thesis \\
PHYS 469 & (3) & Advanced Physics Laboratory 2 \\
PHYS 479 & (3) & Physics Research Project \\
PHYS 512 & (3) & Computational Physics with Applications
\end{tabular}
\begin{tabular}{lll} 
PHYS 519 & (3) & Advanced Biophysics \\
PHYS 521 & (3) & Astrophysics
\end{tabular}
** NOTE: If chosen, PHYS 459D1 and PHYS 459D2 are taken together.
\({ }^{\wedge}\) Note: A maximum of 6 credits of complementary courses may be from research courses PHYS 449, PHYS 479, and PHYS 459D1/459D2.
Note: It is possible for students to transfer from the Major to the Honours program after U1 year if they have passed all the 200-level required courses listed above and MATH 314 and MATH 315 with a C or better, and obtained a cumulative GPA of 3.5 or better in these courses. The written permission of an adviser is required for this change of program. The missing MATH 249 and PHYS 260 from the U1 Honours year should be taken in U2.

\subsection*{11.12.30.9 Bachelor of Science (B.Sc.) - Major Physics: Biological Physics (82 credits)}

This program may be completed in 81 or 82 credits.
The B.Sc.; Major in Physics; Biological Physics program keeps a strong core of foundational physics and specializes in biology, mathematics, physiology, computer science, and chemistry. Complementary courses provide background in molecular and cell biology, computer science, and organic chemistry, whereas introductory and advanced biophysics courses offered by the Physics Department as integrative courses

\section*{Required Courses ( 63 credits)}

Bio-Physical Science Core ( 27 credits)
\begin{tabular}{lcl} 
BIOL 219 & (4) & Introduction to Physical Molecular and Cell Biology \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
CHEM 212* & \((4)\) & Introductory Organic Chemistry 1 \\
MATH 222* & (3) & Calculus 3 \\
MATH 223 & \((3)\) & Linear Algebra \\
MATH 315 & \((3)\) & Ordinary Differential Equations \\
MATH 323 & \((3)\) & Probability \\
PHYS 319 & \((3)\) & Introduction to Biophysics \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications
\end{tabular}
* Students who have taken the equivalent of CHEM 212 or MATH 222 can make up the credits with complementary 3 or 4 credits courses in consultation wit the program adviser.

Biology and Mathematics (6 credits)
\begin{tabular}{lll} 
BIOL 202 & (3) & Basic Genetics \\
MATH 314 & (3) & Advanced Calculus
\end{tabular}

Physics (30 credits)
\begin{tabular}{lcl} 
PHYS 230 & \((3)\) & Dynamics of Simple Systems \\
PHYS 232 & \((3)\) & Heat and Waves \\
PHYS 241 & \((3)\) & Signal Processing \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 340 & (3) & Majors Electricity and Magnetism \\
PHYS 342 & (3) & Majors Electromagnetic Waves \\
PHYS 346 & (3) & Majors Quantum Physics \\
PHYS 449 & (3) & Majors Research Project \\
PHYS 519 & (3) & Advanced Biophysics
\end{tabular}

\section*{Complementary Courses}
(18-19 credits)
3 credits selected from:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 250 & (3) & Introduction to Computer Science \\
& & \\
3 credits selected from: & & Electronics \\
PHYS 328 & (3) & Topics in Classical Mechanics \\
PHYS 331 & (3) &
\end{tabular}

3 credits selected from:

PHYS 339
(3)

PHYS 359
(3)

PHYS 469

3 credits selected from:
\begin{tabular}{lll} 
CHEM 514 & \((3)\) & Biophysical Chemistry \\
MATH 437 & (3) & Mathematical Methods in Biology \\
PHGY 425 & (3) & Analyzing Physiological Systems \\
PHYS 432 & (3) & Physics of Fluids \\
PHYS 434 & (3) & Optics \\
PHYS 447 & (3) & Applications of Quantum Mechanics
\end{tabular}

6 to 7 credits selected from:
BIOL 300
BIOL 301
BIOL 303
BIOL 306
BIOL 313
BIOL 316
BIOL 551
(3)
(4)
(3)
(3)
(3)
(3)
(3)

Measurements Laboratory in General Physics
Advanced Physics Laboratory 1
Advanced Physics Laboratory 2

PHYS 447
(3)

Applications of Quantum Mechanics

\subsection*{11.1230.10 Bachelor of Science (B.Sc.) - Major Physics and Geophysics (69 credits)}

This joint program in Physics and Geophysics provides a firm basis for graduate work in geophysics and related fields as well as a sound preparation for those who wish to embark on a career directly after the B.Sc.

\section*{Program Prerequisites}

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.
\begin{tabular}{lll} 
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

One of:
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
BIOL 112 & (3) & Cell and Molecular Biology
\end{tabular}

MATH 133 and either MATH 140/141 or MATH 150/151.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

\section*{Required Courses (57 credits)}
\begin{tabular}{|c|c|c|}
\hline EPSC 231 & (3) & Field School 1 \\
\hline EPSC 240 & (3) & Geology in the Field \\
\hline EPSC 303 & (3) & Structural Geology \\
\hline EPSC 320 & (3) & Elementary Earth Physics \\
\hline MATH 222 & (3) & Calculus 3 \\
\hline MATH 223 & (3) & Linear Algebra \\
\hline MATH 314 & (3) & Advanced Calculus \\
\hline MATH 315 & (3) & Ordinary Differential Equations \\
\hline PHYS 230 & (3) & Dynamics of Simple Systems \\
\hline PHYS 232 & (3) & Heat and Waves \\
\hline PHYS 241 & (3) & Signal Processing \\
\hline PHYS 257 & (3) & Experimental Methods 1 \\
\hline PHYS 258 & (3) & Experimental Methods 2 \\
\hline PHYS 331 & (3) & Topics in Classical Mechanics \\
\hline PHYS 333 & (3) & Thermal and Statistical Physics \\
\hline PHYS 340 & (3) & Majors Electricity and Magnetism \\
\hline PHYS 342 & (3) & Majors Electromagnetic Waves \\
\hline PHYS 346 & (3) & Majors Quantum Physics \\
\hline PHYS 432 & (3) & Physics of Fluids \\
\hline
\end{tabular}

\section*{Complementary Courses (12 credits)}
\begin{tabular}{lcl} 
EPSC 350 & \((3)\) & Tectonics \\
EPSC 425 & (3) & Sediments to Sequences \\
EPSC 435 & (3) & Applied Geophysics \\
EPSC 482 & (3) & Research in Earth and Planetary Sciences \\
EPSC 510 & (3) & Geodynamics \\
EPSC 520 & (3) & Earthquake Physics and Geology \\
EPSC 549 & (3) & Hydrogeology \\
MATH 319 & (3) & Partial Differential Equations
\end{tabular}
\begin{tabular}{lll} 
PHYS 339 & (3) & Measurements Laboratory in General Physics \\
PHYS 404 & (3) & Climate Physics \\
PHYS 449 & (3) & Majors Research Project \\
PHYS 512 & (3) & Computational Physics with Applications
\end{tabular}

\subsection*{11.1230.11 Bachelor of Science (B.Sc.) - Major Physics and Computer Science (66 credits)}

The Major Physics and Computer Science is designed to give motivated students the opportunity to combine the two fields in a way that will distinguish them from the graduates of either field by itself. The two disciplines complement each other, with physics providing an analytic problem-solving outlook and basic understanding of nature, while computer science enhances the ability to make practical and marketable applications, in addition to having its own theoretical interest. Graduates of this program may be able to present themselves as being more immediately useful than a pure physics major, but with more breadth than just a programmer. They will be able to demonstrate their combined expertise in the Special Project course which is the centrepiece of the final year of the program.

\section*{Program Prerequisites}

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.
\begin{tabular}{lll} 
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

One of:
\begin{tabular}{lll} 
BIOL 111 & (3) & Principles: Organismal Biology \\
BIOL 112 & (3) & Cell and Molecular Biology
\end{tabular}

MATH 133 and either MATH 140/141 or MATH 150/151.
\begin{tabular}{lll} 
MATH 133 & (3) & Linear Algebra and Geometry \\
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

\section*{U1 Required Courses (21 credits)}
\begin{tabular}{lcl} 
COMP 250 & (3) & Introduction to Computer Science \\
MATH 222 & (3) & Calculus 3 \\
MATH 223 & (3) & Linear Algebra \\
MATH 240 & (3) & Discrete Structures \\
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2
\end{tabular}

\section*{U2 Required Courses (24 credits)}
\begin{tabular}{lll} 
COMP 206 & (3) & Introduction to Software Systems \\
COMP 251 & (3) & Algorithms and Data Structures
\end{tabular}
\begin{tabular}{lcl} 
COMP 302 & (3) & Programming Languages and Paradigms \\
COMP 350 & (3) & Numerical Computing \\
MATH 314 & (3) & Advanced Calculus \\
MATH 315 & (3) & Ordinary Differential Equations \\
PHYS 232 & (3) & Heat and Waves \\
PHYS 241 & (3) & Signal Processing
\end{tabular}

\section*{U3 Required Courses ( 21 credits)}
\begin{tabular}{lcl} 
COMP 360 & \((3)\) & Algorithm Design \\
MATH 323 & (3) & Probability \\
PHYS 331 & (3) & Topics in Classical Mechanics \\
PHYS 339 & (3) & Measurements Laboratory in General Physics \\
PHYS 340 & (3) & Majors Electricity and Magnetism \\
PHYS 346 & (3) & Majors Quantum Physics \\
PHYS 489 & \((3)\) & Special Project
\end{tabular}

\subsection*{11.1230.12 Bachelor of Science (B.Sc.) - Honours Physics (81 credits)}

The B.Sc.; Honours in Physics provides a broad view of physics from classical to modern topics as well as a choice of specialized high level courses relevant for contemporary research. The students have the opportunity to participate in research.

This is a demanding program. This program may be completed in 78 or 81 credits.

\section*{Program Prerequisites}

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.
\begin{tabular}{lll} 
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

7-8 credits from:
\begin{tabular}{lll} 
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

Note: Either MATH140 and MATH141 or MATH150 and MATH151.

\section*{Required Courses (51 credits)}
\begin{tabular}{lcl} 
MATH 247 & (3) & Honours Applied Linear Algebra \\
MATH 248 & (3) & Honours Vector Calculus \\
MATH 249 & (3) & Honours Complex Variables \\
MATH 325 & (3) & Honours Ordinary Differential Equations \\
MATH 475 & (3) & Honours Partial Differential Equations
\end{tabular}
\begin{tabular}{lcl} 
PHYS 241 & (3) & Signal Processing \\
PHYS 251 & (3) & Honours Classical Mechanics 1 \\
PHYS 253 & (3) & Thermal Physics \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 260 & (3) & Modern Physics and Relativity \\
PHYS 350 & (3) & Honours Electricity and Magnetism \\
PHYS 351 & (3) & Honours Classical Mechanics 2 \\
PHYS 352 & (3) & Honours Electromagnetic Waves \\
PHYS 357 & (3) & Honours Quantum Physics 1 \\
PHYS 362 & (3) & Statistical Mechanics \\
PHYS 457 & (3) & Honours Quantum Physics 2
\end{tabular}

\section*{Complementary Courses (27-30 credits)}

0-3 credits from:
MATH 222*
(3)
Calculus 3
* Students who did not complete an equivalent of MATH 222 on entering the program must take this course in the first semester.

3 credits from:
\begin{tabular}{lll} 
PHYS 359 & (3) & Advanced Physics Laboratory 1 \\
PHYS 469 & (3) & Advanced Physics Laboratory 2
\end{tabular}

6 credits selected from:
Note: If chosen, PHYS 459D1 and PHYS 459D2 are taken together.
\begin{tabular}{lll} 
PHYS 359 & (3) & Advanced Physics Laboratory 1 \\
PHYS 459D1 & (3) & Honours Research Thesis \\
PHYS 459D2 & (3) & Honours Research Thesis \\
PHYS 469 & (3) & Advanced Physics Laboratory 2 \\
PHYS 479 & (3) & Physics Research Project
\end{tabular}

Note: Students cannot take both PHYS 359 and PHYS 469 to meet this requirement as one of them was taken to meet the previous requirement above.

18 credits selected from the list below (students may substitute one or more courses with any 3-credit course approved by the Department of Physics):
\begin{tabular}{lll} 
PHYS 404 & \((3)\) & Climate Physics \\
PHYS 432 & \((3)\) & Physics of Fluids \\
PHYS 434 & (3) & Optics \\
PHYS 479 & (3) & Physics Research Project \\
PHYS 512 & (3) & Computational Physics with Applications \\
PHYS 514 & (3) & General Relativity \\
PHYS 519 & (3) & Advanced Biophysics \\
PHYS 521 & (3) & Astrophysics \\
PHYS 534 & (3) & Nanoscience and Nanotechnology
\end{tabular}
\begin{tabular}{lcl} 
PHYS 551 & \((3)\) & Quantum Theory \\
PHYS 557 & \((3)\) & Nuclear Physics \\
PHYS 558 & \((3)\) & Solid State Physics \\
PHYS 559 & \((3)\) & Advanced Statistical Mechanics \\
PHYS 562 & (3) & Electromagnetic Theory \\
PHYS 567 & \((3)\) & Particle Physics
\end{tabular}

\subsection*{11.1230.13 Bachelor of Science (B.Sc.) - Honours Physics: Biological Physics (82 credits)}

The B.Sc.; Honours in Physics; Biological Physics program contains a strong core of foundational physics and specializes in biology, mathematics, physiology, computer science, and chemistry. This Honours program offers a more rigorous preparation, with additional research experience, in biophysics. The program includes a research project within a biophysics lab in the department that is completed in the final year. This program may be completed in 81 or 82 credits

\section*{Required Courses (63 credits)}
\begin{tabular}{lcl} 
Bio-Physical Sciences Core (24 credits) & \\
BIOL 219 & \((4)\) & Introduction to Physical Molecular and Cell Biology \\
BIOL 395 & \((1)\) & Quantitative Biology Seminar \\
CHEM 212* & \((4)\) & Introductory Organic Chemistry 1 \\
MATH 247 & \((3)\) & Honours Applied Linear Algebra \\
MATH 315 & \((3)\) & Ordinary Differential Equations \\
MATH 323 & \((3)\) & Probability \\
PHYS 319 & \((3)\) & Introduction to Biophysics \\
PHYS 329 & \((3)\) & Statistical Physics with Biophysical Applications
\end{tabular}
* Students who have taken the equivalent of CHEM 212 can make up the credits with complementary 3 or 4 credit courses in consultation with the program adviser.

Biology and Mathematics (6 credits)
\begin{tabular}{lll} 
BIOL 202 & (3) & Basic Genetics \\
MATH 248 & (3) & Honours Vector Calculus
\end{tabular}

Physics (33 credits)
\begin{tabular}{lcl} 
PHYS 241 & (3) & Signal Processing \\
PHYS 251 & (3) & Honours Classical Mechanics 1 \\
PHYS 253 & (3) & Thermal Physics \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 346 & (3) & Majors Quantum Physics \\
PHYS 350 & (3) & Honours Electricity and Magnetism \\
PHYS 352 & (3) & Honours Electromagnetic Waves \\
PHYS 459D1 & (3) & Honours Research Thesis \\
PHYS 459D2 & (3) & Honours Research Thesis \\
PHYS 519 & (3) & Advanced Biophysics
\end{tabular}

Complementary Courses

\section*{(18-19 credits)}

3 credits selected from:
\begin{tabular}{lll} 
COMP 202 & (3) & Foundations of Programming \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

3 credits selected from:
PHYS 328

\section*{Electronics}

Honours Classical Mechanics 2

3 credits selected from:
PHYS 339
PHYS 359
PHYS 469
Measurements Laboratory in General Physics
Advanced Physics Laboratory 1
Advanced Physics Laboratory 2

3 credits selected from:
\begin{tabular}{lll} 
CHEM 514 & (3) & Biophysical Chemistry \\
MATH 437 & (3) & Mathematical Methods in Biology \\
PHGY 425 & (3) & Analyzing Physiological Systems \\
PHYS 432 & (3) & Physics of Fluids \\
PHYS 434 & (3) & Optics \\
PHYS 447 & (3) & Applications of Quantum Mechanics
\end{tabular}

6 to 7 credits selected from:
\begin{tabular}{lll} 
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
BIOL 303 & (3) & Developmental Biology \\
BIOL 306 & (3) & Neural Basis of Behaviour \\
BIOL 313 & (3) & Eukaryotic Cell Biology \\
BIOL 316 & (3) & Biomembranes and Organelles \\
BIOL 551 & (3) & Principles of Cellular Control
\end{tabular}

\subsection*{11.1230.14 Bachelor of Science (B.Sc.) - Honours Mathematics and Physics (81 credits)}

This is a specialized and demanding program intended for students who wish to develop a strong basis in both Mathematics and Physics in preparation for graduate work and a professional or academic career. Although the program is optimized for theoretical physics, it is broad enough and strong enough to prepare students for further study in either experimental physics or mathematics.

The minimum requirement for entry into the program is completion with high standing of the usual CEGEP courses in physics and in mathematics, or the Physics Program Prerequisites as explained below. In addition, a student who has not completed the equivalent of MATH 222 must take it in the first term without receiving credit toward the 81 credits required in the Honours program.
A student whose average in the required and complementary courses in any year falls below a GPA of 3.00, or whose grade in any individual required or complementary course falls below a C (unless the student improves the grade to a C or higher through a supplemental exam or by retaking the course), may not register in the Honours program the following year, or graduate with the Honours degree, except with the permission of both departments. The student will have two advisers, one from Mathematics and the other from Physics.

\section*{Program Prerequisites}

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.
\begin{tabular}{lll} 
CHEM 110 & \((4)\) & General Chemistry 1 \\
CHEM 120 & \((4)\) & General Chemistry 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & (4) & Electromagnetism and Optics
\end{tabular}

One of:
BIOL 111
(3) Principles: Organismal Biology
BIOL 112
(3)
Cell and Molecular Biology

MATH 133 and either MATH 140/141 or MATH 150/151.
\begin{tabular}{lll} 
MATH 133 & \((3)\) & Linear Algebra and Geometry \\
MATH 140 & \((3)\) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & \((4)\) & Calculus B
\end{tabular}

\section*{U1 Required Courses (27 credits)}
\begin{tabular}{lcl} 
MATH 235 & (3) & Algebra 1 \\
MATH 248 & (3) & Honours Vector Calculus \\
MATH 249 & (3) & Honours Complex Variables \\
MATH 325 & (3) & Honours Ordinary Differential Equations \\
PHYS 241 & (3) & Signal Processing \\
PHYS 251 & (3) & Honours Classical Mechanics 1 \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 260 & (3) & Modern Physics and Relativity
\end{tabular}

\section*{U2 Required Courses (24 credits)}
\begin{tabular}{lcl} 
MATH 255 & (3) & Honours Analysis 2 \\
MATH 475 & (3) & Honours Partial Differential Equations \\
PHYS 253 & (3) & Thermal Physics \\
PHYS 350 & (3) & Honours Electricity and Magnetism \\
PHYS 351 & (3) & Honours Classical Mechanics 2 \\
PHYS 357 & (3) & Honours Quantum Physics 1 \\
PHYS 362 & (3) & Statistical Mechanics \\
PHYS 457 & (3) & Honours Quantum Physics 2
\end{tabular}

\section*{U3 Required Courses (12 credits)}

MATH 454
(3)

Honours Analysis 3
\begin{tabular}{lll} 
MATH 458 & (3) & Honours Differential Geometry \\
PHYS 352 & (3) & Honours Electromagnetic Waves \\
PHYS 359 & (3) & Advanced Physics Laboratory 1
\end{tabular}

\section*{Complementary Courses (18 credits)}

U1 Complementary Course ( 3 credits)
\begin{tabular}{lll} 
MATH 247 & (3) & Honours Applied Linear Algebra \\
MATH 251 & (3) & Honours Algebra 2
\end{tabular}

U2 Complementary Courses ( 3 credits)
\begin{tabular}{lll} 
MATH 242 & (3) & Analysis 1 \\
MATH \(254^{* *}\) & (3) & Honours Analysis 1
\end{tabular}
** It is strongly recommended that students take MATH 254.

\section*{U3 Complementary Courses (12 credits)}

12 credits are selected as follows:
3 credits from:
\begin{tabular}{lll} 
MATH 455 & (3) & Honours Analysis 4 \\
MATH 456 & (3) & Honours Algebra 3
\end{tabular}

6 credits selected from:
\begin{tabular}{lcl} 
PHYS 404 & (3) & Climate Physics \\
PHYS 432 & (3) & Physics of Fluids \\
PHYS 459D1* & (3) & Honours Research Thesis \\
PHYS 459D2* & (3) & Honours Research Thesis \\
PHYS 479 & (3) & Physics Research Project \\
PHYS 512 & (3) & Computational Physics with Applications \\
PHYS 514 & (3) & General Relativity \\
PHYS 519 & (3) & Advanced Biophysics \\
PHYS 521 & (3) & Astrophysics \\
PHYS 551 & (3) & Quantum Theory \\
PHYS 557 & (3) & Nuclear Physics \\
PHYS 558 & (3) & Solid State Physics \\
PHYS 559 & (3) & Advanced Statistical Mechanics \\
PHYS 562 & (3) & Electromagnetic Theory \\
PHYS 567 & (3) & Particle Physics
\end{tabular}
* Note: PHYS 459D1 and PHYS 459D2 are taken together.

3 credits in Honours Mathematics.

\subsection*{11.1230.15 Bachelor of Science (B.Sc.) - Honours Physics and Chemistry (80 credits)}

This program provides a strong basis in both chemistry and physics. It contains a core of chemistry courses and a mix of honours-level courses in physics and mathematics.

To graduate with an Honours degree, a student must have, at time of graduation, a CGPA of at least 3.0 in the required and complementary courses of the program, as well as an overall CGPA of at least 3.0.

This is a specialized and demanding program. The student will have two advisers, one from Chemistry and the other from Physics. This program may be completed in 80 or 83 credits.

\section*{Program Prerequisites}

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.
\begin{tabular}{lll} 
CHEM 110 & (4) & General Chemistry 1 \\
CHEM 120 & (4) & General Chemistry 2 \\
PHYS 131 & (4) & Mechanics and Waves \\
PHYS 142 & \((4)\) & Electromagnetism and Optics \\
& & \\
3 credits from: & (3) & Principles: Organismal Biology \\
BIOL 111 & (3) & Cell and Molecular Biology \\
BIOL 112 & (3) & Linear Algebra and Geometry \\
MATH 133 &
\end{tabular}

7-8 credits from:
\begin{tabular}{lll} 
MATH 140 & (3) & Calculus 1 \\
MATH 141 & (4) & Calculus 2 \\
MATH 150 & (4) & Calculus A \\
MATH 151 & (4) & Calculus B
\end{tabular}

Note: Either MATH 140 and MATH 141 or MATH 150 and MATH 151.

\section*{Required Courses ( 68 credits)}
\begin{tabular}{lll} 
CHEM 212 & (4) & Introductory Organic Chemistry 1 \\
CHEM 213 & (3) & Introductory Physical Chemistry 1: Thermodynamics \\
CHEM 273 & (3) & Introductory Physical Chemistry 2: Kinetics and Methods \\
CHEM 281 & (3) & Inorganic Chemistry 1 \\
CHEM 355 & (3) & Applications of Quantum Chemistry \\
CHEM 365 & (2) & Statistical Thermodynamics \\
CHEM 493 & (2) & Advanced Physical Chemistry Laboratory \\
CHEM 556 & (3) & Advanced Quantum Mechanics \\
CHEM 574 & (3) & Introductory Polymer Chemistry \\
COMP 208 & (3) & Computer Programming for Physical Sciences and Engineering \\
MATH 247 & (3) & Honours Applied Linear Algebra \\
MATH 248 & (3) & Honours Vector Calculus \\
MATH 249 & (3) & Honours Complex Variables \\
MATH 325 & (3) & Honours Ordinary Differential Equations
\end{tabular}
\begin{tabular}{lcl} 
PHYS 241 & (3) & Signal Processing \\
PHYS 251 & (3) & Honours Classical Mechanics 1 \\
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 350 & (3) & Honours Electricity and Magnetism \\
PHYS 352 & \((3)\) & Honours Electromagnetic Waves \\
PHYS 357 & (3) & Honours Quantum Physics 1 \\
PHYS 457 & (3) & Honours Quantum Physics 2 \\
PHYS 558 & (3) & Solid State Physics
\end{tabular}

\section*{Complementary Courses (12-15 credits)}
(with at least 3 credits in Chemistry and 3 credits in Physics)
\(0-3\) credits from:
MATH 222*
(3)
Calculus 3
*Note: A student who has not taken MATH 222 (or equivalent) prior to entering the program must take it in their first semester, increasing the program credits from 80 to 83 . The student must then take MATH 314 in their second semester instead of MATH 248, if scheduling requires it.

3 credits selected from:
\begin{tabular}{lll} 
CHEM 593 & (3) & Statistical Mechanics \\
PHYS 559 & (3) & Advanced Statistical Mechanics
\end{tabular}

9 credits selected from the list below:
Note: PHYS 459D1 and PHYS 459D2 are taken together.
\begin{tabular}{lll} 
CHEM 480D1 & \((1.5)\) & Undergraduate Research Project 2 \\
CHEM 480D2 & \((1.5)\) & Undergraduate Research Project 2 \\
CHEM 505 & (3) & Computer Modeling of Molecules and Materials \\
CHEM 531 & (3) & Chemistry of Inorganic Materials \\
CHEM 575 & (3) & Chemical Kinetics \\
CHEM 585 & (3) & Colloid Chemistry \\
PHYS 351 & (3) & Honours Classical Mechanics 2 \\
PHYS 359 & (3) & Advanced Physics Laboratory 1 \\
PHYS 404 & (3) & Climate Physics \\
PHYS 434 & (3) & Optics \\
PHYS 459D1 & (3) & Honours Research Thesis \\
PHYS 459D2 & (3) & Honours Research Thesis \\
PHYS 469 & (3) & Advanced Physics Laboratory 2 \\
PHYS 479 & (3) & Physics Research Project \\
PHYS 512 & (3) & Computational Physics with Applications \\
PHYS 562 & (3) & Electromagnetic Theory
\end{tabular}

\subsection*{11.1230.16 Bachelor of Science (B.Sc.) - Honours Physics and Computer Science (81 credits)}

This program provides essential background in physics and computer science at a level sufficient to pursue courses at the 400-and 500-level in either discipline. The program is intended to be flexible to allow students to take either more physics or more computer science courses at the advanced level.

Students entering this Honours program should have high standing in mathematics, physics, and computer science.
To graduate with an Honours degree, a student must have, at time of graduation, a CGPA of at least 3.0 in the required and complementary courses of the program, as well as an overall CGPA of at least 3.0
The program may completed in 78 or 81 credits.

Note: COMP 202-or an equivalent introduction to computer programming course- is a program prerequisite. U0 students may take COMP 202 as a Freshman Science course; new U1 students should take it as an elective in their first semester.

\section*{Required Courses ( 63 credits)}
*Note: The student must then take MATH 314 in their second semester instead of MATH 248, if scheduling requires it.
\begin{tabular}{|c|c|c|}
\hline COMP 206 & (3) & Introduction to Software Systems \\
\hline COMP 250 & (3) & Introduction to Computer Science \\
\hline COMP 252 & (3) & Honours Algorithms and Data Structures \\
\hline COMP 273 & (3) & Introduction to Computer Systems \\
\hline COMP 302 & (3) & Programming Languages and Paradigms \\
\hline COMP 350 & (3) & Numerical Computing \\
\hline MATH 240 & (3) & Discrete Structures \\
\hline MATH 247 & (3) & Honours Applied Linear Algebra \\
\hline MATH 248* & (3) & Honours Vector Calculus \\
\hline MATH 249 & (3) & Honours Complex Variables \\
\hline MATH 314* & (3) & Advanced Calculus \\
\hline MATH 325 & (3) & Honours Ordinary Differential Equations \\
\hline PHYS 241 & (3) & Signal Processing \\
\hline PHYS 251 & (3) & Honours Classical Mechanics 1 \\
\hline PHYS 253 & (3) & Thermal Physics \\
\hline PHYS 257 & (3) & Experimental Methods 1 \\
\hline PHYS 258 & (3) & Experimental Methods 2 \\
\hline PHYS 350 & (3) & Honours Electricity and Magnetism \\
\hline PHYS 352 & (3) & Honours Electromagnetic Waves \\
\hline PHYS 357 & (3) & Honours Quantum Physics 1 \\
\hline PHYS 362 & (3) & Statistical Mechanics \\
\hline PHYS 457 & (3) & Honours Quantum Physics 2 \\
\hline
\end{tabular}

\section*{Complementary Courses ( 15 credits)}

At least 6 of the 15 complementary credits must come from a course at the 400 - or 500-level (excluding COMP 400 and PHYS 479), and of these at least 3 must be from a COMP course.
\(0-3\) credits from:
MATH 222* (3) Calculus 3

\footnotetext{
* Note: A student who has not taken MATH 222 (or equivalent) prior to entering the program must take it in their first semester, increasing the program credits from 78 to 81 .
}

3-4 credits from:
\begin{tabular}{lll} 
COMP 400 & (4) & Project in Computer Science \\
PHYS 479 & (3) & Physics Research Project
\end{tabular}

6 or 7 credits selected from:
\begin{tabular}{lll} 
COMP 303 & (3) & Software Design \\
COMP 310 & (3) & Operating Systems \\
COMP 330 & (3) & Theory of Computation \\
COMP 362 & (3) & Honours Algorithm Design
\end{tabular}

Any COMP course at the 400- or 500-level (excluding COMP 400) (3 or 4 credits)

3-4 credits from:
\begin{tabular}{lll} 
MATH 323 & \((3)\) & Probability \\
MATH 340 & \((3)\) & Discrete Mathematics \\
PHYS 351 & \((3)\) & Honours Classical Mechanics 2 \\
PHYS 359 & (3) & Advanced Physics Laboratory 1 \\
PHYS 404 & \((3)\) & Climate Physics \\
PHYS 432 & \((3)\) & Physics of Fluids \\
PHYS 434 & \((3)\) & Optics \\
PHYS 469 & \((3)\) & Advanced Physics Laboratory 2
\end{tabular}

Any number of PHYS courses at the 500 level ( 3 credits each)
Any number of COMP courses at the 400 or 500-level (excluding COMP 400) (3 or 4 credits each)

\subsection*{11.1230.17 Physics (PHYS) Related Programs 11.123017.1 Major in Atmospheric Science and Physics}

See section 11.12.3: Atmospheric and Oceanic Sciences (ATOC). This program provides a firm basis for graduate work in atmospheric science and related fields as well as a sound preparation for those who wish to embark on a career directly after the B.Sc. Students should consult undergraduate advisors in both departments.

\subsection*{11.1230172 Major in Physiology and Physics}

See section 11.12.31: Physiology ( \(\mathrm{PH} G Y\) ). This program provides a firm basis for graduate work in bio-physics and other interdisciplinary fields involving the physical and biological sciences.

\subsection*{11.12.31 Physiology (PHGY)}

\subsection*{11.12.31.1 Location}

McIntyre Medical Sciences Building, Room 1021
3655 Promenade Sir-William-Osler
Montreal QC H3G 1Y6
Telephone: 514-398-4316
Website: mcgill.ca/physiology

\subsection*{11.12.31.2 About Physiology}

Physiology has its roots in many of the basic sciences including biology, chemistry, mathematics, and physics; and it overlaps with other biomedical sciences such as anatomy, biochemistry, pathology, pharmacology, psychology, and biomedical engineering. Physiology is one of the prime contributors of basic scientific knowledge to the clinical medical sciences.
Members of the Department of Physiology at McGill are engaged in studies dealing with molecules, single cells, or entire systems in a variety of vertebrates, including humans. A wide range of interest and expertise is represented, including:
- cardiovascular;
- respiratory;
- gastrointestinal and renal physiology;
- the physiology of exercise;
- neurophysiology;
- endocrinology;
- immunology;
- biophysics; and
- biomathematics.

Some faculty members have formal or informal links with the departments of mathematics, physics, electrical engineering, and chemistry, and with clinical departments (medicine, surgery, pediatrics, neurology, obstetrics, psychiatry, anesthesia), reflecting and reinforcing the close ties between physiology and other disciplines.

Graduates at the B.Sc. level have found rewarding careers in secondary school and CEGEP teaching, government service, and laboratory technical assistance such as in pharmaceutical houses, hospitals, and institutions of higher learning. Moreover, physiology provides an excellent background for medicine, dentistry or other postgraduate work, in such fields as physiology, experimental medicine, pharmacology, biochemistry, or physiological psychology.
The programs offered in Physiology differ in their orientation but they all have a common core of material covering:
- cardiovascular;
- respiratory;
- gastrointestinal and renal physiology;
- neurophysiology;
- endocrinology; and
- immunology.

The specified U1 courses are identical for all programs except the Joint Major programs in Physiology and Physics, Physiology and Mathematics, and the Joint Honours program in Immunology, and thus, afford students maximum flexibility before deciding on a particular program to follow in U2 and U3.
All new students to the Department, Freshman and CEGEP, must contact the Student Affairs Officer at 514-398-3689 for advising; further information is available on the Physiology website.
Returning students are encouraged to consult with the Student Affairs Officer regularly throughout the year, in particular at the beginning of their final year, to ensure they have met all departmental requirements.
Please note: Complementary courses are not electives.

The difference between complementary courses and required courses is that complementary courses are defined as offering an element of choice, however small that choice may be. Students may choose from the two (or more) courses specified within complementary course segments of a program description, but ONLY from those. For further information, refer to University Regulations \& Resources > Undergraduate > Registration > section 1.3.2: Course Information and Regulations.

\subsection*{11.12.31.3 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Physiology (50 credits)}

\section*{Required Courses ( 32 credits)}
* Students who have taken CHEM 212 and/or CHEM 222 in CEGEP are exempted and must replace these credits with 4 or 8 credits of elective course(s).
\begin{tabular}{lcl} 
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
CHEM 212* & (4) & Introductory Organic Chemistry 1 \\
CHEM 222* & (4) & Introductory Organic Chemistry 2 \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2 \\
PHGY 212 & (1) & Introductory Physiology Laboratory 1 \\
PHGY 213 & (1) & Introductory Physiology Laboratory 2 \\
PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology
\end{tabular}

\section*{Complementary Courses ( \(\mathbf{1 5}\) credits)}

15 credits selected as follows:

3 credits selected from:
\begin{tabular}{lll} 
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOL 201 & (3) & Cell Biology and Metabolism
\end{tabular}

3 credits, one of:
\begin{tabular}{lcl} 
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 314 & (3) & Integrative Neuroscience \\
& & \\
3 credits selected from: & & Mathematical Models in Biology \\
BIOL 309 & (3) & Biometry \\
BIOL 373 & (3) & Computer Programming for Life Sciences \\
COMP 204 & (3) & Introduction to Computer Science \\
COMP 250 & (3) & Statistics for Experimental Design \\
PSYC 305 & (3) &
\end{tabular}

\section*{Upper-Level Physiology (ULP) Courses}

6 credits selected from the Upper-Level Physiology (ULP) course list as follows:
* The 6-credit course PHGY 459D1/D2 equals 3 credits of ULP and 3 credits of electives.
** The 9-credit course PHGY 461D1/D2 equals 3 credits of ULP and 6 credits of electives.
\begin{tabular}{lll} 
BIOL 532 & (3) & Developmental Neurobiology Seminar \\
BMDE 505 & (3) & Cell and Tissue Engineering \\
BMDE 519 & (3) & Biomedical Signals and Systems \\
EXMD 502 & (3) & Advanced Endocrinology 1 \\
EXMD 503 & (3) & Advanced Endocrinology 02 \\
EXMD 506 & (3) & Advanced Applied Cardiovascular Physiology \\
EXMD 507 & (3) & Advanced Applied Respiratory Physiology \\
EXMD 508 & (3) & Advanced Topics in Respiration \\
MIMM 414 & (3) & Advanced Immunology \\
MIMM 509 & (3) & Inflammatory Processes \\
PHGY 425 & (3) & Analyzing Physiological Systems \\
PHGY 451 & (3) & Advanced Neurophysiology \\
PHGY 459D1* & (3) & Physiology Seminar \\
PHGY 459D2* & (3) & Physiology Seminar \\
PHGY 461D1** & (4.5) & Experimental Physiology \\
PHGY 461D2** & (4.5) & Experimental Physiology \\
PHGY 488 & (3) & Stem Cell Biology \\
PHGY 502 & (3) & Exercise Physiology \\
PHGY 508 & (3) & Advanced Renal Physiology
\end{tabular}
\begin{tabular}{lcl} 
PHGY 513 & (3) & Translational Immunology \\
PHGY 515 & (3) & Blood-Brain Barrier in Health and Disease \\
PHGY 516 & (3) & Physiology of Blood \\
PHGY 518 & (3) & Artificial Cells \\
PHGY 520 & (3) & Ion Channels \\
PHGY 524 & (3) & Chronobiology \\
PHGY 525 & (3) & Cortical Plasticity \\
PHGY 531 & (3) & Topics in Applied Immunology \\
PHGY 550 & (3) & Molecular Physiology of Bone \\
PHGY 552 & (3) & Cellular and Molecular Physiology \\
PHGY 556 & (3) & Topics in Systems Neuroscience \\
PHGY 560 & (3) & Light Microscopy-Life Science \\
PSYC 470 & (3) & Memory and Brain \\
PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders
\end{tabular}

\subsection*{11.12.31.4 Bachelor of Science (B.Sc.) - Major Physiology (66 credits)}
(65-66 credits)
The Major program includes, in addition to some intensive studies in Physiology, a strong core content of related biomedical sciences. Admission to the Major program will be in U2, upon completion of the U1 required courses, and in consultation with the student's adviser.
If not previously taken, CHEM 212 "Introductory Organic Chemistry 1" must be completed in addition to the 64-65 program credits.
Students may complete this program with a minimum of 64 credits or a maximum of 65 credits depending on their choice of complementary courses.

\section*{U1 Required Courses (18 credits)}
\begin{tabular}{lcl} 
BIOL 200 & \((3)\) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2 \\
PHGY 212 & (1) & Introductory Physiology Laboratory 1 \\
PHGY 213 & (1) & Introductory Physiology Laboratory 2
\end{tabular}
U2 and U3 Required Courses (19 credits)
BIOC 311
BIOL 301
PHGY 311
PHGY 312
PHGY 313
PHGY 314

\section*{Complementary Courses (28 credits)}

12-13 credits selected as follows:

3 credits, one of:
\begin{tabular}{|c|c|c|}
\hline BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
\hline BIOL 201 & (3) & Cell Biology and Metabolism \\
\hline \multicolumn{3}{|l|}{3 credits, one of:} \\
\hline BIOL 309 & (3) & Mathematical Models in Biology \\
\hline BIOL 373 & (3) & Biometry \\
\hline COMP 204 & (3) & Computer Programming for Life Sciences \\
\hline COMP 250 & (3) & Introduction to Computer Science \\
\hline PSYC 305 & (3) & Statistics for Experimental Design \\
\hline \multicolumn{3}{|l|}{3 credits, one of:} \\
\hline BIOC 312 & (3) & Biochemistry of Macromolecules \\
\hline CHEM 203 & (3) & Survey of Physical Chemistry \\
\hline CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1 \\
\hline \multicolumn{3}{|l|}{3-4 credits, one of:} \\
\hline ANAT 214 & (3) & Systemic Human Anatomy \\
\hline ANAT 261 & (4) & Introduction to Dynamic Histology \\
\hline ANAT 316 & (3) & Clinical Human Visceral Anatomy \\
\hline
\end{tabular}

\section*{9 credits selected from the Upper-Level Physiology (ULP) course list as follows:}
\begin{tabular}{lll} 
BIOL 532 & (3) & Developmental Neurobiology Seminar \\
BMDE 505 & (3) & Cell and Tissue Engineering \\
BMDE 519 & (3) & Biomedical Signals and Systems \\
EXMD 502 & (3) & Advanced Endocrinology 1 \\
EXMD 503 & (3) & Advanced Endocrinology 02 \\
EXMD 506 & (3) & Advanced Applied Cardiovascular Physiology \\
EXMD 507 & (3) & Advanced Applied Respiratory Physiology \\
EXMD 508 & (3) & Advanced Topics in Respiration \\
MIMM 414 & (3) & Advanced Immunology \\
MIMM 509 & (3) & Inflammatory Processes \\
PHGY 425 & Analyzing Physiological Systems \\
PHGY 451 & (3) & Advanced Neurophysiology \\
PHGY 459D1* & Physiology Seminar \\
PHGY 459D2* & (3) & Physiology Seminar \\
PHGY 461D1** & (4.5) & Experimental Physiology \\
PHGY 461D2** & (4.5) & Experimental Physiology \\
PHGY 488 & (3) & Stem Cell Biology \\
PHGY 502 & (3) & Exercise Physiology \\
PHGY 508 & (3) & Advanced Renal Physiology \\
PHGY 513 & (3) & Translational Immunology
\end{tabular}
\begin{tabular}{lcl} 
PHGY 515 & (3) & Blood-Brain Barrier in Health and Disease \\
PHGY 516 & (3) & Physiology of Blood \\
PHGY 518 & (3) & Artificial Cells \\
PHGY 520 & (3) & Ion Channels \\
PHGY 524 & (3) & Chronobiology \\
PHGY 525 & (3) & Cortical Plasticity \\
PHGY 531 & (3) & Topics in Applied Immunology \\
PHGY 550 & (3) & Molecular Physiology of Bone \\
PHGY 552 & (3) & Cellular and Molecular Physiology \\
PHGY 556 & (3) & Topics in Systems Neuroscience \\
PHGY 560 & (3) & Light Microscopy-Life Science \\
PSYC 470 & (3) & Memory and Brain \\
PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders
\end{tabular}
* the 6 -credit course equals 3 credits of ULP and 6 credits of electives.
** the 9 -credit course equals 3 credits of ULP and 6 credits of electives.

\section*{6 credits selected from the Upper-Level Science (ULS)}

Note: For Chemistry, Neurology, and Neurosurgery: select from all courses 300 level and above and the ULS courses listed below.
For Biochemistry, Computer Science, Microbiology and Immunology, Mathematics, Physics, and Pathology: select from all courses 300 level and above. For Anatomy, Biology, Experimental Medicine, Pharmacology, and Psychology: select from the ULS courses listed below:
\begin{tabular}{lll} 
ANAT 321 & \((3)\) & Circuitry of the Human Brain \\
ANAT 322 & \((3)\) & Neuroendocrinology \\
ANAT 365 & \((3)\) & Cellular Trafficking \\
ANAT 381 & \((3)\) & Experimental Embryology \\
ANAT 416 & \((3)\) & Development, Disease and Regeneration \\
ANAT \(458^{*}\) & (3) & Membranes and Cellular Signaling \\
ANAT 541 & (3) & Cell and Molecular Biology of Aging \\
ANAT 542 & (3) & Transmission Electron Microscopy of Biological Samples \\
ANAT 565 & (3) & Diseases-Membrane Trafficking \\
BIOC \(458^{*}\) & (3) & Membranes and Cellular Signaling \\
BIOL 300 & (3) & Molecular Biology of the Gene \\
BIOL 303 & (3) & Mathematical Models in Biology \\
BIOL 309 & (3) & Eukaryotic Cell Biology \\
BIOL 313 & (3) & Molecular Biology of Cancer \\
BIOL 314 & (3) & Ecological Genetics \\
BIOL 324 & (3) & Human Genetics Applied \\
BIOL 370 & (3) & Biometry \\
BIOL 373 & (3) & Laboratory in Neurobiology \\
BIOL 389 & (3) & Genetics of Mammalian Development \\
BIOL 416 & BIOL 468 & (3)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline BIOL 524 & (3) & Topics in Molecular Biology \\
\hline BIOL 532 & (3) & Developmental Neurobiology Seminar \\
\hline BIOL 544 & (3) & Genetic Basis of Life Span \\
\hline BIOL 546 & (3) & Genetics of Model Systems \\
\hline BIOL 551 & (3) & Principles of Cellular Control \\
\hline BIOL 575 & (3) & Human Biochemical Genetics \\
\hline BIOL 588 & (3) & Advances in Molecular/Cellular Neurobiology \\
\hline CHEM 214 & (3) & Physical Chemistry/Biological Sciences 2 \\
\hline EXMD 401 & (3) & Physiology and Biochemistry Endocrine Systems \\
\hline EXMD 502 & (3) & Advanced Endocrinology 1 \\
\hline EXMD 503 & (3) & Advanced Endocrinology 02 \\
\hline EXMD 504 & (3) & Biology of Cancer \\
\hline EXMD 506 & (3) & Advanced Applied Cardiovascular Physiology \\
\hline EXMD 507 & (3) & Advanced Applied Respiratory Physiology \\
\hline EXMD 508 & (3) & Advanced Topics in Respiration \\
\hline EXMD 510 & (3) & Bioanalytical Separation Methods \\
\hline NEUR 310 & (3) & Cellular Neurobiology \\
\hline PHAR 503 & (3) & Drug Discovery and Development 1 \\
\hline PHAR 504 & (3) & Drug Discovery and Development 2 \\
\hline PHAR 562 & (3) & Neuropharmacology \\
\hline PHAR 563 & (3) & Endocrine Pharmacology \\
\hline PPHS 501 & (3) & Population Health and Epidemiology \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders \\
\hline
\end{tabular}
* Students may take ANAT 458 or BIOC 458 but not both.

Note: Students may opt to replace 3 credits of the 6 credits of Upper Level Science with 3 credits selected from the following list:
\begin{tabular}{lcl} 
COMP 364 & (3) & Computer Tools for Life Sciences \\
PHIL 341 & (3) & Philosophy of Science 1 \\
PHIL 343 & (3) & Biomedical Ethics \\
REDM 410 & (3) & Writing Research Articles
\end{tabular}

\subsection*{11.12.31.5 Bachelor of Science (B.Sc.) - Major Physiology and Mathematics (79 credits)}

\section*{Required Courses (70 credits)}

\section*{Bio-Physical Sciences Core}
\begin{tabular}{lll} 
BIOL 219 & (4) & Introduction to Physical Molecular and Cell Biology \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
MATH 222 & (3) & Calculus 3 \\
MATH 223* & (3) & Linear Algebra \\
MATH 247* & \((3)\) & Honours Applied Linear Algebra \\
MATH 315** & \((3)\) & Ordinary Differential Equations \\
MATH 323 & \((3)\) & Probability \\
MATH 325** & (3) & Honours Ordinary Differential Equations
\end{tabular}
* Students may take either MATH 223 or MATH 247.
** Students may take either MATH 315 or MATH 325.

\section*{Physiology and Mathematics Core}
\begin{tabular}{|c|c|c|}
\hline BIOL 309 & (3) & Mathematical Models in Biology \\
\hline BMDE 519 & (3) & Biomedical Signals and Systems \\
\hline MATH 242 & (3) & Analysis 1 \\
\hline MATH 243 & (3) & Analysis 2 \\
\hline MATH \(248{ }^{* * *}\) & (3) & Honours Vector Calculus \\
\hline MATH 314*** & (3) & Advanced Calculus \\
\hline MATH 317 & (3) & Numerical Analysis \\
\hline MATH 319 & (3) & Partial Differential Equations \\
\hline MATH 324 & (3) & Statistics \\
\hline MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
\hline MATH 437 & (3) & Mathematical Methods in Biology \\
\hline PHGY 209 & (3) & Mammalian Physiology 1 \\
\hline PHGY 210 & (3) & Mammalian Physiology 2 \\
\hline PHGY 212 & (1) & Introductory Physiology Laboratory 1 \\
\hline PHGY 213 & (1) & Introductory Physiology Laboratory 2 \\
\hline PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
\hline PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
\hline PHGY 461D1 & (4.5) & Experimental Physiology \\
\hline PHGY 461D2 & (4.5) & Experimental Physiology \\
\hline
\end{tabular}

\section*{Complementary Courses (9 credits)}

3 credits, one of:
\begin{tabular}{lll} 
COMP 204 & (3) & Computer Programming for Life Sciences \\
COMP 250 & (3) & Introduction to Computer Science
\end{tabular}

3 credits, one of:
\begin{tabular}{lll} 
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}

3 credits, one of:
PHYS 413
(3)
Physical Basis of Physiology
PHYS 519
Advanced Biophysics

\subsection*{11.12.31.6 Bachelor of Science (B.Sc.) - Major Physiology and Physics ( 82 credits)}

This program provides a firm foundation in physics, mathematics, and physiology. It is appropriate for students interested in applying methods of the physical sciences to problems in physiology and allied biological sciences.

Required Courses (76 credits)

\section*{Bio-Physical Sciences Core}
\begin{tabular}{lcl} 
BIOL 219 & \((4)\) & Introduction to Physical Molecular and Cell Biology \\
BIOL 395 & (1) & Quantitative Biology Seminar \\
MATH 222 & (3) & Calculus 3 \\
MATH 223* & (3) & Linear Algebra \\
MATH 247* & \((3)\) & Honours Applied Linear Algebra \\
MATH 315** & (3) & Ordinary Differential Equations \\
MATH 325** & (3) & Honours Ordinary Differential Equations \\
PHYS 329 & (3) & Statistical Physics with Biophysical Applications
\end{tabular}
* Students may take either MATH 223 or MATH 247.
** Students may take either MATH 315 or MATH 325.

Physiology and Physics Core
\begin{tabular}{lcl} 
BMDE 519 & \((3)\) & Biomedical Signals and Systems \\
MATH \(248^{* * *}\) & \((3)\) & Honours Vector Calculus \\
MATH \(314^{* * *}\) & (3) & Advanced Calculus \\
MATH 326 & (3) & Nonlinear Dynamics and Chaos \\
MATH 437 & (3) & Mathematical Methods in Biology \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2 \\
PHGY 212 & (1) & Introductory Physiology Laboratory 1 \\
PHGY 213 & (1) & Introductory Physiology Laboratory 2 \\
PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
PHGY 461D1 & (4.5) & Experimental Physiology \\
PHGY 461D2 & (4.5) & Experimental Physiology \\
PHYS 230 & (3) & Dynamics of Simple Systems \\
PHYS 232 & (3) & Heat and Waves \\
PHYS 241 & (3) & Signal Processing
\end{tabular}
\begin{tabular}{lcl} 
PHYS 257 & (3) & Experimental Methods 1 \\
PHYS 258 & (3) & Experimental Methods 2 \\
PHYS 339 & (3) & Measurements Laboratory in General Physics \\
PHYS 340 & (3) & Majors Electricity and Magnetism \\
PHYS 346 & Majors Quantum Physics \\
*** Students may take either MATH 248 or MATH 314.
\end{tabular}

\section*{Complementary Courses ( 6 credits)}

3 credits, one of:
\begin{tabular}{lll} 
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 314 & (3) & Integrative Neuroscience
\end{tabular}

3 credits, one of:
\begin{tabular}{lll} 
PHYS 413 & (3) & Physical Basis of Physiology \\
PHYS 519 & (3) & Advanced Biophysics
\end{tabular}

\subsection*{11.12.31.7 Bachelor of Science (B.Sc.) - Honours Physiology (75 credits)}

All admissions to the Honours program will be in U2, and the student must have a U1 GPA of 3.30, with no less than a B in PHGY 209 and PHGY 210. Admission to U3 requires a U2 CGPA of 3.20 with no less than a B in U2 Physiology courses. Decisions for admission to U3 will be heavily influenced by student standing in U2 courses.

The Department reserves the right to restrict the number of entering students in the Honours program. Students who do not maintain Honours standing may transfer their registration to the Major program in Physiology.
The deadline to apply to the Honours program is August 23, 2019. Application forms are available online at physiology.med@mcgill.ca or a hard copy can be picked up at McIntyre 1021. Please contact Sonia Viselli, Student Affairs Officer (sonia.viselli@mcgill.ca; 514-398-3689) for more information. An email will be sent to acknowledge receipt of your application.

Graduation: To graduate from the Honours Physiology program, the student will have a CGPA of 3.20 with a mark no less than a B in all Physiology courses.
If not previously taken, CHEM 212 Introductory Organic Chemistry 1 must be completed in addition to the 75 program credits.

\section*{Required Courses ( 60 credits)}
\begin{tabular}{lcl} 
ANAT 261 & \((4)\) & Introduction to Dynamic Histology \\
BIOC 311 & \((3)\) & Metabolic Biochemistry \\
BIOL 200 & (3) & Molecular Biology \\
BIOL 202 & (3) & Basic Genetics \\
BIOL 301 & (4) & Cell and Molecular Laboratory \\
CHEM 222 & (4) & Introductory Organic Chemistry 2 \\
PHGY 209 & (3) & Mammalian Physiology 1 \\
PHGY 210 & (3) & Mammalian Physiology 2 \\
PHGY 212 & (1) & Introductory Physiology Laboratory 1 \\
PHGY 213 & (1) & Introductory Physiology Laboratory 2 \\
PHGY 311 & (3) & Channels, Synapses and Hormones \\
PHGY 312 & (3) & Respiratory, Renal, and Cardiovascular Physiology \\
PHGY 313 & (3) & Blood, Gastrointestinal, and Immune Systems Physiology \\
PHGY 314 & (3) & Integrative Neuroscience \\
PHGY 351 & (3) & Research Techniques: Physiology
\end{tabular}
\begin{tabular}{lll} 
PHGY 359D1 & (.5) & Tutorial in Physiology \\
PHGY 359D2 & \((.5)\) & Tutorial in Physiology \\
PHGY 459D1 & \((3)\) & Physiology Seminar \\
PHGY 459D2 & \((3)\) & Physiology Seminar \\
PHGY 461D1 & \((4.5)\) & Experimental Physiology \\
PHGY 461D2 & \((4.5)\) & Experimental Physiology
\end{tabular}

\section*{Complementary Courses (15 credits)}

9 credits selected as follows:

3 credits, one of:
\begin{tabular}{lll} 
BIOC 212 & (3) & Molecular Mechanisms of Cell Function \\
BIOL 201 & (3) & Cell Biology and Metabolism
\end{tabular}

3 credits, one of:
\begin{tabular}{lll} 
BIOL 309 & (3) & Mathematical Models in Biology \\
BIOL 373 & (3) & Biometry \\
COMP 204 & (3) & Computer Programming for Life Sciences \\
COMP 250 & (3) & Introduction to Computer Science \\
PSYC 305 & (3) & Statistics for Experimental Design
\end{tabular}

3 credits, one of:
\begin{tabular}{lll} 
BIOC 312 & (3) & Biochemistry of Macromolecules \\
CHEM 203 & (3) & Survey of Physical Chemistry \\
CHEM 204 & (3) & Physical Chemistry/Biological Sciences 1
\end{tabular}

\section*{6 credits selected from the Upper-Level Physiology (ULP) course list as follows:}
\begin{tabular}{lll} 
BIOL 532 & \((3)\) & Developmental Neurobiology Seminar \\
BMDE 519 & \((3)\) & Biomedical Signals and Systems \\
EXMD 502 & (3) & Advanced Endocrinology 1 \\
EXMD 503 & (3) & Advanced Endocrinology 02 \\
EXMD 506 & (3) & Advanced Applied Cardiovascular Physiology \\
EXMD 507 & (3) & Advanced Applied Respiratory Physiology \\
EXMD 508 & (3) & Advanced Topics in Respiration \\
MIMM 414 & (3) & Advanced Immunology \\
MIMM 509 & (3) & Inflammatory Processes \\
PHGY 425 & (3) & Analyzing Physiological Systems \\
PHGY 451 & (3) & Advanced Neurophysiology \\
PHGY 488 & (3) & Stem Cell Biology \\
PHGY 502 & (3) & Exercise Physiology \\
PHGY 508 & (3) & Advanced Renal Physiology
\end{tabular}
\begin{tabular}{lll} 
PHGY 513 & (3) & Translational Immunology \\
PHGY 515 & (3) & Blood-Brain Barrier in Health and Disease \\
PHGY 516 & (3) & Physiology of Blood \\
PHGY 518 & (3) & Artificial Cells \\
PHGY 520 & (3) & Ion Channels \\
PHGY 524 & (3) & Chronobiology \\
PHGY 525 & (3) & Cortical Plasticity \\
PHGY 531 & (3) & Topics in Applied Immunology \\
PHGY 550 & (3) & Molecular Physiology of Bone \\
PHGY 552 & (3) & Cellular and Molecular Physiology \\
PHGY 556 & (3) & Topics in Systems Neuroscience \\
PHGY 560 & (3) & Light Microscopy-Life Science \\
PSYC 470 & (3) & Memory and Brain \\
PSYT 500 & (3) & Advances: Neurobiology of Mental Disorders
\end{tabular}

\subsection*{11.12.31.8 Physiology (PHGY) Related Programs \\ 11.1231.81 Interdepartmental Honours in Immunology}

For more information, see section 11.12.18: Immunology. This program is offered by the Departments of Biochemistry, Microbiology and Immunology, and Physiology.

Students interested in the program should contact:
Dr. Monroe Cohen
Physiology
Telephone: 514-398-4342
Email: monroe.cohen@mcgill.ca
OR
Dr. C. Piccirillo
Microbiology and Immunology
Telephone: 514-934-1934, ext. 76143
Email: ciro.piccirillo@mcgill.ca

\subsection*{11.12.32 Psychiatry (PSYT)}

\subsection*{11.12.32.1 Location}

1033 Pine Avenue West, Room 104
Montreal QC H3A 1A1
Telephone: 514-398-4176
Website: mcgill.ca/psychiatry/education

\subsection*{11.12.32.2 About Psychiatry}

There are no B.Sc. programs in Psychiatry, but the PSYT courses listed below are administered by the Faculty of Science and are open to Arts and Science students and to graduate students, subject to the regulations and restrictions of their home faculty.
\begin{tabular}{ll} 
Courses & \\
PSYT 199 & FYS: Mental Illness and the Brain \\
PSYT 301 & Issues in Drug Dependence \\
PSYT 400D1/PSYT 400D2 & Research Project in Psychiatry \\
PSYT 455 & Neurochemistry
\end{tabular}

\section*{Courses}

PSYT 500
PSYT 502 Brain Evolution and Psychiatry
PSYT 503
PSYT 504
PSYT 515

Advances: Neurobiology of Mental Disorders

Mental Health Services and Policy
Issues in Forensic Mental Health
Advanced Studies in Addiction

\subsection*{11.12.33 Psychology (PSYC)}

\subsection*{11.12.33.1 Location}

2001 McGill College, Room 740
Montreal QC H3A 1G1
Telephone: 514-398-6100
Fax: 514-398-4896
Email: undergrad.psych@mcgill.ca
Website: mcgill.ca/psychology

\subsection*{11.12.33.2 About Psychology}

The Department of Psychology offers programs in both Arts and Science. All B.A. programs in Psychology can be found in Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.32: Psychology.

Psychology is the scientific study of mind and behaviour. It is both a social and a biological science.
- As a social science, psychology examines the social nature of human beings and the influence that culture, group membership, and relationships have on individual personality, thought, and behaviour.
- As a biological science, psychology seeks to identify the neural basis of human behaviour, both directly, through the study of humans, and indirectly, through the study of other species.

The data of psychology is collected within the psychological laboratory by the use of experimental methods in the study of behaviour, and outside the laboratory by systematic observation of the behaviour of humans and animals. The aim is to formulate general principles of perception, learning, motivation, cognition, and social psychology that are relevant to different aspects of human life. Experimentation, laboratory techniques, observational procedures, measurement, and statistical methods are important tools of the psychologist.

Psychology has many interdisciplinary aspects. The study of psychological problems often involves knowledge drawn from other disciplines such as biology, physiology, linguistics, sociology, philosophy, and mathematics. For this reason, a student with varied interests can frequently find a place for these in psychology.

Psychology is a young science, so explanations of the processes underlying observed phenomena are often theoretical and speculative. The major objectives of psychological study are to reduce the discrepancy between theory and fact and to provide better answers about why humans think and behave as they do.

\section*{Undergraduate Studies}

Although a number of undergraduate courses in psychology have applied implications, applied training is not the purpose of the undergraduate curriculum. Its purpose is to introduce the student to an understanding of the basic core of psychological knowledge, theory, and method, regardless of questions of practical application.
The B.Sc. or B.A. with a Major or Honours degree in psychology is not a professional qualification; it does not qualify the individual to carry on professional work in psychology. In the province of Quebec, the minimum requirement for membership in the Order of Psychologists, the professional association governing the work of psychologists in the province, is a doctoral degree. However, the Order also has a number of undergraduate course requirements that you should consult in planning your degree if you ultimately hope to apply for membership in the Order of Psychologists of Quebec. All students planning to practise in the province of Quebec will also be examined on their proficiency in French before being admitted to the professional association. Undergraduate courses in psychology may prove to be of considerable value to students planning careers in professional fields other than psychology. These include, but are not restricted to, medicine, education, social work, human communication sciences, and business and industry.

What distinguishes the Honours program from the Major program is the Honours program's emphasis on research methodology and practice, and its requirement that students maintain a high academic standard. Honours students also have an opportunity to work closely with faculty members in small groups.

\section*{Graduate Studies}

Students who are interested in psychology as a career must pursue graduate studies. Persons who hold graduate degrees in Psychology, usually the Ph.D., may find employment in universities, research institutes, hospitals, community agencies, government departments, large corporations, or may act as self-employed consultants. At the graduate level, psychology has many specialized branches including social psychology, cognitive psychology, physiological psychology, experimental psychology, clinical psychology, child psychology, industrial psychology, educational psychology, and others.

Requirements for admission to graduate studies in psychology vary from one university to another and from one country to another. Nonetheless, both the Honours and Major degrees in Psychology may qualify the student for admission to many graduate schools, provided that sufficiently high grades are obtained and, in some cases, that research experience has been obtained. During the U2 year, undergraduate students are strongly advised to verify the admission requirements of various graduate programs. This is to ensure that sufficient time is available for students to complete all necessary requirements for admission to their preferred graduate programs.

\subsection*{11.12.33.3 Information Meetings for New Students}

All new students entering the Psychology undergraduate program should attend an information meeting prior to registration. Newly admitted students from CEGEPs should attend the information session in June. There will be an identical information session in August for all other students and for any CEGEP students who could not attend the earlier meeting. Please check the Psychology Department website for the specific dates. Students accepted into a Bachelor of Arts program must attend a different information meeting from the one offered to students in the Faculty of Science. (For details, see Faculty of Arts > Undergraduate > Browse Academic Units \& Programs > section 3.9.32: Psychology). At this meeting, the Psychology Undergraduate Advising team will explain the requirements of the Department's programs. Incoming students will have an opportunity to ask questions and receive advice on how to plan their courses.

Entering students can bring a copy of their collegial transcript(s). They should also consult the eCalendar and a preliminary Class Schedule before this advising session.

Students entering the Psychology program in January are strongly encouraged to make an appointment with an academic advisor in the Department of Psychology in early December to clarify their course selection.

\subsection*{11.12.33.4 Admission Requirements to the Bachelor of Science (B.Sc.) - Honours Psychology}

Applications are available on the Psychology Department's website at
mcgill.ca/psychology/undergraduate/current-students/research-opportunities/research-courses. The deadline is specified on the application form. Candidates will be advised of the Department's decision via email before classes begin in September.
Students should note that awarding of the Honours degree will depend on the criteria listed below.
Honours is awarded to students with a minimum CGPA of 3.00 and a minimum grade of B in the required Honours courses, namely PSYC 380D1/PSYC 380D2 and PSYC 306. Moreover, the awarding of the Honours degree normally requires completion of two full years of study, U2 and U3, in the Honours program. Students with particularly strong academic records may be admitted for the U3 year only on the basis of their marks. These students must complete all Honours program requirements.

First Class Honours is awarded to students who obtain a minimum CGPA of 3.50 and a minimum grade of A- in the required Honours courses, namely PSYC 380D1/PSYC 380D2 and PSYC 306.

For more information, see mcgill.ca/study/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-psychology.

\subsection*{11.12.33.5 Bachelor of Science (B.Sc.) - Minor Psychology ( 24 credits)}

A minor program in Psychology is available to students registered in any B.Sc. program other than Psychology. This program is intended to complement a student's primary field of study by providing a focused introduction to specialized topics in psychology.

A separate minor concentration exists for students registered in a program in the Faculty of Arts.
The Minor program for Science students requires the completion of 24 credits in Psychology, of which no more than 6 may overlap with the primary program. All courses in the Minor program must be passed with a minimum grade of C. A prerequisite to the program is PSYC 204 or equivalent.

\section*{Program Prerequisite (0-3)}

Students planning to enter the Minor Psychology program are required to complete PSYC 204 Introduction to Psychological Statistics (3 credits) * or equivalent.
*Note: CEGEP students may not take PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\).

\section*{Complementary Courses (24 credits)}

3 or 6 credits selected from the following:
\begin{tabular}{lll} 
PSYC 211 & \((3)\) & Introductory Behavioural Neuroscience \\
PSYC 212 & \((3)\) & Perception \\
PSYC 213 & \((3)\) & Cognition \\
PSYC 215 & \((3)\) & Social Psychology
\end{tabular}

18 or 21 credits selected from Psychology courses at the 300 level or above.

\subsection*{11.12.33.6 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Psychology (45 credits)}

Psychology is the scientific study of the mind and behavior. The B.Sc. Liberal Core Science Component in Psychology ( 45 credits) provides students with a broad overview of the field of psychological science. It is less specialized than the B.Sc. Major in Psychology as students choose a selection of the core courses in psychology as well as advanced courses in specialized content areas. Students may also have the option to complete a research course(s). This program provides students with the space to take the additional courses they may need for applying to graduate school in psychology and for completing the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs). However, students desiring a more specialized program should consider the B.Sc. Major in Psychology.

\section*{Program Requirements}

The Liberal Program - Core Science Component Psychology requires the completion of 45 credits in Psychology, all of which need to be passed with a minimum grade of C. Students completing a Liberal Program with a Core Science Component Psychology must also complete at least one breadth component in a second area.

\section*{Program Prerequisites (0-6 credits)}

Students planning to enter the Core Science Component Psychology program should have completed an introductory course in general psychology and biology in CEGEP. Otherwise, they can complete them in their first year of study at McGill University (see below).

Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.

Students who have completed General Biology 1 or 2 in CEGEP would have the recommended biology background. Students who have not completed one of those courses are advised to complete BIOL 111 or BIOL 112 during their first year.

McGill Freshman students are recommended to complete the following courses in their U0 year:
0-3 credits from:
PSYC 100
Introduction to Psychology

0-3 credits from:

BIOL 111
BIOL 112
Principles: Organismal Biology
Cell and Molecular Biology

\section*{Required Course (3 credits)}

PSYC 204
Introduction to Psychological Statistics
*Note: CEGEP students are exempt from PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\). If the equivalent of PSYC 204 was completed in CEGEP, then students must replace it with 3 credits in Psychology (PSYC) at the 300-level or above.

\section*{Complementary Courses (42 credits)}

9 credits from:
\begin{tabular}{lll} 
PSYC 211 & \((3)\) & Introductory Behavioural Neuroscience \\
PSYC 212 & \((3)\) & Perception \\
PSYC 213 & \((3)\) & Cognition \\
PSYC 215 & \((3)\) & Social Psychology
\end{tabular}

\section*{List A}

6 credits in Psychology from List A (Behavioural Neuroscience, Cognition and Quantitive Methods).
\begin{tabular}{lll} 
NSCI 201 & (3) & Introduction to Neuroscience 2 \\
PSYC 301 & (3) & Animal Learning and Theory \\
PSYC 302 & (3) & The Psychology of Pain \\
PSYC 306 & (3) & Research Methods in Psychology
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 329 & (3) & Introduction to Auditory Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 353 & (3) & Research Methods and Laboratory in Human Perception \\
\hline PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 513 & (3) & Human Decision-Making \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYC 531 & (3) & Structural Equation Models \\
\hline PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
\hline PSYC 538 & (3) & Categorization, Communication and Consciousness \\
\hline PSYC 541 & (3) & Multilevel Modelling \\
\hline PSYC 545 & (3) & Topics in Language Acquisition \\
\hline PSYC 560* & (3) & Machine Learning Tools in Psychology \\
\hline PSYC 562 & (3) & Measurement of Psychological Processes \\
\hline
\end{tabular}
*1. Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.
2. Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

\section*{List B}

6 credits in Psychology from List B (Social, Health, and Developmental Psychology).
PSYC 304
(3)
Child Development
\begin{tabular}{lll} 
PSYC 309 & \((3)\) & Positive Psychology: Science of Well-Being \\
PSYC 328 & (3) & Health Psychology \\
PSYC 331 & (3) & Inter-Group Relations \\
PSYC 332 & (3) & Introduction to Personality \\
PSYC 333 & (3) & Personality and Social Psychology \\
PSYC 337 & (3) & Introduction to Psychopathology \\
PSYC 351 & (3) & Research Methods and Laboratory in Social Psychology \\
PSYC 408 & (3) & Principles and Applications of Psychotherapy \\
PSYC 409 & (3) & Positive Psychology \\
PSYC 412 & (3) & Child Development: Psychopathology \\
PSYC 414 & (3) & Social Development \\
PSYC 436 & (3) & Human Sexuality and Its Problems \\
PSYC 471 & (3) & Human Motivation \\
PSYC 473 & (3) & Social Cognition and the Self \\
PSYC 474 & (3) & Interpersonal Relationships \\
PSYC 475 & (3) & Neuroscience of Social Psychology \\
PSYC 483 & (3) & Advanced Topics in Social Psychology 2 \\
PSYC 491D1 & (3) 539 & (3)
\end{tabular}

15 credits in Psychology at the 300 level or above.

6 credits in Psychology at the 400 or 500 level.

\section*{Unclassified Courses}

Students may also select complementary courses from the research and topics courses below:
\begin{tabular}{lll} 
PSYC 385 & \((3)\) & Independent Research Project 1 \\
PSYC 450D1 & \((4.5)\) & Research Project and Seminar \\
PSYC 450D2 & \((4.5)\) & Research Project and Seminar \\
PSYC 484D1 & \((3)\) & Independent Research Project 2 \\
PSYC 484D2 & \((3)\) & Independent Research Project 2 \\
PSYC 485 & \((3)\) & Independent Research Project 3 \\
PSYC 492 & \((3)\) & Special Topics Seminar 1 \\
PSYC 493 & \((3)\) & Special Topics Seminar 2 \\
PSYC 499 & \((1)\) & Reading Project
\end{tabular}

\subsection*{11.12.33.7 Bachelor of Science (B.Sc.) - Major Psychology (54 credits)}

Psychology is the scientific study of the mind and behavior. The B.Sc. Major in Psychology ( 54 credits) provides students with an in-depth overview, covering the core areas of psychological science as well as more advanced courses in specialized content areas. Students also have the option to complete a research course(s) and/or gain additional training in science related disciplines (see Program Requirements for details). This program provides students with the space to take the additional courses they may need for applying to graduate school in psychology and for completing the undergraduate credits in psychology as specified by the Ordre des Psychologues du Québec (which are required by some graduate psychology programs).

\section*{Program Prerequisites ( \(0-9\) credits)}

Students planning to enter the Major Psychology program should have completed an introductory course in general psychology, biology and statistics at the collegial level. Otherwise, they can complete them in their first year of study at McGill University (see below).
Introduction to Psychology or General Psychology in CEGEP is equivalent to PSYC 100 at McGill. Students who have not completed either of those courses are advised to take PSYC 100 in their first year.
Students who have completed General Biology 1 or 2 in CEGEP would have the recommended biology background. Students who have not completed one of those courses are advised to complete BIOL 111 or BIOL 112 during their first year.
CEGEP students may not take PSYC 204 if they have completed Probability \& Statistics or Statistics with a minimum grade of \(75 \%\).
McGill Freshman students are recommended to complete the following courses in their U0 year:

\section*{0-6 credits from:}
PSYC 100
(3) Introduction to Psychology
PSYC 204*
(3)
Introduction to Psychological Statistics
* Can be completed in U1 concurrently with the required psychology courses.

0-3 credits from:
BIOL 111
(3) Principles: Organismal Biology
BIOL 112
Cell and Molecular Biology

\section*{Required Courses (15 credits)}

U1
\begin{tabular}{lcl} 
PSYC 211 & \((3)\) & Introductory Behavioural Neuroscience \\
PSYC 212 & \((3)\) & Perception \\
PSYC 213 & \((3)\) & Cognition \\
PSYC 215 & \((3)\) & Social Psychology
\end{tabular}

\section*{U 1 or U 2}
PSYC 305* (3) Statistics for Experimental Design
*Note: Students who wish to apply to the Honours program in Psychology must complete the required courses above, including PSYC 305 in their U1 year to be eligible for admission. Also, all students must complete a minimum of 27 graded credits in the academic year prior to applying (fall and winter terms only). For additional information about applying to Honours, please refer to the Honours program description.

\section*{Complementary Courses (39 credits)}

\section*{List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)}

6 credits in Psychology from the following:
\begin{tabular}{lll} 
PSYC 301 & (3) & Animal Learning and Theory \\
PSYC 302 & (3) & The Psychology of Pain \\
PSYC 306 & (3) & Research Methods in Psychology \\
PSYC 310 & (3) & Intelligence
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 329 & (3) & Introduction to Auditory Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 353 & (3) & Research Methods and Laboratory in Human Perception \\
\hline PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 513 & (3) & Human Decision-Making \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYC 531 & (3) & Structural Equation Models \\
\hline PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
\hline PSYC 538 & (3) & Categorization, Communication and Consciousness \\
\hline PSYC 541 & (3) & Multilevel Modelling \\
\hline PSYC 545 & (3) & Topics in Language Acquisition \\
\hline PSYC 560* & (3) & Machine Learning Tools in Psychology \\
\hline PSYC 562 & (3) & Measurement of Psychological Processes \\
\hline
\end{tabular}
*1. Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.
2. Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

\section*{List B - (Social, Health, and Developmental Psychology)}

6 credits in Psychology from the following:
\begin{tabular}{lll} 
PSYC 304 & (3) & Child Development \\
PSYC 309 & (3) & Positive Psychology: Science of Well-Being
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline PSYC 328 & (3) & Health Psychology \\
\hline PSYC 331 & (3) & Inter-Group Relations \\
\hline PSYC 332 & (3) & Introduction to Personality \\
\hline PSYC 333 & (3) & Personality and Social Psychology \\
\hline PSYC 337 & (3) & Introduction to Psychopathology \\
\hline PSYC 351 & (3) & Research Methods and Laboratory in Social Psychology \\
\hline PSYC 408 & (3) & Principles and Applications of Psychotherapy \\
\hline PSYC 409 & (3) & Positive Psychology \\
\hline PSYC 411 & (3) & Discrimination \& Wellbeing in Marginalized Communities \\
\hline PSYC 412 & (3) & Child Development: Psychopathology \\
\hline PSYC 414 & (3) & Social Development \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline PSYC 471 & (3) & Human Motivation \\
\hline PSYC 473 & (3) & Social Cognition and the Self \\
\hline PSYC 474 & (3) & Interpersonal Relationships \\
\hline PSYC 483 & (3) & Seminar in Experimental Psychopathology \\
\hline PSYC 491D1 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 491D2 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 507 & (3) & Emotions, Stress, and Illness \\
\hline PSYC 509 & (3) & Diverse Clinical Populations \\
\hline PSYC 512 & (3) & Advanced Personality Seminar \\
\hline PSYC 528 & (3) & Vulnerability to Depression and Anxiety \\
\hline PSYC 530 & (3) & Applied Topics in Deafness \\
\hline PSYC 535 & (3) & Advanced Topics in Social Psychology \\
\hline PSYC 539 & (3) & Advanced Topics in Social Psychology 2 \\
\hline
\end{tabular}

6 credits in Psychology at the 300 level or above.

9 credits in Psychology at the 400 or 500 level.

12 credits at the 300 level or above in any of the following disciplines: Psychology (PSYC), Anatomy and Cell Biology (ANAT), Biology (BIOL), Biochemistry (BIOC), Chemistry (CHEM), Computer Science (COMP), Mathematics (MATH), Physiology (PHGY), Psychiatry (PSYT).

\section*{Unclassified Courses}

Students may also select complementary courses from the research and topics courses as follows:
\begin{tabular}{lll} 
PSYC 385 & \((3)\) & Independent Research Project 1 \\
PSYC 450D1 & \((4.5)\) & Research Project and Seminar \\
PSYC 450D2 & \((4.5)\) & Research Project and Seminar \\
PSYC 484D1 & \((3)\) & Independent Research Project 2 \\
PSYC 484D2 & \((3)\) & Independent Research Project 2 \\
PSYC 485 & \((3)\) & Independent Research Project 3 \\
PSYC 492 & \((3)\) & Special Topics Seminar 1 \\
PSYC 493 & \((3)\) & Special Topics Seminar 2 \\
PSYC 499 & \((1)\) & Reading Project
\end{tabular}

\subsection*{11.12.33.8 Bachelor of Science (B.Sc.) - Honours Psychology (60 credits)}

Honours in Psychology prepares students for graduate study, and so emphasizes practise in the research techniques which are used in graduate school and professionally later on. Students are normally accepted into Honours at the beginning of their U2 year, and the two-year sequence of Honours courses continues through U3.

\section*{Recommended Background}

It is expected that most students who enter the Honours program in Psychology will have taken introductory psychology, biology, and statistics at the collegial level. Recommended CEGEP courses include Psychology 350-101 or 350-102 or equivalent; Biology CEGEP objective 00UK, 00XU or equivalent; and Statistics (Mathematics) 201-307 or 201-337 or equivalent. Students must obtain a minimum grade of \(75 \%\) in their CEGEP-level statistics course. In the first year, those students who have not taken the recommended collegial-level statistics course, or those who have obtained a grade below \(75 \%\), must take Psychology PSYC 204. Those who have not taken the recommended collegial-level biology must take BIOL 111 or BIOL 112, and those who have not taken Introductory Psychology in CEGEP must take PSYC 100.
The application is available on the Psychology Dept website at:
http://www.mcgill.ca/psychology/undergraduate/current-students/research-opportunities/research-courses. The deadline is specified on the application form. Candidates will be informed of the Department's decision via email before classes begin in September.

\section*{Program Prerequisites}

Admission to Honours is selective. Students with a cumulative grade point average (CGPA) of 3.00 or better are eligible to apply; however, since enrolment is limited, the usual CGPA for admission to this program is 3.50 . Students must complete 27 graded credits in their U1 academic year to be eligible to apply to the Honours program.

Students must complete the following courses in their U1 year to be eligible to apply to the Honours program: PSYC 204, PSYC 211, PSYC 212, PSYC 213, and PSYC 215. Students are advised to complete PSYC 305 in their U1 year. Once in the Honours program, the student must obtain a GPA of 3.00 in the U2 year in order to continue in the program for U3. Honours students are encouraged to take at least 27 graded credits per academic year. This is also usually the minimum number of credits required to be eligible for fellowships and awards.

\section*{U1 Required Courses (12 credits)}

Note: PSYC 100 may be taken as a corequisite with these basic courses.
\begin{tabular}{lll} 
PSYC 211 & \((3)\) & Introductory Behavioural Neuroscience \\
PSYC 212 & \((3)\) & Perception \\
PSYC 213 & (3) & Cognition \\
PSYC 215 & \((3)\) & Social Psychology
\end{tabular}

\section*{U1 or U2 Required Course (3 credits)}
PSYC 305 (3) Statistics for Experimental Design

\section*{U2 Required Courses (9 credits)}
\begin{tabular}{lll} 
PSYC 380D1 & (4.5) & Honours Research Project Seminar \\
PSYC 380D2 & \((4.5)\) & Honours Research Project Seminar
\end{tabular}

\section*{U3 Required Course (3 credits)}
PSYC 482 (3) Advanced Honours Seminar

\section*{Complementary Courses (33 credits)}

12 credits to be selected from the list below and any Psychology course at the 500 level.
\begin{tabular}{lll} 
PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
PSYC 483 & (3) & Seminar in Experimental Psychopathology \\
PSYC 495 & (6) & Psychology Research Project 2 \\
PSYC 496 & (6) & Senior Honours Research 1
\end{tabular}
\begin{tabular}{lll} 
PSYC 497 & (6) & Senior Honours Research 2 \\
PSYC 498D1 & \((4.5)\) & Senior Honours Research \\
PSYC 498D2 & \((4.5)\) & Senior Honours Research
\end{tabular}

\section*{List A}

6 credits in Psychology from List A (Behavioural Neuroscience, Cognition, and Quantitative Methods).
\begin{tabular}{|c|c|c|}
\hline NSCI 201 & (3) & Introduction to Neuroscience 2 \\
\hline PSYC 301 & (3) & Animal Learning and Theory \\
\hline PSYC 302 & (3) & The Psychology of Pain \\
\hline PSYC 306 & (3) & Research Methods in Psychology \\
\hline PSYC 310 & (3) & Intelligence \\
\hline PSYC 311 & (3) & Human Cognition and the Brain \\
\hline PSYC 315 & (3) & Computational Psychology \\
\hline PSYC 317 & (3) & Genes and Behaviour \\
\hline PSYC 318 & (3) & Behavioural Neuroscience 2 \\
\hline PSYC 319 & (3) & Computational Models - Cognition \\
\hline PSYC 329 & (3) & Introduction to Auditory Cognition \\
\hline PSYC 340 & (3) & Psychology of Language \\
\hline PSYC 341 & (3) & The Psychology of Bilingualism \\
\hline PSYC 342 & (3) & Hormones and Behaviour \\
\hline PSYC 352 & (3) & Research Methods and Laboratory in Cognitive Psychology \\
\hline PSYC 353 & (3) & Research Methods and Laboratory in Human Perception \\
\hline PSYC 403 & (3) & Modern Psychology in Historical Perspective \\
\hline PSYC 406 & (3) & Psychological Tests \\
\hline PSYC 410 & (3) & Special Topics in Neuropsychology \\
\hline PSYC 413 & (3) & Cognitive Development \\
\hline PSYC 415 & (3) & Electroencephalography (EEG) Laboratory in Psychology \\
\hline PSYC 427 & (3) & Sensorimotor Neuroscience \\
\hline PSYC 433 & (3) & Cognitive Science \\
\hline PSYC 439 & (3) & Correlational Techniques \\
\hline PSYC 443 & (3) & Affective Neuroscience \\
\hline PSYC 444 & (3) & Sleep Mechanisms and Behaviour \\
\hline PSYC 470 & (3) & Memory and Brain \\
\hline PSYC 502 & (3) & Psychoneuroendocrinology \\
\hline PSYC 506 & (3) & Cognitive Neuroscience of Attention \\
\hline PSYC 513 & (3) & Human Decision-Making \\
\hline PSYC 514 & (3) & Neurobiology of Memory \\
\hline PSYC 522 & (3) & Neurochemistry and Behaviour \\
\hline PSYC 526 & (3) & Advances in Visual Perception \\
\hline PSYC 529 & (3) & Music Cognition \\
\hline PSYC 531 & (3) & Structural Equation Models \\
\hline PSYC 537 & (3) & Advanced Seminar in Psychology of Language \\
\hline PSYC 538 & (3) & Categorization, Communication and Consciousness \\
\hline
\end{tabular}
\begin{tabular}{lll} 
PSYC 541 & (3) & Multilevel Modelling \\
PSYC 545 & (3) & Topics in Language Acquisition \\
PSYC 560* & (3) & Machine Learning Tools in Psychology \\
PSYC 562 & (3) & Measurement of Psychological Processes
\end{tabular}
* 1. Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.
2. Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

\section*{List B}

6 credits in Psychology from List B (Social, Health, and Developmental Psychology)
\begin{tabular}{|c|c|c|}
\hline PSYC 304 & (3) & Child Development \\
\hline PSYC 309 & (3) & Positive Psychology: Science of Well-Being \\
\hline PSYC 328 & (3) & Health Psychology \\
\hline PSYC 331 & (3) & Inter-Group Relations \\
\hline PSYC 332 & (3) & Introduction to Personality \\
\hline PSYC 333 & (3) & Personality and Social Psychology \\
\hline PSYC 337 & (3) & Introduction to Psychopathology \\
\hline PSYC 351 & (3) & Research Methods and Laboratory in Social Psychology \\
\hline PSYC 408 & (3) & Principles and Applications of Psychotherapy \\
\hline PSYC 409 & (3) & Positive Psychology \\
\hline PSYC 411 & (3) & Discrimination \& Wellbeing in Marginalized Communities \\
\hline PSYC 412 & (3) & Child Development: Psychopathology \\
\hline PSYC 414 & (3) & Social Development \\
\hline PSYC 436 & (3) & Human Sexuality and Its Problems \\
\hline PSYC 471 & (3) & Human Motivation \\
\hline PSYC 473 & (3) & Social Cognition and the Self \\
\hline PSYC 474 & (3) & Interpersonal Relationships \\
\hline PSYC 475 & (3) & Neuroscience of Social Psychology \\
\hline PSYC 483 & (3) & Seminar in Experimental Psychopathology \\
\hline PSYC 491D1 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 491D2 & (3) & Advanced Study: Behavioural Disorders \\
\hline PSYC 507 & (3) & Emotions, Stress, and Illness \\
\hline PSYC 509 & (3) & Diverse Clinical Populations \\
\hline PSYC 512 & (3) & Advanced Personality Seminar \\
\hline PSYC 528 & (3) & Vulnerability to Depression and Anxiety \\
\hline PSYC 530 & (3) & Applied Topics in Deafness \\
\hline PSYC 535 & (3) & Advanced Topics in Social Psychology \\
\hline PSYC 539 & (3) & Advanced Topics in Social Psychology 2 \\
\hline
\end{tabular}

9 credits at the 300 level or above selected from:
Anatomy and Cell Biology (ANAT), Biochemistry (BIOC), Biology (BIOL), Chemistry (CHEM), Computer Science (COMP), Mathematics (MATH), Physiology (PHGY), Psychiatry (PYST), Psychology (PSYC).

\subsection*{11.12.34 Redpath Museum (REDM)}
11.12.34.1 Location

Redpath Museum
859 Sherbrooke Street West
Montreal QC H3A 0C4
Telephone: 514-398-4086 ext. 3188
Fax: 514-398-3185
Email: redpath.museum@mcgill.ca
Website: mcgill.ca/redpath

\subsection*{11.12.34.2 About the Redpath Museum}

The Redpath Museum fosters the study of the history and diversity of the natural world. Its mandate includes biological, geological, and cultural diversity, and science education. It conducts academic teaching and research activities and also provides academic services to other units. The Redpath Museum offers a B.Sc. Minor program in Natural History. REDM courses listed below are considered as ones taught by the Faculty of Science.

\section*{Redpath Museum Courses}
\begin{tabular}{ll} 
REDM 396 & Undergraduate Research Project \\
REDM 400 & Science and Museums \\
REDM 405 & Natural History of East Africa \\
REDM 511 & Advanced Museum-Based Science
\end{tabular}

\subsection*{11.12.34.3 Bachelor of Science (B.Sc.) - Minor Natural History ( \(\mathbf{2 4}\) credits)}

The Minor Natural History involves the exploration of the natural world via specimen-based studies, object-oriented investigations and field studies. Museum collections are used to provide hands-on experience with real objects and specimens. The required course brings students to the Redpath Museum and other McGill natural science museums and exposes them to natural history methodologies and the value of specimen-based studies. Complementary course lists are drawn from a variety of disciplines to emphasize breadth and integration with the inclusion of specimen- or object-based courses and field courses in zoology, botany, and earth and environmental sciences. To ensure breadth, students are required to choose courses from among these lists. A compulsory field course component rounds out the program.

\section*{Required Course (3 credits)}
REDM 400
(3)
Science and Museums

\section*{Complementary Courses (21 credits)}

Students select 21 credits from among four course lists (A (Zoology), B (Botany), C (Earth and Environmental Sciences), and D (Field Courses)) with the following specifications.
- At least 3 credits and no more than 9 credits from each of Lists A, B, and C.
- At least 3 credits from List D.
- No more than 3 credits from any one list may be at the 200 level.

Note: Students may take up to a maximum of 9 credits of courses outside the Faculties of Arts and of Science.

\section*{List A: Zoology}
* Note: BIOL 205 and BIOL 215 may be applied to either List A or List B.
** Note: Students may take either ENTO 330 or one of the cross-listed courses BIOL 350 and ENTO 350 as these courses have similar content.
\begin{tabular}{lcl} 
AEBI 211 & (3) & Organisms 2 \\
ANTH 312 & (3) & Zooarchaeology \\
BIOL 205* & (3) & Functional Biology of Plants and Animals \\
BIOL 215* & (3) & Introduction to Ecology and Evolution \\
BIOL 305 & \((3)\) & Animal Diversity
\end{tabular}
\begin{tabular}{lcl} 
BIOL \(350 * *\) & \((3)\) & Insect Biology and Control \\
BIOL 352 & \((3)\) & Dinosaur Biology \\
BIOL 363 & \((3)\) & Mammalian Evolution \\
BIOL 418 & \((3)\) & Freshwater Invertebrate Ecology \\
BIOL 427 & \((3)\) & Herpetology \\
ENTO \(330^{* *}\) & \((3)\) & Insect Biology \\
ENTO \(350^{* *}\) & \((3)\) & Insect Biology and Control \\
ENTO 535 & \((3)\) & Aquatic Entomology \\
EPSC 334 & \((3)\) & Invertebrate Paleontology \\
WILD 307 & \((3)\) & Natural History of Vertebrates \\
WILD 350 & (3) & Mammalogy \\
WILD 420 & (3) & Ornithology
\end{tabular}

\section*{List B: Botany}
* Note: BIOL 205 and BIOL 215 may be applied to either List A or List B.
\begin{tabular}{lcl} 
AEBI 210 & \((3)\) & Organisms 1 \\
BIOL 205* & \((3)\) & Functional Biology of Plants and Animals \\
BIOL \(215^{*}\) & \((3)\) & Introduction to Ecology and Evolution \\
BIOL 240 & \((3)\) & Monteregian Flora \\
BIOL 355 & \((3)\) & Trees: Ecology and Evolution \\
PLNT 304 & \((3)\) & Biology of Fungi \\
PLNT 353 & \((3)\) & Plant Structure and Function \\
PLNT 358 & \((3)\) & Flowering Plant Diversity \\
PLNT 460 & \((3)\) & Plant Ecology
\end{tabular}

\section*{List C: Earth and Environmental Sciences}
\begin{tabular}{lcl} 
BIOL 540 & (3) & Ecology of Species Invasions \\
ENVR 200 & (3) & The Global Environment \\
ENVR 202 & (3) & The Evolving Earth \\
EPSC 210 & \((3)\) & Introductory Mineralogy \\
EPSC 233 & \((3)\) & Earth and Life History \\
ESYS 200 & (3) & Earth System Processes \\
ESYS 300 & (3) & Investigating the Earth System \\
GEOG 203 & (3) & Environmental Systems \\
GEOG 272 & \((3)\) & Earth's Changing Surface \\
GEOG 470 & \((3)\) & Wetlands \\
GEOG 550 & (3) & Historical Ecology Techniques
\end{tabular}

\section*{List D: Field Studies}
* Note: Students may take either of the cross-listed courses NRSC 405 and REDM 405, but not both. Students may also take other field courses with the permission of the Program Adviser.
BIOL 331
(3)
Ecology/Behaviour Field Course
\begin{tabular}{lcl} 
BIOL 335 & \((3)\) & Marine Mammals \\
BIOL 573 & \((3)\) & Vertebrate Palaeontology Field Course \\
ENTO 340 & \((3)\) & Field Entomology \\
EPSC 231 & \((3)\) & Field School 1 \\
NRSC \(405^{*}\) & \((3)\) & Natural History of East Africa \\
REDM 405* & \((3)\) & Natural History of East Africa \\
WILD 475 & \((3)\) & Desert Ecology
\end{tabular}

\subsection*{11.12.35 Science or Mathematics for Teachers}

\subsection*{11.12.35.1 Location}

Dawson Hall, Room 405
853 Sherbrooke Street West
Montreal QC H3A 0G5
Email: pete.barry@mcgill.ca
Website: mcgill.ca/scienceforteachers

\subsection*{11.12.35.2 About Science or Mathematics for Teachers}

The training and certification of school teachers has traditionally been the responsibility of the Faculty of Education and requires the completion of a Bachelor of Education, subject to regulations set by the Government of Quebec. The Faculties of Education and of Science offer the Minor in Education for Science Students for students in the B.Sc. who wish to combine Science or Mathematics with Education at McGill. The Minor allows Science students to develop or explore an interest in Education without committing themselves to completing a B.Ed. degree. Science students who have taken this Minor will have completed some of the necessary credits for the B.Ed. degree should they wish to enrol in that program. For details, see section 11.12.35.3: Bachelor of Science (B.Sc.) - Minor Education for Science Students (18 credits).

The traditional Bachelor of Education, Secondary Program, Science and Technology, or Secondary Program, Mathematics is available within the Faculty of Education; see. Additionally, the Master of Arts in Teaching and Learning (MATL) is available in the Faculty of Education as part of the Department of Integrated Studies in Education.
Program advisor: Gabrielle Ohayon, ISA Administrator
Faculty of Education
Telephone: 514-398-7042
Email: isa.administrator@mcgill.ca

\subsection*{11.12.35.3 Bachelor of Science (B.Sc.) - Minor Education for Science Students (18 credits)}

This Minor allows Science students to develop or explore an interest in Education without committing themselves to completing a B.Ed. degree. Science students who have taken this Minor in Education will have completed some of the credits for the B.Ed. degree should they wish to enrol in that program. Students graduating with a B.Sc. should also consider the Master of Arts in Teaching and Learning (http://www.mcgill.ca/dise/grad/) if they are interested in obtaining a teaching license.
This minor program requires an application due to limited enrolment space. Please see http://www.mcgill.ca/isa/faculty-advising/minor-programs for procedures and deadlines.
For more information please contact:
Internships \& Student Affairs Office, Faculty of Education
General Information: 514-398-7042
Website: http://www.mcgill.ca/isa

\section*{Required Courses (6 credits)}
\begin{tabular}{lll} 
EDEC 260 & (3) & Philosophical Foundations \\
EDPE 300 & (3) & Educational Psychology
\end{tabular}

\section*{Complementary Courses (12 credits)}

3 credits from:
\begin{tabular}{lll} 
EDEC 233 & \((3)\) & Indigenous Education \\
EDEC 248 & \((3)\) & Equity and Education \\
EDEC 249 & \((3)\) & Global Education and Social Justice
\end{tabular}

3 credits from:
EDEC 247
Policy Issues in Quebec and Indigenous Education
EDEM 220
(3)
Contemporary Issues in Education

6 credits from:
* Note: Students select either EDES 335 or EDES 353.
\begin{tabular}{lcl} 
EDEC 262 & (3) & Media, Technology and Education \\
EDES 335* & (3) & Teaching Secondary Science 1 \\
EDES 353* & (3) & Teaching Secondary Mathematics 1 \\
EDPE 304 & (3) & Measurement and Evaluation \\
EDPI 341 & (3) & Instruction in Inclusive Schools
\end{tabular}

\section*{12 Study Abroad and Field Studies}

\subsection*{12.1 Opportunities for Field Study and Study Abroad}

Besides the many academic resources McGill offers on campus, there are also unparalleled opportunities to enrich your educational experience through exchange programs, internships, field study programs, and McGill courses taught off-campus and abroad. The following sections provide information regarding opportunities in the following categories:
- section 12.2: Field Study Semesters and Off-Campus Courses - Participate in programs and courses offered by McGill University in local, regional, and international settings as a complement to classroom learning.
- section 12.3: Internships and Co-op Programs - Participate in partnerships offered through McGill to gain valuable on-the-job knowledge in your field.
- section 12.4: Exchange Programs - Study at one of McGill's partner universities while earning credit at McGill, and paying McGill tuition.
- section 12.5: Independent Study Away - Independently study away at another university while earning credit at McGill. Tuition is paid directly to the host university.

\subsection*{12.2 Field Study Semesters and Off-Campus Courses}

McGill offers you a chance to put theory into practice through local, regional, and international field study semesters and individual courses. Field studies provide practical experience and a chance to integrate and apply knowledge gained in the classroom. In many cases, field courses can be counted toward major program requirements. You should see your advisor for details.
Field Study Semesters are packages of McGill courses aimed at upper-year students that focus on the physical and social aspects of the environment. They are offered in various regions around the world in the Summer, Fall, or Winter terms. Currently, Field Study Semesters are offered in East Africa (Kenya, Uganda, and Tanzania; see section 12.2.1.1: Africa Field Study Semester), the Canadian Arctic (Axel Heiberg Island; see section 12.2.1.2: Arctic Field Study Semester), Barbados (see section 12.2.1.3: Barbados Field Semester and section 12.2.1.4: Barbados Interdisciplinary Tropical Studies Field Semester), and Panama (see section 12.2.1.5: Panama Field Study Semester). Enrolment is limited, and application deadlines and costs vary, so you should consult the relevant sections of this publication for details. If you are interested in participating, you should begin planning your courses before the Field Study semester, as some of the field courses may require prerequisites.

Students participating in any one of the field study semesters-i.e., the Africa Field Study Semester (AFSS), the Arctic Field Study Semester (MAFS), the Barbados Field Study Semester (BFSS), the Barbados Interdisciplinary Tropical Studies (BITS) Field Study Semester, or the Panama Field Study Semester (PFSS)—may complete the 18-credit Minor in Field Studies. See section 12.2.1: Field Study Minor for details.
Off-campus McGill courses are also offered to you and sometimes require separate departmental application. The courses are typically offered during the summer months and can be offered in places as varied as Italy, Mexico, or Brazil, and in disciplines in arts, engineering (including architecture), science, law, or management. See section 12.2.3: Off-Campus Courses.

\subsection*{12.2.1 Field Study Minor}

\section*{General Information:}

Email: ifso.science@mcgill.ca
Internship \& Field Studies Office
Faculty of Science
Burnside Hall. 805 Sherbrooke Street West, Room 720
Field Study Minor Advisor (Faculty of Science):
Science Office for Undergraduate Student Advising (SOUSA)
Dawson Hall, 853 Sherbrooke Street West, Room 405
Curtis Sharman
Telephone: 514-398-5442
Email: curtis.sharman@mcgill.ca
Website: mcgill.ca/science/undergraduate/advice/sousa
For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits).

\subsection*{12.2.1.1 Africa Field Study Semester}

\section*{Website: mcgill.ca/africa}

The Africa Field Study Semester comprises 15 credits of field study courses. Two context courses ( 6 credits) in the natural and social sciences provide interdisciplinary academic context for field study. The other 9 credits are taken from the complementary courses list.
Visit the Africa website, or refer to Faculty of Science > Undergraduate > Browse Academic Units \& Programs >Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits), for the latest program updates.
Offered: Winter term

\section*{Location: East Africa}

Enrolment limit: 38 students
Fees: In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include local travel, all food and accommodation, special admission fees for parks and museums, as well as other field costs. Fee details for the upcoming semester are available at mcgill.ca/africa/program-fees.
Application deadline: May 30, 2024 for January 2025 departure (Winter term of the 2024-2025 academic year). Depending on space, there will be a second intake with a deadline date of August 15, 2024.
Application details: Students must submit:
- the online application (available at mcgill.ca/africa/application)
- a copy of their transcript
- a letter of intent
- one reference letter
- a CV
to the Internship and Field Studies Office in the Faculty of Science:
Internships \& Field Studies Office
805 Sherbrooke Street West, Burnside Hall, Room 720
Montreal Quebec H3A 0B9
Telephone: 514-398-1063; 514-398-8365
Email: ifso.science@mcgill.ca
Website: mcgill.ca/science/undergraduate/internships-field
Prerequisites: The Africa Field Study Semester is intended for students in their final two years. A CGPA of 3.00 and higher is recommended.

Students from other universities are eligible to apply to the Africa Field Study Semester and must also meet the criteria for admission to McGill as a Visiting Student. Please see the Africa website at mcgill.ca/africa for details.

For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits).

\section*{Field Study Minor Advisor}
- Interdisciplinary Programs Advisor
- Science Office for Undergraduate Student Advising (SOUSA)
- McGill University, Faculty of Science
- 411 Dawson Hall, 853 Sherbrooke Street West
- Montreal, Quebec, Canada H3A 0G5
- For general inquiries: advisor.science@mcgill.ca
- Curtis Sharman
- curtis.sharman@mcgill.ca

\subsection*{12.2.1.2 Arctic Field Study Semester}
**This program is currently not offered.**
The McGill Arctic Field Study Semester comprises 15 credits of field study courses. Two courses ( 6 credits) provide the background to complete an independent research project. The other 9 credits are taken from Atmospheric \& Oceanic Sciences, Earth \& Planetary Sciences, and Geography.
Visit the Arctic website or refer to Faculty of Science > Undergraduate > Browse Academic Units \& Programs >Field Study > section 11.12.15.1: Field Studies - Minor Field Studies ( 18 credits) for the latest program updates.

Offered: Summer term
Location: Central Axel Heiberg Island in the Canadian High Arctic
Enrolment Limit: 10 students
Fees: In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include airfare, local travel, all food and accommodation, special admission fees for parks and museums, as well as other field costs. Fee details for the upcoming semester are available at mcgill.ca/arctic/program-fees.

Application Deadline: **This program is currently not offered. \({ }^{* *}\)
Application Details: Students must submit:
- the online application form (available at mcgill.ca/arctic/apply-now);
- a letter of intent;
- one reference letter;
- a CV; and
- a copy of their transcript
to the Internship and Field Studies Office in the Faculty of Science:
Science Internship \& Field Studies Office
Burnside Hall, Room 720
Telephone: 514-398-1063; 514-398-8365
Email: ifso.science@mcgill.ca
Website: mcgill.ca/science/student/internships-field
Prerequisites: The Arctic Field Study Semester is intended for students in their final two years. A CGPA of 3.00 and higher is recommended.
For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits).

\subsection*{12.2.1.3 Barbados Field Semester}

Website: mcgill.ca/bfss
Offered: Fall term
Location: Bellairs Research Institute in Barbados
Enrolment limit: 20 students
Fees: In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include accommodation and most food, as well as other field costs; they do not include airfare. Fee details for the upcoming semester are available at mcgill.ca/bfss/cost.

Students enrolled in the Barbados Field Study Semester (BFSS) program may be eligible for a Mobility Bursary for Exchanges: see mcgill.ca/studentaid/special-funding/mobility-exchanges for details.

Application deadline: April 28 2024. The deadline is for admission to the Fall 2024 semester.
Application details: Students must submit:
- the online application form available at mcgill.ca/bfss/apply-now;
- a letter of intent;
- a CV; and
- a copy of their transcript
by email to ifso.science@mcgill.ca. Further details are available at mcgill.ca/bfss.
Prerequisites: None
For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits).

\subsection*{12.2.1.4 Barbados Interdisciplinary Tropical Studies Field Semester}

Website: mcgill.ca/bits
The Barbados Interdisciplinary Tropical Studies Field Semester is administered by the Faculty of Agricultural and Environmental Sciences. Three intensive courses run consecutively with a 6-credit project course. Courses integrate class and laboratory experiences with extensive field trips.
Offered: Summer term
Location: Bellairs Research Institute in Barbados
Enrolment Limit: 20 students
Fees: In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include accommodation and most food, as well as other field costs; they do not include airfare. Fee details for the upcoming semester are available at mcgill.ca/bits/cost.
McGill students may be eligible for a Mobility Bursary; see mcgill.ca/studentaid/special-funding/mobility-exchanges for details.
Application Deadline: Please consult the website for upcoming deadlines.
Application Details: Students must submit:
- a letter of intent;
- a CV; and
- an application form (available on the website)
by email to caroline.begg@mcgill.ca. Further details are available at mcgill.ca/bits.
Prerequisites: A CGPA of 2.5 or higher is recommended.
For more information on the field studies minor and course lists, see Faculty of Science > Undergraduate \(>\) Browse Academic Units \& Programs \(>\) Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits).

\subsection*{12.2.1.5 Panama Field Study Semester}

Website: mcgill.ca/pfss
Offered: Winter term
Location: Smithsonian Tropical Research Institute (STRI) in Panama
Enrolment limit: 22 students
Fees: In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include accommodation and other field costs; they do not include airfare, food, or other living expenses. Fee details for the upcoming semester are available at \(\mathrm{mcgill} . c a / p f s s / c o s t\).
Students can apply for the Enriched Educational Opportunities need-based bursary (EEOs). See mcgill.ca/studentaid/special-funding/eeo for details.
Application deadline: April 30, 2024 for the January 2025 Departure (Winter term of the 2024-2025 academic year).
*: Please note that at time of publication, the application deadline was tentative and is subject to change. Please liaise with pfss for further details.
Application details: Students must submit:
- the online application (available at mcgill.ca/pfss/application);
- a copy of their transcript;
- a letter of intent; and
- a CV
to the Internship and Field Studies Office in the Faculty of Science:
Internship \& Field Studies Office
805 Sherbrooke Street West, Burnside Hall, Room 720
Montreal Quebec H3A 0B9
Telephone: 514-398-1063; 514-398-8365
Email: ifso.science@mcgill.ca
Website: mcgill.ca/science/undergraduate/internships-field
Prerequisites: HISP 218 Spanish Language Intensive - Elementary or equivalent proficiency, and MATH 203 Principles of Statistics 1 or equivalent. A CGPA of 3.00 and higher is recommended. The program is aimed at undergraduate students in their final year

For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units \& Programs > Field Study > section 11.12.15.1: Field Studies - Minor Field Studies (18 credits).

\subsection*{12.2.2 Off-Campus Summer Programs}

McGill offers the following off-campus summer programs.

\subsection*{12.2.2.1 Desautels Faculty of Management}

Courses are given abroad in the Summer session and cover essentially the same material as the equivalent courses given in Montreal. They will, however, be heavily influenced by the local business environment. Courses are offered in various locations.

For the most up-to-date information concerning Summer Abroad courses, please visit the Minerva Class Schedule at mcgill.ca/minerva.
Application details: For registration and/or advising, please contact the BCom Student Affairs Office at 514-398-4068.

\subsection*{12.2.2.2 Faculty of Engineering}

The FACC 501 Technology Business Plan Project course, normally offered during the Winter term, includes a trip to Israel the following August-also known as the "Israel Start-Up Nation" experiential study trip. This course offers a unique entrepreneurial and cultural experience and is open to students across the University

Further information is available on the McGill Abroad website.

\subsection*{12.2.3 Off-Campus Courses}

McGill offers a number of off-campus courses.

\subsection*{12.2.3.1 Animal Science}

The following course is offered off campus by the Department of Animal Science.

\section*{Off-Campus Animal Science Course}
AGRI 325 (3) Sustainable Agriculture and Food Security
12.2.3.2 Architecture

The following course is offered off campus by the School of Architecture.
Off-Campus Architecture Courses
\begin{tabular}{lcl} 
ARCH 379 & (3) & Summer Course Abroad \\
ARCH 519 & (3) & Field Course Abroad
\end{tabular}

\subsection*{12.2.3.3 Biology}

The Faculty of Science offers the following biology courses off campus.
Off-Campus Biology Courses
\begin{tabular}{lcl} 
BIOL 240 & \((3)\) & Monteregian Flora \\
BIOL 331 & (3) & Ecology/Behaviour Field Course
\end{tabular}

\section*{Off-Campus Biology Courses}
BIOL 334D1/BIOL 334D2

\author{
Applied Tropical Ecology \\ Marine Mammals \\ Vertebrate Palaeontology Field Course
}

\subsection*{12.2.3.4 Earth \& Planetary Sciences}

The following courses are two-week field studies (May) in selected branches of the geosciences to examine processes in geology.

\section*{Off-Campus Earth \& Planetary Sciences Courses}
\begin{tabular}{lll} 
EPSC 231 & \((3)\) & Field School 1 \\
EPSC 331 & \((3)\) & Field School 2
\end{tabular}

\subsection*{12.2.3.5 Geography}

The Faculty of Science offers the following Geography courses off campus.
\begin{tabular}{lcl} 
Off-Campus Geography Courses & & \\
GEOG 290 & \((1)\) & Local Geographical Excursion \\
GEOG 425 & \((3)\) & Southeast Asia Urban Field Studies \\
GEOG 494 & \((3)\) & Urban Field Studies \\
GEOG 495 & \((3)\) & Field Studies - Physical Geography \\
GEOG 496 & \((3)\) & Geographical Excursion \\
GEOG 499 & \((3)\) & Subarctic Field Studies
\end{tabular}

\subsection*{12.2.3.6 History \& Classical Studies}

The Department of History and Classical Studies offers the following field courses.
Off-Campus History \& Classical Studies Courses
CLAS 349

Archaeology Fieldwork: Italy
HIST 262
Mediterranean and European Interconnections

\subsection*{12.3 Internships and Co-op Programs}

For information on internships and co-op programs, refer to University Regulations and Resources > Undergraduate > section 1.7: Internships, Exchanges, and Co-op Programs, or the Internship Offices Network website.

\subsection*{12.4 Exchange Programs}

Exchanges allow McGill students to complete a semester or year of study at a partner university. Students explore, learn, and grow abroad, all while earning credit toward their McGill degree and paying McGill tuition.
Student exchange agreements are bilateral exchange agreements that exist between McGill University and peer institutions which have been reviewed and approved by McGill. The number of exchange spaces available at the host institution are limited, and vary from year to year. McGill students nominated to participate on an exchange term abroad are billed McGill tuition and fees for that term (equivalent to 15 McGill credits). McGill University has agreements with over 150 universities in 39 countries around the world. Exchange programs can be university-wide or faculty-specific. Faculty-specific agreements are only open to students in the specified faculty.
Explore McGill exchange partners.

\subsection*{12.4.1 Eligibility}

Student exchange programs are open to McGill students of all nationalities. To participate, applicants must be currently registered as full-time, degree-seeking McGill students, and meet the criteria of their faculty at McGill. Applicants must have completed at least one year of full-time study ( 24 McGill credits) by the start of the exchange. Students can participate in exchanges for one term or two terms, dependent on faculty approval and space availability.
Visit mcgill.ca/mcgillabroad/go-abroad/steps/apply for up-to-date information on how to apply to the McGill exchange program.

\subsection*{12.4.2 Applying to go on Exchange}

Applications must be submitted on Minerva. The McGill application for Fall (including full-year exchanges) will be open from December to mid-January. Winter application dates are to be confirmed. Please check the website for updates. For Faculty of Law application deadlines, click here.
Detailed information on the application process, eligibility criteria and deadlines can be found on the McGill Abroad website: mcgill.ca/mcgillabroad/go-abroad/steps/apply.

\subsection*{12.4.3 Exchanges Within Quebec}

The BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ) offers a Quebec Inter-University Transfer Agreement (IUT). Through this agreement, students registered at any Quebec university can take courses at any other of the province's universities for credit toward a degree at their home university. For more information, refer to mcgill.ca/students/iut.

\subsection*{12.4.4 Transfer of Credits from Host Institution}

Grades received from the host institution do not appear on the McGill transcript nor are they calculated in the McGill CGPA. The McGill transcript includes a notation of participation in an exchange, the number of transfer credits granted by McGill, and where applicable, McGill course exemptions.

Students can begin the transfer of credits process once they have registered at the host institution and have obtained course syllabi. For more detailed information, students should consult their faculty Student Affairs Office. The transfer credits process should be completed within the shortest delay possible after the end of the exchange term.

Before leaving the host institution, students should order two (2) copies of the official transcript for their files, and ensure that the institution sends an official version of the transcript to Enrolment Services at officialschooldocs@mcgill.ca. Questions regarding transcripts can be directed to Student Exchanges.

\subsection*{12.5 Independent Study Away}

Unlike an exchange, participating in an Independent Study Away means that you apply and pay tuition to your host university independently as a visiting student. This program is an opportunity to go abroad to a destination not covered by McGill's already existing exchange destinations. You must consult the Student Affairs Office of your McGill faculty, as well as the Admissions Office of the university to which you are applying regarding application requirements.

Contact information for your faculty's Student Affairs Office is available at mcgill.ca/students/advising/advisordirectory.

\subsection*{12.6 Funding Opportunities for Going Abroad}

Awards and financial assistance are available to students to help with the cost of going abroad. Further information, as well as application deadlines and eligibility requirements, can be found in the following sections and on the McGill Abroad website.

\subsection*{12.6.1 Government Student Financial Assistance}

Students participating in an official McGill exchange program show as registered full-time on their McGill transcript. As such, Canadian students participating in an official McGill exchange program are eligible to apply for government student financial assistance. American students participating in an official McGill exchange are eligible to apply for their federal aid (Title IV U.S. Direct Loans) within certain constraints and are strongly advised to consult the Scholarships and Student Aid Office for more details.

Students who take part in an Independent Study Away (i.e., "study away on their own") are not eligible to receive government aid through McGill, as they are registered at their host institution. Students should verify with the institution they will be attending whether or not they will be eligible to receive government student financial assistance.

\subsection*{12.6.2 McGill Scholarships and Awards}

For students who hold renewable scholarships and awards, these may be retained for up to one year while on exchange, however will not be eligible for McGill's yearly in-course scholarships and awards. For further information, please refer to the Regulations for Award Recipients under "Term or Year Award for Academic Reasons", consult the unit who administers the award, or contact studentexchanges@mcgill.ca.

Students are encouraged to inquire with their individual faculties who may offer travel-related awards available by application.

\subsection*{12.6.3 McGill's Mobility Bursaries for Exchanges}

The University recognises that the additional costs of going on an official McGill University exchange may be difficult for some students to assume on their own. Thanks to the Quebec government's Programme de mobilité international et de courts séjours à l'extérieur du Québec (PMICSE), McGill is able to help defray these costs for students who otherwise could not afford to participate. This program is administered by the Scholarships \& Student Aid Office, and is based on demonstrated financial need. The application is available to any undergraduate student approved for an eligible exchange semester abroad. Further information, as well as application deadlines and eligibility, can be found on the McGill Abroad website or at Mobility Bursaries for Exchanges.

\subsection*{12.6.4 McGill's Enriched Educational Opportunities (EEO) Bursaries}

The EEO Bursary Program is administered by the Scholarships \& Student Aid Office, to help defray costs or forgone earnings for students who wish to participate in Field Semesters, Field Courses, as well as unpaid off-campus Internships and Research opportunities. Allocation is based on demonstrated financial need. Further information, as well as application information and eligibility requirements can be found on the McGill Abroad website or at EEO Bursaries.

\subsection*{12.7 Further Information about Global Learning Opportunities Offered to McGill Students}

For more details regarding the global learning opportunities offered to McGill students—as well as application procedures, deadlines, eligibility criteria, etc.-visit the McGill Abroad website. Students can also contact Student Exchanges through Service Point for related inquiries: mcgill.ca/servicepoint/contact.```


[^0]:    Note for Medicine and Health Sciences: Refer to UGME's Assessment and Promotion Policy.

[^1]:    Cropping Systems
    Forage Crops and Pastures

[^2]:    3 credits from the following:

[^3]:    12-18 credits chosen from the following list:

