Program Affected? | Y
---|---
Program Change Form Submitted? | N (Simple Change) - Please replace the combination of CHEM 287 and CHEM 297 with CHEM 267 in the listed programs (file attached).
Subject/Course/Term | CHEM 267
- one term
Credit Weight or CEU's | 3 credits
Course Activities | Schedule Type | Hours per week
---|---|---
A - Lecture | 2
L - Laboratory | 4
Total Hours per Week : 6
Total Number of Weeks : 13
Course Title | Official Course Title : | Intro. Chemical Analysis
Course Title in Calendar : | Introductory Chemical Analysis
Rationale | Introductory analytical chemistry is currently separated into a 2-credit lecture course (CHEM 287) and a 1-credit laboratory course (CHEM 297). The material covered in the two courses is highly intertwined. We strongly encourage students to take these courses concurrently, however this suggestion is not always followed. In order to achieve better synchronization of lab and lecture components, we propose to combine CHEM 287 and CHEM 297 into a single 3-credit lecture/lab course CHEM 267 to be offered once a year in the fall. CHEM 287 and 297 were recently changed from required to complementary courses in Biochemistry undergraduate programs, leading to a drop in enrollment which no longer requires the lab component (297) to be offered in both Fall and Winter semesters. We are requesting to create a new course rather than to consolidate into one of the existing course numbers because we anticipate that in Fall 2016 there will be 5-10 students who will have passed CHEM 287 but still require CHEM 297 to complete their program. Creating a new course seems the best way for new students to register in a combined version while the old cohort completes the separate CHEM 287/297 requirements.
Responsible Instructor | [Display Printable PDF](https://horizon.mcgill.ca/pban1/bzskcpwf.p_display_form?form_mode=...)}
**Course Description**

Qualitative and quantitative analysis. A survey of methods of analysis including theory and practice of semimicro qualitative analysis and representative gravimetric, volumetric and instrumental methods. The laboratory component includes introductory experiments in analytical chemistry emphasizing classical and instrumental methods of quantitative analysis.

**Teaching Dept.**
0287 : Chemistry

**Administering Faculty/Unit**
SC : Faculty of Science

**Prerequisites**
CHEM 110 and CHEM 120, or CHEM 115, or equivalent  
Web Registration Blocked? : N

**Corequisites**

**Restrictions**
Not open to students who have taken CHEM 287 or CHEM 297

**Supplementary Calendar Info**

**Additional Course Charges**

**Campus**
Downtown

**Projected Enrollment**
100

**Requires Resources Not Currently Available**
N

**Explanation for Required Resources**

**Required Text/Resources Sent To Library?**

**Library Consulted About Availability of Resources?**

**Consultation Reports Attached?**

**Effective Term of Implementation**
201609

**File Attachments**
- CHEM 267 affected programs.xlsx  
[View](https://horizon.mcgill.ca/pban1/bzskcpwf.p_display_form?form_mode=...)

**To be completed by the Faculty**

**For Continuing Studies Use**

**Approvals Summary**

**Show all comments**

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Edited by: Anthony Mittermaier  
on: Nov 30 2015
Bachelor of Arts (B.A.) - Minor Concentration Science for Arts Students (18 credits)
Bachelor of Arts and Science (B.A. & Sc.) - Major Concentration Chemistry (36 credits)
Bachelor of Education (B.Ed.) - Secondary Science and Technology (120 credits)
Bachelor of Engineering (B.Eng.) - Minor Chemistry (25 credits)
Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Bachelor of Science (B.Sc.) - Honours Biochemistry (73 credits)
Bachelor of Science (B.Sc.) - Honours Chemistry (71 credits)
Bachelor of Science (B.Sc.) - Honours Chemistry - Atmosphere and Environment (75 credits)
Bachelor of Science (B.Sc.) - Honours Chemistry - Bio-organic (75 credits)
Bachelor of Science (B.Sc.) - Honours Chemistry - Materials (74 credits)
Bachelor of Science (B.Sc.) - Honours Chemistry - Measurement (74 credits)
Bachelor of Science (B.Sc.) - Honours Immunology (Interdepartmental) (75 credits)
Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Biochemistry (47 credits)
Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Chemistry - Biological (47 credits)
Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Chemistry - General (49 credits)
Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Chemistry - Physical (47 credits)
Bachelor of Science (B.Sc.) - Major Biochemistry (64 credits)
Bachelor of Science (B.Sc.) - Major Chemistry (59 credits)
Bachelor of Science (B.Sc.) - Major Chemistry - Atmosphere and Environment (63 credits)
Bachelor of Science (B.Sc.) - Major Chemistry - Bio-organic (63 credits)
Bachelor of Science (B.Sc.) - Major Chemistry - Materials (62 credits)
Bachelor of Science (B.Sc.) - Major Chemistry - Measurement (62 credits)
Bachelor of Science (B.Sc.) - Major Environment - Atmospheric Environment and Air Quality (60 credits)
Bachelor of Science (B.Sc.) - Minor Chemistry (18 credits)
Concurrent Bachelor of Science (B.Sc.) and Bachelor of Education (B.Ed.) - Major Concentration Biology -
Concurrent Bachelor of Science (B.Sc.) and Bachelor of Education (B.Ed.) - Major Concentration Biology -
Concurrent Bachelor of Science (B.Sc.) and Bachelor of Education (B.Ed.) - Major Concentration Chemistry with
Syllabus/Course Outline Chem 267 - Fall 2016

General Information:

CHEM 267 – Introductory Chemical Analysis (3 Credits): Qualitative and quantitative analysis. A survey of methods of analysis including theory and practice of semi-micro quantitative analysis and representative gravimetric, volumetric and instrumental methods. The methods will be illustrated in the associated lab sessions.

Instructors:
Dr. Jan Hamier
Office Location: Otto Maass 100
Telephone: (514) 398-XXX

Dr. Samuel Sewall
Office Location: Pulp & Paper 108
Telephone: (514) 398 5536

Office Hours:
Dr. Hamier: Mondays (14:00-17:00) by appointment; Wednesdays 14:00-17:00 (free access); other times by appointment;
Contact: jan.hamier@mcgill.ca

Dr. Sewall: Mondays 12:30-1:30, or by appointment.
Contact: samuel.sewall@mcgill.ca

Lecture: 11:35-12:25 M & W, Otto Maass 112  (+ 1 Friday lecture on Sep 4)
Class attendance is a formal requirement. Every effort to record the lectures will be made, but with no guarantees of its effectiveness. We strongly recommend you attend class prepared to be engaged with the material by keeping up with the presented topics.

You must arrive on time for lab, with appropriate clothing, labcoat and goggles. See the associated lab manual on MyCourses for specific information on requirements for lab period

Midterm Date: October 13, 2016 Time and Location TBA

Prerequisites: Chem 110 AND Chem 120, or equivalent.

Restrictions: Not open to students who have taken or are taking CHEM 287 or CHEM 297 (see Dr. Sewall if you did so).
Learning Outcomes: By the end of the course students should be able to understand the principles and practical aspects of making qualitative and quantitative chemical measurements. They should be able to use statistics to describe and compare such measurements. They should have a thorough understanding of “classical” methods of analysis such as volumetric and gravimetric techniques. They will also have a strong foundation for important instrumental methods such as spectroscopy, chromatography, and mass spectrometry (to which this course provides a formal introduction).

Course Announcements, Issued Instructional Materials and use of the Course Web Page

It will also be the student’s responsibility to access the course web site (hosted on MyCourses) regularly for announcements and information. We assume that any postings on the course website will be read within 24 hours. Note that you can setup email and text notifications for MyCourses, which can be helpful for this purpose (see the IT Knowledge Base website, search ’my courses notification’).

Course Content: see the tentative lecture schedule following McGill’s policy statements.

Instructional Method: This is a lecture and lab combination course.

Course Materials:


There is also an option to purchase an electronic copy from the publisher at roughly half the price. Wiley E-Text http://ca.wiley.com/WileyCDA/WileyTitle/productCd-EHEP002943.html

Additional Materials: A solution manual is available.
The publicly accessible Student companion site for the textbook has a variety of content that is also useful: http://bcs.wiley.com/he-bcs/Books?action=index&bcsId=8267&itemId=0470887575
Other supplementary handouts and/or readings will be posted on the MyCourses site.

Evaluation:
All students will be marked using the following scheme:

Marking Scheme:
35 % Lab Grade
15 % Midterm
50 % Final

**ALL STUDENTS ARE REQUIRED TO TAKE THE MIDTERM.** If you miss the midterm, you must provide a documented medical excuse to be allowed to take a make-up midterm. The date of a make-up exam will be determined later.
McGill Policy Statements:
“McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures” (see www.mcgill.ca/students/srr/honest/ for more information). (approved by Senate on 29 January 2003)
« L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/). »

“In accord with McGill University’s Charter of Students’ Rights, students in this course have the right to submit in English or in French any written work that is to be graded.” (Approved by Senate on 21 January 2009)
« Conformément à la Charte des droits de l’étudiant de l’Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l’un des objets est la maîtrise d’une langue). »

“As the instructors of this course we endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with us and the Office for Students with Disabilities, 514-398-6009.”

“End-of-course evaluations are one of the ways that McGill works towards maintaining and improving the quality of courses and the student’s learning experience. You will be notified by e-mail when the evaluations are available on Mercury, the online course evaluation system. Please note that a minimum number of responses must be received for results to be available to students

“In the event of extraordinary circumstances beyond the University’s control, the content and/or evaluation scheme in this course is subject to change.”

"Additional policies governing academic issues which affect students can be found in the McGill Charter of Students’ Rights” (http://www.mcgill.ca/secretariat/policies/students/handbook-student-rights-and-responsibilitiesle-recueil-des-droits-et-obligations-d)

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