

McGILL SCHOOL OF ENVIRONMENT

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1. The School

1.1 Location

Mailing Addresses:

Macdonald Campus

Macdonald-Stewart Building, Room MS2-032
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue, QC H9X 3V9

Downtown Campus:

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<http://www.mcgill.ca/mse>

For advising, contact:

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1.2 Administrative Officers

DEBORAH BUSZARD, B.Sc.(Bath), Ph.D.(Lond.) **Dean,**
Faculty of Agricultural and Environmental Sciences

CARMAN MILLER, B.A., B.Ed.(Acad.), M.A.(Dal.), Ph.D.(Lond.)
Dean, Faculty of Arts

ALAN G. SHAVER, B.Sc.(Car.), Ph.D.(M.I.T.)
Dean, Faculty of Science

T.B.A. **Director**

PETER BARRY, B.Sc.(C' dia), M.Sc.(McG.)
Program Coordinator

1.3 Executive Committee

NIGEL ROULET (CHAIR), Faculty of Science

JAMES FYLES, Faculty of Agricultural and Environmental Sciences

CHRISTOPHER GREEN, Faculty of Arts

CATHERINE POTVIN, Faculty of Science

JOSEPH RASMUSSEN, Faculty of Science

COLIN SCOTT, Faculty of Arts

MARILYN SCOTT, Faculty of Agricultural and Environmental
Sciences

1.4 Creation of the School

In September 1998, McGill's Faculties of Agricultural and Environmental Sciences, Arts, and Science will forge a unique approach to the study of environment through the inter-faculty, trans-disciplinary McGill School of Environment (MSE).

The growth of technology, globalizing economies, and rapid increase in population have had dramatic and significant environmental impacts. These changes have been accompanied by an increasing awareness of the relationship between human activity and the environment. Environmental problems range from local and short-term degradation through to the perturbation observed over the entire globe and for many years. The importance of human-environment relations for environmental and social well-being, and the complexity and conflict involved in environmental analysis and decision making, requires a depth and breadth of knowledge. The McGill School of Environment (MSE) has developed its programs with the approach of introducing 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.

1.5 Goals of the School

The McGill School of Environment has the following goals:

- to impart to students an understanding of current environmental problems;
- to provide an exciting and rigorous program that allows for intellectual growth in the comprehension of environmental issues or components of the environment;
- to help students gain an understanding of the complexity and conflicts that underlie most environmental problems; and
- to give students an opportunity to apply their knowledge in the analysis of specific, contemporary problems..

Students enrolled in the Environmental Studies Program prior to September 1998 may continue in that program until they receive their degree.

They should refer to the Calendar for the year they entered the program or contact their adviser.

2. Admission and Registration

Students may be admitted to B.A. or B.Sc. programs offered by the MSE on the University's two campuses: the Macdonald Campus and the Downtown Campus. They register as students within their faculty of admission and are governed by all rules and regulations of that faculty.

Please refer to the Admission Requirements in the General University Information section. In addition, in the case of students entering the B.A. Faculty Program in Environment, the MSE requires, as either a pre or co-requisite for the core courses, 189-139 Calculus or 189-140 Calculus I and 189-141 Calculus II, or their equivalents (CEGEP courses 201-103 and 201-203 respectively).

3. Programs

The McGill School of Environment has developed four programs which are offered on the downtown and Macdonald campuses. 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 trans-disciplinary area of environmental specialization, referred to as a Domain; or
- in a more traditional discipline-based program that has an environmental emphasis. 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.

The MSE offers four options for students interested in pursuing environmental studies.

1. **A Minor in Environment** is open to all undergraduates.
2. **A Faculty Program in Environment** leading to a B.A. is open to Arts students only.
3. **A Major in Environment** leading to a B.Sc. is open to students meeting the entrance requirements of the Faculty of Science and who obtain 54 credits in approved Science and Agricultural and Environmental Sciences courses.
4. **A Diploma in Environment** is available only to students who have already completed a Bachelor or an equivalent degree, and who wish to return to university for further study.

Minor In Environment (18 credits)

The Minor in Environment is intended to complement an expertise obtained through a Major or a Faculty Program offered by an academic unit **other than** the MSE. Students taking the Minor 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 and the MSE Program Coordinator, can declare their intention to do a Minor in Environment from their first to their penultimate year. Students must submit their program of courses already taken and to be taken for the Minor in Environment to the MSE Program Coordinator for approval.

To obtain a Minor in Environment, students must:

- (a) pass all courses counted towards the Minor with a **grade of C or higher**;
- (b) complete 18 credits from the courses listed below NOT otherwise counted towards the student's Major program or a second Minor program; and
- (c) ensure that all the credits specified in (b) above are taken outside the discipline or field of the student's Major program.

Complementary Courses (18 credits)

12 credits selected from the MSE core courses:

170-200	(3)	The Global Environment
170-201	(3)	Society and Environment
170-202	(3)	The Evolving Earth
170-203	(3)	Knowledge, Ethics and Environment
170-401	(3)	Environmental Analysis

6 Thematic Category credits:

B.Sc. Majors must take at least 3 credits from the list of courses in the thematic area of Social Sciences and Policy.

B.A. students must take at least 3 credits from the list of courses in the thematic area of Natural Sciences and Technology.

The List of Approved Courses for the above Thematic Categories is in the process of being up-dated and revised. The new List of Approved Courses will be available in March, 1998 on the MSE Web Page (<http://www.mcgill.ca/mse>). Check the departmental course listings in this Calendar for course descriptions, prerequisites, and current scheduling.

B.A. Faculty Program in Environment OR

B.Sc. Major in Environment (54 credits)

The B.A. Faculty Program and B.Sc. Major have two components: core and Domain. The core consists of four introductory courses where students are exposed to the different approaches, perspectives, and world views that will help them gain an understanding of the complexity and conflicts that underlie most environmental problems. Through the core program students go beyond the confines of their individual views of environment.

Domains provide a trans-disciplinary study of a particular theme or component of the environment. Domains are being developed in areas such as Environment and Development, Aquatic Environments, Biodiversity and Conservation, and Natural Resource Management. More information on these Domains and others will be available in March, 1998 on the MSE Web Page (<http://www.mcgill.ca/mse>).

Finally, students in the two senior courses of the core 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 B.A. Faculty Program or B.Sc. Major in Environment, students must:

- (a) pass all courses counted towards the Faculty Program or the Major with a **grade of C or higher**; and
- (b) confirm that their course selection satisfies the required components of the MSE core and their chosen Domain, and that the complementary courses are approved courses in their chosen Domain.

In addition, the B.A. Faculty Program requires, as either a pre- or co-requisite for the core courses:

189-139 Calculus or 189-140 Calculus I and 189-141 Calculus II,

or their equivalents

(CEGEP courses 201-103 and 201-203, respectively).

Required Core Courses (18 credits)

170-200	(3)	The Global Environment
170-201	(3)	Society and Environment
170-202	(3)	The Evolving Earth
170-203	(3)	Knowledge, Ethics and Environment
170-400	(3)	Environmental Studies Project
170-401	(3)	Environmental Analysis

Complementary Domain Courses (36 credits)

The list of courses appropriate to each Domain is currently under development and will be available on the MSE Web Page (<http://www.mcgill.ca/mse>).

Diploma in Environment (30 credits)

The Diploma 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. The Diploma requires 30 credits of full-time or part-time studies; it may be started in either January or September (recommended). The Diploma 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 either the Faculty of Science or the Faculty of Arts, provided they are otherwise acceptable for admission to the University. Students must have a **grade of C or higher** in all courses for the Diploma.

Required Courses (18 credits)

170-200	(3)	The Global Environment
170-201	(3)	Society and Environment
170-202	(3)	The Evolving Earth
170-203	(3)	Knowledge, Ethics and Environment
170-400	(3)	Environmental Studies Project
170-401	(3)	Environmental Analysis

Complementary Courses (12 credits)

12 credits selected from the Thematic Categories:

6 credits must be taken within the thematic area outside the area of the student's previous degree (e.g. those with a B.A. degree must take 6 credits from the Natural Sciences and Technology list; those with a B.Sc. degree must take 6 credits from the Social Sciences and Policy list.)

6 credits must be taken at the 400 level or higher in the thematic area of the student's previous degree (e.g., those with a B.A. degree must take 6 credits at the 400 level or higher in Social Sciences and Policy; those with a B.Sc. degree must take 6 credits at the 400 level or higher in Natural Sciences and Technology.)

The List of Approved Courses for the above Thematic Categories is in the process of being up-dated and revised. The new List of Approved Courses will be available in March, 1998 on the MSE Web Page (<http://www.mcgill.ca/mse>). Check the departmental course listings in this Calendar for course descriptions, prerequisites, and current scheduling.

Course offerings change more quickly than can the List of Approved Courses. Students who identify comparable courses that they wish to substitute to meet requirements may do so with the written permission of their academic advisor (the MSE Program Coordinator in the case of students in the Minor or Diploma). A copy of the permission with a brief rationale for the substitution must be included in the student's file to avoid complications at graduation.

SOCIAL SCIENCES AND POLICY THEMATIC CATEGORY**NATURAL SCIENCES AND TECHNOLOGY THEMATIC CATEGORY**

The List of Approved Courses for the above Thematic Categories is in the process of being up-dated and revised. The new List of Approved Courses will be available in March, 1998 on the MSE Web Page (<http://www.mcgill.ca/mse>).

4. COURSES**4.1 MSE Course Descriptions**

MSE courses are team-taught by faculty spanning a range of disciplines and perspectives.

The course credit weight is given in parentheses (#) after the course title.

170-200A,B THE GLOBAL ENVIRONMENT. (3) A systems approach to study the different components of the environment involved in global climate change: the atmosphere, biosphere, hydrosphere, and lithosphere. The interactions among these components. Their role in global climate change. The human dimension to global change.

170-201A,B SOCIETY AND ENVIRONMENT. (3) An introduction to human societies and their relations with the biophysical environment, focusing on how economy, technology, and institutions combine and interact to give rise to environmental problems. Analytical treatment of key concepts including "carrying capacity", "renewable resources", "environmental equity", and "sustainability", from distinct disciplinary perspectives in the social and life sciences.

170-202A,B THE EVOLVING EARTH. (3) Formation of the earth and the evolution of life. How geological and biological change are the consequence of history, chance, and necessity acting over different scales of space and time. General principles governing the formation of modern landscapes and biotas. Effects of human activities on natural systems.

170-203A,B KNOWLEDGE, ETHICS, AND ENVIRONMENT. (3) Introduction to cultural perspectives on the environment: the influence of culture and cognition on perceptions of the natural world; conflicts in orders of knowledge (models, taxonomies, paradigms, theories, cosmologies), ethics (moral values, frameworks, dilemmas), and law (formal and customary, rights and obligations) regarding political dimensions of critical environments, resource use, and technologies.

170-400B ENVIRONMENTAL STUDIES PROJECT. (3)

170-401A ENVIRONMENTAL ANALYSIS. (3)

4.2 Thematic Category Courses**Notes:**

Most courses listed at the 300 level and higher have prerequisites. Although instructors may waive prerequisites in some cases, **students are urged to prepare their program of study well before their final year.**

Not all courses are available in any given year. Consult departmental listings for full course descriptions and offerings.

