53 Natural Resource Sciences

Department of Natural Resource Sciences
Macdonald Campus
21,111 Lakeshore Road
Sainte-Anne-de-Bellevue, QC H9X 3V9
Canada

Telephone: (514) 398-7890
Fax: (514) 398-7990
E-mail: info@nrs.mcgill.ca
Web site: www.nrs.mcgill.ca

Chair — B. Côté

Graduate Program Director — R.D. Titman

53.1 Staff

Emeritus Professors

A.C. Blackwood; B.Sc., M.Sc.(Alta.), Ph.D.(Wis.), F.R.S.C.; Microbiology
R. Knowles; B.Sc.(Birm.), Ph.D., D.Sc.(Lond.); F.R.S.C.; Microbiology
A.F. MacKenzie; B.S.A., M.Sc.(Sask.), Ph.D.(C'nell); Soil Science
Tor.), M.Sc.(McG.), Ph.D.(Br.Col.); Soil Science

Associate Professors

B. Côté; B.Sc., Ph.D.(Laval); Forest Resources
M.A. Curtis; B.Sc., M.Sc., Ph.D.(McG.); Wildlife Biology
B.T. Driscoll; B.Sc., Ph.D.(McM.); Microbiology
G.B. Dunphy; B.Sc.(U.N.B.), M.Sc., Ph.D.(Mem.); Entomology
D.J. Lewis; B.Sc., M.Sc., Ph.D.(Mem.); Entomology
G.R. Mehuys; B.Sc., Ing.Agron.(Gembloux), Ph.D.(Calif.); Soil Science
D.F. Niven; B.Sc., Ph.D.(Aber.); Microbiology
M.E. Rau; B.Sc.(Purdue), M.Sc., Ph.D.(McG.); Entomology
R.D. Titman; B.Sc.(McG.), M.Sc.(Bishop's), Ph.D.(U.N.B.); Wildlife Biology
T.A. Wheeler; B.Sc.(Mem.), M.Sc., Ph.D.(Guelph); Entomology
L.G. Whyte; B.Sc.(Reg.), Ph.D.(Wat.); Microbiology

Assistant Professors

C. Buddle; B.Sc.(Guelph), Ph.D.(

application form available on the Web at www.mcgill.ca/applying/graduate.

Application Fee (non-refundable) – *A fee of $60 Canadian* must accompany each application (including McGill students), *otherwise it cannot be considered.* This sum must be remitted using one of the following methods:

1. Credit card (by completing the appropriate section of the application form). NB: on-line applications must be paid for by credit card.
2. **Certified** cheque in Cdn.$ drawn on a Canadian bank.
3. **Certified** cheque in U.S.$ drawn on a U.S. bank.
4. Canadian Money order in Cdn.$.
5. U.S. Money Order in U.S.$.
6. An international draft in Canadian funds drawn on a Canadian bank requested from the applicant's bank in his/her own country.

Transcripts – Two official copies of all transcripts with proof of degree(s) granted are required for admission. Transcripts written in a language other than English or French must be accompanied by a certified translation. An explanation of the grading system used by the applicant's university is essential. It is the applicant's responsibility to arrange for transcripts to be sent.

It is desirable to submit a list of the titles of courses taken in the major subject, since transcripts often give code numbers only. Applicants must be graduates of a university of recognized reputation and hold a Bachelor's degree equivalent to a McGill Honours degree in a subject closely related to the one selected for

tions to movement of water, salts, nutrients; diffusion of gases; heat transfer. Discussion of significant research in soil physics.

WILD 605 WILDLIFE ECOLOGY. (3) (2 class hours per week) Discussion of current topics in wildlife ecology with special reference to the research interests of staff and students involved.

WILD 610 FISH ECOLOGY. (3) (3 class hours per week) A critical examination of current topics in fish ecology; discussion of migration, reproductive strategies, sex determination mechanisms, competition, communication and predator-prey relationships.

WOOD 640 RECENT ADVANCES: TREE ECOPHYSIOLOGY. (3) (3 lectures per week) Discussion of the effects of environmental factors on the physiology of trees. Both anthropogenic and natural factors will be discussed.

WOOD 660 RECENT ADVANCES: FOREST ECOLOGY. (3) (2 hours seminar) Review and discussion of current literature in forest ecology. Topics covered will depend on the research interests of students and may include population biology of forest plants, forest succession, forest nutrition and nutrient cycling, computer modelling of forest systems.

54 Neurology and Neurosurgery

GRADUATE PROGRAM IN

A. Bernasconi; M.D.(Basel U.)
M.A. Castro-Alamancos; B.Sc., M.Sc., Ph.D.(U. Complutense of Madrid)
L. Collins, M.Eng., Ph.D.(McG.)
A. Dagher; M.Eng.(McG.), M.D.(Tor.), F.R.C.P.(C)

proposal and communicate its recommendations to the student and the Graduate Studies Committee.

3. Students will present a formal seminar on their research work prior to writing their thesis. This presentation will be attended by the student's Advisory Committee and members of the Graduate Studies Committee who will report their impressions and recommendations to the student.
4. An annual oral informal presentation of research work accomplished will be presented to the student's Advisory Committee which in turn presents its report to the Graduate Studies Committee.

M.Sc. DEGREE

Course requirements:
Student with a B.Sc., B.A. or M.D. degree: A minimum of 45 credits distributed as follows:*

Principles of Neuroscience 1 course: NEUR 630 and either Principles of Neuroscience 2: NEUR 631 or CNS course: NEUR 610;
6 credits in other graduate level specialty courses relevant to program;
9 credits in Master's project Proposal: NEUR 697 (first term of studies)
9 credits in Master's Seminar Presentation: NEUR 698 (second term of studies)
12 credits in Master's Thesis Submission: NEUR 699 (third term of studies)

Upon recommendation, depending upon their particular background and needs, students may be requested to take additional selected courses.

Any remaining credits needed to complete the minimum 45 credits required may be chosen from the following: Master's Thesis Research 1: NEUR 695 (3 credits); Master's Thesis Research 2: NEUR 696 (6 credits).

** Please note that all M.Sc. level students must register for a minimum of 12 credits a term during the first three terms of their Master's program.*

Research requirements:
Presentation of a thesis in a subfield of neuroscience. The thesis must be based upon the research of the student. While not necessarily requiring an exhaustive review of work in a particular field, or a great deal of original scholarship, the thesis must show familiarity with previous work in the field and must demonstrate the ability of the candidate to carry out research and to organize results, all of which must be presented in good literary style. The Graduate Studies Committee expects the student's research should be of sufficient quality for publication in a peer-reviewed journal. A seminar on the thesis topic is given prior to writing the thesis, and each year, a report from the student's Advisory Committee is required by the graduate Studies Committee.

Residence requirements:
Three terms of full-time study.

PH.D. DEGREE

Course requirements:

Students with an M.Sc. degree continuing in this Department have no required courses. It may be recommended that they take specialty courses related to their field of study in neuroscience. Students with an M.Sc. degree from another program will be required to take NEUR 630 and NEUR 631 and/or other courses listed under the M.Sc. degree depending upon their background and field of study.

Students with an M.D. degree proceeding directly into a Ph.D. program will be required to take NEUR 630 and NEUR 631. Recently graduated M.D.s should have the equivalent of NEUR 610, and may be granted equivalence. They will also be required to take 6 credits of graduate level courses.

Doctoral Candidacy Examination (NEUR 700)
All students registering directly into the Ph.D. program on or after September 1998, regardless of prior degrees from McGill or any other academic institutions, must complete the Doctoral Candidacy Examination within 18 months of initial registration in the Program. This is a qualifying examination consisting of a formal presentation and oral examination of the thesis proposal. The questioning will pertain to the student's knowledge and understanding of his/her field of specialization in neuroscience as well as the research proposal. Its primary purpose is to evaluate the student's ability to carry out original scholarship.

The Candidacy Examination will be conducted in conjunction with the Transfer seminar for all students currently registered in the M.Sc. program who apply for transfer to the Ph.D.

Research requirements:
Presentation of a thesis in a subfield of neuroscience. The thesis must display original scholarship expressed in satisfactory literary style and must be a distinct contribution to knowledge. After the thesis has been submitted to, and approved by the Graduate and Postdoctoral Studies Office, a final oral exam will be held on the subject of the thesis and subjects immediately related to it.

Residence requirements:
Three years of resident study of which one year may be completed in the Master's program.

54.6 Graduate Courses

Students preparing to register should consult the Web at www.mcgill.ca/minerva (click on Class Schedule) for the most up-to-date list of courses available; courses may have been added, rescheduled or cancelled after this Calendar went to press. Class Schedule lists cour

laboratories in neuroanatomy, and clinical problems and demonstrations in neurology.

NEUR 630 PRINCIPLES OF NEUROSCIENCE 1. (3) (Prerequisites: BIOL 200 and BIOL 201 or equivalent; permission of instructor) An overview of cellular and molecular neuroscience at the graduate level. Topics include: synthesis, processing and intracellular transport of macromolecules; development of the nervous system including neurogenesis, axonal pathfinding, synaptogenesis and myelination; neuronal survival and response to injury; generation and propagation of action potentials; neurotransmitters and synaptic transmission.

NEUR 631 PRINCIPLES OF NEUROSCIENCE 2. (3) (Prerequisite: Permission of instructor; basic knowledge of mechanisms of neurotransmission and signal transduction.) An overview of the structure, function and interaction of neuronal systems of vertebrates. Topics include basic neuroanatomy, coding and processing of sensory information (somatic sensory, visual and auditory systems), control of posture and voluntary movement, learning and memory, processing of language and speech, cerebral blood flow, the neuroendocrine system and neuroimmunology.

NEUR 695 MASTER'S THESIS RESEARCH 1. (3) Independent work under the direction of the student's supervisor.

NEUR 696 MASTER'S THESIS RESEARCH 2. (6) Independent work under the direction of the student's supervisor.

NEUR 697 MASTER'S PROJECT PROPOSAL. (9) (M.Sc. students only) Presentation of a written thesis proposal by the end of the first year in the program. This document stating the hypothesis being tested, relevant literature and methodology will be orally presented to the student's Advisory Committee which will also review the written proposal and communicate its recommendations to the student and the Graduate Studies Committee.

NEUR 698 MASTER'S SEMINAR

EMINARfu.76 r8.1 TD-0.0011 Tc-0.014view theO9.9333 0 Testudent'6.479O9.9333(6s9Tm-0.000uB)7.4tten ttions to the student and the G6)C9.1 112.14 426.4e(a)

porating research and evaluation methods in the investigation of nursing problems.

Master of Science (with thesis) (not offered 2003-04).

Doctoral Studies in Nursing

The School of Nursing of McGill University and the Faculté des Sciences Infirmières of the Université de Montréal offer a joint doctorate program leading to a Ph.D. in Nursing. This program is offered in English at McGill.

The program is designed to train researchers who will make a contribution to the advancement of knowledge in the field of nursing and assume a leadership role both in the profession and in the health care system.

55.3 Admission Requirements

Master's Programs

Non-Canadian applicants shall normally be required to submit documented proof of competency in oral and written English, e.g., TOEFL (600 minimum on the paper-based test, 250 minimum on the computer-based test) or equivalent.

GRE (Graduate Record Examination) general test results may be required in individual circumstances.

Nurse applicants

Applicants for the Master's degree must have completed a bachelor's degree in nursing with a minimum GPA of 3.0 on a scale of 4.0. This preparation must be comparable to that offered in the bachelor's program at McGill. Experience in nursing is suggested. An introductory statistics course (3 credits) is required.

Nurses with a general B.Sc. or B.A. (comparable to the McGill undergraduate degrees) may be considered on an individual basis.

All nurse applicants are expected to hold current registration in the province or country from which they come. Nurses who are not licensed in Quebec must obtain a special authorization for graduate nurse students from the Order of Nurses of Quebec.

Non-nurse applicants (direct entry Master's students)

Applicants holding a B.Sc. or B.A., which includes a number of prerequisite courses, may be admitted to a Qualifying Year. Upon successful completion of their studies, candidates may apply directly to the Master’s program. (Persons prepared in another professional discipline or in nursing are not eligible for this pro-

***Complementary Courses:** a total of 12 credits from the physical sciences, social sciences and nursing, are chosen in consultation with faculty to complement the student's previous academic background.

Students must successfully complete the Qualifying Year with a minimum of B- in all courses and be recommended by the Standing and Promotions Committee for entry to the Master of Science (Applied) Program. Students in the Qualifying Year will be required to submit an on-line application to the Master's of Science (Applied) by the application deadline.

Ph.D. PROGRAM

Each student's program is designed with the research director and thesis supervisor, taking into account the student's previous academic preparation, needs and research interests. The requirements for the doctoral degree are:

1. A minimum of 18 credits beyond the Master's level. Courses and seminars in research design, issues of measurement, advanced nursing, development of theory in nursing, advanced statistics and complementary course(s) in the student's major field of study art4.4ryrr

NUR2 625 CLINICAL LABORATORY IN NURSING 3. (6) Field experience in nursing, incorporating extensive assessment, experimentation and evaluation of differing nursing approaches.

NUR2 626 CURRENT DEVELOPMENTS IN NURSING EDUCATION & ADMINISTRATION. (3) An examination of theories of learning and organizational behaviour as related to the preparation of nurses for the delivery of health care services. Implications of these theories for the assessment, development, and evaluation of nursing programs will be investigated.

NUR2 627 NURSING PRACTICUM. (3) Research, administrative or teaching projects in nursing are defined by interested faculty and developed with students. The goal is to promote and enhance scholarly activity and productivity. At completion, there should be

vant to occupational health or hygiene such as: chemistry, engineering, environmental sciences, physics; medicine, nursing and other health sciences with a standing equivalent to a minimum Cumulative Grade Point Average (CGPA) of 3.0 out of 4. High grades are expected in courses considered by the Department to be preparatory to the graduate program.

M.Sc. Applied Program (Distance Education)
Candidates must hold an M.D., a bachelor's degree in nursing, or a B.Sc. (any major). They must have maintained at least a 3.0 on 4.0 grade point average.

Those who hold a B.Sc. must be Industrial Hygienists with at least three years of experience in industrial hygiene and/or safety. In the case of medical doctors and nurses, priority will be given to candidates with two or more years of experience in occupational health.

Ph.D. Program
Candidates must hold a M.Sc. degree or its equivalent in occupational health sciences, or in a relevant discipline, such as: community health, environmental health, epidemiology, chemistry, engineering, physics, or health sciences (medicine, nursing, etc.).

56.4 Application Procedures

Application forms are available on-line at www.mcgill.ca/applying/graduate.

M.Sc. Applied Program (Full-time) (Resident) (on campus)

Candidates must submit with their application two official copies of their university transcripts, two letters of reference, a copy of their curriculum vitae and a letter describing their background (occupational health, occupational hygiene, worker safety, etc.) as well as a $60(Cdn) application fee.

Eligible candidates may be invited for an interview with members of the Admissions Committee of the Department.

Applications are accepted for Fall term only.

M.Sc. Applied Program (Distance Education)

Candidates must submit with their application two official transcripts from their university of graduation, two letters of recommendation, a copy of their résumé, a letter describing their career plan, the reasons for their enrolment, and how they plan to accommodate their study time within their work schedule as well as a $60(Cdn) application fee.

Ph.D. Program

Candidates must submit with their application two official copies of their university transcripts (undergraduate and graduate), two letters of reference (or completed special forms), a copy of their curriculum vitae and a letter describing their field of interest as well as a $60(Cdn) application fee.

Candidates must also submit with their application an outline of their scientific interests, indicating the field and the topic of their proposed research. Each student will be assigned to one academic staff member of the Department, who will act as his/her supervisor, who will guide him/her in the preparation of a definite research protocol.

56.5 Program Requirements

It is highly recommended to have access to a computer and the Internet as some of the course material is most readily available by accessing the Web.

M.SC. APPLIED PROGRAM (FULL-TIME) (RESIDENT) (ON CAMPUS)

Teaching is organized in eight 3-credit courses and one 6-credit course totalling 30 credits. Promotion to the following term is dependent upon passing grade. A comprehensive examination is held at the end of the course program.

After successfully Pa-0e0 -f-acopy of their

PH.D. PROGRAM

Three years of resident study are required for this program.

Students are required to take course OCCH 706 Occupational Health and Hygiene Seminars (2 credits) and are encouraged to

OCCH 706D2 PH.D SEMINAR ON OCCUPATIONAL HEALTH AND HYGIENE. (1) (Prerequisite: OCCH 706D1) (No credit will be given for this course unless both OCCH 706D1 and OCCH 706D2 are successfully completed in consecutive terms) (OCCH 706D1 and OCCH 706D2 together are equivalent to OCCH 706) See OCCH 706D1 for course description.

M.SC.(A) APPLIED PROGRAM (RESIDENT) COURSES

Students with a strong interest in ergonomics could take course OCCH 627 Work Physiology and Ergonomics given in the Distance Education program as an additional course. This is not a required course for the resident program students and will not exempt students from taking all the required courses in the resident program.

Those with a strong interest in risk assessment are invited to take the summer course EPIB 668 Special Topics 1. This is not a required course and will not exempt the resident program or distance education program students from taking all the required courses in their respective programs. For more information on this course, please contact the Summer Program Office at tel: (514) 398-3973 or e-mail: summer.epid@mcgill.ca or refer to their Web site: www.mcgill.ca/epi-biostat.

57 Otolaryngology

Department of Otolaryngology
Montreal Children's Hospital
2300 Tupper Street
Montreal, QC H3H 1P3
Canada

Telephone: (514) 934-4344
Fax: (514) 934-4342
Web site: www.mcgill.ca/ent

Chair — M.D. Schloss

57.1 Staff

Emeritus Professor
J.D. Baxter; M.D.,C.M., M.Sc.(McG.), F.R.C.S.(C)

Professors
S. Frenkiel; B.Sc., M.D.,C.M.(McG.), F.R.C.S.(C)
A. Katsarkas; M.D.(Thess.), M.Sc.(Otol.), F.R.C.S.(C)
M.D. Schloss; M.D.(Br.Col.), F.R.C.S.(C)
T.L. Tewfik; M.D.(Alex.), F.R.C.S.(C)

Associate Professors
M.J. Black; M.D.,C.M.(McG.), F.R.C.S.(C)
N. Fanous; M.B., BCH.(Cairo), F.R.C.S.(C)
W.R.J. Funnell; B.Eng., M.Eng., Ph.D.(McG.)
J. Manoukian; M.B., Ch.B.(Alex.), F.R.C.S.(C)
W.H. Novick; M.D.(Queen's), F.R.C.S.(C)
B. Segal; B.Sc., B.Eng., M.Eng., Ph.D.(McG.)
R.S. Shapiro; M.D., C.M.(McG.), F.R.C.S.(C)

Assistant Professors
F. Chagnon; M.D.C.M.(McG.), F.R.C.S.(C)
I. Fried; M.D.(Dal.), F.R.C.S.(C)
M. Hier; M.D.,C.M.(McG.), F.R.C.S.(C)
K. Kost; M.D., C.M.(McG.), F.R.C.S.(C)

press. Class Schedule lists courses by term and includes days, times, locations, and names of instructors.

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

OTOL 602 PHYSIOLOGY, HISTOPATHOLOGY AND CLINICAL OTOLARYNGOLOGY 1. (3) (6 hours/week) University and hospital rounds and seminars presenting various topics in Clinical Otolaryngology.

OTOL 603 ADVANCED SCIENTIFIC PRINCIPLES - OTOLARYNGOLOGY 1. (3) (1.5 hours/week) Lectures in advanced basic-science topics of relevance to the otolaryngologist.

OTOL 612 PHYSIOLOGY, HISTOPATHOLOGY AND CLINICAL OTOLARYNGOLOGY 2. (3) (6 hours/week) University and hospital rounds and seminars presenting various additional topics in Clinial Otolaryngology.

OTOL 613 ADVANCED SCIENTIFIC PRINCIPLES - OTOLARYNGOLOGY 2. rting various a 2.

applicant's file until the following admittance period if application materials including supporting documents are received after these dates. International applicants are advised to apply well in

press. Class Schedule lists courses by term and includes days, times, locations, and names of instructors.

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

♦ Departmental approval required for registration.

● Denotes courses not offered in 2003-04.

The following advanced undergraduate courses are available for graduate students in Parasitology.

AEBI 202 CELLULAR BIOLOGY. (3) (Winter) (3 hours of lectures per week) Organization and function of intercellular organelles in eukaryotic cells. Protein synthesis and control of protein transport within the cell. Cell division and DNA replication. Energy metabolism and electron transport. Signal transduction and transmembrane signalling. Differentiation of cells and cancer. Function and components of the immune system.

AEMA 306 MATHEMATICAL METHODS IN ECOLOGY. (3) (3 hours of lectures per week) (Prerequisite: AEBI 205 or permission. Corequisite: AEMA 310 or permission) An introduction to mathematical and graphical tools for use in ecology. Representation and interpretation of data and associated statistics in graphs and tables; theoretical modelling in plant and animal ecology, including difference and differential equation models. Introduction to stability analysis and probability theory. Emphasis is placed on graphical techniques.

FDSC 211 BIOCHEMISTRY 1. (3) (Fall) (3 lectures) (Corequisite: FDSC 230) Biochemistry of carbohydrates, lipids, proteins, nucleic acids; enzymes and coenzymes. Introduction to intermediary metabolism.

PARA 400 EUKARYOTIC CELLS AND VIRUSES. (3) (4 hours of lectures per week) (Prerequisite: CELL 204) The basic principles of molecular biology and the underlying molecular basis for various methodologies in molecular biology are covered. The molecular genetic basis for viral infections and tumorigenesis will be covered as examples of the use of molecular genetic approaches to address biological problems.

PARA 410 ENVIRONMENT AND INFECTION. (3) (2 lectures per week) (Prerequisite: BIOL 111 or AEBI 120 or equivalent) Infectious pathogens of humans and animals and their impact on the global environment are considered. The central tenet is that infectious pathogens are environmental risk factors. The course considers their impact on the human condition and juxtaposes the impact of control and treatment measures and environmental change.

PARA 438 IMMUNOLOGY. (3) (2 lectures per week) (Prerequisite: AEBI 202 or permission of instructor) An in-depth analysis of the principles of cellular and molecular immunology. The emphasis of the course is on host defense against infection and on diseases caused by abnormal immune responses.

WILD 410 WILDLIFE ECOLOGY. (3) (Winter) (3 hours of lectures per week) (Prerequisite: AEBI 205 or permission) Ecological proc-

basic and clinical research in areas of specialty ranging from neuropharmacology, reproductive, endocrine, receptor, cardiovascular, cancer, developmental, autonomic, clinical and biochemical pharmacology, molecular biology, to toxicology.

The present 35 full and affiliate members of the Department have research laboratories located in the McIntyre Medical Sciences Building and in a variety of hospitals, institutes and industry including the Douglas Hospital Research Center, Allan Memorial Institute, Montreal Children's Hospital, Montreal General Hospital, Royal Victoria Hospital, Montreal Heart Institute, Lady Davis Research Institute, Pfizer Canada and Merck Frosst Canada Inc. The participation of researchers from both industry and government ensures the relevance of the Department's applications-oriented training programs.

60.3 Admission Requirements

Candidates are required to hold a B.Sc. degree in a discipline relevant to the proposed field of study; those with the M.D., D.D.S. or D.V.M. degrees are also eligible to apply. A background in the health sciences is recommended, but programs in biology, chemistry, mathematics, and physical sciences may be acceptable.

Admission is based on a student's academic record, letters of assessment, and, whenever possible, interviews with staff members. Non-Canadian students are required to take the Graduate

- **PHAR 703 NEUROPHARMACOLOGY.** (3)
- **PHAR 704 DRUG DISTRIBUTION, METABOLISM AND EXCRETION.** (3)

PHAR 705 CARDIOVASCULAR REGULATION AND DRUG ACTION. (3) Homeostatic regulation of cardiovascular function and its modification by drugs.

- **PHAR 706 CHEMICAL MEDIATORS AND AUTONOMIC DRUGS.** (3)
- **PHAR 707 MOLECULAR PHARMACOLOGY.** (3)

PHAR 712 STATISTICS FOR PHARMACOLOGISTS. (3) Basic theoretical and practical aspects of statistics for pharmacologists.

PHAR 713 DEVELOPMENTAL PHARMACOLOGY. (3) Developmental changes that take place from fetal life to old age will be studied in the context of response to an array of drugs. Emphasis will be placed on the cell and molecular mechanisms by which drugs interfere with different stages of development and on the altered actions and handling of drugs.

- **PHAR 714 ENDOCRINE PHARMACOLOGY.** (3)

61 Philosophy

Department of Philosophy
Leacock Building, Room 908
855 Sherbrooke Street West
Montreal, QC H3A 2T7
Canada

Telephone: (514) 398-6060
Fax: (514) 398-7148
E-mail: info.philosophy@mcgill.ca
Web site: www.arts.mcgill.ca/programs/philo

Chair —

M.A. specialization in Bioethics
Applications are made initially through the Biomedical Ethics Unit in the Faculty of Medicine, which administers the program and teaches the core courses.

Applicants must be accepted first by the Department of Philosophy and then by the Bioethics Graduate Studies Advisory Committee.

For information, please contact the Chair, Master's Specialization in Bioethics, Biomedical Ethics Unit, 3690 Peel Street, Montreal, QC, H3A 1W9. Telephone: (514) 398-6980. Fax: (514) 398-8349. E-mail: leigh.turner@mcgill.ca.

61.5 Program Requirements

The course work for the first four terms of the Ph.D. program will include two pro-seminars, in two of the following three areas: Value theory; Metaphysics and Epistemology; History of Philosophy. Each seminar will be led by two members of staff, and the grade for the seminar will be determined jointly by them. Each academic year, the Chair will invite joint proposals from staff for topics for the following year's pro-seminar and will, if necessary, choose among proposals, ensuring that the topics offered in successive years do not fall within the same area as defined above. The Chair will also consult with graduate students in Ph.D. I concerning the topic of the pro-seminar for the following year. The pro-seminar will normally be offered in the Fall term.

The course work taken towards completion of the requirements for the Ph.D. program must satisfy certain distribution requirements. Students must take at least two graduate courses in each of the following three areas: Value Theory; Metaphysics and Epistemology; History of Philosophy. Pro-seminars (6 credits each) may be counted in partial satisfac

● **PHIL 560 SEMINAR: 17TH CENTURY PHILOSOPHY.** (3) (Prerequisite: PHIL 360 or written permission of the instructor)

PHIL 561 SEMINAR: 18TH CENTURY PHILOSOPHY. (3) (Prerequi-

Occupational Therapy or related health professions. Two years of clinical experience is recommended. The program trains health professionals to become consumers of research in order to promote evidence-based practice in rehabilitation science. The curriculum is made up of both required and elective courses and may also include a research project.

Master of Science in Rehabilitation Science
The full curriculum consists of approximately two years of study for graduates who hold a B.Sc. degree in one of the medical rehabilitation disciplines or a related field. The program consists of required and elective course work, a research proposal and a research thesis.

Doctorate in Rehabilitation Science
The Ph.D. program curriculum consists of three to four years of study, on average, for graduates with Master's level training in one of the medical rehabilitation disciplines or a related field. The program consists of required and elective course work, a comprehensive written examination, a research proposal and a doctoral

Required Courses (9 credits)

Complementary Courses (36 credits)

Doctorate in Rehabilitation Science
Doctoral students are required to pursue at least three years of full-time residence study.

The curriculum is divided as follows:

Required Courses (12 credits)

Of the four required courses, at least two* will already have been completed by students with an M.Sc. in Rehabilitation Science from McGill.

Complementary Course (6 credits)

Elective Courses (3-6 credits)

Comprehensive Examination

The student must successfully pass a written comprehensive examination by the end of the first academic year. The format is three questions to be answered in essay style over a five-day period. An additional requirement may include an oral component.

Research Proposal
A research proposal is to be submitted in written form and defended in front of a supervisory committee. Research proposals should be completed during the second full-time year, following the comprehensive examination.

Thesis Component - Required
The student carries out a research study in an approved subject area under the guidance of an internal supervisor (from within the School) or an external supervisor (from outside the School). In the case of an external supervisor, an internal co-supervisor must be

abnormal human motor performance. Topics include the anthropometrics, kinematics, and kinetics of altered movement patterns that result from pathology of the nervous and musculoskeletal systems. Practical, experimental and clinical applications will be stressed.

POTH 630 MEASUREMENT: REHABILITATION 2. (3) (Prerequisite: EPIB 607 or PSYC 305 or equivalent.) Theoretical and practical basis for measurement in rehabilitation research. Introduction to measurement theory, scale development and related statistics, approaches and instruments used to assess outcomes in patients with musculoskeletal, neurological, cardiovascular, respiratory, psychiatric or psychologic conditions.

POTH 631 RESEARCH PROPOSAL. (3) The course covers issues involved in the development of a research protocol. The presentation of a written thesis proposal is required by the end of the course. This document will serve as the basis for an oral presentation to the student's Supervisory Committee which will also review the written proposal.

POTH 661 RESEARCH PROJECT 1. (7) (Campus students only.)

POTH 662 RESEARCH PROJECT 2. (8)

POTH 696 THESIS RESEARCH. (2)

POTH 697 THESIS RESEARCH 1. (6)
May be offered as: POTH 697D1 and POTH 697D2.

POTH 698 THESIS RESEARCH 2. (9)
May be offered as: POTH 698D1 and POTH 698D2.

POTH 699 THESIS RESEARCH 3. (12)
May be offered as: POTH 699D1 and POTH 699D2.

POTH 701 PH.D. COMPREHENSIVE. (0)

ward jet production and low-x physics) and flavour (strange,

Note: All undergraduate courses administered by the Faculty of Science (courses at the 100- to 500-level) have limited enrolment.

The course credit weight is given8( )-imited enrolment.

Additional course work may be required depending upon background of the candidate.

Students in the M.Sc. Program are required to:

1. fulfill the course requirements specified at the time of admission;
2. present a proposal seminar 3 months after starting the program, and a seminar based on the research project two months prior to submission of the thesis;
3. submit a thesis.

Each student will have a supervisory committee which will monitor the progress of the studies.

Transfer to the Ph.D Program
After 18 months students may transfer to the Ph.D. program if all of the transfer requirements have been fulfilled. This includes

PHGY 608 LABORATORY RESEARCH 2. (3)

PHGY 610 BIOPHYSICS. (3) (Prerequisite: permission of the instructor.) A series of seminars in selected topics in theoretical

65.2 Programs Offered

The Department offers an M.Sc. and Ph.D. in Plant Science and provides for study in all fields of the plant sciences. Research facilities – both field and laboratory – are available for investigations in plant breeding, crop physiology, crop management, plant ecology, the epidemiology and biology of plant diseases, the physiology of diseased plants, cytogenetics, biosystematics, recombinant DNA technology, mycology, weed biology, tissue culture and plant biochemistry.

An advisory committee is named for each student, having the responsibility for developing the program of study appropriate to the student's background and area of specialization.

65.3 Admission Requirements

General
The minimum cumulative grade point average (CGPA) is 3.0/4.0 (second-class upper division) or a GPA of 3.2/4.0 during the last two years of full-time university study. High grades are expected in courses considered by the academic unit to be preparatory to the graduate program.

Ph.D.
Ph.D. candidates are required to have an M.Sc. degree in an area related to the chosen field of specialization for the Ph.D. program. Outstanding M.Sc. students may be permitted to transfer to the second year of the Ph.D program following one year of study.

65.4 Application Procedures

Applicants for graduate studies through academic units in the Faculty of Agricultural and Environmental Sciences must forward supporting documents to:

Student Affairs Office (Graduate Studies)
Macdonald Campus of McGill University
21,111 Lakeshore
Sainte-Anne-de-Bellevue, QC H9X 3V9
Canada

Telephone: (514) 398-7925
Fax: (514) 398-7968
E-mail: grad@macdonald.mcgill.ca

Applications will be considered upon receipt of a signed and completed application form, $60 application fee, all official transcripts, two signed original letters of reference on official letterhead of originating institution, and (if required) proof of competency in oral and written English by appropriate exams. DOCUMENTS SUBMITTED WILL NOT BE RETURNED.

Deadlines – Applications, including all supporting documents must reach the Student Affairs Office no later than June 1 (March 1 for International) for the *Fall Term (September)*; October 15 (July 1 for International) for the *Winter Term (January)*; February 15 (November 1 for International) for the *Summer Term (May)*. It may be necessary to delay review of the applicant's file until the following admittance period if application materials including supporting documents are received after these dates. International applicants are advised to apply well in advance of the deadline because immigration procedures may be lengthy. Applicants are encouraged to make use of the on-line application form available on the Web at www.mcgill.ca/applying/graduate.

Application Fee (non-refundable) – *A fee of $60 Canadian* must accompany each application (including McGill students), *otherwise it cannot be considered.* This sum must be remitted using one of the following methods:

1. Credit card (by completing the appropriate section of the application form). NB: on-line applications must be paid for by credit card.
2. **Certified** cheque in Cdn.$ drawn on a Canadian bank.
3. **Certified** cheque in U.S.$ drawn on a U.S. bank.
4. Canadian Money order in Cdn.$.
5. U.S. Money Order in U.S.$.
6. An international draft in Canadian funds drawn on a Canadian bank requested from the applicant's bank in his/her own country.

Transcripts – Two official copies of all transcripts with proof of degree(s) granted are required for admission. Transcripts written in a language other than English or French must be accompanied by a certified translation. An explanation of t

4. M.Sc. Thesis 3 PLNT 666.
5. Attendance at PLNT 665, PLNT 666, PLNT 767 and PLNT 768; and at invitational seminar (PLNT 690).
6. Additional courses may be required at the discretion of the candidate's supervisory comittee.

Plant Science M.Sc. research programs normally require two years for completion.

M.Sc. – Neotropical Environment
Candidates must complete a 45-credit course and research program established by their advisory committee. The program will consist of:

1. Two 3-credit courses ENVR 610 and BIOL 640.
2. One 3-credit course chosen from POLI 644, SOCI 565, ENVR 611, ENVR 612, ENVR 680, BIOL 553, BIOL 641, GEOG 498, AGRI 550.
3. M.Sc. Thesis 1 PLNT 664.
4. M.Sc. Thesis 2 PLNT 665.
5. M.Sc. Thesis 3 PLNT 666.
6. When in residence in Montreal, attendance at PLNT 665, PLNT 666, PLNT 690, PLNT 767 and PLNT 768; when in residence in Panama, participation at the STRI seminar series.
7. Participation in the MSE-Panama Symposium Presentation in Montreal is also required.
8. Additional courses may be required at the discretion of the candidate's supervisory comittee.

Plant Science research programs normally require two years for completion.

Ph.D.
Students will follow the program of study established by their advisory committee. This program will consist of:

1. Ph.D. comprehensive examination PLNT 701, which must be taken within one year of registering.
2. Ph.D. Thesis 1 PLNT 766TD-0.0005 Tc0.0041 6TD-0.0005 segistera– Neotropihe 0 Tw-m0 -1.ristering.

PLNT 623 BIOCHEMISTRY AND PHYSIOLOGY OF HERBICIDES. (3) Mechanisms of penetration, translocation, selectivity and modes of action of herbicides and their interactions with the environment.

- **PLNT 626 BIOCHEMISTRY AND PHYSIOLOGY OF PLANT LIPIDS.** (3) (2 hours lectures)

PLNT 628 PLANT NITROGEN FIXATION AND MYCORRHIZAE. (3) A detailed examination of the chemistry, biochemistry, anatomy, physiology, ecology and agricultural application of biological nitrogen fixation and mycorrhizal associations in higher plants.

- **PLNT 633 PLANT PATHOGENIC FUNGI.** (3)

PLNT 636 EPIDEMIOLOGY AND MANAGMENT OF PLANT DISEASE. (3) Concepts and principles of plant disease epidemiology. Quantification of factors influencing epidemiological processes. Influence of host, pathogen and environmental factors on the rate of disease development. Disease forecasting and timing fungicide application. Management of crop diseases, including chemical and biological control. Immunological and molecular techniques to detect pathogens.

- **PLNT 636D1 EPIDEMIOLOGY AND MANAGMENT OF PLANT DISEASE.** (1.5)
- **PLNT 636D2 EPIDEMIOLOGY AND MANAGMENT OF PLANT DISEASE**

Requirements for the Ph.D. Degree

Superior applicants, normally understood as students who are at least in the top 10 percent of their graduating class or who have a CPGA of at least 3.5 or its equivalent, will be eligible for admission into the Ph.D. track and receive a Ph.D. degree after successfully completing the requirements of the Ph.D. track. These are:

A. Successful completion of thirteen 3-credit courses.

B. Distribution of Courses:

1. Two major fields in political science (satisfied by four courses and a written comprehensive examination in each field, as well as one integrated oral comprehensive examination covering both major fields).
2. One minor field (satisfied by two courses). Minor fields can be in any one of the five fields offered by the Department. Students may also petition the Graduate Committee to approve as a minor some special combination of courses which is suitable to a particular student's planned course of study.
3. An additional 3-credit course in either of the student's major fields or minor field, accordi

engage in and profit from discussion and debate. Topic for 2003-04: Justice and Reconciliation.

POLI 575 SEMINAR: INTERNATIONAL POLITICS. (3) (Open to gradu-

Associate Professors
E.E. Corin; Ph.D.(Louvain)
G. Debonnel; M.D.(Lyon)
B.O. Dubrovsky; M.D.(Buenos Aires)
C. Gianoulakis; B.Sc.(Sir G.Wms.), Ph.D.(Rutgers)
K. Gill; B.Sc.(Br.Col.), M.A., Ph.D.(C'dia)
A. Gratton; Ph.D.(C'dia)
S. King; M.Ed., Ph.D.(Va.)
D. Pedersen; M.D.(Buenos Aires)
J. Rochford; M.A.(Queen's), Ph.D.(C'dia)
C. Rousseau; M.D.(Sher.), M.Sc.(McG.)
L.K. Srivastava; B.Sc., M.Sc.(Alld.), Ph.D.(New Delhi)

genetic, physiological and biochemical factors in mental illness will be discussed. Discussion will also focus on the rationale for present treatment approaches and on promising new approaches.

PSYT 502 Brain Evolution and Psychiatry. (3) (Fall) (Prereq-uisites: BIOL 115 or equivalent as authorized by instructor) The course will focus on the transcendental importance of evolution of nervous systems for normal and pathological behavior. Studies of allomeric brain growth and recent evolutionary theories of brain organization as they relate to normal and abnormal behavior will be emphasized.

PSYT 610 Diploma Evaluation: Written. (0)

PSYT 611 Diploma Evaluation: Oral. (0)

PSYT 630 Statistics for Neurosciences. (3) Statistics needed for a95 TmLu.41H.n PSYT 6109nt7r1twe7od1

68.6 Courses

Students preparing to register should consult the Web at www.mcgill.ca/minerva (click on Class Schedule) for the most up-to-date list of courses available; courses may have been added, rescheduled or cancelled after this Calendar went to press. Class Schedule lists courses by term and includes days, times, locations, and names of instructors.

Courses with numbers ending D1 and D2 are taught in two consecutive terms (most commonly Fall and Winter). Students must register for both the D1 and D2 components. No credit will be given unless both components (D1 and D2) are successfully completed in consecutive terms.

Note: All undergraduate courses administered by the .m-

● **PSYC 699 MASTERS RESEARCH 2.** (12) Continuation of PSYC 690. Further experimental and/or theoretical research. Data analysis (as needed). Writing of thesis.

PSYC 699D1 MASTERS RESEARCH 2. (6) Continuation of PSYC 690. Further experimental and/or theoretical research. Data analysis (as needed). Writing of thesis.

PSYC 699D2 MASTERS RESEARCH 2. (6)
May be offered as: PSYC 699N1 and PSYC 699N2.

PSYC 701 DOCTORAL COMPREHENSIVE EXAMINATION. (6)
May be offered as: PSYC 701D1 and PSYC 701D2.

PSYC 706 CLINICAL PRACTICUM. (15)
May be offered as: PSYC 706D1 and PSYC 706D2,
or PSYC 706J1, PSYC 706J2 and PSYC 706J3.

PSYC 707 CLINICAL INTERNSHIP 1. (15)
May be offered as: PSYC 707D1 and PSYC 707D2,
or PSYC 707 -1.0963 TD-0.00312.2393 Tm0.0003 Tc0.0001 Tw

B. Barry Levy; B.A., M.A., B.R.E.(Yeshiva), Ph.D.(N.Y.U.)
A. Sharma; B.A.(Alld.), M.A.(Syr.), M.T.S., Ph.D.(Harv.) *(Henry Birks Professor of Comparative Religion)*
F. Wisse; Ing.(Utrecht), B.A., B.D.(Calvin, Mich.), Ph.D.(Claremont)
K.K. Young; B.A.(Vt.), M.A.(Chic.), Ph.D.(McG.) *(James McGill Professor)*

Associate Professors
D.B. Farrow; B.R.E.(Providence), M.Div.(Grace), M.Th.(Regent), Ph.D.(Lond.)
I.H. Henderson; B.A.(Manit.), B.D.(St. Andrews), M.A.(McM.), D.Phil.(Oxon)
G.V. Hori; B.A.(York), M.A.(Tor.), Ph.D.(Stan.)
T. Kirby; B.A.(King's, Halifax); M.A.(Dal.); D.Phil.(Oxon)
P.G. Kirkpatrick; B.A.(McG.), M.Th.(Lond.), D.Phil.(Oxon)
G.S. Oegema; B.A., Th.D.(Free, Amsterdam); M.A., Ph.D.(Fretz Berlin)

Assistant Professors
D.A. Arnold; Ph.D.(Chic.)
L.H. Sideris; B.A., M.A., Ph.D.(Ind.) *(joint appoint. with McGill School of Environment)*
D. Soneji; M.A.(Manit.)

Associate Member
L. Turner *(Bioethics)*

70.2 Programs Offered

The Faculty of Religious Studies offers programs leading to the degrees of Master of Sacred Theology (S.T.M.), Master of Arts (M.A.) (thesis) and (non-thesis), and Doctor of Philosophy (Ph.D.).

The purpose of the M.A. (thesis) degree is to encourage advanced study and research in one of the disciplines of religious studies (see below) for those who wish to become scholars or teachers, or will be engaged in some field of religious or public service. An option in the M.A. (thesis) program is the M.A. in Religious Studies with specialization in Bioethics offered in collaboration with the Biomedical Ethics Unit, see section 9.

The M.A. without thesis is intended to ensure a student's well-rounded exposure to several religions and to several of the disciplinary approaches currently used in their academic study.

The S.T.M. is meant for those who intend to enter the ministry of the Christian Church or another religious institution, or proceed to a teaching career or to some form of social work. The S.T.M. program is fully accredited by the Association of Theological Schools in the U.S. and Canada.

The purpose of the Ph.D. program is to engage students in advanced academic studies normally in preparation for an academic career.

Adequate library facilities are available in the William and Henry Birks Building and elsewhere in the University for the courses listed, and for research.

Specializations are offered in the following disciplines:
Hebrew Bible and Old Testament Studies; New Testament Studies; Church History; Christian Theology; Philosophy of Religion; Religious Ethics; Hinduism; Buddhism.

The M.A. (thesis) with specialization in Bioethics is offered in conjunction with the Biomedical Ethics Unit.

70.3 Admission Requirements

Master of Arts (M.A.) (thesis)
Applicants must possess a B.A. with a Major or Honours in Religious Studies or a Bachelor of Theology (B.Th.), or a Master of Divinity (M.Div.) degree, normally with a minimum CGPA of 3.3/4.0 (B+) from an accredited university or college. Applicants with less than 30 appropriate credits in Religious Studies or Theology are normally required to take a Qualifying Program before entering the M.A.

Master of Arts (M.A.) (thesis) in Religious Studies with specialization in Bioethics – for information contact the Chair, Master's Specialization in Bioethics, Biomedical Ethics Unit, 3690 Peel Street, Montreal, QC, H3A 1W9. Telephone: (514) 398-6980. Fax: (514) 398-84a6eesso taka8 0 T yPHedi.A. (t Thr, 13.5037

MASTER OF SACRED THEOLOGY (S.T.M.) (48 credits)

ATS Accreditation The S.T.M. program is fully accredited by the Association of Theological Schools in the U.S. and Canada.

The normal requirement is two years (of two terms each) of full-time study (or one year of full-time study for those admitted with advanced standing into S.T.M.2), but the degree may, by permission, be taken on a part-time basis.

Note: Ordination requirements for S.T.M. graduates will normally involve a further year of professional pastoral studies (the In-Ministry Year) provided by the Joint Board of Theological Colleges affiliated with the Faculty of Religious Studies.

Candidates are required to complete satisfactorily twelve one-term courses (36 credits) and pass four Area Studies courses (12 credits) chosen from the following areas:

1) Biblical Theology (RELG 520)
2) Church History (RELG 530)
3) Christian Theology (RELG 531)
4) Philosophy of Religion (RELG 540)
5) Theological Ethics (RELG 541)
6) Comparative Religion (RELG 550)

Normally six 3-credit courses and two Area Studies courses shall be taken in each academic session. The pass mark in courses is B- for S.T.M. students. Normally graduate courses should be chosen from at least four different specialty areas in Religious Studies. Applicants who are admitted directly into S.T.M. 2 are required to complete six one-term courses (18 credits) and two Area Studies (6 credits).

Students who take the S.T.M. as part of their ordination requirements are to choose their courses in consultation with the Principal of the Theological College with which they are associated. Course selection for all S.T.M. students needs the approval of the Chair of the Religiated. Course R0)6.9(chepo ivhSmTD07.4(8wh4(8 ed85 TDll)8he degree)-7.4(ts (are eJ0 -1.175l8ei)-0 Tw[oct03)7.2(icale4())-7.4(provi

RELG 531 CHRISTIAN THEOLOGY. (3) (Fall and Winter) Limited to S.T.M. studies. Tutorials and guided reading in the field of Christian Theology.

- **RELG 532 HISTORY OF CHRISTIAN THOUGHT 1.** (3) (Prerequisite: At least six (6) credits at the 300-level in Christianity or the Christian Bible.) (Not open to students who have taken RELG 320)
- **RELG 533 HISTORY OF CHRISTIAN THOUGHT 2.** (3) (Prerequisite: At least six (6) credits at the 300-level in Christianity or the Christian Bible.) (Not open to students who have taken RELG 327)
- **RELG 625 CREEDS AND CONFESSIONS.** (3)
- **RELG 626 REFORMATION: SECULAR DIMENSIONS.** (3)

RELG 630 THEOLOGICAL FOUNDATIONS. (3) Readings and discussions of theologians from the formative periods of Christian thought, with attention to the history of philosophy, ethics and dogma.

- **RELG 631 THEOLOGY OF**

M.A. RESEARCH (THESIS)

RELG 688 THESIS RESEARCH 1. (3)

RELG 689 THESIS RESEARCH 2. (3)

RELG 698 THESIS RESEARCH 3. (12)
May be offered as: RELG 698D1 and RELG 698D2, or RELG 698N1 and RELG 698N2.

RELG 699 THESIS RESEARCH 4. (12)
May be offered as: RELG 699D1 and RELG 699D2, or RELG 699N1 and RELG 699N2.

OTHER COURSES

RELG 602 THEORY IN RELIGIOUS ETHICS. (3) Basic theories in philosophical and religious ethics.

● **RELG 603 PRIMARY TEXT: AKKADIAN.** (3) (Prerequisite: Basic reading knowledge of Akkadian or permission of instructor.)

RELG 621 PATRISTIC STUDIES. (3) (Restrictions: M.A., STM, or Ph.D. students only.) Selected texts of patristic theology and history of the early Christian Church from Irenaeus to Boethius.

● **RELG 629 PRIMARY TEXT: ARAMAIC.** (3) (Prerequisite: Basic reading knowledge of Aramaic or permission of instructor)

● **RELG 640 PRIMARY TEXT: BIBLICAL HEBREW.** (3) (Prerequisite: Basic reading knowledge of Biblical Hebrew or permission of instructor.)

71.6 Courses

Students preparing to register should consult the Web at www.mcgill.ca/minerva (click on Class Schedule) for the most up-to-date list of courses available; courses may have been added, rescheduled or cancelled after this Calendar went to press. Class Schedule lists courses by term and includes days, times, locations, and names of instructors.

Courses with numbers ending D1 and D2 are taught in two consecutive terms (most commonly Fall and Winter). Students must register for both the D1 and D2 components. No credit will be given unless both components (D1 and D2) are successfully completed in consecutive terms.

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

● Denotes courses not offered in 2003-04.

RUSS 510 HIGH STALINIST CULTURE. (3) (Fall) (Given in English) Novels, films, art, architecture, pageantry, rhetoric and routine of the Stalinist 1930s-40s, including socialist relaism as an aesthetic doctrine, utopian blueprint, target of parody, amalgam of a submerged avantgarde and state-controlled pop culture, precursor of the postmodernist simulacrum, self-proclaimed international style and/or uniquely -0.011 -1.mm1F an blueprint, tar9 TD-0.00amalgam of a sub-

ing applications, teaching, assistantships, fellowships, etc., see Department of Sociology.

Ph.D. Programs
Please refer to the appropriate Department – Anthropology, History, or Sociology.

72.5 Program Requirements

M.A. IN MEDICAL ANTHROPOLOGY
With the medical anthropology program, candidates will apply for permission to take either of two courses of study, M.A. thesis or non-thesis.

For Anthropology courses, see Department of Anthropology. For SSOM seminars, see below.

M.A. in Medical Anthropology with thesis (48 credits)

Required Courses (42 credits)
HSSM 605 (3) Medical Anthropology
ANTH 615 (3) Seminar in Medical Anthropoogy
ANTH 694 (6) M.A. Thesis Tutorial 1
ANTH 695 (6) M.A. Thesis Tutorial 2
ANTH 699 (24) M.A. Thesis

Complementary Courses (6 credits)
Two Anthropology courses.

M.A. in Medical Anthropology, without thesis (45 credits)

Required Courses (45 credits)
HSSM 605 (3) Medical Anthropology
ANTH 615 (3) Seminar in Medical Anthropology
ANTH 602 (3) Theory 1
ANTH 609 (6) Proseminar in Anthropology
ANTH 611 (3) Research Design
ANTH 660 (3) Research Methods
ANTH 665 (3) Quantitative Methods
ANTH 685 (3) Research Tutorial 1
ANTH 686 (3) Research Tutorial 2
ANTH 696 (15) M.A. Research Paper

M.A. IN THE HISTORY OF MEDICINE
The M.A. degree in Medical History does not have a thesis option.

The program requires the completion of 48 credits, composed of three full-year graduate seminars, plus a major research paper, (30 credits) (HIST 691, HIST 692 in the first year and HIST 693, HIST 694 in the second year).

Graduate seminars offered in the History of Medicine include
HIST 619 (3) Ancient Medicine Seminar 1
HIST 620 (3) Ancient Medicine Seminar 2
HIST 636 (3) Medieval Medicine Seminar 1
HIST 637 (3) Medieval Medicine Seminar 2

For SSOM seminars, see below.

M.A. IN MEDICAL SOCIOLOGY
Students may choose between two programs: M.A. thesis or non-thesis.

For Sociology courses, see Department of Sociology. For SSOM seminars, see below.

M.A. in Medical Sociology (thesis) (48 credits)
This includes 18 credits of course work and a research thesis that is based on original research (30 credits)

Required Courses (12 credits)
SOCI 504 (3) Quantitative Methods 1
SOCI 540 (3) Qualitative Research Methods
SOCI 580 (3) Social Research Design and Practice
SOCI 652 (3) Current Sociological Theory

Complementary Courses (6 credits)
one of the following two courses:
SOCI 515 (3) Medicine and Society
SOCI 538 (3) Selected Topics in Sociology of Biomedical Knowledge
plus one course in the History of Medicine.

Thesis Component – Required (30 credits)
SOCI 690 (3) M.A. Thesis 1
SOCI 691 (6) M.A. Thesis 2
SOCI 692 (3) M.A. Thesis 3
SOCI 693 (3) M.A. Thesis 4
SOCI 695 (15) M.A. Thesis 6

M.A. in Medical Sociology (non-thesis) (45 credits)
This includes 21 credits of course work and a research paper based on original research (24 credits).

Required Courses (12 credits)
SOCI 652 (3) Current Sociological Theory
SOCI 580 (3) Design and Practice of Social Research
SOCI 504 (3) Seminar: Quantitative Methods I
SOCI 540 (3) Qualitative Research Methods

Complementary Courses (9 credits)
one of the following two courses:
SOCI 515 (3) Medicine and Society
SOCI 538 (3) Selected Topics in the Sociology of Biomedical Knowledge
plus two courses in the Social Studies of Medicine, one of which must be in the History of Medicine.

Research Component – Required (24 credits)
SOCI 696 (3) Research Paper 1
SOCI 697 (3) Research Paper 2
SOCI 698 (6) Research Paper 3
SOCI 699 (12) Research Paper 4

PH.D. PROGRAMS
For information on the doctoral programs, please refer to the appropriate Department – Anthropology, History, or Sociology.

72.6 SSOM Courses

Students preparing to register should consult the Web at www.mcgill.ca/minerva (click on Class Schedule) for the most up-to-date list of courses available; courses may have been added, rescheduled or cancelled after this Calendar went to press. Class Schedule lists courses by term and includes days, times, locations, and names of instructors.

Courses with numbers ending D1 and D2 are taught in two consecutive terms (most commonly Fall and Winter). Students must register for both the D1 and D2 components. No credit will be given unless both components (D1 and D2) are successfully completed in consecutive terms.

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

● Denotes courses not offered in 2003-04.

● **HSSM 603D1 Medicine in 19th and 20th Century.** (3)
● **HSSM 603D2 Medicine in 19th and 20th Century.** (3)

HSSM 604 History of Medicine. (3) Tutorial.

HSSM 605 Medical Anthropology. (3)

HSSM 606 Medical Anthropology Tutorial. (3)

HSSM 609 Social Sciences of Medicine. (3) Tutorial.

● **HSSM 610 Sociology of Medicine.** (3)

HSSM 611 Sociology of Biomedical Knowledge. (3)

● **HSSM 612D1 Medicine and the Scientific Revolution 1500-1700.** (3)
● **HSSM 612D2 Medicine and the Scientific Revolution 1500-1700.** (3)

● **HSSM 614D1 History of Medieval Medicine.** (3)
● **HSSM 614D2 History of Medieval Medicine.** (3)

Each student works out a study plan in consultation with her/his academic advisor in relation to the student's identified study goals. Broadly speaking, these include Child and Family Welfare, Health and Well-Being through the Life Cycle, and Community Development.

There are two options, practice (non-thesis, including a practicum and independent study project) and thesis (thesis, no practicum). Both options carry a weight of 45 credits, and, taken on a full-time basis, both options involve three terms of study. In both options, part-time study can be arranged (see section on Duration and Time Limitations below).

M.S.W. (Non-Thesis Option) (45 credits)
This option is designed for students who are interested in developing skills in specialized practice and policy analysis.

Required Courses (24 credits)

Note: Students without the ability to use French may find their choice of Field Work placements restricted.

Complementary Course (3 credits)

Elective Courses (18 credits)

M.S.W. (Thesis Option) (45 credits)
This option is designed for students who have strong research interests.

Required Courses (33 credits)

Complementary Course (3 credits)

Elective Courses (9 credits)

Courses taken outside of the Department
Students in both M.S.W. options are invited to take up to two courses in other departments of the University in areas of study not offered in the School of Social Work. Students also have the option of taking equivalent research methodology courses offered in other departments to fulfill the research requirement. All students must secure the approval of their academic advisor prior to registration for such courses.

Duration and Time Limitations
Taken on a full-time basis, both M.S.W. options involve three terms of study. The third term may optionally be taken in the summer, in which case the entire program may be completed in one calendar year.

In both options, part-time study can be arranged. In the thesis option, a student may register for half-time studies, in which case the program may be completed in six terms. In the practice (non-thesis) option, students may arrange to register course by course, so that greater flexibility is possible. When residency requirements are complete, students may, if necessary, register

73.6 Courses

Students preparing to register should consult the Web at www.mcgill.ca/minerva (click on Class Schedule) for the most up-to-date list of courses available; courses may have been added, rescheduled or cancelled after this Calendar went to press. Class Schedule lists courses by term and includes days, times, locations, and names of instructors.

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

● Denotes courses not offered in 2003-04.

● **SWRK 530 SOCIAL PERSPECTIVES ON AGING 1.** (3) (Limited to U3 and M.S.W. students)

● **SWRK 531 SOCIAL PERSPECTIVES ON AGING 2.** (3) (Summer) (School of Social Work: Limited to U3 and M.S.W. students)

SWRK 532 INTERNATIONAL SOCIAL WORK. (3) (Winter) (Limited to B.S.W. U3, Special B.S.W. and M.S.W. students) Discussion based upon intensive study and reports on problems in selected countries. Emphasis on identifying major social problems, understanding the social forces bearing on those problems and considering appropriate professional approaches to aid in their solution.

SWRK 539 CHRONIC AND TERMINAL ILLNESS. (3) (Winter) (Limited to B.S.W. U3, Special B.S.W. and M.S.W. students) A seminar to examine practice with persons living with chronic and terminal illnesses. Needs of families, caretakers, health care workers and the gay community are studied.

SWRK 600 PRACTICE WITH WOMEN AS MOTHERS. (3) This course will explore maternal subjectivity and its implications for clinical practice with mothers and families. We will examine how social work intervention has tended to reproduce traditional attitudes towards mothers and consider the develoment of alternative social relations in our practice with mothers.

SWRK 601 CONSTRUCTION OF SUBJECTIVITY. (3) This course will present a critical approach to understanding how personality is constructed within the major social relations of class, gender and race. Relevance to students' research and practice interests will be explored.

SWRK 604 CRITICAL ISSUES: SOCIAL POLICY. (3) With the erosion of the contempoary welfare state, analysts have argued that state responsibility for social and economic well-being has been shifted to the private sphere, notably familes. This course explores how social policies and practices contribute to this shift, and how gender, class and inequalities are thereby reinforced.

SWRK 606 PRACTICE IN CHILD WELFARE. (3) Reflection on current practices in child welfare. An overview of contemporary theoretical frameworks and students' experiences in the field will form the basis of class discussion. Topics include: the construction of abuse and neglect; the risk ethos, families'/mothers' experiences of child welfare services; the reflective practitioner and resistance.

● **SWRK 608 SEMINAR IN CORRECTIONS.** (3)

SWRK 609 HEALTH AND SOCIAL WORK. (3) An examination of major social work policy and practice issues bearing on health, including: ethics, legal issues, medicalization, health as an industry, uses of epidemiology and m

4 4 8

74 Sociology

Department of Sociology
Stephen Leacock Building
855 Sherbrooke Street West, Room 712
Montreal, QC H3A 2T7
Canada

Graduate Program and Admission Information:
Telephone: (514) 398-6847
Fax: (514) 398-3403
E-mail: graduate.sociology@mcgill.ca
Web site: www.mcgill.ca/sociology

Acting Chair — Suzanne Staggenborg

Graduate Program Director — Morton Weinfeld

Graduate Admissions Director — Axel van den Berg

74.1 Staff

Emeritus Professor
Maurice Pinard; B.A., LL.L., M.A.(Montr.), Ph.D.(Johns H.), F.R.S.C.

Professors
John A. Hall; B.A.(Oxon), M.A.(Penn. St.), Ph.D.(L.S.E.) *(James McGill Professor)*
Michael Smith; B.A.(Leic.), M.A., Ph.D.(Brown)
Suzanne Staggenborg; B.A.(Miami), M.A.(Wash.), Ph.D.(Northwestern)
Axel P.M. van den Berg; Kand.Doc.(Amsterdam), Ph.D.(McG.)
Morton Weinfeld; B.A.(McG.), Ed.M., Ph.D.(Harv.) *(Chair, Canadian Ethnic Studies)*

Associate Professors
Lucia Benaquisto; B.A.(S.U.N.Y., Albany), A.M. Ph.D.(Harv.)
Alberto Cambrosio; M.A.(Sher.), Ph.D.(Montr.) *(Social Studies of Medicine)*
Uli Locher; V.D.M.(Berne), S.T.M., Ph.D.(Yale)
Anthony Masi; A.B.(Colgate), M.A., Ph.D.(Brown)
James Ron; B.A.(Stan.), M.A., Ph.D.(Berkeley) *(Canada Research Chair in Conflict and Human Rights) (on leave 2003-04)*
Steven L. Rytina; B.G.S., Ph.D.(Mich.)
Donald von Eschen; A.B.(Beloit), M.A.(Chic.), Ph.D.(Johns H.)

Assistant Professor
Giovani Burgos; B.A.(SUNY, Albany), M.A., Ph.D.(Ind.)
Kathleen Fallon; B.A.(Calif.), M.A., Ph.D.(Ind.)
Jennifer Fosket; B.A.(Hills College), Ph.D.(Calif.)
John (Jack) Sandburg; B.A.(Hunter), Ph.D.(Mich.)
Elaine Weiner; B.A.(Grinnell College); M.A.(Fla.)

Associate Members
David Aberbach *(Jewish Studies),*
Gregory Baum *(Religious Studies)*

Adjunct Professors
Catherine Montgomery, Rodney Nelson

74.2 Programs Offered

The Department offers training leading to the degrees of Master of Arts in Sociology (thesis and non-thesis options), Master of Arts in Medical Sociology with the Social Studies of Medicine Department (thesis and non-thesis options), and the Doctor of Philosophy in Sociology.

Theses and dissertations are normally supervised in one of the following areas of Department research concentration: states and social movements; economy and society; social inequality (class, ethnicity and gender) and deviance and social control.

M.A. in Medical Sociology
The program is open to students with a social sciences, health professions or health sciences background. It is interdisciplinary in nature and includes required courses offered by both participating departments as well as a research thesis based on original research. For additional information concerning this program, please consult the Social Studies of Medicine section or the Web site, www.mcgill.ca/ssom.

74.4 Application Procedures

Please note that the dossier must be complete with ALL of the following information before the applicant will be considered for entrance to the graduate program:

1. Application form.
2. Statistics, Theory, Methods form.
3. Two certified copies of undergraduate and graduate level

M.A. Degree Program Non-Thesis Option in Social Statistics

- **SOCI 545 Selected Topics.** (3)

SOCI 550 Developing Societies. (3) Comparison of alternative explanations of underdevelopment: the impact of social stratification, relations of domination and subordination between countries, state interference with the market. Alternative strategies of change: revolution, structural adjustment, community development and cooperatives. Students will write and present a research paper, and participate extensively in class discussion.

- **SOCI 560 Gender and Organization.** (3)
- **SOCI 565 Social Change in Panama.** (3) (Prerequisites: SOCI 218 and SOCI 350 or equivalents.) (Corequisites: BIOL 473, ENVR 451 and ABEN 450.) (Restriction: location in Panama. Students must register for a full term in Panama.)

SOCI 571 Deviance and Social Control. (3) This seminar focuses on how social groups enforce rules (and maintain social order) through coercion and socialization. It reviews current research and critiques key theoretical approaches to social control. Included are discussions of regulating institutions such as prisons and mental asylums, and the roles of gossip, manners and etiquettes.

SOCI 580 Social Research Design and Practice. (3) (Open to U3 and graduate students) Asking researchable sociological questions and evaluation of different research designs used to answer such questions. Development of cogent research proposals, including data collection procedures. Principles, dynamics, strengths and practical limitations of research designs. Examples from recent publications.

- **SOCI 590 Conflict and State Breakdown.** (3) (Open to graduate students in Sociology, Political Science, Anthropology, and History AND undergraduate students with permission of instructor.)
- **SOCI 627 Political Sociology.** (3)

SOCI 629 Ethnicity and Public Policy. (3) Major themes in the theoretical literature on ethnicity. Public policies with direct and indirect implications for inter-ethnic relations will be studied. Policies affecting areas such as language, education, immigration, employment and promotion, multiculturalism and welfare. Examples drawn from several multi-ethnic societies. Political, constitutional, and economic problems associated with these policy initiatives.

SOCI 652 Current Sociological Theory. (3) (Prerequisite: SOCI 330) Examination of works in some major areas of Sociology with a focus on: antecedent thought and research in the area; the internal structure and consistency of these works; the validity of the major claims made; and the implications for future theoretical development and research.

- **SOCI 661 Seminar: Sociology of Knowledge.** (3)
- **SOCI 670 Comp Urbanization-Third World.** (3)
- **SOCI 688 Seminar on Social Statistics.** (3) (Restriction: open only to students in the M.A. Social Statistics Option, or with permission of instructor. Not open to students who have taken POLI 688, SOCI 668 or GEOG 688.)

SOCI 690 M.A. Thesis 1. (3) (Restriction: Open only to graduate students registered in the M.A. thesis program of the Sociology Department.) Exploratory thesis research for the selection of a thesis topic.

SOCI 691 M.A. Thesis 2. (6) (Restriction: Open only to graduate students registered in the M.A. thesis program of the Sociology Department.) Preparation, submission and approval of the thesis proposal by the student to his/her committee.

SOCI 692 M.A. Thesis 3. (3) (Restriction: Open only to graduate students registered in the M.A. thesis program of the Sociology Department.) Fieldwork and data analysis on the thesis. Progress report to the supervisor.

SOCI 693 M.A. Thesis 4. (3) (Restriction: Open only to graduate students registered in the M.A. thesis program of the Sociology Department.) Fieldwork and data analysis on the thesis. Progress report to the supervisor.

SOCI 694 M.A. Thesis 5. (18) (Restriction: Open only to graduate students registered in the M.A. thesis program of the Sociology Department.) Completion, submission, and approval of the M.A. Thesis by the committee stu1.125-18di0005 E7.46.9(Completion,)] 1 Tf31.851 726.599

H. Shennib; M.D.(Cairo), F.R.C.S.(C)
H.B. Williams; B.A.(Acadia), M.D.,C.M.(McG.)

Associate Professors
J. Barkun; M.D., M.Sc.(McG.)
O. Blaschuk; B.Sc.(Winn.), M.Sc.(Man.), Ph.D.(Tor.)
J.D. Bobyn; B.Sc., M.Sc.(McG.), Ph.D.(Tor.)
S. Chevalier; B.Sc., M.Sc., Ph.D.(Montr.)
D. Fleiszer; B.Sc., M.D., C.M.(McG.)
J.M. Laberge; M.D.(Laval)
C. Lee; M.D., M.Sc.(McG.), F.R.C.S.(C)
L. Lessard; B.Sc., M.D.(Laval), F.R.C.S.(C)
P. Metrakos; B.Sc., M.D.(McG.), F.R.C.S.(C)
J.S. Mort; B.Sc.(McG.), Ph.D.(McM.)
R. St.-Arnaud; Ph.D.(Laval)
J. Sampalis; M.Sc., Ph.D.(McG.)
T. Taketo-Hosotani; B.Sc., M.Sc., Ph.D.(Kyoto)
C.I. Tchervenkov; B.Sc., M.D.,C.M.(McG.), F.R.C.S.(C)
J.I. Tchervenkov; M.D.,C.M.(McG.), F.R.C.S.(C)
D. Zukor; B.Sc., M.D.,C.M.(McG.)

Assistant Professors
J. Antoniou; M.D.,C.M., Ph.D.(McG.), F.R.C.S.(C)
E. Chevet; M.Sc., Ph.D.(Paris)
M. Chevrette; B.Sc., M.Sc., Ph.D.(Laval)
D.C. Evans; B.A., M.D.,C.M.(McG.)
J. Faria; M.D.,C.M., M.Sc.(McG.), F.R.C.S.(C)
L. Feldman; M.D.,C.M., M.Sc.(McG.)
H. Flageole; M.D., M.Sc.(McG.)
R.C. Hamdy; M.Sc, M.D.(Egypt), F.R.C.S.(C)
E. Harvey; B.Sc.(Ont.) M.D.,C.M., M.Sc.(McG.)
K.J. Lachapelle; M.Sc., M.D.,C.M.(McG.)
E. Lee; B.A.(Boston), M.Sc., Ph.D.(McG.)
S. Meterissian; M.D.,C.M., M.Sc.(McG.)
M. Petropavlovskaia; M.Sc., Ph.D.(Moscow)
A. Philip; M.Sc., Ph.D.(McG.)
A.D. Recklies; B.Sc.(McG.), Ph.D.(McM.)
K. Shaw; M.D.,C.M., M.Sc.(McG.)
D. Shum-Tim; M.Sc., M.D.,C.M.(McG.)
T. Steffen, M.D.(Switz.), Ph.D.(McG.)
M. Tanzer; M.D.,C.M.(McG.), F.R.C.S.(C)

75.2 Programs Offered

The Department of Surgery offers graduate programs leading to M.Sc. and Ph.D. degrees.

The main research interests in the Department include projects in islet cell differentiation and islet transplantation, tissue engineering of cardiac muscle, immunopathogenesis of liver xenograft rejection; the biology of tissue repair and fibrosis; cartilage regeneration, osteoinduction and biomechanics; sepsis and multi-organ failure; biology of cancer; sexual dysfunction and prostate cancer; and surgical health outcomes.

A list of research directors and a description of their research topics, as well as application forms may be obtained from our Web site.

75.3 Admission Requirements

Graduate Diploma in Surgical Health Care Research
The program is open to all graduate students in the Division of Surgical Research, but is specifically designed for surgical residents who have allotted time during their residency training. To be accepted into the Graduate Diploma Program students must be accepted into the Division of Surgical Research; fulfill the minimum requirements for admission of the Graduate and Postdoctoral Studies Office; identify an acceptable and feasible research project; and identify an accredited faculty member willing to support the research and supervise the student. **The program is under the direction of Professor John Sampalis.**

M.Sc. Program
Usually a B.Sc., M.D. or D.V.M. degree, with a minimum CGPA of 3.2/4.0. Applications will be accepted from candidates sponsored by a research supervisor willing to provide laboratory space and direction for their research work.

Ph.D. Program
Admission is usually from the M.Sc. program either upon completion of the M.Sc. degree, or by transfer from the first year of M.Sc. to the second year of Ph.D. studies. Request for such transfer is to be made in writing by the thesis supervisor during the candidate's first year of M.Sc. studies, not later than March 30th for students enrolled in September, or November 1st for those registered in January. **Transfer is granted on the basis of an examination administered by the student's Research Supervisory Committee.** Exceptional students with a minimum 3.5/4.0 CGPA may apply directly to the Ph.D. program.

Students with an M.Sc. degree from other departments or from other recognized universities whose M.Sc. topic is closely related to the subject of their Ph.D. research may be admitted directly into the Ph.D. program, at the level of Ph.D.2, at the discretion of the Department. Exceptional students with a Master's degree unrelated to their proposed research may be admitted to Ph.D.1.

75.4 Application Procedures

Applicants must submit a completed application form including a brief curriculum vitae, a short description of the proposed thesis research (prepared by the student and/or the prospective research director), $60 (payable by credit card, certified cheque or money order to McGill University), as well as two copies of all academic transcripts and two letters of recommendation mailed directly to the Department. A letter of intent and a memorandum of agreement are also required from the prospective supervisor.

Deadline for receipt of complete applications:

Canadian applicants:	April 1 for September (Fall term) September 1 for January (Winter term)
International applicants:	February 2 for September (Fall term) August 1 for January (Winter term)

McGill's on-line application form for graduate program candidates is available at www.mcgill.ca/applying/graduate.

75.5 Program Requirements

Graduate Diploma in Surgical Health Care Research
(30 credits)
This diploma program consists primarily of coursework, however a research project must be completed to obtain the required 30 credits. The program is designed to be completed within one year.

Required Courses (18 credits)

EXSU 606	(3)	Statistics for Surgical Research
EXSU 601	(6)	Seminars in Surgical Research
EXSU 637	(9)	Research Project

Complementary Courses (12 credits)
at least 3 credits from the following courses:

EPIB 631*	(2)	Pharmacoepidemiology 2
EPIB 633*	(2)	Pharmacoepidemiology 1
EPIB 656	(3)	Health Care Technology Assessment
EPIB 679	(3)	Special Topics 5
EXMD 631	(3)	Topics in Economic Evaluation

* Must be taken in tandem for a total of four credits.

at least 9 credits from the following courses:

EPIB 606	(3)	Introduction to Epidemiology
EPIB 607	(3)	Inferential Statistics
EPIB 610	(3)	Occurence of Health Events in Population
EPIB 631*	(2)	Pharmacoepidemiology 2
EPIB 633*	(2)	Pharmacoepidemiology 1
EPIB 643	(1)	Substantive Epidemiology 3
EPIB 655	(3)	Epidemiology in Public Heatlh
EPIB 668	(2)	Special Topics 1
EXMD 631	(3)	Topics in Economic Evaluation
POTH 630	(3)	Measurement: Rehabilitation 2

* Must be taken in tandem for a total of four credits.

M.Sc. Program (48 credits)
The M.Sc. program consists of research work in preparation of a thesis and completion of required courses for a total of 48 credits. The program is to be completed during three terms; an additional term is assigned for the preparation of the thesis.

The course requirements for a total of 15 credits are as follows:

A graduate level course in the student's specialty is also mandatory. Selection of the former and of additional courses, if required, will be in consultation with a Research Supervisory Committee appointed for each student.

The laboratory research component of the program is worth 33 credits.

Ph.D. Program
The minimum residence time in the program is three calendar years. In addition to the courses listed under the M.Sc. program, students are encouraged to select additional courses from allied disciplines relevant to their research topic. To graduate, candidates will also have to pass a predoctoral examination.

cerned professionals; beautification schemes and infrastructure works marked the early stages of public intervention in the nineteenth century. Architects, engineers and public health specialists were joined by economists, sociologists, lawyers and geographers as the conplexities of the city's problems came to be more fully understood and public pressure mounted for their solution. Contemporary urban and regional planning techniques for survey, analysis, design and implementation developed from an interdisciplinary synthesis of these various fields.

Today, urban planning can be described as the collective management of urban development. It is concerned with the welfare of communities, control of the use of land, design of the built environment, including transportation and communication networks, and protection and enhancement of the natural environment. It is at once a technical and a political process which brings together actors from the public, private and community spheres. Planners participate in that process in a variety of ways, as designers and analysts, advocates and mediators, facilitating the search for equitable and efficient solutions to urban development problems.

McGill University was the first institution in Canada to offer a full-time planning program. An inter-disciplinary program was established in 1947, in which students combined a master's degree in Urban Planning with one in a related field. An autonomous program was established in 1972. It became the School of Urban Planning in 1976, a unit within the Faculty of Engineering.

Students come to the School from diverse backgrounds, the physical sciences, the traditional professions, such as architecture and engineering, and the social sciences. Alumni of the School work as planners and designers at various levels of government, in non-profit organizations and with private consulting firms. Their expertise ranges from historic preservation to traffic management, from housing development to computer imaging. They devote their efforts in increasing numbers to environmental planning and sustainable development.

The School is a partner in the Montreal Interuniversity "Group Urbanization and Development", a consortium recognized by CIDA as a Centre of Excellence, which is devoted to the study of urban problems and the formulation of policies in developing regions. Faculty and students collaborate actively with members of other McGill departments, notably Architecture, Geography, Civil Engineering and Law, and with colleagues at other institutions in Canada and abroad.

76.3 Admission Requirements

The M.U.P. degree is open to students holding a bachelor's degree or equivalent in Anthropology, Architecture, Economics, Engineering, Environmental Studies, Geography, Law, Management, Political Science, Social Work, Sociology or Urban Studies. Students from other backgrounds are considered for admission on an individual basis.

In addition to the documents for admission required by the Graduate and Postdoctoral Studies Office, the following must be submitted:

1. Statement of specific interest in the area of Urban Planning.
2. For architects only, a portfolio containing at least five (5) examples of architectural work accomplished in school and in practice. (Portfolios are not to exceed 8½" x 11" in size.)
3. For international students only. The minimum TOEFL requirement is 600 (paper-based test) or 250 (computer-based test).

The deadline for submitting applications and supporting material is March 1st.

press. Class Schedule lists courses by term and includes days, times, locations, and names of instructors.

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

● Denotes courses not offered in 2003-04.

URBP 501 PRINCIPLES AND PRACTICE 1. (2) This six-week intensive course exposes students to issues and techniques that are applicable in diverse professional planning contexts. The subject matter, geographic area, scale of intervention and institutional location of planning varies from semester to semester. The course focuses on a specific case study and is taught by a visiting lecturer with professional experience in the selected subject matter.

URBP 505 GEOGRAPHIC INFORMATION SYSTEMS. (3) An introduction to fundamental geographic information system (GIS) concepts and a range of GIS applications in urban and regional planning.

URBP 506 ENVIRONMENTAL POLICY AND PLANNING. (3) (Restriction: This course is open to students in U3 and above) Analytical and institutional approaches for understanding and addressing urban and other environmental problems at various scales; characteristics of environmental problems and implications; political-institutional context and policy instruments; risk perception and implications; cost-benefit analysis, risk assessment, multiple-objectives approaches, life-cycle analysis; policy implementation issues; case studies.

● **URBP 507 PLANNING AND INFRASTRUCTURE.** (3) (Corequisites: Enrolment in full "Barbados Field Study Semester"; AGRI 413, AGRI 519 or CIVE 519 or URBP 519, AGRI 452 or CIVE 452.)

● **URBP 519 SUSTAINABLE DEVELOPMENT PLANS.** (6) (Corequisites: Enrolment in full "Barbados Field Study Semester"; AGRI 413, AGRI 519 or CIVE 519 or URBP 519, AGRI 452 or CIVE 452, URBP 507) (Restrictions: Not open to students who have taken AGRI 519 or CIVE 519.)

URBP 604 PLANNING PROJECTS 3. (6) (Prerequisites: Planning