76 Sociology

Department of Sociology
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Website: http://www.arts.mcgill.ca/programs/sociology

Chair — Axel P.M. van den Berg
Graduate Program Director — Suzanne Staggenborg
Graduate Admissions Director — Michael R. Smith

76.1 Staff
Emeritus Professor
Maurice Pinard; B.A., L.L.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.)
Michael Smith; B.A.(Leic.), M.A., Ph.D.(Brown)
Suzanne Staggenborg; B.A.(Miami), M.A.(Wash.), Ph.D.(Northwestern)

Adjunct Professor
Jessie M. Tzeng; B.A.(Tsinghaui), M.Sc., Ph.D.(Wisconsin-Madison)

Associate Members
Gregory Baum (Religious Studies)
Suzanne Culler (East Asian Studies)

76.2 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.

Availability of Funding
Prospective students may apply for a variety of fellowships administered by the University, through research-granting agencies in Quebec, Canada, or in their home countries. Other sources of funding include private companies, agencies, foundations, other provincial and federal government agencies, as well as foreign governments and organizations. Detailed information on other funding sources is available on the McGill website (http://www.mcgill/fgsr/fellow1.htm).

The Department offers a limited number of teaching assistantships equal to 3,328 per term. Teaching assistantships require 12 hours of work per week in the fall and winter terms. Students who wish to be considered for such assistantships should inform the Graduate Adviser, Professor Michael R. Smith, Leacock 814, in writing and preference will be given to those dossiers completed by February 15th.

A limited number of differential fee waivers are also available for international students. Several research assistantships may be available from faculty members.

76.3 Admission Requirements
For admission, applicants must have a Bachelor's degree with a standing equivalent to a Cumulative Grade Point Average (CGPA) of 3.3 or better, out of a possible 4.0. The degree may be in either Sociology – in which case it should be equivalent to the Honours B.A. degree at McGill – or it may be in another relevant social science. In the latter case, applicants may be required to take some additional Sociology courses to fill gaps in their background.

All in all, the strength of an applicant's academic record is of primary importance in consideration of an applicant's dossier. For a detailed description of courses open to graduates and undergraduates, and of preparation required of McGill University honours students, candidates should consult the Undergraduate Calendar via the Web at http://www.ari.mcgill.ca/

For an application to be considered, applicants not registered at Canadian universities must submit with their applications the results of the Verbal and Quantitative aptitude tests of the Graduate Record Examination. Canadian students are also encouraged to submit the results of this test with their application. Arrangements to take the Graduate Record Examination should be made directly with the Educational Testing Service, Box 955, Princeton, New Jersey 08540, USA. The Test of English as a Foreign Language (TOEFL) is also required of all non-Canadian students whose mother tongue is not English.

In addition, all applicants are asked to submit two letters of recommendation and two certified copies of their university-level grades along with an example of their written work. Applicants who have received a Master's degree at a university other than McGill should submit a copy of their thesis or evidence of equivalent research experience with their application for admission. The applicant's dossier must be completed by February 15th to be considered for the McGill Awards Competition and the internal Teaching Assistantship competition.

Candidates who lack sufficient preparation in the social sciences, but whose academic record justifies consideration for eventual admission to the Master's graduate program, must register for a qualifying year during which they are required to take courses to broaden their knowledge of sociology. Candidates must achieve a final mark of at least B in these courses and an average in all courses of at least B+; in general, they must, in the opinion of the Department, have achieved sufficient preparation in the subject matter of sociology before they will be allowed to proceed further in graduate work. All candidates are expected to have taken courses in statistics, research methods and sociological theory at the undergraduate level.

The program of study is designed to give students an advanced understanding of a major field in sociology, of current methods of sociological research, and of some principal theoretic issues in the discipline. Three terms of residence study is the minimum requirement for a Master's degree.

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.
76.4 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 transcripts. Please provide an official translation if the original is not in English or French.
4. Two letters of reference on the departmental forms enclosed with the graduate application package.
5. Test results (Graduate Record Examination (GRE) / Test of English as a Foreign Language (TOEFL) (if applicable).
6. Statement of Academic Background - a brief statement of the applicant's interests and the areas of sociology he/she wishes to study at McGill.
7. One or two samples of written work. This can be in the form of a graded paper or a chapter from a thesis and must be at least 15 typewritten pages in length translated into English or French.
8. M.A. Option Form (for M.A. applicants only).
9. $60 application fee.
10. Two address labels which will serve to acknowledge both the receipt of the application and the decision taken by the Graduate Committee.

Applications can be obtained by contacting the Graduate Secretary, Department of Sociology at (514) 398-6847, sending a fax to (514) 398-3403, e-mailing msmith13@po-box.mcgill.ca or sending a request in writing to the Sociology Department Office at gradsocio@po-box.mcgill.ca.

M.A. in Medical Sociology

Admission is granted by a joint admissions committee made up of representatives from Sociology and Social Studies of Medicine.

76.5 Program Requirements

M.A. PROGRAM OPTIONS

The M.A. degree has five options:
- the non-Thesis option consisting of seven required courses plus a research paper;
- the Thesis option with five required courses and a thesis;
- The M.A. Program in Medical Sociology, which requires six courses plus a thesis;
- the M.A. Program in Medical Sociology non-Thesis which requires seven courses plus a research paper; and
- the M.A. Program in Social Statistics non-Thesis which requires seven courses (supplemented by further statistical courses) plus a statistics-based research paper. (Awaiting University Approval).

Although the non-Thesis option requires more coursework, students taking this option are likely to obtain the M.A. more rapidly than those in the Thesis option because of the difficulty and length of time involved in completing an M.A. thesis. The expectation is that most students will choose the non-Thesis Master's program so as to progress in their career more quickly, especially those pursuing a doctoral degree. The programs are described in more detail below.

M.A. Degree Program non-Thesis Option (45 credits)

Required Courses (12 credits)

All students must have taken, or take during the first year of the program, the following four courses:
166-652A (3) Current Sociological Theory
166-550A (3) Design and Practice of Social Research
166-540B (3) Qualitative Methods of Social Research
166-540B (3) Quantitative Methods of Social Research I

Should a student be granted an exemption from any one or more of these courses by the Graduate Studies Committee, another substantive seminar must be substituted in its place.

Elective Courses (9 credits)

Students are required to choose three elective courses, one of which may be in a cognate field, subject to the approval of the Graduate Committee.

Research Paper Component – Required (24 credits)

166-696 (3) Research Paper I (first term)
166-697 (3) Research Paper II (second term)
166-698 (6) Research Paper III (third term)
166-699 (12) Research Paper IV (third term)

The research paper will normally, but not necessarily, flow out of a paper written for one of the graduate seminars or an independent reading course. Comparable to an article in a professional journal, the paper ought to focus on a clearly defined research problem, demonstrating in the process familiarity with the most important relevant scholarly work and the ability to carry out research and organize the results of the research. This paper is expected to be no more than 30 pages in length, exclusive of footnotes and bibliography.

M.A. Degree Program Thesis Option (48 credits)

Required Courses (12 credits)

All students must have taken, or take during the first year of the program, the following four courses:
166-580B (3) Quantitative Methods of Social Research I
166-540B (3) Qualitative Methods of Social Research
166-652A (3) Current Sociological Theory
166-504B (3) Quantitative Methods of Social Research

Should a student be granted an exemption from any one or more of these courses by the Graduate Committee, another course must be substituted in its place.

Elective Courses (3 credits)

Students are required to choose one course, which may be in a cognate field, subject to the approval of the Graduate Committee.

Thesis Component – Required (33 credits)

166-690 (3) M.A. Thesis I (first term)
166-691 (6) M.A. Thesis II (second term)
166-692 (3) M.A. Thesis III
166-693 (3) M.A. Thesis IV (second term)
166-694 (18) M.A. Thesis V (third term)

To provide students with some research experience, all candidates must present a thesis based on their own research. While not necessarily requiring an exhaustive review of work in the particular field of study, or a great deal of original scholarships, the thesis must show familiarity with previous work in the field and must normally demonstrate the ability to carry out research and to organize results, all of which must be presented in good literary style. The thesis will consist of between 50-75 pages of text, exclusive of footnotes and bibliography which must be completed no later than August 31st of the second year in the program.

M.A. Degree Program non-Thesis Option in Social Statistics (Awaiting University Approval)

The program complements disciplinary training with research experience applying statistical methods to Statistics Canada data (or equivalent). Students will complete normal program course requirements under the M.A. non-Thesis program, supplemented by further statistical courses, as advised by the Option advisor, and subject to approval by the home department. Students will complete a statistics-based M.A. research paper (Economics, Political Science, Sociology) or thesis (Geography) in conjunction with an interdisciplinary capstone seminar.

Acceptance into the program is by application to the Social Statistics Option Committee and is contingent on acceptance into the M.A. program in one of the participating departments (Economics, Geography, Political Science, Sociology).

M.A. Degree in Medical Sociology

In addition to the M.A. thesis program, the Department offers M.A. programs in Medical Sociology which are given jointly by the Sociology Department and the Department of Social Studies in...
REQUIREMENTS FOR THE PH.D. DEGREE

A minimum of three years of study is required. There is one year of course work consisting of six courses. It is important to note that students admitted without any one or more of the required courses or their equivalent at the M.A. level (166-580, 166-652, 166-504, and 166-540) will be expected to make up any deficiencies in addition to the regular course requirements.

Course Requirements: Ph.D. students are required to take six additional courses, the only required course being 166-505B Quantitative Methods of Social Research II. The other five courses can be chosen from among the elective courses listed in the Sociology Department course offerings.

Examination Requirements: Ph.D. Candidates must take examinations in two subfields of sociology. These fields will be chosen from the Department's areas of specialization. Examinations must be completed and the student's candidacy for the degree established no later than the end of the third year of graduate study.

Language Requirement: Ph.D. Candidates must demonstrate ability to read French with high proficiency or to read another language which is relevant to the candidate's field of research. The language requirement should be met by the end of the third Ph.D. year and may be satisfied by taking the French language course for Ph.D. students at the Centre for French Language and Literature at McGill, or by having a written examination in the Department or by exemption.

Thesis Requirement: Ph.D. Candidates are required to submit a thesis on an approved topic. The topic must be approved by a dissertation proposal committee convened by the student's dissertation supervisor. The thesis should be completed within five years after the initial residency period of two years.

Further details on the requirement and regulations for the thesis and the fields in which the Department is prepared to direct research may be obtained from the Graduate Coordinator of the Department at gradsoc@po-box.mcgill.ca or via the Web at http://www.mcgill.ca/fgsr/gso/thesis.htm.

76.6 Courses

- Denotes not offered in 2000-01.
- Denotes limited enrolment.

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

N.B.: As this Calendar is prepared early in the year, it is subject to change. A final listing of the course offerings will be made available in the summer. Students are advised to check with the Department prior to registration.

All 300, 400 and 500-level Sociology courses listed in the Faculty of Arts Calendar are open to graduate students and can be taken for graduate credit provided appropriate work load adjustments are agreed upon with the instructor.

166-504B Seminar: Quantitative Methods I. (3) (Prerequisites: 166-350 and 166-461 or equivalents.) Analysis of quantitative information, especially in large, survey-type data sets. Use of computer programs such as SPSS and SAS. Topics include: cross tabulations: multi-dimensional tables, multiple correlation and regression, and the relationship between individual and aggregate level statistical analyses. Special reference to demographic techniques.

166-505B Seminar: Quantitative Methods II. (3) (Prerequisite: 166-504) Topics include: problems -- and solutions -- in regression analysis, models for categorical dependent variables, including logit, log-linear, and linear probability models, measurement models, structural equation models with latent variables (LISREL), and time series and panel analysis.

166-510A Seminar in Social Stratification. (3) (Prerequisites: 166-333 and 166-350 or equivalents.)

166-511A Seminar: Movements/Collective Action. (3) A critical examination of classical and more recent approaches to the study of social movements and collective action. Discussion of the role of grievances and interests, incentives and beliefs, conditions of breakdown and solidarity, mobilization and social control and the dynamics of collective action.

166-515B Seminar: Medicine and Society. (3) (Prerequisite: Undergraduate students require permission of instructor.) The sociology of health and illness. Reading in areas of interest, such as: the sociology of illness, health services occupations, organizational settings of health care, the politics of change in national health service systems, and contemporary ethical issues in medical care and research.

166-516B Advanced Psychological Sociology. (3)

166-519A Sociology of Ethnic Conflict. (3)

166-520B Migration and Immigrant Groups. (3) (Prerequisite: 15 credits in the Social Sciences)

166-529B Social Inequality & Public Policy. (3)

166-530A Sex and Gender (3) (Restriction: Open to Honours Sociology students and to Sociology Majors with the permission of instructor.)

166-535A Sociology of the Family. (3) (Restriction: Undergraduate students require permission of instructor.) This seminar reviews literature on major research areas in sociology of the family. It examines families in the past, focuses on the study of family using a life course approach, and considers selected areas which have significant influences, such as, work and family, family violence, and cultural variation in families. Password required.

166-538B Selected Topics in the Sociology of Biomedical Knowledge. (3) The seminar will examine recent work in the sociology of biomedical knowledge. It will focus on the technological shaping of biomedical knowledge, i.e. on the impact of new technologies and equipments on the development of biomedical knowledge.

166-540B Qualitative Research Methods. (3) Qualitative methodology, mainly participant observation, structured and unstructured interviewing. Students begin a research project using these techniques and submit field notes once a week.

166-545B Selected Topics. (3)

166-550B Sociology of Developing Societies. (3) Comparison of alternative explanations of underdevelopment and strategies for change. Impact of social inequalities. Relations of domination and subordination between nations. The market strategy of development. Strategies emphasizing the environment, local cooperation, and appropriate technology. Students will write and present a research paper, and participate extensively in class discussion. Password required.

166-555A Comparative Historical Sociology. (3) (Restriction: Undergraduates require permission of instructor.)

166-560A Gender and Organization. (3) (Prerequisite: Permission of instructor.)

166-571A Deviance and Social Control. (3) The 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. Password required.

166-580A Design & Practice of Social Research. (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 propos-
als, including data collection procedures. Principles, dynamics, strengths and practical limitations of research designs. Examples from recent publications. **Professor Benavistio**

- 166-612B **INDUSTRIAL SOCIOLOGY.** (3) (Restriction: Only open to graduate students.)
- 166-626B **SEMINAR: LABOUR MARKET STRUCTURE AND STRIKES.** (3) (Pre- or co-requisite: 166-504)

166-627A **SEMINAR: POLITICAL SOCIOLOGY.** (3) Key theories and empirical areas of political sociology. Major works relevant to each theme will be read and analyzed. Topics include: political socialization, the social psychology of political behaviour, class and politics, political organizations, elite studies. A research paper in one of the areas covered will be required. **Professor Hall**

166-629A **SEMINAR: 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. **Professor Krohn**

166-652A **CURRENT SOCIOLOGICAL THEORY.** (3) (Prerequisite: 166-330) Examination of works in some major areas of Sociology with a focus on recent 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. **Professor Weinfeld**

166-668 **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 160-688, 166-688 or 183-688.) Special topics in social statistics and presentations of ongoing research by students pursuing the M.A. Option in Social Statistics in any of the participating disciplines. (Awaiting University Approval) **Staff**

166-690A,B **M.A. THESIS I.** (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. **Staff**

166-691A,B **M.A. THESIS II.** (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. **Staff**

166-692A,B **M.A. THESIS III.** (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. **Staff**

166-693A,B **M.A. THESIS IV.** (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. **Staff**

166-694A,B **M.A. THESIS V.** (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 and by Faculty of Graduate Studies and Research. **Staff**

166-695A,B **M.A. THESIS VI.** (15) (Restriction: Open only to graduate students registered in the Medical Sociology Thesis Program.) Completion, submission and approval of the M.A. Thesis by the committee and by Faculty of Graduate Studies and Research. **Staff**

**77 Surgical Research**

Department of Surgery (Division of Surgical Research)
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Canada

Telephone: (514) 937-6011 ext. 2837
Fax: (514) 934-8289
E-mail: irenes@med.mcgill.ca

Chair, Department of Surgery — J.L. Meakins
Director, Division of Surgical Research — L. Rosenberg
Associate Director, Division of Surgical Research — A. Philip

**77.1 Staff**

**Professors**

J.L. Meakins; B.Sc.(McG.), M.D.(W.Ont.), D.Sc.(Cinc.)
L. Rosenberg; M.Sc., M.D., Ph.D.(McG.)
M. Aebi; B.Sc., M.D.(Switz.). F.R.C.S.(C)
R.A. Brown; B.Sc., M.D., Ph.D.(McG.)
R.C.-J. Chiu; M.B.(Taiwan), Ph.D.(McG.)
N.V. Christou; B.Sc., M.Sc., Ph.D., M.D.(McG.)
M.H. Elhili; M.B.B.Ch., M.Sc., Ph.D., M.Ch.(Cairo), Ph.D.(McG.)
G.M. Fried; B.Sc., M.D.(McG.)
C. Gagnon; B.Sc., M.D., Ph.D.(Montr.)
F. Glorieux; M.D., (Louvain), M.Sc.(Montr.), Ph.D.(McG.)
D.S. Mulder; M.D.(Sask.), M.Sc.(McG.)
A.R. Poole; B.Sc., Ph.D.(Rdg)
P.J. Roughley; B.Sc., Ph.D.(Nott.)
H.B. Williams; B.A.(Acadia), M.D.(McG.)

**Associate Professors**

J.D. Bobyn; B.Sc., M.Sc.(McG.), Ph.D.(Tor.)
P. Brodt; B.Sc.(Bar-Ilan), M.Sc.(Olt.), Ph.D.(McG.)
S. Chevalier; B.Sc., M.Sc., Ph.D.(Montr.)
D. Fleiszer; B.Sc., M.D., C.M.(McG.)
J.M. Laberge; M.D,(Laval)
J.S. Mort; B.Sc.(McG.), Ph.D.(McM)
H. Shennib; M.D.(Cairo), F.R.C.S.(C), Ph.D.(McG.)
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)

**Assistant Professors**

A. Philip; M.Sc., Ph.D.(McG.)
J. Barkun; M.D., M.Sc.(McG.)
M. Chevrette; B.Sc., M.Sc., Ph.D.(Laval)
O. Huk-Papanastasiou; M.D.
G. Jensen; B.Sc., Ph.D.(Denmark)
E. Lee; B.A.(Boston), M.Sc., Ph.D.(McG.)
L. Lessard; B.Sc., M.D.(Laval), F.R.C.S.(C)
77.2 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, lung transplantation; tissue repair and engineering for plastic surgery applications; cartilage regeneration, osteoinduction and biomechanics; sepsis and multi-organ failure; biology of cancer; sexual dysfunction, prostate cancer and kidney stones; and surgical epidemiology.

A list of research directors and a description of their research topics, as well as application forms may be obtained from Mrs. Irene Sidorenko, Department of Surgery, Division of Surgical Research, e-mail: irenes@med.mcgill.ca, to whom all enquiries are to be directed.

77.3 Admission Requirements

M.Sc. Program

Usually a B.Sc., M.D. or M.V.D. degree, with a minimum CGPA of 3.2. 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 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 Advisory Committee.

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 given credit for one year of their M.Sc. and 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 project, as well as preparation of a report in writing on an assigned research publication, and its oral presentation. The candidate must receive a pass mark in both components to continue in the Ph.D. program.

77.4 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), a cheque for $60 payable to McGill University, as well as two copies of all academic transcripts and two letters of recommendation mailed directly to the Department.

Deadline for receipt of complete applications:
- May 1st for the September term.
- October 1st for the January term.
- February 2nd for International students.

77.5 Program Requirements

M.Sc. Program

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:

- 519-601D Seminars in Surgical Research (6)
- 519-606A Statistics for Surgical Research (3)
- 519-605B Issues in Biomedical Research (3)

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 Advisory Committee appointed for each student.

The laboratory research component of the program is given 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.

Predoctoral comprehensive examination: All Ph.D. students (admitted directly into the Ph.D. program, or those allowed to transfer from M.Sc. 1 to Ph.D. 2 without writing an M.Sc. thesis) must take this examination.

The examination is to take place after 12 months of residence in the Ph.D. program, and will be administered by an expanded Research Advisory Committee under its Chair. The examination will have two components: an oral presentation of the candidate's research project, as well as preparation of a report in writing on an assigned research publication, and its oral presentation. The candidate must receive a pass mark in both components to continue in the Ph.D. program.

77.6 Courses

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

519-601D SEMINARS IN SURGICAL RESEARCH (6) (1½ hours/week) (Compulsory for graduate students in the Department of Surgery and available to others by permission of the coordinators.) Each session will consist of presentations by research directors and the graduate student. The fall term will feature invited speakers and the winter sessions will consist of presentations by research directors and the graduate student. The first will introduce the subject by highlighting the clinical biological problem while the student will be expected to describe the project and methodology and integrate their findings with the overall approach presented.

Professors Lee, Mort, Philip and Steffen

519-606A STATISTICS FOR SURGICAL RESEARCH (3) (2 hours/week) (Compulsory for graduate students in the Department of Surgery and available to others by permission of the coordinators.) Introduction to basic statistical principles and methods as they could be applied to surgical research. The topics covered will include: descriptive statistics probability theory, statistical inference, bivariate techniques, analysis of variance, and introduction to multi-variate methods.

Professor Sampalis

519-605B ISSUES IN BIOMEDICAL RESEARCH (3) (2 hours/week) (Compulsory for graduate students in the Department of Surgery and available to others by permission of the coordinators.) Students will be introduced to current trends in important areas of surgical research such as inflammation, wound healing, immunity, tissue engineering, cancer and gene therapy. The impact of basic research on the practice of surgery and post-surgical patient care will be highlighted through lectures shared by clinical and basic scientists. In addition the course offers lectures on the art of grant and paper writing by experienced members of the staff.

Professors Brodt and Rosenberg.

519-684A SIGNAL TRANSDUCTION (3) (2 hours/week) (Open to graduate students with prerequisites and U3 undergraduates with special permission.) An in-depth course describing the cellular and molecular mechanisms involved in signal transduction by growth factors, cytokines and extra cellular matrix with emphasis on clinical relevance. The course will focus on how perturbation in signaling pathways may result in disease states and address the issues from a surgical research perspective.

Professors Philip and Chevalier
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 “Groupe Urbanisation 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.

78.3 Admission Requirements
The M.U.P. degree is open to students holding a bachelor's degree or equivalent in Anthropology, Architecture, Economics, Engineering, 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 Faculty of Graduate Studies and Research, 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.)

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

Awards and Financial Assistance
For information regarding awards and financial assistance, please refer to the Faculty of Graduate Studies “Graduate Fellowships and Awards” Calendar.

78.4 Program Requirements
The program in Urban Planning requires two years of study (69 credits). It consists of a basic core of compulsory courses and a selection of courses from a group of recommended electives. A three-month internship with a member of a recognized planning association is required.

Students are required to prepare a Supervised Research Project which may take the form of investigative research, an impact study, a development project or a plan. It may be undertaken jointly with another student.

Required Courses (51 credits)

409-604A (6) Planning Projects III
409-606A,B (3) Supervised Research Seminar
409-609A* (3) Planning Graphics
409-612A (3) History and Theory of Planning
409-622A (6) Planning Projects I
409-623B (3) Planning Projects II
409-628A,B,C (6) Practical Experience in Urban Planning
409-630A,B,C (3) Supervised Research Project I
409-631A,B,C (6) Supervised Research Project II
409-632A,B,C (6) Supervised Research Project III
183-351B* (3) Applied Quantitative Methods in Geography
490-004A (3) Land Use Planning Law

Students who have completed the material for courses marked with an * may request permission from the instructor to substitute another course.

When selecting Complementary and Elective courses, it is highly recommended that students take at least one course in each of the fields of housing, transportation, environment and design.

**Complementary Courses** (12) credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>301-379A</td>
<td>Site Usage</td>
</tr>
<tr>
<td>301-550B</td>
<td>Urban Planning I: Planning in Québec</td>
</tr>
<tr>
<td>301-551A</td>
<td>Urban Planning II: Land Use Regulation and Project Development</td>
</tr>
<tr>
<td>301-527B</td>
<td>Civic Design</td>
</tr>
<tr>
<td>301-528A</td>
<td>History of Housing</td>
</tr>
<tr>
<td>301-529B</td>
<td>Housing Theory</td>
</tr>
<tr>
<td>303-540A</td>
<td>Urban Transportation Planning</td>
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<tr>
<td>409-501A,B</td>
<td>Principles and Practice of Planning I</td>
</tr>
<tr>
<td>409-505B</td>
<td>Geographical Information Systems in Planning</td>
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<tr>
<td>409-605A,B</td>
<td>Graduate Seminar</td>
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<tr>
<td>409-607A,B,C</td>
<td>Reading Course</td>
</tr>
<tr>
<td>409-614B</td>
<td>Urban Environmental Planning</td>
</tr>
<tr>
<td>409-616A,B</td>
<td>Selected Topics in Urban Planning I</td>
</tr>
<tr>
<td>409-617A,B</td>
<td>Selected Topics in Urban Planning II</td>
</tr>
<tr>
<td>409-618A,B</td>
<td>Selected Topics in Urban Planning III</td>
</tr>
<tr>
<td>409-619B</td>
<td>Transportation and Land Development</td>
</tr>
<tr>
<td>409-620A</td>
<td>Computer Applications in Planning</td>
</tr>
<tr>
<td>409-621B</td>
<td>Theories of Urban Form</td>
</tr>
<tr>
<td>409-625A,B</td>
<td>Principles and Practice of Planning II</td>
</tr>
<tr>
<td>409-626A,B</td>
<td>Principles and Practice of Planning III</td>
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</tbody>
</table>

**Electives** (6 credits)

Students may select courses to acquire an in-depth knowledge of one subject area in the field of planning. Students are not limited to the list below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>166-222B</td>
<td>Urban Sociology</td>
</tr>
<tr>
<td>183-315A</td>
<td>Urban Transportation Geography</td>
</tr>
<tr>
<td>183-331A</td>
<td>Urban Social Geography</td>
</tr>
<tr>
<td>274-445A</td>
<td>Real Estate Finance</td>
</tr>
<tr>
<td>274-446B</td>
<td>Real Estate Investment Analysis</td>
</tr>
<tr>
<td>274-447A</td>
<td>Real Estate Valuation</td>
</tr>
<tr>
<td>274-546B</td>
<td>Land Law</td>
</tr>
<tr>
<td>303-440A</td>
<td>Traffic Engineering</td>
</tr>
<tr>
<td>407-352A</td>
<td>The Public Social Services in Canada</td>
</tr>
</tbody>
</table>

**78.5 Courses**

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

**409-501A,B PRINCIPLES AND PRACTICE OF PLANNING I.** (2) This six-week intensive course exposes students to issues and techniques which are applicable in diverse professional planning contexts that vary in terms of their subject matter, location, scale and the role played by planners. The course focuses on a specific case study and is taught by a visiting lecturer with experience in the selected subject area. Course topics are systematically varied over a two-year cycle.

**409-505B GEOGRAPHIC INFORMATION SYSTEMS IN PLANNING.** (3) An introduction to fundamental geographic information system (GIS) concepts and the range of GIS applications in urban and regional planning. Seminar topics include: data structures, input and output techniques, spatial analysis and modelling, and managerial considerations. Practical experience with leading microcomputer GIS packages is offered.

**409-606A SUPERVISED RESEARCH SEMINAR.** (3) The supervised research seminar consists of group conferences between students and staff, both to introduce and discuss the topic of professional ethics, and to permit the formulation and development of the students’ research project.

**409-607A,B,C READING COURSE.** (3) The Reading Course offers an opportunity to explore, under the supervision of a staff member, subject areas relevant to urban planning.

**409-609A PLANNING GRAPHICS.** (3) Designed to familiarize the student with graphic techniques used in professional planning practice, as well as to heighten environmental perception. Weekly lecture which reviews theory and practice followed by a weekly studio assignment involving the application of practical skills.

**409-612A HISTORY AND THEORY OF PLANNING.** (3) A review of planning history and theories of planning. These are examined under three categories: explanation of urban phenomena, substantive theory, and theories of process.

**409-614B URBAN ENVIRONMENTAL PLANNING.** (3) Examination and evaluation of methodologies pertaining to the assessment of environmental impact in the urban context and the integration of diverse environmental elements directly within the urban planning process. Consideration is given to both theoretical and practical issues. The quality of recent professional reports is assessed.

**409-616A,B SELECTED TOPICS IN URBAN PLANNING I.** (3)

**409-617A,B SELECTED TOPICS IN URBAN PLANNING II.** (3)

**409-618A,B SELECTED TOPICS IN URBAN PLANNING III.** (3) Special topics related to Urban Planning will be presented by staff and visiting lecturers.

**409-619B TRANSPORTATION AND LAND DEVELOPMENT.** (3) Urban land development projects: design procedures and standards for internal traffic distribution, auto, truck and pedestrian access, parking requirements, and the development of transportation-related land-use controls. Methods for assessing the impact of land development projects on external traffic. Transportation/land-use relationships at the broader regional scale, with a review of land-use forecasting and allocation models and procedures for the coordination of comprehensive transportation/land-use planning.

**409-620A COMPUTER APPLICATIONS IN PLANNING.** (3) An introduction to selected computer applications in planning including information systems, planning analysis and computer-aided design. Students will acquire experience with software packages currently used in planning practice and research.

**409-621B THEORIES OF URBAN FORM.** (3) This seminar explores the forces and ideas which have shaped cities since the industrial revolution, with the objective of understanding urban aesthetics. The urban environment as a source of stimulation for the senses is examined from the perspective of different fields of study.

**409-622A PLANNING PROJECTS I. (STUDIO)** (6) This studio introduces practical problems based on real world cases. Material covered includes: problem definition; data sources, collection and analysis; goal setting; the creative process; problem solving; and policy implications. Students work in interdisciplinary groups. Each studio terminates with an oral and graphic presentation of work to which expert critics are invited. Progress is evaluated according to performance in class, in the oral presentation, and on written reports.

**409-624A RESEARCH METHODS IN PLANNING.** (3) A review of research methodologies and processes. Students will be introduced to the variety of methodologies used in planning research, and to the process of preparing and making a research proposal. The course will involve a large reading component, and individualized planning research projects which are supervised by professors or visiting lecturers.

**409-625A COMPUTER APPLICATIONS IN HISTORICAL PLANNING.** (6) The use of computer technology in historical planning projects, survey methods, computer-aided design, and the use of software packages to enhance the research process.

**409-630A,B READING COURSE II.** (3) The Reading Course offers an opportunity to explore, under the supervision of a staff member, subject areas relevant to urban planning.

**409-631A,B RESEARCH METHODS IN URBAN HISTORY.** (3) An extended research seminar in which the students carry out an in-depth study of an urban planning problem. The course will involve a large reading component, and individualized planning research projects which are supervised by professors or visiting lecturers.

**409-632A RESEARCH METHODS IN URBAN HISTORY.** (6) The use of computer technology in historical planning projects, survey methods, computer-aided design, and the use of software packages to enhance the research process.

**409-633A RESEARCH METHODS IN URBAN HISTORY.** (6) The use of computer technology in historical planning projects, survey methods, computer-aided design, and the use of software packages to enhance the research process.
409-623B Planning Projects II (Studio) (3) (Prerequisite: 409-622) This studio introduces practical problems based on real world cases. Material covered includes: problem definition; data sources, collection and analysis; goal setting; the creative process; problem solving; and policy implications. Students work in interdisciplinary groups. Each studio terminates with an oral and graphic presentation of work to which expert critics are invited. Progress is evaluated according to performance in class, in the oral presentation, and on written reports. Professor Fischler and Staff

409-625A,B Principles and Practice of Planning II. (2) This six-week intensive course exposes students to issues and techniques which are applicable in diverse professional planning contexts that vary in terms of their subject matter, location, scale and the role played by planners. The course focuses on a specific case study and is taught by a visiting lecturer with experience in the selected subject area. Course topics are systematically varied over a two-year cycle. Staff and Visitors

409-626A,B Principles and Practice of Planning I. (2) Staff and Visitors

409-628A,B,C Practical Experience in Urban Planning. (6) An internship related to the practice of urban planning is required. The practical experience must be of at least 3 months duration and be supervised by a professional in the planning field. An evaluation of the student's performance by the supervisor, as well as a short report by the student, forms the basis for assessment. Staff

409-629A,B,C Supervised Research Project I. (3) The Supervised Research Project is intended to focus a student's interests on a particular area of enquiry at the end of studies for a Master's Degree in Planning. It should ideally provide the transition into practice or more advanced studies. Joint research projects are allowed. Staff

409-631A,B,C Supervised Research Project II. (6) Continuation of the requirements for the Supervised Research Project. Staff

409-632A,B,C Supervised Research Project III. (6) Continuation of the requirements for the Supervised Research Project. Staff

Courses Offered Jointly by the School and Other Academic Units

490-004A Land Use Planning Law. (3) A comparative study of private and public control of land use and development, involving: Master plans, zoning bylaws, subdivision control, urban re-development, expropriation, and regional planning. Professor Glenn

303-433B Urban Planning. 3(3-1-5) (Prerequisites: 303-421A, 306-310A,B; Corequisite: 303-319B). The planning profession, evolution of planning in North America, Canada and Quebec. Planning theories, the general or master plan, planning processes and techniques, planning and design of residential subdivisions. Local planning issues, housing policies, planning laws. Professor Wolfe

301-550B Urban Planning I. (3) Theory and practice. An examination of different basic approaches to urban planning with special reference to Quebec. Professor Wolfe

301-551A Urban Planning II. (3) Urban Design and Project Development. Theory and practice. Detailed analysis of selected examples of the development process and of current techniques in urban design. Professor Fischler

183-351A Applied Quantitative Methods in Geography. (3) Survey design; uni- and multi-dimensional scaling; cost-benefit analysis and matrix methods of plan evaluation; multiple regression and correlation; logic models; gravity models; population projection. Professor Ewing

303-540A Urban Transportation Planning. 3(3-1-5) (Prerequisite: 303-319B or permission of instructor). Process and techniques of urban transportation engineering and planning, including demand analysis framework, data collection procedures, travel demand modelling and forecasting, and cost-effectiveness framework for evaluation of project and system alternatives. Professor Rice, Messrs. Boucher and Trottier