University of Toronto  
at Scarborough

Calendar

If somebody would give me about two dozen very old elm trees and about fifty acres of wooded ground and laws, — not too near anywhere and not too far from anywhere — I think I could set up a College that would put all the big universities in the shade.

Stephen Leacock

2000 / 2001

1265 Military Trail, Scarborough, Ontario, Canada, M1C 1A4
ELCOME to the University of Toronto. As one of the premier universities in the world, we welcome new students to our community. Your experience here will be enriching, challenging, and rewarding.

The University is a community of scholars, thinkers, and doers. You are an important part of this community. We hope you will feel welcome and find your time here stimulating.

Your professors are active researchers and scholars who have won awards and international recognition for their contributions to knowledge. They are well qualified both to introduce the basic concepts and ideas of their disciplines, and to encourage the junior scholar to develop and pursue interests that are at the leading edge of their areas of specialization.

But teaching is not a one-way communication. Your learning and your intellectual growth depend on your own active engagement with the material and with your instructors. You should also know that teaching undergraduates is part of the further development of your professors. The process of explaining and re-explaining the subject matter leads to an evolution of courses over time and frequently provokes professors to question and reconsider their earlier understanding of it, sometimes influencing the future direction of their own research.

I hope that you make the most of the opportunity to pursue your studies here. At its best, the university experience is one that transforms your view of the world, of life, and of yourself. Whatever subjects you choose to study, I wish you every one of you this experience, and every success.

Professor Joan Foley
Acting President and Dean
University of Toronto at Scarborough
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Important Notices

1 Changes in Subject Lists (Programmes of Study)
The programme of study that the Calendar lists and describes are available for the years to which the Calendar applies. They may not necessarily be available in later years. If the University or the Faculty (School, College) must change the content of programmes of study or withdraw them, all reasonably possible advance notice and alternative instruction will be given. The University, however, will not be liable for any loss, damages, or other expenses that such changes might cause.

2 Changes in Courses / Academic Activities
For each programme of study offered by the University through the Faculty (School, College), the courses necessary for the successful completion of the programme will be made available subject to the programme. It is possible that the University will make changes from time to time in the programme requirements, prorogation, or cancellation. Any changes will be made with the greatest possible notice.

3 Changes in Regularity of Meetings
The University reserves the right to alter the meetings of the Senate, the Governing Council and which apply to the University. The University will notify the persons. The University will assume that he or she has done so. The rules and regulations of the Faculty (School, College) are displayed here. Applicable University policies are either fully displayed here or listed here.

In applying to the Faculty (School, College) the student assumes certain responsibilities to the University and the Faculty (School, College) and, if admitted and registered, shall be subject to the rules, regulations, and policies cited in the Calendar.

4 Calendar Limitations
The University makes every reasonable effort to plan and control enrolment to ensure that all of our students are qualified to complete the programmes to which they are admitted, and to strike a practicable balance between enrolment and available instructional resources. Sometimes such a balance cannot be struck and the number of qualified students exceeds the instructional resources that we can reasonably make available while at the same time maintaining the quality of instruction. In such cases, we must reserve the right to limit enrolment in the programmes, courses, or sections listed in the Calendar, and to withdraw courses or sections for which enrolment or resources are insufficient.

5 Copyright or Course Lectures
If a student wishes to tape-record, photograph, video-record or otherwise reproduce lecture presentations, course notes or similar materials provided by instructors, he or she must obtain the instructor’s written consent beforehand. Otherwise all such reproductions are an infringement of copyright and is absolutely prohibited. In the case of private use by physically disabled students, the instructor’s consent will not be unreasonably withheld.

6 Person I.D. (Student Number)
Each student at the University is assigned a unique identification number. The number is confidential. The University, through the Policy on Access to Student Records, does not disclose any information about an individual to any person other than the individual’s written consent. The University reserves the right to alter the fees and other charges described in the Calendar.

7 Separate Calendars are published by the St. George campus of the Faculty of Arts and Science and by Erindale College. Students are reminded that University of Toronto at Scarborough is a separate faculty of the University and that rules governing students registered at University of Toronto at Scarborough may differ from those in the Faculty of Arts and Science.

8 It is the responsibility of students to see that their academic programmes meet University of Toronto at Scarborough’s regulations in all respects.

9 ACADEMIC OFFENCES ARE A SERIOUS MATTER. See page 230.

10 University of Toronto at Scarborough has a fire safety plan. Copies are available from Physical Plant Services R470A.

11 University of Toronto at Scarborough has a No-Smoking Policy.

12 University of Toronto at Scarborough “Snowline” (416) 287-7026.
Academic Calendar / Summer Session 2000*

March 15
- Last day for new students to apply for admission to the University for the Summer Session for courses beginning in May.

April 10
- Summer Session registration begins through ROSI's Line and ROSI's Page (Student Telephone and Web Services).

April 21
- Good Friday = University closed.

May 12
- Deadline to register in May to June and July to August courses (Section "F" and "Y").

May 15
- Last day for new students to apply for admission to the University for the Summer Session for courses beginning in July.

May 15
- Classes begin in May to June and July to August courses (Section "F" and "Y").

May 21
- Last day to add May to June and July to August courses (Section "F" and "Y").

May 22
- Victoria Day = University closed.

June 11
- Last day to cancel May to June courses (Section "F") from academic record and GPA.

June 30
- Deadline to register in July to August courses (Section "S").

June 30
- Last day of classes in May to June courses (Section "F").

July 3
- Canada Day = University closed.

July 4
- Classes begin in July to August courses (Section "S").

July 10
- Last day to add July to August courses (Section "S").

July 23
- Last day to cancel May to August courses (Section "Y") from academic record and GPA.

July 30
- Last day to cancel July to August courses (Section "S") from academic record and GPA.

August 7
- Civic holiday = University closed.

August 14 - 18
- Deferred examinations from April/May 2000.*

August 18
- Last day of classes in May to August and July to August courses (Section "Y" and "S").

November 21
- Last day for submission of term assignments. Final examinations, if required, will be held in a class period of the last week.

November 21
- Fall Convocation.

December 11 - 20
- Deferred examinations from June and August 2000.*

* For dates on other campuses, see the appropriate Calendar.

** After this date a grade is recorded whether course work is completed or not and calculated into the GPA.

Academic Calendar / Winter Session 2000/2001*

2000 - FALL SESSION

April 1
- Last day for new students to apply for admission to the University for fall full-time studies beginning in September. Overseas students must apply by March 31.

June 1
- Last day for new students to apply for admission to the University for part-time studies beginning in September.

July 4
- Fall/Winter Session registration using ROSI's Line and ROSI's Page (Student Telephone and Web Services) begins.

September 4
- Labour Day = University closed.

September 11
- Classes begin in Fall Session courses (Section "F") & Fall/Winter Session courses (Section "Y").

September 24
- Last day to add Fall courses (Section "F") & Fall/Winter Session courses (Section "Y").

October 9
- Thanksgiving Day = University closed.

November 5
- Last day to cancel Fall Session courses (Section "F") from academic record and GPA.

November 13
- Christmas Examination Schedule published.

December 4
- Last day of classes in the Fall Session. Last day for submission of term assignments in Fall Session courses (Section "F").

December 5-8
- Study Break (Scarborough). U of T Scarborough students who are registered in St. George courses will continue to have classes through this period.

December 11-20
- Term test and final examination period. Deferred examinations from June and August 2000.*

December 21-January 2
- Christmas break = University closed.

2001 - WINTER SESSION

January 8
- Classes resume for Fall/Winter Session courses (Section "Y").

January 8
- Classes begin in Winter Session courses (Section "B").

January 21
- Last day to add Winter Session courses (Section "B").

February 15
- Last day to confirm intention to graduate at the Spring Convocation.

February 18
- Last day to cancel Fall/Winter Session courses (Section "Y") from academic record and GPA.

February 19-23
- Reading Week = No classes held.

March 11
- Last day to cancel Winter Session courses (Section "S") from academic record and GPA.

March 12
- Annual Examination Schedule published.

April 6
- Last day of classes; no tests or examinations (other than deferred examinations) may be held until the beginning of the examination period.

April 9-12
- Study Break (Scarborough).

April 13
- U of T Scarborough students who are registered in St. George courses will continue to have classes through this period.

April 16 - May 2
- Good Friday = University closed.

May 4
- Final examination period.

May 6
- Deferred examinations from December 2000.*

June 8
- University Spring Convocations are likely to begin.

* For dates on other campuses, see the appropriate Calendar.

** After this date a grade is recorded whether course work is completed or not and calculated into the GPA.
Officers of the University of Toronto at Scarborough 2000/2001

Principal and Dean
R.P. Thompson, M.A., Ph.D.

Vice-Principal and Vice-Dean
C.M. MacLeod, B.A., Ph.D.

Associate Dean
L.H. McDonald, B.A., Ph.D.

Associate Principal & Chief Administrative Officer
K. McLean, B.A., M.B.A.

Associate Vice-Principal, Student Affairs
T. Nowosi, B.Sc., M.Ed.

Chair, Division of Humanities
E.A. Cooper, B.A., A.M., Ph.D.

Chair, Division of Life Sciences
J. Yoon, B.A., M.Sc., Ph.D.

Chair, Division of Management
S. Botim, B.A., M.P.P., Ph.D.

Chair, Division of Physical Sciences
J. Thompson, B.A., Ph.D.

Chair, Division of Social Sciences
D.B. Cook, M.A., Ph.D.

Director of Recruitment & Registrar

Officers of the University of Toronto 2000 / 2001

Chancellor

Chair, Governing Council
W.M. Cecil-Cook, B.A.

President and Chief Executive Officer
R. Biggs, B.Sc., Ph.D.

Vice-President and Provost
A. Sadra, B.Sc., M.A.Sc., Ph.D.

Vice-President, Administration and Human Resources
M.G. Frishman, B.A., M.A., Ph.D.

Vice-President and Chief Development Officer
J. Dallandrea, B.A., M.Ed., Ed.D.

Vice-President, Research and International Relations
H. Mozure-Bham, B.A., B.S.W., M.S.W., Ph.D.

Deputy Provost
C. Tushy, B.A., M.A., Ph.D.

Vice-Provost, Relations with Health Care Institutions
D. Naylor, M.D., D.Phil., FRCP.

Vice-Provost
F. Gouche, B.A., M.A., Ph.D.

Vice-Provost, Planning & Budget
D. McCammond, B.Sc., Ph.D.

Vice-Provost, Students
I. Orchard, B.Sc., Ph.D., D.S.Sc.

Assistant Vice-President, Research Services
P. Manson, B.A., M.A., Ph.D.

Director of Student Affairs
S. Addario, B.A., M.A.

Assistant Vice-President Operations and Services
J. Oliver, B.Com., M.Sc.

Chief Financial Officer
R.G. White, C.M.A.

Secretary of the Governing Council
L. Chapman, B.Sc., M.B.A.

University Registrar
K.J. Swift, M.Sc., M.Ed.

Vincent W. Bladen Library

Librarians
J. Crichton Patterson, B.A., M.L.S.
E. Duncan, B.A. (Hons.), M.L.S.
S. Dyas-Correa, B.A. (York), M.L.S.
L. Lue, B.A., M.L.S.
M. Miller, B.A., Hons., M.L.S.
E.K. Tanen, B.A., M.L.S.

Student Services

The Registrar's Student Services

Visit our:
- 24 hr. telephone information line at (416) 287-7501
- our website at: www.assur.utoronto.ca/depts/registrar

Advancing and Learning Strategies

Academic Advising assists you in making thoughtful decisions about adding or dropping courses, program selection and course load. Advisors can help you understand degree requirements and academic regulations and are a good sounding board for any of your academic concerns. Advisors are generalists who are often the best people to talk to when you are uncertain about where to go for help.

Learning Strategies

Learning strategies are offered to workshops and individual peer counselling to help you attain academic excellence.

Reference books are available. Room S302, (416) 287-7581

The Career Centre

The Career Counselling offers workshops and seminars on career planning and employment search. Listings for part-time, summer, volunteer and post-graduation positions are available. The Career Counselling houses a library of career area, employment and education information. Room S302, (416) 287-7581 www.assur.utoronto.ca/services/career

Financial Aid

Financial Aid is processed seminars and guest speakers to inform you about financial aid programs, OSAP (Ontario Student Assistance Program). The Office of Financial Aid and Awards offers advice and assistance on matters related to your financial aid. The Office of Financial Aid and Awards is located in University Centre, Room S303, (416) 287-7581

Registrarial Services

Registrarial Services is to place to visit for help with registration, to request a student card, repair cards or forms which confirm your status at the University, order copies of your examinations and answer many of your general questions about academic regulations and degree requirements. Room S303, (416) 287-7501

Health & Wellness Centre

Hours: Monday - Friday 9:00 a.m. - 5:00 p.m.

Nasser Almoudi: Student Residential Services

Nasser Almoudi: Student Residential Services is a multi-service centre which offers a range of services to support students in their academic and personal development.

Office of the Registrar

The Office of the Registrar provides administrative support to the University's governing bodies and committees, including the Board of Governors, the Senate, the Faculty Councils, and other relevant university committees.

Finance

The Office of Finance provides financial administration services for the University, including budgeting, accounting, and financial reporting.

Student Services

Student Services is responsible for supporting students in various areas such as registration, academic advising, and personal support.

Library

The University Library provides access to a wide range of resources for teaching and learning, including print and electronic materials.

The Centre for the Study of Women & Gender

The Centre for the Study of Women & Gender promotes research and education on gender and sexuality.

The Centre for Interdisciplinary Research in Writing

The Centre for Interdisciplinary Research in Writing supports research and teaching on writing and communication.

The Centre for International and Area Studies

The Centre for International and Area Studies promotes research and teaching on international and area studies.

The Centre for the Study of the Environment

The Centre for the Study of the Environment supports research and teaching on environmental issues.

The Centre for Human Rights

The Centre for Human Rights promotes research and teaching on human rights.

The Centre for Public Affairs

The Centre for Public Affairs supports research and teaching on public affairs.

The Centre for the Study of Asia

The Centre for the Study of Asia supports research and teaching on Asian studies.

The Centre for the Study of the Americas

The Centre for the Study of the Americas supports research and teaching on the Americas.

The Centre for the Study of the Middle East

The Centre for the Study of the Middle East supports research and teaching on the Middle East.

The Centre for the Study of the United Kingdom

The Centre for the Study of the United Kingdom supports research and teaching on the United Kingdom.

The Centre for the Study of the United States

The Centre for the Study of the United States supports research and teaching on the United States.

The Centre for the Study of the European Union

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The Centre for the Study of the Commonwealth
Harassment Officer is not a committee to file a complaint and in any point a complaint can be dropped.
The services of the Sexual Harassment Office are available to all members of the University.
All complaints and requests for information will be kept completely confidential unless the individuals involved approve otherwise. Members of the University of Toronto at Scarborouh may arrange an appointment at Scarborouh Campus with the Sexual Harassment Officer or may go to the downtown office, whichever is more convenient. For an appointment, information, to arrange educational or to file a complaint, contact:
Sexual Harassment Education, Counselling and, Complaint Office,
University of Toronto, 455 Spadina Avenue (at College), Room 302, Toronto, Ontario, M5S 2E7
(telephone (416) 978-3908).

AccessAbility Services
ACCOMMODATION OF STUDENTS WITH DISABILITIES
University Commitment
The University will make every attempt to provide reasonable and appropriate accommodations to persons who have disabilities. Staff carries a responsibility for creating and maintaining an inclusive environment in their training and work setting and responding appropriately to requests for accommodations of a disability.
Responsibility of Students Who have Disabilities
Students who have disabilities and wish to be accommodated in their academic programs and related activities at the University have the responsibility to disclose their disabilities and present requests for accommodations in a timely manner which will facilitate the implementation of supports and services. Students are encouraged to discuss their needs as early as possible with the Co-ordinator of AccessAbility Services. Students must present appropriate and up-to-date documentation of their disability when it is requested.

Researcher/Advisor
Staff in AccessAbility Services are available to provide services directly to students who have disabilities and to support and advise staff of the University in providing appropriate accommodations. AccessAbility Services will encourage students to communicate with their department and discuss their problems with appropriate staff.

AccessAbility Services will act as a resource centre for the University on disability issues, will assess documentation, recommend appropriate accommodations, and provide ongoing consultation and support.

Services Available at Scarborouh
• arrangements for alternate tests/exams
• note-takers
• provision of assistive devices and adaptive equipment and assessment of these needs
• adaptive materials (large print/braille text)
• alternative communication (e.g. sign language interpreter)
• accessible rest and course locations
• personal and career counselling relating to the individual's disability
• access to a registered psychologist for psycho-educational assessment.
The Co-ordinator is available at
(Voice/TTY): (416) 387-7553,
Voice: (416) 387-7500, drop by S302AB, email: ability@sca.utoronto.ca. We also have a page on the World Wide Web:
(www.scar.utoronto.ca/accessability).

International Student Centre
At the International Student Centre (ISC) all students can take part in social and cultural programs with an international focus, or just take a break from the pressures of studies.
"Interchange", ISC's work or study abroad resource centre, provides information and counselling on overseas programs. ISC also offers special services to international students: pre-arrival information (with the admission offer), reception service and orientation events, English language program, Newsletter and advice on non-academic concerns. Contact: 195 St. George Street, Toronto, Ontario, M5S 2B3, (416) 978-2564.

University Ombudsman
The Ombudsman assists in any way possible to resolve grievances or complaints, and can recommend changes in academic or administrative decisions where this seems justified. In handling a grievance or complaint, the Ombudsman has access to all relevant files and information, and to all appropriate University officials. The Ombudsman is independent of all administrative structures of the University, and is accountable only to the Governing Council.
For information, service, or assistance, contact the Office of the University Ombudsman, 161 St. George Street, Toronto, Ontario M5S 1A1 (Telephone (416) 978-4774).
Degrees

University of Toronto at Scarborough students may earn a Bachelor of Arts, a Bachelor of Science or a Bachelor of Business Administration degree. Students may elect to receive a B. A. or a B.Sc. degree after having completed the requirements for a three-year degree or an Honours (four-year) degree. The Bachelor of Science (B.Sc.) degree is awarded to students who have completed at least twelve full courses.

Degree Requirements

In the context of the degree requirements, the word “course” refers to one full-course or two half-courses.

Students who first registered at Scarborough before the 1989 Summer Session may, if they wish, complete the degree requirements detailed in the 1989-90 Calendar. Students who first registered at the College before the 1980 Summer Session may, if they wish, complete the degree requirements outlined in the 1979-80 Calendar.

Bachelor of Administration Degree

1. Pass at least twenty courses.
2. Complete either the Specialist Programme in Management or the Specialist Programme in Management & Language (French).
3. Earn a cumulative grade point average of at least 1.60.

Special Students

“Special students” are students registered in degree courses at the University of Toronto at Scarborough:

(a) who are not proceeding towards a University degree and who may have been admitted on an interim basis and who may apply for admission to Special Students who have been admitted as regular degree students. Special students are subject to the normal regulations governing academic status.
Programmes of Study (Subject POSIs)

Students must select and register in a programme or programmes following the session in which they receive their forth-credit. Note that some programmes have limited enrolment. See the programme descriptions for admission requirements. A list of Programmes may be found on page 17.

Specialist Programmes

1 Specialist Programmes are designed to provide depth and intensity of study within a limited area defined as a discipline, a group of disciplines, or a particular theme or area of study. A Specialist Programme may be taken only as part of an Honours or a Bachelor of Business Administration degree and will consist of at least nine courses. There are seven Specialist (Co-operative) Programmes.

Major Programmes

2 Major Programmes are designed to provide concentration in an area of study defined as a discipline, a group of disciplines or a particular theme or area of study. A Major Programme may be taken as part of either a three-year or an Honours degree and will consist of six to eight courses.

Minor Programmes

3 Minor Programmes are designed to provide study in a specific area for students desiring wide-ranging but coherent programmes of study in different areas of the curriculum. A Minor Programme may be taken as part of either a three-year or an Honours degree and will consist of four fall courses, including at least one C- or D-level course.

Approved Individual Programmes

4 Students may propose individual Programmes of study, other than those described in this Calendar. Such proposals will be considered favourably only from students with cumulative grade point averages of 3.5 or greater. The approved individual Programmes must be approved by the appropriate school. Programmes should specify four courses for a Major Programme, and ten to fourteen courses for a Specialist Programme. The courses should all be offered at the Scarborough Campus and should form a logical programme. The student should identify the prerequisites for the proposal. Proposals should be made to the Vice-Principal and Vice-President, Programs.

Programmes of Study (Subject POSIs)

1 Students may register in no more than three Programmes at any one time (including no more than two Majors and/or Specialists) and may receive certification of completion of no more than three Programmes.

2 Students may register in no more than one limited enrolment Specialist Programme at any one time.

3 No overlapping courses are permitted between a Minor Programme and any other Programme.

4 Where a student is registered in two Major Programmes with overlapping course requirements, a student may use no more than two courses to fulfill the requirements of both Programmes. In cases where two Programmes have an overlap of more than two courses, students must substitute additional courses, approved in advance by either supervisor, to reduce the overlap to two courses or fewer. Such substitutions should be discussed with the appropriate supervisor when the student first registers in the overlapping Programmes.

5 Where a student completes the requirements of a Minor Programme and subsequently chooses to complete a Major or Specialist Programme the student may use the courses already accredited to the Minor Programme to fulfill the requirements of the Major Programme. Upon successful completion of the additional requirements, any previous certification of the Minor Programme will be superseded on the student’s transcript by certification of the Major or Specialist Programme.

6 Where a student completes the requirements of a Major Programme and subsequently chooses to complete a Specialist Programme, the student may use the courses already accredited to the Major Programme to fulfill the requirements of the Specialist Programme. Upon successful completion of the additional requirements, any previous certification of the Major Programme will be superseded on the student’s transcript by certification of the Specialist Programme.

7 Supervisors have the authority to deal with special circumstances concerning Programme requirements. They may - prescribe additional courses when a student is registered in two Major Programmes that require more than two overlapping courses (see 4 above);
Student Telephone and Web Services

ROSI’s Line (416-872-ROS1)
ROSI’s Page (www.rosl.utoronto.ca)

Information for Toronto students may use ROSI’s Line and ROSI’s Page to:
- add and drop courses
- check the status of their course requests
- list courses on their record
- check to see if there is still room in a course
- add and drop Specialist, Major and Minor Programs
- display grades, GPA’s and academic status
- access grades, GPA’s and academic status
- display their academic record (ROSI’s Page only)
- request a transcript (ROSI’s page only)
- confirm intention to graduate
- change their PIN
- change address and telephone numbers (ROSI’s Page only)
- change out of kiss and emergency contact information (ROSI’s Page only)
- view other personal information (ROSI’s Page only)
- access their SIs account (ROSI’s Page only)
- list their ROSI’s Line and ROSI’s Page transactions (ROSI’s Page only)
- avoid lines

Superintendent

E-mail Address

Anita D’Souza
adsoza@cas.utoronto.ca

Benjamin Staines
bsaines@cas.utoronto.ca

Mark Lister
mlister@cas.utoronto.ca

SPECIALIST PROGRAMMES

Type of Degree

Superintendent

E-mail Address

Antropology - B.A./B.Sc.
F. Burtin
fburtin@cas.utoronto.ca

Margaret Henderson
mrhenderson@cas.utoronto.ca

R. Dengler
rdengler@cas.utoronto.ca

C. Hansel
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L. Casey
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MAJOR PROGRAMMES

Type of Degree

Superintendent

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Antropology - B.A./B.Sc.
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Biochemistry - B.Sc.

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Biological Sciences - B.Sc.

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Economics - B.B.A.
### Programmes of Study and Course Descriptions

<table>
<thead>
<tr>
<th>Drama - B.A.</th>
<th>F. Sperdakos</th>
<th><a href="mailto:sperdakos@scar.utoronto.ca">sperdakos@scar.utoronto.ca</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics for Management Studies - B.A.</td>
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<tr>
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<td><a href="mailto:shops@scar.utoronto.ca">shops@scar.utoronto.ca</a></td>
</tr>
<tr>
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<tr>
<td>Physical Sciences - B.Sc.</td>
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<tr>
<td>Psychology* - B.Sc.</td>
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<tr>
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</tr>
<tr>
<td>Sociology - B.A.</td>
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<tr>
<td>Studio - B.A.</td>
<td>T. Rank</td>
<td><a href="mailto:rank@scar.utoronto.ca">rank@scar.utoronto.ca</a></td>
</tr>
<tr>
<td>Women’s Studies - B.A.</td>
<td>L. Carney</td>
<td><a href="mailto:carney@scar.utoronto.ca">carney@scar.utoronto.ca</a></td>
</tr>
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</table>

**CO-OPTERATIVE PROGRAMMES**

<table>
<thead>
<tr>
<th>Type of Degree</th>
<th>Supervisor</th>
<th>E-Mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts Management - B.A.</td>
<td>A. Sharkey</td>
<td><a href="mailto:sharkey@scar.utoronto.ca">sharkey@scar.utoronto.ca</a></td>
</tr>
<tr>
<td>Inst’l Development Studies - B.A./B.Sc.</td>
<td>S. Horton</td>
<td><a href="mailto:horton@chas.utoronto.ca">horton@chas.utoronto.ca</a></td>
</tr>
<tr>
<td>Economic Policy Management and Data Analysis - B.A.</td>
<td>G. Cleveland</td>
<td><a href="mailto:gstore@chas.utoronto.ca">gstore@chas.utoronto.ca</a></td>
</tr>
<tr>
<td>Computer Science - B.Sc.</td>
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<td><a href="mailto:crdyer@scar.utoronto.ca">crdyer@scar.utoronto.ca</a></td>
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<tr>
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<tr>
<td>Management - B.A./B.Sc.</td>
<td>A. Stavinska</td>
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</tr>
</tbody>
</table>

Co-operative Programmes are work-study Programmes which are designed to integrate related, practical experience with regular university studies. All Co-operative Programmes are Specialist Programmes and may be taken only as part of a four-year degree. Most Co-operative Programmes, however, will require up to five years to complete because of the time required for the work placements.

**MINOR PROGRAMMES**

<table>
<thead>
<tr>
<th>Type of Degree</th>
<th>Supervisor</th>
<th>E-Mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology - B.A.</td>
<td>F. Burton</td>
<td><a href="mailto:burton@scar.utoronto.ca">burton@scar.utoronto.ca</a></td>
</tr>
<tr>
<td>Art History - B.A.</td>
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<tr>
<td>Biological Sciences - B.Sc.</td>
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<tr>
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</tr>
</tbody>
</table>

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**Student Telephone and Web Services**

**ROSI’s Line (416-572-ROSI)**

University of Toronto at Scarborough students may use ROSI’s Line and ROSI’s Page to:
- add and drop courses
- add and change meeting sections
- check the status of their course requests
- fill courses on their record
- check to see if there is still room in a course
- add and drop Specialister, Major and Minor Programs
- access grades, GPA’s and academic status
- display their academic record (ROSI’s Page only)
- request a transcript (ROSI’s Page only)
- confirm intention to graduate
- change their PIN
- change address and telephone numbers (ROSI’s Page only)
- change most of their and-emergency contact information (ROSI’s Page only)
- view other personal information (ROSI’s Page only)
- access their fees account (ROSI’s Page only)
- list their ROSI’s Line and ROSI’s Page transactions (ROSI’s Page only)
- avoid lines
Anthropology (B.A./B.Sc.)

Faculty List
T.F.S. McFettrich, B.A. (McGill), M.A., Ph.D. (Harvard), FRSC, Professor Emeritus
J. Bledsoe, B.A. (McGill), M.A. (Calgary), Ph.D. (UBC), Professor
F. D. Burton, B.Sc., M.A. (NYU), Ph.D. (CUNY), Professor
M. Lankin, B.A. (McGill), M.A., Ph.D. (Michigan), Professor
C. S. Gilligan, B.A. (McGill), Ph.D. (CUNY), Associate Professor
M. Laza, B.A. (Carleton), M.A., Ph.D. (Toronto), Associate Professor
L. Szwatka, B.A., M.A. (McMaster), Ph.D. (Toronto), Associate Professor

Discipline Representative/Superior of Student Union: F. Brown (273-754)

Anthropology is the study of human beings, dealing with the origins, development and nature of human culture. As such it is concerned with human phenomena in the widest possible terms, both biological and cultural. It differs from other social sciences in its comparative and historical approach, and in its intimate links with the physical and natural sciences. Anthropology examines societies today and in the past, both complex civilizations and relatively small-scale primitive societies. From this vantage point Anthropology attempts to arrive at an understanding of the common factors underlying human existence and to isolate the causes that have led and continue to lead to social and cultural change and to differences between peoples and cultures.

Because of the vastness of its subject matter, Anthropology is traditionally divided into four sub-fields: Social-Cultural Anthropology, Archaeology, Physical Anthropology and Anthropological Linguistics. At the present time, University of Toronto at Scarborough offers courses in the first three areas. Students interested in inquiring about appropriate course sequences in one of the sub-fields are invited to consult with one of the faculty in the appropriate sub-field and with the Supervisor of Studies. Students may elect either a B.A. or a B.Sc. degree in Anthropology. The requirements for a B.A. Specialist are that at least seven of the twelve full-course equivalents in Anthropology should be courses with science credit. The requirement for a B.Sc. Major degree are that at least four of the six full-course equivalents in Anthropology should be courses with Science credit. Most courses in Anthropology and Physical Anthropology, excluding Introduction to Anthropology, carry science credit. Consult the Discipline Representative for clarification.

The following courses in Anthropology may be used to fulfill requirements for the B.A. degree: ANTHB1, ANTHB4, ANTHB11, ANTHB15, ANTHB22, ANTHB25, ANTHB34, ANTHC12, ANTHC16, ANTHC23, ANTHC26, ANTHC29, ANTHC32, ANTHC34, ANTHC35, ANTHC42, ANTHC43, ANTHC44, ANTHC45, ANTHD11, ANTHD14, ANTHD16. The following courses may also be used to fulfill the B.Sc. requirements for students registering in appropriate scientific areas of Anthropology. ANTHC13, ANTHC24, ANTHD23, ANTHD31 and ANTHD32.

SPECIAL PROGRAMME IN ANTHROPOLOGY
The Special Programme in Anthropology is intended to provide the professionally oriented student with background preparation of sufficient breadth and depth to pursue specialized training at the graduate level. It is also designed to offer interested students a course structure of sufficient flexibility to follow their intellectual interests and to develop yet holistic perspective on the human phenomena providing Anthropology. All students are required to consult with the Supervisor concerning the selection of course sequence appropriate to their interests and objectives. The Programme requires completion of at least six full-course equivalents, no less than ten of which will be in Anthropology.

Students must complete at least eight full-course equivalents in disciplines other than Anthropology within the four-year degree programme. The courses within the Programme are to be selected as follows:

1. ANTAG1Y, Introduction to Anthropology
2. At least two full-course equivalents from among the following:
   a) ANTHB12Y Biological Anthropology
   b) ANTH32Y Private Behavior
   c) ANTHB11Y Introduction to World Prehistory
3. At least one-half full-course equivalent from the following:
   ANTHC13H Quantitative Methods in Anthropology
   ANTHC35H Fieldwork in Social and Cultural Anthropology
4. ANTHB31H Biomedical Anthropology
   * A course in statistics may be substituted for ANTHC35H
5. Six full-course equivalents from the following:
   ANTHB11Y The Biological Perspective in Anthropology
   ANTHB12Y The Anthropology of the Body
   ANTHC16Y Anthropological Study of Religion
   ANTHC4Y Anthropological Perspectives on Development
   ANTHB34Y Human Maturation
   ANTHC13Y Human Ontology
   ANTHC36Y Death and Burial
   ANTHC39Y The Anthropology of Body Image: Conceiving Passions
   ANTHD13H Ethnomedicine
   IIS34H International Development Studies: Development and Environment
   IIS35H International Health Policy Analysis
   IDSC50H The Ethics of Development
   LSC30SH Human Biology
   PHLB5SH The Art of Thinking
6. Two full-course equivalents at the B-level or higher from disciplines other than Anthropology (IDSC50H, IDSC34H, IDSC50H, LSC30SH and PHLB5SH may not be counted to fulfill this requirement if they are used to fulfill the third requirement above.)

++ Pending approval of the Governing Council of the University
ANTH100H3 African Cultures and Societies Survey
A study of contemporary and traditional African peoples, their cultural backgrounds and historical interactions. Lectures and readings will provide an overview of African social institutions, religion beliefs and practices, political and economic organization, colonial and post-colonial experience, and current problems.
Two hours of lecture per week.
Prerequisites: ANTA01Y or permission of the instructor.
T.B.A.

ANTH102B3 Biological Anthropology
A survey of the human place in nature: origin (Pliocene) and ongoing evolution (Spring). Basic to the course is an understanding of the biological theory of evolution and the principles, processes, evidence and application of the theory. Laboratory projects acquaint the student with the methods and materials utilized by the Physical Anthropologist. Specific topics include the development of evolutionary theory, the biological basis for human variation, the evolutionary forces, human adaptability, primates, hominid behavior, organization and behavior of human primates, anatomy and classification, osteological principles and human origins. Three hours of lecture per week.
Exclusion: ANTH300
Prerequisite: ANTA01Y or permission of the instructor.
S. E. L. Posselt

ANTH103B3 Cultures of Modern Canada
This course has two objectives: to explore the regional and ethnic diversity within Canadian cultures, and to examine the forces which operate to bind the Caucadians together.
The first objective entails consideration of local case studies, e.g., the development of a charismatic based religious community, Newfoundlander culture and aboriginal culture. Trends and patterns in Canadian literature, myth and symbolism, music and media, and political culture. Two hours of lecture per week.
Prerequisites: ANTA01Y or permission of the instructor
T.B.A.

ANTH201Y3 Social and Cultural Anthropology
An examination of the basic approaches to understanding social and cultural organization in societies.
Focusing on simpler societies, this course explores comparative social institutions, including kinship and marriage as well as economic, political and legal institutions. Some attention will also be given to belief systems and symbolic thought as well as sources of stability and change in society and anthropological perspectives on current social issues.
Two hours of lecture per week.
Exclusion: ANTH300
Prerequisite: ANTA01Y or permission of the instructor.
T.B.A.

ANTH345Y3 First Nations of North America in Anthropological Perspective
An introduction to the establishment and diversification of Aboriginal traditions in Canada and the United States from the late Paleolithic to the present. The course will emphasize environmental and social factors in the processes of cultural change as well as anthropological methods of reconstructing the past.
Two hours of lecture per week.
Prerequisite: ANTA01Y
L. M. White

ANTH396H3 The Anthropology of the Body: A comparative consideration of the human body as symbol, metaphor and focus of practical knowledge. Issues to be considered include cultural constructions of the body in societies of different scale, cultural formations of sexuality, gender, and human biology, the body as the site of political control in colonial and post-colonial societies, and cultural and practical relationships of the body to the natural environment. Seminar, limited enrolment: 20.
Two hours of lecture per week.
Prerequisites: [ANTC111 or ANTC125] or ANTA01Y or permission of the instructor.
J. Boddy

ANTH399H3 and ANTH400H3 Directed Research in Anthropology
A directed exploration of specific topics in Anthropology, based on extensive investigation of the literature. The courses are available in exceptional circumstances and do not duplicate regular course offerings. Students are advised that they must obtain consent from the supervising instructor, but additional forms of direction, such as, arranged. In addition to course work to be decided by the instructor, one seminar presentation of the student's research findings is required.
Prerequisite: ANTA01Y and one B-level full-course equivalent in Anthropology & permission of the instructor.
Members of Faculty
ANTC260Z The Theory and Practice of Anthropological Fieldwork
An introduction to the fieldwork experience, both theoretical and practical. Students will be assigned a field site, and will conduct research there. The course is offered in the fall term. Two hours of lecture per week. Exclusion: ANTH2300

ANTC200Y Introduction to the Fieldwork Experience
A survey of the fieldwork experience, both theoretical and practical. Students will be assigned a field site, and will conduct research there. The course is offered in the fall term. Two hours of lecture per week. Exclusion: ANTH2300

ANTB111H3 Introduction to Anthropology
An introduction to the field of anthropology, covering its major sub-disciplines. The course is offered in the fall term. Two hours of lecture per week. Exclusion: ANTH200Y

ANTC100H3 Anthropological Perspectives in Development
A critical examination of the concept and practice of development in several Third World societies. Attention will be paid to issues of colonization and the postcolonial order, global capitalism, and the intersection of Western ideas with local knowledge and practices. Semester; limited enrollment: 20. Two hours of lecture per week. Prerequisite: ANTH200Y or permission of the instructor

ANTC100H3 Anthropological Perspectives in Development
A critical examination of the concept and practice of development in several Third World societies. Attention will be paid to issues of colonization and the postcolonial order, global capitalism, and the intersection of Western ideas with local knowledge and practices. Semester; limited enrollment: 20. Two hours of lecture per week. Prerequisite: ANTH200Y or permission of the instructor

J. Boddy

ANTC100H3 Research on the Social Behaviour of Non-Human Primates
The purpose of this course is to teach field techniques in the study of non-human primates. The current subjects are Old World Monkeys (Cercopithecidae) which were translocated to Barbados from 50 years ago. Observation and training sessions present the two weeks of field work. Observation is from dawn till dusk. Evenings are set aside for discussion, transcriptions and analysis. In addition, there are 4 or 5 trips to local ethno- and wildlife conservation, and visits to local ethno- and wildlife conservation. What is of interest is that the animals live in a free environment. Observations include preliminary research, field notes, log book and data recording. The course runs from 1 June to 15 July and is $1.000-$1,000 inclusive airfare and land transportation, and shared accommodation. Deposit must be made by May 30. Permission is by permission of instructor. Please contact Professor Barton directly for further information at e-mail: viterbo@uca.acu.edu or (416) 287-3745. Enrolment is limited to 10. Prerequisites: ANTH222Y (ANTC22) & permission of the instructor

P.D. Barton

ANTC100H3 Anthropological Perspectives in Development
A critical examination of the concept and practice of development in several Third World societies. Attention will be paid to issues of colonization and the postcolonial order, global capitalism, and the intersection of Western ideas with local knowledge and practices. Semester; limited enrollment: 20. Two hours of lecture per week. Prerequisite: ANTH200Y or permission of the instructor

ANTC100H3 Research on the Social Behaviour of Non-Human Primates
The purpose of this course is to teach field techniques in the study of non-human primates. The current subjects are Old World Monkeys (Cercopithecidae) which were translocated to Barbados from 50 years ago. Observation and training sessions present the two weeks of field work. Observation is from dawn till dusk. Evenings are set aside for discussion, transcriptions and analysis. In addition, there are 4 or 5 trips to local ethno- and wildlife conservation, and visits to local ethno- and wildlife conservation. What is of interest is that the animals live in a free environment. Observations include preliminary research, field notes, log book and data recording. The course runs from 1 June to 15 July and is $1.000-$1,000 inclusive airfare and land transportation, and shared accommodation. Deposit must be made by May 30. Permission is by permission of instructor. Please contact Professor Barton directly for further information at e-mail: viterbo@uca.acu.edu or (416) 287-3745. Enrolment is limited to 10. Prerequisites: ANTH222Y (ANTC22) & permission of the instructor

P.D. Barton

ANTC100H3 Research on the Social Behaviour of Non-Human Primates
The purpose of this course is to teach field techniques in the study of non-human primates. The current subjects are Old World Monkeys (Cercopithecidae) which were translocated to Barbados from 50 years ago. Observation and training sessions present the two weeks of field work. Observation is from dawn till dusk. Evenings are set aside for discussion, transcriptions and analysis. In addition, there are 4 or 5 trips to local ethno- and wildlife conservation, and visits to local ethno- and wildlife conservation. What is of interest is that the animals live in a free environment. Observations include preliminary research, field notes, log book and data recording. The course runs from 1 June to 15 July and is $1.000-$1,000 inclusive airfare and land transportation, and shared accommodation. Deposit must be made by May 30. Permission is by permission of instructor. Please contact Professor Barton directly for further information at e-mail: viterbo@uca.acu.edu or (416) 287-3745. Enrolment is limited to 10. Prerequisites: ANTH222Y (ANTC22) & permission of the instructor

P.D. Barton

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P.D. Barton
Astronomy

(B.Sc.)

Faculty List
P.P. Kroenke, B.Sc., M.Sc., (Quint's), Ph.D. (McMaster),
Professor Emeritus
C.C. Dyce, B.Sc., M.Sc., Ph.D. (Toronto),
Professor

Discipline Representative: C.C. Dyce

Astronomy is at the same time one of the oldest and one of the most dynamic areas of science. It is basically the attempt to understand the environment in which humanity developed, from the solar system in which we find our direct and remote origins, to the largest distances typified by quasars and the big bang, in which we must search for the very origins of structure coming from the solar system to the largest structures, such as large clusters of galaxies and cosmic voids. The past quarter century has seen startling discoveries, such as the cosmic microwave background radiation, that have given us both a new understanding of the universe and made us more aware of the problems still facing us as we are in the exciting frontier of understanding. In addition there has certainly been significant toward the integration of many of the ideas of modern high-energy physics into astrophysics, with particularly interesting developments concerning ideas about the very first seconds in the evolution of our universe.

The full range of modern astronomical topics is covered in the introductory course AST 100Y. For students wishing to further their study in astronomy, there are a number of B-level courses, which are the entry component of a number of the Physical Sciences Specialist Programmes. In addition, the course AST 105Y is intended for students who have taken no previous astronomy, and covers the history of modern astronomy; it is intended to provide a historical perspective on modern astronomy, and by example, an introduction to the evolution of a number of modern scientific areas.

Please refer to the Physical Sciences Scarborough timetable for a list of the courses included. Students interested in programmes which involve Astronomy are referred to Physics and its Applications on page 144 and Physical and Mathematical Sciences on page 141.

SPECIALIST PROGRAME IN ASTRONOMY, MATHEMATICS AND PHYSICS

Consultant: C.C. Dyce, M.D., M. Sc.
The Specialist Programme in Astronomy, Mathematics and Physics has been withdrawn. Students currently registered will be allowed to finish the programme (refer to 1995/96 calendar for requirements).

AST 105Y Introduction to Astronomy

A description of the solar system, stars, galaxies and other phenomena of the Cosmos in which we live.

In this course, the mechanisms which make our sun and other stars shine are explored, and the nature and evolution of our solar system, the stars, galaxies and the universe as a whole are discussed in a manner suitable for both the science and non-science student. Methods and techniques for exploring the universe are discussed, including the recent use of radio telescopes and telescopes on spacecraft. Two lectures and one tutorial per week. This is
supplemented by a planetarium demonstration and a class trip to the David Dunlap Observatory. Using the College's 12 inch Queen telescope, students also have an opportunity to observe and to photograph heavenly bodies if they wish.

Two hours of lecture per week and a one hour tutorial per week.

Exclusion: ASTR110, 120, 200

ASTRO203H Great Moments in Astronomy
An examination of the people, the background and the events associated with some major advances in astrophysics. Emphasis is given to the role of a few key individuals and to how their ideas have restructured our understanding of nature and the Universe. Implications of the revised outlook are also discussed. The course will focus on: the first measurement of stellar distances; the prediction of the existence of Neptune; the discovery of the nature of stars; the proof of the existence of "island universes"; the birth of the theory of stellar structure; the detection of the cosmic fireball; and the expansion of the Universe. The perspective gained is used to assess current astronomical research and its impact on society.

The course is intended primarily for students not in Physical Science who, in their second or higher years, wish to acquire an understanding of the origins and significance of our present world view. A term paper, dealing in detail with an aspect of one of the topics is required.

Two hours of lecture per week and a one hour drop-in session.

Exclusion: ASTR210

Prerequisite: Four full-course equivalents

ASTRO210H Solar System and Stellar Astrophysics
The application of physical principles to study the interior and evolution of astrophysical bodies, particularly stars and their local and motion in the universe.

The structure of astrophysical bodies such as planets and stars using principles of physics will be considered. The motion of these bodies can be calculated using Kepler's law of planetary motion, which will be considered as a consequence of Newton's three inverse square force laws. The use of the Euler-Lagrange equations to describe such mechanical systems will be considered.

Two hours of lecture and one hour tutorial per week.

Exclusion: ASTR205H & ASTR211H & ASTR212H & PHY211H & PHY221H & permision of the instructor

ASTRO212H Galactic and Extragalactic Astrophysics
The study of the structure of the Galaxy and other galaxies, and the place of galaxies, clusters of galaxies, and other large-scale systems in the Universe, using the principles and mathematics.

Building on the knowledge of the structure of individual astrophysical bodies, their place in successively larger scale systems in the Universe, such as star clusters, galaxies, and clusters of galaxies, will be considered. This will lead to the consideration of the Universe as a whole system. Questions concerning the possible origins of structure in the Universe, its final end-state, and related topics in cosmology will conclude the course.

Two hours of lecture per week and a one hour tutorial per week.

Exclusion: ASTR205H & ASTR209H & ASTR211H

Prerequisite: ASTR212H & MAT241H

Corequisite: MAT242H

ASTRO213H Research Topics in Astronomy
An application of individual effort to reading and research on a topic of current interest. The student will research on some topic of current interest in astrophysics and write a report ("mistakelets") on his/her work. The student is expected to gain an appreciation of the current state of knowledge of a particular topic of astrophysical interest and to become familiar with the basic methods of research. The topics will be selected by one of the instructors in consultation with the student. Formal lectures are replaced by regular consultation between the student and instructor. It is expected that at least 80 hours of work will be done during the year, following which the oral thesis will be examined by the instructor. For more detailed information see Professors Dyar or Kronberg. The bibliography is dependent upon the topic selected.

Students are advised that they must obtain consent from the supervising instructor before registering for this course.

Exclusion: ASTR225

Prerequisite: [ASTRO205H or ASTR212H] & PHY211H & permission of the instructor

Biological Sciences

(B.Sc.)

Faculty List

C. Naidoo, B.A., P.D., D.Sc. (University College London, Professor Emeritus)

J. C. Ritchie, B.Sc. (Babson), Ph.D. (Sheffield, D.Sc. (Abenberg), P.R.S.C., Professor Emeritus)

F. A. U. Hart, B.A., M.A., Ph.D. (Kindin, Professor Emeritus)

R. W. Stewkley, B.Sc. (Glyndwr, M.Sc. (Tramore), Ph.D. (Glasgow), Professor Emeritus)

G. R. Williams, B.Sc., Ph.D. (Scottish, Liverpool, F.R.S.C., Professor Emeritus)

R. B. Bown, B.Sc. (Calgary, Ph.D. British Columbia, Professor)

L. R. Brown, B.Sc. (Carleton, Ph.D. (Texas), Professor)

R. C. Godwin, B.Sc. (Rhodes, M.Sc. (Namibia, Ph.D. (Montana), Professor)

J. W. Ward, B.A. (Mount Allison, Ph.D. (McGill), Professor)

J. C. Silver, B.Sc., Ph.D. (CUNY), Professor

R. P. Thompson, M.A., Ph.D. (Toronto), Professor

D. D. Williams, B.Sc. (University College North Wales, B.Ed. (Liverpool, M.Sc., Ph.D. (Waterford, D.Sc. (Wales), Professor)

J. H. Younson, B.A. (Victoria, M.Sc. (McGill), Ph.D. (Western Ontario), Professor)

R. E. Dingler, B.Sc., Ph.D. (California, Darry, Associate Professor)

C. D. Riggs, B.Sc. (North Carolina, Ph.D. (Florida State), Associate Professor)

N. S. Williams, B.Sc. (Guelph), M.Sc. (Waterford, Ph.D. (Toronto) Associate Professor)

M. C. Andrade, B.Sc. (Simon Fraser), M.Sc. (Toronto), Assistant Professor

C. A. Hassemie, B.S. (Loyola, M.Sc., Ph.D. (Florida State), Assistant Professor)

C. M. Carver, B.Sc. (Guelph), M.Sc. (Toronto, Assistant Professor)

C. L. A. Turner, B.Sc., M.Sc. (Western Ontario, Ph.D. (Queen's), Assistant Professor)

C. Pickard, B.Sc., M.A. (Toronto), Senior Tutor

Associate Chair: R. S. Edgler

From its early beginnings as a descriptive science, biology has developed into a sophisticated experimental science employing other basic sciences such as, chemistry, physics, and mathematics. Modern biology includes the study of the structure and function of all living organisms, including humans. Within biology, various core areas may be distinguished: morphology, taxonomy, physiology, cell biology, biochemistry, genetics and evolution, and ecology. In additional to their fundamental significance, these areas are central to understanding and solving many problems currently confronting humanity.

Four Programs are offered in Biological Sciences. These include the Biological Sciences Major and Minor Programs and two Specialist Programs: Biological Sciences and Cell and Molecular Biology. The Minor Programme is intended for students who have an interest in Biology, but who wish to focus their studies in Physical Sciences, Social Sciences, Management and Economics, or Humanities. The Major Programme is intended for students who are interested in Biology and who wish to combine these studies with other areas of interest. The Specialist Programmes permit students to focus their studies on areas of contemporary biology which are of particular interest to them. The Biological Sciences Specialist degree offers the flexibility for students who wish to concentrate on more than one area of biology. The Biological Sciences Programmes are more tailored to students who have a particular interest in this area. All students engaged in Biology Programmes are required to take a set of these second year core lectures in Cell and Molecular Biology, Plant and Animal Physiology, and Evolutionary Biology, and are required to take one of the following in these areas. Students are advised to consult the specific requirements for their degree, to meet with the appropriate programme supervisor for advice, and to obtain a copy of the Biology students' handbook from the divisional office (33218 or 33514) which has more detailed information and suggestions for advising. In a few instances, courses from the other campuses may be approved by the Supervisor of Studies. Students who are contemplating enrolment in graduate or
MINOR PROGRAMME IN BIOLOGICAL SCIENCES
Supervisor: R.E. Denger
(Room 5522, 287-7426)

denger@york.utoronto.ca

This programme must include BIO 101Y or BIO 101X.

MAJOR PROGRAMME IN BIOLOGICAL SCIENCES
Supervisor: R.E. Denger
(Room 5522, 287-7426)

denger@york.utoronto.ca

Students planning to complete a double major in Biology and Neuroscience must take an extra 0.5 F.C.E. from either Category 4 of the Major Programme in Neuroscience or an extra 0.5 F.C.E. in Biology under Category 4 of the Major Programme in Biological Sciences. Students should consult Programme Supervisor.

This programme consists of 8 required F.C.E.

1. Four F.C.E.'s consisting of the core curriculum components: BIO 101Y, BIO 101X, EEB 101Y, or EEB 101X.
2. Four F.C.E.'s from the following courses: EEB 101Y, BIO 101Y, BIO 101X, or EEB 101X.
3. Two F.C.E.'s of the core curriculum components: BIO 101Y, BIO 101X, EEB 101Y, or EEB 101X.
4. Four F.C.E.'s of the core curriculum components: BIO 101Y, BIO 101X, EEB 101Y, or EEB 101X.
5. One F.C.E. from the following: BIO 101Y, BIO 101X, EEB 101Y, or EEB 101X.
6. One F.C.E. from the following: BIO 101Y, BIO 101X, EEB 101Y, or EEB 101X.

SPECIALIST PROGRAMME IN CELL AND MOLECULAR BIOLOGY
Supervisor: C. Haisenkamp
(Room 5522, 287-7426)

This programme consists of 14 required F.C.E. s. Students in this programme MUST take CHE 101Y during the first year, and CHE 101Y and BIO 101Y during the second year to properly stream through the programme. The required courses are:

1. Four F.C.E.'s consisting of the core curriculum components: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
3. Four F.C.E.'s in the following courses: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
4. One F.C.E. from the following courses: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
5. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.
6. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.
7. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.
8. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.

SPECIALIST PROGRAMME IN PROTEIN BIOCHEMISTRY
Supervisor: G. Scheller
(Room 5522, 287-7426)

This programme consists of 15 required F.C.E. s. Students in this programme MUST take CHE 101Y during the first year, and CHE 101Y and BIO 101Y during the second year to properly stream through the programme. The required courses are:

1. Four F.C.E.'s consisting of the core curriculum components: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
2. Two F.C.E.'s of the core curriculum components: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
3. Three F.C.E.'s from the following courses: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
5. One F.C.E. from the following courses: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
6. One F.C.E. from the following courses: BIO 101Y, BIO 101X, BIO 101Y, EEB 101Y.
7. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.
8. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.
9. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.
10. One F.C.E. from the following courses: CHE 101Y, CHE 101X, BIO 101Y, EEB 101Y.
Biological Sciences

Cell and Molecular Biology or the Specialisation Programme in Biological Chemistry or the Major Programme in Biochemistry. Additional students will be admitted by instructor if space permits.

D. Riggs

BIO50973 Animal and Plant Physiology
A core course in physiology with one of the two terms devoted to animal physiology, and the other term to plant physiology. The animal physiology term will consider regulatory mechanisms which control and coordinate the functioning of the body, such as autonomic functions, systemic blood flow, and muscular contraction. The molecular and cellular basis of these processes will be covered. The plant physiology term will cover the structures of plant cells, the transport and translocation of water, dissolved minerals and organic compounds; the role of light energy in the conversion of carbon dioxide to carbohydrate in plant photosynthesis; and the regulation of growth and development through the coordinated action of specific hormones and environmental cues, and adaptations to their environment. Two one-hour lectures per week, plus one two-hour tutorial every third week. T.A.: Tutorial times alternate with those in both BIO5010Y and BIO5010Y. Exclusion: (BIO5010Y). Pre-Prerequisite: BIO3504Y or BIO5010Y. C.K. Govind / J.C. Vandermeer

BIO5010Y Animal Physiology Laboratory
A course designed to laboratory exercises in regulatory mechanisms that control and coordinate the functioning of the body. Laboratory exercises examine aspects of the nervous system, including the CNS and peripheral nervous system, and include examination of neural conduction. Written reports and tests of the laboratory exercises and a final examination of all the material are required. One three-hour laboratory per week and one one-hour lab as required. Exclusion: (BIO5012Y). Pre-Prerequisite: BIO5012Y. C.K. Govind

BIO5012Y Ecology and Evolutionary Biology
Evolution is the study of the change in the form and/or behaviour of organisms between generations. Ecology is the study of the interactions that determine the distribution and abundance of organisms. The full term covers the development of evolutionary theory, maintenance of genetic variation, origins of species, adaptation, and phylogeny. The spring term covers statistics of populations, species interactions, competition, predation, herbivory, community energetics, nutrient cycling, and conservation. Two one-hour lectures per week, plus one two-hour tutorial every third week. T.A.: Tutorial times alternate with those in both BIO5010Y and BIO5010Y. Exclusion: (BIO5010Y). Pre-Prerequisite: BIO3504Y or BIO5010Y. C.K. Govind / J.C. Vandermeer

BIO5024H Ecology and Evolutionary Biology Laboratory
The emphasis will be on hands-on experimentation, interpretation, and statistical analysis as well as familiarization with computing and ecology. Experiments will cover vegetation analysis, computer simulations, competition and growth, interesting, acidification, and community dynamics. This course will utilize computer resources of the college. One hour of lecture per week as required and one four-hour lab per week. Exclusion: (BIO5014Y). Pre-Prerequisite: BIO5016Y. R. Rowan

BIO5026H Biodiversity and Biogeography
Theoretical and practical aspects of the diversity of animal form and function, together with examination of the distribution patterns of representative taxa. Much of the course will be concerned with invertebrate animals, as it is amongst these phyla that the vast majority of the species and functional diversity of organisms lies. Coverage will include the major bodies, ontogenetic drift, dispersal, endemism, concepts of abundance and rarity, comparison of the biota of continents and islands, the fundamental influence of climate, and the invasive role of mankind in shaping modern biogeography. One two-hour lecture/discussion group, and one three-hour laboratory per week. Exclusion: (BIOC25H). Pre-Prerequisites: BIOA401Y or BIO5010Y or (BIOC501Y) or GD 2 or C. D. Williams

BIO5103H Biochemistry III: Proteins and Enzymes
A course designed to introduce students to the properties and behaviour of proteins and enzymes. The course will analyze factors involved in determining protein structure and the interactions between protein structure and function. Topics will include: the chemistry of amino acids; the primary, secondary, tertiary and quaternary structures of proteins; protein folding and protein domains; interactions of proteins; protein-protein and protein-DNA interactions; the analysis of the interaction of small molecules with proteins; classical enzyme kinetics and allosteric enzymes; mechanisms of enzyme action. Three one-hour lectures per week. Exclusion: (BIOC25H), (BIOC35H). Pre-Prerequisite: BIO3504Y or BIO5010Y. J. C. Silver

BIO5135H Biochemistry IV: Bioenergetics and Metabolism
A course designed to introduce students to cellular metabolism, the process by which living organisms are able to obtain and utilize energy from their environment for the maintenance of life. Topics will include basic principles of bioenergetics; chemiosmotically driven oxidative phosphorylation; carbohydrate metabolism, aspects of the metabolism of lipids and amino acids; metabolic control mechanisms including intracellular control, protein phosphorylation systems, and hormonal regulation of metabolism. The integration of metabolic pathways will be discussed. Three one-hour lectures per week. Exclusion: (BIOC25H). Pre-Prerequisite: BIO3504Y or BIO5010Y. J. C. Silver

BIO5189H Microbiology II: Perspectives of the Microbial World
A lecture course in which the relationships between microorganisms and human populations are investigated. Many of these interactions influence human health in both positive and negative ways. A number of microbial diseases will be discussed in a broad context. Students will be encouraged to consider the impact of microbial interactions on human health.
BGVC19H3 Animal Development Biology
This lecture course will focus on cellular and molecular events which underlie animal development. Particular reference will be given to the concept that regulation of gene activity is fundamental to development. Following a discussion of cellular and molecular events in early embryonic life, the development of several model systems will be analyzed at the cell and molecular level such as embryogenesis, lens development in the eye, spermatogenesis and myogenesis. One two-hour lecture per week. Exclusions: (BIOC421Y) or BGVB10Y
J.R. Brown

BGVC21H3 Vertebrate Histology: Cells and Tissues
A study of the structure of cells and the various tissue types which make up the vertebrate body: epithelial, connective, muscle, nervous, blood, and lymphatic. Emphasis is placed on the development and function of the cells and tissues. Two one-hour lectures and one three-hour laboratory per week. Exclusions: (BIOC421H) or BGVB10Y or BGVB50Y T.B.A.

BGVC22H3 Vertebrate Histology: Organs
The histological structure of the major organ systems of the vertebrate body: sense, integument, digestive, respiratory, excretory, reproductive. Particular emphasis is placed on functional morphology, evolution, and development. Two one-hour lectures, plus one two-hour tutorial per week. Exclusions: (BIOC421H) or BGVC21H T.B.A.

BGVC23H3 Practical Approaches to Biochemistry
A course designed to introduce students to a number of practical approaches used in biochemical research. The course will introduce students to practical and theoretical aspects of a variety of procedures used in the biochemical laboratory including: spectrophotometry, chromatographic procedures, electrophoresis, use of radioisotopes, protein purification. Students will be expected to solve numerical problems involving these and related procedures. One two-hour lecture / tutorial plus one four-hour laboratory each week. Exclusions: (BIOC25H4), (BIOC32H6), (BIOC37H5), (BIOC41H1) Prerequisites: BGY121H, BGY122H or (BIOC32H6) Corequisite: BGY13H1 (for students who have not completed (BIOC37H5) only) J.W. Good

BGYC12H3 Plant Histology
A plant structure and development course dealing with the main growth centres, cells, and tissues that make up the plant body: bionomes and woody vascular plants: spores and floral meristems, pachyxyths, collar orificial, epidermis, pith, xylem, phloem and accessory structures. Relationships between structure and function, and development and the evolution of complex cell types are also considered. Two one-hour lectures and one three-hour laboratory per week. Exclusions: (BIOC25H4), (BIOC32H6), (BGYC25H5), (BGYC26H), (BIOC31H4) Prerequisites: (BIOC32H6) or BGY10Y or BGY122H or (BIOC31H4) R.E. Doogter

BGYC37H3 Advanced Plant Physiology
This course examines aspects of how plants function. An integrated approach is taken, in which topics are examined from physiological, biochemical and molecular biological perspectives. Lecture topics include: cell walls, carbon, nitrogen and energy metabolism, hormones, regulation of gene expression, responses to light, pathogenesis and environmental areas: lipid and secondary metabolites; membrane transport; and prospects for plant improvements through gene transfer. Laboratory exercise and research projects such as soil analysis, enzyme activities, respiration and photosynthesis, and synthetic nitrogen fixation. Two one-hour lecture per week and one three-hour lab or tutorial each week. Exclusion: BIOC11Y, BIOC24H1 Prerequisites: (BIOC32H6) or (BGY10Y) & BGY122H G. Vandergerp

BGYC12H3 Ecology Field Course
Coverage of basic principles and techniques of animal and plant ecology. Students will study a variety of aspects of local ecosystems (both aquatic and terrestrial). Five hours of lecture/lab per week; one or more weekend field trips. Offered in alternate years. Limited enrolment: 15 Exclusions: (BIOC31H4), (BIOC32H6) Prerequisites: (BIOC12Y) or BGY10Y Co-requisite: (BIOC12Y) or BGY122H Co-ordinator: R. Bonsor

BGYC13H3 Marine Biology
A field course on selected topics of marine biology with particular emphasis on tropical waters. This course will be held during reading week as a field station in the Caribbean and will have a considerable practical component. Prior to field work, there will be a series of lectures at Scarborough. On site, students will study three marine habitat types: rocky shores, open ocean, and coral reef. In addition, students will work on individual field projects. Limited enrolment: 12 Exclusions: (BIOC11Y), (BIOC31H4) Prerequisites: (BIOC12Y) or BGY10Y or permission of the instructor D.D. Williams

As this course is often oversubscribed, interested students must contact the instructor well in advance of the start of the fall term for details and entry, at that time, he will be prepared to place a deposit towards the cost of travel and accommodation. Places are allocated on a first-come, first-served basis.

BGYC12H3 Microbes in the Environment
An examination of the relationships between microorganisms (algae, bacteria, fungi) and their environment. Following a survey of microbial biodiversity, abiotic factors of major importance to microorganisms will be described. Fundamentals of microbial ecology in aquatic and terrestrial habitats will be examined, including seasonal dynamics, interactions among microorganisms, productivity and the role of microorganisms in nutrient cycling and food web. One two-hour lecture per week. Several seminars and problem sets. Exclusion: (BIOC11Y) or (BIOC20Y) Prerequisites: (BIOC12Y) or BGY10Y or BGY122H T.B.A.

BGYC13H3 Limnology
A branch of biology dealing with interactions of lake biota and the environment. Physical, chemical, and biological properties of lakes will be examined with special reference to south temperate lakes. The structure and function of natural lake ecosystems will be examined with the objective of gaining insight into lake responses to anthropogenic perturbations such as nutrient pollution (eutrophication), acidification, and global climate change. One two-hour lecture plus one three-hour laboratory or tutorial per week. Exclusions: (BIOC11Y), ZOO307H, ZOO476H Prerequisites: (BIOC12Y) or BGY122H T.B.A.

BGYC13H3 Evolutionary and Applied Biology of Insects
An exploration of the origins of insects, their modern diversity, and their impact on mankind. Coverage will begin by examining the evolutionary history of the group, which extends back over 400 million years, together with its diversity and morphology. This will be followed by consideration of those species which are important in mankind in terms of commerce, medicine (e.g., allergies, disease, and forensic science), and as competitors. The course will conclude with discussion of the vital role played by insects in world ecosystems. One two-hour lecture / discussion group, and one three-hour laboratory per week. Offered in alternate years. Exclusions: (BIOC11Y) Prerequisites: (BIOC32H6) or EESC341H D.D. Williams

BGYC13H3 Advanced Community Ecology
The study of assemblages of populations living in terrestrial ecosystems. This course examines both the theory and methodology of community analysis with an emphasis on the factors regulating the development of terrestrial ecosystems. The application of ecological theory to solving environmental problems is emphasized. Topics include succession, primary productivity, nutrient cycling, herbivory, predation, competition, topic dynamics, stability and disturbances, introduced species, and effects of global change. One two-hour lecture and one three-hour laboratory per week. Exclusions: (BIOC11Y) Prerequisite: (BIOC12Y) or BGY122H T.B.A.
BOTY058S Environmental Toxicology
An examination of the effects of pollutants on ecosystem structure and function.
Pollutants are substances that occur in the environment at least in part as a result of anthropogenic activity, and have deleterious effects on biota. This course deals with the effects of pollutants on the structure (species composition, diversity, food-web complexity), and function (nutrient cycling, productivity) in aquatic and terrestrial ecosystems. Standard methods of assessment of pollutant effects on individuals, populations, and communities will be discussed.
One two-hour lecture per week. Several tutorials and problem sets.
Exclusion: (BIOG638H)
Prerequisites: (BIOG120Y) or (BIOG122Y) or BYGB50Y T.P.A.

BOTY070H3 Advanced Field Course in Ecology
Inter-university selections from a variety of field courses offered by the Ontario Universities Programme in Field Biology, a co-operative arrangement among universities in Ontario. Courses, of one or two weeks' duration at a wide variety of field sites from late April through mid September. A fee for room and board is charged over and above tuition. Lists of courses available are posted early in January. Sign-up is on a first-come, first-served basis. Students register in the fall after the course has been completed. See the Scarthbroch co-ordinator, Professor R. Boonstra for further details.
Exclusion: (BIOG109H) Prerequisites: (BIOG123Y) or BYGB50Y or permission of the instructor R. Boonstra

BOTY071Y3 Supervised Study in Biology
An independent study course designed to permit intensive, supervised study of a selected topic in the student's field of interest. Supervision of the work is arranged individually with the student and instructor. This course requires the student to present a written report and a seminar paper at the end of the course. Students must obtain permission from the Divisional Office (542A) that is to be completed and signed by the instructor, and returned to the Divisional Office. At this time, the student will be provided with an outline of the schedule and general requirements for the course.
Exclusion: BOTY004Y, ZOOAY4Y, (BI0100Y)
Prerequisite: Satisfactory completion of fifteen full-course equivalents, of which at least four must be Biological Sciences B- or C-level courses and permission of the instructor.
Members of Faculty

BOTY073Y Directed Research in Biology
Identical to BOTY001Y but not to be taken with the same faculty member.
Exclusion: BOTY060Y, ZOOAY60Y (BI0010Y)
Prerequisite: Satisfactory completion of fifteen full-course equivalents, of which at least four must be Biological Sciences B- or C-level courses and permission of the instructor.
Members of Faculty

BOTY079S Molecular Genetics
An examination of genetic systems that go beyond Mendelian genetics, and the central dogma of molecular biology. This course will consider the following topics: recombination in bacteria and their viruses, recombinant DNA methodology, mutation, transposable genetic elements, immunology, viral genetics and genomics. One three-hour meeting per week.
The weekly meetings will consist of a variable mixture of traditional lecture, group problem solving, student presentations, and open forum discussions.
Limited enrolment: 40
Exclusion (BI0020Y) or BYGC15YH
Prerequisites: (BI0101Y) or BYGC15YH
C. Fiber

BOTY023Y Molecular Biology Laboratory: II Host, Vector and Cloning
A laboratory and lecture/tutorial course to provide students with information and practical experience in molecular biology.
The course will deal with the hosts and vectors useful in the cloning and expression of DNA sequences. DNA amplification methods using biological systems and the polymerase chain reaction (PCR), will be covered. Computational analysis of DNA and protein.
One three-hour lecture/laboratory plus one three-hour laboratory per week.
Limited enrolment: 24
Prerequisites: BYGB128H, BYGC15YH, BYGC17YH
Priority will be given to students enrolled in the Special Programme in Cell and Molecular Biology. Additional students will be admitted by instructor if space permits.
J.C. Silver

BOTY023Y Molecular Biology Laboratory: II. Nucleic Acids & Proteins
A laboratory course offering "hands on" experience in a range of molecular techniques such as Northern and Southern Blotting, in situ hybridization, gel shift assays for transcription factors, Western blotting and immunocytochemistry. The course will be organized around a central theme, namely the expression of heat shock genes. In response to stress, cells activate a highly conserved repair/protective mechanism called the "heat shock" or "stress response" in which ongoing transcription and translation is massively repressed and genes encoding heat shock proteins are induced.
Intensive laboratory course with two meetings of three hours on the same day.
Limited enrolment: 24
Exclusion: (BOTY191H)
Prerequisite: BOTY13YH
* Priority will be given to students enrolled in the Special Programme in Cell and Molecular Biology. Additional students will be admitted by instructor if space permits.
J.R. Brown

BOTY024Y Molecular Biology of the Gene
A lecture course focusing on recent advances in the molecular biology of the gene. The following areas will be included:
organization of the eukaryotic genome, regulation of eukaryotic transcription, transcription factors, RNA processing, post-transcriptional control mechanisms, translational control, the molecular biology of chaperones. An important feature of the course will be to introduce students to current research papers in scientific journals.
One two-hour lecture per week.
Limited enrolment: 15
Exclusion: (BOTY191H)
Prerequisite: BOTY104H
J.R. Brown

BOTY024Y Yeast Gene Expression
A lecture course focusing on recent advances in the molecular biology of the yeast. The following areas will be included:
organization of the yeast genome, regulation of yeast transcription, transcription factors, RNA processing, post-transcriptional control mechanisms, translational control, the molecular biology of chaperones. An important feature of the course will be to introduce students to current research papers in scientific journals.
One two-hour lecture per week.
Limited enrolment: 15
Exclusion: (BOTY191H)
Prerequisite: BOTY104H
J.R. Brown

Biological Sciences 37

COURSES NOT OFFERED 2002/2003

BYGC10H1 Plant Morphology
Exclusions: (BOTY131H), (BOTY232H), (BOTY231H), (BOTY242H)
Prerequisite: (BOTY03Y) or BYGB10Y or BYGB50Y

BYGC10H1 Plant Diversity
Exclusions: (BIOG80H), (BOTY103H), (BOTY210H), (BOTY231H)
Exclusion: (BOTY03Y) or BYGB10Y or BYGB50Y

*
While courses in Physics do not appear among the prerequisites or co-requisites of most courses in Chemistry, students are urged to take PHY202H and PHY203H early in their programs. Thus the suggested first-year programme in Chemistry includes CHM104Y, MATA26Y and [PHY202H & PHY203H].

Completion of one of the Specials in Major Programmes listed below can lead to a number of career opportunities in industry, research, teaching, and government. Students who are interested in these Programmes are urged to consult with the supervisors early in their academic careers.

Please refer to the Physical Sciences Scarborough programme on page 126 for a list of the Programmes offered. Descriptions of these programmes will be found on subsequent pages of this section.

**SPECIAL PROGRAMME IN BIOLOGICAL CHEMISTRY**

**Supervisor:** K.A. Henderson (287-2125)

**First Year:**
- BOTA01Y Inorganic Biology
- CHM420Y General Chemistry
- MATA26Y Calculus I
- [PHY202H Dynamics of Classical Systems] or [PHY203H Principles of Classical Physics]
- PHY211H Principles of Modern Physics

**Second Year:**
- BOTA02Y Cell and Molecular Biology
- BGY112H Laboratory for Cell and Molecular Biology
- CHM431H Introduction to Organic Chemistry
- CHM444Y Introduction to Organic Chemistry

**Second to Third Year:**
- CHM416H Techniques in Analytical Chemistry
- CHM422Y Introduction to Physical Chemistry

**Note:** MATH41H Techniques of Calculus of Several Variables I, or a topic in the second year of chemistry, is a prerequisite for CHM422H.

**Third Year:**
- CHM423Y Biochemistry I: Proteins and Enzymes
- CHM424H Biochemistry II: Metabolism
- CHM425H Practical Approaches to Biochemistry
- CHM426H Bio-Organic Chemistry

**Fourth Year:**
- CHM320H Current Questions in Mathematics and Science
- At least 0.5 P.C.E. from the following: BGY300Y Directed Research Project
- CHM490Y Introduction to Research
- CHM491H Library Thesis
- PSCC10H Physics Sciences Project

And, in appropriate years 0.5 P.C.E. (1.5 P.C.E. if CHM390H or PSCC10H is taken) from the following:
- CSCI10H Introduction to Scientific Computing
- CHM481H Techniques of Calculus of Several Variables I
- CHM395H Environmental Chemistry
- CHM370H Analytical Instrumentation
- CHM380H Environmental Chemistry
- CHM395H Analytical Instrumentation
- CHM370H Environmental Chemistry

**SPECIAL PROGRAMME IN ENVIRONMENTAL CHEMISTRY**

The Specialist Programme in Chemistry has been withdrawn. Students currently registered in it will be allowed to complete it or may transfer into the Environmental Chemistry stream of the Environmental Science Specialist Programme. All students interested in the Chemistry of the Environment might wish to consider this Specialist stream. Please consult with the Supervisor of Studies.

**SPECIAL PROGRAMME IN ENVIRONMENTAL CHEMISTRY**

**Supervisor:** K.A. Henderson (287-2125)

The Specialist Programme in Environmental Chemistry has been withdrawn. Students currently registered in it will be allowed to complete it or may transfer into the Environmental Chemistry stream of the Environmental Science Specialist Programme. All students interested in the Chemistry of the Environment might wish to consider this Specialist stream. Please consult with the Supervisor of Studies.
MAJOR PROGRAMME IN CHEMISTRY

First Year:

CHEM10Y1 General Chemistry
CHEM15H1 Calculus

MAT122Y1 Introduction to Mathematical Modeling

PHYS11Y1 Principles of Classical Physics

PHYS11H1 Principles of Modern Physics

PHYS111H Introduction to Inorganic Chemistry

PHYS113H Principles of Modern Physics

Second and Later Years:

4.5 F.C.E. Chemistry courses, including at least one "C" level half course with a laboratory.**

PHYS110 is not an acceptable substitute for

PHYS110 or PHYS110H or PHYS110H is prerequisite, if PHYS110H is chosen.

CHEM2227 and MAT1141H are prerequisites.

** Students should note that if they are going to select CHEM2227, then MAT212Y and PHYS110H or PHYS110H are prerequisite, if PHYS110H is chosen, CHEM111H is required.

CHEM2227 and MAT1141H are prerequisites.

MAJOR PROGRAMME IN BIOCHEMISTRY

First Year:

BOG10Y1 General Biology

CHEM10Y1 General Chemistry

Second and Later Years:

BOG110H Biochemistry I: Proteins & Enzymes

BOG13H1 Bioenergetics & Metabolism

BOG12H1 Practical Approaches to Biochemistry

CHEM16H1 Techniques in Analytical Chemistry

CHEM14Y1 Organic Chemistry I

CHEM24H1 Intermediate Organic Chemistry

CHEM210H Organic Synthesis

And 2 F.C.E. from the following:

BOG12H1 Cell & Molecular Biology Lab

CHEM212Y Physical Chemistry I

CHEM211H Introduction to Inorganic Chemistry

CHEM215H Environmental Chemistry

CHEM213H Principles of Analytical Instrumentation

CHEM214H Analytical Instrumentation

CHEM215H Topics in Biophysical Chemistry

CHEM216H Intermediate Inorganic Chemistry

CHEM217H Organic Synthesis

CHEM218H Intermediate Organic Chemistry

CHEM219H General Chemistry

Nuclear chemistry, stoichiometric and molecular structure, ionic solids, bonding in organic compounds, states of matter and equations of state, thermochemistry, chemical equilibrium in the gas phase and in solutions; reaction kinetics.

The course includes the quantitative description of gases, solids and solutions and develops ideas of bonding and structure in chemical compounds based on Lewis structures, VSEPR and simple molecular orbital theory. Reactions and equilibria in chemical systems are explored through their thermodynamic properties and chemical kinetics. Time permitting, descriptive topics such as introductory organic chemistry are used to round out the course.

Two lectures per week. One-three hour laboratory and one one-hour tutorial in alternating weeks.

Exclusions: CHM132, 133, 135, 136, 137, 135, 151

Prerequisite: OAC Chemistry or Grade 12 Chemistry and permission of the instructor, OAC Calculus.

Co-requisite: NOME1.111

MAT210Y or MAT210Y are strongly recommended.

MAT210Y is required for some higher level chemistry and other Physical Sciences courses.

CHEM111H Techniques in Analytical Chemistry

An introduction to the principles and methods of chemical analysis and the provision of practical experience in analytical laboratory techniques.

The course deals primarily with quantitative chemical analysis. Chemical methods of volumetric analysis, sampling techniques, statistical handling of data are studied, as well as a brief introduction to spectrophotometric and electrolytical methods.

Two-hour lecture and four-hour laboratory every week.

Exclusions: CHEM111Y

Prerequisite: CHEM10Y

Recommended: CHEM211Y

CHEM2227 Introductory Physical Chemistry

Topics in Physical Chemistry with an emphasis on biological applications. The course will discuss fundamental principles using the chemical examples: equilibrium thermodynamics, energy and entropy in relation to chemical and biochemical processes; chemical kinetics, reaction rates and mechanisms; diffusion processes; thermonuclear and kinetic processes in open systems, with advanced biological and physical examples: photochemistry, spectroscopy.

One two-hour lecture every week.

Exclusions: CHEM222, 223, 229

Prerequisites: CHEM10Y or CHEM210Y or PHYS110 or PHYS110H

Exclusions: MAT214Y and PHYS110H are strongly recommended but not required.

Note that MAT214Y is a prerequisite for CHM211Y and that PHYS110H is required in all Chm courses.

CHEM111H Introduction to Inorganic Chemistry

Fundamentals of coordination, solid state and descriptive inorganic Chemistry. Structures, bonding and reactivity of transition metal coordination compounds; solid state structures and energetics; selected chemistry of non-transition elements. Examples will be taken from environmentally and biologically important inorganic compounds.

Two hours of lecture and one hour of tutorial per week.

Exclusion: CHEM210Y

Prerequisite: CHEM10Y

CHEM141Y Organic Chemistry I

The chemistry of the principal functional groups encountered in aliphatic and aromatic compounds, interpreted in terms of reactivity, stereochemistry and reaction mechanisms. An introduction to organic spectroscopy will also be given.

The fundamentals of organic chemistry, including aliphatic and aromatic chemistry and an introduction to the chemistry of biologically important molecules such as proteins and carbohydrates.

Two lectures per week and a four-hour laboratory every second week.

Exclusions: CHEM141, 248, 249, 506, 509

Prerequisite: CHEM10Y

CHEM15H1 Environmental Chemistry

An investigation of aspects of chemical substances and processes as they occur in the environment, including both naturally occurring and synthetic chemicals.

This course will include an introduction to atmospheric chemistry, aqueous chemistry, some agricultural and industrial chemistry, and chemical analysis of contaminants and pollutants. Specific topics may include degradations of the ozone layer, the greenhouse effect, photochemical smog, the global chemical cycles of some of the elements essential to life, natural waters, acid rain, drinking water, sewage and waste disposal, chlorinated organic compounds and metals in the environment. Chemical concepts utilized include the calculation of reaction rates and equilibria, and the structure and reactions of organic and inorganic compounds.

Two one-hour lectures per week.

Prerequisite: CHEM10Y

Exclusions: CHEM23H, CHM310

CHEM111H Principles of Analytical Instrumentation

An introduction to the workings of modern analytical instrumentation.

Principles of measurement, detection of photons, electrons and ions; instrument and experiment design; amplification methods; noise reduction techniques and signal-to-noise ratio improvements. Emission and absorption spectroscopy, electrochemical methods and separation techniques will be covered.

One two-hour lecture per week.

Exclusion: CHEM111Y

Prerequisite: CHEM10Y

Recommended: CHEM24H
CHMIC198 Analytical Instrumentation
A laboratory course to complement CHMIC11 Principles of Analytical Instrumentation.

This course will provide a practical introduction to the use of modern chemical instrumentation with a focus on the sampling, sample preparation (extraction, cleanup, concentration, derivatization), instrumental trace analyst and data interpretation of environmental samples. Lab sessions will allow students to gain experience in using most of the analytical instrumentation utilized in modern environmental science. The lab sessions will be held at the ANALYSIS facility on U of T’s St. George Campus featuring state-of-the-art gas, liquid, and ion chromatographs, mass spectrometers, atomic absorption, and inductively coupled plasma emission (ICP) spectrometers. Field as a two week.

Preparation: CHMIC11H

CHMIC199 Biochemistry I: Proteins & Enzymes
A course designed to introduce students to the properties and behaviour of proteins and enzymes. The course will analyze factors involved in determining protein structure and the relationships between proteins structure and function. Topics will include: the chemistry of amino acids, the primary, secondary, tertiary and quaternary structure of proteins; protein motifs and protein domains; glycoproteins; lipoproteins; protein-protein and protein-DNA interactions; the analysis of the structure of small molecules with proteins; classical enzyme kinetics and allosteric enzymes; mechanisms of enzyme action.

Three times per week. Exclusions: (CHMIC351Y, (CHMIC351Y), BCH310H, BCH310H, BCH317H

Preparation: BGY122H, BGY122H or (CHMIC351Y)

J.W. Gard

CHMIC213H Biochemistry II: Bioenergetics & Metabolism
A course designed to introduce students to cellular metabolism, the process by which living organisms are able to extract and utilize energy from their environment for the maintenance of life. Topics will include: basic principles of biogeochemistry, chemosynthesis and anaerobic phosphorylation; carbohydrate metabolism, aspects of the metabolism of lipids and amino acids; metabolic control mechanisms including allosteric control, protein phosphorylation systems, and hormonal regulation of metabolism. The integration of metabolic pathways will be discussed.

Three one-hour lectures per week. Exclusions: (BIOC353Y), (JRC353Y), BCH3110H, BCH3120Y, BCH312Y

Preparation: (BIOA24Y), or (BGBY11F) & CHMIC24Y

J.W. Gard

CHMIC243H Practical Approaches to Biochemistry
A course designed to introduce students to a range of experimental approaches used in biochemical research. The course will introduce students to practical and theoretical aspects of a variety of procedures used in the biochemical laboratory including: spectrophotometry, chromatographic procedures, electrophoresis, the use of radiotracers; protein purification. Students will be expected to solve numerical problems involving these and related procedures. One two-hour lecture / tutorial plus one four-hour laboratory each week. Exclusions: (BIOC56H), (JRC36H), BCH310H, BCH317H

Preparation: BGY122H, BGY122H or (CHMIC351Y)

Comparative: BGY123H (for students who have not completed (CHMIC351Y) only)

J.W. Gard

CHMIC331Y Intermediate Inorganic Chemistry
A more detailed discussion (than in CHMIC331H) of the structure, bonding, spectroscopy and reactivity of main group, transition metal and organometallic compounds. Special topics may include inorganic solids and materials, biologically and environmentally important inorganic compounds, and catalysis. The laboratory will introduce a variety of synthetic techniques, with characterization of products by both classical and instrumental methods.

Three one-hour lectures per week. Exclusions: (CHMIC11H)

Preparation: CHMIC11H

Comparative: CHMIC11H

Strongly recommended preparation: (CHMIC11H), CHMIC11H, CHMIC21Y, CHMIC44Y

J.W. Gard

CHMIC414H Organic Reaction Mechanisms
Theory and mechanisms of organic reactions, principles of structure, introduction to reactivity, spectroscopy and polymers. Theories of bonding. The laboratory experiments are designed to complement the topics covered in lectures.

Two one-hour lectures and a three hour laboratory per week. Offered in alternate years with CHMIC313H.

Exclusions: CHMIC44Y, CHMIC46

Preparation: CHMIC44Y

Replaces: CHMIC44Y

CHMIC471H Bio-Organochemistry
The chemistry of biologically active compounds, carbon acids, heterocycles, steroids and other natural products; amino acids, proteins and carbohydrates; introduction to enzyme structure and catalysis. Two one-hour lectures per week.

Exclusions: CHMIC44Y

Preparation: CHMIC44Y

Replaces: CHMIC44Y

CHMIC482H Symmetry In Chemistry
An essentially one-semester approach to the applications of symmetry and group theory in chemistry.

The course will cover areas such as structure and bonding, electronic and vibrational spectra, and reactivity. Examples will be taken from both organic and inorganic chemistry.

Two hours lectures per week. Exclusions: CHMIC21H or CHMIC31H or CHMIC41H or permission of the instructor.

CHMIC483Y Introduction to Research Participation in a chemical research project under the direction of a member of the Chemistry staff, requiring approximately 260 hours of effort.

The objective is to develop familiarity with some of the methods of modern chemical research. The particular research problem to be pursued will be determined by discussions between the student and the faculty director of the research.

Students are advised that they must obtain consent from a supervising instructor before registering for this course.

Exclusions: CHMIC48K, 48E, 48K

Preparation: Permission of the instructor.

Not normally offered for credit.

Preparation: CHMIC11H, CHMIC41H, CHMIC483Y

Comparative: CHMIC483Y

Students undertaking a project in inorganic Chemistry are required to take the advanced laboratory course CHMIC844Y on offer on the St. George campus.

CHMIC506Y3 Library Thesis
A project to select a current topic in chemistry based on literature research and carried out under the direction of one of the chemistry staff. Approximately 260-300 hours of work are expected.

The objective is to obtain a thorough understanding of a topic of current interest and to prepare a comprehensive and critical report on the subject. The student will also develop familiarity with the techniques of searching the chemical literature. The topic will be selected in consultation with a member of the chemistry staff. Progress will be monitored during periodic consultations with the staff member.

Students are advised that they must obtain consent from a supervising instructor before registering for this course.

Exclusions: CHMIC445Y, CHMIC471H

Preparation: Permission of the instructor.

Normally only for individuals who have completed fifteen full-course equivalents including at least two C-level Chemistry courses, and who are pursuing one of the Chemistry Programmes.

CHMIC601H Library Thesis
Similar to CHMIC506Y but representing 150 hours of work.

The objective is to obtain a thorough understanding of a topic of current interest and to prepare a comprehensive and critical report on the subject. The student will also develop familiarity with the techniques of searching the chemical literature. The topic will be selected in consultation with a member of the chemistry staff. Progress will be monitored during periodic consultations with the staff member.

Students are advised that they must obtain consent from a supervising instructor before registering for this course.

Exclusions: CHMIC445Y, CHMIC471H

Preparation: Permission of the instructor.

Not normally offered for credit.

Preparation: CHMIC11H, CHMIC41H

Comparative: CHMIC42H

Organic Synthesis

COURSES NOT OFFERED 2000/2001

CHMIC21H Topics in Biophysical Chemistry

CHMIC42H Organic Synthesis
Classical Studies

3 CLAC01H Selected Topics in Greek Literature and
and
4 CLAC02H Selected Topics in Classical Civilization
and the Computer
5 One additional half-course in CLA
CLAB10H Greek & Latin for Scientists
CLAB11H Freedom in the Making of Western Culture
CLAB42H Army and Empire in the Roman World
CLAB53H Women in the Greek and Roman World
CLAC41H Slavery in the Roman Economy
or
One half-course in VPA (courses in Ancient Art and Architecture)

CLA202Y3 Greek and Roman Mythology
The emergence and treatment of myths and legends in the Greco-Roman World. The course will examine the most important myths and legends and their representation in classical literature, drama, and art, and will partly be concerned with ancient and modern theories of myth.

This course will be useful to students engaged in literary and art-historical studies and will serve as an introduction to other courses in classics.
Exclusion: HUMA11, CLA205
Session: Winter Term
M.E. Irwin
Offered: 2001/2002

CLA205Y3 The Mediterranean World A survey of the civilizations which flourished around the Mediterranean Sea in ancient times. The primary focus will be on the Roman Empire, a brief survey of the history of the Near East and Greece in the classical period (ca. 600-200 B.C.) will serve to set the historical context. The course will begin by defining the Mediterranean region in relation to Africa, the Middle East and Europe. Students will then be introduced to the distinctive natural environment of the Mediterranean Basin with emphasis on the natural processes shaping the societies which flourished there. A brief survey of near eastern and Greek History from early times and the rise of Rome will prepare students for a more extended study of the rise of Rome from Caesar to Constantine. This course will make extensive use of literary sources (all read in English translation) and archaeological evidence.
J.H. Corbett
Offered: 2001/2002
Exclusions: (GRHBC11), (GRHCC25Y), (GRHC26Y), CLAS30
Prerequisites: CLA202Y or CLAB05Y or (HSA04Y) or (HSA05Y) J.H. Corbett
Offered: 2002/2003

Classical Studies: MAJOR PROGRAMME IN CLASICAL STUDIES

Superintendent: J.H. Corbett

The Major Programme in Classical Studies offers a limited but coherent curriculum in Classical studies for students interested in studying the Greek and Roman world while pursuing more widely ranging course of studies in a number of related disciplines. For the Minor Programme in Classical Studies, students must complete four full-course requirements as follows:
1. CLAB01Y Greek and Roman History
2. CLAB05Y The Mediterranean World
3. CLAC01H Selected Topics in Greek Literature
4. CLAC02H Selected Topics in Classical Civilization
or
One additional half-course in CLA

This programme will include the study of a special focus on the economic, social, and political factors which gave rise to the development of democratic ideas and practices. Students will be introduced to the Greek world in the archaic period and the conditions which gave rise to the classical Greek city-state and its institutions. Athens will be at center stage in this course, the contributions of her poets, artists, philosophers, and statesmen in the foundations of western culture and social values will be examined in detail. Also taken into account will be the fact of slavery in Classical Greece, with its unique contribution to the ideology of freedom in the western tradition. Orlando Patterson's Freedom in the Making of Western Culture will be a major text.
Exclusions: (GRHBC11), (GRHCC25Y), (GRHC26Y), CLAS30
Prerequisites: CLA202Y or CLAB05Y or (HSA04Y) or (HSA05Y) J.H. Corbett
Offered: 2002/2003

Classical Studies: HONOURS PROGRAMME IN CLASICAL STUDIES

Superintendent: R.F. McDonald

The Honours Programme in Classical Studies offers a more extensive and rigorous curriculum in Classical studies for students interested in pursuing a more advanced study of the Greek and Roman world while pursuing more widely ranging course of studies in a number of related disciplines. For the Major Programme in Classical Studies, students must complete five full-course requirements as follows:
1. CLAB01Y Greek and Roman History
2. CLAB05Y The Mediterranean World
3. CLAC01H Selected Topics in Greek Literature
4. CLAC02H Selected Topics in Classical Civilization
5. One additional half-course in CLA

The course aims to provide the student who has no previous knowledge of classical Greek or Latin with the ability to determine the meaning of scientific words by analyzing their structure, to increase his/her range and comprehension of technical vocabulary, to acquaint him/her with the principles of scientific word formation, and to help him/her develop sound neologismic practices. Topics will include: characteristic, relic, and codes of scientific nomenclature; Latin and Greek roots, affixes, combining forms, and inflectional patterns; transliteration and pronunciation; malformations, misconstructions, and hypercorrections. Particular emphasis will be placed on the biological and medical sciences.
Exclusions: (CLAB11), CLA201
R.F. McDonald
Offered: 2001/2002

CLA200Y3 The Classical World In Film A study of the representation of the Classical world and historical events in film. Topics will include: how the Greek and Roman worlds were recreated in film noir, Westerns, and 1950s film noir, their interpretation of the characters in their own terms, and their portrayal of the Greek and Roman worlds as they see them. The course will be based on the study of the films. Students will be required to prepare written reports on the films studied. The instructor will provide a number of suggested films for a list of suggested films. The instructor will provide a list of suggested films.
Exclusions: CLAB05Y, CLAB51, CLAB90Y, CLAB52, CLAB53
Prerequisites: CLA202Y or WSTA01Y T.B.A.

CLA210Y3 Selected Topics in Classical Literature A detailed study of an author or a genre in Classical Literature in Translation. For 2000/2001 the genre will be Greek and Roman epic poetry; we will read in translation the poems of Homer, Virgil, and other epic poets.
Exclusion: CLA200Y
Prerequisites: One course in Classics or in English or other literature
R.F. McDonald
Offered: 2001/2002

CLA220Y3 Selected Topics in Classical Civilization A detailed study of a theme in Classical Civilization; all sources will be read in translation.
For 2000/2001 the topic will be the classical history of the Roman Empire. Exclusion: VPA220, DRML26Y
Prerequisite: One course in Classics or History
J.H. Corbett
Offered: 2001/2002
Cognitive Science

46 Cognitive Science

CLAS0233 Classics and the Computer
An independent research project using the resources of the computer program and the internet.

The advent of an extensive, multi-faceted computer database for the study of Greek antiquity in the form of the Perseus Project and the increasing numbers of databases and programs on the internet with content relevant to the study of ancient Rome have opened new possibilities for undergraduate research into many areas of life in classical Greece and Rome: history, literature, language, topography, the visual arts and architecture, among others. Under the supervision of a member of faculty, the student will design his or her own "pathway" or will create a Web page on a topic or topics to be selected in consultation with the supervisor.

Students are advised that they must obtain consent from the supervising instructor before registering for this course.

Prerequisites: (3 F.C.R.'s in CLA) & permission of the instructor

M.E. Irwin
Offered: 2001/2002

COURSES NOT OFFERED 2000/2001

CLAS401H5 Army and Empire in the Roman World
Exclusions: (CRHB080) Prerequisite: CLAS0233 or HSA03Y or HSA03Y

CLAS411H5 Slavery in the Roman Economy
Exclusions: (CRHB080) Prerequisites: CLAS0233 or HSA03Y or HSA03Y

Cognitive Science (B.Sc.)

Faculty List
R.J. Stinson, M.A., Ph.D. (Chicago), Professor
G. Henry, B.A., B.Sc., M.Sc. (A.N.U., U.B.C.), Ph.D. (Cornell), Professor
J.M. Kennedy, B.Sc., M.Sc. (Belfast), Ph.D. (Cornell), Professor
A. Kola, A.B., M.A., Ph.D. (UCLA), Professor
C.M. MacLeod, A.M. (McGill), Ph.D. (Washington), Professor
W.E. Souers, M.A. (Alberta), Ph.D. (Toronto), Professor
M.C. Smith, B.A. (Toronto), Ph.D. (MIT), Professor
M.A. Schneekloth, B.A. (UNI-Binghampton), Ph.D. (Cornell), Associate Professor
S. Sudra, B.A. (Toronto), Ph.D. (Pittsburgh), Associate Professor
R. Smith, B.A. (Carleton), M.Sc., Ph.D. (Alberta), Associate Professor

Supervisor: A. Kula (387-7466)

Cognitive Science is the study of knowledge-how human beings, other animals, and even machines acquire knowledge, organise it and test that knowledge, and use that particular knowledge to solve problems. Cognitive scientists are particularly interested in the way we use symbolic systems, such as natural or computer languages, drawing, or mathematical symbols, to organise our knowledge of the world. Cognitive Science considers questions like: Are we born with some knowledge already in place? How does our experience of the world allow us to develop knowledge? Is knowledge stored as visual images, words or abstract propositions? How do we master and store the complicated system of rules that allows us to use language? How do language and culture affect our understanding of the world? How is the knowledge stored in a computer like and unlike the knowledge stored in our heads?

The Cognitive Science Program (Major and Specialist) draws on philosophy, linguistics, computer science and psychology to answer these questions. The Programmes are excellent preparation for students interested in teaching in junior schools, who should add a course in Philosophy of Education, and obtain practice teaching experience. They are also as excellent base for the students interested in careers in Speech Pathology, who should add courses in human physiology. Also, they prepare students for careers in Psychology and Philosophy, and are good adjuncts for careers in Computer Science and Neuroscience.

First-Year Students in Cognitive Science LINAGY, PHIL01Y and PSY01Y are recommended in first year if intending to pursue a Major or Specialist in Cognitive Science.

SPECIAL PROGRAMME IN COGNITIVE SCIENCE

Supervisor: A. Kula (387-7466)

NOTE: The Special Programme consists of 12 F.P.C.C.'s. Nine are specified courses.

Three and one-half to be selected from the following:
(1) Psychology/Neuroscience, (2) Linguistics, (3) Philosophy, and (4) Computer Science.

The recommended year for taking the specified courses is given in parentheses.

Specified Courses:

Nine full-course equivalents:

LING01Y General Linguistics (Year 1)
PHIL01Y Fundamental Questions of Philosophy (Year 1)
PSY01Y Introduction to Psychology (Year 1)
LIN00H4 Practical Language Analysis: Phonology (Year 2)
LIN00H4 Practical Language Analysis: Syntax (Year 2)
PHIL02H4 Right Knowledge and Truth (Year 2)
PHIL05H4 Foundations of Cognitive Science (Year 3)
PSY07H4 Data Analysis in Psychology (Year 2)
PSY05H4 Perception and Cognition (Year 2)
PSY08H4 Memory and Cognition (Year 2)
LIN00H4 Practical Language Analysis: Morphology (Year 3)
PHIL08H4 Theories of Mind (Year 3)
PSYC04H4 Cognition and Representation (Year 3)
PLJC05H4 Psychobiology (Years 3 or 4)
CASC08H Introduction to Computer Programming
CASC08H Introduction to Computer Science

PHIL01Y: (1) Students with no familiarity with the use of computers would be advised to take CASC08H in their first year, followed by CASC08H in the following year. Students having familiarity with computers, but no computer programming skills, may wish to take CASC08H in the first or second year. Only students with computer programming experience should attempt CASC08H without first taking CASC08H. Students may wish to consult with the Supervisor of Programme before deciding on the most appropriate computer science course sequence.

1. Psychology/Neuroscience

One and one-half full-course equivalents chosen from the following:

PSY02H4 Introduction to Developmental Psychology
PSY03H4 Sensation and Perception
PSY04H4 Human Brain and Behaviour
PSY06H4 Advanced Data Analysis in Psychology
PSY07H4 Developmental Psychology
PSY08H4 Psychometric Methods Laboratory

PSY01H4 Psychology of Music
PSY02H4 History of Psychology
PSY03H4 Current Topics in Memory and Cognition
PSY04H4 The Scientific Study of Consciousness and Unconscious Influences
PSY05H4 Computational Models of Memory and Attention
NEURO01H1 Neuroscience 1: Cells and Synapses
NEURO01H1 Neuroscience 2: Learning and Motivation
NEURO01H1 Neurosensory 3: Sensory and Motor Systems
NEURO01H1 Synaptic Organization of the Brain
NEURO01H1 Cognitive Neuroscience
NEURO01H1 Cognitive Neuroscience

2. Linguistics

One-half full-course equivalent chosen from the following:

LING07H4 Structure of English
LING07H4 Phonetis: The Study of Speech Sounds
LING07H4 Second Language Learning Phonology
LING07H4 Syntax
LING07H4 The Study of Meaning
PLJC04H Developmental Psychobiology
PLJC05H Disorders of Speech and Language
COOG02H4 Supervised Study in Cognitive Science

3. Philosophy and Theoretical Psychology

One-half full-course equivalent chosen from the following:

PHIL04H4 Supervised Study in Cognitive Science
PHIL05H4 Symbolic Logic I
PHIL05H4 Philosophy of Science
PHIL05H4 Philosophy of Language
PHIL05H4 Logical and Probability
PSY01H4 Theoretical Psychology
PSY01H4 Fundamental Issues in Cognitive Science
PSY01H4 Current Topics in Theoretical Psychology

Cognitive Science 47
4. Cognitive Courses

One full-course equivalent chosen from the following:
- MATA26H: Linear Algebra I
- MATA28H: Calculus
- MATA36Y: Introduction to Optimization
- MATA37Y: Introduction to Mathematical Modeling
- MATA44H: Linear Algebra II
- CSCB30H: Discrete Mathematics for Computer Science
- CSCB35H: Computer Organization
- CSCB37H: Computer Applications
- One-half course in Anthropology at the B-level or higher.

NOTE: It is expected that most students will take MATA26Y to fulfill their cognitive course requirement.

MAJOR PROGRAMME IN COGNITIVE SCIENCE

Supervisor: A. Kalia (287-7466)

NOTE: The Major Programme consists of 7.5 F.C.E.’s. Seven are specified courses. One-half F.C.E. is to be selected from the Psychology bin.

Specified Courses:
- Seven full-course equivalents:
  - PSYA01Y: Introduction to Psychology
  - LINA0Y: General Linguistics
  - LINB04H: Practical Language Analysis: Phonology
  - LINB05H: Practical Language Analysis: Syntax
  - LINB06H: Practical Language Analysis: Morphology
  - PHLB11H: Theories of Mind
  - PHLB06H: Foundations of Cognitive Science
  - PSYB07H: Data Analysis in Psychology
  - PSYB08Y: Perception and Cognition
  - PSYB07H: Memory and Cognition
  - PC255H: Psychobiology
  - CSCA06H: Computer Basics
  - CSCA08H: Introduction to Computer Science

NOTE: (1) Students with no familiarity with the use of computers would be advised to take CSCA08H in their first year, followed by CSCA06H in the following year. Students having familiarity with computers, but no computer programming skills, may wish to take CSCA06H in the first or second year. Only students with computer programming experience should attempt CSCA08H without first taking CSCA06H. Students may wish to consult with the supervisor of Programme before deciding on the most appropriate computer science course sequence.

Psychology

One-half full-course equivalent chosen from the following:
- PSYB07H: Introduction to Developmental Psychology
- PSYB08H: Sensation and Perception
- PSYB09H: Human Brain and Behaviour
- PSYC01H: Advanced Data Analysis in Psychology
- PSYC02H: Psychometric Methods Laboratory
- PSYC03H: Cognition and Representation
- PSYC04H: Psychology of Music
- PSYC05H: Theoretical Psychology
- PSYD01H: The Scientific Study of Conscious and Unconscious Influences
- NRK06H: Neuroscience I: Cell Anatomy and Physiology
- COOG01HR: Supervised Study in Cognitive Science

NOTE: Students may substitute (COOG01HR) for PSYB09H to satisfy Cognitive Science programme requirements for Specified Courses. If this option is selected, PSYB09H may be used to satisfy Cognitive Science Programme requirements in the Psychology bin.

SUPPLEMENTARY PROGRAMME IN COGNITIVE SCIENCE

Supervisor: A. Kalia (287-7466)

NOTE: Students may substitute (COOG01HR) for PSYB09H to satisfy Cognitive Science programme requirements for Specified Courses. If this option is selected, PSYB09H may be used to satisfy Cognitive Science Programme requirements in the Psychology bin.

COOG09HR

COOG10HR: Supervised Study in Cognitive Science

Supervised reading or research project. These courses provide an opportunity to pursue advanced study in a specialized area following the appropriate scheduled courses and in close consultation with the supervisor. They are not intended as a substitute for scheduled advanced courses. Written report or paper is usually required. Students are advised that they must obtain consent from the supervising instructor before registering for these courses.

Prerequisites: Three F.C.E.’s at the B- or C-level in COG and/or LING and/or PSY, permission of the supervisor.

Session: Winter Day

T.B.A.

Computer Science

(B.B.Sc.)

Faculty List
- C.C. Dyck, B.Sc., (Bishops M.Sc., Ph.D., (Toronto), Professor
- W.H. Elliott, B.Sc. (U.B.C.), M.Sc., Ph.D., (Toronto), Professor
- V. Hadjiloucas, B.A. (Princeton), Ph.D. (Harvard), Professor
- G. Horn, B.A., B.Sc., (McGill), M.Sc., (A.N.U., U.B.C.), (Ph.D. (Brown), Professor
- A. Mendlstern, B.S., M.S.E., M.A., Ph.D., (Princeton), Professor
- M. Molloy, Ph.D., (Cornell/Berkeley), Associate Professor
- N. Cheng, B.Sc., Senior Lecturer
- G.J. Cappel, B.Sc. (U.B.C.), Senior Lecturer
- G. Lovizzato, B.Sc., M.Sc., (Toronto) Senior Lecturer
- C. Jermy, B.Sc., M.Sc., (Toronto) Lecturer
- R. Pancor, B.Sc., M.Sc., (Toronto) Lecturer

Discipline Representative: W.H. Elliott (287-7208)

Computer science is the study of the use of computers to process information. The form of this information may vary widely, from the business person’s records or the scientist’s experimental results to the linguist’s texts. One of the fundamental concepts in computer science is the algorithm - a list of instructions that specify the steps required to solve a problem. Computer science is concerned with producing correct, efficient, and maintainable algorithms for a wide variety of applications. Closely related is the development of tools to foster these goals: programming languages for expressing algorithms; operating systems to manage the resources of a computer; and various mathematical and statistical techniques to study the correctness and efficiency of algorithms.

Theoretical computer science is also concerned with the inherent difficulty of problems that can be made tractable by computers. Numerical analysis, data management systems, computer graphics, and artificial intelligence are concerned with the applications of computers to specific problems areas.

The Specialist Programme in Computer Science prepares a student for graduate study and for a professional position in the computer field.

Limited Enrolment: Because of pressures of demand for places, it has been necessary to place enrolment limits on most CSE courses and on admission to the Major and Specialist programmes. Information on how to apply for admission to a Programme is given below.

Please refer to the Physical Sciences Scarborough timetable on page 139 for a list of the Programmes offered. Descriptions of these programmes will be found on subsequent pages of this section.

SPECIALITY PROGRAMME IN COMPUTER SCIENCE

1. General Stream
2. Information Systems Stream
3. Joint Mathematics Stream
4. Joint Physics Stream
5. Joint Statistics Stream
6. Software Engineering Stream

Admission to the Programme
Each year, 80 students are admitted to the six streams of the Specialist Programme in addition to those admitted to the Specialist Co-operative Programme. There are three possible ways to be admitted:
1. Directly from Secondary School. Up to 40 students will be admitted directly from high school on the basis of academic performance. Applicants must have completed GAC Calculus, GAC Algebra and GAC Geometry.
2. At the End of 1st Year. Applicants must have completed ALL the courses in the first year of the Specialisation(s) of the Specialist Programme. Applicants applying for admission on completion of their first year (at least 4 F.C.E.’s) will be evaluated on the basis of their 1st year GPA and their marks in Computer Science and Mathematics courses. The minimum GPA is calculated annually. It is never less than 2.00 and 2.80 will not be greater than 3.00.
3. Admission After 1st Year. Admission of students during or after the first year will also be on the basis of the grades they have received in Computer Science and Mathematics courses.
Computer Science

Students applying at the end of their first year or later will be considered together for a total of approximately 40 places in the Specialised Programme. As stated above, a GPA of 2.80 and above will guarantee acceptance provided the required first year computer science and calculus courses have been satisfactorily completed.

In order to remain in the programme, a student must maintain a cumulative GPA of 2.0 or higher throughout the programme.

Common 1st Year Core for All Streams of the Programme

The following courses are common to all streams of the Programme and should be taken in the 1st Year. Students should note that the Information Systems Stream and the Joint Physics Stream have an additional 1st Year requirement.

CSA048H Introduction to Computer Programming
CSA588H Introduction to Computer Science
MATA23H Linear Algebra I
MATA25Y Calculus
STAB22H Statistics

1. General Stream

Supervisor: G. Crips (287-7253)

Second Year:

CSB58H File Structures and Data Management
CSB58H Discrete Mathematics
CSB58H Computer Organization
CSB58H Fundamental Data Structures and Techniques
MATA24H Linear Algebra II
MATA24H Techniques of Integration
MATA25H Techniques of the Calculus of Several Variables I
MATA25H Techniques of the Calculus of Several Variables II

Two of:

MATH21H MATH21H, MATH24H, MATH24H, MATH24H, PSCD156H

Students intending to proceed to graduate school in Computer Science are advised to take MATH24H.

STA847H Introduction to Probability Theory and Mathematical Statistics

Third Year:

CSCS54H Principles of Programming Languages
CSCS54H Compositional Complexity and Computation
CSCS75H Data Structures and Algorithm Analysis

Fourth Year:

CSCB99H Methods and Tools for Software Development
CSCC58H Numerical Algebra and Optimization
CSCS58H Numerical Approximation, Integration, and Ordinary Differential Equations
CSCS58H Linear Algebra II

One of:

CSA048H, CSA048H, CSA048H
CSA048H, CSA048H, CSA048H
CSA048H, CSA048H, CSA048H
CSA048H, CSA048H, CSA048H
CSA048H, ECE484H

One of:

CSA048H, CSA048H, CSA048H
CSA048H, CSA048H, CSA048H
CSA048H, CSA048H, CSA048H
CSA048H, CSA048H, CSA048H
CSA048H, CSA048H, CSA048H

PSCD30H Computer in Contemporary Society

3. Joint Mathematics Stream

Supervisor: G. Crips (287-7253)

This stream offers a broad-based education in Computer Science and Mathematics. It prepares a student for a professional position in the computer field and is appropriate for students who wish to pursue a career in teaching or in government or industry. It can also lead to graduate study. The courses may be taken in a different order or from those listed below, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

Second Year:

CSB58H Discrete Mathematics
CSB58H Computer Organization
CSB58H Fundamental Data Structures and Techniques
CSB58H Linear Algebra II
MATH24H Geometry I
MATH24H Techniques of the Calculus of Several Variables I
MATH24H Techniques of the Calculus of Several Variables II

Introduction to Analysis

Fourth Year:

CSB58H Discrete Mathematics
CSB58H Computer Organization
CSB58H Fundamental Data Structures and Techniques
CSB58H Linear Algebra II
MATH24H Geometry I
MATH24H Techniques of the Calculus of Several Variables I
MATH24H Techniques of the Calculus of Several Variables II

Introduction to Analysis

At least one of:

MATH21H, MATH24H or MATH24H

NOTE: Due to enrolment restrictions in required Management courses, registration in this stream is limited. A maximum of 20 students will be admitted annually to the second year of the programme. Selection will be based on grades in the course specified for the first year of the programme with a minimum GPA of 3.5. There are 14.5 F.C.E. required for this stream. The courses may be taken in an order different from that listed below, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

Additional 1st Year requirement

MATH21H Introduction to Management

Second Year:

CSB58H File Structures and Data Management
CSB58H Discrete Mathematics
CSB58H Computer Organization
CSB58H Fundamental Data Structures and Techniques
MATA24H Linear Algebra II
MATA24H Techniques of Integration
MATA25H Techniques of the Calculus of Several Variables I

Two of:

MATH21H MATH21H, MATH24H, MATH24H, MATH24H, PSCD156H

Students intending to proceed to graduate school in Computer Science are advised to take MATH24H.

STA847H Introduction to Probability Theory and Mathematical Statistics

Further:

MATH24H Techniques of the Calculus of Several Variables II

** Students in this Programme may substitute MATH24H or MATH24H or MATH24H and STA847H for the stated prerequisite.

*** This course is offered only in alternate years and enrollment is restricted.

Note that 300-series and 400-series must be completed at the St. George Campus. Consult the Department of Computer Science Undergraduate Student Handbook or consult the web site http://www.cs.utoronto.ca.

One other 0.5 F.C.E. in Mathematics

Fourth Year:

One of:

MATH253H, MATH24H, MATH24H

Two of:

MATH253H, MATH24H, MATH24H

One other 0.5 F.C.E. in CS at the B-level or higher.
4. Joint Physics, Chemistry, and Computer Science Stream

Supervisor: J. C. Dyer (287-6503)

This stream provides a broadly based education in Computer Science and Physics. It prepares students for professional positions in the computer field and is appropriate for students who may wish to pursue a career in teaching or in government or industry. The course may be taken in a different order or year from those listed below, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

Additional 1st Year Requirements:

Either

PHYS01H Principles of Classical Physics
or

PHYS03H Dynamics of Classical Systems

or

PHYS02H Principles of Modern Physics

Second Year:

CSCI21H File Structure and Data Management
CSCI22H Discrete Mathematics
CSCI23H Computer Organization
CSCI24H Fundamental Data Structures and Techniques
MATH23H Linear Algebra II
MATH24H Techniques of the Calculus of Several Variables I
MATH25H Techniques of the Calculus of Several Variables II
STAB47H Introduction to Probability Theory and Mathematical Statistics

Second or Third Year:

PHYS20H Vibrations and Waves
PHYS21H Electricity and Magnetism
PHYS22H Electronics
PHYS23H Physics Laboratory
PHYS24H Introduction to Quantum Physics

PSC001H Physical Principles of Modern Technology

Third Year:

CSCI30H Methods and Tools for Software Development
CSCI34H Principles of Programming Languages

CSCI35H Numerical Algebra and Optimization
CSCI36H Data Structures and Algorithms

PRLB01H Philosophy of Science

Fourth Year:

CSCI45H Numerical Approximation, Integration, and Ordinary Differential Equations
CSCI46H Computational Complexity and Completeness

One 3.0 F.C.E. in PHYS34H or the 300- or 400-level PHY courses on the St. George Campus

Either

PHYS30H Principles of Classical Physics
or

PHYS32H Dynamics of Classical Systems

PHYS31H Principles of Modern Physics

5. Joint Statistics, Mathematics

Supervisor: M. Evans (287-7274)

This stream provides a student with the computational and statistical background required in many applications of these fields. The programme prepares students for employment opportunities in business, government and education and for graduate study. The course may be taken in a different order or year from those listed below, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

Second Year:

CSCI21H File Structure and Data Management
CSCI22H Discrete Mathematics
CSCI23H Computer Organization
CSCI24H Fundamental Data Structures and Techniques
MATH23H Linear Algebra II
MATH24H Techniques of the Calculus of Several Variables I
MATH25H Techniques of the Calculus of Several Variables II
STAB47H Introduction to Probability Theory and Mathematical Statistics

Second or Third Year:

PHYS20H Vibrations and Waves
PHYS21H Electricity and Magnetism
PHYS22H Electronics
PHYS23H Physics Laboratory
PHYS24H Introduction to Quantum Physics

PSC001H Physical Principles of Modern Technology

Third Year:

CSCI30H Methods and Tools for Software Development
CSCI34H Principles of Programming Languages

CSCI35H Numerical Algebra and Optimization
CSCI36H Data Structures and Algorithms

PHILB01H Philosophy of Science

Fourth Year:

CSCI45H Numerical Approximation, Integration, and Ordinary Differential Equations
CSCI46H Computational Complexity and Completeness

One 3.0 F.C.E. from MATH30H and C-level STA courses and 300- or 400-level STA courses on the St. George campus

Fourth Year:

CSCI45H Numerical Algebra and Optimization
CSCI46H Data Structures and Algorithms

One 3.0 F.C.E. from MATH30H and C-level STA courses and 300- or 400-level STA courses on the St. George campus

Either

PHYS30H Principles of Classical Physics
or

PHYS32H Dynamics of Classical Systems

PHYS31H Principles of Modern Physics

6. Software Engineering Stream

Supervisor: S. C. Dyer (287-7353)

Software engineering is concerned with the timely and cost-effective development of quality software. This programme leads to employment opportunities in software development and to graduate study in computer science. The course may be taken in a different order or year from those listed below, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

Second Year:

CSCI21H File Structure and Data Management
CSCI22H Discrete Mathematics
CSCI23H Computer Organization
CSCI24H Fundamental Data Structures and Techniques
MATH23H Linear Algebra II
MATH24H Techniques of the Calculus of Several Variables I
MATH25H Techniques of the Calculus of Several Variables II
STAB47H Introduction to Probability Theory and Mathematical Statistics

Second or Third Year:

PHYS20H Vibrations and Waves
PHYS21H Electricity and Magnetism
PHYS22H Electronics
PHYS23H Physics Laboratory
PHYS24H Introduction to Quantum Physics

PSC001H Physical Principles of Modern Technology

Third Year:

CSCI30H Methods and Tools for Software Development
CSCI34H Principles of Programming Languages

CSCI35H Numerical Algebra and Optimization
CSCI36H Data Structures and Algorithms

MATH23H Linear Algebra II
MATH24H Techniques of the Calculus of Several Variables I
MATH25H Techniques of the Calculus of Several Variables II
STAB47H Introduction to Probability Theory and Mathematical Statistics

Second or Third Year:

CSCI45H Numerical Approximation, Integration, and Ordinary Differential Equations
CSCI46H Computational Complexity and Completeness

One 3.0 F.C.E. from MATH30H and C-level STA courses and 300- or 400-level STA courses on the St. George campus

Fourth Year:

CSCI45H Numerical Algebra and Optimization
CSCI46H Data Structures and Algorithms

One 3.0 F.C.E. from MATH30H and C-level STA courses and 300- or 400-level STA courses on the St. George campus

Either

PHYS30H Principles of Classical Physics
or

PHYS32H Dynamics of Classical Systems

PHYS31H Principles of Modern Physics

NOTE: 300-series and 400-series must be completed at the St. George campus. Consult the Department of Computer Science Undergraduate Handbook or consult the web site http://www.cs.toronto.edu.

SPECIALIST (CO-OPTATIVE) PROGRAMME IN COMPUTER SCIENCE

Co-ordinator: V. A. Atik (287-7324)

Supervisor of Studies: C. C. Dyer (287-7306)

The Co-operative Programme in Computer Science is a work-study programme which combines academic studies in computer science, and other disciplines in the physical sciences with work placements in public and private enterprises. Two work terms must be completed along with the academic programme. An optional third work term may be included, with permission of the Co-ordinator.

The programme prepares students for permanent employment with government and business enterprises concerned with research and technology as well as for graduate study in computer science. Graduates receive a four-year Honours B.Sc. with a specialist certification in Computer Science. The Co-operative Programme can be taken in conjunction with any of the specialties in the Specialist Programme in Computer Science.
For Programme outlines, please refer to the Student Handbook.

For Computer Science, you can expect the following courses to be included:

**Computer Science Courses**

- Introduction to Computer Science
- Data Structures and Algorithms
- Computer Architecture
- Operating Systems
- Database Systems
- Advanced Programming Techniques
- Computer Networks
- Artificial Intelligence
- Computer Security

Please consult the Student Handbook for the most up-to-date course offerings and requirements.
Introduction to Scientific Computing

An introduction to the use of computers in the physical and biological sciences. Choice and design of algorithms and their implementation in a high-level computer language, such as C or FORTRAN, for the solution of problems arising in the physical and biological sciences. Topics will include elementary numerical analysis, such as numerical integration, mathematical modeling of physical systems, data fitting and interpolation. The use of database systems for information storage and query and the use of graphical display devices and software for visualization of physical systems will be considered. The use of computer algebra systems will also be considered. Intended primarily for physical and biological science students who do not plan to pursue any of the programs in computer science or cognitive science.

Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 508H, CSCI 608H
Perquisite: [MAT 126Y or MAT 129Y with permission of the instructor] & Use A-level science course

Introduction to Computer Science

Abstract data types and data structures for implementing them. Linked data structures. Eclipsedation and information hiding. Object-oriented programming in a language such as Java. Specifications. Analyzing the correctness and efficiency of programs using mathematical induction and recursion. Recursion relations for analyzing the efficiency of recursive code.

This course assumes programming experience is an objective. Discrete data structures such as C or Java, as provided by CSCI 608H. Students who already have this background may consult the Instructor or Supervisor of Studies before enrolling. Selecting skipping CSCI 608H. Students who enroll in CSCI 608H and find the course too difficult may "drop down" to CSCI 708H in terms when CSCI 608H is offered. The deadline for "dropping down" is the end of the fifth week of classes.

Two hours of lectures per week; two hours of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 508H, CSCI 608H
Perquisite: CSCI 608H and CSCI 605
Two OAC mathematics courses

Methods and Tools for Software Development

Techniques for programming efficiently by making use of operating-system facilities and standard utilities and software tools. Tools discussed and used are from the UNIX environment using the C programming language. Topics: files, Programmable command interpreters ("shells"), Program generators, networking, interprocess communication, window programming, challenging assignments emphasizing the importance of good design, programming style and use of appropriate tools.

Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 508H, CSCI 608H
Perquisite: CSCI 608H or CSCI 458H

Structure and Data Management

An introduction to techniques for storing, accessing, and managing large data in computer systems. Hardware and software aspects of data processing: processors, storage devices, communications, file I/O control. Techniques for organizing and managing files: sequential files, direct files, indexed files, auxiliary files, indexed files, file systems. Introduction to database management systems with emphasis on relational database systems.

Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 728H
Perquisite: CSCI 708H

Discrete Mathematics for Computer Science

A rigorous treatment of certain aspects of discrete mathematics, with applications to Computer Science. Topics include elementary number theory, program correctness, recurrences, divide-and-conquer algorithms, finite state machines, and an introduction to the propositional and predicate calculus.

Two hours of lecture per week and one hour of tutorial per week.

Exclusions: CSCI 738H
Perquisite: CSCI 608H

Computer Organization

This course is designed to give students an understanding of the operation and the hardware of a modern digital computer. Specific topics include: the internal structure of data, the design and analysis of gate networks, memory devices, the organization of a simple microprogrammed machine, basic data representation, assembly language, addressing structures, mechanisms for input and output, the structure of peripheral devices, some case studies of particular machines. There will be four laboratory periods in which students will construct, experiment with digital logic circuits.

Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 528H
Perquisite: CSCI 508H or CSCI 458H

Computer Science

Algorithms and Design of Information Systems

Theory, tools, and techniques of information systems analysis and design. Topics include: theory of systems and organizations (organization theory, systems life cycle, role of the systems analyst). Information system analysis (data collection, requirements analysis, structured analysis, system modeling, cost/benefit analysis), information system design (structured design, top-down development, file and database design), information system implementation (project management, documentation, acceptance testing, hardware and software evaluation and acquisition), and user interface design.

Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 568H
Perquisite: CSCI 528H

Numerical Analysis

The efficiency and stability of solution techniques for systems of linear equations and least squares problems, including LU- and QR-based methods. Algorithms for optimization problems, including linear programming, and for systems of nonlinear equations.

Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 588H, CSCI 688H
Perquisite: CSCI 528H or CSCI 708H & MAT 129Y & MAT 129Y

Numerical Approximation, Integration and Ordinary Differential Equations


Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week.

Exclusions: CSCI 558H, CSCI 658H, CSCI 758H
Perquisite: CSCI 508H

Computer-Based Simulation Models

Constructing and using models of complex systems. Representing models as simulation programs for computers. Implementing simulation models using such simulation languages as GPSS and DYNAMO. Methods of generating uniformly distributed pseudo-random numbers and stochastic random variables with specific distributions. Validations of simulation models by statistical methods. Case studies of some applications of computer-based simulation.
CSCI908H3 Software Engineering
The structure and design characteristics of large software systems. Concepts and techniques in the design and implementation of large software systems. Requirements definition and specification. Software modularity and programming languages for system implementation. Debugging, testing and software quality assurance. Software project management. Formal methods in software engineering. A course project is used to illustrate software engineering techniques. Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week. Exclusion: CSCI348H
Prerequisite: CSCI346H
Corequisite: CSCI346H

CSCI748H3 Data Structures and Algorithm Analysis
Abstract data types such as priority queues and dictionaries. Advanced data structures for main memory resource allocation, such as binary heap, leftist heap, self-adjusting trees and balanced search trees. Algorithms analysis: worst case, average case, and amortized complexity. Introduction to lower bounds. Emphasis is given to problem solving and a theoretical treatment of the data structures. Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week. Exclusion: CSCI778H
Prerequisite: CSCI708H & CSCI361H & STA347H

CSCI848H3 Microprocessor Systems
A study of hardware and software aspects of microcomputers and microprocessors. This course will examine instruction sets, addressing modes, memory devices, bus structures, input/output and interrupt mechanisms, assembly language and high-level language programming. System and applications software. Laboratory experiments will provide hands-on experience. Two hours of lecture per week, one hour of tutorial per week and four to five hours of laboratory work (on average) per week. Enrollment limit: 30
Exclusion: ECSI830H
Prerequisite: CSCI830H

CSCI909H3 Computer Networking
Computer communication network principles and practice. Protocols and Internet-layer model; Internet application layer and naming; transport layer and congestion avoidance; network layer and routing; link layer with local area networks, connection-oriented protocols and error detection and recovery; multimedia networking with quality of service and multicasting.

CSCI949H3 Computer Science Project
This half-course involves a significant project in any area of computer science. The project may be undertaken individually or in small groups. The course is offered by arrangement with a computer science faculty member, at Scarborouh or the St. George campus.

CSCI959H3 Computer Science Project
This course is intended for students specializing in computer science. It can be taken in an F or S course in a single term, or as an H course spread over an entire winter or summer session. Projects must be completed by the last day of classes in the term or semester the course is taken.

Students are advised that they must obtain consent from the supervisor of studies before registering for this course.
Exclusion: CSCI949H
Prerequisite: [Three C-level computer science half-courses (2.50) & (a GPA of 2.0) & (permission of the programme supervisor & completion of the Enrolment procedure. Project supervisor's note of agreement to be presented to the programme supervisor by whom special permission will be issued for registration.]

CSCI959H3 Computer Science Project
Same description as CSCI949H. Normally a student may not take both CSCI949H and CSCI959H.

If an exception is made allowing a second project, the student must discuss this with the program director. If an exception is made allowing a second project, the student must have permission to do so from the program director. If an exception is made allowing a second project, the student must have permission to do so from the program director.
Economics for Management Studies (B.A.)

Faculty List
S. K. Howson, B.A., M.Sc. (London), M.A., Ph.D. (Cambridge), Professor
M. Kratovsky, S.B. (M.I.T.), M. Phil., Ph.D. (Yale), Professor
D. Hyatt, B.A., M.A., Ph.D. (Toronto), Associate Professor
H. Loyd-Ellis, B.Sc. (Southampton), M.A., Ph.D. (Queen’s), Associate Professor
J. Carrier, B.A. (Ottawa), M.A. (Toronto), Ph.D. (Yale), Associate Professor
G. Cerdá, B.A. (Dalhousie), M.A., Ph.D. (Toronto), Assistant Professor
G. Green, B.Sc., M.Sc., (Oxford), Ph.D. (Western), Assistant Professor
W. Begon, B.A. (Western Ontario), M.A., Ph.D. (Toronto), Assistant Professor

Economics studies how consumers and producers interact in a market economy to provide goods and services. Economists also study how this process grows and changes over time, and under what circumstances it may fail to function in an optimal fashion.

Economic policies to remedy these failures are also examined.

In the Division of Management, the study of economics is oriented primarily to the needs of students interested in management studies. Thus many of our examples will focus on the ways in which firms and consumers in western economies interact. However, students interested in the wide variety of problems considered by economists will find these matters are also addressed in our courses.

The curriculum provides an excellent background for careers in business, government, and the professions, and may be of considerable interest to students specializing in other disciplines as well. Students may study economics within several specially designed joint programs (with Management or with Political Science). Students may also take a major or a minor in the area.

Students wishing to pursue a graduate program in Economics will require some additional courses in Economic Theory not offered at Scarborough. Such students should consult with the Undergraduate Secretary of the Department of Economics at the St. George campus, or the graduate secretary of the Department of Economics where they intend to do further work to determine what additional courses would be required to do graduate work in this field. The Supervisor of Studies at Scarborough can help you with this task.

Programs in Economics for Management Studies
Students generally apply to enter a program at the end of their first year. Later admission is also possible. Students should consult the detailed discussion below. The following programs are offered:

1. Specialist or Co-op in International Development Studies - a program in International Development Studies (B.A.)

Admission to Programs in Economics for Management Studies and in Management

1. All students, even those who have been directly admitted into the Division from high school (and who are not required for their program in the Division), must formally register to specific programs after four courses have been completed. Decisions are made on program admissions by the Supervisor of Studies only twice a year, in May and in August. This schedule is based on program requests which students must file in the Registrar's Office by the winter pre-registration instructions. Instructions are provided at that time. Only transfer students are considered for direct admission in the Division of Management.

2. These students directly admitted into the Division from high school are guaranteed entry into a program in the Division (only a limited number of transfer students may register). Co-op programs will be accepted into Co-op programs after first year.
The Co-operative Programme in Economic Policy Management and Data Analysis (EPMDA) is a four-year program combining academic studies with work experience in public and private enterprises. EPMDA is designed to allow students to gain practical skills in data analysis and to combine them with the interpretative skills gained by knowledge of economic theory. Work terms and courses will allow students to act as junior apprentices to professional economists.

Admission to the Program - Students who have been admitted directly from high school to a Co-operative Program in the Management Division may apply for the Co-op Program in EPMDA after completing four years and six full-course equivalents, including ECMAG2Y and MGTAG2Y. Other students may apply to the program at the end of the first year and will be evaluated on the basis of grades including ECMAG2Y and MGTAG2Y.

Program Requirements
The Co-operative Program in Economic Policy Management and Data Analysis requires the completion of the following minimum requirements as part of a twenty-course degree (B.A.).

1. Ten full-course equivalents in Economics for Management Studies including ECMAG2Y, EBM2BH, ECM3BH, ECM4BH, ECMB11H, ECMB12H, ECM3BH, ECM3BH, ECM3BH, ECMB3BH, ECM3BH, and a half-course in applied data analysis (as to be added to the curriculum next year), and three additional C-level full-course equivalents in Economics.

2. MATH31H, MATH32H, MATH34H, MATH41H, PASH1H, POLS41H, MATA27H, CSCA40H, and POA31H are required equivalents from the Humanities Division. Students should be aware that the mathematics requirements imply that OAC Calculus is a prerequisite for this program.

Work Terms
This program requires three work terms, the first one of which can be combined with course work. In the first work term, students will complete for job as teaching and research assistants within the Division of Management. The students perform further work terms, outside the University, on a full-time basis. These will normally be scheduled during the summer. Work terms are arranged and scheduled by the Co-operative Program Co-ordinator but must be worked by students in conjunction with Co-op students from this and other universities. Work terms will generally be placements with professional economic working for financial institutions, government organizations, or elsewhere. Students must maintain a 3.0 G.P.A. in order to go on to these work terms. Course credit of 0.5 full-course equivalent is granted for successfully completing both work and reporting requirements of a work term. Work term credits are granted as Pass/Fail and are in addition to the 20 course requirement for the degree.

Fee
Students will pay Co-operative Program fees as established by the Management Co-op Program.

Recommended Schedule of Courses
Students in, or intending to enter, the Co-op Program in EPMDA are advised to take the following courses in their first two years:

First Year:
- ECMAG2Y, MGTAG2Y, POLS41H, MATA27H, CSCA40H
- Summer: EBM2BH, ECM3BH, EBM31H, EBM31H

Second Year:
- ECM3BH, ECM3BH, EBM42H, EBM42H, EBM41H, EBM41H, half-course in applied data analysis, first placement as teaching assistant.

** Pending approval of the Governing Council of the University **

** SPECIALIST PROGRAMME IN POLITICAL SCIENCE AND ECONOMICS FOR MANAGEMENT STUDIES **

Supervisor: G. Cleveland (287-7371)
E-mail: gcleve@fas.st.mcgill.ca

NOTE: Registration in this Programme is limited.

Students must complete a minimum of four courses to be considered for this programme. Students with 4-6 course credits will be considered on the basis of G.P.A. including ECM2BH and ECM2BH. Students with 7-10 course credits will be considered on the basis of G.P.A. including ECM2Y and ECM2Y. Six full-course equivalents are required in each of the two disciplines, as specified below. Students must also complete at least four full-course equivalents in disciplines other than Political Science & Economics for Management Studies.

Required Courses in Economics for Management Studies
- ECM2BH or ECM2BH
- ECM2BH or ECM2BH
- ECM2BH or ECM2BH
- ECM2BH
- ECM2BH
- ECM2BH

Required Courses in Politics
- POLS41H or POLS41H

Two more P.C.'s in ECM, including at least one at the C-level.

Required Courses in Political Science
Six full-course equivalents, including the following: POLS41H, POA31H, POLS41H

One P.C. from each of any three of the following fields:
- Canadian Government: POLS41H, POLS41H, POLS41H, POLS41H
- Public Administration and Public Policy: POLS41H, POLS41H, POLS41H, POLS41H
- International Relations: POLS41H, POLS41H, POLS41H, POLS41H
- Comparative Politics, Industrial Countries: POLS41H, POLS41H, POLS41H, POLS41H
- Comparative Politics, Developing Countries: POLS41H, POLS41H, POLS41H, POLS41H
- Comparative Politics, Developing Countries: POLS41H, POLS41H, POLS41H, POLS41H

TIP: No more than two courses at the A-level may be counted toward program requirements. If POLS41H is used to satisfy the first requirement (POLA31) or POLS41H above, then it may also be used to satisfy the Canadian Government field requirement.

MAJOR PROGRAMME IN ECONOMICS FOR MANAGEMENT STUDIES

Supervisor: G. Cleveland (287-7371)
E-mail: gcleve@fas.st.mcgill.ca

NOTE: Registration in this Program is limited.

Students must complete a minimum of four courses to be considered for this program. Students with 4-6 course credits will be considered on the basis of G.P.A. including ECM2BH or ECM2BH. Students with 7-10 course credits will be considered on the basis of G.P.A. including ECM2Y and ECM2Y. Six full-course equivalents are required in each of the two disciplines, as specified below. Students must also complete at least four full-course equivalents in disciplines other than Political Science & Economics for Management Studies.

Required Courses in Economics for Management Studies
- ECM2BH or ECM2BH
- ECM2BH or ECM2BH
- ECM2BH
- ECM2BH
- ECM2BH

Two more P.C.'s in ECM, including at least one at the C-level.
ECMB0203 Price Theory: A Mathematical Approach
Intermediate level development of the principles of microeconomic theory. The course will cover the same topics as ECMB009, but will employ techniques involving calculus so as to make the theory clearer to students.

Limited enrolment: 80 per section.
Exclusions: ECMB009, ECMB200, ECO200, ECO206, ECOM002
Prerequisites: ECMB020 (ECMB020Y) or students who have completed ECMB020 may be admitted with the permission of the supervisor of studies and must complete MAT2A7H as a further prerequisite.

ECMB0203 Quantitative Methods in Economics II
An introduction to probability and statistics as used in economic analysis. Topics to be covered include: descriptive statistics, probability, special probability distributions, sampling theory, confidence intervals, hypothesis testing (parametric), and simple and multiple regression. There will be a number of computer assignments.

Limited enrolment: 80 per section.
Exclusions: ECO202 (ECMB009Y), ECO204 (ECMB009), EIB211H, EIB212H, GSR301H or GSR301H, SOC310H, STAB21H
Prerequisites: ECMB009 (ECMB009Y) or EIB211H (ECMB009)

ECMB0212 Quantitative Environmental Analysis
A second course in probability and statistical methods as used in economic analysis. Topics to be covered include: confidence intervals, hypothesis testing, simple and multiple regression.

Limited enrolment: 80 per section.
Exclusions: ECO202 (ECMB009Y), ECO206, GSR301H or GSR301H, SOC310H, STAB21H, STAB47H
Prerequisites: ECMB009 (ECMB009Y) or EIB211H (ECMB009)

GGR237H5 Location and Spatial Development
An application of competitive location theory to explain economic landscapes. Topics include Ricardian rents and spatial equilibrium, trade flows and spatial price equilibrium, geographic market areas and spatial pricing policies, location of firms with mobile resources, and industrial theory and regional specialization.

Three hours of lecture per week.
Exclusion: GGR220
Prerequisites: ECO202 (ECMB009Y)

J. Minor
ECM300H3 Economic Aspects of Public Policy
Cost-Benefit Analysis (CBA) is a key policy evaluation tool developed by economists to assess government policy alternatives and provide advice to governments. In this course, we learn the key assumptions behind and techniques used by CBA. You will learn how to collate the shortcomings in the work of those who misuse Cost-Benefit Analysis techniques, and you will come to understand both the power and the limitations of CBA. We use the general analytical techniques discussed in the first part of the course to discuss specific policy areas, for example, the economics of education, the costs in society of smoking, government policy towards early childhood services, and the economics of the Internet.

Limit enrolment: 60
Exclusions: ECO206
Prerequisites: ECA301Y or ECA310Y (ECA310Y or ECA301Y)

C. Cleveland

ECM229H3 Topics in Price Theory
Continuing development of the principles of microeconomic theory. This course builds on the theory developed in ECM201H1. Topics will be chosen from a list which includes price, uncertainty, monopoly and oligopoly, game theory, general equilibrium, Pareto Optimality, externality.

Limit enrolment: 80 per section
Exclusions: ECM203H1, ECM204H1, ECO203, ECO206
Prerequisite: ECO203H1

GGR346H3 Urban Residential Geography
Macro and micro perspectives on urban residential geography are presented in this course with an emphasis on North American Cities. At the macro level, topics include the search and location behaviour of individuals and families as consumers of housing, and suppliers of labour and domestic production. At the micro level, topics include commuting, social ties, neighbourhood environments, structure and segregation, changes in the social and physical structure of neighbourhoods. In both cases, the course will examine the changing role of land use planning and public policy over two or three decades.

Prerequisites: University-level half-course in data analysis (e.g., STA222) and one of GGR205, GGR206, GGR217, POL260

ECM290H3 Topics in Macroeconomic Theory
Continuing development of the principles of macroeconomic theory. The course will build on the theory developed in ECM202H1. Topics will be chosen from a list which includes consumption theory, investment, exchange rates, inflation expectations, inflation, neo-Keynesian economics, monetary and fiscal policy.

Limit enrolment: 60 per section
Exclusions: ECO207H1, ECO208H1, ECO209H1

Prerequisite: ECO208H1

ECM299H3 Applied Regression Analysis
Economic theory, including the formulation of econometric models and economic hypotheses. Students will learn how to estimate regressions, conduct hypothesis tests, and critically assess statistical results. The implications and usefulness of special statistical problems that arise in estimating economic relationships will also be discussed.

Two hours of lecture per week.

Limit enrolment: 60 per section
Exclusion: ECM111Y
Prerequisites: ECO204H1 & ECO206H1 & ECO207H1

ECM210H3 Empirical Applications of Regression Analysis
Continuing development of the uses of econometric theory. The course will build on the theory developed in ECM209H1. Students will learn how to move from a structural econometric model to the reduced forms estimating frameworks. Using the econometric tools developed in ECM209H1, economic theory and statistical hypotheses will be examined. A research paper is required.

Two hours of lecture per week.

Limit enrolment: 60 per section
Exclusion: ECM111Y

Prerequisite: ECM209H1

GGR301H3 Urban Transportation Policy Analysis
This course examines current problems in urban transportation planning using policy analysis. Topics include the development of community goals, economic and social cost-benefit analysis, evaluation of redistributive impacts, impacts of transport projects on local values, mass transit subsidies, and regulation deregulation. The course examines insights gained from contemporary empirical research.

Two hours of lecture per week. This course will count as a B level course in Economics.

Prerequisites: University-level half-course in data analysis and one of GGR205, GGR206, GGR217, POL260

ECM202H1 Economics of the Media
An examination of the role and importance of communications media in the economy. Topics to be covered include: the challenge the media pose for conventional economic theory, historical and contemporary issues in media development, and basic media research techniques. The course is research-oriented, involving empirical assignments and a research essay.

Limit enrolment: 60
Exclusions: EC223 (EC223)
Prerequisites: ECO203H1 or ECO208H1 (or ECO207H1 or ECO204H1)

J. Parker

ECM211H3 Economics of the Public Sector: Taxation
A course concerned with the revenue side of government finance. In particular, the course deals with existing tax structures, in Canada and elsewhere, and with criteria for tax design. Two hours of lecture per week and a one hour tutorial per week.

Limit enrolment: 60
Exclusion: ECO236 (ECO236)
Prerequisites: ECO201H1 or ECO208H1 (or ECO203Y or ECO204Y)

G. Freeman

ECM203H3 Economics of the Public Sector: Expenditures
A study of resource allocation in relation to the public sector, with emphasis on decision criteria for public expenditures. The distinction between public and private goods in central to the course.

Two hours of lecture per week and a one hour tutorial per week.

Limit enrolment: 60
Exclusion: ECO223 (ECO223)
Prerequisites: ECO201H1 or ECO208H1 (or ECO203Y or ECO204Y)

M. Azmolay

ECM375H3 Law and Economic Analysis
A study of laws and legal institutions from an economic perspective. The course develops a positive theory of the law which suggests that laws frequently evolve so as to maximize economic efficiency. The efficiency of various legal principles is examined. Topics covered include: externalities, property rights, environmental law, contracts, torts, product liability and consumer protection, criminal law and procedure.

Limit enrolment: 60
Exclusions: ECO203D (ECO203D)
Prerequisites: ECO201H1 or ECO208H1 (ECO207H1 or ECO204H1) (ECO203Y or ECO204Y)

M. Kranzhofer

ECM404H3 Economics of Organization and Management
This course covers economics of the internal organization of the firm. The emphasis will be on the economic relationships between the various parties involved in running a business: managers, shareholders, workers, banks, and the government. Topics covered will include the role of organizations in market economies, contractual theory, risk sharing, property rights, corporate financial structure and vertical integration.

Two hours of lecture per week.

Limit enrolment: 60
Exclusions: ECO210 (ECO210)
Prerequisites: ECO201H1 or ECO208H1 (ECO203Y or ECO204Y)

H. Lloyd-Elis

ECM413H3 Industrial Organization
The economics of the firm in a market environment. The aim is to study business behaviour and market performance as influenced by concentration, entry barriers, product differentiation, diversification, research and development and inflationary trade. There will be some limited use of calculus in this course.

Two hours of lecture per week.

Limit enrolment: 60
Exclusions: ECO210 (ECO210)
Prerequisites: ECO201H1 or ECO208H1 (ECO203Y or ECO204Y)

H. Lloyd-Elis

ECM448H3 Money and Banking
An introduction to the role of banking institutions in the economy. There will be a focus on the institutional arrangements and basic macroeconomic theory underlying financial intermediation. Specifically, the interaction of the Bank of Canada, the chartered banks, trust companies, credit unions and other depository and non-depository financial services will be considered.

Limit enrolment: 60 per section
Exclusion: ECO238
Prerequisites: ECO201H1 or ECO208H1 (ECO207Y or ECO208Y)

ECM488H3 Financial Economics
This course is designed to introduce students to the theoretical underpinnings and practical applications of financial economics. Topics covered include: international choice, expected utility theory, the Capital Asset Pricing Model (CAPM), the cost of capital, the role of debt in firm and dividend policy, market efficiency, the term structure of interest.
ECMC04105 Economic Development
An introduction to the processes of growth and development in less developed countries and regions. Topics include the role of international trade and investment in developing countries; the problems of population growth and unemployment, inequalities in income distribution, the roles of agriculture and history. Limited enrollment: 10
Exclusions: ECO324, ISC661
Prerequisites: ECMC011H or ECMC022H (ECM030Y or ECM034Y)

ECM07020 Development Policy
A consideration of how government policy can affect the pace and nature of development in Third World countries. Emphasis will be on the most important policies including those relating to rural organization, agricultural goods markets, labour markets, credit markets, land rights systems, income distribution and technological change.
Limited enrollment: 60
Exclusions: ECO324, ISC661
Prerequisite: ECMC061H (ECM030Y or ECM034Y)

ECMC04104 Topics in North American Economic Development
A study of the history of economic development in North America. Students will survey current theoretical approaches in economic history, study particular topics in North American economic history, and develop hands-on practice in data collection and analysis.
Limited enrollment: 60 per section
Exclusions: ECM011H
Prerequisites: ECON201B or ECON202 or ECON301H or ECON501H

ECON011H1 Supervised Reading
For upper-level students whose interests are not covered in one of the other courses normally offered. Students are expected to design the course with the guidance of a staff member interested in the area of study being proposed. The courses will normally be made available only to students whose performance in Economics courses has been well above average. Students interested in supervised reading courses are urged to contact faculty members well in advance, as not all faculty will be available for these courses in any given term.

Notes: Students are advised that they must obtain consent from the supervising instructor before registering for this course.

ECMC05020 Comparative Economic Systems
An introduction to comparative economic systems, with particular emphasis on the role of non-market methods in the functioning of economic systems. Prerequisites: ECM02Y or ECM034Y

ECMC05110 Advanced Macroeconomic Theory

ECMC05140 Advanced Macroeconomic Theory

ECMC05200 Research Methods in Economic Policy Management and Data Analysis
Prerequisites: ECON202H or ECON301H or ECON321H or ECON501H

ECMD010H Workshop in Economic Research

Facility List

W.J. Howard, M.A., S.T.B. (Toronto), Ph.D. (London), Professor
R.M. Brown, M.A., Ph.D. (New York), Professor
M.C. Caddy-Krueger, M.A., Ph.D. (Toronto), Associate Professor
N. ten Konmoire, M.A., Ph.D. (Toronto), Assistant Professor
S. Lown, M.A., Ph.D. (Toronto), Assistant Professor
G. Leonard, M.A., Ph.D. (Florida), Associate Professor
A.J.G. Pannell, M.A. (McGill), Ph.D. (Nimbin), Associate Professor
M.B. Goldberg, M.A. (Vancouver), Ph.D. (Toronto), Assistant Professor

Discipline Representative: G. Leonard (287-1141)
Supervisor of Studies: G. Leonard (287-1141)

The discipline of Economics involves not only a broad study of the great works of literature but also training in complex modes of interpretation and communication that are
incredible in our increasingly media-saturated world. As Shakespeare, the curriculum offers courses in the English-language literature of Britain, Canada, America, and other regions of the world, as well as providing major investigations of culture. An emphasis on literature of more recent periods is balanced by historical examinations of earlier eras and a general survey of the British literary tradition. All courses place emphasis on close responsive readings, critical thinking, and clarity of expression.

A level courses introduce all students to the study of English at the university level. ENGL110Y is designed for students planning a Specialist, Major, or Minor Programme in English and for students having a general interest in literature of the twentieth century. ENGL129H is available for those students enrolled in ENGL110Y who want training in writing essays for English courses. It is required of English speciality and majors before they take ENGL230Y, a course that continues instruction in the writing of English essays.

ENGL160Y and ENGL260Y are required for all students planning a Specialist or Major Programme in English. Other B-level courses require no prerequisites and are available both to beginners and to more advanced students.

C-level courses, as their prerequisites indicate, are designed to build upon previous work and presuppose some background in critical skills and some familiarity with the subject matter.

C-level courses provide opportunities for more sophisticated study and require some independent work of the student. These courses are generally restricted in enrollment and may involve the generation of seminars.

Students are advised to check the prerequisites for C- and D-level courses when planning their course program, and to consult with the Supervisor of Studies or the Discipline Representative before taking courses on other campuses.

### SPECIALIST PROGRAMME

**ENGL110Y Introduction to Literary Study: The Twentieth Century**

**ENGL129H Writing Workshop for ENGL110Y Students who have successfully completed ENGL110Y prior to Winter 1999/99 do not need ENGL129H to fulfill requirements for a Specialist Programme in English.**

3. Additional full-course equivalents, at least 1 of which must be at the C-level, to bring the total number of English courses successfully completed to 10 (10) full-course equivalents.

**MINOR PROGRAMME IN ENGLISH LITERATURE**

**ENGL110Y Introduction to Literary Study: The Twentieth Century**

ENGL129H Writing Workshop for ENGL110Y Students who have successfully completed ENGL110Y prior to Winter 1999/99 do not need ENGL129H to fulfill requirements for a Minor Programme in English Literature.

3. Additional full-course equivalents, at least 1 of which must be at the C-level, to bring the total number of English courses successfully completed to 10 (10) full-course equivalents.
ENG101Y3 What is Culture? A text-based exploration of the development and emergence of "culture" as a concept and as a field of study.

What is the relationship between culture and civilization? How has culture often been associated with a society's artistic and imaginative expression, but how do we discuss culture today without reference to science and technology? What does a group's culture tell us about its social and political organization and its attitudes to race, class, gender, sexuality and nationhood? How do we distinguish between mainstream culture and subcultures, between industrial and post-industrial culture, or between "high" culture and "low"? We will explore the ways in which new approaches to culture are redefining the nature of English literary studies. Drawing on a wide range of materials - including literary texts, film, video, advertisements, visual art, and hypermedia - this course will offer multicultural perspectives on such topics as contemporary media and communications, popular and commodity culture, technology, musical subcultures, and the history of the cinema.

R. Kilburne

ENG203Y3 American Literature: An Introduction
A broad survey of literature in the United States.

Examining the many different cultural points of view operating within the framework of the American experience, this course will explore such questions as: What is the make-up and significance of the American Dream? What is at stake in the American Hero? What are the functions of the American Hero? How are these themes determined as good versus evil, or is versus redemption, progress and the irrelevant in the American context? The reading will include cultural and national background material as well as literary texts by such writers as Hawthorne, Dickinson, Melville, Twain and as such as Faulkner, Wright, Morrison, and Bellow. Exclusion: ENG220

T.R.A.

ENG212Y3 Detective Fiction
A study of the evolution and forms of detective fiction.

We will examine the formal rules that govern this form of fiction and the conventions that have evolved as a result of the many influenced literary narratives. In addition, we will consider the social and cultural contexts that have helped to foster and develop the detective genre: the popular fiction form that has cut across classes, cultures, and continents.

Exclusion: ENG226H1

T.R.A.

ENG241H3 Science Fiction
An examination of the genre of science fiction.

This course will look at novels, as well as short stories, set in the future from long ago and films, from the beginnings of science fiction to cyberpunk. Emphasis will be placed on the way a formalistic popular genre comes into being; the relationships of that genre to its failure; the way later innovation is introduced into an established form; and the interaction that exists between science fiction and literary writing. The course will be marked through examination and through some written essay projects.

Exclusion: ENG241H1

R. Kilburne

ENG203Y3 Canadian Fiction in English
A study of Canadian fiction in English from its origins in the eighteenth century to the contemporary period.

The course examines authors confronting the problems of finding a fictional form and voice for their responses to Canada and to structuring themselves as viable, distinctive, and productive on an international scale. The course will examine several contemporary novels, both in terms of their form and content and through close readings of specific works.

Texts which may be studied include: Olive, My Love by Miriam Toews; The Beggar's wealthy, by John Huisman; Red Sky by John Merrick; Surfacing by Margaret Atwood; The Calculus of Happiness by S.J. Perelman; and The Overstory by David Vann. Exclusion: ENG220

T.R.A.

Premise: One full-course equivalent in English.

M. Goldman

ENG273Y3 Literature and Culture, 1740-1850
An examination of literature and its wider culture during the second half of the eighteenth and the first third of the nineteenth centuries. This year, we will trace the development in the period of a consciously national culture, and the concern for the nation's culture with the terms of "high," "middle," and "low" culture. Why do we use the term "culture" to refer to learning and the arts as well as using it in a way that is widely accepted? How did learning and the arts begin to be understood in the late eighteenth century? What did learning and the arts begin to be understood as entering into social and national status and culture? What kind of shift occurs when it? We will read works by such authors as Samuel Richardson, Charlotte Lennox, Laurence Sterne, Francis Bacon, Richard Brinsley Sheridan, Anne Yeats, William Wordsworth, John Keats, and Lord Byron. Sub-topics include: the role of the author as public figure in publishing, circulating libraries, readership and education, travel, public entertainment such as the theatre and the opera; collecting and museums.

Premises: [ENG100Y1 & ENG201Y1 or ENG201Y1 and one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]

S. Lumb

ENG203Y3 The Rise of the Novel
A study of the development of the English novel from its early stages through the Victorian period.

This course investigates the English novel from its inception through the end of the nineteenth century, as it emerges into a wide range of social, political, and cultural movements. The course will consider how the novel has shaped the way in which people perceive their own and past times through analysis of the works of such authors as Defoe, Richardson, Fielding, Sterne, Austen, the Brontës, Thackeray, Eliot, Dickens, Carver, and Hardy. Students are advised to consult the instructor for specific titles and to read as many of these novels as possible before classes begin.

Exclusion: ENG117 ENG222

Premise: [ENG100Y1 & ENG201Y1 or ENG201Y1 and one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English] or [three full-course equivalents at the B-level, one of which must be in English]

T.R.A.

ENG203Y3 Independent Studies: Creative Writing
A student-chosen project under the guidance of a faculty member.

The project is supervised and approved by the faculty member. The project is an opportunity for the student to develop an individual project. The project is limited to one or more students per year. The project is an opportunity for the student to develop an individual project. The project is limited to one or more students per year.

Premise: ENG100Y1

ENG273Y3 The Immigrant Experience in Literature
An examination of the creative literature written in English, and written about, the immigrant experience.

We will examine the literature produced by several ethnic communities in at least three nations - Canada, the United States, and Great Britain - in order to examine the
nature of disparities in identity, national identity, and the lived experience of ethnicity. We will consider the themes of controversy, resistance, integration, preservation, and reproduction, and the relations of individuals and community and of community and larger society. We will also consider the specific location of ethnicity in the larger racial divide(s) (such as those between black and white or between indigenous peoples and settlers) already characterizing these societies. We will consider various topics such as those of Conrad, Wilde, Cervantes, Roth, Singer, Richter, Ma, Ngugi Wa Thiong’o, Cixous, and others.

ENG207Y3 Senior Essay
A scholarly project, chosen by the student and supervised by one faculty member. Approval by the faculty in English must normally be obtained by the student before the end of the previous term.

The student writes a substantial essay on a literary subject under the supervision of a member of the English department. It is the responsibility of the student to locate a supervisor, but any member of the faculty might be sought from the Discipline Representative. The following deadlines should be observed: by the last day of the previous term a brief statement of the area of the project, signed by the supervisor, should be submitted to the Discipline Representative. By November 15th a concise specific statement of the project is to be submitted, including the exact title of the proposed project and a brief description of its approach and method. After the topic has been approved by the discipline, a second reader will be appointed. Exclusions: ENGB147Y, ENGB149Y

Prerequisites: Open only to students completing the last five courses for the four-year degree, and who have at least three full-course equivalents in English, at least one at the C-level.

Four D-level half-course seminars will be offered. Please consult the Supervisor of Studies at 287-7141 and refer to the Winter 2002/03 Timetable.

COURSES NOT OFFERED 2002/2001

ENG80Y3 Canadian Literature: An Introduction
Exclusions: ENG252

ENG175H3 Contemporary Literature from the Caribbean
Exclusions: ENGB32Y, ENGB52Y

ENG181H3 Contemporary Literature from Africa
Exclusions: ENGB32Y, ENGB52Y

ENG345H4 The Short Story
Exclusions: ENG2113

ENG467Y3 The Bible and English Literature
Exclusions: ENGB32Y, ENGB52Y

ENG507Y3 Women and Literary Study
Exclusions: ENGB325

ENG507Y5 Creative Writing
Exclusions: ENGB325

ENG545H5 Native North American Literatures
Exclusions: ENGB545, ENGB564H

ENG588Y3 Senior Seminar
A scholarly project, chosen by the student and supervised by one faculty member.

American Authors
Prerequisites: [ENGB510Y & ENGB750Y] or [ENGB580Y & one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]

South African Literature: Around the Horn
Exclusions: ENGB32Y, ENGB58Y

Prerequisites: [ENGB510Y & ENGB750Y] or [ENGB580Y & one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]

South African Literature: Around the Horn
Exclusions: ENGB32Y, ENGB58Y

Prerequisites: [ENGB510Y & ENGB750Y] or [ENGB580Y & one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]

Myths and History in Canadian Fiction
Prerequisites: [ENGB510Y & ENGB750Y] or [ENGB580Y & one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]

Literature and Travel
Prerequisites: [ENGB510Y & ENGB750Y] or [ENGB580Y & one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]

The Gothic Tradition
Prerequisites: [ENGB510Y & ENGB750Y] or [ENGB580Y & one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]

Literary Theory and Criticism
Prerequisites: [ENGB510Y & ENGB750Y] or [ENGB580Y & one other full-course equivalent in English] or [three full-course equivalents at the B-level, at least one of which must be in English]
Environmental Science

Environmental Science (B.Sc.)

Faculty List
R. B. Bryan, B.A. (Dublin), Ph.D. (Sheffield), Professor
N. Eyles, B.Sc., M.Sc. (Memorial University, NFLD), Ph.D. (East Anglia, D.Sc. (Lancaster), Professor
B. Greenwood, B.Sc., Ph.D. (Bristol), Ph.D. Rome, Caio (Uppsala), Professor
W. J. Howard, B.Sc., M.Sc., Ph.D. (Birmingham), Professor
T. Inouye, B.S., M.S., Ph.D. (University of New Brunswick), Ph.D. (Cambridge), Professor
J. A. Lawton, B.Sc. (Reading), Ph.D. (Aberystwyth), Professor
D. W. Williams, B.Sc. (University College, North Wales), Dip. Ed. (Liverpool), M.Sc., Ph.D. (Warwick), Ph.D. (Warwick), Professor
P. C. Paterson, B.Sc., M.Sc. (Toronto), Ph.D. (Carleton), Associate Professor
W. A. Gough, B.Sc., M.Sc. (Toronto), Ph.D. (McGill), Associate Professor
A. G. Price, B.Sc. (Waterloo), M.Sc., Ph.D. (McGill), Associate Professor
A. Mutai, M.Sc. (Florida State), Ph.D. (London), Associate Professor

Discipline Representative: A. G. Price

Human activity is a major cause of environmental change and the rate of that change has accelerated dramatically over the last century. Understanding the dynamics of both natural and anthropogenic environmental change requires knowledge spanning many scientific disciplines. Recent environmental degradation such as surface and subsurface water pollution, air and soil pollution, climate change, desertification, extinction of species and problems of waste disposal are all a result of the lack of understanding of environmental systems and processes. Environmental degradation has an impact not only on human beings but on all species and natural systems, and it is in understanding these interactions and developing skills from many areas such as: biology, chemistry, mathematics, physics, earth science and ecology. Such an integrated approach needs not only a good understanding of the causes of environmental change and degradation, but also a more complete understanding of the mechanisms through which environmental change has an impact on living creatures.

A Specialist Programme with three streams, a Major Programme, a Minor Programme and, in addition, a Co-operative Specialist Programme are all available within Environmental Science. The three specialist streams are: a broadly based study of Environmental Systems and two more narrowly based studies of Environmental Biology and Environmental Chemistry. The Major Programme is designed for students who wish to pursue either another Major or Specialist programme in a related discipline. All streams have a large common core in the first two years: this reflects the strong interdisciplinarity requirements of an integrated approach to the study of the environment and allows students to switch between programmes if they wish.

Please refer to the Physical Sciences Scarborough programme on page 130 for a list of the Programmes offered.

Descriptions of these programmes will be found on subsequent pages of this section.

SPECIALIST (CO-OP) PROGRAMME IN ENVIRONMENTAL SCIENCE

Coordinator: W. A. Gough

The Co-operative Programme allows students to take any one of these specialist streams in Environmental Science. Each of these streams has a strong basis in the fundamental sciences such as biology, chemistry, mathematics and physics, but emphasizes the importance of the environmental sciences such as: earth and atmospheric sciences and ecology. The programme is broad-based for the practising environmental scientist and includes study in the areas of: Environmental Law; Environmental Impact Assessment; Remote Sensing and Geographical Information Systems; Scientific Computing. Students will complete a four-year major programme in their chosen field of study. The two work placements are integral to the Co-operative experience; students will be employed for 16-week periods of work placement in positions fitting their interests and skills and in relevant employment contexts. Assistance will be provided by the Co-ordinator in securing appropriate employment opportunities. The overall purpose of the programme is to provide education and training which will produce highly qualified scientists with excellent field and laboratory experience, with a view to future employment in consulting, government research agencies, regulatory agencies, non-governmental environmental and development organizations and research and teaching.

Admission to the Programme

Applicants may apply to the programme directly from secondary school or may apply as transfer students from college or first-year university. The timing of work placements for students who receive transfer credit will depend upon the particular university courses completed. Applicants must indicate the special code for the University of Toronto at Scarborough programme on the Application for Admission to an Ontario University. Once the University of Toronto is notified of the application, candidates are sent an additional co-op application form to complete. To be considered for the first round of selection, applicants must return the co-op application by the following deadlines. Current CAC applicants = March 1; Applicants who applied on the 10th form = April 1. Therefore it is essential that applicants submit the initial OMAA application at least six weeks prior to these dates.

Note that enrolment in the programme is limited. Admission is considered on the basis of the applicant's academic performance, background and experience in relevant subjects, and a letter of recommendation from high school teacher or university instructor in mathematics or science. An interview is required.

Fees

Every student in a co-operative programme is required to pay additional fees established by the University of Toronto.

SPECIALIST (CO-OP) PROGRAMME IN ENVIRONMENTAL SCIENCE

This programme requires twenty FCE's in each of the two terms of four months each. Exceptionally, with the approval of the University of Toronto and the co-op co-ordinator, a third work term may be approved. To be eligible for their first work term, students must have completed at least 10 FCE's. Work placement opportunities are available through the Physical Sciences Division, but must be won by students in competition with all applicants for the position.
Performance on work terms will be evaluated by the employer and coordinator. Students must submit a report for each work term (including a third work term if taken).

To maintain standing in the program, to be eligible for a work term and to receive specialist certification upon graduation, a student must:

- maintain a cumulative grade point average of at least 2.3
- complete an Introduction to Environmental Science Co-op tutorial in first year
- receive a satisfactory evaluation for work term performance and work term report
- be registered as a full-time student during study terms
- return to studies after each work term

For Programme outlines, please refer to the description of the Specialist Programme in Environmental Science below. Note that while it is strongly encouraged, course need not be taken in exactly the indicated order, but if an alternative ordering is adopted, care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

Each Student's Programme Requires the Annual Approval of the Supervisor of Studies.

NOTE: Students are individually responsible for ensuring that they have completed all programme and degree requirements for graduation.

For Programme outlines, please refer to the description of the Specialist Programme in Environmental Science below.

Introduction to Environmental Science Co-op

During their first year, students will participate in a one-term introductory course. This is designed to prepare students for their work term environment and is crucial for ensuring that students get the most benefit from their co-op placement learning opportunities. The tutorial will cover a variety of topics that will help students develop the skills and tools required to secure placements that best match their interests. Students will gain insights into trends in the industry as well as research opportunities. The tutorial will consist of presentations, hands-on activities, and group exercises. This is in addition to the 20 full-course degree requirements. There are no additional fees associated with this tutorial.

Successful completion of this tutorial is a prerequisite for the co-op work terms (COMP090).

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>COMP090</td>
<td>Environmental Science Co-op Work Term</td>
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</table>

Work terms are an integral part of the co-op structure. Practical work experience in a related field is alternated with study terms to enhance academic studies and develop professional and personal skills. Work term reports are required at the completion of each work term. Continuation in the co-op programme is based on a student's ability to meet both the academic and work term requirements. To be eligible for work term, students must be in good standing in the programme and have completed at least 10 F.C.E.'s. Students are eligible for one summer and one non-summer placement (either the fall or winter term). Students are expected to take course credits in either the year preceding or following their non-summer work term. Course credit of 0.5 F.C.E. is granted for each four-month period. Work term credits are in addition to the 20 full-course degree requirements and are graded on a Credit/No Credit system. There are no additional course fees for work terms.

| Specialist Programme in Environmental Science |

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<tr>
<th>Supervisors: W. Gough (387-7245)</th>
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This programme is a response to strong student interest in Environmental Issues and the new attitudes and demands within society. It has a firm base in the traditional environmental disciplines, that is, the earth, atmospheric and ecological sciences, but is built on an excellent grounding in the fundamental sciences of biology, chemistry, mathematics and physics. The acquisition of practical skills through extensive field and laboratory experience is emphasized. The programme is integrated in nature with a common core extending through all years of study. All students take specialist streams: a broadly based study of Environmental Systems, and two more narrowly based studies of Environmental Biology and Environmental Chemistry. A list of suggestions for elective courses can be obtained from the Supervisor of Studies.

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<tr>
<th>Environmental Systems Stream</th>
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<td>Advisor: W. Gough (387-7245)</td>
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<tr>
<td>Year 1:</td>
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<td>ESSA06H Introduction to Environmental Science</td>
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<td>ESSA06H Introduction to Planetary Earth</td>
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<td>BOY10Y Introductory Biology</td>
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<td>Year 2:</td>
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<td>ESSC11H Marine Systems</td>
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<td>ESSC11H The Great Lakes</td>
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<td>Year 3:</td>
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<tr>
<td>ESSC11H Urban Environmental Problems of the Greater Toronto Area</td>
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<td>BOY10Y Introduction to Scientific Computing</td>
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EES105H Environmental Science

MINOR PROGRAMME IN ENVIRONMENTAL SCIENCE
Advisor: A. G. Price (287-7237)

Total requirements: 4.0 P.C.E.

The Minor Programme is designed to provide an insight into the basic principles of Environmental Science and its application to current environmental issues of importance to society. It is intended for students with an interest in environmental issues but who do not have the necessary background for specialization in the field. It is appropriate for students pursuing a three year degree in science or those pursuing a four year degree in the social sciences or in management and economics.

Year 1:
- EES101H Introduction to Environmental Science
- EES102H Contaminant Hydrogeology
- EES104H General Chemistry
- EES105H Microbiology
- EES106H Environmental Impact Assessment

Year 2:
- EES111H Principles of Environmental Chemistry
- EES112H Principles of Aquatic Ecology
- EES113H Principles of Terrestrial Ecosystems
- EES114H Principles of Analytical Instrumentation
- EES115H Principles of Aquatic Ecology

Year 3:
- EES121H Topics in Biophysical Chemistry
- EES122H Intermediate Organic Chemistry
- EES123H Environmental Impact Assessment
- EES124H Ecology and Evolutionary Biology
- EES125H Advanced Environmental Hydrology

Year 4:
- EES131H Environmental Impact Assessment
- EES132H Principles of Aquatic Ecology
- EES133H Principles of Terrestrial Ecosystems
- EES134H Principles of Analytical Instrumentation
- EES135H Advanced Environmental Hydrology

Year 5:
- EES141H Topics in Biophysical Chemistry
- EES142H Intermediate Organic Chemistry
- EES143H Environmental Impact Assessment
- EES144H Ecology and Evolutionary Biology
- EES145H Advanced Environmental Hydrology

Total requirements: 7.0 P.C.E.

The Major Programme is designed to provide an excellent background in the basic principles of Environmental Science and its application to current environmental issues of importance to society. It is intended for students with an interest in environmental issues but who do not wish to specialize in the field. It is appropriate for students pursuing a three year degree or those pursuing a four year degree with more than one area of specialization (e.g., Biology, Chemistry, Physics, International Development Studies, Society and Environment).

Year 1:
- EES101H Introduction to Environmental Science
- EES102H Contaminant Hydrogeology
- EES104H General Chemistry
- EES105H Microbiology
- EES106H Environmental Impact Assessment

Year 2:
- EES111H Principles of Environmental Chemistry
- EES112H Principles of Aquatic Ecology
- EES113H Principles of Terrestrial Ecosystems
- EES114H Principles of Analytical Instrumentation
- EES115H Principles of Aquatic Ecology

Year 3:
- EES121H Topics in Biophysical Chemistry
- EES122H Intermediate Organic Chemistry
- EES123H Environmental Impact Assessment
- EES124H Ecology and Evolutionary Biology
- EES125H Advanced Environmental Hydrology

Year 4:
- EES131H Environmental Impact Assessment
- EES132H Principles of Aquatic Ecology
- EES133H Principles of Terrestrial Ecosystems
- EES134H Principles of Analytical Instrumentation
- EES135H Advanced Environmental Hydrology

Year 5:
- EES141H Topics in Biophysical Chemistry
- EES142H Intermediate Organic Chemistry
- EES143H Environmental Impact Assessment
- EES144H Ecology and Evolutionary Biology
- EES145H Advanced Environmental Hydrology

Total requirements: 7.0 P.C.E.

Minor Programme in Environmental Science
Advisor: A. G. Price (287-7237)

Total requirements: 4.0 P.C.E.

The Minor Programme is designed to provide an insight into the basic principles of Environmental Science and its application to current environmental issues of importance to society. It is intended for students with an interest in environmental issues but who do not have the necessary background for specialization in the field. It is appropriate for students pursuing a three year degree in science or those pursuing a four year degree in the social sciences or in management and economics.

Year 1:
- EES101H Introduction to Environmental Science
- EES102H Contaminant Hydrogeology
- EES104H General Chemistry
- EES105H Microbiology
- EES106H Environmental Impact Assessment

Year 2:
- Any 1.5 P.C.E. from the following:
  - EES121H Topics in Biophysical Chemistry
  - EES122H Intermediate Organic Chemistry
  - EES123H Environmental Impact Assessment
  - EES124H Ecology and Evolutionary Biology
  - EES125H Advanced Environmental Hydrology

Year 3:
- 1.5 P.C.E. of the remaining EES courses of which 1.0 P.C.E. must be at the C- or D+ level.

Minor Programme in Environmental Science
Advisor: A. G. Price (287-7237)

Total requirements: 7.0 P.C.E.

The Major Programme is designed to provide an excellent background in the basic principles of Environmental Science and its application to current environmental issues of importance to society. It is intended for students with an interest in environmental issues but who do not wish to specialize in the field. It is appropriate for students pursuing a three year degree or those pursuing a four year degree with more than one area of specialization (e.g., Biology, Chemistry, Physics, International Development Studies, Society and Environment).

Year 1:
- EES101H Introduction to Environmental Science
- EES102H Contaminant Hydrogeology
- EES104H General Chemistry
- EES105H Microbiology
- EES106H Environmental Impact Assessment

Year 2:
- EES111H Principles of Sedimentology and Stratigraphy
- EES112H Principles of Geomorphology
- EES113H Principles of Clastic Sedimentology
- EES114H Principles of Hydrology
- EES115H Principles of Soil Science

Year 3:
- EES121H Principles of Sedimentology and Stratigraphy
- EES122H Principles of Geomorphology
- EES123H Principles of Clastic Sedimentology
- EES124H Principles of Hydrology
- EES125H Principles of Soil Science

Year 4:
- EES131H Principles of Sedimentology and Stratigraphy
- EES132H Principles of Geomorphology
- EES133H Principles of Clastic Sedimentology
- EES134H Principles of Hydrology
- EES135H Principles of Soil Science

Year 5:
- EES141H Principles of Sedimentology and Stratigraphy
- EES142H Principles of Geomorphology
- EES143H Principles of Clastic Sedimentology
- EES144H Principles of Hydrology
- EES145H Principles of Soil Science

Total requirements: 7.0 P.C.E.

Minor Programme in Environmental Science
Advisor: A. G. Price (287-7237)

Total requirements: 4.0 P.C.E.

The Minor Programme is designed to provide an insight into the basic principles of Environmental Science and its application to current environmental issues of importance to society. It is intended for students with an interest in environmental issues but who do not have the necessary background for specialization in the field. It is appropriate for students pursuing a three year degree in science or those pursuing a four year degree in the social sciences or in management and economics.

Year 1:
- EES101H Introduction to Environmental Science
- EES102H Contaminant Hydrogeology
- EES104H General Chemistry
- EES105H Microbiology
- EES106H Environmental Impact Assessment

Year 2:
- Any 1.5 P.C.E. from the following:
  - EES121H Topics in Biophysical Chemistry
  - EES122H Intermediate Organic Chemistry
  - EES123H Environmental Impact Assessment
  - EES124H Ecology and Evolutionary Biology
  - EES125H Advanced Environmental Hydrology

Year 3:
- 1.5 P.C.E. of the remaining EES courses of which 1.0 P.C.E. must be at the C- or D+ level.

Environmental Science

Environmental Hazards
An investigation of the geologic, biological, and physical processes that operate at the Earth's surface. Topics include: weathering, erosion, sedimentation, hydrology, and the mechanics of environmental transport and deposition of mass by rivers, winds, glaciers, and ice caps. Prerequisite: EES105H. 4.0 P.C.E.

Environmental Science

Environmental Hazards
An investigation of the geologic, biological, and physical processes that operate at the Earth's surface. Topics include: weathering, erosion, sedimentation, hydrology, and the mechanics of environmental transport and deposition of mass by rivers, winds, glaciers, and ice caps. Prerequisite: EES105H. 4.0 P.C.E.

Environmental Science

Environmental Hazards
An investigation of the geologic, biological, and physical processes that operate at the Earth's surface. Topics include: weathering, erosion, sedimentation, hydrology, and the mechanics of environmental transport and deposition of mass by rivers, winds, glaciers, and ice caps. Prerequisite: EES105H. 4.0 P.C.E.
Field excursions and laboratory exercises will allow students to apply theory to natural systems and to understand the dynamics of one mass-modified geomorphic system. Two hour lecture every week and a two hour practical every other week.

Exclusions: [GGR206]
Prerequisites: [EESA40H1] & [EESA40H2] (GGR206)
AG: Price

**EESA352H1 Principles of Soil Science**
A study of the processes of pedogenesis and the development of diverse soil profiles, their field relationships and their response to changing environmental conditions. An examination of the fundamental soil properties of importance in soil management. As introduction to the techniques of soil examination in the field, soil analysis in the laboratory and the basic principles of soil classification.
Two hour lecture and two hour practical every other week.
Exclusions: [GGR230], [GGR385]
Prerequisites: Any A level course in Environmental Science or IESO29H T/R.

**EESA353H1 Deformation of Earth Materials**
Local, regional and plate tectonic stresses, earth material deformation and failure. Principles of geotechnics. Geotechnical influences on rock behaviour, controls on important earth processes such as folding, faulting and mass wasting. Geological structures observed at field sites in Ontario, and interpreted from geological maps, reveal the history of earth movements in the area. Insights into how earth materials might behave in the future under changing stress conditions.
Two hour lecture every week and a three hour practical every other week.
Prerequisites: [EESA40H1] or [EESA40H2] (EESA353H1)
K. Howard & N. Eyles/I. Westgate

**EESA354H1 Earth Materials**
Introduction to minerals and rocks, including their physical and chemical properties, classification, origin and use. Laboratory exercises will emphasize examination and identification of minerals and rocks in hand specimens.
Two hour lecture and two hour practical every week.
Exclusions: [EESA11H] & [EESA12H]
Prerequisites: [EESA40H1] & [EASA40H2]
J. Westgate

**EESA355H3 Remote Sensing & Geographic Information Systems**
Fundamentals of GIS and remote sensing: spatial data types, data capture, data input and output formats, georeferencing and coordinate systems, spatial analysis techniques, recently sensed image analysis and map production.
Application of GIS technology to "real-world" situations and to regional and global environmental problems using multiple datasets will be demonstrated.
External hands-on experience with GIS software (ArcView, Windows, Geodatix, Flood-Seg), other time permit and various hardware devices (e.g., digitizer, printer, etc.).
Two hour lecture and two hour practical every week.
Prerequisites: [EESA40H1] & 1.5 F.C.E.'s in 6 or C-level EES courses.
M. Doughty

**EESA356H1 Biogeoigraphy and Biodiversity**
Theoretical and practical aspects of the diversity of animal form and function, together with examination of the distribution patterns of representative taxa.
This course will familiarize students with the diversity of animal life and how this is organized for scientific study. Much of the course will be concerned with invertebrate animals, as it is amongst their phylog that the vast majority of the structural and functional diversity of organisms lies. Information on important animal groups and their evolution will be set in the context of past and present global distribution patterns. Coverage will begin with consideration of the evolution of diversity in a functional context. Subsequent topics will include the major biomes (marine and terrestrial), continental drift, dispersal, endemism, concepts of abundance and rarity, comparison of the biota of continents and islands, and the fundamental influence of climate. Important biological processes to be studied will include adaptation, speciation, colonization and extinction. The course will conclude with discussion of the invasive role of mink in shaping modern biogeography.
Two hour lecture and three hour practical per week.
Exclusions: [BIOL329]
Prerequisites: [BIOG30Y] (BIOG30Y) or [EESA40H1] & any 0.5 F.C.E.'s B- or C-level Biology or Environmental Science courses.
D.D. Williams

**EESA357H3 Groundwater**
Groundwater represents the world's largest and most important fresh water resource. This course covers the fundamentals of hydrogeology and introduces the principles of groundwater flow and aquifer storage. Through a review of how a knowledge of these fundamental tools is essential for effective groundwater resource management and protection. Special emphasis is placed on the practical methods of resource exploration and assessment; examples of the approaches are given for aquifers under environmental stress in southern Ontario, the US and Africa.
Four hour lecture per week.
Prerequisites: [EESA353H1] and 1 F.C.E. in a B-level EES courses.
K. Howard

**EESC1103H Environmental Impact Assessment**
A study of the relevant legislation, qualitative and quantitative approaches and applications for environmental impact assessments.
Emphasis on the assessment of impacts on the natural environment, as well as socio-economic impacts. Examples and case studies from forestry, biology and land use.
Two hour lecture and one hour practical per week.
Exclusions: GGR393, IES120, GGR401
Prerequisites: 2.5 F.C.E.'s in EES courses, or permission of the instructor.
D. Puntar

**EESC1503H Research Seminar in Environmental Science**
Concepts and methods developed in Environmental Science will be applied to practical environmental problems, within the framework of individual or group projects; a research proposal and a research seminar will be produced. The course is also designed to encourage interaction between students from disparate streams of environmental science through participation in joint seminars with faculty and other environmental practitioners from the community at large.
Three hour lecture per week.
Prerequisite: Permission of co-ordinator.
Coordinator: B. Greenwood

**EESC1104H Field Camp I**
Designed to familiarize the student with field work in the Earth Sciences. Many environmental problems can only be assessed by collecting geological and other data in the field.
This course is designed for students in the Environmental Systems Stream, but students in other streams may register. The course is normally offered in the third week of May or June, and is in coop co-operation with the Earth Sciences.
The camp will be held in alternate years in the Kawarthas (May) or the Rocky Mountains (September).
Prerequisites: [EESA30H3] or [EESA40H1] and 1.5 F.C.E. in any B-level EES course.
N. Eyles/K. Howard

**EESC1003H Marine Systems**
Telephone ID # 3631983
The world's oceans contain more than 70% of the earth's surface environments. This course will introduce students to the dynamics of oceans environments, ranging from the deep ocean basins to marginal seas to the coastal.
Environmental Science

ES52893 Late Cenozoic Environments
The record of global climate change during the last three million years as evidenced in terrestrial and marine sedimentary rocks and ice-cores recovered from the Antarctic and Greenland Ice Sheets, the hemispheric fossil record and the palaeoenvironmental contexts. Methods used in palaeo-environmental research, including a survey of appropriate dating techniques. Two hour lecture and one hour practical every week.
Exclusion: FN5204
Pre-requisite: ES52991
Corequisite: ES52901
W. Gough/B. Greenwood

ES52903 Soil Erosion Control
Two hour lecture every week and one two hour practical every other week.
Exclusion: FN5203
Pre-requisite: ES5204 or ES5205
Recommended Course: ES52901
R.B. Bryan

ES52913 Urban Environmental Problems of the Greater Toronto Area
Urban areas such as the GTA are the focus of many environmental problems such as the disposal of solid and liquid wastes, and the contamination of soil, air and water by industrial activity. Specific cases of such problems drawn from the GTA will be reviewed, with reference to field investigations and environmental audits, due diligence and liability, and remedial solutions. Students will carry out their own field investigations and will report on specific issues, paying particular regard to government regulations and guidelines set up by regulatory agencies. This course is essential to students in the environmental science, public health, but is also directly relevant to business and management students.
Two hour lecture and one hour practical per week.
Exclusion: ES52404
Pre-requisite: 10 P.C.E.'s in an EES programme, or permission of the instructor.
N. Eyles

ES52915 Climate Change
Climate change is studied first from a palaeoclimatic perspective, by examining the climate record and theoretical frameworks explaining climate variability, orbital forcing, chaos theory, and the Gaa hypothesises are critically assessed. The second approach is to examine the simulation of climate change, particularly anthropogenically induced changes. Potential impacts of global warming are explored. Two hour lecture and one hour practical per week.
Exclusion: GGR006
Pre-requisite: ES52903 (GGR03)
W. Gough

ES52933 Fluid Flow II
This field camp will familiarize students with several geological settings and modern environments.
Designated for students in the Environmental Systems stream, but students in other environmental streams may register. The course is normally taken at the end of 2nd Year (May) or just before the beginning of the 2nd Year (September) in conjunction with ES52914. The camp is held in alternate years in Costa Rica (May) or the Rocky Mountains (September).
Limit enrolment: 15
Pre-requisite: ES52404 and permission of the instructor
K. Novak and K. Eyles

ES52934 Research Project in Environmental Science
The design, implementation, and reporting of a substantial research project involving laboratory and fieldwork. Existing faculty research allows a broad range of possible topics. The course should be undertaken after the end of the 2nd Year, subject to faculty availability. Early permission and supervision is required, open only to those students who have either completed or are undertaking specialist courses in the area of intended study. Students having a B+ or higher standing may be eligible for summer financial support from research projects. Permission of the co-ordinator must be obtained.
Exclusion: GL5240, GL5241
GGR008, GL5242, GL5244
Pre-requisite: ES52915
Coordinator: B. Greenwood

Environmental Science

COURSES NOT OFFERED 2000/2001

ES52104 Introduction to Geophysics
Exclusion: ES52130
Pre-requisite: ES52904 (GGR04) or permission of the instructor

ES52105 Environmental Geosciences and Law
Pre-requisite: 1.5 F.C.E.'s from the Environmental Science Programme or permission of the instructor

ES52106 Glacial and Periglacial Geomorphology
Exclusion: GL5260, GL5232
Pre-requisite: ES52101

ES52107 Physical Oceanography and Limnology
Pre-requisite: MAT125Y or PHY1101 or PHY131Y

ES52108 The Great Lakes: A Landscape System
Pre-requisite: ES52102
Recommended Course: ES52105

ES52204 Environmental Geophysics and Subsurface Exploration Techniques
Exclusion: ES5204
Pre-requisite: ES5201
Corequisite: ES5201
Software: ES52105

ES52302 Process Hydrology
Exclusion: GGR097
Pre-requisite: ES52303 (GGR093) or ES52305

ES52313 Groundwater Risk Assessment
Pre-requisite: ES5201 or permission of the instructor

ES52404 Terrace Environments and the Contaminant Environments
Pre-requisite: CHM5551 or CHM5552

ES52406 Cleaning Up Our Mess: Rivers of Terrestrial and Aquatic Environments
Pre-requisite: CHM5551 or CHM5552

ES52501 Fundamentals of Biological Science
Exclusion: GL5241
Pre-requisite: ES52904 (GGR04) and Permission of the instructor

ES52504 Introduction to Environmental Science
Pre-requisite: ES52904 (GGR04)
French

French (B.A.)

Faculty List
C. Berthieu-Stepanian, L.L.L. (Paris), Ph.D. (Wayne State); Professor Emeritus
L.B. Docteur, B.A. (London), Ph.D. (Brown); Professor Emeritus
S. Mitton, M.A. (Toronto), Ph.D. (Strasbourg); Associate Professor
P. Magnier, M.A. (Lyon), Ph.D. (Clemson); Senior Lecturer

Disciplinary Representative: T.B.A.
Supervisor of Studies: S. Mitton
Supervisor of Study Elsewhere: V. Maguire (287-7143)

Studies in French allow for a wide range of interests: the enhancement of practical language skills, including translation, pronunciation and business French (R66, R1A, R4B, C09, C16); the study of how the language is structured (B25) and how it evolved and spread beyond the borders of France (C24, C43); the development of approaches to the teaching of French (G30, C11); and the exploration of the rich literature and cultures of French Canada, France and other parts of the francophone world.

The following programmes are offered at University of Toronto at Scarborough: a Minor Programme in French, a Minor Programme for francophone students; a Major in French with four streams (French Studies, International French Studies, French and Business, French and the Arts); a Joint Specialist Programme in Management and Language (see: Management); and the Specialist Programme: Education of Teachers in French. (The Specialist Programme in French, the Major Programme in French Language and Literature and the Major Programme in French Language are no longer offered. Students already enrolled in one of these programmes will be able to continue it, please consult the Supervisor of Studies for further information.)

French studies normally begin with FREA10, Language Practice 1, which serves to consolidate previous knowledge, and is the prerequisite for more advanced courses in all areas. FREA10 is designed primarily for students with OAC French or equivalent competence. Those who have significant "immersion" or "enriched" high school experience, or who have native or nearnative ability in French, should consult the faculty member responsible for FRED18 or FRED19 about the appropriate entry course(s). Students without OAC French or equivalent are urged to study at FRED12Y (the equivalent of FREA1073). Note that the Language Practice courses A10, B10, and C10 must be taken in sequence. Normally, an A-level FKE course should not be taken at the same time as, or after, a B-level FKE course. (This does not apply to FRED10V.) Please do not hesitate to consult Programmes Supervisors and other faculty members for further advice about course selections and programmes.

The College’s Study Elsewhere Programme offers ideal opportunities for students of French to earn academic credit while studying in another province or country. For further information about this programme and about Letters of Permission, please refer to “Study or Other Universities” in this calendar, and consult the Supervisor of Study Elsewhere.

French Studies with OAC French who seek Semester Study Programme courses prior to attending U of T, must see the Supervisor of Study Elsewhere during the first week of classes. After August 15, the Supervisor of Study Elsewhere will advise the student to check the online course level to which they are admitted. Failure to seek advice at that time may result in a loss of credit to which the student is entitled.

Students who consult the Supervisor of Studies about possible exclusions if they are considered as non-French-speaking students in the Fachy of Arts and Science (St. George or Erindale campus). Failure to do so may leave the student short a course for degree credit and thus delay graduation and increase tuition fees.

Note that a few of our courses (see: FRED83, FRED84, FRED84B and FRED86) are offered in English readings and assignments for these courses are done in French to earn full credit toward a French programme, and in English by those who wish general credit toward a degree.

SPECIALIST PROGRAMME: EDUCATION OF TEACHERS IN FRENCH

Co-ordinator: P. Magnier

This four-year programme is designed and offered jointly by the Division of Humanities, University of Toronto at Scarborough, and the Institute for Studies in Education/University of Toronto (OSIE) in order to meet the need for teachers of French at all levels in the school system: primary/elementary, junior/senior high and intermediate/secondary. It provides a comprehensive education for those planning to continue their studies at the Faculty of Education (OSIE) (U. of T.) as well as for anyone broadly interested in the teaching of French as a second language. Emphasizing both content and methodology, it includes academic courses in French and other subjects as well as practical placements. There are two kinds of practicum placements: 1) those that take place within the context of courses, FRED10H and FRED11PS1 and 2) those, independent of courses, that take place in elementary and secondary schools during years 3 and 4.

Students are admitted to the programme on the basis of their overall performance in first year AND their performance in FKE courses. Students who successfully complete this programme of studies and who meet the admission requirements of the Ontario Institute for Studies in Education/University of Toronto (OSIE) will be admitted to that institute. Up to 20 students will be selected for this programme each year. Several bursaries are available for study in France or Quebec. For further information please consult the Supervisor of Studies.

This Specialist Programme must complete a total of 30 courses chosen from the two main categories below.

A. Ten full-course equivalents in French as follows:

1. Three full-course equivalents consisting of: FRED10Y, FRED105 and FRED107 (except for French Students in the Faculty of Arts and Science (St. George or Erindale campus)). Failure to do so may leave the student short a course for degree credit and thus delay graduation and increase tuition fees.

Note that a few of our courses (see: FRED83, FRED84, FRED84B and FRED86) are offered in English readings and assignments for these courses are done in French to earn full credit toward a French programme, and in English by those who wish general credit toward a degree.

B. Ten full-course equivalents in literature which must include: one full-course equivalent in French Canadian literature; one full-course equivalent in French literature (FRED83Y can fulfill this requirement); one half-course in French literature from other parts of the

French-speaking world including France and Canada. NOTE: French courses taught in English cannot count towards this requirement.

C. PREBC11 and PREBC11H. PREBC11H ideally should be taken in second year to avoid timetable conflicts which might arise as a result of trying to schedule the practicum component of the course. (All of these courses are described in detail below.)

6. Further full-course equivalents:

Students are advised to choose courses to suit the teaching programme and the teaching subjects in which they are interested. Information and advice will be available through the Programme Co-ordinator at Scarborough and through counselling at the Ontario Institute for Studies in Education/University of Toronto (OSIE). The following are recommended as general preparatory for the Ontario Institute for Studies in Education/University of Toronto (OSIE).

a. A half-course in educational psychology
b. A half-course in language acquisition

course(s) in language acquisition are recommended for a half-course to develop computer skills.

Practicum requirement

All programmes require students to complete a practicum in their fourth year. The practicum is offered in local elementary and secondary schools.

MAJOR PROGRAMME IN FRENCH

The Major programme in French provides a strong foundation of language study, with an opportunity for students to specialize in order to meet the needs of the professional world. The Major Programme in French is designed for students who wish to complete seven full-course equivalents. The course requirements include:

1. FRED10Y and FRED107 (except for French Students in the Faculty of Arts and Science (St. George or Erindale campus)). Failure to do so may leave the student short a course for degree credit and thus delay graduation and increase tuition fees.

2. Further full-course equivalent in literature in a language other than French.

MINOR PROGRAMME IN FRENCH FOR FRANCOPHONES

Supervisor: S. Mitter

Students wishing to complete a minor in French (note: it is not possible to complete a minor or courses in French outside the University of Toronto) should consult with their College Adviser. Students should complete four full-course equivalents in French, excluding FREN10Y, FREN10Y and 2000 level courses.

FREN10Y Language Practice I
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN20Y Language Practice II
A continuation of FREN10Y.

FREN30Y Language Practice III
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN40Y Language Practice IV
A continuation of FREN30Y.

FREN10Y3 Practical Translation
Texts from fields such as literature, business, politics, law, science and technology, art, and advertising will be translated, analyzed, and discussed in terms of type of language and style of expression. Class time is devoted to increasing the student's proficiency, based on the many types of differences between French and English.

FREN10Y4 Language Practice I
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN20Y4 Language Practice II
A continuation of FREN10Y4.

FREN30Y4 Language Practice III
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN40Y4 Language Practice IV
A continuation of FREN30Y4.

MINOR PROGRAMME IN FRENCH

Supervisor: S. Mitter

Students should complete four full-course equivalents in French, excluding FREN10Y, FREN10Y and 2000 level courses.

FREN10Y Language Practice I
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN20Y Language Practice II
A continuation of FREN10Y.

FREN30Y Language Practice III
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN40Y Language Practice IV
A continuation of FREN30Y.

MINOR PROGRAMME IN FRENCH FOR FRANCOPHONES

Supervisor: S. Mitter

Students wishing to complete a minor in French (note: it is not possible to complete a minor or courses in French outside the University of Toronto) should consult with their College Adviser. Students should complete four full-course equivalents in French, excluding FREN10Y, FREN10Y and 2000 level courses.

FREN10Y Language Practice I
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN20Y Language Practice II
A continuation of FREN10Y.

FREN30Y Language Practice III
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN40Y Language Practice IV
A continuation of FREN30Y.

MINOR PROGRAMME IN FRENCH

Supervisor: S. Mitter

Students should complete four full-course equivalents in French, excluding FREN10Y, FREN10Y and 2000 level courses.

FREN10Y Language Practice I
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN20Y Language Practice II
A continuation of FREN10Y.

FREN30Y Language Practice III
Reaffirmation and development of the language skills—listening, reading, writing, and speaking—necessary for higher-level courses.

FREN40Y Language Practice IV
A continuation of FREN30Y.
FREN3040 The Literature of French Canada I: To 1960
Representative novels, plays and poetry since 1860.
Intended for the general student of French as well as the specialist. A discussion-seminar course, with various options for evaluating individual student performance. Special attention is paid to the historical, cultural, and political context in which literature has evolved in French Canada. Exclusions: FREN308F, FREN390, FREN210, FREN310
Prerequisite: FREN101Y
Corequisite: FREN40Y or FREN500H or permission of the instructor T.B.A.
Not offered: 2001/2002

FREN3710 The Literature of French Canada II: Since 1960
Representative novels, plays and poetry since 1960.
Intended for the general student of French as well as the specialist. A discussion-seminar course, with various options for evaluating individual student performance. Special attention will be paid to the political and social context in which recent literature has evolved. Exclusions: FREN218, FREN259, FREN312
Prerequisite: FREN101Y
Corequisite: FREN40Y or FREN500H or permission of the instructor T.B.A.
Not offered: 2001/2002

FREN3800 The 20th-Century French Novel
A study of representative French novels from 1900 to the present. Following a general historical and aesthetic introduction to the course, works by representative novelists will be studied in their own right and in relation to the society which produced them. Themes, which will comprise both lectures and seminar discussions, will be conducted in French. Exclusions: FREN380F, FREN390, FREN267, FREN258
Prerequisite: FREN101Y or equivalent
Corequisites: FREN40Y or FREN500H or permission of the instructor T.B.A.
Not offered: 2001/2002

FREN4043 Aspects of Folklore, Myth and the Fantastic in the French-Speaking World
A study of symbolism and the imagined/imaginative in France and the francophone world. The course will explore the lively imaginations and belief systems to be found in a broad selection of francophone communities.

Myths and folk tales of North and West Africa, Europe, and other regions will be examined in relation to cultural interpretations of, for instance, life, death, family, attractiveness and unattractiveness, wealth, happiness, innovation, the individual in society, and attraction to and fear of the miraculous or exotic.

Lectures and discussions will be in English and film materials provided with subtitles. Students wishing credit in French programmes will be required to do the readings, paper(s), tests, and final examination in French. Exclusions: None
Prerequisite: FREN101Y for students enrolled in French programmes or three full A-level courses or permission of the instructor
S. Motier
Not offered: 2001/2002

FREN5050 Exercise in Interpreting
A course for students preparing to use oral French for job and other contact-related purposes.
Starting from the premise that second-language students use primary language as a reference point, small groups will work in class in "oral-disc" situations (e.g. legal cases, social work, immigration, actual business meetings, professional conferences). The focus will be on retention, accuracy of expression, lexical correctness, cultural "telomatism" and speed of delivery.
Enrollment limit: 10
Prerequisite: FREN101H or permission of the instructor
S. Motier

FREN101Y Language Practice III
The purpose of the course is to improve the student's written, listening and oral skills.
The course will focus on acquiring the appropriate means of expression through practical tasks, writing compositions, conversations, analysis, reading, and discussion of recorded material, articles, and films.
Prerequisite: FREN101Y or equivalent
P. Bruger
Offered: 2001/2002

FREN111H Teaching French as a Second Language
A study of current theories of language teaching and learning and their application to the teaching of French as a second language. Topics include communicative competence, traditional and innovative methods and approaches, and the development of teaching materials.

FREN114H Teaching French as a Second Language
A study of current theories of language teaching and learning and their application to the teaching of French as a second language. Topics include communicative competence, traditional and innovative methods and approaches, and the development of teaching materials.

FREN117H Teaching French as a Second Language
A study of current theories of language teaching and learning and their application to the teaching of French as a second language. Topics include communicative competence, traditional and innovative methods and approaches, and the development of teaching materials.

FREN161H Translation for Business and Professional Needs
A continuation of FREN11, devoted to the study of the French language in a commercial, professional, and technical context. Through class practice in translating from French to English and English to French, students will have the opportunity to widen their knowledge of the vocabulary and structures particular to the language of business as well as to such fields as legal services, social work, health care, industrial relations, insurance, and software.
Class work is directed toward increasing the student's proficiency. Evaluation will be based on class participation and a series of in-class tests.
Exclusions: FREN480F, FREN481
Prerequisite: FREN1010 or FREN11 or equivalent
S. Motier

FREN204H General History of the French Language
A study of the nature and patterns of change in the French language, from its origins to Modern French.
This course will follow the chronological development of French from its beginnings in Latin, and the influence of historical events and of contact with other languages. Attention will be given to social and regional variations in Modern French, and to the role of the language in many parts of the world beyond the borders of France.
Exclusions: FREN214H, FREN273
Prerequisite: One B-level course in the group FREN10-FREN111, except FREN17 & FREN18 or permission of the instructor
T.B.A.
Not offered: 2001/2002

FREN210H

FREN212H

FREN214H

FREN216H

FREN218H

FREN217H

FREN219H

FREN220H

FREN222H

FREN224H

FREN226H

FREN228H

FREN230H

FREN232H

FREN234H

FREN236H

FREN238H

FREN240H

FREN242H

FREN244H

FREN246H

FREN248H

FREN250H

FREN252H

FREN254H

FREN256H

FREN258H

FREN260H

FREN262H

FREN264H

FREN266H

FREN268H

FREN270H

Theoretical and practical methods of approach. The material studied should bear a clear relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in regular courses. In applying to a faculty supervisor, students should be prepared to present a brief written statement of the topic they wish to explore. Final approval of the project rests with the French Discipline.
Students are advised that they must obtain consent from the supervising instructor before registering for these courses. Interested students should contact the Discipline Representative or Supervisor of Studies for guidance.
Prerequisite: One-B level course in the group FREN10-FREN111, except FREN17 & FREN18. Offered every year

COURSES NOT OFFERED 2000/2001

FREN214H Introduction to French Linguistics
Exclusion: FREN227
Prerequisite: FREN101Y or equivalent

FREN216H 20th-Century France
Exclusion: FREN213
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN217H The Francophone World
Exclusions: FREN252, FREN233
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN220H Francophone Literature
Exclusions: FREN224, FREN252
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN222H Francophone Literature
Exclusions: FREN224, FREN252
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN230H The Francophone World
Exclusions: FREN224, FREN252
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN234H Francophone Literature
Exclusions: FREN224, FREN252
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN236H Francophone Literature
Exclusions: FREN224, FREN252
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN238H Francophone Literature
Exclusions: FREN224, FREN252
Prerequisite: FREN101Y or equivalent or permission of the instructor

FREN240H Theoretical and Practical Phonetics
Exclusions: FREN227
Prerequisite: FREN101Y or equivalent

FREN242H The Cenic Tradition in France
Exclusions: FREN101, FREN206, FREN207, FREN256
Prerequisite: FREN101Y for students enrolled in a French programme or three full A-level courses for others or permission of the instructor
Geography

(B.A.)

Faculty List
J.R. Blackman, B.A. (Queens); M.A. (Penn); M.Sc., Ph.D. (Toulouse), Professor
E. Rippl, B.A. (Toronto); Ph.D. (McMaster), Professor
M.F. Bunn, B.A. (Ph.D. Sheffield), Associate Professor

Discipline Representative of Supervisor of Studies: John Mirrlees

Geography is a broad-ranging subject. As a social science it is concerned with the spatial patterns of human activity and the character of regions and places. It is a subject which is excellently placed to explore the complex relationships between society and the natural environment as well as the social and economic problems of human land use and settlement. It requires complementarity between programmes such as: Sociology and Environmental Science, Political Science, Sociology, Anthropology, Economics for Management Studies and Development Studies. Geography courses are also listed as options in several college programmes including Society and Environment and the Co-operative Programme in International Development.

MINOR PROGRAMME IN GEOGRAPHY

The requirements for this Programme are four full-course equivalences in Geography which must include one full-course equivalent at the C-level or above. ScGL01, SCGL02, and SCGL03 may be counted towards the requirements of this programme.

SOEAOY12 Global Processes and Change
An introduction to the patterns, processes and relationships that underlie current global trends. This course examines theories and mechanisms that can help us understand the environmental, economic and social changes that flow from globalisation, and how these affect the quality of human life and ecosystems at all scales. Emphasis will be placed on the sustainability of these changes. Two hours of lecture and one-hour tutorials per week. Exclusion: (GGR02), GGR107

SCGL0101 Geographic Information Systems (GIS) and Empirical Reasoning
This course is divided into three sections. In the first section, students review notions of theory and model, dependence and causation, induction and deduction, map as model, and the roles of space, place, location, and metrics in our understanding of social processes. In the second section of the course, students are introduced to basic gisography, the structuring of spatial data, sources and their geographic interpretation, GIS components, tools and applications, spatial data storage, and data accuracy. In the third section, students learn about empirical methods in spatial analysis and exploration. Two hours of lectures per week.

Exclusion: This is a first course in GIS. Students may not enrol in this course if they have already completed any other introductory-level course in GIS, e.g. EEC809, GCR107

J. Mirrlees

SOEAOY03 Environmental Conservation
The history and current status of environmental problems and conservation responses. The course deals with two major topics: the origins of environmental problems in the rise and subsequent global spread of industrial capitalism, and environmental conservation, movements, and policies. Themes include: changes in human-environment relations, trends in environmental problems, the rise of environmental awareness, ideologies of conservation and conservation, environmental activism and organizations, environmental policy and the local to the international scale, problems of sustainable development. Two hours of lectures per week.

Exclusion: GCR101, GCR233

SCGL0201 Planning in Canada
This course will delve into the understanding of the geographical nature of urban systems and the internal spatial patterns and activities in cities. Planning is the key to the North American experience, although some examples will be drawn from other regions of the world. The course will explore the location and growth of cities, explore the internal organization of cities, especially with regard to residential, social and economic activities, and shed light on the major issues and trends facing contemporary urban society. Two hours of lectures per week.

Exclusion: GCR124, SOEAOY12 or SOEAOY10 or alternative prerequisite with permission of the instructor

J. Bunn
underpinning of urban politics that structure and are used to legitimate particular urban political policies and practices. Topics will include the nature and organization of local government, the political powers of the property industry, big business, and community-based organizations. Throughout, emphasis will be placed on the ways in which the geography of the cities and local government have shaped, and been shaped by, urban political activity. The course will employ urban political literature published in North America and Britain.
Two hours of lecture per week.
Exclusions: GGR339
Prerequisites: GGR805
F.P.A.
GGR183H Urban Transportation Policy Analysis
This course examines current problems in urban transportation planning using policy analysis. Topics include setting of community goals, economic and social costs-benefit analysis, evaluation of redistributive impacts, impacts of transport projects on land values, mass transit subsidies, and regulation/deregulation. The course examines insights gained from contemporary empirical research.
Two hours of lectures per week.
Exclusions: GGR324
Prerequisites: University-level half-course in data analysis and one of ECON301, ECON302, GGR803, GGR806, GGR821, POL360 J. Mirvish
GGR230H Issues in Rural Development
An introduction to the key problems of rural areas in an industrialized world and associated development strategies. Particular attention will be paid to the underlying causes of rural poverty and disadvantage, to the rise of new economic realities in national development, and to the basic theories of rural development.
Two hours of lectures per week.
Prerequisite: IDS801 or SOE801 (GGR818) M. Holgate
GGR233H The Greater Toronto Area
Processes and issues of urban change, growth and planning in the Toronto region. Planning practices and proposals at the local level and the regional scale will be examined critically. Current trends in population, urban form and structure, and urban design in the Greater Toronto Area will be compared with other rapidly changing urban regions in North America and elsewhere.
Two hours of lecture per week.
Prerequisite: GGR805 E. Ralph
GGRD113H Supervised Research
A research project under the supervision of a member of faculty. Topics may be suggested by students or faculty, but in either case must be identified and approved by the intended supervisor in time to allow for possible field work in the summer prior to formal registration in the course. Progress discussions with the supervisor are expected. Research may be based on library or archival investigations, field studies, laboratory experiments, the analysis of censuses or other published data, or some combination of these. Evaluation will be based on (1) an extended proposal on progress report submitted on or before October 31; value 20 per cent of final grade. (2) A complete draft of the final report submitted on or before February 28; value 20 per cent of final grade. (3) A written report or dissertation of professional quality in its presentation, submitted on or before March 31; value 60 per cent of final grade. The final report will be evaluated by at least two members of faculty and the student may be asked to defend it at an oral examination. Students are advised that they must obtain consent from the supervising instructor before registering for this course.
Prerequisites: [Any fifteen full-course equivalents including at least five equivalents in Geography]
Staff
COURSES NOT OFFERED 2000/2001
GGR282H Location and Special Development Evaluation: GGR220
Prerequisite: ECON302 (EOCA02)
GGR285H Problems in Modern Agricultural Land Use
Prerequisite: GGR802 (GGR830) S. Amada
GGR318H Development and Planning of Metropolitan Regions
Prerequisites: one of ECON801, ECON860 (BCMB3001, ECON3041), GGR802, GGR806, GGR827
GGR413H Current Topics in Human Geography
Exclusion: ECON313
Prerequisite: GGR804 & one B-level full-course equivalent in Human Geography
GGR438H Social Geography
Prerequisite: GGR805 or another Social Science or Women's Studies B-level course with permission of the instructor.
GGR6107H Supervised Research
A research project under the supervision of a member of faculty. Topics may be suggested by students or faculty, but in either case must be identified and approved by the intended supervisor in time to allow for possible field work in the summer prior to formal registration in the course. Progress discussions with the supervisor are expected. Research may be based on library or archival investigations, field studies, laboratory experiments, the analysis of censuses or other published data, or some combination of these. Evaluation will be based on (1) an extended proposal on progress report submitted on or before October 31; value 20 per cent of final grade. (2) A complete draft of the final report submitted on or before February 28; value 20 per cent of final grade. (3) A written report or dissertation of professional quality in its presentation, submitted on or before March 31; value 60 per cent of final grade. The final report will be evaluated by at least two members of faculty and the student may be asked to defend it at an oral examination. Students are advised that they must obtain consent from the supervising instructor before registering for this course.
Prerequisites: [Any fifteen full-course equivalents including at least five equivalents in Geography]
Staff
COURSES NOT OFFERED 2000/2001
GGR282H Location and Special Development Evaluation: GGR220
Prerequisite: ECON302 (EOCA02)
GGR285H Problems in Modern Agricultural Land Use
Prerequisite: GGR802 (GGR830) S. Amada
GGR318H Development and Planning of Metropolitan Regions
Prerequisites: one of ECON801, ECON860 (BCMB3001, ECON3041), GGR802, GGR806, GGR827
GGR413H Current Topics in Human Geography
Exclusion: ECON313
Prerequisite: GGR804 & one B-level full-course equivalent in Human Geography
GGR438H Social Geography
Prerequisite: GGR805 or another Social Science or Women's Studies B-level course with permission of the instructor.

GGR805 E. Ralph

History
History

History (B.A.)

Faculty List
J.S. Muir, M.A., Ph.D. (Toronto), D.D. (Peabody, Divinity, Montreal), Professor Emeritus
E.W. Dewler, A.M. (Harvard), Ph.D. (London School of Economics, Professor, M. Ekstein, B.A. (Toronto), B.Phil., D.Phil. (Oxford), Professor
M. Gervers, M.A. (Petersham), Ph.D. (Toronto), Professor
J.R. Robertson, M.A. (McGill), Ph.D. (Toronto), Professor
L.J. Abrey, M.A. (McMaster) M.Phil., Ph.D. (Oxford), Associate Professor
P. Lacovia, M.A., Ph.D. (York, Canada), Associate Professor
J.L. Peirce, M.A., Ph.D. (Northwesterns), Associate Professor
A.N. Sheep, M.A., Ph.D. (Toronto), Associate Professor
S.J. Kochel, M.A., Ph.D. (Toronto), Assistant Professor
Discipline Representative: M. Ekstein (267-7148)
The study of history is intended to enhance our understanding of human society by examining the experiences of particular peoples and their societies in the past. Its findings depend upon the precise evaluation of specific evidence. History's concerns and goals are humanistic; its methods draw from all forms of scholarly endeavor. History courses, therefore, can play a part in a number of interdisciplinary programmes and can serve as an adjunct to courses in Politics, Philosophy, Literature, Economics, Sociology, and Anthropology. History can also be usefully combined with language study.

The History curriculum combines a variety of approaches and teaching in order to satisfy a number of purposes. HELA01Y provides both a general introduction to the study of history at the university level, and the preparation for further studies in World history. A series of survey courses (HIS805-895) provides a comprehensive foundation of knowledge in particular areas. At upper-level students investigate more specific areas, periods, or problems. D-series courses are conducted as seminars. In them students make close and thorough studies of particular questions and present their findings in discussions and major essays. There are courses at all levels in the following areas and periods of history: Medieval Europe, Modern Europe, Britain, Canada, America and the United States, Russia, Ancient Greece and Rome, Africa, Asia, and Latin America.

SPECIAL PROGRAMME IN HISTORY
Supervisor: A.N. Sheep (267-7133)
1 Number of Courses
Students must complete at least ten full-course equivalents in History. These ten must include HIS801Y (or HIS810Y) and five upper-level full-course equivalents (C/D-level courses on the Scarborough Campus, 300/400-level courses on the St. George Campus). At least one of the five must be a D-level course.
2 Pro-1315 Courses
Of the above two full-course equivalents must deal with the period prior to 1513.
3 Areas of Study
a. Students are also required to take courses at least three different area fields from the following groups:
   i. Latin American
   ii. African
   iii. Medieval
   iv. European
   v. Ancient Greek and Roman
b. Students must complete at least one course in Canadian History.
The Course Programme in the Humanities

The Course Programme in the Humanities has been withdrawn.

Every effort will be made to allow students who registered before September 1995 to complete it at this campus. Please consult with the Associate Chair in HSSC (287-7128).

CREDIT COURSES IN ENGLISH AS A SECOND LANGUAGE

HUMMA105Y Introduction to Canadian Culture and Society: A Course for Non-Native Speakers of English

A semester and lecture course designed to introduce students who speak English as a second language to a study of Canadian culture and society through guest lectures, non-fiction and fiction, with an emphasis on multicultural topics. Topics include: literature and non-fictional writing on Canadian English; English Canadianization; the new culture of technology; multiculturalism as an ideal, as a reality; equity issues. Evaluation is based on individual and team oral presentations, term papers, participation in class discussion, response to guest lectures, and ability to defend and relate arguments in speech and in writing. Limited enrollment: 30

Prerequisite: Permission of the instructor. Screening interview required, normally by May 1. Call 287-7142 for further details, or e-mail: humma105y@car.scar.utoronto.ca

HUMMA106Y Language and Power: A Course for Non-Native Speakers of English

An examination of the relationship between language and power in society. Students will analyze academic, political, media-inspired, cross-cultural, and post-colonial discourse in order to learn how language is used to establish power relations, to express ideology, and to accomplish a variety of other goals in everyday life. Course materials will be based on various types of real-life spoken and written communication in English, for example, conversations, academic discussions, and newspaper reports. In addition, students will be given the opportunity to strengthen their own academic speaking and writing skills through their present participation, class discussions, and written assignments. Limited enrollment: 30

Prerequisite: Permission of the instructor. Screening interview required, normally by August 20. Call 287-7142 for further details, or e-mail: humma106y@car.scar.utoronto.ca

Normally offered every other year

HUMMA107Y Modern Standard Chinese

A comprehensive introduction to Modern Standard Chinese (Mandarin). Intended for students who speak a Chinese dialect other than Mandarin and who have a good knowledge of written Chinese, this course emphasizes the Pinyin romanization, reading aloud and discussion, and the comparison and adaptation of traditional characters to the simplified version. Evaluation: ES1280Y T.R.A.
SUPERVISED READING COURSES
IN THE HUMANITIES
HUM3219S
HUM3206S
HUM5207S Supervised Readings
Independent study of an advanced and
intensive kind, under the direction of a faculty
member. The material studied shall bear
some significant relation to the student’s
previous work, and shall differ significantly
in content and/or concentration from topics
offered in other courses.
Students are advised that they must obtain
consent from the supervising instructor before
registering for these courses. The student
should submit to the Co-ordinator a statement
of objectives and proposed content for the
course; this should be done by 15 April for 'B'
and 'C' courses and by 1 December for 'A'
courses. If the proposal is approved, two
faculty members from relevant disciplines
will supervise and evaluate the work.
Exclusion: (HUMC01C-C02)
Prerequisite: These B-level full-course
equivalents in the Division of Humanities.
Co-ordinator: T.B.A.

COURSES NOT OFFERED 2000/2001
HUM421Y3
Prehistory
PHI4256S Modern Greek Music
HUM4319S Print National Cultures in North
America
HUM4329S Dance in a Multicultural
Society
HUM4359S Poetry in Nauru and Nambour
Earth
HUM4549S The Last Hundred Years
HUM4569S The Spanish Civil War: Fact or
Flotation
HUM4589S Growing Up German
HUM4619S From Racism to Genocide:
The Holocaust
HUM4679S The Third Cinema
HUM5159S Canadian Cultures Seminar

International Development Studies
(B.A./J.S.B.)
Faculty List
A. Berry, B.A. (Western), M.A. (Yale), Ph.D. (Sheffield), Professor
R.B. Bryan, B.A. (Dalhousie), Ph.D. (Sheffield), Professor
J. Boddy, B.A. (McGill), M.A. (Calgary), Ph.D. (Harvard), Professor
M. Lambert, B.Sc. (McGill), M.A. Ph.D. (California), Associate Professor
E.C. Belpa, B.A., M.Phil (London), Ph.D. (Toronto), Professor
I. Teichert, B.A., M.A., Ph.D. (Toronto), Professor
M.F. Boocock, B.A., Ph.D. (Sheffield), Associate Professor
R.R. Fitch, B.A., M.Sc. (Toronto), Ph.D. (California), Associate Professor
P.C. Hurling, B.A. (National Chung-hsing
University), M.A., Ph.D. (California), Associate Professor
P. Kacem, B.A. (Toronto), M.A. (London), Associate Professor
A.D. Pfeifer, B.S. (Salt Lake), M.Sc., Ph.D. (McGill) Associate Professor

THE SPECIALISED (CO-OPERATIVE) PROGRAMME IN INTERNATIONAL DEVELOPMENT STUDIES

Co-ordinator: J. Maxwell (287-7115)
Supervisor of Studies: Susan Horton (287-7109)

IDS Module Statement
The Co-operative Programme in International Development Studies at University College at Toronto is a five year undergraduate programme which aims to provide students with a critical understanding of international development issues through exposure to a variety of academic disciplines and to another culture. The Programme combines intensive (full-time) academic study in the social and environmental sciences and humanities with a rich field experience in a developing country. IDS students graduate with an Honours B.A.,B. Sc., with a Specialist certificate in International Development Studies.

Objectives
1. To provide students with a broad
understanding of different development
performance, background, and domestic
factors affecting their success, and the
international
2. To develop cross-cultural sensibilities
and an awareness of the reality of
cultural differences - their cultural
and socio-economic and political
relationships and the impact of
national and international -

Fees
Every student in a co-operative programme is required to pay fees as established by the University.

Work Placement
This programme requires twenty courses (five years) of study and a work term of approximately eight to twelve months' duration. The work term will normally begin no sooner than the second week of the January period of the second year and no later than January of the third year.

Work placements are arranged by the Programme Co-ordinator in consultation with each student. Some placements are won on a competitive basis. The majority of students obtain placements with Canadian employers - Canadian development agencies (CIDA), research institutes or private sector consulting firms. The location of the placement will vary according to each student's discipline and regional preferences and abilities, the availability of positions, and the practicability and safety of development work. Students who wish to carry out their placement in a developing country where there is no Canadian employer, may be assisted in the finding of suitable alternative placements.

Admission to the Programme
Applicants must apply directly to the programme. Applicants may apply as transfer students from college or first-year university. When applying, applicants must indicate the special code for this Scarborough Campus programme on the Application For Admission To An Ontario University. Once the University of Toronto is notified of the application, candidates are sent an additional Co-op application form to complete. In order to qualify for interview consideration, applicants must submit the Co-op application by the following deadlines:

Current OAC applications - March 1 for early consideration; April 1 otherwise.

Applicants who applied on the 105 form - April 1. Therefore, it is essential that applicants submit the initial OUAC application at least six weeks prior to these dates.

Enrolment in the programme is limited. Interviews are normally held from March until May for students who pass the initial screening. Admission is granted on the basis of the applicants' academic performance, background in relevant subjects, language skills, experience or interest in international development studies and work, and a letter of reference from a high school teacher or university instructor.

Requirements
To maintain standing in the programme and to receive specialist certification upon graduation, a student must:

- maintain a cumulative grade point average of 2.50
- receive satisfactory evaluations for work completed (as determined by the University)
- be placed as a full-time student during study terms
- complete a minimum of 240 credits with an average of 2.50

All students must complete:
- a common core programme (at least eight and one-half full-course equivalents) in environmental and social sciences
- one major field (at least three full-course equivalents) in either the social sciences or environmental sciences (Section B. below)
- one language and culture option (Section C. below)
- one advanced seminar related to their work placement experience (Section D. below)
- other electives (courses (Section D. below)

In the first two years of study students must complete as much of the common core programme and of language studies as possible. Students must choose their regional and language option (Section C) no later than year 2 and their advanced option (Section B).
Development Studies at the University of Toronto at Scarborough may choose also to complete the requirements for a Major in Environmental Studies offered by Ilnis College, and students registered in the Specialist or Major in Environmental Studies at Ilnis College may choose also to complete the requirements for a Major in International Development Studies offered by the University of Toronto at Scarborough.

Admission to the Programme

This is a limited enrollment programme. Students already registered in the Specialist (Co-op) Programme in International Development Studies may build for the Interfaculty programme.

Programme Requirements

Students registered at the University of Toronto at Scarborough who wish to complete the Interfaculty programme, must complete all the requirements for the Specialist (Co-op) Programme in International Development Studies including EISEA01H and IDSDB02H. In addition they must complete six to seven full-course equivalents depending on the options chosen below:

1. Four full-course equivalent courses as follows:
   - IN230Y* Environmental Policy
   - IN330Y* Making and Decision Making
   - IN340Y* Canadian Environmental Issues
   - IN341Y* Practical Environmental Skills
2. Two full-course equivalent from the following courses:
   - EISEC10H Environmental Law
   - ESO030H Environmental Economics
3. One of the following two options:
   - Option 1
     - EISEC10H Environmental Law
     - IDSDB02H Environmental Economics
   - Option 2
     - IN311H Environmental Thought
     - IDSDB02H Environmental Economics

* NOTE: These courses may also count as advanced options in the IDS Social Science Stream.

**NOTE:** Students may retitle equivalent courses given at the University of Toronto at Scarborough but must obtain the permission of the Supervisor.

IDSDB02H Introduction to Environmental Science

Refer to Environmental Science for description.

IDSDB01H International Development Studies: Political Economy

Introduces students to major development problems, focusing on international economic and political factors. The course examines trade, aid, international institutions such as the World Bank and the IMF, the GATT and how these affect developing countries. The course examines both conventional economic perspectives as well as critique of these perspectives. Some course case studies may be used to illustrate different approaches to development. This course can be counted for programme credits in ESM programmes.

Two hours of lecture per week and one hour tutorial per week.

Exclusion: UOCC030Y Prerequisite: EISEC10H or ESM101H or permission of the instructor.

IDSDB02H International Development Studies: Development and Environment

An introduction to the environmental consequences of development activities, with emphasis on tropical countries. Changing environmental conditions are explored in a number of specific contexts: urban, rural, forest, semi-arid, wetland and mountainous systems. Environmental constraints on development have been significant in almost all regions, but increasingly, it is the influences of...
development on the global environment which are of concern. These include: species extinction, loss of agriculturally productive land, declining water quality, diminished access in energy and climate change. In addition, as settlement of marginal lands continues, human welfare is more and more threatened by "natural" hazards, such as earthquakes, floods, droughts and events such as El Nino. Two hours of lecture per week and a one-two hour tutorial per week.

Prerequisite: IDS4A01H

IDS6003H International Health Policy Analysis

Introduces health policy analysis in developing countries, drawing comparisons to the industrialized countries. The course examines trends in the financing and provision of health care, and discusses some of the choices involved (primary health care versus curative care, private versus public provision, and issues of cost and efficiency). Case studies of different models of health care will be examined (for example: Chile, China, Canada). Participants will also obtain experience with the practical tools of health policy analysis, such as cost-benefit and cost-effectiveness analysis. This course can be counted for programme credit in ELM programmes (2 hours of lecture per week).

Prerequisites: ECOM403Y or ECOM402Y (ECOM420Y or ECOM421Y)

COP00125Y International Development Studies Co-op Work Placement Term

The IDS work placement is an integral part of the co-op curriculum and is designed to provide students with practical hands-on experience in the world of development at a Third World field setting. Students are placed as interns with Canadian or local development agencies or institutions in a developing country for a 10-12 month period. Students are required to attend a four-week orientation every 2 months and begin work on a major research project based over their work placement. Experience to be eligible for placement, students must have completed 1.5 full-course equivalents including IDS 12 credits. These 12 must include 10 credits from sections A and B (of which at least 7.5 must be from Section A) plus regional and language requirements. The IDS work placement normally begins after the third year of study and requires a minimum of 2 years of residence in the programme. Course credit of 0.5 full-course equivalent is granted for each four-month work period. Two hours of lecture and an addition to the 20 full-course degree requirement and are granted on a Credit-No Credit system. There are no additional course fees for work terms.

IDS6013H Project Management

Introduces an introduction to the project management cycle with emphasis on the situation analysis and identification of needs, project implementation, project monitoring and evaluation.

Project management will be considered in the context of the mission and programme activities of international development agencies. Students will be familiarized with basic organizational development theory and the various approaches of Canadian Non Governmental Organizations (NGOs) engaged in the delivery of development assistance. The problems of project design and development and environmental issues from the project process will be discussed.

CIDA's policies and practices of project administration as well as its project management model will also be examined. Students will be expected to visit local development NGOs to analyze the project approach used by the agency. Practicing professionals will also be invited to talk about development issues and project management. Three hours of lecture per week and a one hour tutorial per week.

Prerequisites: IDS6011H & IDS6012H

IDS6023H The Ethics of Development

An examination of the theoretical foundations of ethics of development, particularly the ethics of aid and intervention. The course will consider the ethical dimensions and implications of dominant models of development including the policies and a study of the phases of the project development.

Prerequisite: IDS6011H and IDS6012H & permission of the instructor.

IDS6043H COSESS (unavailable)

COSESS is the Canada OASIS (unavailable) in the area of Social Science and Environment.

IDS6053H Courses Not Offered 2000-2001

IDS6063H Economics of Small Enterprise and Microcredit

Prerequisite: ECOM420Y (ECOM402Y or ECOM403Y (ECOM421Y) or ECOM404Y)

IDS6083H Environmental Development

Exclusion: ECOM566H (ECOM566H) or ECOM567H (ECOM567H)

Prerequisites: ECOM420Y or ECOM421Y (ECOM424Y) or ECOM423Y

IDS6073H Development Policy

Exclusion: ECOM465H (ECOM465H)

Prerequisite: ECOM466H (ECOM466H)

No IDS courses are being offered this term. Students interested in obtaining this area of study should refer to courses offered in the Faculty of Arts & Science, University of Toronto (St. George Campus and St. Jude College).

Italian / Language Studies 109

Language Studies (R.A.)

Students interested in language studies should consult courses under French, Spanish and Linguistics.

Specialist Programme in Management and French

Registration in this Programme is limited. Please refer to the Management section of the Calendar for details.

The Management and Humanities Divisions have co-operated to develop a joint programme in Management and French. The Management requirement for any of these programmes is the first five requirements for the Specialist in Management.

Language requirements consist of five full-course equivalents as follows:

French

A. FRE1A01, FRE1B01, one full-course equivalent from FRE2C01, FRE2C02, FRE2C03, FRE2C04, FRE2C05
B. At least one full-course equivalent from FRE3A01, FRE3A02, FRE3B01, FRE3B02, FRE3B03, FRE3B04, FRE3B05, FRE3B06, FRE3C01, FRE3C02, FRE3C03, FRE3C04, FRE3C05, FRE3C06
C. At least one half-course from FRE2B02, FRE2B03, FRE2B04, FRE2B05
D. An additional half-course in French

Major Programmes

See entries under French for the Minor Programme in French.

Minor Programmes

See entries under French for the Minor Programme in French.
Linguistics (B.A.)

Faculty List
R.I. Binczek (Chair), B.A. (CUNY), M.A., Ph.D. (Chapel Hill), Associate Professor
D.M. James, B.A. (U.R.C.), M.A. (Cornell), Ph.D. (Michigan), Associate Professor
R. Spry, B.A. (Carleton), M.B. (Alberta), Ph.D. (Alberta), Associate Professor

Discipline Representative: R.I. Binczek

Linguistics is the scientific study of human language. It encompasses theories of linguistic structure in all domains: speech sounds, phonetics, phonology, morphology, syntax, semantics, and text or conversation discourse. Subfields of linguistics include sociolinguistics (language variation according to region, gender, class, etc., as well as the social functions of language); psycholinguistics (language acquisition and processing, and their disorders); historical linguistics (how languages change across time, and why); and applied linguistics (e.g., second language learning, translation, clinical linguistics).

The Major Programme in Linguistics is designed to help students prepare for entry into professional programmes in areas with a significant language component, such as speech-language pathology, education, and language teaching. In many cases, a combined Major in Linguistics and another discipline (e.g., Psychology, Cognitive Science, Computer Science, or a language) will provide the best preparation. However, students whose interests lie in the area of theoretical linguistics, and who wish to complete a Specialist degree after their Scarborough Major programme (e.g. on the St. George campus), should consult with the Supervisor of Studies to design a coherent course of study appropriate for the Specialist degree elsewhere.

**MAJOR PROGRAMME IN LINGUISTICS**

**Supervisor:** R.I. Binczek (287-7120)

Students must complete seven full-course equivalents, as follows:

1. **LINAH01Y General Linguistics**
2. **LINBH08H Practical Language Analysis: Phonology**
3. **LINBH08Y Practical Language Analysis: Morphology**
4. **LINBH09Y Practical Language Analysis: Syntax**
5. **LINBH09Y Practical Language Analysis: Syntax**
6. **LINBH09Y Practical Language Analysis: Syntax**
7. **LINBH09Y Practical Language Analysis: Syntax**

**MINOR PROGRAMME IN LINGUISTICS**

**Supervisor:** R.I. Binczek (287-7120)

Students must complete four full-course equivalents, as follows:

1. **LINAH01Y General Linguistics**
2. **LINBH08H Practical Language Analysis: Phonology**
3. **LINBH08Y Practical Language Analysis: Morphology**
4. **LINBH09H Practical Language Analysis: Syntax**
5. **LINBH09Y Practical Language Analysis: Syntax**

**Linh001Y Specialist Programme in Linguistics:**

**Supervisor:** R.I. Binczek (287-7120)

This Specialist Programme in Linguistics is no longer offered. Students already registered in the programme are allowed to complete it; please contact the Supervisor of Studies to make appropriate arrangements.

**LIN601Y Practical Language Analysis: Phonology**

An analysis of sound patterns in a broad variety of languages.

The aims of the course is to expand students' knowledge of phonology and to strengthen their abilities in practical analysis. Potential solutions to problems sets will be discussed in each class.

Exclusion: (LINBH01Y), LIN229H

Prerequisite: LINAH01Y

T.B.A.

Offered every year

**LIN601Y Practical Language Analysis: Morphology**

An analysis of word structure in a broad variety of languages.

The aims of the course is to expand students' knowledge of morphology and to strengthen their abilities in practical analysis. Potential solutions to problems sets will be discussed in each class.

Exclusion: (LINBH01Y), LIN251H

Prerequisite: LINAH01Y

T.B.A.

Offered every year

**LIN601Y Practical Language Analysis: Syntax**

An analysis of sentence structure in a broad variety of languages.

The aims of the course is to expand students' knowledge of syntax and to strengthen their abilities in practical analysis. Potential solutions to problems sets will be discussed in each class.

Exclusion: (LINBH01Y), LIN229H

Prerequisite: LINAH01Y

T.B.A.

Offered every year

**LIN601Y Phonetics: The Study of Speech Sounds**

The phasiological and acoustic bases of speech.

An examination of the means by which speech sounds are produced, and of the physical properties of those sounds. Emphasis will be placed on such practical considerations as phonetic transcription. We will also discuss material related to the phonetics of the spoken words used for written language, and the teaching of second languages.

Exclusion: LIN229H

Prerequisite: LINAH01Y

T.B.A.

Offered every year

**LIN601Y The Structure of English Sounds**

An analysis and analysis of various aspects of the structure and grammar of English sentences, with emphasis on these distinctive features which make it possible to test the tonality of teachers and students of the language.

Topics such as the following will be included: the basic grammatical patterns of English; how to say the basic sentence patterns are transformed; the semantics of the verb, including tense; and the construction of discourse in English.

Exclusion: (LINBH01Y), LIN229Y & LIN254H

Prerequisite: LINAH01Y

R.I. Binczek

Offered every year

**LIN610H The Structure of English Words**

Descriptive and structural analysis of the use of English words, including the sound and word structure systems, with emphasis on these distinctive and characteristic features most of the great interests of teachers and students of the language.

Topics such as the following will be included: the relation of English spelling to English sound; the word structure systems for native and foreign elements; and the structure of the vocabulary as a functional system.

Exclusion: (LINBH01Y), LIN292Y & LIN230H

Prerequisite: LINAH01Y

R.I. Binczek

Offered every year

**LING020H Language and Society**

The study of the relationship between language and society, with the goal of understanding social structure through language.

Major themes are: sociolinguistic categories, including the political language of the English-language, and the social construction of language; and social interaction through language, including power, inequality, and the cultural construction of speech in speech communities.

Prerequisite: LINAH01Y

D.M. James

Offered every year

**LIN605Y Phonetics: The Study of Speech Sounds**

The physiological and acoustic bases of speech.

An examination of the means by which speech sounds are produced, and of the physical properties of those sounds. Emphasis will be placed on such practical considerations as phonetic transcription. We will also discuss material related to the phonetics of the spoken words used for written language, and the teaching of second languages.

Exclusion: LIN229H

Prerequisite: LINAH01Y

T.B.A.

Offered every year

**LIN610H Second Language Learning**

The stages adults and children go through as they learn a second or subsequent language.

The course examines theories of the linguistic, cognitive, social, and personal differences that affect second language acquisition. Implications for second language teaching are also discussed. This course is recommended for students enrolled in the Specialist Programme in the Education of Teachers in French.

Prerequisite: One full-course equivalent in LIN or ENERGY or alternate prerequisites with permission of the instructor.

T.B.A.

Normally offered every other year

**LING020H Language and Society**

The study of the relationship between language and society, with the goal of understanding social structure through language.

Major themes are: sociolinguistic categories, including the political language of the English-language, and the social construction of language; and social interaction through language, including power, inequality, and the cultural construction of speech in speech communities.

Prerequisite: LINAH01Y

D.M. James

Offered every year

**LING020H Language and Society**

The study of the relationship between language and society, with the goal of understanding social structure through language.

Major themes are: sociolinguistic categories, including the political language of the English-language, and the social construction of language; and social interaction through language, including power, inequality, and the cultural construction of speech in speech communities.

Prerequisite: LINAH01Y

D.M. James

Offered every year
PL635H3 Disorders of Speech and Language
Pathologies of language acquisition and comprehension/production. Topics include the anatomy and physiology of the speech and hearing mechanism, voice disorders (laryngitis, hoarseness, dysphonia, glottal insufficiency), physiological speech disorders (motor speech disorders, stuttering), cochlear implants, hearing impairments, and the identification and treatment of pathological conditions that might interfere with the development of communication skills.
Exclusions: L93118
Prerequisites: L93108Y
E.D. Bals-A SOURCE: Normally offered every other year.

LINC110H1 Semantics: The Study of Meaning
The role of meaning in the structure, function, and use of language.
Topics include lexical (word and idiom) meaning, conveyed vs. literal meaning; the role of real world knowledge and other metaphors in understanding language; and the relationship between form and content in sentences and in other linguistic units.
Exclusions: L93107H
Prerequisites: L93108Y
SOURCE: Normally offered every other year.

LINC125H1 Language and Gender
An introduction to the research on differences between females and males in how they use language and how they behave in conversational interaction, together with an examination of the role of language in reflecting and perpetuating cultural attitudes toward gender.
Topics include: different theoretical approaches to explaining when and why gender differences in language use do or do not exist; the research on such phenomena in the amount of people talk, what they talk about, interruptions, and politeness in relation to gender-consonant differences; and ways in which females and males are defined and described by different theoretical languages.
Exclusions: J92135S
Prerequisites: One full-course equivalent in L93, ANT, SOC or WST.
D.M. James
SOURCE: Normally offered every other year.

PLC235H1 Psycholinguistics
Experimental evidence for theories of how humans produce and understand language, and of how language is represented in the mind.
Topics will include the perception and categorization of word sounds; retrieval of words from memory during speech and listening; use of logical knowledge in planning and understanding sentences; production and comprehension of longer stretches of discourse; and the role of memory systems in language processing.
Exclusions: J12174Y
Prerequisites: One full-course equivalent in L93 and one full-course equivalent in PSY.
D.M. James
SOURCE: Offered every year.

PLC245H1 Sociolinguistics
Sociolinguistics: The Language and Its Peoples: Variation in Time and Place
Prerequisite: One full-course equivalent in ANT, ENG, L93 or SOC.
R. Wray
SOURCE: Offered every year.

PLC345H1 Reading and Writing in a Second Language: Theoretical and Pedagogical Issues
Exclusion: J12174Y
Prerequisites: L94061Y or FRB251Y or PLIC245H or FRB101YH or L92105H
Recommended Preparation: L92105H or FRB101H
PLC345H1 Developmental Psycholinguistics
Exclusion: J12174Y
Prerequisite: One full-course equivalent in L93 and one full-course equivalent in PSY.
D. M. James
SOURCE: Offered every year.

Management (B.B.A.)
Faculty List
O. Bernat, B.A., S.M. (Tel Aviv University, Ph.D. [M.I.T.], Professor
R. Botsie, B.A. (Harvard), M.P.P. (Kennedy School of Gov.), Ph.D. (Harvard), Professor
J. Delandres, B.A., M.A., Ph.D. (Toronto), Professor
D. W. Lang, B.A., M.A. (Weissman), Ph.D. (Toronto), Professor
S. Sark, B.A. (U.B.C), M.A. (London), A.M., Ph.D. (Harvard), Associate Professor
L. J. Xie, B.A. (Peking's Clinic), M.B.A., Ph.D. (Columbia), Associate Professor
S. Law, B.A. (Calgary), B.A. (Wellesley College), M.S. (Bucknell), Ph.D. (Toronto), Assistant Professor
J. L. Wood, B.C. (Harvard Inst., China), M.B.A. (York, Canada), Ph.D. (Toronto), Associate Professor
S. Ahmed, B.Com., M.A. (Sadi), M.B.A. (Concordia), Lecturer
T. L. Scott, B. Com. (Toronto), M.A., M.B.A. (York, Canada), Senior Lecturer
R. Power, B.A., B.P.H.E., M.B.A., LL.B. (Queen's), Senior Lecturer
A. Stibbard, B.A. (Toronto), M.B.A. (York, Canada), C.M.A., Senior Lecturer
Chair: S.F. Botos
The design of the curriculum in Management is guided by our mission statement, which follows:
"The Scarborough Program in Management will provide high-quality pre-professional management education within the context of liberal arts education for students interested in managerial careers. It will provide introductory education about organizational life for any student enrolled at the University of Toronto at Scarborough, and it will develop and support a group of faculty who are actively engaged in research that contributes to the advancement of management knowledge and the quality of instruction.
The first part of the mission statement will be achieved through the Specialist Program in Management, which are intended to prepare students for careers in the public or private sectors or in accounting. The second part of the mission statement will be achieved through our Introduction to Management course (MOT210). The third part of the mission statement refers to faculty development initiatives."
The University of Toronto at Scarborough offers the Bachelor of Business Administration degree to students who complete one of the Specialist Programmes in Management. We also offer a Co-operative version in the Management Programme and a Certificate in Business. The University of Toronto at Scarborough Management Programmes offer a wide range of elective courses. University of Toronto at Scarborough Management Programmes are subject to limits on enrolment.
Admission to graduate studies leading to the Master of Business Administration (MBA) degree is open to all qualified graduates (fifteen or twenty course degrees) regardless of previous work or discipline studied at the undergraduate level. Students completing graduate study would be well advised to include ING310 in their electives. The admission requirements for graduate study should also consider strengthening their preparation for graduate work by taking courses in such fields as Economics, Mathematics, Computer Science, Sociology, Psychology and Anthropology.
Limited enrolment: Because of pressures of demand for places, it has been necessary to place enrolment limits on Management courses including those given
Having attempted at least 4 full-course equivalents and a GPA of 2.0 or higher after having attempted at least 8 full-course equivalents. Co-op students must maintain a cumulative GPA of 2.50 throughout the Programme.

2. At the end of First Year
Applicants for the Specialist Programmes in Management must have completed (or be in the process of completing) MGT402, ECOM3 and MATA27 (MATA26 may also be used to satisfy the calculus requirement.) Students who took ECOM3 may be able to ease the Management Programme once they have completed MATA27.

3. Admission after First Year
Admission of students during second year (that is, until they have completed up to 10 full courses) will also be on the basis of all grades received. Students who have completed more than ten full-courses will not necessarily be considered for admission to the Programmes. Students applying at the end of first year or during the second year will be considered together for a total of approximately 80 places in the three Specialist Programmes.

Subject to enrolment limits, a student admitted to any of the Programmes will have access to the full range of offerings in the Division. Specific Program requirements are listed below.

Guidelines for First-Year Students in Management Programmes
Co-op B.B.A.: MGT402, MGT405, MGT506, ECOM4, CISC401 and MATA27
Direct Admit B.B.A.: MGT402, ECOM4, MATA27, CISC402 recommended, MGT506 and MGT406 allowed
Pre-program (must have at least 4 F.Us. to apply to Programmes)
B.B.A.: MGT402, ECOM4, MATA27, CISC402 recommended but not required to apply to Programme
Taking a course in the Humanities or Social Sciences is recommended in all Programmes.

1. Directly from Secondary School
Up to 180 credits may be admitted directly from high school, on the basis of academic performance. Applicants interested in the Specialist Programmes in Management must have completed OAC English I and OAC Calculus.

In the first year, they will take the courses required for the Programme of their choice and the following core courses. In order to remain in the Programme students must maintain a GPA of 1.0 or higher after
Course credit of 0.5 full-course equivalent is granted for each four-month work period. Work term credits COPC074 are in addition to the 20 full-course degree requirements and are granted on a credit, no credit system. There are no additional fees for work terms.

**JOINT SPECIALIST PROGRAMME IN MANAGEMENT AND LANGUAGE (FRENCH)**
Supervisor: Andrew Sawangco (287-7351)
E-mail: sawangco@conestoga.ca
The Management and Humanities Divisions have cooperated to develop a joint Programme in Management and French. The Management requirements for this Programme are the first 5 requirements for the Specialist in Management (follows). The French requirement is waived.

Students are encouraged to take MGTAD02, ECOM02, CSCI02, MATA21 and an appropriate course(s) in French in the first year.

Language requirement consists of five full-course equivalents in one language, made up of A. Basic Language, B. Business Language and C. Civilization, as follows:

FRENCH
A. FREA10, PREB10, PREC10 or equivalent
B. at least one course equivalent from PREB20, PREB19, PREC18
C. at least one half-course from PREB22, PREB23, ECON23 and ECON24
D. an additional half-course in FRENCH

The remaining courses needed to complete the degree requirement of 20 F.C.E.'s can be chosen either within or outside the Division of Management in accordance with the student's interest.

**SPECIALIST PROGRAMME IN MANAGEMENT AND ECONOMIC THEORY**
Supervisor: Andrew Sawangco (287-7351)
E-mail: sawangco@conestoga.ca
This Programme provides a broad exposure to all functional areas of Management as well as a solid grounding in Economics.

The Programme requires the completion of the following minimum requirements as part of a twenty-course degree (14.5 full-course equivalents):

1. MGTAD02, MGT8005, MGT8015, MGT8065, MGT8125 AND MGT8404 and MGT8200, MCT0030, MCT0140, MCT0230, MCT0274, MCT0750.
2. at least 0.5 F.C.E. of courses emphasizing strategic management, chosen from MGT8300, MCT0110, MCT0120, MCT0315, MCT0329, MCT0341, MCT0402, MCT0431, MCT0440, MCT0569, MCT0575, MCT0576, MCT0579.
3. ECOM02, ECOM03, ECOM04, ECOM05, ECOM06, ECOM07, ECOM08, ECOM12 and 1 F.C.E. of C-Level Economics for Management Studies classes. A C-Level Economics for Management Studies course is defined as one that has a B-level prerequisite.
4. MATA27 (strongly recommended) or MATA25
5. CSCI02 (students familiar with the material in CSCI02 may substitute CSCI09)
6. Two- and one-half additional P.C.E.'s from courses other than MGT8005, to include at least 1 F.C.E. from courses within the Division of Humanities.

The remaining courses needed to complete the degree requirement of 20 F.C.E.'s can be chosen either within or outside the Division of Management in accordance with the student's interest.

**CERTIFICATE IN BUSINESS**
Supervisor: R. Powers (287-7251)
E-mail: rpowers@conestoga.ca
The Division of Management also offers a Certificate Programme for non-degree students. Non-degree students interested in this Certificate Programme should contact the Supervisor.

**SPECIAL STUDENTS IN MANAGEMENT AND ECONOMICS**
Supervisor: R. Powers (287-7251)
E-mail: rpowers@conestoga.ca
Special students may be allowed to take individual courses either as credit towards professional certification (for example in accounting or human resource management) or for personal interest. Students may take courses if they have fulfilled the prerequisites or have the permission of the Supervisor. Special students will be admitted to courses only if there is room after regular degree students in Management Programmes have been accommodated. Applicants must provide specific information regarding previous education and work experience. To assist in designing individual course selection, the application form will ask about one's educational objectives. Applicants may begin in either semester of the Fall/Winter Session or Summer Session. Regular application deadlines apply, but late applicants may be accommodated if there is space in classes.

MOTA02Y: Introduction to Management

Introduction to the process of management (planning, organizing, coordinating, and directing), the functional components of profit and nonprofit organizations (accounting, finance, marketing, personnel, etc.), and the organization's role in a broader context, including ethical and societal considerations. This course should be taken before any other MGT courses. One two-hour lecture per week.

Exclusions: Any other MGT course (except B05 & B06 for students in programmes requiring B05 & B06). B05 & B06 for students admitted to the Management programme directly from high school.
Exclusion: MGT101Y.
Prerequisite: None

MOTB03H Management Accounting

An introduction to management and cost accounting with an emphasis on the use of accounting information in management decision-making. Topics include: product and process costing, transfer pricing, budgeting and control systems. Enrollment is limited to students registered in programmes requiring this course.
Two hours of lecture per week.
Exclusions: MOTZ212B, MOTZ213H, VPAA21H
Prerequisites: ECOM02Y (ECOM09 or ECOM10Y), and for the Fall offering, MOTB01H.
Corequisite: For the Spring offering, MOTB01H

MOTB06H Financial Accounting I

Together with MOTB06H, this course provides a rigorous introduction to accounting techniques and to the principles and concepts underlying these techniques. The development of double-entry theory and practice, the accounting cycle, problems of income measurement, and the preparation of financial statements are discussed from the point of view of both preparers and users of financial information.
Two hours of lecture per week.
Exclusions: MOTA09Y, MOTA12H, MOTA20H & VPAPA13
Prerequisites: ECOM02Y: Students admitted into the Management programme directly from high school and students registered in programmes requiring this course may take MOTA09Y concurrently.

MOTB08H Financial Accounting II

This course is a continuation of MOTB06H and builds on material covered in that course. Coverage in this course will assume a knowledge of the material taught in MOTB06H. Students are therefore encouraged to complete MOTA09Y immediately after completing MOTB06H. Technical topics include partnerships, corporations, cash flows, analysis and others. Choices of treatment and disclosary are discussed, and the development of professional judgement is encouraged.
Two hours of lecture per week.
Exclusions: (MOTA09Y, MOTA12H, MOTA20H) & VPAPA13
Prerequisite: MOTB06H
MGTR8100 Quantity Methods in Management
An introduction to statistical and regression analysis as used in economic analysis. The course will cover material similar to ECON 311 (ECOB 311) but to somewhat less depth. Topics to be covered include: summary statistics, special probability distributions (normal, binomial), confidence intervals, hypothesis testing (parametric), and simple and multiple regression. There will be no large computer assignments. Three hours of lecture per week.
Limited enrolment: 30 per section.
Exclusions: ANTC 313H, ECON 280Y (ECOB 280Y), ECGR 313; PSYB 070H, SOC 360E; STASC 22H
Prerequisites: CASC 030 or CASC 040
Corequisites: ECON 280H (ECOB 280H) or ECON 280Y (ECOB 280Y)
Z.R.A.

MGTR200H Managing People in Organizations
An introduction to micro-organizational behaviour theories from both conceptual and applied perspectives. Students will examine a variety of theories and concepts to help them develop an understanding of the behavior of individuals and groups in all types of organizational settings. Topics covered include: individual differences, motivation and job design, work attitudes, decision making, and leadership. Enrollment is limited to students registered in programs requiring this course.
Two hours of lecture per week.
Exclusion: MGTR221H
Prerequisite: MGTR20Y

MGTR2403 Managerial Skills
This course prepares students for the development of managerial skills. As management students enter today's complex organizations, they need managerial skills as well as knowledge of the conceptual and technical material covered by their courses. This course provides students with opportunities to develop these skills. The conceptual knowledge addressed in earlier courses. The objectives of this course are to provide personal management competencies in areas such as interpersonal relations, decision making and problem solving, negotiating and selling, and teamwork. Enrollment is limited to students registered in programs requiring this course.
Two hours of lecture per week.
Exclusion: MGTR221H
Prerequisite: MGTR20Y

MGTR280H Managing Groups and Organizations
An introduction to the practical and theoretical aspects of micro-organizational behaviour. Organizations are seen as integral part of our everyday lives, yet the average person understands little about how organizations function. This course is about how organizations work, and how we can change them to make them work for us. Building on concepts and skills from MGTR22 and MGTR24, students will be introduced to theoretical and practical aspects of micro-organizational levels of behaviour that make management concern a group and organizational levels of analysis. Topics covered include: organizational design, culture, and innovation, power and politics, and conflict and group interaction. Enrollment is limited to students registered in programs requiring this course.
Two hours of lecture per week.
Prerequisite: MGTR22H & MGTR24H

MGTR290H Principles of Finance
An introduction to basic concepts and analytical tools in financial management. Building on the fundamental concept of time value of money, the course will examine cash and bond valuation and capital budgeting under certainty. Other topics include: stock and bond market, investment, financial planning and forecasting, and short-term financing decisions. Enrollment is limited to students registered in programs requiring this course.
Two hours of lecture per week.
Limited enrolment: 70
Exclusions: MGTR253Y, MGTR273Y
Prerequisites: MGTR100H or ECON 280Y (ECOB 280Y) & MGTR20H

MGTR290H Principles of Marketing
An introduction to basic concepts and tools of marketing. The focus is on the nature and scope of marketing in an organizational setting. The subjects include: an examination of buyer behaviour, market segmentation and target marketing, the basic elements of the marketing mix: product, price, promotion and place; marketing planning, evaluation and control.
Two hours of lecture per week.
Limited enrolment: 60
Exclusion: MGTR252H
Prerequisites: MGTR20H

MGTR295H Intermediate Management Accounting I
An examination of various cost accumulation and performance evaluation systems and decision-making tools. Topics include job and process costing, flexible budgeting, and variance analysis and cost allocations.
Two hours of lecture per week.
Limited enrolment: 60
Exclusions: MGTR22H & MGTR22H
Prerequisite: MGTR20H

MGTR296H Intermediate Financial Accounting I
Together with MGTR801, an examination of the framework of theory and practice of financial reporting in Canada. Theoretical and practical accounting and reporting issues are examined. Various topics dealing with measurement and disclosure are covered. The course builds extensively on the material covered in MGTR20H & MGTR20H, and, to a lesser extent, MGTR20H. Potential students should review thoroughly the basic accounting model, preparation of financial statements, and accounting principles prior to the start of this course.
Two hours of lecture per week and one hour tutorial per week.
Limited enrolment: 60
Exclusions: (MGTR21Y) & MGTR22H & MGTR32H
Prerequisites: MGTR200H (MGTR20Y) & MGTR20H
Corequisite: MGTR200H (either with this course or with MGTR20H)

MGTR310H Intermediate Financial Accounting II
A continuation of MGTR296H. It continues the student's development of skills and professional judgment through study of several complex topics. To this end, problems, cases and discussions are used in the course. Students must complete MGTR707 before attempting this course.
Two hours of lecture per week and a one hour tutorial per week.
Limited enrolment: 60
Exclusions: (MGTR21Y) & MGTR22H & MGTR32H
Prerequisite: MGTR20H
Corequisite: MGTR200H (either with this course or with MGTR20H)

MGTR310H Intermediate Finance
A sequel to MGTR296H, this course will continue the coverage of advanced finance topics. Besides a deeper examination of certain topics already covered in MGTR296H, the course will investigate additional subjects such as working capital management, capital budgeting under uncertainty, cost of capital, capital structure, dividend policy, leasing, mergers and acquisition, and international financial management.
Two hours of lecture per week.
Limited enrolment: 60
Exclusions: MGTR311Y, MGTR373Y
Prerequisite: MGTR20H

MGTR410H Management Control Systems
The course objective is to develop a thorough understanding of planning and control systems in organizations, with an emphasis on behavioural implications. Case studies will be used to evaluate control structures and processes with some attention to multinational, service and non-profit organizations.
Two hours of lecture per week.
Limited enrolment: 40
Exclusion: MGTR426H
Prerequisites: MGTR203H & MGTR223H & MGTR24H

MGTR411H Management Information Systems
This course is intended to help students understand the information systems that are a critical component of modern organizations. The course covers the technology, design, and applications of data processing and information systems, with emphasis on managerial judgment and decision making.
Two hours of lecture per week.
Limited enrolment: 60
Exclusion: MGTR471H
Prerequisites: MGTR203H & MGTR223H & MGTR24H

MGTR415H Canadian Income Taxation I
This is the first of two courses in Canadian income taxation. It is designed to provide a broad range of detailed instruction in income taxation as it applies to individuals and small businesses. Current tax laws are applied to practical problems and cases. Topics covered include: employment income, business and property income, and computations of tax for individuals.
Limited enrolment: 60
Exclusion: MGTR423H
Prerequisite: Completion of at least ten full-course equivalents including MGTR205 & MGTR206 (MGTR20Y) & MGTR20H
120 Management

MGT2176 Canadian Income Taxation II
This course is designed to give the student an understanding of the more complex issues of federal income taxation, by applying current tax law to practical problems and cases.
Topics include: corporation or corporate taxes; corporate dispositions; corporate reorganizations; partnerships; trusts; and
individual and corporate tax planning.
Limited Enrolment: 60
Exclusion: MGT220
Prerequisites: MGT2175

MGT2180 Introduction to Management
Consulting
Introduces students to consulting as a career option. With the changing nature of employment, students are increasingly likely to find careers involving a series of short-term contracts or project related assignments. The successful manager of the future will not have a "job" but a portfolio of adaptable and transferable skills. The course examines what consultants do, and the reasons organizations engage consultants. The course teaches consulting skills: personal selling, project specification, proposal writing, contract negotiation, and project management.
One two-hour lecture per week.
Limited enrolment: 40
Prerequisites: MGTB10 & MGTB23 & MGTB24

MGT2202 Human Resource Management
An introduction to the basic concepts, theories and practices of personnel management. Topics include recruitment, selection, training, development, performance appraisal, compensation and human resource planning. Attention is given to the management of equal pay issues will be examined in relation to social, political, and economic factors.
One two-hour lecture per week and a one-hour tutorial per week.
Limited enrolment: 40
Exclusions: MGT208
Prerequisites: MGTB13 & MGTB24
Corequisites: MGTB29

MGT2215 The Legal Environment of Business I
An introduction to the Canadian legal system and its effects on business entities. The course includes an examination of the Canadian court structure and a discussion of the various forms of business ownership, tort law, contract law, and property law.
Two hours of lecture per week.
Limited enrolment: 60
Exclusion: MGT2304
Prerequisites: MGT219H I and II
Corequisites: Completion of at least ten full-course equivalents including MGTB05 & MGTB06 (MGTB22Y)

MGT2216 The Legal Environment of Business II
This course further examines the issues raised in Legal Environment of Business I. It focuses on relevant areas of law that impact business organizations such as consumer protection legislation and agency and employment law. It includes a discussion of laws affecting secured transactions and commercial transactions.
Two hours of lecture per week.
Exclusions: MGT2217
Prerequisites: MGT231H

MGT2238 Management and Organization in Fitness
Through the analysis of works of fiction dealing with managers in both private and public sector organizations, the course explores the ethical dilemmas, organizational politics and career choices that managers can expect to face.
Two hours of lecture per week.
Limited enrolment: 40
Prerequisites: MGTB23H & MGTB24

MGT2400 Management Communications
Written and Oral Communication Skills for Managers.
Effective and correct communication allows professionals to articulate with confidence their managerial knowledge and expertise. Topics in this course include written communications from e-mail to reports and oral presentations both spontaneous and prepared. Students will learn how to communicate in a well-organized, audience-oriented manner in concise, jargon-free language. Since correct grammar and punctuation are essential to good communication, these skills will be carefully reviewed. Class participation and group interaction will be stressed.
Two hours of lecture per week.
Limited enrolment: 40
Prerequisites: MGTB23H & MGTB24

MGT2405 Entrepreneurship
This course focuses on the practical viewpoint, using case methods, on the skills required and issues - personal, financial, sales, operational, personnel - entrepreneurs face as their smaller business grows from startup to maturity. The course should interest those who wish to own, or seek connection with an entrepreneurial business.
One two-hour lecture per week and one two-hour tutorial per week.
Limited enrolment: 60
Exclusions: MGT2403
Prerequisites: MGT240Y & MGTB23H & MGTB24H & MGTB30Y

MGT2293 New Venture Creation and Planning
An introduction to self-employment as a career alternative focusing on the creation of a business plan for a start-up business. Emphasis is placed on the identification, analysis, and development of business ideas in anticipation of forming a new venture. Knowledge gained from the course will help students to evaluate themselves as potential entrepreneurs. This course is intended to provide a practical framework for the evaluation of ideas, inventions, and innovation and their commercial exploitation. Students will learn about market research, investment appraisal, commercial acquisitions and most important, creating new business ventures. The core of this course is the development of a complete business plan which extends the student's concept for a start-up venture.
Two hours of lecture per week.
Prerequisites: MGT219H & MGTB23H & MGTB24H & MGTB30H

MGT2410 Management Policy and Strategy
An introduction to the art and science of general management of a business organization. The course begins with an examination of the concepts of stakeholders and of business mission. Students are then challenged to evaluate the external and industry environments in which business must compete, to identify sources of competitive advantage and value creation, and to design strategies that will enable the firm to succeed within its environment. The course will involve intensive discussion of the strategies and policies of active Canadian companies, and the use of the case studies. One two-hour lecture.
Limited enrolment: 50
Exclusions: MGT2403
Prerequisites: MGT208Y & MGT219H

MGT2425 Public Management
An introduction to key public sector management processes—planning, budgeting, human resource management—and to the New Public Management—innovation being salient. The course will examine the world to make government work better and cost less. Makes use of cases, case studies, and simulations to develop management skills in the public sector setting.
Two hours of lecture per week.
Limited enrolment: 40
Exclusions: MGT2403
Prerequisites: MGTB23H & MGTB24H & POLICY20

MGT4310 Innovation Management
An introduction to the study of the emerging field of Innovation Management. The course provides students with opportunities to explore the three levels of innovation—individual, team and organization—and to view innovation as an integration of strategic thinking, creative thinking, and transformational thinking.
In addition to examining a variety of theories and concepts, the course introduces students to methods, tools, and practical applications of innovation management from various business areas: strategic planning, organizational behavior, marketing, finance, and operations. By offering different perspectives on innovative thinking and decision-making (i.e. concepts, tools, methods, thought leaders, and examples of innovation in action), students will complete the course empowered with a broad understanding of innovation management and prepared to lead and "manage" innovation systems in their work situations for competitive advantage.
Two hours of lecture per week.
Prerequisites: MGTB23 & MGTB24 & MGTB25

MGT4340 International Business Management
This course deals with problems faced by managers of international business, such as development of a global business strategy, location of operations, dealing with local cultures in marketing and human resource management, and the effect of international agreements on the operations of home governments.
Two hours of lecture per week.
Limited enrolment: 50
Exclusions: MGT2403
Prerequisites: MGT240Y & MGTB23H & MGTB30H

MGT4345 The Changing World of Business - Government Relations
How regulation, privatization and globalization are affecting today's public sector.
Most major management issues and budgetary opportunities involve government (domestic or foreign) at some level—whether as lawmaker, customer, partner, invesstigator, tax-collector, grant-giver, licenser, drunk-driver, agent, close-friend, foe, money, and use of the ability to interact with government is becoming part of every manager's portfolio of skills and a specialty for many. This course provides
students with an understanding of the issues and introduces some of the skills necessary to successfully manage a business's relationship with government. Part of the appeal of the course will be its topicality and the use of current materials. Two hours of lecture per week. Enrollment limit: 60
Prerequisites: MGTD702Y

MGTC5SH Building Internet Commerce Ventures
This highly interactive hands-on course provides students with a set of theoretical and practical skills necessary to develop an Internet commerce enterprise or to negotiate online transactional delivery of administrative services within the government agency. A limited number of lectures present a new fundamental concept of the Internet Commerce Community and describe what it consists of, what makes it different from conventional ways of running a business, and how much it might cost. Visits by cooperating online in small teams, students will be expected to create an original Internet Commerce enterprise (business or government). As well, every student will have to write a predefined piece of Business Plan for an Internet Commerce or Internet Governance enterprise. We will likely involve web services, capitals, or top civil servants in evaluation of final results. Enrollment limit: 60
Prerequisites: MGTC19 or MGTC38 or MGTC56

MGTC60H Business Negotiation
An introduction to the theory and practice of negotiation in business. Almost all business transactions (for example, relationships among managers and relationships with suppliers and customers) require negotiations. This course provides the student with a set of approaches and tactics to use in different forms of negotiation, and an introduction to traditional and emerging procedures (for reaching disputes of negotiable and non-negotiable cases). To gain practical experience, students will prepare for and actually conduct exercises which simulate negotiations. Two hours of lecture per week. Enrollment limit: 60
Exclusion: MGMT354Y
Prerequisites: MGMT102Y & MGTB23H & MGTB24H

MGTC65H Introduction to Industrial Relations
An overview of the industrial system and process in Canada. The course will introduce students to industrial relations theory, the roles of unions and management, employment law, labour law, the impacts of collective bargaining on the economy and the firm, strikes and lockouts, grievance arbitration, collective bargaining in the public sector, occupational health and safety and workers’ compensation, and the history of the Canadian industrial relations systems. Students will participate in collective bargaining simulations. Two hours of lecture per week and a one hour tutorial per week. Enrollment limit: 60
Exclusion: MGTC54Y
Prerequisites: Completion of at least ten full-course equivalents including ECON300Y (ECON302Y or ECON320Y) & ECON402Y & MGTB1H

MGTC685H Planning and Budgeting for Public Institutions
The theory and practice of planning and allocating resources in large public institutions. After presenting theories of planning and resource allocation in large public institutions, the course will illustrate them by means of extensive case studies of the changes currently faced by universities and colleges. Information will be a combination of lectures, discussion, and case studies. Two hours of lecture per week. Enrollment limit: 60
Prerequisites: MGTC50H

MGTC690H Management Ethics
This course provides students with a set of skills necessary to deal with the ethical problems contemporary managers face. Locally, the marketplace has come to demand a sophisticated managerial approach to the ethical problems that arise in all areas of business practice. Topics will include ethical issues in international business, finance and banking, accounting, advertising, intellectual property rights, environmental policy, product and worker safety, new technologies, pay equity, and affirmative action, whistle-blowing, and drug testing for employees. Two hours of lecture per week. Enrollment limit: 60
Exclusion: MGTC408H, MGT474H
Prerequisite: MGTC40Y
Exclusion: PHIL306H
Prerequisite: MGMT102Y

MGTC695H Introduction to Operations Management
Introduces the student to the design and control problems of systems that transform inputs into output, with emphasis on making major strategic, tactical, and operational decisions in the operations function. The course also covers several Management Science approaches used to solve the associated problems. Enrollment is limited to students registered in programmes requiring this course. Two hours of lecture per week. Enrollment limit: 60
Exclusion: MGTC75H
Prerequisites: BCOM200Y (ECON302Y) & MGTB1H

MGTC740H Analysis for Decision-Making
Introduction to Management Science approaches to dealing with decision-making situations, including discussion of problem definitions, objectives, constraints, model construction and verification, development of solutions, sensitivity analysis and interpretation. Topics include: decision analysis, mathematical programming, network methods, dynamic programming and waiting-line models. Two hours of lecture per week. Enrollment limit: 60
Prerequisites: MAT320Y or MAT327 & ECMB304Y (ECMB302Y) & ECMB307Y (ECMB305Y)

MGTC750H Operations Management: A Mathematical Approach
Introduction to the broad scope of major topics, strategic, and operational decisions in Operations Management. Topics include forecasting, long-range capacity planning, location and layout of facilities, aggregate planning, project management, inventory control, and production scheduling. Two hours of lecture per week. Enrollment limit: 60
Exclusion: MGTC608H, MGT74TH
Prerequisite: MGTC74H

MGTC854H Marketing in the Information Age
With the advent of information technology, marketing of even common consumer goods has changed radically in the last decade. This course will centre around the techniques used by managers to target and reach the proper segment, gather timely marketing research, analyze it electronically and monitor the marketing process through them. Course participants will engage in the creation of a product or service, and its associated marketing plan, through an integrated World Wide Web site accessible to the Scarborough community. Limited enrollment: 40
Prerequisites: ECIC301H & MGTC04H

MGTD093H Market Research
A decision oriented course, designed to introduce students to the market research process. Alternatives data collection, sampling, analysis, and evaluation procedures are discussed. Exploratory, descriptive and causal research approaches are reviewed. Both theoretical and technical considerations in design and execution of market research are stressed. Instructors involves lectures and class projects including computer analysis. Limited enrollment: 40
Exclusion: MGTC408H
Prerequisites: ECON100Y (ECMB100Y) & MGTC50H

MGTD120H Advertising: From Theory to Practice
An introduction to the basic communication tools used in planning, implementing and evaluating promotional strategies. The course will review the basic findings of the behavioral sciences dealing with perception, personality, psychological appeals, and their application to advertising as persuasive communication. Students will gain experience preparing a promotional plan for a small business. The course will rely on lectures, discussions, and presentations by industry and guest speakers from the local advertising industry. Two hours of lecture per week. Limited enrollment: 20
Prerequisite: MGTD094Y & MGTC04H or permission of the instructor

MGTD094H Advanced Financial Accounting
Consideration of accounting practice in the context of accounting theory and concepts for a number of areas including intercorporate investments, and foreign currency translation. Two hours of lecture per week. Enrollment limit: 60
Prerequisite: MGTD021H
MAT324H Graph Theory and Algorithms for its Applications
MAT344H Introduction to Combinatorics
MAT344H Linear Programming and Optimization
MAT359H Chaos, Fractals, and Dynamics
MAT369H Introduction to Real Analysis
MAT371H Differential Geometry I
MAT425H Complex Variables

MAT444H Current Questions in Mathematics and Science
MAT450H Computers in Contemporary Society

MAT499 Computer Science Specialist Program

PHYS300 Principles of Modern Physics

SCSC55H Computer Graphics

SCSC61H Scientific Computing

Stochastic Differential Equations

SCSC65H Mathematical Methods in Computer Science

SCSC66H Computational Physical Sciences

SCSC69H Introduction to Computer Science

SCSC70H Current Questions in Mathematics and Science

SCSC71H Computers in Contemporary Society

STAC421 Multivariate Analysis

STAC422 Experimental Design

STAC423 Time Series Analysis

STAC424 Stochastic Processes

STAC425 Regression Analysis

STAC499 Computer Science Specialist Program

CSCS100 Principles of Computer Science

CSCS150 Computer Graphics

CSCS200 Scientific Computing

CSCS250 Ordinary Differential Equations

CSCS260 Numerical Approximation, Integration and Ordinary Differential Equations

CSCS270 Numerical Linear Algebra

CSCS300 Introduction to Computer Science

CSCS350 Computer Graphics

CSCS360 Scientific Computing

CSCS400 Scientific Computing

CSCS450 Numerical Methods for Differential Equations

CSCS460 Numerical Linear Algebra

CSCS470 Numerical Approximation, Integration and Ordinary Differential Equations

CSCS480 Numerical Methods for Differential Equations

CSCS490 Computer Science Specialist Program

CSCS500 Introduction to Computer Science

CSCS550 Computer Graphics

CSCS600 Scientific Computing

CSCS650 Mathematical Methods in Computer Science

CSCS660 Computational Physical Sciences

CSCS690 Introduction to Computer Science

CSCS700 Current Questions in Mathematics and Science

CSCS710 Computers in Contemporary Society

CSCS720 Computer Science Specialist Program

CSCS730 Current Questions in Mathematics and Science

CSCS740 Computers in Contemporary Society

CSCS750 Computer Science Specialist Program
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT42H1</td>
<td>Techniques of the Calculus of Several Variables I</td>
<td>Core calculus course focusing on vector calculus, multivariable calculus, and</td>
</tr>
<tr>
<td>MAT42H2</td>
<td>Techniques of the Calculus of Several Variables II</td>
<td>Advanced calculus, including vector calculus, multivariable calculus, and</td>
</tr>
<tr>
<td>MAT43H</td>
<td>Linear Algebra I</td>
<td>Introduction to linear algebra, including systems of linear equations,</td>
</tr>
<tr>
<td>MAT44H</td>
<td>Calculus</td>
<td>Suitable for students interested in mathematics or pre-med courses.</td>
</tr>
<tr>
<td>MAT45H</td>
<td>Fundamental Data Structures and Techniques</td>
<td>Focuses on data structures and algorithms, including arrays, linked lists,</td>
</tr>
<tr>
<td>CS31H</td>
<td>Introduction to Computer Science</td>
<td>Comprehensive introduction to computer science, including programming</td>
</tr>
<tr>
<td>MAT48H</td>
<td>Discrete Mathematics for Computer Science</td>
<td>Focuses on discrete mathematics, including set theory, graph theory,</td>
</tr>
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</table>

**Mathematics Supervised by:** H.S. Rosenbaum (287-7268)

For more detailed information, please refer to the full course catalog.
MAT240H Linear Algebra II
Two one-hour lectures per week and a two hour tutorial per week.
Exclusion: MAT200X, MAT224
Prerequisite: MAT223H, MAT223

MAT241H1 Techniques of the Calculus of Several Variables I
A study of vector algebra in \( \mathbb{R}^2 \), lines and planes in \( \mathbb{R}^3 \), complex numbers, matrices, determinants and linear equations, functions of several variables, partial derivatives, gradients, tangent plane, Jacobian matrix and chain rule, Taylor series, extreme problems, extremal problems with constraints and Lagrange multipliers, multiple integrals, spherical and cylindrical coordinates, line and surface integrals. Vector fields in \( \mathbb{R}^n \).
Two-one-hour lectures per week and a one hour tutorial per week.
Exclusion: MAT222Y, MAT229Y, MAT230, 234, 235, 237, 239, 257
Prerequisite: MAT223H, MAT224Y

MAT242H1 Techniques of the Calculus of Several Variables II
Polar series. Vector fields in \( \mathbb{R}^n \). Divergence and curl, curves, parametric representation of surfaces, double and line integrals, surfaces, parametric representations of surfaces, and integrals. Green's, Gauss' and Stokes' theorems will also be covered. An introduction to differential forms, wedge derivative.
Two-one-hour lectures per week and a one hour tutorial per week.
Exclusion: MAT230L, 234, 235, 237, 239, 257
Prerequisite: MAT225H

MAT243H0 Introduction to Analysis
This course is designed for students whose interest in mathematics has been stimulated by their experience in A20 and A10, and who wish to acquire the analytic techniques which are essential for more advanced mathematics. The course will have a fundamental emphasis on rigorous analytic proofs. Students will study the least upper bound principle for \( \mathbb{R} \), limits in \( \mathbb{R} \) and \( \mathbb{R}^2 \), continuity functions in one and two variables, space filling curves and nowhere differentiable functions, existence of extrema on closed and bounded sets, mean value theorems and the fundamental theorems of the calculus, the Riemann integral.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT227Y, MAT228
Prerequisite: MAT226Y & MAT223H & MAT224H (MAT245Y)
Corequisite: MAT229H

MAT246H0 Ordinary Differential Equations I (Formerly MAT231H)
Ordinary differential equations of the first and second order, existence and uniqueness; solutions by series and integrals, linear systems of first order; non-linear equations; difference equations.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT231H, MAT244, 267
Prerequisite: MAT224H, MAT226H & MAT223H
Corequisite: MAT241H & MAT242H

MAT247H0 Linear Programming and Optimization
Linear programming, simplex algorithms, duality theory, interior point methods; gradient and convex optimization, stochastic programming, applications to portfolio optimization and operations research.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: APME21H
Prerequisite: MAT224H
Corequisite: MAT229H

MAT248H1 Groups and Symmetry
Groups, rings, fields, and modules; groups and rings, permutation groups, linear groups. Symmetry groups of regular polygons and Platonic solids, wallpaper groups, group actions, class formula, Cayley's theorem, Lagrange's theorem. Normal subgroups, quotient groups. Emphasis on examples and calculations.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT351H, MAT352H, MAT380
Prerequisite: MAT244H

MAT249H0 Fields and Galois Theory
Introduction to abstract algebra theory. Subfield, field extensions, roots of polynomials, quotient fields, finite fields, field extensions, automorphisms, symmetric polynomials.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT351H
Prerequisite: MAT244H

MAT345M Complex Variables
Theory of functions of one complex variable, analytic and meromorphic functions. Cauchy's theorem, residue calculus, conformal mappings, introduction to analytic continuation and harmonic functions. Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT326H, MAT334
Prerequisite: MAT244H

MAT346H0 Differential Equations I
Elementary topics in number theory, arithmetical functions, polynomials over the residue classes modulo \( n \), characters on the residue classes modulo \( n \), quadratic reciprocity law, representation of numbers as sums of squares.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT228H, MAT315
Prerequisite: MAT226Y & MAT224H

MAT248H3 Classical Plane Geometry and Their Transformations
Motions, Isometries and Desargues' theorem, similarities and collineations in the Euclidean plane; inversions and the conformation plane; models of the hyperbolic and real projective planes and their transformations.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT280H, MAT265 (355)
Prerequisite: MAT223H
Corequisite: MAT249H

MAT349M Graph Theory and Algorithms for its Applications
Graphs, subgraphs, isomorphism, trees, connectivity, Euler and Hamiltonian properties, matching, vertex and edge colourings, planarity, network flows and strongly regular graphs. A selection of applications to such problems as timetabling, personal assignment, task from scheduling, traveling salesman, tournament scheduling, experimental design and friendship problems. Expert algorithms and their computational complexity will be discussed whenever possible.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT224M, MAT265
Prerequisite: MAT244H

MAT244H3 Differential Geometry I
Curves and surfaces in Euclidean space. Curvature, torsion and the associated equations, the first and second fundamental forms and integrability conditions, intrinsic geometry and parallelism, the Gauss-Bonnet theorem.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT254, MAT376
Prerequisite: MAT244H

MAT245H0 Complex Variables II
Applications of complex analysis to geometry, dynamics and number theory. Fractional linear transformations and the Schwarz-Christoffel formula. Solutions to the Dirichlet problem by conformal mapping and the Poisson kernel. The Riemann mapping theorem. The prime number theorem.
Two-one-hour lectures per week and one hour tutorial per week.
Exclusion: MAT254
Prerequisite: MAT244H (MAT245H)
Neuroscience
(B.S.C.)

Faculty List
J.R. Brown, B.Sc. (Carleton), Ph.D. (Texas) Professor
C.K. Guvett, B.Sc. (Rhodes), M.Sc. (Harvard), Ph.D. (Montana), Professor
J.W. Gerd, B.A. (Mount Allison), Ph.D. McGill, Professor
G.O. Ivy, B.A. (Duke), Ph.D. (California, Bristol) Professor
N.W. Milgram, B.A. (UCLA), M.A., Ph.D. (McGill), Professor
T.L. Pitt, B.S., M.A., M.S., Ph.D., Florida, Professor
A.C. Mason, B.Sc., (Guelph), M.Sc. (Toronto), Ph.D. (Toronto), Assistant Professor

Neuroscience encompasses aspects of a very diverse disciplines that have the common goal of understanding how the nervous system works. Techniques from constituent disciplines like anatomy, biochemistry, molecular biology, pharmacology, physiology, psychology, and ecology are used to unravel some of the mysteries of the brain and its mechanisms of action. Investigators in Neurosciences have also made fundamental contributions to clinical aspects of neurological function and behavior.

The Major Programme is intended for students who wish to combine their studies of Neuroscience with other areas of interest. The Specialist Programme is designed for students who have a particular interest in the Neurosciences and wish to focus their studies in this area. In a few instances, courses from other areas may be used to satisfy programme requirements, but substitutions must be pre-approved by the Supervisor of Studies.

First-Year Students in Neuroscience ROYALT, CHAMAG, and PSYCH are recommended in the first year if you are intending to pursue a Specialist or Major Programme in Neuroscience.

SPECIALIST PROGRAMME IN NEUROSCIENCE

Supervisor: J. Good (Office: S312)

1. The following 3 F.C.E.'s:
   ROYALT Introductory Biology
   CHAMAG Introductory Chemistry
   PSYCH Introductory Psychology

MAJOR PROGRAMME IN NEUROSCIENCE

Supervisor: J. Good (Office: S312)

The programme requires seven full-course equivalents. Students planning to complete a double major in Biology and Neuroscience must take at least 0.5 F.C.E. in either Category 4 of the Major Programme in Neuroscience or an extra 0.5 F.C.E. in Biology under Category 4 of the Major Programme in Biological Systems. Students should consult Programme Supervisor.

2. The following 4.5 F.C.E.'s:
   ROYALT Cell & Molecular Biology
   ROYALTZ Animal Physiology
   CHAMAG Organic Chemistry
   CHAMAGY Animal Physiology
   PSYCHY Neuroscience I. Cell Anatomy and Physiology
   PSYCHY Data Analysis in Psychology (STAT322 may not be used to fulfill this requirement)
   PSYCHY Human Brain & Behaviour

3. The following 3.5 F.C.E.'s:
   ROYALT Introductory Biology I: Proteins & Enzymes
   ROYALTZ Biochemistry II: Bioenergetics & Metabolism
   ROYALTZ2 Bioinformatics

4. The following 1.5 F.C.E.'s from the following:
   ROYALTZ Developmental Neurobiology
   ROYALTZ1 Sympathetic Organization of the Brain
   ROYALTZ Supervised Study in Major Neuroscience
   ROYALTZ2 Supervised Study in Major Neuroscience
   ROYALTZ Current Topics in Neuroscience
   ROYALTZ1 Neuropsychology
   ROYALTZ2 Advanced Neuroscience Laboratory
   ROYALTZ3 Pathologies in the Nervous System
   ROYALTZ7 Thesis in Neuroscience

Neurosciences

Music

Pass me Visual & Performing Arts credits of the Calendar page 160.

The following indicates the required courses for the Major Programme in Neuroscience.

1. The following 3.0 F.C.E.'s:
   ROYALTY Introductory Biology
   CHAMAGY Introductory Chemistry
   PSYCHY Introductory Psychology

2. The following 1.5 F.C.E.'s:
   ROYALT neuroscience I. Cell Anatomy & Physiology
   ROYALTZ Neuroscience II: Learning & Motivation
   ROYALT Neuroscience III: Sensory & Motor Skills

3. 2.0 F.C.E.'s from the following:
   ROYALTZ Cell and Molecular Biology
   ROYALTZ Animal Physiology
   ROYALTZ Data Analysis in Psychology
   ROYALTZ3 Human Brain and Behaviour

4. 0.5 F.C.E. from the following:
   ROYALTZ Neuroscience Laboratory
   ROYALTZ Developmental Neurobiology
   ROYALTZ1 Neurosciences Laboratory
   ROYALTZ3 Sympathetic Organization of the Brain
   ROYALTZ Supervised Study in Neuroscience
   ROYALTZ2 Supervised Study in Neuroscience
   ROYALTZ Current Topics in Neuroscience
   ROYALTZ2 Neuropsychology
   ROYALTZ2 Advanced Neuroscience Laboratory
   ROYALTZ3 Pathologies of the Nervous System
   ROYALTZ7 Thesis in Neuroscience
   PSYCHY Psychological Aging

Neurosciences

Animal Physiology

A core course in animal physiology, which will consider regulatory mechanisms that control and co-ordinate the functioning of the body.

Tobacco will include stress action potentials, chemical synaptic transmission, contraction of smooth muscle, neuroendocrine systems, sensory receptors, and hormonal actions. This course is the animal half of the Animal and Plant Physiology course (BIO4030Y) and
NROCB0053 Neuroscience: I Cell Anatomy and Physiology
In-depth coverage of the structure and function of the nervous system.
Topics include: neuroanatomy, structure and function of neurons and glial cells, neurochemistry, neural development, and neural mechanisms of communication at the cellular and molecular levels. The objective is to give the student a firm grasp of the structure and cellular/molecular basis of functions of the nervous system as well as its role in the behavior of the organism. Three hours of lecture and two hours of lab per week.
Exclusion: PSY290H, PSYA0Y1
Pre requisite: BGYA07Y (BIDAY3Y) C. G. Crevel

NROCB1053 Neuroscience I: Learning and Motivation
Topics covered under the category of motivation include: physiological basis of eating, drinking and sexual behavior, sleep, and the neural correlates of reward. Topics covered under learning include: learning categories, memory systems, and the cell and molecular basis of learning and memory.
Three one-hour lectures plus one one-hour tutorial per week.
Exclusion: PSY291, PSY295H
Pre requisite: BGYB08H (PSY280H) plus one other B-level half-course in PSY.
[PSY280H and PSY280H are recommended] 7.6.4.

NROCB2053 Neuroscience Laboratory
Instructs in a variety of techniques used in investigations of nervous system function.
The course is mainly intended for students who are pursuing a Specialized Program in Neuroscience. The procedures covered include: behavioral techniques, surgery, brain lesioning, preparations, and histology (preparing, sectioning and staining neural tissues). In addition, animal ethics and preparation of scientific papers will be covered.
Two hours of lecture and three hours of scheduled laboratory work per week.
Students will also be required to spend additional hours working in the student laboratory.
Limited enrolment: 30
Exclusion: PSY399, PSY363
Pre requisite: PSY207H & BGY280H (PSY280H)
T. P. Frey

NROCB3053 Neuroscience II: Sensory and Motor Systems
A focus on the mechanisms by which the nervous system processes sensory information and controls movement.
Topics include sensory transduction and the sensory physiology of each of the sensory systems (olfactory, visual, somatosensory, auditory, gustatory) and models of memory processing. Both spinal and central mechanisms of motor control are also covered.
Three one-hour lectures and one one-hour tutorial per week.
Exclusion: PSY294, PSY290
Pre requisite: BGYB08H (PSY280H) C. G. Crevel
NROCB3063 Synaptic Organization of the Brain
A detailed study of the synaptic organization of the brain, focusing on major structures of the central nervous system (CNS).
Neuronal morphology, synaptic connectivity, and molecular mechanisms of synaptic function, ion channels and neurotransmitter actions will be covered in detail. Simultaneous in circuits among sensory devices structures as the olfactory bulb, cerebellum, hippocampus and cerebral cortex will be examined in detail. The goal of the course is to engender a deeper understanding of cellular mechanisms of information processing in the CNS.
One two-hour lecture per week.
Exclusion: PSY289H
Pre requisite: BGYB08H (PSY280H) G. Frey

NROCB3063 Supervised Study in Neuroscience
A reading or research project.
These courses provide an opportunity to investigate an area of neurosciences in depth after completing basic course requirements. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate that his or her background is adequate for the project proposed and should present a clear rationale to prospective supervisors. Frequent consultation with the supervisor is necessary and extensive library research and/or data collection will be required. Such a project will culminate in a written submission.
Students must obtain a permission form from the Divisional Office (SO4 7.1A) that is to be completed and signed by the intended supervisor, and returned to the Divisional Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course.
Students seeking supervision off campus are advised to notify their advisor with the Supervisor of Studies that the prospective project supervisor currently holds a convocation appointment at the University of Toronto and that the project is acceptable.
Pre requisite: Full course equivalents in Psychology, Biology or Neuroscience & permission of the instructor.
Exclusions for NROCB3063: PSYC09, BGYD01 (BID00)
Exclusions for NROCB3063: PSYC09, BGYD01 (BID00)
Supervision by a faculty member

NROCB3063 Currents Topic in Neuroscience
An intensive examination of selected issues and research problems in the Neurosciences.
Limited enrolment: 20
Exclusion: PSY289H
Pre requisite: NROCB3063 (PSYC46H) & NROCB3063 (PSYC46H) W. W. Milgrom
NROCB3063 Advanced Neuroscience Laboratory
Instruction in a variety of advanced techniques used in investigations of nervous system function.
The course is mainly intended for students who are pursuing a Specialized Program in Neuroscience. Advanced behavioral, surgical, and histological techniques used in the study of neuroscience will be covered.
Two hours of lecture and three hours of scheduled laboratory work per week.
Students will also be required to spend additional hours working in the student laboratory.
Exclusion: PSY296, PSY063
Pre requisite: BGYB08H
Corequisite: NROCB3063 (PSYC46H) and PSY280H
T. Frey

NROCB3063 Thesis in Neuroscience
This course offers qualified students the opportunity to engage in a year-long research project under the supervision of a faculty member in the Neuroscience area (Psychology or Biology). Students will meet as a group with the course co-ordinator to present their own research proposals, to appraise the proposals of others and to discuss the results of their investigation. Additional topics directly related to neuroscience research will also be discussed.
The individual research project will culminate in a written report in the form of a thesis and as oral defense of that report in the spring.
Students must obtain a permission form from the Divisional Office (SO4 7.1A) that is to be completed and signed by the intended supervisor, and returned to the Divisional Office.

NROCB3063 Advanced Neuroscience Laboratory
Instruction in a variety of advanced techniques used in investigations of nervous system function.
The course is mainly intended for students who are pursuing a Specialized Program in Neuroscience. Advanced behavioral, surgical, and histological techniques used in the study of neuroscience will be covered.
Two hours of lecture and three hours of scheduled laboratory work per week.
Students will also be required to spend additional hours working in the student laboratory.
Exclusion: PSY296, PSY063
Pre requisite: BGYB08H
Corequisite: NROCB3063 (PSYC46H) and PSY280H
T. Frey

NROCB3063 Thesis in Neuroscience
This course offers qualified students the opportunity to engage in a year-long research project under the supervision of a faculty member in the Neuroscience area (Psychology or Biology). Students will meet as a group with the course co-ordinator to present their own research proposals, to appraise the proposals of others and to discuss the results of their investigation. Additional topics directly related to neuroscience research will also be discussed.
The individual research project will culminate in a written report in the form of a thesis and as oral defense of that report in the spring.
Students must obtain a permission form from the Divisional Office (SO4 7.1A) that is to be completed and signed by the intended supervisor, and returned to the Divisional
supervision, and returned to the Divisional Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course. Students seeking supervision off campus are further advised to verify first with the Supervisor of Studies that the prospective project supervisor currently holds a cross-appointment at the University of Toronto. Prerequisite: Satisfactory completion of fifteen full-course equivalents in any discipline, but including PSY880X & one laboratory half-course in Psychology or Biology & consent of a faculty member in Psychology or Biology to serve as research supervisor.
Exclusions: PSY992Y, BOYDG2Y
(RIGOS2Y)

Supervision by a Faculty Member

COURSES NOT OFFERED IN 2000/2001

NRO262H3 Neoplasticity
Exclusion: PSY4262H
Prerequisite: NRO860H3
PSY8600H & PSY8601H

NRO865H3 Pathologies of the Nervous System
Prerequisite: NRO860H3
PSY8600H & PSY8601H
Exclusion: NRO860H3

Philosophy

(B.A.)

Faculty List
J.H. Sobel, M.A. (Queen’s University), Ph.D. (Yale), Professor
W.C. Graham, M.A., Ph.D. (Toronto), Professor
W.E. Steiger, M.A. (Alberta), Ph.D. (Toronto), Professor
R.P. Thompson, M.A., Ph.D. (Toronto), Professor
M. Kingwell, M. Phil., Ph.D. (York), Associate Professor
L. Lange, B.A., M.A. (McMaster), Ph.D. (Toronto), Associate Professor
S. Smedly, B.A. (Toronto), Ph.D. (Pittsburgh), Associate Professor

Discipline Representative: M. Kingwell

Philosophy is the study of the ideas that shape our thought and activity. While we do discuss controversial issues in politics, morality, science, philosophy, and religious, art, etc., philosophy is more concerned with the ideas that underlie all such debates. We consider what the role of government should be, what reasons there could be to describe anything as good or bad, what proves that something is true, whether there could be a reality beyond the physical world, and whether the only value of art is in the pleasure it gives. Such questions have been addressed in a variety of theories, and any study in philosophy begins with learning what others have thought, but our purpose is not primarily to be historians of ideas, and assignments focus on developing the intellectual abilities and techniques required to think effectively for oneself at this deeper level. So philosophy emphasizes interpretation and original thought, reasoning, discussion and assessment.

PHILO 1Y1 Fundamentals of Philosophy (1.0)
A discussion of some of the fundamental questions of philosophy: what is good or bad? What is moral and can it be justified? Is it reasonable to adhere to a religion? What is knowledge? Are social practices justifiable? Is materialism true? Are humans free?
Some of the world’s major philosophers will be studied with a view to answering these and other basic questions which have confronted us throughout history.
The course will be divided into the following lecture sections: LOI, LO2, L30.
The problems addressed are substantially the same in each section, though the readings and approach may vary from section to section, depending on the instructor.

PHILO 201H3 Ethics (1.0)
A study of philosophical problems and positions in ethics.
Topics may include: the nature of values, the justification of morality, social skepticism, ethical egoism, utilitarianism, deontology.
Exclusions: PHIL 275, 276

PHILO 255H5 Social Issues (0.5)
An examination of issues that may be both contemporary and historical, that call upon us to consider and articulate our values and commitments.
This year the course will address what seems to be the over-arching social issue of the present - economic globalization. Our text will be Cheikh Anta Diop: The Global Marker or an Ethical System, by Canadian philosopher John Holloway.
Exclusion: PHIL 381

PHILO 396H5 Business Ethics (1.0)
An examination of philosophical issues in ethics, social theory, and theories of human nature as they bear upon the conduct of business.
Topics may include: what social obligations does business have to the people who work for companies, and to the communities in which they are located? what standards can business should be calculated in a way that is relevant to business decisions? Do political ideas such as democracy have a role within business?
Exclusions: PHIL/HIL 295H

T.B.A.

PHILO 109D Political Philosophy (1.0)
A study of philosophers about the order and governance of human societies.
In this course, a variety of significant political philosophers will be examined.
Many questions may be considered, for example: What is justice? When, if ever, is it legitimate for some persons to have authority over others? Do people have a right to choose the societies they want, or do society shape them? Who really knows what is best for society? Are all people equal? If so, how will society best reflect this?
Exclusions: PHIL 265

L. Lange

PHILO 119S Topics in the Philosophy of Law (1.0)
A discussion of right and wrong, justice, legality, and related concepts.

T.B.A.

PHILO 136H Philosophy and Feminism (1.0)
Study and discussion of a variety of issues in contemporary feminist philosophy.
This course will be an introduction to a diverse range of feminist ideas. Feminist thinkers differ greatly about the nature and source of the problem of gender inequality, and equally widely about proposals for more egalitarian societies.
What is feminism? What is a woman? or a man? Is there anything natural or inevitable about gender relations? Why do gender relations exist in virtually every known society? How do gender relations interact with other social relations, such as economic class relations, race, sexual orientation, etc.? These and other topics will be considered through assigned readings, class discussion, and written work.

L. Lange

PHILO 136H Philosophy of Education (1.0)
Study of the nature of education. Exclusions: PHIL 115

PHILO 137D Belief, Knowledge, and Truth (1.0)
An examination of such questions as certainty, the problem of skepticism, the scope and limits of human knowledge, the objectivity of perception, rationality, and theories of truth.
Exclusions: PHIL 230

T.B.A.

PHILO 139D Existentialism (1.0)
A study of the views and approaches characteristic of such writers as Kierkegaard, Heidegger, and Sartre. Exclusions: PHIL 230, 231

T.B.A.
PHIL 3303 Symbolic Logic I
An introduction to formal techniques of reasoning, sentential logic, and quantification theory or predicate logic.
Exclusions: JMBP590, PHIL345
J.H. Sobel

PHIL 3303 Symbolic Logic II
A continuation of PHIL 3303.
The natural deduction system studied in Symbolic Logic I is extended to cover identity and definite descriptions. Special attention is paid to the resolution of the identity calculus in "extensional" terms and formulas. Alternative treatments of definite descriptions, one that follows Frege, the other that follows Russell, are developed and compared.
The text is by D. Kehler, R. Montague and G. Most, Logical Techniques of Formal Analysis.
Exclusions: JMBP590
PHIL 3303 Symbolic Logic
J.H. Sobel

PHIL 3304 Philosophy and Culture
An examination of basic philosophical issues in the creation and interpretation of culture. What do we mean when we use the word "culture"? What intellectual tools do we need to understand culture? Is philosophical questioning, often thought to be universal, in fact shaped by developments in our surrounding culture? How, in turn, does philosophy appropriate the importance of culture? Can philosophical reflections help resolve conflicts within, and between, cultures? Thinkers to be studied may include: Marx, Feuerbach, Habermas, Popper, Lévi-Strauss, Fanon, McLuhan, M. Kingwell

PHIL 3305 Foundations of Cognitive Science
A study of the hypotheses and theories that ground the cognitive science approach to mental representations and cognition. We will address the fundamental problems: what is a computational system and how can a physical system understand language and think? In order to answer these questions, we will study the functionalist theory of mind, the relationship between syntax and semantics, and the theory of interpretable automatic formal systems. We will also examine some of the basic computer accomplishments. We will conclude by examining the difference between traditional artificial intelligence using symbol systems, and connectionism.

Exclusions: COG200

W. Seager

PHIL 3306 Symbolic Logic III
A continuation of PHIL 3305.
The natural deduction system studied in Symbolic Logic I is extended to cover identity and definite descriptions. Special attention is paid to the resolution of the identity calculus in "extensional" terms and formulas. Alternative treatments of definite descriptions, one that follows Frege, the other that follows Russell, are developed and compared.
The text is by D. Kehler, R. Montague and G. Most, Logical Techniques of Formal Analysis.
Exclusions: JMBP590
PHIL 3306 Symbolic Logic
J.H. Sobel

PHIL 3504 Seminar in Philosophy: Postcolonial Studies in Philosophy
A critical examination from a postcolonial perspective of some aspects of western European philosophy.
How has Western European philosophy and religious thought been shaped by western Europe's colonization of other parts of the globe? After 1492, did western European thinkers perceive and imagine the indigenous peoples of the Americas? How was this connected to European attitudes toward Africa, Asia and the East?
We will examine modern philosophy's ideals of rationality, universality, and progress. Reading will include some primary sources in modern philosophy, and some contemporary works in postcolonial studies.
Prerequisites: Two F.C.E.'s in PHIL or permission of the instructor.

L. Lange

PHIL 3505 Seminar in Philosophy: Cultural Criticism
A detailed examination of philosophical issues in thinking about culture.
This course will pursue theoretical concepts about interpretation, discourse, identity and authenticity as they relate to cultural formations, including minority cultures, sub-cultures and popular culture. We will also consider the role of ideology, the construction of cultural common, and the influence of the media on culture. Readings from authors such as Barthes, Postman, Gadamer, Habermas, Baudrillard, Debor and Beauvoir.
Prerequisites: Two F.C.E.'s in PHIL or permission of the instructor.

M. Kingwell

PHIL 3506 Seminar in Philosophy: Minds and Machines
An examination of various arguments for and against the idea that machines, especially computing machines, can be conscious, can think, or can feel. Topics may include: Turing's test of machine intelligence, the argument based on Gold's theorem that there is an uncomputable software between machines and Sejnowski's "Chinese Room Thought Experiment." Prerequisites: Two F.C.E.'s in PHIL or permission of the instructor.

W. Seager

PHIL 3507 Seminar in Philosophy: Theories of Human Nature
An exploration of theories which provide answers to the question "What is a human being?". These answers probe and develop the sorts of catchphrase definitions in which we are all accustomed: "Man is a rational animal," "Man is a political animal," "Man is inherently individual," "Man is inherently social." Theories of human nature bring together considerations from ethics, political philosophy, metaphysics and philosophy of mind (and so acquaintance with some notions of these areas is required). We will study a wide variety of works by authors such as Aristotle, Hobbes, Rousseau, Marx and Freud.

Prerequisites: Two F.C.E.'s in PHIL or permission of the instructor.

S. Sobel

PHIL 3508 Seminar in Philosophy: Topic to be Announced
Prerequisites: Two F.C.E.'s in PHIL or permission of the instructor.
J.A.

PHIL 3509-3609 Independent Study
These courses are intended for qualified students who wish to engage in advanced level work on a well-defined topic of their choice. These courses are only available with the prior arrangement of an instructor.

COURSES NOT OFFERED 2000/2001

PHIL 3601 Philosophy of Art
PHIL 3604 Philosophy of Science
PHIL 3605 Philosophy of Language

Physical Sciences

Physical Sciences Scarborough

(B.S.)

The Programs offered by the Physical Sciences are a closely related group especially designed for students pursuing professional subject areas. The aim is to provide students with an integrated view of science.

The following Specialist programme are offered by the Physical Sciences Division at Scarborough:

Biological Chemistry
Computer Science (Co-op & Non-Co-op)
General Stream
Information Systems Stream
Mathematics Stream
Joint Physics Stream
Joint Statistics Stream
Software Engineering Stream
System Science (Co-op & Non-Co-op)

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The following Specialist programme are offered by the Physical Sciences Division at Scarborough:

Biological Chemistry
Computer Science (Co-op & Non-Co-op)
General Stream
Information Systems Stream
Mathematics Stream
Joint Physics Stream
Joint Statistics Stream
Software Engineering Stream
System Science (Co-op & Non-Co-op)
Environmental Systems Stream
Environmental Biology Stream
Environmental Chemistry Stream
Mathematics and Its Applications
Physical and Mathematical Sciences
Physics and Its Applications

Most programmes cover at least two coitate disciplines and, as a result, 14 to 17 full course equivalents (F.C.E.'s) must be specified in a 20 course degree programme. Many of the programmes have a common first year core of requirements, allowing students to keep their options open for subsequent choice of programmes. Students are generally advised to take their courses in the sequence recommended by their programme of choice. Irresolvable, insurmountable differences may arise if courses are delayed to later years. However, students should be aware that some courses are offered in alternate years. These courses may be taken in the student's year of study in which they are offered provided prerequisites have been satisfied.

EARLY TEACHER PROJECT

Coordinator: E.C. Dyer (287-7206)

The Early Teacher Project is designed to produce lessor high school teachers of Science and Mathematics. It has been developed in cooperation with OSERT, University of Toronto. The Physical Sciences Scarborough Specialist programmes are designed to lead to Honours (Specialist) Ontario Teacher Certification in one or more subjects. To participate in the project, students must be registered in a Physical Sciences Scarborough Specialist Programme and are in their second year. Students who have completed these courses will work with experienced teachers in classrooms of primary/secondary schools in the third and fourth years. There will also be a weekly seminar in which students meet and are supervised by University of Toronto at Scarborough and OSERT.

The Early Teacher Project will count for academic credit (though not as part of the 20 course requirement of a degree). Successful completion of the Early Teacher Project, together with a Physical Sciences Scarborough Specialist Programme with a 2.5 GPA standing in the final five F.C.E.'s will guarantee admission to OSERT/UT for at least thirty students each year.

Completion of the Early Teacher Project requires the completion of PHYS101H / PHYS102H and one of PASC203H or PASC206H, irrespective of the particular programme requirements of Physical Sciences Scarborough Specialist Programmes. These courses may have to be chosen as electives since they are not required in all our programmes.

CO-OPTERATIVE PROGRAMMES

The Division offers two co-operative programmes in conjunction with the specialist programmes in Computer Science and Environmental Science. See the listings in those disciplines for details.

Specialist (Co-operative) Programme in Computer Science combines scientific and mathematical studies with work experience in research and technology in the private and public sectors. The programme prepares students for permanent employment in the areas of Information Technology, Research and Development, as well as for graduate study in computer science. For further information, consult the listings under Computer Science (page 53) and Co-operative Programmes (page 59).

Specialist (Co-operative) Programme in Environmental Science provides the key to understanding and relating many of the environmental issues that plague our planet. Problems such as diminishing and polluted water supplies, acid rain, lake and coastal erosion, disposal of household, industrial and radioactive wastes are related to an insufficient understanding of our natural systems and processes. The Specialist (Co-operative) Programme in Environmental Science provides students with an opportunity to investigate, analyse, and recommend solutions through work placements with government, consultation, industry and the non-profit sector. For further information, consult the listings under Environmental Science (page 77) and Co-operative Programmes (page 59).

The following Major Programmes are offered by the Physical Sciences Division at Scarborough:

Biochemistry
Chemistry
Computer Science
Environmental Science
Mathematical Sciences
Physical Sciences

The Division also offers a Minor Programme in Environmental Science.

Interdisciplinary courses are offered in the Physical Sciences Scarborough Division for the PASC designation. They are designed to be taken by students with a broad interest in Physical Science. Most of the Specialist programmes offered by the disciplines of Physical Sciences require one or more PASC courses.

The Division offers an interdisciplinary Specialist Programme in the Physical and Mathematical Sciences. This programme provides an excellent opportunity to combine studies from a number of disciplines in Physical Sciences.

SPECIALIST PROGRAMME IN PHYSICAL AND MATHEMATICAL SCIENCES

Supervisor: M.J.G. Lee (287-7246)

This programme provides a framework of courses in the Physical Sciences based upon a firm Mathematical foundation, relating Astronomy, Chemistry, Computer Science, Physics and Statistics. It prepares students for careers in teaching, industry, and government as well as for further studies in the graduate level.

NOTE: The two previous streams of this programme have both been withdrawn. Students currently enrolled in Stream A (Mathematical Sciences Stream) may, with the advice of the supervisor (E. Moore, 287-7267) complete the programme or transfer to the new programmes, Mathematics and Its Applications. See page 126 for Programme listing. Students currently enrolled in Stream B (Physical Sciences Stream) should seek the advice of the supervisor (M.J.G. Lee, 287-7246) with respect to completing the programme.

First Year:
CSC213H Introduction to Scientific Computing
MATA23H Linear Algebra I
MATA26H Calculus I
(PHY1A0H Principles of Classical Systems)

Second Year:
CSC236H Introduction to Computer Science
MATA24H Linear Algebra II

MAJOR PROGRAMME IN PHYSICAL SCIENCES

Supervisor: M.J.G. Lee (287-7246)

The Major Programme in Physical Sciences is aimed for students continuing a general background in the physical sciences (with emphasis in the area of astronomy, physics and physical chemistry) but who do not intend to enter graduate studies. Parallel major programmes for students more interested in the mathematical sciences or in chemistry are offered in Mathematical Sciences, in Chemistry, and in Biochemistry.
The Programme requires 8 full-course equivalents as follows:

First Year:
- AST102Y: Introduction to Astronomy
- CHM185Y: General Chemistry
- CISC270H: Introduction to Scientific Computing (recommended)
- CISC305H: Introduction to Computer Science
- MAT232Y: Calculus
- PHY222H: Principles of Classical Physics
- PHY223H: Principles of Modern Physics
- STAT250H1S: Statistics (statistics)

Some of these can be deferred to second year, but then prerequisites for second- and third-year courses must be carefully checked.

Second and Third Years:
Any 3.5 full-course equivalents from the following:

- NOTE: Students who think they might subsequently proceed to complete the Specialised Programme in Mathematical and Physical Sciences (Physical Sciences Option) should consider taking the courses marked with an asterisk (*), since these courses are required for the Specialised Programme.

ASTR265H1S: Celestial and Classical Mechanics

Chemistry

- CIS222Y: Introduction to Physical Chemistry
- MAT221H1S: Linear Algebra I
- MAT242H1S: Linear Algebra II
- MAT245H1S: Techniques of the Calculus of Several Variables I
- MAT246H1S: Techniques of the Calculus of Several Variables II

Physics

- PHYS235H1S: Classical Waves
- PHYS236H1S: Electricity and Magnetism
- PHYS238H1S: Electronics
- PHYS239H1S: Physics Laboratory
- PHYS255H1S: Physical Principles of Modern Technology
- STAT260H1S: Statistics

*Co-requisites and prerequisites must be carefully checked. For example, MAT241H1S is a co-requisite for PHYS221H.

PHYS200H: Physical Sciences Project

An independent study course to cover an experimental project or series of projects (including computational projects) in the Physical Sciences. Each project would be supervised by a member of the professorial faculty, who in consultation with the laboratory supervisor, would assess the laboratory performance of the student as well as the written report. This course is intended to provide opportunities for experimental work, beyond those available in the normally scheduled laboratory courses, for students engaged in a Physical Sciences Scarburgh Specialised Programme, who have completed the requirements of the first three years of the programme with a GPA of at least 2.5.

Prerequisites: Permission of the Programme Supervisor, who shall consult with proposed supervising faculty.

PHYS202H: Current Questions in Mathematics and Science

Topics of current prominence in the physical sciences and mathematics will be discussed, usually by faculty or outside guests who are close to the areas of prominence. Topics will change from year to year as the science evolves.

Exclusion: PHYS241H

Co-requisite: Continued participation in one of the Physical Sciences Scarburgh Programmes.

PHYS301H: Computers in Contemporary Society

The benefits and risks to society of computer systems, the trade-offs between the benefits and the harms that arise in ethics and public policy.

Topics to be covered will include the following:
- Public safety and computer reliability
- The ethics of personal privacy, methods of protection
- Crime with, by, and against computers, including viruses, hacking, software theft, computer-based scams, etc.
- The commercialization of the workplace
- Social consequences of a highly computerized society
- Professional ethics in the software industry: code of conduct

There will be an emphasis on current events that pertain to these topics.

Limited enrolment: 25

Exclusion: CISC300

Prerequisites: Ten full-course equivalents including CISC241H or CISC270H or CISC353H (or, in special cases, CISC292H and permission of the instructor).

PHYS302H: Chaos and Fractals

Prerequisites: PHYS200H or PHYS201H; elementary knowledge of a programming language such as C, FORTRAN, Basic or Turing.

PHYS303H: Chaos and Fractals

The Physical Sciences in Contemporary Society. Exclusion: PHYS341H

Prerequisites: Completion of at least one-half of the full-course equivalent requirements of the required courses in any one of the Physical Sciences Scarburgh Programmes.

Co-requisite: Continued participation in one of the Physical Sciences Scarburgh Programmes.

NOTE: Where PHYS301H is a programme requirement, it may be replaced by PHYS341H with the approval of the programme supervisor.

PHYS310H: Physical Sciences Project

An independent study course to cover an experimental project or series of projects (including computational projects) in the Physical Sciences. Each project would be supervised by a member of the professorial faculty, who in consultation with the laboratory supervisor, would assess the laboratory performance of the student as well as the written report. This course is intended to provide opportunities for experimental work, beyond those available in the normally scheduled laboratory courses, for students engaged in a Physical Sciences Scarburgh Specialised Programme, who have completed the requirements of the first three years of the programme with a GPA of at least 2.5.

Prerequisites: Permission of the Programme Supervisor, who shall consult with proposed supervising faculty.

PHYS311H: Current Questions in Mathematics and Science

Topics of current prominence in the physical sciences and mathematics will be discussed, usually by faculty or outside guests who are close to the areas of prominence. Topics will change from year to year as the science evolves.

Exclusion: PHYS241H

Co-requisite: Continued participation in one of the Physical Sciences Scarburgh Programmes.

PHYS312H: Computers in Contemporary Society

The benefits and risks to society of computer systems, the trade-offs between the benefits and the harms that arise in ethics and public policy.

Topics to be covered will include the following:
- Public safety and computer reliability
- The ethics of personal privacy, methods of protection
- Crime with, by, and against computers, including viruses, hacking, software theft, computer-based scams, etc.
- The commercialization of the workplace
- Social consequences of a highly computerized society
- Professional ethics in the software industry: code of conduct

There will be an emphasis on current events that pertain to these topics.

Limited enrolment: 25

Exclusion: CISC300

Prerequisites: Ten full-course equivalents including CISC241H or CISC270H or CISC353H (or, in special cases, CISC292H and permission of the instructor).

PHYS400H: Chaos and Fractals

Prerequisites: PHYS200H or PHYS201H; elementary knowledge of a programming language such as C, FORTRAN, Basic or Turing.

PHYS401H: Chaos and Fractals

The Physical Sciences in Contemporary Society. Exclusion: PHYS341H

Prerequisites: Completion of at least one-half of the full-course equivalent requirements of the required courses in any one of the Physical Sciences Scarburgh Programmes.

Co-requisite: Continued participation in one of the Physical Sciences Scarburgh Programmes.

NOTE: Where PHYS301H is a programme requirement, it may be replaced by PHYS341H with the approval of the programme supervisor.

PHYS410H: Physical Sciences Project

An independent study course to cover an experimental project or series of projects (including computational projects) in the Physical Sciences. Each project would be supervised by a member of the professorial faculty, who in consultation with the laboratory supervisor, would assess the laboratory performance of the student as well as the written report. This course is intended to provide opportunities for experimental work, beyond those available in the normally scheduled laboratory courses, for students engaged in a Physical Sciences Scarburgh Specialised Programme, who have completed the requirements of the first three years of the programme with a GPA of at least 2.5.

Prerequisites: Permission of the Programme Supervisor, who shall consult with proposed supervising faculty.

PHYS411H: Current Questions in Mathematics and Science

Topics of current prominence in the physical sciences and mathematics will be discussed, usually by faculty or outside guests who are close to the areas of prominence. Topics will change from year to year as the science evolves.

Exclusion: PHYS241H

Co-requisite: Continued participation in one of the Physical Sciences Scarburgh Programmes.

PhD (B.Sc.)

Faculty List

H.C. Corben, M.A., M.Sc. (Melbourne) Ph.D. (Canter), Professor Emeritus
B. Fawcett, M.A., Ph.D., Ph.D. (McMaster), Professor Emeritus
J.D. King, B.A., (Toronto) Ph.D. (Saskatchewan), Professor Emeritus
P. Klassen, B.Sc., M.Sc. (Lethbridge), Ph.D. (Manchester), D.Sc. (Manchester), Professor Emeritus
A. Griffin, M.Sc., Ph.D. (British Columbia), Professor Emeritus
A. Jacobs, B.A., B.Sc. (Waterloo, Ph.D. (Illinois), Professor Emeritus
M.J.G. Lee, M.A., Ph.D. (Canter), Professor Emeritus
P.J. O’Donnell, B.Sc., Ph.D. (Glasgow), Professor Emeritus
J.M. Perez, B.A., M.A. (Socorro), Ph.D. (Canter), Professor Emeritus
S. Quick, M.Sc., Ph.D. (Windsor), Senior Lecturer
G. Lecuire, B.Sc., M.Sc. (Toronto), Senior Lecturer

Discipline Representative: P.J. O’Donnell (72142)

Physics is the study of the basic laws that govern how material objects move and influence each other. The effect of a star on the motion of a planet, or of the Earth on the motion of a satellite, the effect of a molecule on a nearby atom, or of an atomic nucleus on an electron, can be accurately described by the laws of physics. Although Newton’s laws of motion adequately describe some of these situations, in most cases it is necessary to apply the more recently discovered mechanisms and the theory of relativity, together with the understanding of electric and magnetic effects so beautifully synthesized in Maxwell’s theory of electromagnetism. From these basic principles many of the properties of gases, liquids, solids, plasmas, and nuclear matter can be related to the interactions among the individual units of which these forms of matter are composed.

Physics allows us to describe the properties of light, sound and heat up to the point where these enter our senses, as well as x-ray, radio, cosmic and other radiations of which we are not directly aware. The remarkable properties of some materials under extreme conditions of temperature and pressure, and of other materials when an electric current passes through them, form the basis of a wide range of applications of the subject.

It is possible to develop, in mathematical language, theories that so accurately describe physical phenomena that they may be used to predict the results of many carefully controlled experiments. The study of physics, therefore, involves both mathematics and the techniques of careful observation. At the University of Toronto at Scarborough, a co-operative programme in Physics can take the Specialist Programme in Physical Sciences co-operative programme in Mathematics and Physics in and its applications. This Specialist Programme in Computer Science and Physical Sciences (Computer Science and Physics streams), or the Major Programme in Physical Sciences. In addition, there is a co-operative programme in Computer Science and Physical Sciences. Students who do not have an OC in Physical, and PHY220H/PHY211H are designed for those students who do not have an OC in Physics. Of the two first-year courses, PHY220H
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The table above lists the courses offered in the Physics program, including introductory and advanced courses in various branches of physics.
Political Science

B.A.

Faculty List
S.J. Coleman, M.A. (Oxon.), Professor Emeritus
B.G. Andrew, B.A. (British Columbia), Ph.D. (London), Professor
R. Menzer, B.A., B.Ed. (New Bruns.), M.A. (Oxon.), Ph.D. (Harvard), Professor
A. Kohnen, B.A. (Algethy), M.A. Ph.D. (Chicago), Professor
G. Skoogland, B.A., M.A. (Alberta), Ph.D. (British Columbia), Professor
S. Solomon, B.A. (McGill), M.A., Ph.D. (Columbia), Professor
J. Tischman, B.A., M.A., Ph.D. (Toronto), Professor
D.B. Cook, M.A., Ph.D. (Toronto), Associate Professor
P. Laing, B.A. (Toronto), M.A. (London), D.Phil. (Oxford), Associate Professor
D. Welch, B.A. (Toronto), A.M., Ph.D. (Harvard), Associate Professor

Discipline Representative / Supervisor:
G. Skoogland, 387-7296

Contemporary states and societies are heir to political crisis and change. International relations have become unstable and unpredictable as the Cold War has ended and a new world order has yet to be constructed. The sovereignty of nation states and their capacity to implement national policies of economic and social welfare are being eroded by transnational forces of the new global economy. Religious and ethnic nationalism divides many countries, even in historically stable liberal democracies. Political mobilization by race, ethnicity, language, and gender challenge the legitimacy of established cultural and political relationships. Potentially calamitous problems, such as exploding populations, proliferation of nuclear weapons, and environmental degradation, threaten the ability of national governments and international organizations to secure human survival. Dealing with these problems is a fundamental necessity for citizens and their governments. In its teaching, research, and community service, the discipline of Political Science seeks to help in meeting these needs.

Political Science is the study of enduring issues of power and authority, citizenship and governance, justice and legitimacy in ancient and modern states and societies. The field of Political Sciences is divided into the following sub-fields: Canadian Politics, Comparative Politics (Developing and Developed Countries), International Relations and Political Theory. In the area of Canadian Politics, students will learn about the institutional foundations of the Canadian political process. Some of the specific topics dealt with include national unity, elections and political parties, environmental and social policy, and the impact of the global economy on national sovereignty. Courses in comparative politics deal with the problems of political change and development in areas such as Asia, Europe, Latin America, and the Middle East. Political participation and mobilization, transitions to democracy and ethnic and religious conflict are some of the themes dealt with in a comparative politics course. International relations is devoted to studying the foreign policies of particular nation-states and the patterns of conflict and cooperation among states. Political theory explores the ideas, such as justice and legitimacy, that are fundamental to political thought and practice, giving special attention to reading and interpreting the classic expositions of politics from ancient Greek philosophers to post-modern social theorists.

Subject Area: Political Science

SPECIAL PROGRAMME IN POLITICAL SCIENCE

Applications for admission to the Special Programme are accepted after students have completed at least four full-course equivalents (that is, generally after completing the first year of the degree programme). Applicants must have completed one full-course from among the A-level courses in Political Science listed below. Students must complete at least ten full-course equivalents in Political Science including:

1. One full-course equivalent from among the A-level courses in Political Science (to count as a full-course equivalent and to count towards programme requirements).

2. POL50Y/50Y1 Introduction to Quantum Physics

3. [Either POL511Y or one of POL505Y, POL506Y, POL515Y, POL615Y, or POL510Y1, and one of POL501Y, POL506Y, POL597Y]

(Note: this programme requirement is to ensure that all students in the programme take at least a half-course in Canadian Politics.)

4. Four political science full-course equivalents at the C- and/or D-level

Students who are completing their degree programme in the Special Programme must take at least fourteen full-course equivalents in Political Science. In selecting courses from other disciplines, they should consult with the Supervisor of the programme or with a member of the Political Science staff.

MAJOR PROGRAMME IN POLITICAL SCIENCE

Applications for admission to the Major Programme are accepted after students have completed at least four full-course equivalents (that is, generally after completing the first year of the degree programme). Applicants must have completed one full-course from among the A-level courses in Political Science listed below. Students must complete at least seven full-course equivalents in Political Science, including:

1. One full-course equivalent from among the A-level political science courses (note more than one full-course equivalent at the A-level can be counted towards programme requirements).

2. POL505Y1 Classic Texts in Political Theory

3. [Either POL511Y, and one of POL505Y, POL506Y, POL515Y, POL615Y or POL501Y, and one of POL501Y, POL506Y, POL597Y]

(Note: this programme requirement is to ensure that all students in the programme take at least a half-course in Canadian Politics.)

4. Two political science full-course equivalents at the C- and/or D-level
POL66503 Political, Corruption and Violence
An introduction to some of the basic tools of comparative political analysis by examining the origins and dynamics of corruption and violence in the domestic and international politics of selected less developed countries. Placing the politics of less developed countries within the contexts of recent developments of the global political economy, the course explores some of the key explanatory tools used in comparative development studies. The concepts are operationalized through the detailed examination of corruption and violence in specific countries. Case studies include an examination of the rise and expansion of the drug trade in Colombia and Peru and its impact on state corruption, guerrilla insurgency and state repression; the emergence of extreme right wing states in Europe; political violence in Austria; the role of ethnic violence in the two-hundred-fifth year of the French Revolution, and the role of political violence in UNIP and the process of nation building in Zimbabwe. Two hours of lecture per week and a one hour tutorial per week. Exclusion: POL36503. E. Andrew

POL67103 Comparative Politics
An examination of the effects which various Western, especially North American, policies and practices have had upon developments in the Third World. The policies and practices to be surveyed include those relating to foreign aid, the multi-national corporation, and Western security. Case material will be drawn from four countries in Latin America and Africa which illustrate a diversity of approaches to development. Columbia, Chile, Ghana, Kenya. Two hours of lecture per week and a one hour tutorial per week. Exclusions: POL2610, 3T. Bachmann

POL68103 Comparative Politics of Democratic Government
This course examines comparative studies of the structure and processes of selected democratic governments in the developed and developing world. It explores various models of parliamentary and presidential government, and introduces students to comparative analysis by examining how representative democracies function. The focus will be on group demands in a representative setting. The theory and practice of the representation of interest groups will be analyzed. Two hours of lecture per week. A. Baburagi

POL68503 Political Theory
A study of the major political philosophers of the sixteenth to eighteenth centuries. Particular emphasis will be placed on the political thought of John Locke and John Rawls. The course will also consider the political thought of other contemporary theorists. Two hours of lectures per week. Exclusion: POL38503. Exclusions: POL26503. D. Cook

POL68603 Political Analysis
An examination of the methods of analysis used in the applied study of politics. The purpose of the course is to enable students to acquire a good working knowledge of the system of political science. Two hours of lecture per week. Exclusion: POL26603. Exclusions: POL36603. A. Baburagi

POL6970Y Classic Texts in Political Theory

POL6970Y Political and Social Theory of Contemporary Society
An examination of some of the most important works of political and social theory, and their influence on contemporary political thought. The course offers an opportunity to study the theoretical frameworks of key political and social thinkers, and to consider the relevance of these to contemporary political and social issues. The course will cover a variety of theories from classical political theories to contemporary social theories. Two hours of lecture per week and a one hour tutorial per week. Exclusion: POL2700. E. Andrew

POL6970Y Comparative Politics of Democratic Government
This course examines comparative studies of the structure and processes of selected democratic governments in the developed and developing world. It explores various models of parliamentary and presidential government, and introduces students to comparative analysis by examining how representative democracies function. The focus will be on group demands in a representative setting. The theory and practice of the representation of interest groups will be analyzed. Two hours of lecture per week. A. Baburagi

POL6970Y Comparative Politics of Democratic Government
This course examines comparative studies of the structure and processes of selected democratic governments in the developed and developing world. It explores various models of parliamentary and presidential government, and introduces students to comparative analysis by examining how representative democracies function. The focus will be on group demands in a representative setting. The theory and practice of the representation of interest groups will be analyzed. Two hours of lecture per week. A. Baburagi

SPECIALIST PROGRAMME IN POLITICAL SCIENCE AND ECONOMICS FOR MANAGEMENT STUDIES
(see under Economics for Management Studies)

NOTE: Not all A-level half-courses are offered every year. Expected availability of courses for this and the following academic year is indicated below.

POL58603 Critical Issues of Canadian Democracy
An introduction to the study of politics, focusing on five critical issues of contemporary Canadian democracy. Becoming a review of approaches to theorizing democracy and analyzing issues, the course examines the threats of Quebec nationalism and Western regionalism to national unity, pressures of the global economy on the sovereignty of the Canadian state, conflicts over the federalism state as a collective means to provide for the basic social needs of all Canadians, changes in the civic culture that underlies democratic political institutions and practices, and priorities for restructuring representative government for the 21st century. Two hours of lecture per week and a one hour tutorial per week. Excluded: 2000/2001 and 2001/2002. T.B.A.

POL58604 Politics in Literature
An introduction to politics arising from imaginative literature. Themes discussed will be the ethics of power, the politics of literature, the romance of politics and the politics of technology. The tension between private power and public justice will be examined in Ascham’s "The Schoolmaster" and Shakespeare’s "Hamlet", and in the romantic politics and inner technique of Wordsworth’s "The Prelude" and Whitman’s "Leaves of Grass". Two hours of lecture per week and one hour of tutorial per week. Exclusions: 2000/2001 and 2001/2002. P. Kingstone

POL58605 Canadian Politics
An examination of the institutional foundations of Canadian politics and government and the political challenges which are facing Canadian citizens and their governments. The constitution, Parliament, the public service, the federal system, the Charter of Rights and Freedoms, and the role of the courts are elected attention. The electoral system, political parties, interest groups, and the mass media are examined for their impact on the behavior of our political system. Two hours of lecture per week and a one hour tutorial per week. Exclusions: POL2500Y, POL1000Y, POL1700Y, POL1700Y, G. Skolstad

POL67103 Leaving Home: Politics and Migration
The study of the political causes and patterns of emigration in the twentieth century. The course examines the variety of political factors (war and revolution, ethnic/social discrimination, poverty, dreams of independence) that sparked emigration in the twentieth century. Attention will be paid to the impact of emigration on the country of origin and the country of immigration. Two hours of lecture per week and a one hour tutorial per week. Exclusions: 2000/2001. Z. Solomon
Psychology (B.S.C.)

Faculty List
B. Fiero, B.A. (Toronto), M.A., Ph.D. (Michigan) Professor Emeritus
J. Basili, B.A. (McGill), Ph.D. (Cornell), Professor
G.C. Cupchik, B.A. (Michigan), M.A., Ph.D. (Wisconsin), Professor
K.K. Dinn, B.A. (Wellesley), Ph.D. (Minnesota), Professor
J.E. Foley, B.A., Ph.D. (Sydney), Professor
G.D. Fey, B.A. (Down), Ph.D. (California, Irvine), Professor
J.M. Kennedy, B.Sc., M.Sc. (Belfast), Ph.D. (Cornell), Professor
A. Kolka, A.B., M.A., Ph.D. (UCLA), Professor
C.M. MacLeod, B.A. (McGill), Ph.D. (Washington), Professor
N.W. McGinn, B.A. (UCLA), M.A., Ph.D. (McGill), Professor
T.L. Perkins, B.S., M.A. (Louisiana), Ph.D. (Florida), Professor
M.C. Smith, B.A. (Toronto), Ph.D. (MIT), Professor
M.A. Schmuckler, B.A. (UNY-Binghampton), Ph.D. (Cornell), Associate Professor
S. Sinha, B.A. (New Brunswick), M.A., Ph.D. (Waterloo), Assistant Professor
K.K. Sukkar, B.A., M.A., Ph.D. (York), Assistant Professor
D.A. Rues, B.A. (Florida), M.A. (Regina), Ph.D. (Toronto) Senior Tutor

Psychology is that branch of science which seeks to understand behavior and mind. Why organisms - human and inanimate - act as they do is one of the most compelling and longstanding questions in the history of human thought. Philosophers, artists, novelists, theologians and others have sought the answers through a variety of means. Psychology uses the methods of scientific inquiry to address the questions.

The area of interest encompassed by the discipline of psychology include: how organisms perceive their environments, how they learn, adapt, and remember; how they change over their lifetimes; how they choose among alternative courses of action; how they respond to motivating forces; how they are affected by the presence of other organisms in social settings; how their behavior relates to their physiological functions; and how individual and species differ from one another. One course offerings in Psychology include all of these topics, covering how psychologists go about answering the important questions in each, and what we have learned over each.

The Specialised Programme in Psychology includes courses from each of the main sub-areas within the discipline. This Programme is intended both for students with a strong interest in the field and for those who wish to pursue graduate work in psychology after the first degree. Students considering graduate study should also include the thesis course (PSYD364) in their undergraduate programme.

The Major Programme in Psychology is designed to introduce students to the main areas within the discipline. The Minor Programme is designed for students who are interested in a less intensive exposure to the field. Often, students desire to concentrate on their studies in two areas, in which case a double Major Programme combining psychology with another discipline is ideal. Students particularly interested in the relation of brain to behaviour should consider the Specialist or Major Programme in Neuroscience described earlier in this Calendar. Those particularly interested in the study of knowledge-acquisition, communication and thought may wish to consider the Major and Specialist Programmes in Cognitive Science described earlier.

Planning your Programme in Psychology: Students should be aware that the A, B, C, D course structure in Psychology dictates the sequence in which courses should be taken, but not the year of study in which a given course must be taken. That is, a B, C, and D do not correspond to first, second and fourth year. For example, it is recommended that PSYB087 and PSYC808 be taken consecutively in the two terms of second year. Students should be aware that with the exception of the introductory courses in Psychology, all other courses in the Faculty of Arts and Science are considered B-, C-, C+ or D-level and all 400-series are considered D-level. Students are encouraged to plan carefully so that they will meet their educational objectives over the years of their degree. Discussions with the Programme Supervisor can be very valuable in this regard.

Courses in Neuroscience
To facilitate organization of the calendar, all Neuroscience courses that formerly had PSY designations have now been given NRO designations. Consequently, these courses appear only in the Neuroscience listings.
POLC84Y3 Canadian Foreign Policy
An examination of the most important elements within Canada's foreign policy since 1945 and a consideration of the issues and the influences which have determined that policy.
Three hours of class per week.
Prerequisite: POLA30Y (POLA30Y) & POLB80Y
T.B.A.

POLC85Y3 Russian Government and Politics
The development of Russian political and social institutions since 1917, with emphasis upon the process of modernization and its effects. The course examines the formation and consolidation of the Russian political order and the urgent problems confronting Russian society today.
Two hours of class per week.
Exclusion: POLA20Y or (POLA86Y)
Prerequisites: One F.C.E. B-level Political Science course
S. Solomon

POLC86Y3 Politics and Society in the Middle East
A lecture and seminar course examining the evolution and current characteristics of the political issues of the Middle East. Attention will be given to the cultural and international forces which have affected the region.
Two hours of class per week.
Prerequisites: POLB81Y or ANTBS5Y or IDS80H
P. Register

POLC87Y3 Politics and Society in Latin America
A lecture/seminar course surveying the historical development and current nature of Latin American politics and society, emphasizing the interplay between international and domestic processes. Topics include militarism and democracy, the North American Free Trade Agreement and Mexico, Mexico's economic and political crises, the rebellion in Chiapas, guerrilla insurgency and drug trafficking in Colombia.
Two hours of class per week.
Exclusion: POLA35Y
Prerequisite: POLA81Y or a course on Third World development
J. Teichman

POLD40H3 Comparative Public Policy
A seminar course that explores some of the major approaches to the comparative analysis of public policies of industrialized countries. The course uses a combination of case studies and theoretical literature to examine selected social and economic public policies and policy making in Europe, Canada, and the United States.
Two hours of class per week.
Prerequisites: One F.C.E. at the B- or C-level in comparative or Canadian politics.
T.B.A.

POLD71Y3 Canadian Political Ideas
An examination of the ideas informing Canadian political movements and parties from Confederation to the present. The seminar will require two class presentations during the year.
Two hours of class per week.
Exclusion: POLA40Y
Prerequisite: POLA55Y (POLA55Y) or POLC70Y or POLC74Y or HIS804
E. Andrew

POLD99H3 Supervised Research
A research project under the supervision of a member of faculty that will result in the completion of a substantial report or paper acceptable as an undergraduate senior thesis. Students wishing to undertake a supervised research project in the Spring term must register in POLD955 in the Fall term. It is the student's responsibility to find a faculty member who is willing to supervise the project, and the student must obtain consent from the supervising instructor before registering for this course. During the Fall term the student must prepare a short research proposal, and both the supervising faculty member and the Supervisor of Studies must approve the research proposal prior to the first day of classes for the Spring term.
Prerequisite: Permission of the instructor
Sail

POLD99H3 Supervised Reading
An advanced reading program in special topics. This course is meant only for those students who, having completed the available basic courses in a particular field of Political Science, wish to pursue further intensive study on a relevant topic of special interest. Students are advised that they must obtain consent from the supervising instructor before registering for this course.
Exclusion: POLA45Y
Prerequisite: One B-level course in Political Science & permission of the instructor.
Sail
6. Courses at the B-level and/or C-level (5 full-course equivalents)
   Students are required to take one full-course equivalent at the B-level and/or C-level from each of the three content groups listed below:
   (a) Social, Developmental and Personality courses (listed in the 10-, 20-, and 30-series);
   (b) Learning and Physiology courses (listed in the 40- and 60-series);
   (c) Perception, Language, and Cognition courses (listed in the 50-series).

7. Courses at the D-level (2 full-course equivalents)
   In selecting two full-course equivalents at the D-level, students may not include more than 1.5 full-course equivalents from any one of the content groups listed under 6a, 6b, or 6c. Courses with one of the content groups may be replaced by electives with the approval of the Supervisor of Studies.

8. Additional courses in Psychology (1.5 full-course equivalents)
   Students must complete 1.5 further full-course equivalents from the remaining courses in Psychology. The choice is unconstrained.

9. Other Disciplines (2 full-course equivalents)
   Students must select at least two full-course equivalents at the B- or higher level in a discipline or disciplines other than Psychology.

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**MINOR PROGRAMME IN PSYCHOLOGY**

**Supervisor:** D. Bore (Office 561)

The programme requires completion of 4.0 full-course equivalents in Psychology and normally involves a year B- or C-level in Psychology.

1. **PSYA01Y** Introduction to Psychology (1 full-course equivalent)

2. **PSYB01H** Psychological Research Methods (1 full-course equivalent)

3. **PSYB07H** Data Analysis in Psychology (1 full-course equivalent)

4. **PSYB07H** (Data Analysis in Psychology)

5. **PSYB07H** (Data Analysis in Psychology)

6. **PSYB07H** (Data Analysis in Psychology)

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**PSYB01Y Introduction to Psychology**

A study of the basic principles and methods of contemporary psychology.

Using these elementary principles and methods, the student will seek to understand how organisms, both human and nonhuman, perceive their environment, how their behavior is modified by experience, and how their activities are organized, sustained, and directed.

The physiological basis of behavior, particularly the functioning of the nervous system, learning and the importance of past experience in behavior, perceiving, remembering, thinking, and reasoning; intelligence; language; motivation and emotion; social behavior, personality, and abnormalities of behavior and experience.

Three hours of lecture per week.

Exclusions: PSY100, PSY200

Co-ordinator: S. Jordon

**PSYB01H Psychological Research Laboratory**

The nature of hypothesis testing through the design of experiments provides the nucleus of the course. Issues include: planning and conducting research; generating research problems, experimental control, interpretation and evaluation of results, theory construction, and preparation of the research report. Ethical issues in research will also be considered.

Research methods will be introduced in lectures and illustrated in laboratory exercises. This course is required for both the Major and the Specialist Programmes, and provides the basic skills necessary to take the other laboratory courses in psychology.

Two hours of lecture and one hour lab per week.

Prerequisite: PSYA01Y

**PSYB07H Data Analysis in Psychology**

This course focuses on the design and application of statistical procedures in psychological research. Examples are related to psychology and considerable time is spent linking empirical design to appropriate analyses. The analyses described include data reduction techniques (e.g., distribution, measures of variability and central tendency, correlation, etc.) and an introduction to some hypothesis testing techniques (e.g., tests based on normal, chi-square, 't' and 'F' distributions). A working knowledge of elementary algebra is assumed.

Four hours of lecture and one hour of tutorial per week.

Exclusions: ANT135, BIOM185, ECOB201, ECOB202, MBT10, SOC201, STA201, STA243, SOC306, PSY210

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**NOTE:** Of the above list of exclusions, only STA201 or PSY210 may be used to substitute for PSYB01H as a prerequisite for PSY203 and the purposes of selecting Specialist Programme requirements in Psychology. STA212 may not be used to meet Major or Minor Programme requirements in Psychology.

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**PSYB01H Introduction to Social Psychology**

Surveys social influence (conformity and obedience), prejudice, attrition, attitude change, group behavior (crowding, crowding behavior, panic), aggression, cooperation and competition, nonverbal communication, person perception, attraction and emotions.

Social Psychology focuses on the problem of how an individual's feelings, thoughts, and behavior are influenced by the presence of others. The course is designed to demonstrate principles of social behavior and to present theories and research evidence relating to these phenomena.

Three hours of lecture per week.

Exclusion: PSY220

Prerequisite: PSYAOY

**PSYB02H Introduction to Developmental Psychology**

Developmental processes during infancy and childhood.

This course presents students with a broad and integrative overview of child development. Major theories and research findings will be discussed in order to understand how the child changes physically, socially, emotionally, and cognitively with age. Topics are organized thematically, beginning with prenatal development and progressing through selected issues in adolescence and life-span development.

Three lecture hours per week.

Exclusion: PSY219

Prerequisite: PSYAOY

**PSYB03H Personality**

An introduction to some of the historical, theoretical, and empirical domains of personality study. The course will have covered? Specific theories covered vary from year to year. A typical selection might include behavioral psychology, cognitive science, artificial intelligence, and psychoanalysis. The aim of this course is to acquaint the student with the diversity of theoretical assumptions and research methods with which...
PSYB01H3 Sensation and Perception
The processes underlying perception. Stimuli for the human sense, especially light and sound; receptors and sensory pathways with emphasis on vision and audition; sensitivity; colour; spatial and temporal resolution; context; depth; form; speech perception. The teaching method will be lectures and practical sessions requiring some written reports.
Three hours of lecture per week.
Exclusion: PSY230
Prerequisite: PSYA0Y
K. Falle

PSYB02H3 Abnormal Psychology
Definition and identification of abnormality, historical-cultural influences on attitudes, practices, theories, and research; a variety of past and present viewpoints in the development of hypothesis, model, and theory, including genetic, physiological, stress, medical-psychiatry, psychoanalytic, social-learning, and sociological classification systems, including problems in their reliability and validity, description of a variety of nomenclature, psychoanalytic, and other behavioral disorders of adults and children, including cognitive, emotional, sexual-perceptual, psychotic, psychological, and motor aspects, approaches, methods of investigation, and findings in psychological, psychopharmacological, genetic, and epidemiological research; management, control, and modification of abnormal behavior within and outside institutions, including pharmacological, psychotherapeutic, learning-based, and social engineering approaches.
The conceptual problem of defining abnormality and categorizing its varieties will be emphasized.
Three hours of lecture per week.
Exclusion: PSY340
Prerequisite: PSYA0Y
Z. Zaizarin

PSYB04H3 Psychology Research Methods and Practice
A survey of attempts to understand and regulate abnormal human behavior: Philosophical underpinnings; basic concepts and models of behavioral change; research strategies, experimental procedures, behavioral conditioning, token economies, punishment, attention, salient events, cognitive therapy, rational-emotive therapy, thought stopping, social learning, operant conditioning, depersonalization, treatment of anxiety, irreversible counter-conditioning, treatment of alcohol and drug abuse.
Three hours of lecture per week.
Exclusion: PSY304
Prerequisite: PSYA0Y
T.R.A.

PSYB08H3 Human Brain and Behaviour
An examination of the neurological basis of human behaviour: an introduction to human neuropsychology. The course focuses on the following: higher brain function in humans; hemispheric specialization, neuropsychology of speech, disorders of the central nervous system (multiple sclerosis, epilepsy, damage to the cerebral, parietal, occipital and temporal lobes; Alzheimer's disease, neglect, and speech disorders); psychopharmacology and the biological basis of psychiatric disorders. Three hours of lecture per week.
Exclusion: PSYA0Y
T. Perez

PSYC01H2 Scientific Communication in Psychology
The development and enhancement of practical and professional skills based on current standards in the communication of psychological science. The primary focus is on improving the student's ability to think, gather information, and communicate clearly, critically, effectively within and across disciplines and to understand the differences between scientific and non-scientific approaches to the study of behaviour. Related skills, such as strategies for literature search, will be incorporated.
This course is limited to students enrolled in the Psychology Specialist Programme, and is recommended to be taken in the student's third year.
One two-hour lecture and one one-hour tutorial per week.
Prerequisites: PSYB01H & PSYB02H
Corequisite: PSYB08H
B. Ries

PSYC05H3 Advanced Data Analysis in Psychology
This course is a continuation of PSYB07 and focuses primarily on issues related to the analysis of variance (i.e., ANOVA) as a statistical analysis tool. The theory and practical underpinnings of ANOVA will be discussed in a number of experimental design contexts ranging from studies where there is a single between-subject variable to situations where there are multiple independent variables, some within-subject and some between-subject. The related issues will include a-priori and post-hoc tests, as well as tests of the assumptions of the analysis of variance procedures. This course is highly recommended for all students contemplating supervised individual research in psychology.
Three hours of lecture and one hour of tutorial per week.
Exclusion: STAC52, PSY202
Prerequisites: PSYB01H and one additional B-level half-course in Psychology
T.R.A.

PSYC11H3 Social Psychology Laboratory
This is a research-oriented and practical course in social psychology, and provides students with experience of working in several different types of research.
This course is designed to consider in-depth various research approaches used in social psychology (such as attitude questionnaires, observational methods for studying ongoing social interactions), discussion and laboratory work. One two-hour lecture per week. Limited enrollment: 25
Exclusion: PSY329
Prerequisites: PSYB01H & PSYB02H
E.K. Mio

PSYC12H3 Advanced Social Psychology
A detailed examination of selected social psychological topics introduced in PSYB10.
This course examines the nature of attitudes, their development, organization and change, practical issues such as the measurement of attitudes in the laboratory and in public opinion surveys will be covered. Teaching methods: one three-hour lecture per week.
Exclusion: PSY329
Prerequisites: PSYB01H & PSYB02H plus one additional B-level half-course in PSY
J. Basili

PSYC18H3 The Psychology of Emotions
Emotion is examined in everyday life and in relation to art, literature, and advertising. Nineteenth Century ideas about emotion (and pastoral theory) are discussed in the context of the Twentieth Century view of psychoanalysis, functionalism, behaviorism, social constructionism, and phenomenology. A contrast is drawn between category theories that espouse primary emotions, such as happiness and sadness, and dimensional theories that favor an emphasis on mood states, including pleasure and arousal. The process of changing emotions verbally and nonverbally is explored along with gender differences in emotional style. One two-hour lecture per week.
Exclusion: PSY340I
Prerequisites: PSYB10H & PSYB02H
G.C. Caporali

PSYD01H3 Developmental Psychopathology Laboratory
This course introduces conceptual and practical issues concerning research in developmental psychology. Developmental psychology focuses on the process of change within and across different phases.
of the life-span. Reflecting the broad range of topics, this area offers diverse research methods, including techniques for studying infant behavior as well as procedures for studying development in children, adolescents, and adults. This course will cover a representative sample of some of these approaches.

One two-hour lecture per week.
Limited enrollment: 24
Exclusion: PSY139
Prerequisites: PSYB01H & PSYB07H & PSYD01H
M. Schmuckler

PSYC501H5 Learning Laboratory
Critical review of basic theories and issues in the psychology of learning, with selected laboratory exercises in animal learning. An introduction to problems and techniques in the study of the acquisition of behavior.
Topics include: reinforcement, motivation, classical and instrumental conditioning, principles, theory construction.
The course provides theoretical and empirical experience relevant to basic concepts and current problems in learning and motivation.
One two-hour lecture and one two-hour lab per week.
Exclusions: PSY206, PSY359, PSY369
Prerequisites: PSYB08H & PSYB07H (or equivalent)
T.B.A.

PSYC503H5 Psychology and the Law
The course will focus on the application of psychology to the law, particularly the perceptual and mnemonic processes which influence the testimony of witnesses.
One two-hour lecture per week.
Exclusion: PSY139
Prerequisite: a BIO-series half-course in PSY M.C. Smith

PSYC504H5 Cognition and Representation
A study of recent developments in the areas of perception and representation relevant to the use of pictures and language.
Topics may include making and interpreting metaphors, recognizing cross-modal equivalence, learning how to draw and synthesize in vision and touch, and the effects of blindness on the development of skills with patterns normally found in vision and audition. The research to be considered will emphasize studies on the blind and child development.
Teaching method includes lectures and demonstrations. One two-hour lecture per week.
Prerequisites: PSYB07H & PSYB10-series or a PSYB50-series half-course in PSY J. Kennedy

PLIC504H5 Psycholinguistics
Experimental evidence for theories of how humans produce and understand language, and of how language is represented in the mind. Topics will include the perception and comprehension of speech sounds, retrieval of words from memory during speech and listening, use of grammatical knowledge in planning and understanding sentences, production and comprehension of longer stretches of discourse, and the role of memory systems in language processing.
Three hours of lecture per week.
Exclusion: PLIC505, ILIC714H
Prerequisites: One full-course equivalent in JLN and one full-course equivalent in PSY T.B.A.
Offered every year.

PSYC505H5 Experimental Psychology
Microcomputer Laboratory
This laboratory course emphasizes the use of microcomputers in preparing, constructing, and analyzing experiments. Students will learn a programming language and will have considerable "hands-on" experience with laboratory microcomputers. The aim is to develop the skills necessary to program experiments in psychology, with particular emphasis on research in cognition.
The teaching method will consist of lectures on the programming language. No previous computer experience is expected or required.
One three-hour lecture per week.
Limited enrollment: 20
Exclusion: PSY510, and any course in Computer Science with the exception of CSIC50
Prerequisites: PSYB01H & PSYB07H (or equivalent)
D. Bors

PSYC506H5 Theoretical Psychology
An introduction to the problems and methods of theoretical analysis in psychology.
The emphasis of the course is on developing sophistication in the techniques of theoretical analysis. The aim is to enable the students to read and evaluate the current literature in theoretical psychology.
Two hours of lecture per week.
Exclusion: PSY301
Prerequisite: PSYB07H or permission of the instructor
A. Radin

PSYC508H5 History of Psychology
A survey of developments in Western philosophy and science which influenced the emergence of modern psychology in the second half of the Nineteenth Century. The developments in these basic problems are considered: mind-body, epistemology (science of knowledge), and behaviorism / motivation / ethics. We begin with the ancient Greek philosophers who established the foundations of Western thought and science. The contributions of European philosophers and scientists from the Fifteenth through Nineteenth Centuries are then considered. Twentieth Century schools of thought are discussed including: psychology, functionalism, structuralism, gestalt, behaviorism, and phenomenology.
Two hours of lecture per week.
Limited enrollment: 20
Exclusion: PSY500
Prerequisites: Two 6-level half-courses in Psychology and PSYB07H or permission of the instructor
G. Capchuk

PSYC509H5 Supervised Study in Psychology
A reading or research project.
These courses provide an opportunity to investigate an area in depth after completing basic coverage in regularly scheduled courses. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate a background adequate for the project proposed and should present a clear rationale for the project.
Prerequisite: Consent of the instructor
B. Davis

PSYC510H5 Social Psychology
The development of social psychology as a discipline (its phenomena, theory, and methods) and as a profession is examined. The Natural Science and Human Science approaches to social phenomenon are contrasted, and an attempt is made to reconcile them. We are taught to observe the world, choose a social phenomenon of interest to them, and then interview people who describe episodes from their lives in which these phenomenon occurred. The students interpret these episodes and develop theories to account for their phenomenon before searching for scholarly research on the topic.
Two hours of lecture per week.
Limited enrollment: 20
Exclusion: PSY220
Prerequisites: PSYC17H or PSYC212H or PSYB304 plus one C-level half-course in PSY
G. Capchuk

PSYD10H5 Psychological Gender
This course focuses on theory and research pertaining to gender and gender roles. The social psychological and social developmental literature concerning gender differences will be critically examined. Other topics will also be considered. Teaching method: seminar.
Two hours of lecture per week.
Limited enrollment: 20
Exclusion: PSY213
Prerequisites: PSYB108 plus two C-level half-courses in PSY K.K. Doon

PSYD20H5 Current Topics in Developmental Psychology
An intensive examination of selected issues and research problems in developmental psychology.
The specific content will vary from year to year with the interests of both instructor and
PSYD5203 Socialisation Processes

The processes by which an individual becomes a member of a particular social system (or system). The course examines both the content of socialisation (e.g., development of specific social behaviour) and the context in which it occurs (e.g., family, peer group, etc.). Material will be drawn from both social and developmental psychology.

Two hours of lecture per week.

Limited enrolment: 20
Exclusion: PSY410
Prerequisites: PSY411H or PLIC24H (ILJC3H or PSY33B8H plus one C-level half-course in PSY)
M. Schmecker

PSYD5203 Current Topics in Abnormal Psychology

An intensive examination of selected issues and research problems in abnormal psychology. The specific content will vary from year to year.

Two hours of lecture per week.

Limited enrolment: 10
Exclusion: PSY111
Prerequisites: PSY304H & PSY209H plus one C-level half-course in PSY
K. Dons

PSYD5303 Human Intelligencel

Part I of this course reviews the classical theories as well as pur research strategies and findings in the field of human intelligence. Part II examines current work in the area. Part III critically considers the concepts of test validity, how it is examined, and the application to the investigation of individual and group differences on IQ tests.

Two hours of lecture per week.

Limited enrolment: 20
Exclusion: PSY140
Prerequisites: PSY212H plus one C-level half-course in PSY
A. Saha

PSYD5303 Current Topics in Memory and Cognition

An intensive examination of selected topics. The specific content will vary from year to year.

Two hours of lecture per week.

Limited enrolment: 10
Exclusion: PSY430, PSY471
Prerequisites: PSY387H plus one C-level half-course in PSY
T.B.A.

PSYD5303 Functional Issues in Cognitive Science

An examination of the conceptual and theoretical issues that lie at the foundation of cognitive science.

Topics include: the mind-body problem, functionalism, mental representations, propositional attitudes, metain, the modularity of mind, rationality, artificial intelligence, consciousness.

Two hours of lecture per week.

Limited enrolment: 20
Exclusion: PSY206H
Prerequisites: PSY208H and PSY359-series half-course & a PSY C-level half-course or permission of the instructor
A. Kaeli

PL6535H Disorders of Speech and Language

Pathological of language acquisition, comprehension and production. Topics include the anatomy and physiology of the speech and hearing mechanism, voice disorders (dysphonia, hoarseness, dysphasia), stuttering (stuttering), functional articulation disorders, deaf people, aphasia, apraxia, dysarthria, language delay, language learning disabilities, mental retardation, hearing and auditory processing disorders, and the identification of pathologies in speakers of dialects or languages other than that of the clinician.

Exclusion: JLS474H
Prerequisites: One full-course equivalent in LHD and one full-course equivalent in PSY, and PL352H or PL353H or LHD310 or permission of the instructor
T.B.A.

PSYD5303 The Scientific Study of Consciousness and Unconscious Influences

The course focuses on empirical attempts to distinguish between conscious and unconscious processes and to understand the manner in which they combine to affect performance. The course will begin with an overview of experiments studying conscious and unconscious inferences, and will then shift to a detailed examination of more current approaches. Topics covered will include subliminal perception, conscious versus unconscious memory, and models of the relation between conscious and unconscious influences.

Two hours of lecture per week.

Limited enrolment: 20
Exclusion: PSY387H and at least one C-level course in Psychology
S. Druzdzel

PSYD6703 Psychology of Aging

Aging is a complex biological phenomenon which is universal and inevitable fact of life. This course will consider various anatomical, biochemical and physiological changes that occur in the nervous system with age and will explore the associations between these changes and cognitive deterioration. We will examine the characteristics of several age-related disease states and evaluate the validity of current theories and experimental models of aging in depth.

Two hours of lecture per week.

Limited enrolment: 20
Prerequisite: NIC004H (PSY680H)
Corequisite: NIC005HH (PSY681H)
G. Lef

PSY1013Y Thesis in Psychology

This course offers the opportunity to engage in a year long research project under the supervision of an experienced member of the faculty in Psychology. The project will culminate in a written report in the form of a thesis and a defense of that report. During the course of the year, at appropriate times, students will meet to present their own research proposals, to appraise the proposals of others, and to discuss the results of their investigation.

Students will meet as a group with the coordinator as well as individually with the supervisor. This course is restricted to qualified Specialists in Psychology. Students planning to pursue graduate studies are especially encouraged to enroll in the course. Students must obtain a permission form from the Divisional Office (3421A) that is to be completed and signed by the intended supervisor, and returned to the Divisional Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course. Students seeking supervision off campus are further advised to visit the Supervisory of Studies that the prospective program supervises currently holds a cross-appointment at the University of Toronto.

Two hour meeting per week.

Exclusion: NE:259H, PSY410
Prerequisites: PSY308H & PSY209H & PSY304H, Psychology Specialist Co-ordinator: T.B.A.
Discipline Representative/Supervisor of Studies: M.P. Bruce (287-712)

The programme in Society and Environment offers an interdisciplinary approach to environmental issues from the perspective of the social sciences. It assumes that the distinction between environment, as commonly understood, and the built, social, and political-economic environment is artificial, and that environment problems are mostly created by human societies. A clear understanding of environmental issues from this perspective requires knowledge of social and political processes, of social theory, of the history of conservation, of planning and urban development, and of human ecology, as well as of natural environment processes. In this programme, the complex interactions among human societies and environments are approached through a core of specialized courses, social science methods and theories, which are applied specifically to the themes of relations between humans and ecosystems, planning policies; crises for agriculture and food, practices and policies for health. In order to pursue these themes, students can select from relevant courses in Sociology, Political Science, Geography, Anthropology, International Development Studies, Environmental Earth Sciences and other related disciplines, it therefore combines well with these disciplines for students who wish to combine Society and Environment with another Major.

MAJOR PROGRAMME IN SOCIETY AND ENVIRONMENT

The requirements for the programme are eight full-course equivalents, as follows:

1. Introduction to the courses. SOCE01H3

   Students are also recommended to take 3 F.C.E.'s from: ANTH1Y, ANTH2Y, EAS40H1, EAS40H4, HIS40H1, POLA30H1, POLA30H2, SOCI01H3. These courses may not be counted towards the programme requirements.

2. Focus on the courses: SOCE01H3 and one and one-half hours from: IDS03H3, IDS03F, ANTH1Y, ANTH2Y, EAS40H1, EAS40H4, HIS40H1, POLA30H1, POLA30H2, SOCI01H3, SOCI03Y.

3. Theory. One full course equivalent required from: SOCI01Y, POLA30Y, IT287Y.

4. Methodology. One full-course equivalent from: SOCI01Y, SOCI00H1 or STAB2Y equivalent, ANTH2Y, ANTH3H, POLA30F, ESG32H1, SOCI22H1, ESA30H1

5. Advanced courses. These full-course equivalents required, with at least one full-course equivalent from List A, and at least two full-course equivalents from List B:

   List A - CORE: POLA3Y, POLA3Y, SOCI01H, SOCI02H, WSC20H

   List B - FOCUS:
   (Field and Agriculture Courses) ANCT01H, ANCT01Y, ANCT01H, ESG32H1, GORC2H, (Urban Courses) GORC0H, GORC0H, GORC0H, GORC0H, (Health Courses) ANCT03H, ANCT03H, ANCT03H, ANCT03H.

SOCE01Y3 Global Processes and Environments

An introduction to the patterns, processes and relationships that underlie current global trends. This course examines theories and methods that can help us to understand the environmental, economic and social changes that flow from globalization, and how these affect the quality of human life and of environment at many scales. Emphasis will be placed on the sustainability of these changes.

Two hours of lecture per week and one hour tutorial per week.

Exclusion: (GGR3A4H), GOR101

M. Bruce & E. Khalif

SOCE02H3 Environmental Conservation

The history and current status of environmental problems and conservation responses. The course deals with two main topics: the origin of environmental problems in the rise and subsequent global spread of industrial capitalism, and environmental conservation and policies. Themes include: changes in human-environment relations, trends in environmental problems, the rise of environmental awareness, ideologies of preservation and conservation, environmental activism and organizations, environmental policy from the local to the international scales, problems of sustainable development. Two hour lectures per week and one hour seminar per week.

Exclusion: GOR3B1, GOR233

Prerequisite: SOCE01Y (GGR3A4H) and one other A-level course (BES2A1 strongly recommended)

M. Bruce

International Development Studies: Development and Environment

An introduction to the environmental consequences of development activities, with emphasis on tropical countries.

Prerequisite: BES2A1

Refers to International Development Studies for complete course description.

SOCE03H3 Environmental Economics

The application of economic analysis to problems of environmental change and natural resource use. Problems with markets where there are externalities in production and consumption, often related to resources like clean air, oceans and biodiversity. The application of cost-benefit analysis to environmental problems. Applications to Canadian and international environmental issues.

Exclusion: EBS2C01

Prerequisite: SOCE01Y or IDS03H3 or one full-level course in EES.

S. Horton

GOUSES NOT OFFERED 2000/2001

SOCE01H2 Good Places and Environmental Ideals

Prerequisite: SOCE01Y or permission of the instructor

Environmental Project

Prerequisite: SOCE01Y, plus at least 1.5 F.C.E.'s in the methods and 1.0 F.C.E. in theory; or permission of the instructor.

Sociology (B.A.)

Faculty List

W. W. Jope, B.A. (LaSalle), M.A., Ph.D. (Catholic Univ. of America), Professor Emeritus

R. L. Jastor, M.A. (Wayne State) Ph.D. (Ottawa), Professor Emeritus

J. Harrigan, B.A., M.A. (Western Ontario), Ph.D. (Ottawa), Instructor

R. O'Toole, B.A. (Lethbridge), Ph.D. (London), M.A. (McMaster), Ph.D. (Toronto), Professor

J. Tanner, B.Sc. (Hons.) (London) POCI (Leicester), M.A., Ph.D. (Alberta) Professor

M. Hammond, B.A. (California), M.A., Ph.D. (Toronto), Associate Professor

P.C. Hingi (National Chung-king Uni., Ching), LL.D. (UCLA), Ph.D. (UCLA), Associate Professor

A. Sev'or, B.A., M.A. (Windsor). Ph.D. (York, Canada), Associate Professor

S. Unger, B.A. (McGill), M.A., Ph.D. (York, Canada), Associate Professor

R.B. Bernard, B.A. (York), M.A. (McGill), Ph.D. (UCLA), Assistant Professor

Discipline Representative: P.C. Hingi (287-7291)

Sociology is the scientific study of interaction among people, the social relations which they establish, and the social groups which they form. Sociology attempts to explain how society is ordered, how it functions, and what accounts for social cohesion, social stratification, social mobility, and social change. It studies the consequences of cooperation, competition, and conflict.

Students may wish to take Sociology courses as part of a general education, in anticipation of the usefulness of certain courses in future occupations or professions, or as part of a Specialized, Major or Minor Programme.

The introductory course, SOCA01, is intended to familiarize students with the distinctive theories, methods and questions of sociology as a part of a liberal education. In addition, the SOA01 course provides a common minimum background of knowledge about sociology, and hence is a prerequisite to all of the more advanced courses.

Students who wish to learn about some areas of sociology which may be useful in later occupational situations may consult faculty advisors. They are not expected to enroll in these courses.

The faculty advises the special areas of concentration offered in Sociology:

Social Work Prof. A. Sev'or

Urban Studies Prof. J. Harrigan

Education Prof. J. Tanner

PLANNING A PROGRAMME IN SOCIOLOGY:

Students are obliged to take required courses in the Major and Specialist Programmes as prescribed, as far as possible. For example, SOBC01, SOBC03 and SOCI06 should be taken during the second year, and SOCE01 should be taken during the second year at the latest. Failure to do so may lead to timetable conflicts and could prevent the completion of a programme.

Students are reminded that they are not permitted to register in courses for which they have not completed the prerequisites indicated in the Calendar. They may only
enter a course for which they lack the prerequisites by obtaining the permission of the instructor prior to registration. Instructors have the right to request removal of any student ineligible for enrollment.

SPECIALIST PROGRAM IN SOCIOLOGY

Supervisor: S. Utgar (287-7299)

The program requires completion of ten full-course equivalents as described below. No more than fourteen full-course equivalents in Sociology may be included in a four-year degree.

1. SOC 201Y Introduction to Sociology
2. SOC 202Y Methods in Social Research
3. SOC 203Y Classic Sociological Theory
4. SOC 204Y Social Statistics
5. Two full-course equivalents at B-level in Sociology
6. SOC 205Y Contemporary Sociological Theory
7. One and a half full-course equivalents at C-level
8. One full-course equivalent at D-level
9. One other full-course equivalent in Sociology

MAJOR PROGRAMME IN SOCIOLOGY

Supervisor: S. Utgar (287-7299)

The program requires completion of seven full-course equivalents in Sociology including:

1. SOC 201Y Introduction to Sociology
2. SOC 202Y Methods in Social Research
3. SOC 203Y Classic Sociological Theory
4. SOC 204Y Social Statistics
5. Three and a half full-course equivalents in Sociology, one of which must be at the C-level

MINOR PROGRAMME IN SOCIOLOGY

Supervisor: S. Utgar (287-7299)

The program requires completion of four full-course equivalents in Sociology including:

1. SOC 201Y Introduction to Sociology
2. SOC 202Y Methods in Social Research
3. SOC 203Y Classic Sociological Theory
4. One full-course equivalent in Sociology at the C-level

SOC 203Y Introduction to Sociology

This course will introduce students to the basic concepts, principles and methods of sociology as a discipline for the study of society. Major topics studied include: the nature of social groups, social processes, culture, socialization, deviant behaviour, population, community, stratification, social institutions and social change.

Two hours of lecture per week. Exclusion: SOC 210

SOC 204Y Methods in Social Research

The course will be divided into six basic units:

1. A clear understanding of the logic and methods of social research.
2. An overview of research design and causal analysis.
3. An understanding of data collection techniques.
4. The importance of research integrity and ethical considerations.
5. The evaluation of research and the critical analysis of research findings.

Two hours of lecture per week. Exclusion: SOC 205

SOC 205Y Methodology in Social Research

The course will be divided into three basic units:

1. An introduction to research design and causal analysis.
2. An overview of data collection techniques.
3. An understanding of research integrity and ethical considerations.

Two hours of lecture per week. Exclusion: SOC 206

SOC 206Y Political Sociology

An examination of power in its social context. The course will examine liberalism, pluralism and Marxism. The emphasis will be on the role of democracy and social movements, war and warfare, race and politics.

Two hours of lecture per week. Exclusion: SOC 207

SOC 207Y Urban Sociology

A review of theories of urban genesis and urban form, the interrelationship of urbanization, industrialization and modernization, issues in urban living (housing, transportation, urban renewal, poverty, unemployment, etc.), urban social networks (ethnic and cultural heterogeneity, neighborhood, community and other voluntary associations).

Two hours of lecture per week. Exclusion: SOC 208

SOC 208Y Social Statistics

A consideration of elementary statistics including the summarizing of data, the use of statistical data and the role of statistics in everyday life. The emphasis will be on the role of statistics in everyday life.

Two hours of lecture per week. Exclusion: SOC 209

SOC 210Y Social Statistics

A consideration of elementary statistics including the summarizing of data, the use of statistical data and the role of statistics in everyday life. The emphasis will be on the role of statistics in everyday life.

Two hours of lecture per week. Exclusion: SOC 211

SOC 211Y Social Class and Social Stratification

A study of the social processes and structures of stratification. The emphasis will be on the role of social class and social stratification.

Two hours of lecture per week. Exclusion: SOC 212

SOC 212Y Sociology of Deviant Behaviour

An introduction to the sociological study of deviant behaviour. The emphasis will be on the role of deviant behaviour.

Two hours of lecture per week. Exclusion: SOC 213

SOC 213Y Ethnic and Race Relations

A study of the social structure and processes of ethnic and race relations. The emphasis will be on the role of ethnic and race relations.

Two hours of lecture per week. Exclusion: SOC 214

SOC 214Y Social Class and Social Stratification

A study of the social processes and structures of stratification. The emphasis will be on the role of social class and social stratification.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCC2302</td>
<td>Contemporary Sociological Theory</td>
<td>A consideration of basic questions as they arise in the work of contemporary theorists and theoretical schools of sociology. Students will be expected to develop an informed, critical perspective on current debates within the discipline. Two hours of lecture per week. Exclusion: SOCC113. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. M. Hammond</td>
</tr>
<tr>
<td>SOCC2303</td>
<td>Sociology of Gender and Work</td>
<td>Explores the interaction of gender and work. Examines an interaction of the relevance of gender to the organization and experience of paid and unpaid work. We will critically assess some of the central theoretical debates and recent research in this area of sociological inquiry. Through analysis of qualitative and quantitative research, we will specifically consider gender differences in occupational and income attainment, 노.biz, the relation of work and family, gender and class solidarity, the construction of gender identity through occupational roles, and related topics. Exclusion: SOCC2301. Prerequisites: SOCA01Y &amp; SOCB01Y. R. Bernard</td>
</tr>
<tr>
<td>SOCC2304</td>
<td>Sex, Society, and Sexuality</td>
<td>A consideration of the nature of gender as a category of analysis, research and social experience. The single most important influence on our lives is being male or female. Gender is built into the way our institutions are set together, the way we are socialized, and the way access to scarce resources is structured. This course will focus on the social construction of gender, gender ideology, the impact of gender on the individual and the social structure and the maintenance of gender inequality in the labour force, in the family, in education and in social interactions. Two hours of lecture per week. Exclusion: SOCIO01Y, SOCB01Y, SOCB02Y, SOCB03Y. A. Sev or</td>
</tr>
<tr>
<td>SOCC2305</td>
<td>Qualitative Methods in Social Research</td>
<td>An examination of the use of non-statistical methods for systematic analysis of social behaviour. Each student will develop an emphasis on participatory observation, ethnography, and socio-historical methods by completing field-based observation and analysis. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. F-C Huang</td>
</tr>
<tr>
<td>SOCC2306</td>
<td>Sociology of Urban Growth</td>
<td>An in-depth examination of the conditions, patterns and consequences of urban growth and development. Major topics will include the emergence of new urban institutions (legal, political, economic) and the formation and operation of urban social networks. Two hours of lecture per week. Exclusion: SOCIO066. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Montague</td>
</tr>
<tr>
<td>SOCC2307</td>
<td>Rural Sociological Analysis of non-traditional family forms and innovative life styles representing departures from conventional marriage and family patterns. Included will be &quot;singleness&quot;, &quot;living together&quot;, &quot;adolescence as a life style&quot;, non-normative forms, voluntary childlessness, cohabitation and co-operatives, and the &quot;wedge&quot;. Special reference will be made to functional and structural dimensions, role changes, special problems and community response. Two hours of lecture per week. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y, SOCB03Y. A. Sev or</td>
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<tr>
<td>SOCC2308</td>
<td>Small Groups</td>
<td>An examination of the nature of gender as a category of analysis, research and social experience. The single most important influence on our lives is being male or female. Gender is built into the way our institutions are set together, the way we are socialized, and the way access to scarce resources is structured. This course will focus on the social construction of gender, gender ideology, the impact of gender on the individual and the social structure and the maintenance of gender inequality in the labour force, in the family, in education and in social interactions. Two hours of lecture per week. Exclusion: SOCIO01Y, SOCB01Y, SOCB02Y, SOCB03Y. A. Sev or</td>
</tr>
<tr>
<td>SOCC2309</td>
<td>Sociology of Law and Law Enforcement</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
</tr>
<tr>
<td>SOCC2310</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<tr>
<td>SOCC2311</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
</tr>
<tr>
<td>SOCC2312</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<tr>
<td>SOCC2313</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<tr>
<td>SOCC2314</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
</tr>
<tr>
<td>SOCC2315</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<tr>
<td>SOCC2316</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<tr>
<td>SOCC2317</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>SOCC2318</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>SOCC2319</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<tr>
<td>SOCC2320</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>SOCC2321</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>SOCC2322</td>
<td>Sociology of Culture</td>
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<td>SOCC2323</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>SOCC2324</td>
<td>Sociology of Culture</td>
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<td>SOCC2325</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>SOCC2327</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
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<td>SOCC2329</td>
<td>Sociology of Culture</td>
<td>An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Two hours of lecture per week. Exclusion: SOCC067. Prerequisites: SOCA01Y, SOCB01Y, SOCB02Y. J. Tauer</td>
</tr>
</tbody>
</table>
Spanish

(B.A.)

Faculty List
P.S. Lehn, M.A., Ph.D. (Cornell), Professor Emeritus
R. Smythe, B.A., M.Lit. (Bristol, M.A., Ph.D. (Michigan), Professor

MAJOR PROGRAMME IN SPANISH LANGUAGE

Supervisor: R. Smythe (287-7474)
The Major Programme in Spanish Language has been withdrawn. Every reasonable effort will be made to allow students registered in this programme to complete it.

MINOR PROGRAMME IN SPANISH

Supervisor: R. Smythe (287-7474)
The Minor Programme in Spanish Language has been withdrawn. Every reasonable effort will be made to allow students registered in this programme to complete it.

SPCA2173 Introductory Spanish

As elementary course for students with no knowledge of Spanish.

The course develops listening, speaking, reading, and writing skills through a variety of oral and written exercises enhanced by audio-visual and computer-based materials.

For students fulfilling a language requirement and those with a general interest in Spanish.

Exclusions: OAC Spanish I or Grade 13 Spanish

SPA101H3 The Spanish Civil War: Fact to Fiction

Courses Not Offered 2002/2003

SPA121H3 History of the Spanish Language

Exclusions: SPA221, Pre-requisite: SPA804

SPA151HR The Civilization of Spain II

Exclusion: HUMB81H3 (HUMB109)

SPA203H5 Business Spanish

Pre. or Corequisite: SPA101H3

SPA211H3 Literary Language

Exclusion: SPA212H

Pre-requisite: SPA801 or SPA803

Statistics

(B.Sc.)

Faculty List
M. Strun, B.Sc. (Western Ontario), M.Sc., Ph.D., Professor

Discipline Representative: M. Evans (287-7374)

Probability and statistics have developed over a period of several hundred years as attempts to quantify uncertainty. With its origins in modelling games of chance, probability theory has become a sophisticated mathematical discipline with applications in such fields as demography, genetics and physics.

Statistics is concerned with the proper collection and analysis of data, both to reduce uncertainty and to provide for its assessment via probability. Applications range from pre-election polling to the design and analysis of experiments to determine the relative efficiencies of different vaccines.

STAB121H and STAB474H serve as an introduction to the discipline. The C-level courses build upon the introductory material to provide a deeper understanding of statistical methodology and of its practical implementation.
**Specialist Programme in Visual and Performing Arts (B.A.)**

**Supervisor:** I. Cameron (287-7171)

This programme provides training in the visual and performing arts in a university setting both for students who want a conceptual and historical knowledge of the arts and the interrelationships among them, and for those who wish primarily to develop their practical abilities. The programme is a basis for careers or further study for future practitioners in the arts, for gallery and museum professionals, for academics, and for those who want a thorough knowledge of history, theory and practice in the arts. Students must apply for admissions to the programme, and may obtain details from the Supervisor.

The core courses give a basic knowledge of music, visual art and drama as well as opportunities to develop writing and computing skills and to explore arts concepts and theories. Beyond this core, options range from concentration in one area to work across all the arts. All students in the programme are expected to take advantage of the opportunities that exist on this campus to participate in arts events and clubs, as spectators and members and, where appropriate, as artists.

The Specialist Programme in Visual and Performing Arts offers the completion of foureen and a half full-course equivalents as follows:

1. At least three full-course equivalents from:

   - VPA0101H Survey of Cinema I: 1900-1945
   - VPA0201H Survey of Cinema II: 1945 to the Present
   - VPA1010H Introduction to Arts Management
   - VPA399H Exploring the Live Theatre I
   - VPA440H 'The Study of Visual Art
   - VPA445H Visual Art in the Modern World
   - VPA459H Foundation Studies in Studio
   - VPA460H Introduction to Music
   - VPA469H Music of the World's Peoples
   - VPA489H Exploring the Live Theatre II

Visual and Performing Arts 169

2. VPA00HH Computers and the Arts I
3. VPA00HH Research in the Visual and Performing Arts
4. VPA04HH Introduction to Contemporary Cultural Theory
5. At least one of the following courses:
   - CENG660Y What is Culture?
   - PHIL630H Philosophy of Art
   - PHIL630H Philosophy and Culture
   - VPA460H Cultural Pluralism and the Arts I
6. VPA400H Current Issues in the Visual and Performing Arts
7. VPA400H Senior in Visual and Performing Arts
8. VPA400H Project in Visual and Performing Arts
5. Further VPA courses and other electives, two full-course equivalents of which must be at the C- or D-level, to bring the total taken within the programme to fourteen and a half full-course equivalents. These may include the courses listed for a Major in art history, drama, music history, or studio, or a broad selection of approved courses from the arts and related areas.

Consultation with the Supervisor is essential for all students in each year of their programme. Students who are considering continuation in the graduate level and/or professional practice must also consult the Supervisor of the relevant Major programme in order to plan the selection of courses to fulfill the full requirements of the Specialist programme.

It is suggested that students complete the initial requirement as soon as possible. Admission to the programme will be offered to applicants who have completed or are completing at least two of these courses and who have demonstrated ability through academic and other achievements, interviews with faculty members and, for those concentrating in Studio, portfolios. The second requirement should be satisfied in the second year and the third may be fulfilled at any point in the first three years. Students must maintain a cumulative grade point average of 2.50 to remain in the Programme.

VPA000YH Survey of Cinema I: 1900-1945

This foundation in the history and techniques of cinema, from the 1890s to 1945, focuses on the development of narrative techniques and the rise of the screen medium from its origins to the end of World War II. It will include a discussion of narrative and avant-garde films and will supply the conceptual framework for the study of films as an artistic medium.

7.8A
VPA20108 Survey of Cinema II: 1945 to the Present
A continuation of VPA20101 covering the period 1945 to the present.
Prerequisites: VPA20101
T.R.A.

VPA201010 The Body: Representations and Theories
An investigation of representations of the body produced in the last two centuries in both "higher culture" and mass culture, using contemporary theories, in particular theories about gender and sexuality.
What makes some representations of the body propagate, some advertising, some pornography and some art? Are these categories mutually exclusive? Students will learn to apply a variety of theories to images, in ways that challenge received notions about the body as purely natural.
Corequisites: VPA40108 & VPA41108 or VPA2010Y or WST2010Y or permission of the instructor.
L. Curley

VPA202008 Computers and the Arts I
An introduction to the use of computers in the visual and performing arts.
Students will learn broad applications of computer software in the fields of drama, music and the visual arts. Demonstrations/ tutorials will illustrate current standards and future possibilities in the computerized handling of graphics, sound, and text. Projects will allow opportunities for practical experience under the supervision of instructors of the VPA faculty.
This course is restricted to students in Specialist and Major programs in VPA. Additional students may be admitted by the instructor on the first day of classes.
Two hours of lecture per week and two to five hours of individual study in the Lab. Prerequisites: any 4 F.C.E.'s 7 Arts/T.R.A.

VPA208405 Research in the Arts
An introduction to resources and methods for research in the visual and performing arts. Students are introduced to reference tools and other research tools as part of a discussion of methodologies for study in the visual and performing arts. The course emphasizes understanding different research models, evaluating sources, and organizing research projects.
The course is restricted to students in Specialist and Major programs in VPA. Additional students may be admitted by the instructor on the first day of classes.
W. Brown

VPA208500 Introduction to Contemporary Cultural Theory
An introduction to the key concepts and issues in contemporary cultural theory. Students will engage with a wide range of theoretical and methodological developments in the study of art and culture, including cultural studies, feminism, and postmodernism. The course will emphasize critical reading, thinking, and writing, encouraging students to develop their own perspectives on the material, and to consider the implications of cultural theory for individuals, organizations, and institutions in the field of art and culture.
Exclusion: VPA21010
Prerequisites: any 4 F.C.E.'s 4 A. Sandridge

VPA209003 Cultural Pluralism and the Arts
An introduction to changes occurring in the arts and culture in Canada as a consequence of the country's growing ethno-racial and cultural diversity. This is a course about identities and their representation in Canada's arts and culture. Through lectures and discussion students will explore the ways in which majority and minority cultural practices are institutionalized, the nature of cultural representation and communication, the character of private and public cultural institutions, and the link between public cultural expression and cultural power relations in society.
Exclusion: VPA21021
Prerequisites: VPA20810, ENG000Y, or permission of the instructor.
T.R.A.

VPA210203 Current Issues in the Visual and Performing Arts
An exploration of selected topics pertaining to the visual and performing arts.
This course, focuses on current issues of general interest to the arts community. In seminars, lectures, and workshops, students are encouraged to integrate ideas from their study and practical experience of the individual art forms, and to develop an interdisciplinary perspective.
Prerequisites: 15 F.C.E.'s from the Specialist programme in VPA including VPA20904 & VPA208500
W. Brown

VPA201003 Seminar in Visual and Performing Arts
A seminar course on selected issues, theories and critical concepts in the arts, for all students in the final year of the Specialist Programme in Visual and Performing Arts. Topics vary. The Supervisor can advise students on the topic chosen for a given year.
Prerequisites: 10 F.C.E.'s from the Specialist Programme in VPA.
Staff

VPA202002 Project in Visual and Performing Arts
A collaborative project involving various arts and media, to be carried out by students in the final year of the Specialist Programme in Visual and Performing Arts.
The character and themes of the project will vary from year to year. The Supervisor can provide more information.
Prerequisites: 10 F.C.E.'s from the Specialist Programme in VPA.
C. Clark

GENERAL COURSES NOT OFFERED 2000/2001

VPA20845 First Nations Cultures in North America

Art History
Because art is perceived through the eyes and other senses as well as through the intellect, art history courses use slides, films, videos, and direct viewing of art works in galleries and museums in the cities. Although some of the courses reflect a traditional structuring of art history by time periods, instructors often use new methodologies to explore the works within these periods. Art history courses at the A-level and B-level are normally open to all students. In addition to the practice in critical thinking and writing provided by all humanities disciplines, these courses offer basic information about painting, sculpture, architecture, and other arts, and a chance to improve perceptual awareness.

MAJOR PROGRAMME IN ART HISTORY
Supervisor: L. Carney (287/711)
Students must complete seven full-course equivalents as follows:
1. One full-course equivalent at the A-level in art history
2. Four full-course equivalents at the B-level in art history. Students may substitute one full-course equivalent from VPA or another discipline (such as VPA20101, VPA20901 or ENG23538) or the Supervisor's approval.
3. Two full-course equivalents in art history at the C- or D-level (or at the 300/400 level on the St. George campus).

MINOR PROGRAMME IN ART HISTORY
Supervisor: L. Carney (287/711)
Students must complete four full-course equivalents as follows:
1. One full-course equivalent at the A-level in art history
2. Two full-course equivalents at the B-level in art history
3. One full-course equivalent in art history at the C- or D-level, chosen in consultation with the Supervisor.

VPA20903 The Study of Visual Art
An investigation of major examples of world art and of the histories and theories that have been used to explain them. This course considers both the works of art in question and the changing concepts and methods of art history as a discipline. There is an emphasis on the cultural, economic, social, and political factors that affect the making of art, as well as changing interpretations and uses.
Exclusions: FAM100Y, VPA2411Y
T.R.A.

VPA20904 Visual Art in the Modern World
A study of selected works of art in relation to notions of modernity. What is V.P.A. and the terms "modernity" and "modern" when they are used to describe art in the changing cultural, economic, and social contexts? This course examines certain works of art, mostly but not exclusively from the Western world, in relation to this question, using recent theories of modernity.
Exclusion: VPA2411Y
L. Carney

VPA20945 The Body: Representations and Theories
A seminar description under the Specialist Programme in Visual and Performing Arts.

VPA21010 The Arts in Northern Europe ca. 1400-1900
The Northern Renaissance, with emphasis on the Netherlands.
The course concentrates on the development of painting from van Eyck's brilliantly colored works to the magnificent subjects of Hieronymus Bosch. The works
selected will also illustrate some of the problems facing students of art, such as the identification of artists on the basis of documents and the analysis of style and subject matter.

Exclusion: FAH107
T.B.A.

VPA248HS Baroque Painting in the Netherlands
A study of painting and drawing in the Dutch Republic in the so-called Golden Age from 1660 to 1675. The subject includes portraiture, landscape and still life. Work done in these categories forms the basis of a great deal of Dutch \textit{interieur} painting. The approach to the material will be problem oriented, rather than chronological. Prerequisite: VPA424H in a continuation of this course. Exclusion: FAH258
T.B.A.

VPA248HS Art in the Age of the French Revolution
European painting, sculpture and architecture between 1750 and 1830. The course focuses on Paris, which was not only the centre of the French Revolution, but also the location of the great studios of Boucher, David, Ingres and Delacroix. Exclusion: FAH258
T.B.A.

VPA247Y3 Twentieth-Century Art
A survey of twentieth-century painters and sculptors, primarily European, with an emphasis on their interactions with modern technology.

Exclusion: VPA103, VPA203, VPA204, VPA404
T.B.A.

VPA248HS Renaissance and Baroque Art
A survey of architecture, painting, and sculpture from 1400 to 1700. The course will present important movements, primarily from Italy and the Netherlands. Exclusion: FAH254, FAH257, VPA254
Prerequisite: VPA404 recommended
T.B.A.

VPA248HS Gothic Architecture
The development of Gothic architecture from the beginning of the twelfth century to the middle of the thirteenth century. Emphasis will be placed on Notre-Dame in Paris, the cathedrals of Chartres, Reims, and Amiens, and a select number of monasteries in England. A discussion of the sculptural programmes of the said churches will be included. Exclusion: FAH256
Prerequisite: VPA404
T.B.A.

VPA246HS Franz Hals, Rembrandt, and Vermeer
The principal masters of seventeenth-century Holland. This study makes extensive reference to the cities of Haarlem, Amsterdam, and Delft as the centres in which these artists worked. Their paintings will be analyzed from the point of view of subject matter, technique, and outside influences. Exclusion: FAH103
Prerequisite: One full-course equivalent in art history at the B-level, preferably VPA244H
T.B.A.

VPA454HS Seminar in Twentieth-Century Art
Special topics in twentieth-century painting and sculpture. The subject will change from time to time. After introductory sessions outlining the subject and ways of getting information about it, seminar members will research and present topics of their choice. Prerequisite: One full-course equivalent in modern art history at the B-level or permission of the instructor. L. Canney

VPA464HS Topics in Art of the Ancient World
A special topics course in ancient art and architecture. A concentrated study of a particular topic in ancient art, which will change from year to year. Prerequisites: VPA253H (VPA443H) or permission of the instructor T.B.A.

VPA441H3 VPA442Y3 Supervised Reading in Art History
A course offering the opportunity for advanced investigation of an area of interest; for students who are nearing completion of an art history programme and who have already acquired research skills sufficient for independent work. Students must locate a willing supervisor, and topics must be identified and approved, by the end of the previous term. A reading knowledge of a second language is recommended. Prerequisite: One full-course equivalent in art history at the B-level or permission of the instructor M. Gervers

VPA424H3 Art History Courses Not Offered
2000/2001
VPA441H3 The Human Figure in Greek Art (9th - 4th Centuries B.C.)
 prerequisites: Art History or VPA441H

VPA442H3 Carolingian and Romanesque Art and Architecture
Exclusion: FAH251, FAH252
Prerequisite: VPA244H highly recommended

VPA443H3 Introduction to Medieval Art
Exclusion: FAH178

VPA444Y3 Art in North American Cultures

VPA445Y3 Women and Visual Art
Prerequisites: WSTA40Y or VPA444H or VPA445H or permission of the instructor

VPA454H3 The Art of Southeast Asia
Wall Painting in Ancient Egypt and the Bronze Age Argos (1300-1200 B.C.)
Prerequisite: One full-course equivalent in art history at the B-level or permission of the instructor T.B.A.

VPA444H3 The History of Gothic Art
Prerequisites: One full-course equivalent at the B-level or permission of the instructor

Arts Management

**SPECIALIST (CO-OPTATIVE) PROGRAMME IN ARTS MANAGEMENT**

Co-coordinator: S. Crawford (387-7114)
Coordinator: A. Stambaugh (387-7132)

The Co-operative Programme in Arts Management is designed for students with an interest both in the arts and in business management, and normally requires four to five years to complete. It combines academic study in a wide variety of subjects with practical work experience, preparing students for permanent career as arts managers, or for further studies in Arts Administration, Business Administration, Business Studies, Drama, Music, Art History or Studio. For further information, see http://critc.ecs.ontario.ca/setting/index.html
Admission to the Programme
Applicants may apply to the programme directly from secondary school, or may apply as transfer students from college or university. The timing of work placements for students who receive transfer credits will depend upon the particular university course completed. When applying, applicants must indicate the special code for this Scarborough programme on the Application for Admission To An Ontario University. Once the University of Toronto is notified of the application, candidates are sent an additional co-op application form to complete. To be considered for the first round of selection, applicants must return the co-op application by the following deadlines: current OAC applications—March 1; applicants who applied on the 105 forms—April 1. Therefore it is essential that the applicants submit the initial OACU application at least six weeks prior to these dates.

Enrollment in the programme is limited. Interviews are normally held from March until May for students who pass the initial screening. Admissions are granted on the basis of applicants’ academic performance, background in one or more of the arts, and interest and potential ability in Arts Management. Facility in another language and OAC accounting are highly desirable.

Fees
All students in a co-operative programme are required to pay additional fees as established by the University.

This programme requires fifteen academic full-course equivalents within a twenty-course degree and two work terms of twelve weeks each. Students complete six full-course equivalents in (A), the arts management core programme; five full-course equivalents in (B), the management field, and six full-course equivalents from (C), the artistic field. In addition extra credits are awarded for the work terms.

CONSULTATION WITH THE SUPERVISOR OF STUDIES IS ESSENTIAL FOR ALL STUDENTS IN EACH YEAR OF THEIR PROGRAMME. IN ADDITION, A NUMBER OF COURSE CHANGES MUST BE APPROVED BY THE SUPERVISOR OF STUDIES.

A. Arts Management Core Programmes
The following six full-course equivalents are required:

- **VPAA10H** Introduction to Arts Management
- **VPAA11H** Workshop in Arts Management I
- **VPAA10H** Introduction to Contemporary Cultural Theory
- **VPAA11H** Workshop in Arts Management II
- **VPAA11H** Management in the Arts and Cultural Sector
- **VPAC13H** Strategic Planning in the Arts and Cultural Sector
- **VPAC14H** Cultural Pluralism and the Arts II
- **VPAC15H** Cultural Policy: National and International Perspectives
- **VPAD12H** Senior Seminar in Arts Management
- **VPAD13H** Art, Culture, and Policy

B. Management Field of Study
The following three full-course equivalents are required:

- **MGTA22Y** Introduction to Management
- **MGUB22H** Managing People in Organizations
- **MGUB24H** Management Skills Plus I further P.C.E. from MGT or ECO

C. Artistic Field of Study
Six full-course equivalents (in addition to courses listed in the Arts Management Core Programmes) from one of the following disciplines: Art History, Drama, Music, and Studio. These courses should follow the requirements established for the Major programme in your chosen artistic field.

Work Terms
Work terms may begin in September, January, or May and students are normally eligible for a work placement after their second year of study. The places of work will vary widely according to availability and to a student’s needs and abilities. Although the work placements are arranged by the co-ordinator of the Arts Management Programme, they must be won by students in competition with all applicants for the position. Performance on work terms will be evaluated by both employer and co-ordinator. Students must also submit at the end of each work term a report which demonstrates knowledge gained during the placement with academic study already completed (see COP300H below).

Eligibility for work placements
To compete for work placement a student must be in good standing in the Programme and must have completed at least ten full-course equivalents (including:
- two full-course equivalents from the artistic field

- **VPAA10H** Introduction to Arts Management
- **VPAA11H** Workshop in Arts Management I
- **VPAB11H** Workshop in Arts Management II
- **MGBA40Y** Introduction to Management Normally students return to their studies after each work term, and must be registered in courses after the completion of their last work term.

Standing in the programme
To maintain standing in the programme, to be eligible for work placements, and to receive specialist certification upon graduation a student must:
- maintain a cumulative grade point average of 2.50
- receive a satisfactory evaluation for work term performance and work term reports
- complete a full course of study (at least two full-course equivalents and normally two and one-half) during each study term
- participate in special events and seminars arranged by the co-ordinator.

Course in the first two years of the programme
The first year of study should consist of
- **VPAA10H**, **VPAA11H**, one full-course equivalent from the artistic field: MGT20Y, and further courses in the artistic or management field.

The second year of study should consist of
- five full-course equivalents to include
  - **VPAB13H**, **VPAB14H**, **VPAB17H**, and a balanced mixture of management and artistic courses.

**VPAA20H** Introduction to Arts Management
An introduction to the theory and practice of arts management in Canada.

The course will examine the structure of the arts sector in general and in Canada in particular; the various elements of the cultural ecology in Canada, including arts organizations, government agencies; the history and current state of arts management as a professional discipline, and current issues and challenges facing the arts. The course will provide students in the Specialist (Co-operative) Programme in Arts Management with a broad overview of the field. It will also be of interest to students in other programs and disciplines interested in the arts and in management in the not for profit sector. Exclusion: (VPAB10Y)

**T.A.A.**

**VPAA11H** Workshop in Arts Management I
An introduction to practical arts management skills.

This course is designed to supply students with the skills needed to function in the environment they encounter on work placements. Instruction is provided in the form of seminars and workshops given by practicing members of the arts management profession. Topics to be covered may include arts marketing, development for arts managers, grant planning and writing, project management, and public programming. Exclusion: **VPAB10Y**

**Perquisites: VPAA10H**
S. Crawford

**VPAB20H** Computers and the Arts I
See course description under the Specialist Programme in Visual and Performing Arts.

**VPAB21H** Introduction to Contemporary Cultural Theory
See course description under the Specialist Programme in Visual and Performing Arts.

**VPAB23H** Cultural Pluralism and the Arts
See course description under the Specialist Programme in Visual and Performing Arts.

**VPAB11H** Workshop in Arts Management II
A continuation of **VPAA11H**

**Perquisites: VPAA11H**
S. Crawford

**VPAB13H** Financial Management for Arts Managers
An introduction to financial management issues faced by managers in the arts and cultural sector.

The topics covered in the course include an introduction to basic accounting concepts, financial statement preparation and analysis, internal control and management information systems, budgeting and programming, cash and resource management, and various tax-related issues faced by these organizations.

Exclusions: **MB20Y**, **MTB30H**

**Perquisites: VPAA10H & VPAB11H**
T.A.A.

**CPQ20H** Arts Management Co-op Work Terms
The Arts Management Work Terms form an integral part of the co-op curriculum. They are designed to provide a student with practical experience in an appropriate setting, thereby enhancing the student's
academic studies and developing professional and personal skills. To be eligible for a work term, a student must be in good standing in the Programme and have completed ten full-course equivalents. The work term report prepared by the student is a vital component of each placement experience and is required for graduation.

Course credits of one half full-course equivalent is earned for each twelve to sixteen week work period. Work term credits are in addition to the twenty full-course degree requirements and are granted on a Credit, No Credit system. There are no additional course fees for work terms.

VPAC135 Strategic Planning in the Arts and Cultural Sector
This course is designed to analyze the unique financial and environmental challenges that confront arts and cultural organizations, and to develop a strategic approach to dealing with these issues. Through case studies, seminars, and lectures, we will examine issues around such topics as artistic programming, production and distribution, human resource management, financial management, marketing and development, and governance in performing and exhibiting organizations and the cultural industries. Exclusion: MCTC41H
Prerequisite: VPAB13H
T.B.A.

VPAC143 Cultural Pluralism and the Arts II
An examination of best practices in the management of the arts in a pluralist society. This course explores past and present policies and practices of arts organizations and cultural support systems in Canada and the management policies and techniques that will enable them to maximize their responsiveness to cultural change and diversity.
Prerequisite: VPAB14H or permission of the instructor
Exclusion: EPM1A

VPAC153 Cultural Policy: National and International Perspectives
A survey of the structure and patterns of cultural policy and arts funding, both nationally and internationally.
Exclusion:
T.B.A.

The course will focus initially on the history and development of cultural policy in the Canadian context, and will explore current policy issues in Canadian art and culture. The course will also examine policy structures and institutions in present and former countries, including the United States, Great Britain, and Australia. The emphasis will be on an international comparative analysis of cultural policy and arts funding, exploring the strengths and weaknesses of particular policy and funding structures.
Exclusion: VPAC157H
Prerequisite: VPAB05H
A. Stanbridge

VPAD150H Senior Seminar in Arts Management
A synthesis of students' prior academic studies and applied co-op work experience as they prepare to enter the world of arts management.
This course is intended for Arts Management students who have completed at least one, preferably two work terms. Each student will give at least one seminar dealing with a chosen research project and/or their work term report from a placement. The course will also include a mentoring programme which links students to arts managers, and seminars by practicing professionals in the arts and cultural sector.
Exclusion: VPAD107Y
Prerequisites: COPC01H (VPAC12H)
J. Crawford

VPAD123H Art, Culture, and Policy
An exploration of current theoretical issues in cultural policy and arts management. Drawing on a range of recent work in cultural studies, cultural policy studies, sociology, art history, and museum studies, this course will enable students to synthesize and develop their prior knowledge of cultural theory and cultural policy. Adapting a case study approach, the course will examine issues and controversies in both the performing and visual arts, addressing questions of cultural value, canon formation, cultural appropriation, and institutional policy.
In addition to Arts Management students, the course will be of value to other VPA students with an interest in issues of cultural theory and policy.
Exclusion: VPAD107Y
Prerequisite: VPAC15H
A. Stanbridge

Drama

The drama courses have been devised to serve students who intend to major in Drama, students who intend to specialize in Visual and Performing Arts, and students who have a casual interest in drama and theatre.
We offer a range of courses which complement each other: theoretical and practical. The theoretical courses are in the history of theatre and in special aspects of theatre history and theory. In the practical courses, students become acquainted with all aspects of theatre production in studio situations, both as actors and technicians. Participation in public productions at the College is strongly encouraged.

MAJOR PROGRAMME IN DRAMA

Supervisor: P. Speciale (287T-718)
Students must complete seven full-course equivalents as follows:
1. VPAA1Y An Introduction to the Practical Elements of Theatre
2. VPAB1Y Intermediate Workshop in Theatre Performance
3. VPAB2H The History of Theatre I: From Classical Antiquity to the Elizabethan and Jacobean Theatre
4. VPAB2IH The History of Theatre II: From the Renaissance to the Theatre of the First Part of the 19th Century
5. VPAB2IH The History of Theatre III: Modern Theatre
6. VPAB23H Theatre in Canada
7. VPAB29H Introduction to Asian Theatrical Traditions
8. ENGB11Y Thespian Century Drama
9. Two full-course equivalents in Drama, one of which must be at the C- or D-level. Students may substitute VPAB06H and VPAB09H, or other courses outside of Drama, but must first obtain written permission from the Supervisor of Studies.

MINOR PROGRAMME IN DRAMA

Supervisor: P. Speciale (287T-718)
Students must complete four full-course equivalents as follows:
1. VPAA1Y An Introduction to the Practical Elements of Theatre
2. At least two of VPAB22H-VPAB23H
3. One full-course equivalent from the C- or D-level. Students wishing to take VPAC12H must first take VPAC21Y.
4. VPAA1Y An Introduction to the Practical Elements of Theatre

Exclusions: VPAB23H, DRMM24, DRMM34
T.B.A.
VPA303173 Intermediate Workshop in Theatre Performance

This course is designed to enable advanced students to concentrate on problems related to the staging of plays in studio situations. A portion of the course is devoted to work with TV-video equipment. A minimum of three hours weekly in formal groups, and additional time in rehearsal, will be devoted to advanced exercises in acting skills, scene work, and work on productions. Exclusions: DRM3000, (VPAC303Y)

Prerequisite: VPA311Y

P. Spertus

VPA303177 Technical Production

An introduction to the fundamentals of the technical production process. Students will study the essentials of production and stage management, set building and painting, stage lighting, and sound design. As part of the course, students will also assume responsibility for some of the technical and production positions available in college productions. Exclusion: DRM254Y

Prerequisite: VPA311Y (VPAC303Y)

K. Wright

VPA303912 Experiencing the Live Theatre II

Discusses the relationship of plays and playhouses. Students will attend five or six productions, write reviews and consider the various physical issues in which drama may be performed. Prerequisite: VPA309H or permission of the instructor

T.B.A.

VPA303179 Advanced Workshop: Performance and Directing

Detailed analysis, in-depth scene study and elements of directing for the stage in a studio setting. Detailed study of a play which will be produced in the second term. The course will include work on theatrical technique in areas such as period style, masks, improvisation, etc.

Students are expected to participate in a major production generated by the class, as well as on specific assignments related to the work in the course. They will also work on projects according to their individual areas of interest. Exclusion: DRM4000

Prerequisites: VPA311Y (VPAC300Y)

T.B.A.

VPA303293 The Victorian Theatre

An examination of the theatre and the drama in England from 1830 to 1880. The course traces the movement from romanticism towards realism and the adoption of many of the conventions of twentieth-century theatre. Byron, Courtenay, Tom Taylor, Tom Robertson, David Belasco, Powers, and H.A. Jones. The relationship of the drama to the developing modern playhouse, the introduction of new technologies, the changing social attitudes towards theatre, the growth of the Music Hall, and the influence of French and German drama in this period are also assessed.

Prerequisites: Three full-course equivalents in drama or English including one of VPA222H or ENGB11Y or ENGB33Y

A. Passavant

VPA303201 Supervised Headings Courses

An advanced reading course for Drama or English students.

Students should take any of these courses should consult with the Supervisor of Studies who will arrange with the student a reading list and set the specific requirements for the course.

The emphasis in this course will be on advanced individual projects exploring specific areas of the history of the theatre and/or dramatic literature. Proposals by students for specific projects will be assessed by the Supervisor of Studies in consultation with other members of faculty.

Prerequisite: One full-course equivalent in Drama, and permission of the instructor. Exclusion: DRM4000

Members of Faculty

Music

The Music curriculum is designed both for students who intend to pursue a career in the arts and for students whose interests are more general. Students who have taken music at high school or elsewhere will find a selection of historical, theoretical, and practical courses in music. In music, students with little or no previous background can begin music studies here. Most upper-level music courses assume that the student has some ability in reading music, and all continuing students are encouraged and helped to acquire the skill as fast as possible. Students who need additional preparation are advised to take VPA190H and VPA444H. All music students should consider taking advantage of the various opportunities that exist here for practical music making, particularly the series of Supervised Performance courses.

Dr. C. Clark (287-7168)

VPA302912 Introduction to Music

A study of the basic materials, principles of design, and cultural significance of Western Music from the Middle Ages to the present. Through a series of detailed case studies drawn from a variety of periods, students are introduced to the following ideas: musical style and design, the ways in which culture and society influence what composers write; the role of music in creating a musical work; how to approach and analyze pieces of music to communicate ideas about music to others.

This course is designed to prepare students for further studies in music at the university level. It assumes an elementary knowledge of Western art music to the level of DAG 300. Exclusion: VPA230H, Introduction to Music

Prerequisites: OAC Music, or VPA301H and VPA224H, or equivalent.

J. Mayo

VPA302910 Materials of Music I

A study of the basic materials of music from the Middle Ages to the present. A study of elementary harmony and musical forms designed to equip the student with simple analytical and computational techniques. Aural aspects of the subject,
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including sight-singing, will be emphasized, providing a secure foundation for the development of the student’s “inner ear”—that is, the ability to hear mentally what is written and to write down what the inner ear perceives.

Prerequisites: QAC Music or Royal Conservatory Gr II (music rudiments), or VPA4401, or equivalent

A. Rapport

VPA4401 Listening to Music

An introduction to the language of music for non-music majors.

Drawing on examples from a variety of musical styles and genres, this course introduces students to the art of intelligent listening. Beginning with a brief summary of basic musical concepts, this course continues with a chronological survey of Western music that stresses the close connections existing between music and society. Throughout the course, the emphasis is on what may be heard in a piece of music and theoretical concepts are kept to a minimum. Nevertheless, students will gain some basic understanding of the variety of ways that composers through the ages have gone about the task of creating meaningful structures in sound. No previous musical experience is necessary.

Instructor: MUS1001
T.B.A. / J. Mayo

VPA4451G Elementary Music Theory

This course introduces the novice to the elements of music theory, including concepts of melody and harmony, pitch and rhythmic notation, and musical form. Practical approaches, with weekly exercises.

Instructor: VPA4451G
J. Whiting

VPA4501H Music of the World’s Peoples

An introduction to the rich diversity of the world’s peoples.

In our multi-cultural society, we are constantly exposed to sounds which do not follow the familiar patterns of musical expression. Accordingly, it is the purpose of this course to help the student to appreciate the music of other cultures and to recognize the variety and greatness of world musical invention in the world. Course materials will include selected examples from Africa, China, India, Japan, the Middle East and South America.

In addition, the student will be introduced to Western folk music and to the music of the native peoples of North America. Lectures will be devoted to a non-technical discussion of music, musical instruments and the place of music in society. No previous musical experience is required.

Instructor: MUS2001
T.B.A.

VPA4500H Topics in Music and Society to 1600

Music in society: selected topics from the period up to 1600.

Using a thematic rather than a chronological approach, this course will examine Western music within the given period from the point of view of style and structure, social, cultural, economic, and historical contexts; aesthetic significance and reception; and current critiques of interpretation. The emphasis will be on introducing students to a wide variety of approaches to the study of music.

Prerequisites: VPA4451G & VPA4901H

W. Brown

VPA4501H Topics in Music and Society from 1600 to 1900

Music in society: selected topics from the period 1600 to 1900.

Using a thematic rather than a chronological approach, this course will examine Western music within the given period from the point of view of style and structure, social, cultural, economic, and historical contexts; aesthetic significance and reception; and current critiques of interpretation. The emphasis will be on introducing students to a wide variety of approaches to the study of music.

Prerequisites: VPA4451G & VPA4901H

It is recommended that students take VPA4901H as a co- or prerequisite.

C. Clark

VPA4505H Topics in Music and Society after 1900

Music in society: selected topics after 1900.

Using a thematic rather than a chronological approach, this course will examine Western music within the given period from the point of view of style and structure, social, cultural, economic, and historical contexts; aesthetic significance and reception; and current critiques of interpretation. The emphasis will be on introducing students to a wide variety of approaches to the study of music.

Prerequisites: VPA4451G & VPA4901H.

It is recommended that students take VPA4901H as a co- or prerequisite.

J. Mayo

VPA4500H Materials of Music II

A continuation of VPA4401H.

Prerequisite: VPA4901H, or Royal Conservatory Gr III harmony or equivalent.

A. Rapport

VPA4505H Jazz

A history of jazz from its African and European roots to present day experiments.

The history of jazz styles approached through an examination of the work of representative performers. Social questions and the relationship between jazz and “classical” music will be discussed. Class participation may include performance by exceptionally well qualified students.

No previous musical experience is required.

A. Shankland

VPA4505H Popular Music

An examination of the genres and history of twentieth-century popular music with particular attention to its social and commercial contexts.

After considering depictions of popular music, the course surveys the history of the North American genres of blues, jazz, and rock from a comparative perspective, highlighting the interplay of technology, media, and the interests of the commercial music industry. The course will also consider popular music as a cross-cultural phenomenon which includes non-western genres and the recent emergence of “World Music” as a commercial genre.

No previous musical experience is required.

R. Simons

VPA4511H The Orchestra and its Music

A study of the changing musical, social, and economic contexts of the orchestra and the variety of music written for it.

The course will examine a number of topics centered on the variety of ensembles that have given the name orchestra. It will discuss the evolving configuration of the ensemble and the various types of music written for the orchestra at different periods of its history and will assess these in the context of changing audiences and social conditions. Lastly, it will address the particular problems of the orchestra and its repertoire in the 20th century – the century of mechanical reproduction.

Prerequisites: VPA4801H and one course from the series VPA4501H to VPA4504H

J. Mayo

VPA4500H Music and Gender: An "alternative" survey of music.

We will explore the roles of women musicians in the history of primarily Western music from music-making in medieval monasteries and Renaissance courts to 19th century salons and the operatic stage; from popular music in women musicians active in our own society. We will study the curation of musical models of musical women for women performers, and map into an extensive repertoire of important works written by women composers who have long remained in obscurity because of inaccessibility, not quality, and because of the place of women in society throughout history. Topics and issues in current feminist and gender studies will also be addressed. Lectures and discussion topics will be augmented by in-class reports and presentations.

Exclusion: HMT2017

Prerequisites: VPA4451G or WSTA41Y

C. Clark

VPA4505H Beethoven

A study of selected symphonies, quartets and sonatas by Ludwig van Beethoven. The course traces the changes in the composer's style and technique from his development under the influence of the Classic masters to his contribution to the new dramatic expression of the nineteenth century.

Prerequisites: VPA4801H and one course from the series VPA4501H to VPA4504H

A. Rapport

VPA4500H VPA4501H Independent Studies

A directed reading course for students who have demonstrated a high level of academic maturity and competence.

Students must, in consultation with the supervisor, identify a field of musical scholarship which is of common interest to student and supervisor and which is not available for study otherwise. Students must regularly with the supervisor for supervision and prepare a 5,000 - 7,500 word paper for a term course or a 10,000 - 15,000 word paper for a year course. Students may also be required to prepare an oral examination and composition, producing a portfolio of original works in place of the essay.

Students are advised that they must obtain consent from the supervising instructor before registering for this course.

Prerequisites: At least two full-course equivalents in music at the B- and/or C-level; permission of the instructor to be obtained by the last day of classes in the previous term.

Co-ordinator: C. Clark
Performance Courses

The following performance courses are also available to students on a non-credit basis and are open to all faculty and staff members. Enrolment is open to all participants. Credit students should register but will not be admitted to the course unless granted permission by the instructor during the first week of classes.

VPAAB92H Concert Band I

The practical study of ensemble performance. Students work in an ensemble and prepare works for public performance within the College. The emphasis of the course is on the particular problems of ensemble performance and it assumes a basic competence in the chosen instrument. (NOTE: Flutes cannot be accommodated in ensembles except in very exceptional circumstances. Students who need a credit in supervised performance may meet the requirements of the major programme, and who are not admitted to the Concert Choir, should discuss possible alternatives with the programme supervisor.) Each group will meet for two hours per week for rehearsal with VPAAB92H and VPAAB92H/L Williams.

VPAAB92H Concert Band II

A continuation of VPAAB92H. Prerequisite: VPAAB92H/L Williams.

VPAAB92H Concert Band III

A continuation of VPAAB92H. Students in this course meet for three hours per week, two hours with students of VPAAB92H and one hour in a section. In this course the emphasis is on instrumental directing and conducting. Prerequisite: VPAAB92H/L Williams.

VPAAB95H Repertoire Choir I

The practical study of music from the choral repertoire. This course is for students who have little or no experience in choral singing. In addition to learning choral works, students will be taught in fundamental aspects of musicianship and ensemble singing. Students will work with the course as a useful companion to the study of elementary theory in VPAAB49H. Exclusion: VPAAB49H/L Williams.

VPAAB95H Repertoire Choir II

A continuation of VPAAB95H. Exclusion: VPAAB49H/L Williams.

VPAAB97H Choral Choir I

The practical study of a wide range of music from the choral repertoire. Students work as members of Scarborough College Concert Choir, a chamber choir which performs compositions drawn from the literature of the Renaissance to the present day. The choir gives public performances in each term. In addition to rehearsals, students may be required to prepare works in conjunction with members of the instrumental performance programme. Previous experience is desirable but not essential. The course meets two hours per week for rehearsal with VPAAB97H/L Williams. Exclusion: VPAAB97H/L/Williams.

VPAAB99H Repertoire Choir II

A continuation of VPAAB99H. Exclusion: VPAAB59H/L Williams.

VPAAB99H Repertoire Choir III

A continuation of VPAAB99H. Students in this course meet for three hours per week, two hours with students of VPAAB99H and VPAAB99H/L Williams one hour in a section. In this course the emphasis is on the interpretation of choral directing and conducting as an art form. Exclusion: VAPAC91H/L Prerequisite: VPAAB97H/L Williams.

MUSIC COURSES NOT OFFERED

Topics in Music and Society from 1600 to 1900 I

Prerequisites: VPAAB49H & VPAAB49H/L Williams. It is recommended that students take VPAAB49H as a co-requisite.

Music for the Theatre

Prerequisites: VPAAB49H/L Williams.

Opera

Prerequisites: VPAAB49H and one course from the series VPAAB97H-VPAAB99H.

Studio

The Studio curriculum is built around the idea that art is a means of expressing and understanding the human condition. It does not include courses in commercial or advertising art. The studio experience is intended to expand the student's perception not only of what art is, but why and how it is made, and to develop the ability to understand and experience the challenges of contemporary art. Critical skills will expand along with practical skills.

MAJOR PROGRAMME IN STUDIO

Requirements: Y. Mars (287-173)

This programme will give the student a full and broad exposure to the various processes of art-making and to recent developments in art criticism. It provides some preparation for teaching at the high school or elementary level. The programme is designed to be completed by students whose majors are to be in the arts. Students must complete seven full-course equivalents as follows: 1. VPAAB59H Visual Arts in the Modern World 2. VPAAB60H Introduction to Contemporary Cultural Theory 3. VPAAB61H Drawing I 4. VPAAB62H Drawing II 5. VPAAB63H Painting 6. VPAAB65H Art History 7. VPAAB66H Art History 8. One and one-half additional full-course equivalents in courses other than those in the D-level. VPAAB60H, Computers, and the Arts, may be counted as part of this requirement.

MINOR PROGRAMME IN STUDIO

Requirements:

1. VPAAB59H Foundation Studies in Studio

2. But Why Is It Art?

3. One and one-half additional full-course equivalents in courses other than those in the D-level. VPAAB60H, Computers, and the Arts, may be counted as part of this requirement.

[NOTE: VPAAB49H: Foundation Studies in Studio, which covers basic media and concepts through practice and discussion, must be taken with its co-requisite, VPAAB49H/L Williams, before advancing to other studio courses. Students will be expected to purchase the materials necessary for each course. An estimate of the costs is available from the Programme Supervisor.]

VPAAB67H Children's Theatre

An introduction to the various processes of art-making, drawing, painting, sculpture, printmaking, installation work, performance, and/or video. This course is intended to prepare the student for further study in Studio. A basic foundation of visual understanding will be built through the process of exploration of a number of processes, concepts, and media. Students will discover, through assigned work and discussions, the many ways contemporary art is made. They will be required to explore the nature of these processes through assignments. Three hours of lecture per week and three to five hours of individual study in the studio. Limited enrolment: 30 per section Exclusion: VES110 Consulting: VPAAB49H Prerequisite: an OAC in Visual Arts or permission of the instructor following a positive evaluation of a portfolio. Y. Mars / D. Helman

VPAAB69H Why Is It Art?

An introduction to the basic ideas behind recent art, how they developed, and why they change. "I don't know anything about art but I know what I like" is the question that becomes enlightening when confronted with contemporary art. Where are we supposed to be looking and why? This course aims to develop a broad basic knowledge of the critical conversations that led to major changes in recent art.

VPAAB60H Computers and the Arts

See course description under the Specialist Programme in Visual and Performing Arts.
VISUAL AND PERFORMING ARTS – STUDIO

VPAS102 Drawing I
An investigation of the various approaches to drawing, including working from the figure and working from plants.
Limited enrollment: 20
Exclusions: VES901
Prerequisites: VPA600Y

VPAS103 Drawing II
A continuation of VPAS102 with an increased emphasis on the student’s ability to interpret and conceptualize the emotional mood and meaning of drawing. Students will be exposed to various drawing projects dealing with drawing objects and ideas. This course will encourage the student to work from the figure as well as work from concepts to be assigned by the class. These completed drawings will be discussed in the class and will, with a complete sketchbook, make up the final portfolio for grading.
Three hours of lecture per week and three to five hours of individual study in the studio.
Limited enrollment: 20
Exclusions: VES901
Prerequisites: VPAS102 or equivalent

VPAS102 Painting I
An investigation of the possibilities of painting with an emphasis on the rich potential for expression of both personal and cultural imagery. This course is designed to expose the student to current concepts in painting, primarily the shift from Modernism to Post-modernism and its consequences. These changes will be investigated through an exploration of both media and imagery. Work in the second term will be based on assignments. Work in the second term will consist of images and concepts developed by the individual student. Discussions of work will be held regularly on both an individual and group level. Students will be required to write four critiques on contemporary art.
Three hours of lecture per week and three to five hours of individual study in the studio.
Limited enrollment: 20
Exclusions: VES901
Prerequisites: VPA600Y

VPAS105 Performance Art
An exploration of both the history and practice of performance art. This course will be made up of projects constructed around the concepts of performance art from DADA to contemporary art. Tests will include: Goldberg’s Performance Art from DADA to the Present.
Three hours of lecture per week.
Enrollment limit: 15
Exclusions: VES901
Prerequisites: VPA600Y or VAA111Y or permission of the instructor

VPAS104 Introduction to Lithography
A recovery to block and dry stone lithography including a detailed investigation of techniques and methods.
The course will include demonstrations and lectures covering the technical aspects of the medium. Students will be required to pass a test on procedures and the use of materials and techniques. Discussions of work will be held regularly on both an individual and group level.
Three hours of lecture per week and three to five hours of individual study in the studio.
Limited enrollment: 10
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS106 Advanced Studio: Individual Study in Painting
A further opportunity for individual exploration in painting,

STUDIO COURSES NOT OFFERED 2000/2001

VPAS103 Sculpture Concepts
Sculpture Concepts
Prerequisites: VPA600Y or permission of the instructor

VPAS105 Electronic Media
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS108 Intermediate Lithography
Prerequisites: VPAS104 or permission of the instructor

VPAS107 Painting II
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS106 Painting III
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS107 Printmaking
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS108 Independent Study in Studio: Advanced Level
A further opportunity for individual exploration in printmaking, drawing, painting, sculpture, or multimedia.
These courses may be taken in any area including printmaking, drawing, painting, installation, video, performance or mixed media / intermedia. They are designed for the mature student who can show, through their portfolio and their written proposal, an ability to work at an advanced level without intensive guidance. The proposal should state the proposed area of exploration and the amount of work necessary to fulfill it. One of the faculty will act as advisor, but all will be available for critique. Students will be assigned an advisor at the first class. Students will be expected to attend all classes and to discuss all work-in-progress.
Students are advised that they must obtain written consent from their advisor to be registered in these courses.
Two hours of lecture per week and three to five hours of individual study in the studio.
Exclusions: VES901, 402, 403, 404
Prerequisites: At least one-half course in the area of intended study at the C-level

VPAS107 Advanced Studio: Individual Study in Printmaking
A further opportunity for individual exploration in printmaking,

VPAS108 Independent Study in Studio: Advanced Level
A further opportunity for individual exploration in printmaking, drawing, painting, sculpture, or multimedia.
These courses may be taken in any area including printmaking, drawing, painting, installation, video, performance or mixed media / intermedia. They are designed for the mature student who can show, through their portfolio and their written proposal, an ability to work at an advanced level without intensive guidance. The proposal should state the proposed area of exploration and the amount of work necessary to fulfill it. One of the faculty will act as advisor, but all will be available for critique. Students will be assigned an advisor at the first class. Students will be expected to attend all classes and to discuss all work-in-progress.
Students are advised that they must obtain written consent from their advisor to be registered in these courses.
Two hours of lecture per week and three to five hours of individual study in the studio.
Exclusions: VES901, 402, 403, 404
Prerequisites: At least one-half course in the area of intended study at the C-level

VPAS107 Advanced Studio: Individual Study in Painting
A further opportunity for individual exploration in painting,

VPAS108 Independent Study in Studio: Advanced Level
A further opportunity for individual exploration in printmaking, drawing, painting, sculpture, or multimedia.
These courses may be taken in any area including printmaking, drawing, painting, installation, video, performance or mixed media / intermedia. They are designed for the mature student who can show, through their portfolio and their written proposal, an ability to work at an advanced level without intensive guidance. The proposal should state the proposed area of exploration and the amount of work necessary to fulfill it. One of the faculty will act as advisor, but all will be available for critique. Students will be assigned an advisor at the first class. Students will be expected to attend all classes and to discuss all work-in-progress.
Students are advised that they must obtain written consent from their advisor to be registered in these courses.
Two hours of lecture per week and three to five hours of individual study in the studio.
Exclusions: VES901, 402, 403, 404
Prerequisites: At least one-half course in the area of intended study at the C-level

STUDIO COURSES NOT OFFERED 2000/2001

VPAS103 Sculpture Concepts
Sculpture Concepts
Prerequisites: VPA600Y or permission of the instructor

VPAS105 Electronic Media
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS108 Intermediate Lithography
Prerequisites: VPAS104 or permission of the instructor

VPAS107 Painting II
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS106 Painting III
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS107 Printmaking
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS108 Independent Study in Studio: Advanced Level
A further opportunity for individual exploration in printmaking, drawing, painting, sculpture, or multimedia.
These courses may be taken in any area including printmaking, drawing, painting, installation, video, performance or mixed media / intermedia. They are designed for the mature student who can show, through their portfolio and their written proposal, an ability to work at an advanced level without intensive guidance. The proposal should state the proposed area of exploration and the amount of work necessary to fulfill it. One of the faculty will act as advisor, but all will be available for critique. Students will be assigned an advisor at the first class. Students will be expected to attend all classes and to discuss all work-in-progress.
Students are advised that they must obtain written consent from their advisor to be registered in these courses.
Two hours of lecture per week and three to five hours of individual study in the studio.
Exclusions: VES901, 402, 403, 404
Prerequisites: At least one-half course in the area of intended study at the C-level

VPAS107 Advanced Studio: Individual Study in Printmaking
A further opportunity for individual exploration in printmaking,

VPAS108 Independent Study in Studio: Advanced Level
A further opportunity for individual exploration in printmaking, drawing, painting, sculpture, or multimedia.
These courses may be taken in any area including printmaking, drawing, painting, installation, video, performance or mixed media / intermedia. They are designed for the mature student who can show, through their portfolio and their written proposal, an ability to work at an advanced level without intensive guidance. The proposal should state the proposed area of exploration and the amount of work necessary to fulfill it. One of the faculty will act as advisor, but all will be available for critique. Students will be assigned an advisor at the first class. Students will be expected to attend all classes and to discuss all work-in-progress.
Students are advised that they must obtain written consent from their advisor to be registered in these courses.
Two hours of lecture per week and three to five hours of individual study in the studio.
Exclusions: VES901, 402, 403, 404
Prerequisites: At least one-half course in the area of intended study at the C-level

STUDIO COURSES NOT OFFERED 2000/2001

VPAS103 Sculpture Concepts
Sculpture Concepts
Prerequisites: VPA600Y or permission of the instructor

VPAS105 Electronic Media
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS108 Intermediate Lithography
Prerequisites: VPAS104 or permission of the instructor

VPAS107 Painting II
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS106 Painting III
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS107 Printmaking
Exclusions: VES901
Prerequisites: VPA600Y or permission of the instructor

VPAS108 Independent Study in Studio: Advanced Level
A further opportunity for individual exploration in printmaking, drawing, painting, sculpture, or multimedia.
These courses may be taken in any area including printmaking, drawing, painting, installation, video, performance or mixed media / intermedia. They are designed for the mature student who can show, through their portfolio and their written proposal, an ability to work at an advanced level without intensive guidance. The proposal should state the proposed area of exploration and the amount of work necessary to fulfill it. One of the faculty will act as advisor, but all will be available for critique. Students will be assigned an advisor at the first class. Students will be expected to attend all classes and to discuss all work-in-progress.
Students are advised that they must obtain written consent from their advisor to be registered in these courses.
Two hours of lecture per week and three to five hours of individual study in the studio.
Exclusions: VES901, 402, 403, 404
Prerequisites: At least one-half course in the area of intended study at the C-level

VPAS107 Advanced Studio: Individual Study in Printmaking
A further opportunity for individual exploration in printmaking,
Discipline Representative: D.M. James
Women's Studies examines women's roles, women's work, and women's contributions past and present to society. Because men have been more dominant, the bulk of past scholarship has reflected a male perspective on the world and has focused on the activities and experiences of men. Women's Studies seeks to redress this by providing a perspective on women's activities and experiences. This examination is interdisciplinary in nature, drawing upon work in such areas as Anthropology, Literature, Visual and Performing Arts, Geography, History, Linguistics, Philosophy, Psychology, and Sociology. Women's Studies is thus concerned with such issues as women's work and women's role in the family, different issues and different societies; the development, transmission, and perpetuation of ideas and attitudes about women; women's contributions to culture; and the particular concerns and problems of women today. Students preparing for a career in research, teaching, administration, government, law, media or social work are encouraged to consider enrolling in the Major or Minor Programme in Women's Studies; since these careers involve consideration of equity issues, a background in Women's Studies would be a definite asset.

Supervisor of Major and Minor Programmes:
L. Corney (287-7711)

THE MAJOR PROGRAMME IN WOMEN'S STUDIES

The Major Programme in Women's Studies is designed to acquaint students with the substantial body of scholarship concerning the lives and activities of women, and the critical, interpretive, and methodological tools used to examine women's issues in the major academic disciplines.

Students must select seven full-course equivalents as follows:

1. WST100H - Introduction to Women's Studies
2. WST100Y - Introduction to Women's Studies
3. One and only full-course equivalent from the list below:
   WST211Y: Race, Class and Gender
   WST212Y: Women's Issues of Violence and Safety
   WST213H: Women and the Media
   WST220H: Women and Environment
   WST230H: Special Topics in Women's Studies and Gender Issues
   WST240Y: Women and Development
   WST250Y: Women and the Media
   WST260H: Women and Environment
   * Indicates students should check if topics of the year have significant elements pertaining to women.
   ** Not all courses are offered every year.

THE MINOR PROGRAMME IN WOMEN'S STUDIES

The Minor Programme offers a more concentrated course of study designed primarily for students who wish to extend their Women's Studies coursework into a particular area. Students must select four full-course equivalents as follows:

1. WST240H - Introduction to Women's Studies
2. WST250H - Current Research on Women's Issues
3. One and only further full-course equivalent from lists 2, 3 and 5 in the major.
4. Programme must include 1 C.E.C. at the C. or D. level, from list 3, 4 or 5.

WST240Y - Introduction to Women's Studies

An interdisciplinary course which brings the perspectives of philosophy, psychology, political theory, sociology, anthropology, history, language, literature and the arts to the study of women in western society - through the lenses of gender, race and class.

The goal of this course is to enable students not only to enter into the contemporary feminist debates but to understand the significance of these debates within the disciplines under discussion. Issues to be addressed include: women's diversity, patriarchal foundations; the politics of the family including the dynamics of socialization, women's work and the paid labour force; the transmission and perpetuation of images of women; and contemporary issues including reproductive choices, health, sexual politics and violence against women. Tutorial / practical required. Exclusion: NEW160Y

Co-ordinator: T.B.A.

WST250H - Current Research on Women's Issues

An examination of topical and critical research in women's issues from a cross-cultural and interdisciplinary perspective. This course will provide practice in critical analysis of contemporary issues as they affect women globally. Issues will be drawn from a range of disciplines, including history, sociology, education, literature, the arts and sciences.

Prerequisite: WST240Y

C. Gaborovas
Re-enrolling University of Toronto at Scarborough Students previously registered at University of Toronto at Scarborough who wish to return after an absence of three or more consecutive semesters (at least 12 months) must submit an "Application To Re-Enroll" at Registrarial Services, Room E505. An enrollment in MOST courses is on a first-come, first-served basis. Students are strongly advised to apply to re-enroll by APRIL 1 FOR THE SUMMER SESSION AND JUNE 15 FOR THE FALL/WINTER SESSIONS in order to have the forms processed in time to take advantage of the earlier availability of courses when the "course selection period" begins. Students who have a four-year degree conferred normally continue as Special Students. Students who wish to start a second degree must apply in WRITING to the Assistant Registrar-Admissions (Room N3063) by April 1. For further information on re-enrollment, telephone (416) 287-7000. See also the section on Overall Standing.

Admissions
The following is a brief description of admission policies and procedures. Full information may be obtained from:

Admissions and Awards
University of Toronto
315 Bloor Street West
Toronto, Ontario, Canada M5S 1A3
Telephone: (416) 978-2190
e-mail: ask@admissions.utoronto.ca
http://www.library.utoronto.ca/admissions/

Admissions and Liaison
Unit in Scarborough Campus
1265 Military Trail
Scarborough, Ontario, Canada M1C 1A4
Telephone: (416) 287-7529
e-mail: admiss@scar.utoronto.ca

Secondary School Liaison/Campus Tours
Telephone: (416) 287-7565
e-mail: liaison-office@scar.utoronto.ca
Web site: http://www.sgp.utoronto.ca

Ontario Universities Application Centre
Website: http://www.ouac.org
Telephone: (519) 822-1940

Applicants interested in graduate studies should contact the School of Graduate Studies.
Website: http://www.sgs.utoronto.ca
Telephone: (416) 978-6614
Admission to the 2000 Summer Session:
Term I (beginning mid-May) March 15
Term II (beginning in July) May 15
NOTE: Visiting Students applying from other universities on a Letter of Permission may be considered after these dates provided space in the requested course is available.
Telephone (416) 287-7259 to inquire.

Admission to the 2000 Fall/Winter Session:
Full-time study
April 1
March 15 for international students
applying from outside Canada/USA
Part-time study
June 1
Courses begin in September. UofT does not accept applications to the Winter Session only. Applicants interested in starting in January must apply by the above deadlines.

Special Students in Management
Regular application deadlines apply but late applicants may be accommodated for both the fall and winter sessions if space is in classes. Obtain an application from Professor R. Piers in the Division of Management.

General Admission Requirements to University of Toronto at Scarborough for 2000/2001

Applicants from Ontario Secondary Schools
- Applicants must be eligible to receive the Ontario Secondary School Diploma (OSSD).
- Applicants must present at least six (6) Ontario Academic Courses (OACs).
- One credit must be in English L1/L2.
- Applicants must present an acceptable competency assessment of specific courses or specific programs in which they intend to enrol.
- Applicants must satisfy English Facility Requirements. Applicants may request the English Facility Requirements brochure from Admissions and Awards. Telephone (416) 976-2190.

1. Proof of adequate English facility is required of all applicants except for those: (i) whose first language is English, or (ii) who have studied full-time for at least four years in an English language school system located in a country where the first language is English, or (iii) whose first language is French and have studied for at least four years in the Canadian school system.
2. Applicants who are required to present proof of English facility shall be exempt from the normal admission requirement of having to present the OAC English 1 (or equivalent course). Such applicants are, however, encouraged to include English in their preparation for university. If OAC English 1 is completed as an extra credit, applicants will not be penalized by having the result included in their admission average if the grade is low. 3. One of the following tests and scores will be accepted by the University of Toronto as satisfactory proof of English facility.

The Test of English as a Foreign Language Paper-Based Test (TOEFL PBT) and the Test of Written English (TWE) or the TOEFL Computer-Based Test (TOEFL CBT).

Minimum requirement:
TOEFL PBT-total score of 520 and 5.0 on TWE.
TOEFL CBT-total score of 250 and 5.0 on Essay.

Michigan English Language Assessment Battery. The minimum requirement is an overall score of 85 with no part score below 80.

International English Language Testing System (IELTS). The minimum requirement is an overall band of 6.5, with no band below 6.0.

NOTE: For an applicant who scores just below the minimum requirements who is otherwise well-qualified for admission, Admissions and Awards will automatically consider other academic evidence of English proficiency (for example, results in English courses).

Prerequisites
Students should choose OACs that will fulfill the prerequisites for university courses they intend to take. Review UofT at Scarborough brochures or consult with Admissions and Liaison staff. Also see the chart that follows at the end of this section.

Admission By Equivalent Certificate
The certificates listed below are considered acceptable for admission consideration. Applicants should consult the chart at the end of this section which describes specific Ontario OAC course requirements and take equivalent courses to meet prerequisites.

For programmes that require OAC calculus, applicants must complete an equivalent course that covers the geometric notion of a limit, the differentiation and integration of elementary functions to provide them with a geometric grasp of differentiation and integration.

Applicants From Other Canadian Provinces and Territories:
Quebec: 12 academic CEGEP courses (Transfer credit is granted to candidates who have completed more than the 12 academic required courses.)

NOTE: Those who completed their high school studies in Canada in 1985 or earlier should contact Admissions and Awards before applying to check entrance requirements.

Admission with Transfer Credit
Students who have completed work at other universities or at other Faculties or Schools of this University may be considered for admission with advanced standing credits. Acceptance of transfer credits among Ontario universities shall be based on the recognization that, while learning experiences may differ in a variety of ways, their substance may be essentially equivalent in terms of their content and rigor. Insofar as possible, acceptance of transfer credit should allow for maximum recognition of previous learning experience at university-level courses. Subject to degree, grade and program requirements, any course offered for credit by one university shall be accepted for credit by another university when there is virtual equivalency in course content.

Note that students transferring to the University of Toronto at Scarborough will be required to complete at least half of their degree credits and half of their programme requirements at University of Toronto at Scarborough students. (Students transferring from other divisions of the University of Toronto are exempt from this degree requirement. Limits on transfer credit upon admission still apply.) Students must consult with the Program Supervisor before taking courses required for the program at another campus.

Applicants From Ontario Colleges of Applied Arts and Technology
1. Candidates who have completed a one-year CAAT diploma programme (or one year of a two-year or three-year CAAT diploma programme) are not eligible for consideration for admission to the University. University students who have also completed the final academic secondary school year of the jurisdiction in which they attended secondary school. ( Mature students who are at least 21 years of age should contact Admissions and Awards.)
2. Candidates who have completed a two-year CAAT diploma programme (or two years of a three-year CAAT diploma programme) are eligible to be considered for admission in the first year of a degree programme. Up to two transfer credits will be considered. (Effective 1997: the policy change is not retroactive.)
3. Candidates, who have completed a three-year CAAT diploma programme are eligible to be considered for admission with up to five transfer credits.

Applicants Holding The International Baccalaureate
Candidates who have completed the Diploma with at least 12 points from the higher level subjects and 24 points in total, may be considered for admission and awarded transfer credit for more lower level subjects completed with a grade of 5, 6 or 7.

Applicants From The United States of America
Candidates who have completed Grade 12 from an accredited high school with a high grade point average and good scores on the SAT I: Reasoning Tests and their SAT I: Subject Tests (preferred) SAT II: Advanced Placement (AP) Examinations will also be considered for admission for AP examinations is considered.

Applicants With Other Qualifications
Candidates who wish to apply for admission on the basis of work completed in other countries or on the basis of other qualifications should check our websites or write to Admissions and Awards. Certificates listing their academic qualifications and intended area of study. Information on admission requirements can be found at the beginning of their programmes is contained in the Undergraduate Admission Bulletin available from Admissions and Awards.
Mature Students
Applicants who do not hold the published admission requirements may be considered for admission if:
1. They are at least 21 years of age by July 15 of the Summer Session or by October 1 of the Fall/Winter Session, and
2. They have been resident in Ontario as a Canadian citizen or permanent resident of Canada for a minimum of twelve months by the above dates, and
3. They achieve high standing in one Pre-university course, or
4. They achieve high standing in two OAC's completed after the student is 21 years old.
One OAC must be English OAC 1.
Students must receive permission from Admissions and Awards to qualify for consideration using these options. Therefore, consult before making any of these courses. Students who wish to prepare for certain university programs such as science programs may have to do additional studies to assure all of the prerequisites will be obtained.

NOTE: An applicant who enrols in a Pre-university course as a refugee claimant must be officially recognized as a Convention Refugee or Permanent resident at the time of admission to the faculty.

Pre-university courses are offered by Woodsworth College of the University of Toronto. For information about the pre-university courses, contact Woodsworth College at (416) 978-2415.

Senior Citizens
Canadian citizens or permanent residents of Canada who are at least 65 years of age by the first day of term, may apply for admission as part-time special students. Normal admission requirements are waived. Full-time fees will be charged but limited bursary assistance is available. Call the Assistant Registrar - Admissions at (416) 287-7529 for information.

Special Students
Special students are those registered at U of T at Scarborough who are not proceeding towards a degree. Most special students have completed degree studies and are taking further courses for their own purposes.

Special Students on a Letter of Permission (Visiting Students)
Students with valid letters of permission from other accredited North American universities may register directly at U of T at Scarborough, taking courses for transfer credit at their own home university. Visiting student status does NOT imply acceptance as an student proceeding towards a degree or a Special Student. Call (416) 287-7529 for applications.

Application Procedures
Students currently enrolled in a full-time Ontario secondary school submit applications through their school's guidance office.

All other applicants must request an application from Admissions and Awards, giving full details of their educational background and standing. All applications are available on-line at the Ontario University Application Centre. Website: http://www.ouac.on.ca

How Decisions Are Made
The specific average or standing required for admission varies from year to year. Students are selected by taking into consideration a wide range of criteria including school marks, distribution of subjects taken, performance in subjects relevant to the academic programme selected and, for applicants to co-operative programmes, supplementary information obtained through the co-operative programme application. While the University of Toronto recognizes that there may be valid reasons for a student to repeat a course, in general we urge students to do as well as possible on their first attempt. In considering students for admission and scholarships, the University reserves the right to give preference to students whose marks are the result of a single attempt at each course.

Possession of minimum requirements does not guarantee acceptance. Because of limitations of space, preference will be given to applicants with the best qualifications. Applications will be considered from candidates whose qualifications meet the normal requirements, but such candidates must offer written evidence of exceptional ability, or of extenuating circumstances. Applicants whose standardized tests are not available in the current year are advised to telephone or write to Admissions and Awards for information. The University of Toronto reserves the right to determine whether or not candidates for degree-granting institutions in Ontario meet the standards for admission to University of Toronto programmes.
### Awards

Unless specified, the following awards do not require an application; all UofT at Scarborough undergraduate degree students with excellent academic standing are considered. Where deadlines are not specified, ask staff in the Office of the Registrar - Admissions and Liaison in Room S330F and check the "Scholarships" bulletin board in the Meeting Place. Check the UofT at Scarborough website too for announcements.

The official award records are on file in Room S330F. UofT at Scarborough students are also eligible for consideration for other general University of Toronto scholarships and bursaries in addition to the awards listed below. Students should review the "Awards" binder in the Resource Centre, Room S302. Scholarship inquiries: (416) 287-7525, Bursary/Grant inquiries: (416) 287-7001.

A general condition for holding an entrance or in-course award is that the student must register at the University of Toronto at Scarborough in the following academic year with degree status. Students who have been awarded a scholarship which is based on enrollment in a particular program of study must continue in that program to receive the award. UofT at Scarborough may not award a scholarship if, in a particular year, the academic achievement of the candidate is not of high standard. For graduation awards, students who graduate at the fall convocation are considered for awards at the following spring convocation in competition with the spring graduates. Students who graduate with three-year degrees are not considered for in-course awards.

**Ontario Student Opportunity Trust Fund Awards (OSOTF)**

To qualify for consideration for awards listed below which are described as OSOTF awards, students must qualify for consideration for the Ontario Student Assistance Program (OSAP).

**Admission Awards**

**NOTE:** The calendar is published in March. Check our website in September for updates or changes to the scholarship program.

UofT at Scarborough provides generous funding for entrance scholarships to students entering first year. Students transferring from other universities with outstanding academic achievement are also considered. For need-based awards, applicants must complete a University of Toronto Advance Planning for Students (UTAPS) application, which is mailed automatically to all applicants who are...
Awards

University of Toronto at Scarborough

Lo Family Scholarships
Awards to students who are active leaders, are respected and considered to be well-rounded students in their school community and who have demonstrated financial need. Applicants must submit a letter indicating how the Brown County condition is met to Waddell Scholarships, Admissions, and Awards, 315 Blue St. W., M5S 1A3. Deadline: April 1

Frank M. Waddell Scholarship
Awardees to a student from Brown County, Ontario, on the basis of academic excellence. Application required. Submit a letter indicating how the Brown County condition is met to Waddell Scholarships, Admissions, and Awards, 315 Blue St. W., Toronto ON M5S 1A3. Deadline: April 1

In-course awards
It is the practice of the University of Toronto at Scarborough Awards Committee to award only one major award to allow the opportunity for other students to be recognized for excellent achievements. Undergraduate degree students are considered for in-course awards after the 5th, 10th, and 15th fall credit is completed. Most award decisions are made in late summer for students who are eligible for consideration after the fall, winter and summer sessions.

University of Toronto Scholarships Program-
In-Course Scholarships
Awards under the University of Toronto Scholarships Program are not renewable. Outstanding undergraduate degree students, however, will be eligible for consideration for University of Toronto (in-course) Scholarships at the end of the first, second and third year of their programs. At U of T Scarborough, there are about 15 scholarships at each level. In-course awards are worth $1,500 and are available with other in-course scholarships.

A. D. Allen Scholarship
Awards to the outstanding student in each year at U of T Scarborough, in any field of study. The scholarships are awarded to seniors. Dr. A. D. Allen, a former principal of Scarborough.

Vincent Baden In-course Scholarships
Two scholarships for each of first, second and third year are awarded on the basis of exceptional academic achievement. The scholarships are awarded in memory of Professor V. Baden, a former member of the faculty in Economics.

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Canadian Citizens or Permanent Residents of Canada. Successful applicants will be notified of awards received at the time of admission to the University.

In considering students for scholarships, the University reserves the right to give preference to students whose marks are the result of a single attempt at each course.

The National Scholarship Programme
The University of Toronto National Scholarships will be awarded to students who demonstrate superior academic performance, original and creative thought, and exceptional achievement in a broad context. The National Scholarships will be those who not only excel in academic pursuits but also have an enthusiasm for intellectual exploration and an involvement in the life of their school and community. Each secondary school is invited to nominate, on the basis of their criteria, one graduating student to receive a University of Toronto National Book Award. The winners of the Book Awards, and only those students, may enter the National Scholarship Competition.

Information and applications are sent to secondary schools each fall. Applicants will not be sent to individual students since notification by the school is required.

University of Toronto at Scarborough Awards

In considering students for scholarships, the University reserves the right to give preference to students whose marks are the result of a single attempt at each course.

NOTICE: The calendar is published in March. Check with your school in September for updates or changes to this scholarship program for 2001 entry.

University of Toronto at Scarborough

Awards to students applying directly from secondary school who have demonstrated significant contribution to community service work and who have high academic achievement. Application required. Applications will be notified to high schools or telephone (416) 287-7250. (5 awards valued at $10,000 each) Deadline: March 1

City of Scarborough Scholarships
See on-line list of scholarships below. A STAP application is required for new students.

John Ball Alumni Entrance Scholarship
Awards to a student entering first year on the basis of academic excellence in the secondary school programme. (Value: $3,000)

Warren-Lambert Admission Scholarship
Awards to a student entering first year on the basis of academic excellence in the secondary school programme. (Value: $1,000)

Tung-San Ting Memorial Entrance Scholarship
Awards to a student on the basis of excellent academic achievement in the secondary school programme. (Value: $750)

Donated by the Federation of Chinese Canadian Professionals (Ontario Education Foundation).

University of Toronto at Scarborough Scholarship in Studio Art
Awards to a student applying to Arts-Humanities who intends to take a programme in studio art; judged on the basis of an excellent portfolio that focuses on exploration of painting and media. Application required. Deadline March 1. Send a letter indicating how the Brown County condition is met to Waddell Scholarships, Admissions, and Awards, 315 Blue St. W., Toronto ON M5S 1A3. Deadline: April 1

Opportunity Scholarships
This scholarship programme is intended to encourage the participation of groups that can be shown to be under-represented. The awards, which include admission scholarships, are designed to enhance the recruitment and intake of black students (African-Canadian, Caribbean-Canadian and students of Afro-Canadian heritage.) Eligible students must submit a letter to declare their eligibility and interest to: Opportunity Scholarships Admissions and Awards 315 Blue St. W., Toronto ON M5S 1A3. Deadline: April 1

University of Toronto at Scarborough

Awards to students applying directly from secondary school who have demonstrated significant contribution to community service work and who have high academic achievement. Application required. Applications will be notified to high schools or telephone (416) 287-7250. (5 awards valued at $10,000 each) Deadline: March 1

City of Scarborough Scholarships
See on-line list of scholarships below. A STAP application is required for new students.

John Ball Alumni Entrance Scholarship
Awards to a student entering first year on the basis of academic excellence in the secondary school programme. (Value: $3,000)

Warren-Lambert Admission Scholarship
Awards to a student entering first year on the basis of academic excellence in the secondary school programme. (Value: $1,000)

Tung-San Ting Memorial Entrance Scholarship
Awards to a student on the basis of excellent academic achievement in the secondary school programme. (Value: $750)

Donated by the Federation of Chinese Canadian Professionals (Ontario Education Foundation).

University of Toronto at Scarborough Scholarship in Studio Art
Awards to a student applying to Arts-Humanities who intends to take a programme in studio art; judged on the basis of an excellent portfolio that focuses on exploration of painting and media. Application required. Deadline March 1. Send a letter indicating how the Brown County condition is met to Waddell Scholarships, Admissions, and Awards, 315 Blue St. W., Toronto ON M5S 1A3. Deadline: April 1

Opportunity Scholarships
This scholarship programme is intended to encourage the participation of groups that can be shown to be under-represented. The awards, which include admission scholarships, are designed to enhance the recruitment and intake of black students (African-Canadian, Caribbean-Canadian and students of Afro-Canadian heritage.) Eligible students must submit a letter to declare their eligibility and interest to: Opportunity Scholarships Admissions and Awards 315 Blue St. W., Toronto ON M5S 1A3. Deadline: April 1

For all University of Toronto Scholarships Program faculty offices, call 416-978-5634. Outstanding students, however, will be eligible for consideration for University of Toronto (in-course) Scholarships at the end of the first, second and third year of their programs. At U of T Scarborough, there are about 15 scholarships at each level. In-course awards are worth $1,500 and are available with other in-course scholarships.
University of Toronto at Scarborough In-course Scholarships
Awarded to the outstanding students in each year at Scarborough.

University of Toronto at Scarborough Student Council Prizes
Awarded to a student in good academic standing entering the second, third or fourth year who has made an outstanding contribution to the University, Social or Cultural life of UofT at Scarborough. Application or nomination required. Deadline: September 30

Joan E. Foley Prize
Awarded to a student, alumni, administrative staff member or faculty member who has made a significant contribution toward improving the quality of academic or extra-curricular student life at campus. Sponsored by the University of Toronto Alumni Association. Nomination required. The deadline is normally in December.

Neil H. Dobbs Award
Awarded to a student on the basis of financial need. Academic merit will also be considered. (OSOTPP)

Stanton Knight Tidcombe Scholarships
Awarded on the basis of academic excellence to one or more students registered in a Life Sciences or Physical Sciences program that leads to a Bachelor of Science degree.

Norman F. Brown Memorial Award in Humanities
Awarded to a student enrolled in the second or third year of a program in the Division of Humanities on the basis of excellent academic achievement.

The Hudson’s Bay Company Scholarship
Awarded to the student who has demonstrated outstanding academic achievement at the end of third year.

Glickstein Prizes in Science
1. One prize will be awarded to a student entering the fourth year of the Specialist Programme in Cell and Molecular Biology.
2. One prize will be awarded to a student entering the fourth year of a Specialist programme in Computer Science.
3. One prize will be awarded to a student entering the fourth year of a Specialist Programme in Environmental Sciences. Preference will be given to students who have completed at least 10 of the F.C.E.'s required for the programme with excellent standing.

The Rouge Watershed Scholarship
Awarded to a student enrolled in an environmental science, ecology or geography programme on the basis of excellent academic achievement, strong interest in environmental issues and active participation in environmental projects within the university or community. Application Required. Deadline: April 30 (OSOTPP)

The University of Toronto Women’s Association Lois Gove Memorial Scholarship
Awarded to a student on the basis of excellent academic achievement in the third year of a four-year undergraduate degree programme.

The All Tayed Scholarship
Awarded to a student who demonstrates excellent scholarship in political geography or studies of developing nations.

Budden Prize in Economics
Awarded on the basis of an essay submitted by a student specializing in Management or Economics on any subject covered by a B. C. or D-level course in Economics.

Tom McFeast Prize in Anthropology
Awarded to the outstanding student entering the final year of the Major or the Specialist Programme in Anthropology.

John Pounder Prize in Astronomy
Awarded to a full-time student entering the third year of a physical sciences programme on the basis of excellent achievement in 1AST010Y and one B- or C-level course in Astronomy.

John S. Moir Prize in Canadian History
Awarded to the student with the highest standing in Honours Canadian History.

William Beaudreau Memorial Prize in History
Awarded to the student completing third year who, in the opinion of the members of the teaching staff in History, has excelled in the study of History. Awarded in the memory of William Beaudreau, a history graduate of UofT at Scarborough.

The Morris Kever History Prize
Awarded to a student entering the third year of the Major or Specialist Programme in History on the basis of academic performance (at least 3.0) standing and financial need. Emphasis is placed on academic performance. Application required. Deadline: September 30

Dieterlenkant Essay Prize
Awarded on the basis of an essay on a topic focusing on Canadian policy or a similar field of Canadian Studies. The essay should have Canada as its primary focus. Essays are normally those submitted for course work. Nominations are usually made by instructors to the Chair of the Division of Social Sciences before April 15, and should include a copy of the essay and a cover page showing full name of the student, student number and the name of the course for which and professor to whom the essay was originally submitted.

McClelland and Stewart Essay Prize in Canadian Studies
Awarded on the basis of an essay, 2,500 to 3,000 words in length, on a topic focusing on Canadian art, drama, music, or literature. Essays are normally those submitted for course work and nominated by instructors. However, students may also submit a copy of their essays directly to the Chair of the Division of Humanities by April 30. Include a cover page showing full name, student number and the name of the course for which and professor to whom the essay was originally submitted.

The Oxford University Press English Essay Prize
Awarded for the best essay written for an English course, in the full academic year. Essays are nominated by instructors.

The Margaret H. McCloy Johnston Scholarship
Awarded to the student enrolled in a major or specialist programme(s) in a modern language who, on entering the third or fourth year, has the highest grade point average in courses taken to satisfy the programme(s). Minimum gpa 3.2.

Peter Moss Prize in French
Awarded for the best undergraduate essay in French during.

Anita Fitzgerald Prize in Women's Studies
Awarded for the best essay in the field of Women's Studies. Essays are nominated by instructors.

Dr. Vivian Paskal Memorial Prize in Psychology
Awarded to a full-time student entering the fourth year of the Specialist Programme in Psychology, on the basis of excellent academic achievement.

The Katherine Nagel Philosophy Prize
Awarded to the student in the Major or Specialist Programme in Philosophy before the beginning of the third or fourth year of study whose grades and performance in Philosophy, in the opinion of the Faculty in Philosophy, have been demonstrated excellence in the subject.

Marguerine Scholarship in English
Awarded to an outstanding student who has completed the second year of the Major or Specialist Programme in English.

Leigh Loe Brown Scholarship in Drama
Awarded to a student displaying outstanding ability in the dramatic arts who is either continuing in a Drama Programme at UofT at Scarborough or graduating and has registered in an advanced training programme in the dramatic arts. Application required. Deadline: June 1

Abhim Khashikar Prize in Music
Awarded for the best essay or original composition in a course in music offered at the University of Toronto at Scarborough.

Jane Sanborn Scholarship in French
Awarded to a student who is entering the third or fourth year in a Major or Specialist Programme in French on the basis of outstanding achievement in French studies. A minimum of 4.0 full course equivalents must be completed. (First award 2001)

Arthur Louden Scholarship(s)
Awarded to one or more students enrolled in the Early Teacher Project (open to students entering the Teaching Stream programmes) on the basis of academic achievement (minimum 3.3 gpa).

University of Toronto at Scarborough Physics and Astronomy Prize
(THIS award is currently under review.)

Toronto Katzell Leo Club Prize in Physical Sciences
Awarded to one or more students enrolled in the Division of Physical Sciences’ Early Teacher Project on the basis of excellent academic achievement and contribution to the programme through leadership activities and success in the teaching practicum.

Toronto Katzell Lions Club Prize in Environmental Chemistry
Awarded to a student entering the fourth year of the Specialist Programme in Environmental Chemistry who has demonstrated excellent academic achievement, especially in the...
<table>
<thead>
<tr>
<th>Awards</th>
<th>201</th>
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<tbody>
<tr>
<td>Myer Brody Prize in Entrepreneurship Awarded to an undergraduate student enrolled in a management program who has the highest grade in the course MGTC4893 Entrepreneurship (minimum grade A minus). (First award: 2001).</td>
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<tr>
<td>Warner-Lambert Arts Management Scholarships One scholarship will be awarded to a student enrolled in the Cooperative Program in Arts Management who has demonstrated outstanding academic achievement. One scholarship will be awarded to a student enrolled in the Cooperative Program in Arts Management who has demonstrated outstanding achievement on the work placement.</td>
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<tr>
<td>Arts Management Scholarship Awarded to students enrolled in the Cooperative Program in Arts Management who are in good standing in the co-op program, who are eligible for placement, financial need must be considered. (OSOTP)</td>
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<tr>
<td>SKP Canada Limited Scholarship Awarded to a student enrolled in the Cooperative Program in International Development Studies who is starting the work placement. Financial need must be considered. Academic merit will also be considered. (OSOTP)</td>
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<tr>
<td>Frank Feistout Scholarship In International Development Studies Awarded to a student enrolled in the Cooperative Program in International Development Studies who is starting her/his work placement.</td>
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<tr>
<td>Galant Y.T. Ho Scholarship In International Development Studies Awarded to a student enrolling in the third or fourth year in the Cooperative Programme in International Development Studies. Financial need must be considered in addition to academic merit. (OSOTP)</td>
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<tr>
<td>Canadian Society for Chemistry Silver Medal Awarded to a student entering the fourth year of a specialist programme in Chemistry who is the highest standing in the programme in third year.</td>
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<td>Canadian Society for Chemistry, Toronto Section Book Prize Awarded to the most improved student, entering the fourth year of a specialist programme in Chemistry.</td>
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<tr>
<td>Division of Physical Sciences Book Award in Chemistry Awarded to a student entering the third year of a programme in chemistry based on academic achievement in the courses required for the programme (a minimum of three Chemistry courses must be completed to be considered).</td>
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<tr>
<td>Robin A. Haas Canada Scholarship Awarded to one or more students entering either (i) the third year of a major programme in chemistry or (ii) the third or fourth year of a specialist programme in chemistry. Financial need must be considered. Academic merit will also be considered. (OSOTP)</td>
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<tr>
<td>University of Toronto at Scarborough OSOTP Scholarships Awarded to students enrolled in undergraduate degree programmes on the basis of financial need. Academic merit will also be considered. (OSOTP)</td>
<td></td>
</tr>
<tr>
<td>Frank M. Waddell Scholarship Awarded to a student from Brant County, Ontario on the basis of academic excellence. Application required. Check Award Binder for deadline.</td>
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<tr>
<td>Andrew Szarg Memorial Scholarship In Stico-Canadian Studies Awarded to the undergraduate, whose academic performance and extra-curricular activities in the area of Chinese studies and Stino-Canadian studies best exhibits commitment to Chinese-Canadian cultural and economic ties.</td>
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</tr>
<tr>
<td>Samuel Shain In-Course Scholarships Awarded to students enrolled in second, third or fourth year, in a Specialist Programme offered by the Departments of Mathematics, Physics of Computer Science (Faculty of Arts and Science, U of T at Scarborough) on the basis of academic performance and financial need. Application required.</td>
<td></td>
</tr>
<tr>
<td>APUS Scholaristic Awards Part-time undergraduate students who (a) have completed at least ten full courses, of which four are in an area of specialization, and (b) have obtained a B average (GPA of 3.0) in the most recent five full courses, may be considered. Application required.</td>
<td></td>
</tr>
<tr>
<td>APUS Award for the University of Toronto's Sesquicentennial Part-time undergraduate students who (a) have completed at least five full courses with a B average (GPA of 3.0) in the last five full courses, and (b) have demonstrated outstanding achievement or commitment in...</td>
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</tbody>
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activities distinct from their University studies or have overcome adverse circumstances in order to attend University, may be considered. Application required.

Jovita Nagy Scholaristic Awards
Part-time students who have a GPA of at least 3.3 in the most recent five courses who have completed the majority of their courses on part-time basis may be considered. Sponsored by APUS. Application required.

Need-Based Scholarships; Bursaries / Grants; Financial Assistance
NOTE: Some scholarships listed above may also have a financial need component.

University of Toronto Undergraduate Bursaries or Grants
Applications must demonstrate financial need. Applications may be obtained from the Office of the Registrar Room S300. Deadline: November 1. However, applications will be accepted after this date should emergencies arise and funds still be available.

University of Toronto Advance Planning for Students (UTAPS)
Students who are concerned about financing their university studies can obtain early information about government and other financial assistance by completing a UTAPS application. These applications are mailed in the spring to all domestic and permanent residents who have applied for admission to full-time studies at the University of Toronto. The studies will receive notification of UTAPS eligibility by the office of admission. Returning students, with calculated costs need above their government funding maximum, will receive an application for UTAPS bursary assistance in the fall.

City of Scarborough Scholarships
Awarded to students entering first, second or third year in a degree program offered by the Division of Management on the basis of financial need. Eligible candidates are to be limited to graduates of high schools within the geographic limits of the Corporation of the City of Scarborough as it existed on December 31, 1997. (OSFTP*)

Searborough-York Region Chinese Business Association Scholarship
Awarded to students enrolled in the Co-operative Programme in International Development Studies who are starting their work placements. Financial need must be considered. (OSFTP*)

Woo Yuen Scholarship
Awarded to a student enrolled in the Co-operative Programme in International Development Studies who is starting the work placements. Financial need must be considered. (OSFTP*)

International Development Studies Scholarship
Awarded to students enrolled in the Co-operative Programme in International Development Studies who are starting their work placements. Financial need must be considered. (OSFTP*)

Gavin Howse Memorial Bursary
Awarded to a student enrolled in the Co-operative Programme in International Development Studies returning from work placement to complete the fifth and final year, given on the basis of financial need. Where two or more students qualify on this basis, the students' contribution to the programme and to UTAF at Scarborough will also be considered. Application required. Deadline: September 30.

Edward A. Pickering Placement Bursaries in Arts Management
Awarded to students enrolled in the Co-operative Programme in Arts Management undertaking Placement, on the basis of financial need. Application required. Donated by the Corporation of Moseley Hall and Roy Thompson Hall.

University of Toronto Women's Association Bursary
Awarded on the basis of financial need. Submit a bursary application with a copy of letter of Admission and Awards, 313 St. George Street by September 30. (OSFTP*)

N'Sheenaah Child Care Bursary
Awarded to one or more students who have at least a child/children at N'Sheenaah child care facility on the basis of financial need. Bursary must be applied to first at NSheenaah. Application required. Deadline: June 30.

The MacDonald Bursary
Awarded to a full-time degree student registered in second, third or fourth year who achieved at least a Grade B standing in the previous year and who can demonstrate financial need.

Government Financial Aid
The Ontario Student Assistance Programme (OSAP) is available to Ontario residents who are Canadian citizens or permanent residents to assist with educational and living expenses. OSAP loans are interest-free and non-repayable while the student remains enrolled in full-time studies. Information concerning the eligibility and assessment criteria may be obtained from: Admissions and Awards 155 Bloor Street West University of Toronto, M5S 1A4 (416) 978-2190 or Ministry of Education and Training website: http://osap.gov.on.ca

OSAP application forms are also available for pick-up in the Office of the Registrar, Room S300. It is recommended that returning students apply for OSAP assistance for the Winter Session by May 11 and new students by June 30. Check with staff regarding summer deadlines.

Students from other Canadian provinces should apply through their provincial financial aid program. Admissions and Awards can provide addresses, and, in many cases, application forms.

University of Toronto Work-Study Program
This program is funded by the University and the Ministry of Education and Training, and provides co-op, part-time employment to students with financial need. Information and applications are available from Admissions and Awards or from the Resource Centre at Scarborough, Room S302.

Bursary for Students with Disabilities
Non-repayable assistance of up to $5000 is available from the federal and provincial governments for OSAP recipients who have special educational requirements as a result of disability. Information and applications are available from Admissions and Awards.

*Ontario Student Opportunity Trust Fund Awards (OSOTF)
To qualify for consideration for awards listed above which are described as OSOTF awards, students must qualify for consideration for the Ontario Student Assistance Programme (OSAP).

Graduation prizes
Graduation Prizes in Humanities, Life Sciences, Management & Economics, Physical Sciences and Social Sciences
Awarded to the outstanding student graduating in Geography in a Major or Special programme.

The irwin Publishing Prize in Classical Studies
Awarded to the outstanding member of the graduating class who has completed a Minor or Major Programme in Classical Studies.

Forbin Prize in Psychology
Awarded to the outstanding member of the graduating class who has completed the Specialist Programme in Psychology.

CGA Ontario Award for Excellence
Awarded to an outstanding graduating student completing a Management programme who has displayed excellent achievement in accounting an average of at least B plus in MGT203H, MGT204H, MGT205H and MGT206H. Preference will be given to students who intend to enrol in the CGA programme. A declaration is required, written to the Assistant Registrar-Admissions by May 15.

Robert James Prize in Sociology
Awarded to the outstanding student graduating in Sociology in a Major or Specialist programme.

The Society of Chemical Industry Student of Merit Award
Awarded to a member of the graduating class who has completed a Specialist programme in chemistry and achieved the highest standing in the final year. Minimum GPA of 3.075%, has completed the degree within the normal number of years.

Orpheus Prize in Humanities
Awarded to an outstanding member of the graduating class who has completed either the College Programme in the Humanities, the Major in Musical History and Literature, or the Specialist Programme in the Arts.
ROSI
University of Toronto Repository of Student Information

Student Telephone and Web Services

ROSI's Line (416-479-ROSI)
ROSI's Page (www.rosi.utoronto.ca)
University of Toronto at Scarborough

- add and drop courses
- add and change meeting sections
- check the status of their course requests
- list courses on their record
- check to see if there is still room in a course
- add and drop Specialist, Major and Minor Programs
- access grades, GPA’s and academic status
- display their academic record (ROSI’s Page only)
- request a transcript (ROSI’s page only)
- confirm intention to graduate
- change their PIN
- change address and telephone numbers (ROSI’s Page only)
- change mail of lost and emergency contact information (ROSI’s Page only)
- view other personal information (ROSI’s Page only)
- access their fees account (ROSI’s Page only)
- list their ROSI’s Line and ROSI’s Page transactions (ROSI’s Page only)
- avoid fines
1 Part-time students may find that degree or subject point (programme) requirements change during their academic career. When changes occur, students are, wherever possible, allowed, sometimes for a limited period of time, to continue under the old rules. This does not usually apply to rules other than degree or programme requirements.

2 Although the University of Toronto in Scarborough attempts to make available to part-time students a variety of evening courses as possible, students may occasionally find that it is in their best interest to take courses on other campuses of the University. Students, of course, may not register for credit twice for courses that are deemed to be exclusions.

3 Part-time students are governed by the same regulations concerning the dropping of courses as all other students.

4 Students should be aware that special circumstances may appear on occasion justifying an exception to the academic regulations. Requests for special treatment are made by petition. Students who believe that such special consideration is necessary may wish to meet with an academic advisor to discuss the appropriate form of action. Students should be aware that special consideration may not be granted and should avoid taking any action that will harm them if the petition is denied.

Choosing a Programme
Since most students must complete 12 full-time equivalent courses to complete the B.A. or B.Com. degree, students should plan their course selection very carefully in order to meet pre- and corequisites and the fact that certain courses may not be available in a particular session.

Programmes which are available in the evening are listed below with a brief description of the availability of courses. Students are encouraged to consult their Programme Supervisor in planning their course selections. The summer timetable is available in the Registrar’s Office normally in February.

Emancipation for Management Studies Major and Minor Programmes
Each of the core courses specifically required for the Economics Major [ECMB557H, ECMB558H, ECMB559H, ECMB560H, ECMB561H, ECMB562H] is offered in the evening at least once each year usually in the summer. Students must also complete the calculus course MATA24H.

Each winter session, and in some summer sessions, at least one other course at the B-, C-, or D-level is offered.

Programme English courses are, as far as possible, cycled as follows:
- ENGAA1Y - every two years
- ENGA1Y - every two years
- ENGB1Y - every two years
- ENGB2Y - every four years
- ENGC1Y - every four years
- ENGC2Y - every four years
- D-level courses - usually 2 half-courses every year.

History Specialist, Major and Minor Programmes
HISAA11Y offered in the evening normally every other year.
Upper level History courses - at least two offered every year.

Psychology Specialist, Major and Minor Programmes
The following courses are normally offered annually in the evening in the summer:
- PSYAA03H, PSYAA04H, and PSYAA05H, all of which are required for both programmes. As well, courses in each of the content areas and all D-level courses appear in the evening or summer on approximately a 4-year cycle.

Part-time students are also encouraged to check the offerings on the St. George campus, to which they have access and which they will find are not identical to those at Scarborough in a given year.

Sociology Minor Programme
Some Sociology courses will be offered in the evening or summer session every year. These will normally include SOCAA1Y and one full-course equivalent at the B- or C-level. Every effort will be made to maintain these upper-level courses so that students can complete the Minor Programme in Sociology in not more than three years.

Academic Regulations

Student responsibility
Students are responsible for making themselves familiar with the information in this Calendar, particularly with this section, as well as with announcements published periodically by the Registrar’s Office. Students whose registration contravenes the regulations may be withdrawn from courses, regardless of when the contravention comes to light. Members of the Registrar’s Office and the Counselling Services Office will assist students in interpreting the regulations and explaining their application in particular cases. Where appropriate, they will help those who encounter special difficulties to request special consideration.

Calendar changes
The information published in this calendar outlines the rules, regulations, curricula and Programmes for the 2020 Summer Session (May to August) and the 2020 Fall (2021) Winter Sessions (September to May). The University of Toronto at Scarborough reserves the right to change without notice any information contained in this Calendar, including any rules or regulation. The publication of information in this Calendar does not bind the University to the provision of courses, Programmes or facilities as listed herein.

Enrolment limits
University of Toronto at Scarborough reserves the right to limit the number of registrations in any Programme or course when enrolment exceeds the teaching or other resources available. As far as possible, places will be available for incoming students in A-level courses.

Photo identification cards
All students are required to have a photo identification card. The card serves as both a proof of registration and a library card. Once fee payment for the session has been made, the card must be presented at the Registrar’s Office for validation. The validation sticker remains in effect from September to August. Therefore, it is not necessary for a 2020 Summer Session student who was registered in the 1999/2000 Fall & Winter Sessions to present the card for validation again until the 2000 Fall Session begins. Students who do not have a photo identification card should obtain one from the Registrar’s Office. Cards are provided free of charge to all new students. A fee is charged to replace cards.
Students in debt to the University
University of Toronto at Scarborough
imposes the following academic sanctions on
students in debt to the University:
- transcripts not issued
- registration of continuing students cancelled
- registration is refused to re-enrolling students (i.e. returning to the College after an
absence of twelve months or more)

The following debts are taken into consideration when applying sanctions:
- tuition fees
- residence fees and other residence charges
- library fines
- loans made by colleges, faculties or the University
- health service accounts
- unreturned or damaged instruments, materials and equipment
- fines levied under the Code of Behaviour
- unsubmitted course work

Student Record System
(Student Record System (ROSI))
In the Spring of 1999, the University of Toronto implemented a New Student Record System (ROSI). The new system is student-
friendly, available by touch-tone telephone (416) 873-ROSI and on the Web at
www.rosi.utoronto.ca.

Course key
The Course Code
1. The Discipline Abbreviation
The first three characters of the course code indicate, in an abbreviated form, the
discipline or subject area of the course. ANT(100)-"ANT" indicates a course in
Anthropology. CHM(100)-"CHM" indicates a course in Chemistry. HIST(100)-"HST"
indicates a course in History. RO(100)-"RO" (Student Skyline Service) or a separate three-digit
numeric code indicates discipline.

2. The Course Level
The fourth character of the course code indicates the level of the course. A"1" indicates the lowest
degree level and "D" the most advanced.

3. The Course Number
The fifth and sixth characters of the course code are course numbers. In most
disciplines, these numbers have no significance except to identify the course in a shorthand form.

4. Credit Value of a Course
The seventh character of the course code indicates the credit value of a course as follows:
- Final Credit
- Half Course
- Full Course

5. Campus
The "5" at the end of the code indicates a course on the Scarborough Campus of the
University of Toronto.

6. Section Code
Section code indicates the duration of the course as follows:
- Summer Session
- Fall/Winter Sessions
- May - Aug.
- Sept. - May
- May - June
- June - Dec.
- July - Aug.
- Jan. - May

Exclusions, Prerequisites and Corequisites
1. Exclusions
A student may not register for credit in a course which lists, in an exclusion,
one or more courses, which the student is also taking or has already passed. Courses are not
always mutually exclusive, so it is important to check the entries for both
courses when using lists the other as an exclusion.

2. Prerequisites
A student must have passed the prerequisite course before enrolling in
the course being described. Instructors are permitted to waive prerequisites if they feel that there are adequate
grounds for so doing. If a student registers in a course without meeting its
prerequisite and without obtaining a specific waiver, the student may be withdrawn from the course at any time.
Students who are not withdrawn from the course remains in it at their own risk;
for lack of the prerequisite is not grounds for special consideration.

3. Corequisites
Students must either already have passed the corequisite course, or must
enrol in it at the same time that they take the course being described. Instructors are permitted to waive
corequisites if they feel that there are adequate grounds for so doing. If a
student registers in a course without meeting its corequisite, or if they withdraw from the co-required course
without obtaining a specific waiver of the
corequisite, they may be withdrawn from the
course at any time. Students who are not withdrawn from the course remains in it at their own risk;
for lack of the prerequisite is not grounds for special consideration.

4. Exclusions, Prerequisites and Corequisites in Parentheses
Prerequisites in Square Brackets [ ] or Parentheses ( ) are used in
prerequisites to indicate aggregate or alternate choices, example:
[ENG102Y3 & ENG105Y3] or (ENG111Y3 & one B-level course in Humanities or Social Sciences).
Some exclusions and corequisites courses are excluded in parentheses, example (LAT801Y3). This indicates
that the course is no longer in the College's curriculum. Students who have already passed an enclosed course contained in
parentheses may not take the course being described. Students who have completed, in a previous session, a
prerequisite or corequisite course contained in parentheses may make use of the course to meet the requirements
of the course being described.

Supervised Reading, Supervised Research and Independent Study Courses
Students in these courses work under the
direction of a faculty member with whom they meet periodically or in whose laboratory
they work. Students must obtain written
permission of instructors before enrolling in them. (Forms are available from
the Registrar's Office.)

Course selection
In selecting their courses, students must
adhere to the following regulations:

1. Prerequisite and corequisites for each
course, as stated in the course description,
must be met, unless waived by the
instructor.

2. Students may not register for credit in a
course if they have already passed another course shown in the course description as its exclusion to that course.

3. Students may not register for credit in a
course if they have already passed that
course. Students may register for credit in a course they have taken, but failed. In such
cases, both registrations in the course are shown on the student's record, and both
grades count in the student's grade point average.

4. Students may not register for credit in a
course which is a specific prerequisite for a course they have already passed.

5. Where students may not register in
courses for credit, they may register in them as extramural courses. In such cases,
both registrations in the course are shown on the student's record but the second
grade is not included in the student's grade point average nor does the
course count towards the degree.

6. Students may normally select as many
courses as they wish with each session. Students should, however, note the following:
- The usual load maximum for a full-time student from September - May (Fall & Winter Sessions) is 5.0 courses.
- The usual maximum load for a student from May - August (Summer Session) is 2.0 courses.
- Students who are on probation are strongly advised to carry no more than an average course load. Should they choose not to follow this advice they do so at their own risk.

7. Students who wish to register in
courses on the St. George or Rotman
campus should consult pages 213 and 214 of this Calendar. The "overall
limits" rule is especially important.

8. Full-time students are those students who register in at least 4.0 courses over the Fall & Winter Sessions.

9. Students who are restricted to part-time studies may have a course load of no
more than 3.0 in the Fall Session, 3.0 in the Winter Session as 1.5 in any one term of the Summer Session until they have completed at least 1.5 full courses and have a cumulative grade point average of at least 2.0. In applying this rule, course load is calculated as follows:

<table>
<thead>
<tr>
<th>Credit Value</th>
<th>Section Code</th>
<th>Summer</th>
<th>Fall</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Y</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>1.5</td>
<td>Y</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>1.5</td>
<td>T</td>
<td>1.5</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2.0</td>
<td>Y</td>
<td>2.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>2.5</td>
<td>Y</td>
<td>2.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>2.5</td>
<td>T</td>
<td>2.5</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>3.0</td>
<td>Y</td>
<td>3.0</td>
<td>1.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>
10. Students must register for their courses in accordance with instructions issued each session by the Registrar's Office. Students who wish to change their registration:
- may do so only until the deadlines for adding and withdrawing from courses, stated in the "Academic Calendar" of this Calendar,
- must notify the Registrar's Office of any change through ROSI's Line or ROSI's Page (Student Telephone and Web Services).

11. Where multi-sectioned courses have a common examination, students enrolled in the evening session of the course may be required to sit an examination during the day.

NOTES:
1. A course. The word course is used in two ways: a) to describe a full or half course such as "the full year to withdraw from a course", or b) to describe a number of full courses, or the equivalent in full and half courses as the requirement of passing fifteen courses for a three-year degree.
2. To Pay a Course. To pay a course means to obtain a grade of D- or better in that course (or Credit in a Credit/No Credit course).
3. A Specific Prerequisite. This rule does not apply in the case of non-specific prerequisites (such as "one 200 level course in English") or in the case where one of two or more completely different courses may serve as prerequisite.

Registration
Registration consists of two basic steps:
1. Course selection, and
2. Fees payment.

Both must be completed by the appropriate deadlines in order to be considered a "registered" student and to retain a place in any course selected. (For detailed and further information, see the registration material published separately for each session.)

Course selection
Courses may be selected either through ROSI's Line or ROSI's Page (Student Telephone and Web Services). (For regulations on course selection, see page 209.)

Fees payment
All fees are posted to the student's account. Information on the fees process is included in the registration package. Students will also receive an invoice detailing their fees payable for their program of study. For further information contact Student Accounts, University of Toronto, 315 Honest St., Toronto, Ontario, M5S 1A2; telephone (416) 978-2142, fax (416) 978-5572; email fees@finANCE.utoronto.ca.

Programme registration
All degree students with at least 4.0 credits are required to register in their SpeciaLity, Major or Minor Programmes. Students may only register in Programmes offered by University of Toronto at Scarborough. (For regulations governing Programmes, see page 14 of this Calendar.)

Summer Session
2000 Summer Session registration begins April 10. Students who registered at the College in the 1999 Summer Session or the 1999/2000 Fall & Winter Session and who are not on suspension are eligible to register. On March 23 & 24, students may pick up their registration packages in the Meeting Place. New students, students who re-enroll (i.e., reactivated their enrollment after an absence of one year or more) and other students who are not on campus (e.g. students who withdraw) will be mailed their registration material upon request. Most courses in the Summer Session are assigned on a first come-first served basis.

Fall & Winter Sessions
2000 Fall/Winter Session registration begins on July 4. Students who registered at the College in the 1999/2000 Fall & Winter Session and who are not on suspension are eligible to register. Registration packages will be available in the Meeting Place March 23 & 24.

Student Telephone and Web Services
ROSI's Line (416-872-ROSI)
ROSI's Page (Student Telephone and Web Services) University of Toronto at Scarborough students may use ROSI's Line and ROSI's Page to:
- add and drop courses
- add and change meeting sections
- check the status of their course requests
- list courses on their record
- check to see if there is still room in a course
- contact the Specialist, Major and Minor Programmes
- access grades, GPA and academic status
- display their academic record (ROSI's Page only)
- request a transcript (ROSI's Page only)
- confirm intention to graduate
- change their PIN
- change address and telephone numbers (ROSI's Page only)
- change name of kit and emergency contact information (ROSI's Page only)
- view other personal information (ROSI's Page only)
- access their fees account (ROSI's Page only)
- list their ROSI's Line and ROSI's Page transactions (ROSI's Page only)
- avoid misprints

Access to ROSI's Line and ROSI's Page is through Personal ID (student number) and a six digit personal identification number (PIN). All PIN's are not initially in your name, month and day of birth (e.g. 800213 or March 23, 1980) and must be changed to one of the student's own choice before access to the services is granted. (Students accessing ROSI's Line or ROSI's Page for the first time will be prompted to change PIN.) For security there is a limit on the number of attempts which can be made to enter PIN. Students who exceed the limit will have their access to ROSI's Line and ROSI's Page suspended and should contact the Registrar's Office immediately. Access will be re-issued without photo identification.

Service to the hearing-impaired
Access to ROSI's Line is available by the Bell Relay or by contacting the Special Services Office via TTD at (416) 978-6000.

Student System Access fee
Inclusive fees each session include a Student System Access fee. Further information on ROSI's Line and ROSI's Page is included in the registration material.

University of Toronto at Scarborough
Home page (http://www.uts.utoronto.ca) Available information includes:
- the information in this Calendar
- changes to the Calendar
- timetable for each session
- timetable changes
- examination timetables
- divisional, discipline and course information
- faculty home pages
- faculty and administration telephone directories

Course Changes
Course changes
Students may add courses or withdraw from courses without academic penalty up to the dates stated in the Academic Calendar on page 6 either through ROSI's Line or ROSI's Page. The deadlines for adding or withdrawing from courses are strictly applied.

Students who make changes through the Registrar's Office will be given or mailed a reproced copy of the course selection form and should retain it until they have received their statement of results for the particular session. Students who make changes through ROSI's Line or ROSI's Page should end their transaction by listing their courses to ensure that the change has been processed properly. They will then receive written confirmation of the change but it will be recorded in the detailed transaction log kept by the University which can be accessed through ROSI's Page. At the same time students add a course to their record they are accepting responsibility for fees payment for it. Students who withdraw from courses by the appropriate deadline may be entitled to a fees adjustment. (See the fees information published each session for more information.)

Adding a course
Some courses have a restricted admission and may require approval before students are allowed to enrol in them. A list of restricted courses and the approval needed is posted in the Registrar's Office at the beginning of each session.

Changing Meeting sections in a course
Students may change meeting sections in a course at any time provided fees, if the change takes place after the deadline for adding the course, they have appropriate approval. Approval normally comes from the instructor of the new meeting section or from the course coordinator. Changes must be made prior to the beginning of the session through ROSI's Line or ROSI's Page (until the last day to add the course).

Dropping a course
If students withdraw from a course by the appropriate deadline, no record of registration is shown on the student's transcript. If students cease to complete course requirements but do not withdraw officially by the drop deadline, a grade based on the marks awarded (including a zero for any incomplete work) will be recorded.
Standing in a course

Grading scheme (as of September 1998)

Students are assigned a grade in each course, as follows (Grades earned prior to September 1998 will remain as originally reported):

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>96-100</td>
<td>Excellent</td>
</tr>
<tr>
<td>A</td>
<td>86-89</td>
<td>Good</td>
</tr>
<tr>
<td>A-</td>
<td>76-78</td>
<td>Adequate</td>
</tr>
<tr>
<td>B+</td>
<td>66-69</td>
<td>Adequate</td>
</tr>
<tr>
<td>B</td>
<td>57-59</td>
<td>Adequate</td>
</tr>
<tr>
<td>B-</td>
<td>49-52</td>
<td>Adequate</td>
</tr>
<tr>
<td>C+</td>
<td>40-42</td>
<td>Adequate</td>
</tr>
<tr>
<td>C</td>
<td>32-34</td>
<td>Adequate</td>
</tr>
<tr>
<td>C-</td>
<td>25-27</td>
<td>Adequate</td>
</tr>
<tr>
<td>D+</td>
<td>16-18</td>
<td>Adequate</td>
</tr>
<tr>
<td>D</td>
<td>09-11</td>
<td>Adequate</td>
</tr>
<tr>
<td>F</td>
<td>00-09</td>
<td>Incomplete</td>
</tr>
</tbody>
</table>

Grades of "F" and "NCR" are failing grades, yielding no standing in a course and no degree credit. Students are cautioned that a numerical score on an assignment is not deemed to be automatically equivalent to the corresponding letter grade.

Credit/no credit courses

In some courses such as certain visual and performing arts courses or certain drama courses, specific letter grades may not be assigned. Students may request a Credit/No credit (C/NCR) system.

The grade of "No credit" is a failing grade. When students earn a grade of "Credit" in a course, the grade is not included in the grade point average; where students earn a grade of "No Credit," the course is included as an "F" (value zero) in the grade point average.

Aegrotat standing

On petition, a grade of "Aegrotat" (AEG) may be assigned. This grade is assigned on the basis of work completed while medical or similar evidence demonstrates that a student is unable to complete course requirements within a reasonable time, and where a student has already completed at least 60% of the work of the course with a grade of "C" or better. When a student is assigned Aegrotat standing, the course is not included in any grade point average. Students who require a letter grade will be expected to complete the work of the course.

Extra courses

Extra courses are those courses in which students may not register for credit (see "Course Selection" on page 209). The course and its grade will appear on the student's transcript (designated as an extra course) but the grade will not be included in any grade point average.

Other notations

The following have no grade point value and do not yield credit:

- WDE = Withdrawal by petition without academic appeal after the relevant deadline. (See "Special Consideration, Petitions and Appeals" on page 225.)
- WPR = Withdrawal pending review
- NOA = Grade withheld pending review
- SDP = Standing deferred on the basis of incomplete course work because of medical or similar reasons.
- IPR = In progress

Overall standing

Grade point averages (GPA's)

1. A grade point average is calculated as follows: the grade points earned in each full course and one-half the grade points earned in each half course are added together and this total is divided by the number of full courses (or equivalents) taken.

2. A seasonal grade point average is calculated on the basis of all courses taken in a given session (Fall, Winter or Summer) and is a grade point value.

3. An annual grade point average is calculated on the basis of all courses taken in the Fall/Winter sessions (September through May) having a grade point value.

4. A cumulative grade point average is calculated on the basis of all courses taken having a grade point value.

The following grade point averages will be calculated for all students at the end of each session and shown on the student's transcript:

- Sessional & cumulative GPA
- Winter Session - Aegrotat & Cumulative GPA
- Fall Session - Aegrotat & Cumulative GPA

Determination of academic status

Academic status will be determined as follows for students who have attempted at least two and one-half full courses (or equivalents) since beginning their studies at University of Toronto at Scarborough or at the University of Toronto's Faculty of Arts and Science. It is determined at the end of each Summer and each Fall/Winter Session:

1. In good standing

Students who maintain a cumulative grade point average of 1.60 or better are said to be in "good standing".

2. On probation

- Students who have attempted at least two and one-half courses in the College and have a cumulative GPA of less than 1.60 are placed on probation.
- Students returning from suspension (under 3) below (or under any provisions in previous College rules) will be placed on probation again.

3. Probation cleared

Students may clear probation by achieving a cumulative GPA of 1.60 or better. Students who have cleared probation shall be said to be again in "good standing".

4. Probation continued

Students may continue on probation by achieving an annual grade point average of at least 1.60 in each Fall/Winter Session and a seasonal grade point average of at least 1.60 in each Summer Session until such time as they return to good standing.

5. Suspended or refused further registration

Students who, by the end of a given session, whether Summer (May to August) or Fall/Winter (September to December), have not either cleared probation or achieved a Fall/Winter annual grade point average or a Summer seasonal grade point average of at least 1.60 shall be liable for suspension or refusal of further registration and proven, regardless of the number of courses taken in the session:

- Students who have incurred no previous suspensions will be suspended for one year.
- Students who have previously incurred a one-year suspension will be suspended for two years.
- Students who have previously incurred a three-year suspension will be refused further registration in the College.

Determination of academic status for students admitted between sessions

In certain circumstances, students who do not meet normal admission requirements may be admitted "on condition." The academic status of such students is determined according to the following rules:

1. The status of students admitted on condition will be assessed at the end of the session in which such students complete their second full-course equivalent.

2. Where such students earn a cumulative grade point average of 1.70 or better, their conditional status will be removed, and they will be said to be in "good standing.

3. Where such students earn a cumulative grade point average of less than 1.70, they will be suspended for one year.

4. Upon their return from suspension, their academic status will be assessed as it is assessed for any other student returning from suspension.

Determination of academic status for re-enrolling students at University of Toronto at Scarborough

Students who have studied at other institutions since their last registration at Scarborough must arrange for official transcripts of other post-secondary studies to be sent to University of Toronto at Scarborough upon application for re-enrollment. Performance in courses taken elsewhere (including other divisions of the University of Toronto) will be taken into consideration in determining whether to accept a student and whether to make any change in the student's academic status. Students who study at other universities without prior permission from University of Toronto at Scarborough are unlikely to be eligible for transfer credit for such study. See also the section "Study at other institutions or other divisions of the University of Toronto."
Courses on other campuses

Students are permitted to take some courses on other campuses of the University of Toronto subject to the following rules. Students may be withdrawn from courses after classes have started if their registration violates these rules.

Overall limits

At all times throughout their University career, students who are registered at University of Toronto at Scarborough must adhere to the requirement that at least half their courses (defined as the total number of courses that they have passed plus those in which they are currently enrolled) are University of Toronto at Scarborough courses. Students are not permitted an imbalance of courses with the intention of achieving the required distribution in a future session or by the time of graduation.

Courses in Other Faculties

Students are not permitted to register for courses in Faculties other than Arts and Science unless they have received permission or unless the courses are required by their Special or Major Programmes.

Transfer to the Faculty of Arts and Science

Students who are contemplating transfers to other Colleges in the University should be aware that University of Toronto at Scarborough is in fact a separate faculty and rules covering students at University of Toronto at Scarborough differ from those in the Faculty of Arts and Science. Students are urged to consult the Office of Admissions and Aid located at 335 College Street West to establish how they will be affected by transferring from one faculty of Arts and Science to another.

Study at other universities

Students who wish to take courses at another university and have credits transferred to the University of Toronto must request permission from the Toronto campus to do so in prior to taking the courses. Students who study at other institutions without the University of Toronto's approval in advance do so at their own risk since permission to transfer credit is not usually granted after the course has been taken. Students should also be aware that duplication of previous study is not permitted. Students who study at another institution prior to leaving University of Toronto at Scarborough are required to supply official transcripts upon re-enrollment. Grades evaluated at other universities may affect a student's academic status.

There are three types of programmatic criteria for credit transfer that is considered. The Study Elsewhere programme allows a student to study full-time at an accredited university in a different cultural setting to enhance the student's educational experience. A Letter of Permission allows a student to study at a university similar to the student's original institution. A Transfer Agreement programme is an arrangement where credit transfer is governed by the regulations of the universities involved.

(6) Letter of Permission

To take a course at another university, students must, in advance, apply for and receive a "Letter of Permission" from the University of Toronto at Scarborough. Requests should be addressed to the Assistant Registrar - Admissions, Room 330F. Requests should include the name of the university, the course number, title and description. Courses requested must be for purposes of Arts and Science. In addition, the student must give reasons why the Letter of Permission is necessary. The transfer credit is not granted until the student has completed the equivalent of one year of full-time study and is in good standing. A maximum of 30 credits may be obtained on a Letter of Permission. If a student has received 30 or more transfer credits upon admission, it is unlikely that a Letter of Permission will be allowed. The letters of Permission are not normally granted for study at institutions within Metropolitan Toronto and surrounding regions. Only 1.0 credits at the C- or D-level may be permitted to be taken on a Letter of Permission. A student who completes the final course(s) for the degree during the Winter Session may apply to graduate at the June convocation but may apply for graduation at any other convocation. A fee will be charged for each Letter of Permission.

Special Note: French Summer Immersion Programmes

The Summer Language Baccalauréat Program is funded by the Official Languages in Education Program of the Government of Canada in cooperation with the appropriate provincial department. In Ontario, this is the Ministry of Education and Training. Students interested in this six-week immersion programme (in Quebec or elsewhere in Canada) should complete the necessary forms promptly upon distribution by the Ministry. (Check with the Resource Centre, Room 530 in December for expected date of arrival.) Speak to the Assistant Registrar - Admissions and the Study Elsewhere Supervisor in French for advice about choosing three universities offering courses which most closely correspond to the curriculum at the University of Toronto. Submit the form to the Registrar's Office (Room 530) to verify registration and mail promptly to enhance your chances of obtaining your first choice of university. Once you know the university to which you have been accepted and at least three weeks before your departure, apply for a Letter of Permission. You will be advised of the level in which you must register in order to be eligible for the credit to be transferred.

(7) Study Elsewhere year

To apply for a Study Elsewhere programme, students may obtain an application from the Assistant Registrar - Admissions or the Vice-Principal and Vice-Dean. The application requires details about the proposed course of study and asks students to show how the intended studies will enhance their studies at University of Toronto at Scarborough. Students who intend to count the courses towards programme requirements must have the approval of the Programme Supervisor before selecting the application. Students normally apply for a Study Elsewhere year during the third year of a four-year programme. However, students may apply after completing four full-course equivalents at University of Toronto at Scarborough. To be eligible, a student must have a cumulative grade point average of 2.5 or better. Students must normally return to University of Toronto at Scarborough to complete the final year of study. A maximum of 5.0 full-course equivalents will be considered for transfer. Completed applications should be submitted to the Vice-Principal and Vice-Dean by March 1. The proposed programme will be reviewed by the Study Elsewhere Committee.

Since there is often limited information about foreign universities, students should begin the process early in October. Most often students register at the university and show up in courses for credit. It is possible that students may arrange to take University of Toronto independent study or supervised reading courses under supervision from University of Toronto faculty.

(8) International Student Exchanges

The University of Toronto operates several institution-wide student exchange programmes. A student must receive approval from UofT at Scarborough and the International Student Exchange Office to undertake an exchange program. Undergraduate programmes include:

- Chinese University of Hong Kong
- University of Hong Kong
- National University of Singapore
- Kyushu University (Japan)
- Humboldt University, Germany
- The Canadian-Taiwan Student Exchange Program An exchange program that includes 6 institutions in Taiwan
- Ontario/Beijing Wartburg Exchange Program (Germany) A regional exchange program that includes 9 German universities
- University of the West Indies (Barbados, Jamaica & Trinidad)
- University of Melbourne (Australia)
- University of New South Wales (Australia)
- Lancaster University (United Kingdom)
- Canadian University Study Abroad Program, Heroness (Ontario, England)
- Narayanganj Technological University (Bangladesh)
- University of Queensland (Australia)
- University of Amsterdam (The Netherlands)
- University of Nottingham (United Kingdom)
- University of Glasgow (Scotland)
- University of Edinburgh (Scotland)
- Technion - Israel Institute of Technology (Israel)
- University of Venice (Italy)
- University of Alberta (Canada)
- The Chinese University of Hong Kong
- Beijing University (China)
- University of Auckland (New Zealand)
- Land University (Sweden)
- University of Michigan (USA)

- McGill University
- McMaster University
- Monash University
- University of New South Wales (Australia)
- University of Western Ontario
- University of Western Ontario
- University of Western Ontario
- University of Western Ontario
- University of Western Ontario
- University of Western Ontario
- University of Western Ontario
Academic transcripts

The academic transcript is the official statement of the academic record of each student.

Contents
The transcript records the following information:
1. Information to identify the student: full name and university student number.
2. The student's academic record, listed chronologically by semester.

For further information, applications, and a list of current exchange programs, please contact:
International Student Exchange Office
Office of the Vice-President and Provost
Room 301, Keffer Student Services Centre
214 College St., Toronto, ON M5S 2A9
Telephone: (416) 978-4110
Fax: (416) 978-4110
http://www.utoronto.ca/student_exchange/
E-mail: student.exchange@utoronto.ca

Admissions and Liaisons, Room S303F

Grades and Accountability

Students registering in courses offered by the University of Toronto receive grades in the normal manner.

To receive credit for other courses, the student must earn one full grade higher than the minimum passing grade (i.e. a C minus or better at universities using a grading scale similar to that of the University of Toronto). Grades are not recorded on transcripts and are not included in any grade point average. The student must arrange for the host university to send an official transcript to University of Toronto Scarborough promptly after completion of the course. Students who do not register or who withdraw without academic penalty must arrange for a letter from the Registrar of the host university confirming this. Failure to meet this or the minimum grade requirement will result in the notation of "no credit" being entered on the student's transcript at University of Toronto.

Fees and aid

Students pay the appropriate fees to the host university and a Study Elsewhere fee or Letter of Permission fee will be charged by the University of Toronto at Scarborough. Students who would be eligible for financial assistance through the Ontario Student Assistance Program will be able to register for the course through the student's home institution. Assistance Program for study at University of Toronto Scarborough is available and eligible for similar assistance in their Study Elsewhere year. (Contact the Student Awards Division of Admissions and Awards at 978-2193.)

Academic transcripts

Each course attempted, its abbreviated title, its letter grade; the final grade point average; the cumulative grade point average at the end of the session; the annual grade point average; the student's academic status at the end of the session: in good standing, on academic probation, suspended for one year, suspended for two years, refused further registration, or suspension deferred; completion of degree and Program requirements, and date of conferral of the degree; graduation with high distinction or with distinction.

3. The following kinds of special consideration granted by petition: (See "Special Consideration, Petitions and Appeals" on page 226.)

- withdrawal without academic penalty from a course after the relevant deadline. (See "Standing in a course" on page 211);
- other considerations deemed to have altered the academic record.

Ordering Official Copies

Students may obtain copies of their academic transcripts, subject to reasonable notice and upon payment of a fee. With the introduction of the new Student Web Service (SWS) in the Spring of 1999, all requests for transcripts are processed centrally at the University of Toronto Transcript Centre on the St. George Campus. Copies of transcripts may be requested at the SWS Web service (SWS) at the following address: http://www.registrar.utoronto.ca/transcripts. Requests may also be made in person or by writing to the University of Toronto Transcript Production Centre, 100 St. George Street, Room #1006, Toronto, ON M5S 3G3. Payment by mail should take the form of a cheque or money order payable to "The University of Toronto." A fee of $5.00 which includes the PST and GST is charged per transcript. Telephone requests cannot be accepted. To prevent tampering, most institutional recipients insist that the transcript copy be sent directly to them.

Unofficial Copies

With the introduction of the Student Web Service (SWS) in the Spring of 1999, currently enrolled students can obtain an unofficial copy of their academic results at no cost directly from the Student Web Service http://www.registrar.utoronto.ca

Policy on access to student records

1. Procedure
(a) Academic records of students are ultimately the property of the University, and it is the responsibility of the University to establish overall University policy in this area. The policy establishes university-wide aims, objectives, criteria and procedures which shall apply to the academic records of students of academic divisions of the University.
(b) The purpose of this policy is to combine consistency with flexibility in such a way as to ensure that:
(i) Students, alumni and former students are allowed at least a 15-degree to access to their own academic records as is academically justifiable and administratively feasible.
(ii) A student's right to privacy in relation to his or her academic records is safeguarded as far as both internal university access and external public access are concerned.
(iii) There will be a basic university-wide consistency in the kinds of information collected, recorded, filed and made available.
(iv) In keeping with the principles of the Freedom of Information Act, academic divisions may retain some flexibility in the implementation and application of the policies established within this document.
(c) Individual divisional regulations and procedures on access to student academic records, including the format in which they are published, are to be published in the Constitutions and Academic Policy and Programs. Any subsequent revisions shall also be reported.
(d) This policy supersedes the 1979 access policy for undergraduate student records and the 1981 access policy for graduate student records.

2. For the purposes of this policy:
(a) "Student" means any person registered at the University for full-time or part-time study in a program that leads to a degree or post-secondary diploma or certificate of the University or in a program designated as a program of post-secondary study at the University by the Governing Council or other University body having delegated authority. On the date of an emigré or removal relevant to this policy, persons who have been registered within the preceding two calendar years shall be included in the provisions which relate to "student."
(b) "Alumni or alumnus" means any person who has received a degree or post-secondary diploma or certificate from the University, or any person who has completed one year of full-time studies or the equivalent thereof as determined by the Governing Council, towards such a degree, diploma or certificate, and is no longer registered at the University.
(c) "Former student" means any person who is not a student or an alumnus who has been registered at the University in a program as defined in Section 2 (a), and is no longer registered at the University.
(d) "Academic division" means a college, school, institute, faculty or other division of the University that has academic autonomy (i.e., the right to administer its own degrees, diplomas, certificates and other programs of study, subject only to the authority of the Vice-President and Provost, the President, and the Governing Council.

3. Definition of the official student academic record

- The official student academic record refers to any published record produced by a student's admission and academic performance at this University. The "official student academic record" means:
1. Personal information which is required in the administration of official student academic records such as name, student number, citizenship, social insurance number
2. Registration and enrollment information
3. Records for each course and academic period.
4. Narrative evaluation of a student's academic performance subsequent to his or her admission, used to judge his or her progress through an academic program.

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(a) Academic records of students are ultimately the property of the University, and it is the responsibility of the University to establish overall University policy in this area. The policy establishes university-wide aims, objectives, criteria and procedures which shall apply to the academic records of students of academic divisions of the University.
(b) The purpose of this policy is to combine consistency with flexibility in such a way as to ensure that:
(i) Students, alumni and former students are allowed at least a 15-degree to access to their own academic records as is academically justifiable and administratively feasible.
(ii) A student's right to privacy in relation to his or her academic records is safeguarded as far as both internal university access and external public access are concerned.
(iii) There will be a basic university-wide consistency in the kinds of information collected, recorded, filed and made available.
(iv) In keeping with the principles of the Freedom of Information Act, academic divisions may retain some flexibility in the implementation and application of the policies established within this document.
(c) Individual divisional regulations and procedures on access to student academic records, including the format in which they are published, are to be published in the Constitutions and Academic Policy and Programs. Any subsequent revisions shall also be reported.
(d) This policy supersedes the 1979 access policy for undergraduate student records and the 1981 access policy for graduate student records.

2. For the purposes of this policy:
(a) "Student" means any person registered at the University for full-time or part-time study in a program that leads to a degree or post-secondary diploma or certificate of the University or in a program designated as a program of post-secondary study at the University by the Governing Council or other University body having delegated authority. On the date of an emigré or removal relevant to this policy, persons who have been registered within the preceding two calendar years shall be included in the provisions which relate to "student."
(b) "Alumni or alumnus" means any person who has received a degree or post-secondary diploma or certificate from the University, or any person who has completed one year of full-time studies or the equivalent thereof as determined by the Governing Council, towards such a degree, diploma or certificate, and is no longer registered at the University.
(c) "Former student" means any person who is not a student or an alumnus who has been registered at the University in a program as defined in Section 2 (a), and is no longer registered at the University.
(d) "Academic division" means a college, school, institute, faculty or other division of the University that has academic autonomy (i.e., the right to administer its own degrees, diplomas, certificates and other programs of study, subject only to the authority of the Vice-President and Provost, the President, and the Governing Council.

3. Definition of the official student academic record

- The official student academic record refers to any published record produced by a student's admission and academic performance at this University. The "official student academic record" means:
1. Personal information which is required in the administration of official student academic records such as name, student number, citizenship, social insurance number
2. Registration and enrollment information
3. Records for each course and academic period.
4. Narrative evaluation of a student's academic performance subsequent to his or her admission, used to judge his or her progress through an academic program.
(d) Basis for a student's admission such as the application for admission and supporting documents.

(e) Results of petitions and appeals filed by a student.

(f) Medical information relevant to a student's academic performance which has been furnished at the request or with the consent of the student concerned.

(g) Letters of reference which may or may not be relevant to the understanding that the student will be maintained in confidence.

(h) Personal and biographical information such as an address and telephone number.

The "official student academic record" shall be maintained by the University. For each type of information, academic divisions shall designate which document, form, or medium contains the official version and how official copies of such information will be identified.

4. Access to official student academic records

(a) Access by a student

(1) A student may examine and have copies made of his or her official student academic record defined in Section 3 above, with the exception of those portions of the record which comprise letters of reference (Section 3(a)(v)) which have been provided or obtained on the expressed or implied understanding that they shall be maintained in confidence. A student may, however, request a copy of the identity of the authors of any confidential letter contained in either his or her official academic record.

(2) A student's request to examine a part of his or her official student academic record may be refused in writing and shall be complied with by the responsible authorities within a division. Such compliance shall occur within 30 days of receipt of the request, or within such lesser period as a division may determine.

(b) A student has the right to challenge the accuracy of his or her official student academic record and to have such information corrected, if the student is not satisfied with the correction as set forth in this section.

(c) Access by University campus organizations

Recognized campus organizations in the University of Thrones shall have access to information regarding a student that the University has been provided for the purpose of maintaining contact with the student.

(d) Access by University campus organizations

Information concerning a student's academic record shall be released to the University of Thrones in a manner which is specific to the individual and is designated by the student, subject to the conditions of the University's policy and as permitted by law.

(e) Access by others

(i) Any other information contained in the official student academic record, except as otherwise noted in Section 3(a)(v), shall be released to others only upon the written request of the student, or with the consent of the student, or in accordance with the requirements of professional licensing or certification bodies, or the Ministry of Education, or other governmental body.

(f) Access by others

Any access to the official student academic record shall be limited to the purposes for which it was provided.

(g) Access by others

Any access to the official student academic record shall be provided to the University for access to the student's academic record shall be limited to the purposes for which it was provided.

(h) Access by others

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(i) Access by others

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(w) Access by others

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(x) Access by others

Any access to the official student academic record shall be provided to the University for access to the student's academic record shall be limited to the purposes for which it was provided.

(y) Access by others

Any access to the official student academic record shall be provided to the University for access to the student's academic record shall be limited to the purposes for which it was provided.

(z) Access by others

Any access to the official student academic record shall be provided to the University for access to the student's academic record shall be limited to the purposes for which it was provided.
University grading practices policy

The following is the text of the University grading practices policy. Square brackets [ ] indicate additions to the policy to clarify or interpret as it applies specifically to the University of Toronto at Scarborough.

Purpose
The purpose of the University Grading Practices Policy is to ensure:
(a) that grading practices throughout the University reflect appropriate academic standards;
(b) that the evaluation of student performance is made in a fair and objective manner against these academic standards;
(c) that the academic standing of every student can be accurately assessed even when courses have been taken in different divisions of the University and evaluated according to different grade scales.

Application of Policy
The policy applies to all individuals and committees taking part in the evaluation of student performance in degree, diploma, and certificate credit courses (hereafter referred to as courses).

Amendment to Policy
Amendments to the policy shall be recommended to the Academic Board.

Changes to the divisional regulations on grading practices shall be forwarded to the Committee on Academic Policy and Programmes.

Distribution of Policy
A copy of the Grading Practices Policy as well as the description of the grade scales and the substance of divisional regulations included in Part II of this Policy shall be published in the Calendar of the division.

The policy is in three parts. Part I deals with grades, Part II outlines grading procedures to be adhered to in divisional regulations as a part of this Policy, and Part III is an administrative appendix available upon request from the Office of the Vice-President and Provost.

PART II Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be placed on the basis of how well he or she has command of the course materials.

L.1 A grade assigned in a course is not an assessment of standing within a program of studies. To determine the requirements for credit and standing in a program of studies, the academic regulations of the division in which the program is offered should be consulted.

L.2 Grades for each course shall be assigned with reference to the following meanings (which may be expanded in the divisional regulations under Part III):
Excellent, Good, Adequate, Marginal, Inadequate.

Grade Scales

L.3 Once a judgment on the performance of the student has been made, the following grade scales are to be used:
(a) the refined letter grade scale A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F;
(b) the numerical scale of marks, consisting of all integers from 0 to 100;
(c) for graduate divisions only, a trunctated refined letter grade scale in which E2 replaces the "C", "D" and "F" grades in (a) above.

and/or

(d) the scales Honours/Fail and Credit/No Credit.

Grades vs. Score

L.4 Grades should always be based on the approved grade scales. However, students may find that on any one evaluation they may receive a numerical or letter mark that reflects the score achieved on the test or essay. The cumulative scores may not be directly identified with the final grade. Grades are final only after review by the divisional review committee described below.

Grades Reporting

L.5 Grades will be assigned according to the numerical scale of marks referred to in L.3 (a) above, and converted to the refined letter grade scale of L.3 (a) above. In graduate divisions, grades may be assigned according to the truncate letter grade scale of L.3 (c) above. The HT/FL and CR/NCR scales of L.3 (d) above may also be used. However, the grades assigned in a course must all be from the same scale.

L.6 All non-grade designations used in reporting course results must correspond to the University-wide standard. A list of the currently approved designations and their meanings is given in the Appendix A.2.

L.7 The information in grade reports and transcripts must be communicated to the user, whether within or outside the University, in a clear and meaningful way. To that end, transcripts must include:
(i) an enrolment history, which traces chronologically the student's entire participation at the University,
(ii) a "grade point average" based on a 4-point scale for all undergraduate divisions (NOTE: grade point average values will be assigned as follows: A+ = 4.0, A = 3.7, B+ = 3.3, B = 3.0, B- = 2.7, C+ = 2.3, C = 2.0, C- = 1.7, D+ = 1.3, D = 1.0, D- = 0.7, F = 0.0),
(iii) an average grade for each course expressed in the refined letter grade scale (NOTE: these calculations should be restricted to courses of a specific size),
(iv) both the numerical mark and the letter grade equivalent, where applicable, for all courses,
(v) course weight values, expressed using a uniform system of values allowing for the relative values needed by each division,
(vi) transfer credits granted,
(vii) academic honours, scholarships and awards sanctioned by the University,
(viii) a comprehensive guide explaining all grades and scores used on the transcript.

PART III: Grading Procedures

Divisional Councils shall forward to the Committee on Academic Policy and Programmes their grading procedures. Grading procedures may be adapted to divisional circumstances on
the recommendation of the Committee on Academic Policy and Programs, but such procedures shall be consistent with the principles in this Policy.

Grades shall be recommended by the instructor to the chair or division head. The grades shall then be reviewed and approved following the divisional review procedures. Grades shall not be reported or released to students as official until the divisional review procedure has been carried out. The divisional review constitutes final approval of grades except when grades are changed on appeal.

II.1 Divisional Review Committee
In each division, a committee chaired by the divisional head or a designate, and where appropriate, an additional committee structure, with the chair (or their designate) of departments or other academic units of divisions serving as chairs, shall:
(a) administer the implementation of the University Grading Practices Policy at the divisional level and oversee the general consistency of grading procedures with the division;
(b) approve and administer the University's specific regulations concerning the grade scale or scales to be used, the assignment of non-grade designators for course work, classroom procedures and approved methods of evaluation;
(c) review, adopt and approve course grades recommended by instructors. The grades recommended for any individual student in the professional facilities may be adjusted according to his or her performance in the course or program as determined by the committee. The divisional committee has final responsibility for assigning the official course grade.

II.2 Classroom Procedures
To ensure that the method of evaluation in every course reflects appropriate academic standards and fairness to students, divisional regulations governing classroom procedures shall be consistent with the practices below:
(a) As early as possible in each course (and no later than the division's last date for course enrollment) the instructor shall make available to the class, and shall file with the division or department, the methods by which student performance shall be evaluated. This should include whether the methods of evaluation shall be essays, tests, examinations, etc., the relative weight of these methods in relation to the overall score, and the timing of each major evaluation.
(b) After the methods of evaluation have been made known, the instructor may not change them or their relative weight without the consent of at least a simple majority of the students enrolled in the course. Any changes shall be reported to the division or the department.
(c) Student performance in a course shall be assessed on more than one occasion. No one essay, test, examination, etc., shall have a value of more than 80% of the grade. Criteria for exceptions may be determined by the division.
(d) In courses that meet regularly as a class there shall be an examination (or examinations) conducted formally under divisional auspices and worth (alone or in the aggregate) at least one-third of the final grade. Criteria for exemption may be determined by the division. The relative value of each part of an examination shall be indicated to the student. In the case of a written examination, the value shall be indicated on the examination paper.
(e) Commentary on assessed term work and time for discussion of it shall be made available to students.
(f) At least one piece of term work which is a part of the evaluation of a student's performance, whether essay, lab report, review, etc., shall be returned to the student prior to the last date for withdrawal from the course without academic penalty.
(g) Grades shall be recommended by the instructor in reference to the approved grade scales on the basis of each student's overall performance.

In formulating their own regulations, divisions may add to items (a) to (g) and may adopt fewer or more specific provisions, for example in place of such terms as "a simple majority" (h), "one-third of the final grade" (d), or in particularizing the evaluation methods referred to in (a) and (b).

II.3 Procedures in the Event of Disruptions
Principles
The following principles shall apply in the event of disruption of the academic program:
(i) The academic integrity of academic programs must be preserved;
(ii) Students must be treated in a fair manner recognizing their freedom of choice to attend class or not without penalty.

Procedures
(a) The Vice-President and Provost, or the Academic Board, shall declare when a disruption of the academic program has occurred. The Provost shall take steps to inform the University community at large of the changes to be implemented, and will report to the Committee on Academic Policy and Programs regarding the implementation of the procedures and changes to the status of the academic programs.
(b) Individual instructors or multi-section course coordinators are responsible for courses that are disrupted. They shall determine, at the discretion of the instructor, whether changes to classroom procedures are needed to complete the course.
(c) Changes to classroom procedures should, where possible, first be discussed with students prior to the class in which a vote of the students present on the proposed changes is to be taken. Changes agreed upon by the class should be forwarded to the department or division with a report on the attendance at the class where the vote was taken.
(d) Where consensus on changes has not been arrived at, or where a vote is not feasible, the instructor, after the class discussion, will provide the division head or chair of the department in multi-departmental faculties, with his or her recommendation, along with the results of any classroom vote. The chair or division head shall free make a decision.
(e) Where classes are not able to convene, the instructor, with the prior approval of the chair in multi-departmental faculties or the division head, shall make changes deemed necessary to the classroom procedures. In the event of the absence of the instructor such changes will be made by the division head and require the approval of the Provost. Where courses are to be cancelled, approval of the divisional council is required. If the divisional council cannot meet, approval of the division head, or in the absence of the division head, the approval of the Provost, is required.
(f) Students must be informed of changes to classroom procedures. This may be done by circulating the changes in writing to the class, posting in the departmental and faculty offices, reporting to the divisional council, as well as listing in the campus press. Should classes resume students must be informed, at class, of any changes made during the disruption.
(g) When a declared disruption occurs in a specific course after the last day to drop courses for the academic term, students who do not wish to complete the course(s) during the term or session, may, prior to the last day of classes, withdraw without academic penalty. Such students shall receive a full refund of the course tuition fee.
(h) Where students have not attended classes that are necessary, they shall remain responsible for the course work and final course requirements. However, where possible, reasonable extensions of deadlines for the course requirements, or, provision of make-up tests shall be made and reasonable alternative access to essential covered should be provided.
8.5 Grade Review and Approval Process

The following principles and procedures shall govern the grade review and approval process:

(a) The distribution of grades in any course shall not be predetermined by a system of quotas that specifies the number or percentage of grades allowable at any grade level.

(b) However, a division may provide broad limits to instructors setting out a reasonable distribution of grades in the division or department. Such broad limits shall recognize that considerable variance in class grades is not unusual. The division may request an explanation of any grades for a course that exceed the limits and hence appear not to be based on the approved grade scales or otherwise appear anomalous in reference to the Policy. It is understood that this section shall only be used when the class size is thirty students or greater. Each division shall make known in the divisional calendar the existence of any such limits.

(c) The criterion that the Divisional Review Committee shall employ in its evaluation is whether the instructor has followed the University Grading Practices Policy. The Review Committee shall not normally adjust grades unless the consequences of allowing the grades to stand would be inequities in the standards of the University, or the class in general.

(d) Membership on the Divisional Review Committee may include students but should not include members of the divisional faculty.

(e) When grades have been submitted to the divisional committee, the students as well as the instructor shall be informed. On request, the student or the instructor shall be given the reason for the assignment of a grade, a description of the methodology used in the assignment of the grades, and a description of the divisional appeal process.

(f) Where a departmental review committee changes course grades, the faculty office shall be so informed. Having done so, the faculty office shall relay this information upon request, to the students or the instructor with a description as to the cause and the methodology used.

(g) Past statistical data, including drop-out rates, mean arithmetic average, etc., should be provided to the Divisional Review Committee as background information where available. The committee will not use this information exclusively to judge whether a specific grade distribution is anomalous. Rather, the information should provide part of the basis for an overall review of grades in a division.

(h) Where class grades have been changed, or when the Divisional Review Committee had reservations about the grades, the issue will be taken up with the instructor by the division or department head, with a view to ensuring that the Grading Practices Policy is followed in future.

8.6 Appeals procedure

Every division shall establish divisional appeal procedures. Students may appeal grades according to the procedures established for that purpose in the division. The appeal may be made whether marks have been altered by the review process or not. These procedures shall be outlined in the divisional calendar and available upon request at the faculty or registrar's office.

8.7 Student Access to Examination Papers

(a) All divisions should provide access to copies of the previous year's final examination papers and other examination papers where feasible. Examinations may be graded by a committee of the division or department.

(b) All divisions should provide students with the opportunity within a reasonable time to review their examination papers where feasible. A recovery fee should be set to cover administrative costs including photocopying.

8.8 Conflict of Interest

Where the instructor or a student has a conflict of interest, or is in a situation where a fair and objective assessment may not be possible, this should be disclosed to the chair or division head who shall take steps to ensure fairness and objectivity.

Examinations

Examinations are held at the end of both terms of each Summer Session and at the end of each Fall Session and each Winter Session. Students who make personal commitments during the examination period do so at their own risk. No special consideration will be given and no special arrangements made in the event of personal commitments.

Information regarding dates and times of examinations will not be given by telephone.

Students are responsible for reading the timetable carefully and appearing at the time specified. Students taking courses during the day may be required to write evening examinations and students taking evening courses may be required to write day examinations. Students may also be required to write Saturday term final examinations.

Examination timetable conflicts

Students scheduled to write two examinations at the same time should report their conflicts to the Assistant Registrar for Student Services (Room 5416A, (416) 287-7540). Arrangements will be normally made for students to write both examinations on the same day, with a supervised break. Where the conflict involves a St. George Campus course, arrangements will normally be made for both examinations to be written at University of Toronto at Scarborough. Requests for such arrangements must be made no later than two full weeks before the commencement of examinations and will not be considered after that time.
Students with three consecutive examinations
Students scheduled to write examinations in three consecutive time slots (these are morning, afternoon, and evening) may request special arrangements. Requests for such arrangements must be made with the Assistant Registrar (Secretariat and Scheduling) no later than two full weeks before the commencement of examinations. Requests will not be considered after that time.

Special consideration regarding examinations
Students requesting special consideration because they are unable to write a final examination must submit a petition through the Registrar’s Office no later than the last day of the examination period. Petitions must be accompanied by a medical certificate or other appropriate supporting evidence. Please refer to the information concerning petitions and medical certificates (page 229).

Identification cards
Students will be required to identify themselves at examinations by means of their University of Toronto photo identification cards. Students who do not have this card should arrange to obtain one well in advance of the day of their first examination.

Examination room regulations
1. All students are advised to read the section of this Calendar titled Code of Behaviour on Academic Matters.
2. Students are advised to arrive at the examination room at least fifteen minutes before the scheduled examination time. Instructors will begin the actual examination at the scheduled time.
3. No person shall be allowed into the examination room during an examination except the invigilator or the registrar of the course who is supervising the examination.
4. Candidates shall bring their photo identification cards and place them in a conspicuous place on their desks. (Students registered in other Faculties or Colleges of the University shall bring student cards.)
5. Bags and books are to be deposited in areas designated by the invigilator and are not to be taken to the examination desk or table. Students may dispose of their personal items by placing them, closed, in the area underneath their chairs.
6. The invigilator has the authority to assign seats to candidates.
7. No material shall be brought into the examination room or used at an examination except those authorized by the Chief Proctoring Officer or Examiner.
8. Candidates shall not communicate with one another in any manner whatever while the examinations are proceeding.
9. Candidates bringing any unauthorized material into an examination room or who assist, or obtain assistance from other candidates or from an unauthorized source, are liable to be refused permission to write the remaining part of the examination or any subsequent examinations. Such candidates are also liable to the loss of academic credit for the course, to suspension, or to expulsion from the University.
10. Candidates shall not be permitted to leave the examination room except under supervision until at least half an hour after the examination has commenced.
11. Candidates shall not leave the examination room within the final ten minutes of an examination, during which time they shall remain quietly seated at their desks.
12. As the conclusions of an examination all writing within the answer books shall cease. The invigilator may refuse to accept the papers of candidates who fail to observe this requirement.
13. Examination books and other material issued for the examination shall not be removed from the examination room without the authority of the invigilator.
14. Smoking is not permitted in the examination rooms.

Special considerations, petitions and appeals
From time to time students may need to ask for special consideration in their academic work or for exceptions to be made to the academic regulations. Such requests normally arise as a result of their being affected by something outside their control, such as illness, accident or the death of a family member. Very occasionally students may find themselves in a situation not foreseen by the College regulations or feel that they have been unnecessarily affected by a decision from University Policy or approved practice. If you find yourself in such a situation it is important that you follow the appropriate procedures and make any published deadlines.

Policies and descriptors for courses taken on other campuses may differ from those notified below. See the Calendar of the Faculty of Arts & Science for regulations regarding courses on the St. George Campus. You are responsible for observing the regulations governing any courses you take on other campuses.

You should seek special consideration only when there are circumstances which are not only beyond your control but which you could not reasonably have anticipated or overcome and which have seriously affected your studies.

A. Term work
1. If:
   a. you are unable to write a term test, or
   b. your performance on a test is adversely affected by illness or other extenuating circumstances, or
   c. you cannot submit term work by your instructor’s deadlines, you may apply for special consideration.
2. If it is close to the end of term or session and you need an extension of time to complete term work or to write a term test, your instructor jointly with the Divisional Chair may give you an extension of up to a week after the last due date to submit term work.
3. If you need more than a week’s extension, you must submit a formal petition (see JD Below), if your petition is granted, you will be given a deadline by which to complete the work.

B. Final examinations
1. If illness or other extenuating circumstances prevent you from writing a final examination, you may request special consideration by means of a petition (See JD Below). This must be submitted as soon as possible and no later than the last day of the examination period.
2. If you are affected by illness or other circumstances which do not actually prevent your writing an examination, you are required to attempt it. If, after receiving your final grade, you feel that your performance on the exam was adversely affected, you may petition to rewrite it (See JD Below). Please note that grade reports are mailed to you only at the end of the Summer Session and the end of the Winter Session. However, final grades are available through ROST’s Line and ROST’s Page as follows:
   a. for Fall/Winter (September—May) courses, mid-January
   b. for Spring (March—August) courses, mid-April
   c. for Fall/Winter (September—May) and Winter (January—May) courses, mid-May
3. If you are permitted to rewrite, the ungraded module will stand, whether higher or lower.
4. Deferred examinations for all University of Toronto at Scarborough courses, including those which are being rewritten, are held as follows:
   a. exams deferred from April and May are held in the August examination period
   b. exams deferred from June and August are held in the December examination period
   c. exams deferred from December are held at the end of the Winter examination period.
5. You must pay a fee to write any University of Toronto at Scarborough deferred examination.
6. If you are given permission to write a deferred exam, or to rewrite an exam, you must indicate your intention to write it and the required fee by the deadline set. Failure to respond or to pay the fee will result in loss of privilege to sit the examination.
7. You are given only one opportunity to sit deferred examinations and are expected to be available for the entire deferred examination period.
8. If you miss a deferred exam, you may petition for an extension of time to write it normally only under specific circumstances and with support by strong documentation. A petition for an extension of time to sit a deferred examination will be considered only once.
Special Consideration, Petitions and Appeals

9. Under truly exceptional circumstances, students who will inevitably be outside the Toronto area during the special examination period may petition for permission to write at an outside centre. Such a petition must detail the reasons for the request and must be submitted at least three weeks prior to the beginning of the deferred examination period. Late requests cannot be accommodated.

A non-refundable fee of $30.00 for each examination to be written at an outside centre is charged, in addition to the regular deferred examination fee of $70.00. Students who are given permission to write at an outside centre are also responsible for all costs of transportation, lunch charges and other related expenses. These may exceed $100.00 per examination. Students are advised to assess the total costs before petitioning.

C. Marks and Grades

1. Checking Marks: Term Work
If you think that your mark on a term test or assignment has been calculated incorrectly, ask your instructor to check the mark. Do this as soon as possible, and certainly before the end of term. If you wish to appeal an instructor’s decision about the grading of term work, speak with or write to the Chair of the Division offering the course.

2. Copies of final examinations
Within six months of the relevant examination period you may obtain a photocopy of your final exam from the Registrar’s Office. A non-refundable fee is charged.

3. Checking Marks: Final Examinations
If you think there is an error in the calculation of your final grade, within six months of the relevant examination period you may request a re-check of the calculation through the Registrar’s Office on a form provided for that purpose. (It is not necessary to purchase a copy of your exam to make this request or have it re-checked. If an error is discovered which results in a change in your final grade, your fee will be refunded. Whenever a grade is changed, the amended grade will stand whether it is higher or lower. Please note that before submitting any failing grades, instructors are required to re-read the final exams and re-check the calculation of term and final marks.

4. Appealing Assigned Grades
If you wish to appeal a mark on term work returned to you only after the end of term and after the instructor has submitted grades for the course, you may submit a formal petition (See §D Below). This must be done within six months of the relevant examination period.

If, after obtaining a copy of a final examination, you wish to request that it be re-marked, you may submit a petition for re-reading (See §D Below). You must do this within six months of the relevant examination period.

When authorized, the re-reading is arranged by the Division offering the course, which also authorizes any change in grade. Normally the re-reading is done by the course instructor, unless you make a convincing argument that the work be re-marked by another faculty member. Claims of prejudice must be supported in detail and whenever possible confirmed by a third party. Whenever a grade is changed, the amended grade will stand whether it is higher or lower.

5. Violations of the Grading Practices Policy
(a) If you think an instructor has violated the Grading Practices Policy, discuss your complaint with the instructor. If the violation relates to the announced schedule of assignments or the marking scheme, you must do this no later than the fourth week of classes. If it relates to changes in or divergence from the announced marking scheme, you must do this before the end of the final examination period.

(b) If this discussion does not result in a satisfactory solution, you may appeal the instructor’s decision to the Chair of the Division offering the course. If this appeal does not resolve the problem, you may appeal to the Principal of the College.

(c) If you wish to withdraw from a course after the last day to withdraw without academic penalty on the grounds of a violation of the Grading Practices Policy, you must submit a formal petition (See §D Below). If your petition is granted because a violation of the Policy has occurred, no record of your registration in the course will appear on your transcript.

D. Petitions

A petition is a formal request that an exception to an academic regulation be made in your case. You must have good reason to make such a request, and you must show that you have acted responsibly and with good judgment in observing the academic regulations to the extent possible. Please note that some academic matters cannot be petitioned, although exceptions to these may be resolved with an instructor or a Division offering a course.

When a petition is justified, it must be filed by the appropriate deadline (See §E Below). Even if a petition has been filed by the deadline, it will not be considered if documentation is not provided within three weeks of its submission.

1. To enter a petition you must obtain from the Registrar’s Office a petition form. Follow the instructions on the form and fill it out completely, including the Petitioner’s Checklist on page 4.

2. If you think the issue is simple and the solution straightforward, you may not need advice or assistance with your petition. However, if there are more complex academic issues involved you may want to speak first with your instructor, program supervisor or discipline representative. If serious personal problems are involved, you should try to meet with an academic advisor, a student services or a personal counselor in the Health and Wellness Centre. Do not let the lack of recommendations interfere with your submitting your petition by the deadline.

3. Submit whatever documentation is necessary to support your request.

(a) Medical certificates must show:
• that you were examined at the time of illness
• the degree of disability involved
• the duration of the disability
• the practitioner’s professional opinion as to whether you should receive special consideration on medical grounds.

(b) Statements from social workers, lawyers, clergy and other professionals must:
• state the nature and extent of the problem
• give his or her professional opinion as to whether you should receive special consideration on the grounds documented in your petition.

4. Petitions for re-reading of final examinations and for term work returned to you after the end of term and after the instructor has submitted grades for the course will be granted only if you:
• demonstrate clear grounds for reconsideration, addressing the substance of an answer in relation to the mark given or otherwise identifying the nature of the alleged misinterpretation;
• show that the alleged misinterpretation is of a substantial nature; in an objective sense, that a correct response has been counted as incorrect, or in a subjective or easy answer, that the response has been under- evaluated substantially.

5. You will be notified in writing of the decision on your petition. The petition officer attempts to respond as quickly as possible, normally within three weeks of submission. Please do not inquire about the progress of your petition within that period. Complex cases and petitions submitted during very busy periods may take longer.

6. If your petition is granted, the following will be recorded on your transcript (academic record):
• withdrawal from courses after the published deadline (WDR)
• deferral of suspension ("suspension deferred")
• award of last regular standing (ARS).

In cases of error on the part of the University, including violations of the Grading Practices Policy, withdrawal from courses is not recorded on the transcript.

E. Deadlines

The deadlines below apply to the University of Toronto at Scarborough.

Deadline: Applications for courses taken on other campuses may differ: see the appropriate Faculty Calendar.
1. Term Work
- requests for special consideration on term assignments and term tests within the jurisdiction of the Instructor; last day of classes
- petitions to submit term assignments or write make-up term tests after the last day to submit term work (see the Calendar) last day of the examination period

2. Final Examinations
Summers Fall & Winter Sessions
- petitions to rewrite deferred examinations; last day of the examination period

Summer Sessions
- petitions to rewrite final examinations in May - June courses: July 31
- petitions to rewrite final examinations in May - Aug. and July - Aug. courses: September 30

Fall & Winter Sessions
- petitions to rewrite final examinations in Sept. - Dec. courses: January 31
- petitions to rewrite final examinations in Sept. - May and Jan. - May courses: June 30

3. Missed Deferred Examinations
- petitions to rewrite a deferred examination which has been missed; last day of the relevant examination period

4. Errors in Course Registration or Withdrawals from Courses
- petitions to correct errors in course registration or to withdraw from courses without academic penalty after the published deadline should be submitted as early as possible but no later than: June 30 (Fall & Winter Session courses); September 30 (Summer Session courses)

5. Checking of Marks and Appeal of Grades
- requests for checking of marks on term tests, essays and other term work made to the Instructor of a course; last day of classes
- petitions for reconsideration of term work returned to you after the end of term: six months after the relevant examination period
- requests for a photocopy of a final examination: six months after the relevant examination period
- requests for recalculation of marks through the Registrar's Office: six months after the relevant examination period
- petitions for re-awarding of a final examination: six months after the relevant examination period

P. Appeals
1. You may appeal denial of a petition to the Sub-committee on Academic Appeals. Such appeals must be commenced no later than six months after the decision being appealed has been communicated to you in writing. An appeal is commenced by filing a Notice of Appeal on the form provided for this purpose through the Office of the Associate Dean, room 8-154A (telephone 267-7554). Full information may be obtained from that office.

2. You may appeal a decision of the Sub-committee on Academic Appeals to the Academic Appeals Committee of Governing Council. Such appeals must be commenced no later than ninety days after the decision being appealed has been communicated to you in writing. An appeal is commenced by filing a Notice of Appeal to the Secretary of the Appeals Committee on the form provided for this purpose. Full information may be obtained from the Secretary to the Appeals Committee Office of the Governing Council Room 106, Simcoe Hall St. George Campus (telephone (416) 978-8794)

Code of behaviour on academic matters

A. Preamble

The concern of the Code of Behaviour on Academic Matters is to ensure that all students conduct themselves with integrity, honesty, and fairness. The Code outlines the responsibilities of students, faculty, and staff in maintaining an environment conducive to academic success. Any violation of the Code may result in disciplinary action, which may include academic penalties.

B. Offences

The University prohibits any actions that threaten the integrity of its academic community. Examples of such actions include plagiarism, cheating, and academic dishonesty. Any violation of the Code may result in disciplinary action, which may include academic penalties.

Whereas in this Code an offence is described as depending on "knowledge," the offence shall likewise be deemed to have been committed if the person ought reasonably to have known.

D.1. It shall be an offence for a student knowingly:
(a) to forge or in any other way alter or falsify any document or evidence required by the University, or to utter, circulate or make use of any such forged, altered or falsified document, whether the record be in print or electronic form;
(b) to make use or possess an unauthorized aid or to obtain unauthorized assistance in any academic examination or term test or in connection with any other form of academic work;
(c) to procure another person, or to have another person procure, at any academic examination or term test or in connection with any other form of academic work, to represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism; "plagiarism." The present sense of plagiarism is contained in the original (1622) meaning in English, "the wrongful appropriation and purloining, and passing of another's words, or the ideas, or the expression of the ideas... of another." This most common, and frequently most relative of academic infractions is normally associated with student essays. Plagiarism can, however, also affect the integrity of studio and seminar room, laboratory and library. Plagiarism is at once a perversion of the spirit and a denial of the interdependence and mutuality that are the heart of scholarship itself, and hence of the academic experience. Instructors should make clear what constitutes plagiarism within a particular discipline.
1. No hearing within the meaning of Section 2 of the Statutory Powers Procedure Act is required for the purposes of, or in connection with, any of the discussions, meetings and determinations referred to in Section C.I. (a), and such discussions, meetings and determinations are not proceedings of the Tribunal.

2. Where an instructor has reasonable grounds to believe that an academic offence has been committed by a student, the instructor shall so inform the student immediately after hearing of the act or conduct complained of, giving reasons, and invite the student to discuss the matter. Nothing the student says in such a discussion may be used or receivable in evidence against the student.

3. If after such discussion, the instructor is satisfied that no academic offence has been committed, he or she shall so inform the student and no further action shall be taken in the matter by the instructor, unless fresh evidence comes to the attention of the instructor, in which case he or she may again proceed in accordance with sub-section 2.

4. If after such discussion, the instructor believes that an academic offence has been committed by the student, or if the student fails or neglects to respond to the invitation for discussion, the instructor shall make a report of the matter to the department chair or through the department chair to the dean [Associate Dean]. See also Section C.I. (b) 1. Statement.

5. When the dean [Associate Dean] or the department chair, as the case may be, has been so informed, he or she shall notify the student in writing accordingly, provide him or her with a copy of the Code and subsequently afford the student an opportunity for discussion of the matter. In the case of the dean [Associate Dean] being informed, the chair of the department and the instructor shall be invited by the dean [Associate Dean] to be present at the meeting with the student. The dean [Associate Dean] shall conduct the interview.

6. Before proceeding with the meeting, the dean [Associate Dean] shall inform the student that he or she is entitled to seek advice, or to be accompanied by counsel at the meeting, before making, and is not obliged to make any statement of admission, but shall inform him or her that if he or she makes any statement or admission in the meeting, it may be used or receivable in evidence against the student in the trial of any charge with respect to the alleged offence in question. The dean [Associate Dean] shall also advise the student, without further comment or discussion, of the sanctions that may be imposed under Section C.I. (b), and that the dean [Associate Dean] is not obliged to impose a sanction but may instead request that the Provost lay a charge against the student. Where such advice and warning have been given, the statements and admissions, if made in such a meeting may be used or receivable in evidence against the student in any such hearing.
10. If the student does not admit the alleged offence, the dean [Associate Dean] may, after consultation with the instructor and the department chair, request that the Provost lay a charge against the student. If the Provost agrees to lay a charge, the case shall then proceed to the Trial Division of the Tribunal.

11. Normally, decanal procedures will not be examined in a hearing before the Tribunal. A failure to carry out the procedures referred to in this Section, or any delay or irregularity in such procedures, shall not invalidate any subsequent proceedings of the Tribunals, unless the chair of the hearing decides that such failure, defect or irregularity resulted in substantial wrong, deprivation or prejudice to the accused. The chair will determine at the opening of the hearing whether there is to be any objection to an alleged defect, failure or irregularity.

12. No degree, diploma or certificate of the University shall be conferred or awarded, nor shall a student be allowed to withdraw from a course from the time of the alleged offence until the final disposition of the accusation. However, a student shall be permitted to use University facilities while a decision is pending, unless there are valid reasons for the dean [Associate Dean] to be told by him or her from a facility. When or at any time after an accusation has been reported to the dean [Associate Dean], he or she may cause a notation to be recorded on the student's academic record and transcript, until the final disposition of the accusation, to indicate that the student is on a course or the student is on a course in the academic unit concerned and may be referred to by the dean [Associate Dean] in connection with a decision to prosecute, or by the prosecution in making representations as to the sanction or sanctions to be imposed by the Tribunal, for any subsequent offence committed by the student. Information on such cases shall be available to other academic units upon request and such cases shall be reported by the dean [Associate Dean] to the Secretary of the Tribunal for use in the Provost's annual report to the Academic Board. The dean [Associate Dean] may contact the Secretary of the Tribunal for advice or for information on cases disposed of under Section C.II. hereof.

14. Where a professor or invigilator, who is not a faculty member, has reason to believe that an academic offence has been committed by a student at an examination or test, the professor or invigilator shall inform the student's dean [Associate Dean] or department chair, as the case may be, who shall proceed as if he or she were an instructor, by analogy to the other provisions of this section.

15. In the case of alleged offences not covered by the above procedures and not involving the submission of academic work, such as those concerning duplicate entry, and in cases involving cancellation, recall or suspension of a degree, diploma or certificate, the procedure shall be regulated by analogy to the other procedures set out in this section.

C.I.(b) Disproportionate Sanctions
1. In an assignment worth 10 percent or less of the final grade, the department chair deals with the matter as follows:
   (a) the student admits guilt; and
   (b) the student is assigned a penalty of limited to at most a grade of zero.

2. One or more of the following sanctions may be imposed by the dean [Associate Dean] or the department chair in Section C.I. or who has been convicted by the Tribunal shall not be allowed to withdraw from a course as to avoid the sanction imposed.

3. A record of cases disposed of under Section C.I. or and of the sanctions imposed shall be kept in the academic unit concerned and may be referred to by the dean [Associate Dean] in connection with a decision to prosecute, or by the prosecution in making representations as to the sanction or sanctions to be imposed by the Tribunal, for any subsequent offence committed by the student. Information on such cases shall be available to other academic units upon request and such cases shall be reported by the dean [Associate Dean] to the Secretary of the Tribunal for use in the Provost's annual report to the Academic Board. The dean [Associate Dean] may contact the Secretary of the Tribunal for advice or for information on cases disposed of under Section C.II. hereof.

3. The dean [Associate Dean] shall have the power to record any sanction imposed on the student's academic record and transcript for such length of time as he or she considers appropriate. However, the sanctions of suspension or a notation specifying academic misconduct as the reason for a grade of zero for a course shall normally be recorded for a period of five years.

4. The Provost shall, from time to time, give appropriate sanctions for academic offences. These guidelines shall be sent for information to the Academic Board and attached to the Code as Appendix "C".

C.II. Tribunal Sanctions
1. One or more of the following sanctions may be imposed by the Tribunal upon the conviction of any student:
   (a) an oral and/or written reprimand;
   (b) an oral and/or written reprimand and, where the permission of the instructor is necessary, the re-submission of the piece of academic work, in respect of which the offence was committed, for evaluation. Such a sanction shall be imposed only for minor offences and where the student has committed no previous offence;
   (c) assignment of a grade of zero or a failure for the piece of academic work in respect of which the offence was committed;
   (d) assignment of a penalty in the form of a reduction of the final grade in the course in respect of which the offence was committed;
   (e) denial of privileges to use any facility of the University, including library and computer facilities;
   (f) a monetary fine to cover the costs of replacing damaged property or misplaced supplies in respect of which the offence was committed;
   (g) assignment of a grade of zero or a failure for the course in respect of which the offence was committed;
   (h) suspension from attendance in a course or courses, a program, an academic division or unit, or the University for a period of not more than twelve months. Where a student has not completed a course or courses is in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed.
   (i) suspension from attendance in a course or courses in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed;
   (j) recommendation of expulsion from the University. The Tribunal has power only to recommend that such a penalty be imposed. In any such case, the recommendation shall be made by the Tribunal to the Provost for a recommendation by him or her to the Governing Council. Ex parte shall mean that the student shall be denied any further opportunity at the University in any program, and his or her academic record and transcript shall record this sanction permanently. Where a student has not completed a course or courses in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed;
   (k) recommendation of suspension from the University. The Tribunal has power only to recommend that such a penalty be imposed. In any such case, the recommendation shall be made by the Tribunal to the Provost for a recommendation by him or her to the Governing Council. Ex parte shall mean that the student shall be denied any further opportunity at the University in any program, and his or her academic record and transcript shall record this sanction permanently. Where a student has not completed a course or courses in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed;
   (l) recommendation of suspension from the University. The Tribunal has power only to recommend that such a penalty be imposed. In any such case, the recommendation shall be made by the Tribunal to the Provost for a recommendation by him or her to the Governing Council. Ex parte shall mean that the student shall be denied any further opportunity at the University in any program, and his or her academic record and transcript shall record this sanction permanently. Where a student has not completed a course or courses in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed.
cancellation of academic standing or academic credit obtained by any former student who, while enrolled, committed any offence which, if detected before the granting of the degree, diploma, certificate, standing or credit would, in the judgment of the Tribunal, have resulted in a conviction and the application of a sanction sufficiently severe that the degree, diploma, certificate, standing, credits or marks would not have been granted.

2. The hearing panel shall have the power to order that any sanction imposed by the Tribunal be recorded on the student's academic record and transcript for such length of time as the panel considers appropriate.

3. The Tribunal may, if it considers it appropriate, report any case to the Provost who may notify a police of the decision of the Tribunal and the sanctions or sanctions imposed in the University newspapers, with the consent of the student involved.

NOTE: The University of Toronto at Scarborough has a policy on the use of calculators in tests and examinations. Students should consult with instructors about whether the use of calculators is permissible in their courses, and if so which models are approved. The use of an unauthorized calculator may be treated as an academic offense.

Code of Student Conduct

A. Preface

1. The University of Toronto is a large community of teaching staff, administrative staff and students, involved in teaching, research, training and other activities. Student members of the University are adherents of the Alma Mater of the University for the period of their registration in the academic program to which they have been admitted and as such assume the responsibilities that such registration entails.

2. As an academic community, the University governs the activities of its members by standards such as those contained in the Code of Behaviour on Academic Matters, which provides definitions of offenses that may be committed by student members and which are deemed to affect the academic integrity of the University's activities.

3. The University sponsors, encourages or tolerates many non-academic activities of its members, both on its campuses and away from them. These activities, although generally separate from the defined requirements of students' academic programs, are a valuable and important part of the life of the University and of its students.

4. The University does not stand in fact parentis to its student members, that is, it has no general responsibility for the moral and social behaviour of its students, as if they were its wards. In the exercise of its disciplinary authority and responsibility, the University treats students as free to organize their own personal lives, behaviour and associations subject only to the law and to University regulations that are necessary to protect the integrity and safety of University activities, the peaceful and safe enjoyment of University housing by residents and neighbours, and the freedom of members of the University to participate reasonably in the programs of the University and in activities in or off the University's premises. Strict regulation of such activities by the University of Toronto is otherwise neither necessary nor appropriate.

5. University members are not, as such, immune from the criminal and civil laws of the wider political units to which they belong. Provisions for non-academic discipline should not attempt to shelter students from their civic responsibilities and duties. Criminal or civil actions have the authority to redress grievances that are not necessarily within their jurisdiction.

6. Conduct that constitutes a breach of the Criminal Code or other statute, or that may give rise to a civil action or suit, should ordinarily be dealt with by the appropriate criminal or civil authorities. In cases, however, in which criminal or civil proceedings have not been taken or would not adequately protect the University's interests and responsibilities as defined below, proceedings may be brought under a discipline code of the University, but only where the matters are not properly disposed of by other means.

7. The University must define standards of student behaviour and make provisions for student discipline with respect to conduct that jeopardizes the good name and proper function of the academic and non-academic programs and activities of the University or in its divisions, that endangers the health, safety, rights or property of its members or visitors, or that adversely affects the property of the University or bodies related to it, which such conduct is not, for the University's defined purposes, adequately regulated by civil and criminal law.

8. Noting in this Code shall be construed to prohibit peaceful assemblies and demonstrations, lawful picketing, or to inhibit freedom of speech as defined in the Constitution.

9. In this Code, the word "premise" includes lands, buildings and grounds.

10. In this Code, "student" means a member of the University engaged in any academic work which leads to the recording and/or issue of a mark, grade or statement of performance by the appropriate authority in the University or another institution, and/or registered in any academic course which entitles the member to the use of a University library, library materials, library facilities, computer facility or data set.

11. "who is a post-doctoral fellow." The following, the word "University of Toronto" refer to the University of Toronto and include all such institutions federated or affiliated with it, where such inclusion has been agreed upon by the University and the federated or affiliated institution, with respect to the premises, facilities, equipment, services, activities, students and other members of the University or affiliated institution.

NOTE: The University of Toronto has agreed that, when the premises, facilities, equipment, services or activities of the University of Toronto are included in the Code, the premises, facilities, equipment, services and activities of the University of St. Michael's College, Trinity College and Victoria University are included in the Code.

12. In this Code, where an offence is described as depending on "knowing," the offence shall likewise be deemed to have been committed if the person ought reasonably to have known.

13. The Code is concerned with conduct that the University considers unacceptable. In the case of members of the University, the procedures and sanctions described herein shall apply. In the case of others, members of the University, the conduct to be dealt with in accordance with the established policy, procedures and agreements that apply to the members.

B. Offences

The following offenses constitute conduct that shall be deemed to be offenses under this Code, when committed by a student of the University of Toronto, provided that such conduct:

(i) has not been dealt with as failure to meet standards of professional conduct as required by a college, faculty or school, and

(ii) is not specifically assigned to the jurisdiction of the University Tribunal, as in the case of offenses described in the Code of Behaviour on Academic Matters, or in another disciplinary body within the University of Toronto, or the in the case of sexual harassment as described in the Policy and Procedures: Sexual Harassment; and

(iii) except as otherwise provided herein, occurs on premises of the University of Toronto or elsewhere in the course of activities sponsored by the University of Toronto or by any of its divisions.

1. Offences against persons

a) No person shall assault another person personally or threaten any other person with sexual assault.

b) No person shall otherwise assault another person, threaten any other person with bodily harm, or knowingly cause any other person to fear bodily harm.

2. Offences against property

a) No person shall knowingly create a condition that seriously endangers the health or safety of other persons.

b) No person shall knowingly cause property or other person with damage to such person's or property, or knowingly cause any other person to fear damage to his or her property.

3. Offences against society

a) No person shall engage in veering activity that -

1. is directed at one or more specific individuals, and

2. that is based on the race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, age, disability, family status, handicap, receipt of public assistance or record of offences of the individual or those individuals, and
Code of Student Conduct

2. Disruption
No person shall cause by action, threat or otherwise, a disturbance that the member knows causes any activity organized by the University of Toronto or by any of its divisions, the right of any other person or members to carry on their legitimate activities, to speak or to associate with others.

For example, peaceful picketing or other activity inside a class or meeting that does not substantially interfere with the communication inside, or impede access to the meeting, is an acceptable expression of dissent. And silent or symbolic protest is not to be considered disruption under this Code. But noise that obstructs the conduct of a meeting or forcibly blocking of access to an activity constitutes disruption.

3. Offences involving property
a) No person shall knowingly take, destroy or damage premises of the University of Toronto.

b) No person shall knowingly take, destroy or damage any physical property that is not her or his own.

c) No person shall knowingly destroy or damage information or intellectual property belonging to the University of Toronto or to any of its members.

d) No person, in any manner whatsoever, shall knowingly deface the inside of outside of any building of the University of Toronto.

e) No person, knowing the effects or property to have been appropriated without authorization, shall possess effects or property of the University of Toronto.

f) No person, knowing the effects or property to have been appropriated without authorization, shall possess any property that is not her or his own.

g) No person shall knowingly create a condition that unnecessarily endangers or threatens destruction of the premises of the University of Toronto or of any of its members.

4. Unauthorized entry or presence
No person shall, contrary to the expressed instruction of a person or persons authorized to give such instruction, or with intent to damage or destroy the premises of the University of Toronto or damage, destroy or steal any property on the premises of the University of Toronto that is not her or his own, or without just cause knowingly enter or remain in or on any such premises.

5. Unauthorized use of University facilities, equipment or services
a) No person shall knowingly use any facility, equipment or service of the University of Toronto that is the expressed instruction of a person or persons authorized to give such instruction, or without just cause.

b) No person shall knowingly gain access to or use any University computing or internet or external communications facilities to which legitimate authorization has not been granted. No person shall use any such facility for any commercial, disruptive or unauthorized purpose.

Appropriate uses for University connections to external networks are described, for example, in the policy document "Appropriate Use Policy for the Other Network."

c) No person shall knowingly misuse, misplace, mislaid, or render unsuitable any stored information such as books, files, data files or programs from a library, computer or other information storage, processing or retrieval system.

6. False charges
No person shall knowingly or maliciously bring a false charge against any member of the University of Toronto under this Code.

7. Acting in the commission of an offence
No person shall counsel, procure, conspire with or aid a person in the commission of an offence defined in this Code.

8. Refusal to comply with sanctions
No person found to have committed an offence under this Code shall refuse to comply with a sanction or sanctions imposed under the provisions of this Code.

9. Unauthorized possession or use of firearms or ammunition
No person other than a peace officer or a member of the Canadian Forces acting in the course of duty shall possess or use any firearm or ammunition on the premises of the University of Toronto without the permission of the officer of the University having authority to grant such permission.

NOTE: The President of the University or another senior officer designated by the President has been given the authority to grant such permission for the premises of the University of Toronto under the authority of the Governing Council of the University. The President has designated the Vice-President - Administration and Human Resources to exercise this authority. Various officers of institutions federated with the University of Toronto have authority to grant such permission with respect to the premises of the federated institutions.

C. Hearing Procedures

1. Whoever possible and appropriate, informal resolution and mediation shall be used to resolve issues of individual behaviour before resort is made to formal disciplinary procedures.

2. An Investigating Officer, who may be a student, shall be appointed for a term of up to three years by the principal, dean or director (hereinafter called "head") of each faculty, college or school in which students are registered (hereinafter called "division"). After consultation with the dean (or another director of the division, to investigate complaints made against student members of that division. Investigating Officers shall hold office until their successors are appointed.

3. A Hearing Officer, who may be a student, shall be appointed for a term of up to three years by the council of each division to decide on complaints made against student members of that division. Hearing Officers shall hold office until their successors are appointed.

4. If the Investigating Officer is, for any reason, unable to conduct an investigation, then the head of the division shall appoint another person as Investigating Officer for the particular case. If the Hearing Officer is, for any reason, unable to hear the hearing of any case, then the vice-chair of the division shall appoint another person as Hearing Officer for the particular case.
### D. Sanctions

The following sanctions or combinations of them may be imposed upon students found to have committed an offence under this Code.

In addition, students found to have committed an offence may be placed on conduct probation for a period not to exceed one year, with the provision that one or more of the following sanctions will be applied if the conduct probation is violated:

1. Formal warnings reprimand
2. Order for restitution, rectification or the payment of damages
3. A fine or bond for good behaviour not to exceed $100
4. Requirement of public service work not to exceed 25 hours
5. Denial of access to specified services, activities or facilities of the University for a period of up to one year

The following two sanctions, which would directly affect a student's registration in a program, may be imposed only where it has been determined that the offence committed is of such a serious nature that the student's continued registration threatens the academic function of the University or of any of its divisions or the ability of other students to continue their programs of study:

6. Suspension from registration in any course or program of a division or division's for a period of up to one year
7. Recommendation for expulsion from the University

### Other Codes

Some parts of the University, such as the Library and the Computer Centre, have developed codes of their own to make close to what respects precisely the Code of Behaviour on Academic Matters and the Code of Student Conduct upon their areas. Students should be aware of the existence of these codes. They are equally bound by them.

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### Telephone Directory: Frequently Called Numbers

<table>
<thead>
<tr>
<th>Department</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Advising</td>
<td>287-7561</td>
</tr>
<tr>
<td>APUS</td>
<td>287-3993</td>
</tr>
<tr>
<td>Athletic Association (G.O.A.A.)</td>
<td>287-7066</td>
</tr>
<tr>
<td>Bookstore</td>
<td>287-7038</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>287-7057</td>
</tr>
<tr>
<td>Campus Police Information / Lost &amp; found</td>
<td>287-7398</td>
</tr>
<tr>
<td>Computing Centre</td>
<td>287-7391</td>
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<tr>
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University of Toronto at Scarborough
Main Campus
## CALENDAR 2000

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## CALENDAR 2001

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## Notes

- The calendar is divided into monthly sections with the months of January, February, March, April, May, June, July, and August each having their respective dates.
- The dates are arranged in a grid format with the week starting on Sunday (S) and ending on Saturday (S).
- Each month's dates are separated into lines for easier reading.
- The years 2000 and 2001 are highlighted separately to indicate the two different years.