UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

# 2008-2009 Calendar

## Message from the Interim Dean

Welcome to the 2008-2009 academic year.

This Calendar is your guide to the wide range of academic choices available to you as a student in the Faculty of Arts & Science. With more than 2,000 courses in some 300 programs, the number and variety of options is unparalleled in Canada.

While such choice is exciting, it can also be a little intimidating trying to decide which courses to take. There are many people who work in Arts & Science whose job it is to answer your questions and assist you in getting the most out of your university experience. Your college registrar's office is your first stop for assistance, including advice about course selection, degree requirements and so on. I encourage you to take advantage of these services, whether you are at the beginning, middle or end of your university career.

The Faculty of Arts & Science is firmly committed to a top quality experience for our students. We value your feedback on all aspects of your student life. Let us know how you feel your courses and professors measure up by completing the Arts & Science Students' Union course evaluations. Pass along suggestions to your college registrar's office about ways in which services could be improved or drop a note in the Faculty of Arts & Science Registrar's office suggestion box. Take part in campus surveys measuring student satisfaction. Give us your feedback and ideas about this Calendar and our services in general by emailing ask@artsci.utoronto.ca. Or you might even decide to join fellow students on the Faculty Council—Arts & Science's main decision-making body. Through your engagement, we can ensure Arts & Science students get the educational experience they deserve.

With best wishes for a great academic year,

Meric Gertler, FRSC
Interim Dean

# Important Notices

The undergraduate academic Calendar of the Faculty of Arts & Science is published in both online and printed editions. Every effort has been made to ensure the compatability of both versions. In the case of any discrepancy, the online version shall apply. Any post-publication corrections and/or updates to the print edition of this Calendar will be posted on the Faculty Registrar's web site at http://www.artsci.utoronto.ca/current. Students are strongly advised to check back regularly to keep informed of changes.

While Departmental counsellors and the Registrars of the Colleges are always available to give advice and guidance, it must be clearly understood that **THE ULTIMATE RESPONSIBILITY RESTS WITH THE STUDENT** for completeness and correctness of course selection, for compliance with prerequisite, co-requisite requirements, etc., for completion of Program details, for proper observance of the Distribution Requirement and for observance of regulations, deadlines, etc.

Students are responsible for seeking guidance from a responsible officer if they are in any doubt; misunderstanding, or advice received from another student will not be accepted as cause for dispensation from any regulation, deadline, program or degree requirement.

## Degrees Offered on the St. George Campus

Effective for students registering in a degree program in the Faculty for the first time in the 2001 summer session or later, the St. George Campus of the Faculty of Arts and Science has discontinued the 15-course (three-year) B.A. and B.Sc. degrees; ONLY 20-course (four-year) Honours B.A., B.Sc. and B.Com degrees will be available. Students registered in a degree program in the Faculty before the 2001 summer session may still choose a 15-course (three-year) degree.

## Changes in Programs of Study and/or Courses

The programs of study that our Calendar lists and describes are available for the year(s) to which the calendar applies. They may not necessarily be available in later years. If the University or the Faculty must change the content of programs of study or withdraw them, all reasonable possible advance notice and alternative instruction will be given. The University will not, however, be liable for any loss, damages, or other expenses that such changes might cause.

For each program of study offered by the University through the Faculty, the courses necessary to complete the minimum requirements of the program will be made available annually. We must, however, reserve the right otherwise to change the content of courses, instructors and instructional assignments, enrolment limitations, pre-requisites and co-requisites, grading policies, requirements for promotion and timetables without prior notice.

## Regulations and Policies

As members of the University of Toronto community, students assume certain responsibilities and are guaranteed certain rights and freedoms.

The University has several policies that are approved by the Governing Council and that apply to all students. Each student must become familiar with the policies. The University will assume that he or she has done so. The rules and regulations of the Faculty are listed in this calendar. In applying to the Faculty, the student assumes certain responsibilities to the University and the Faculty and, if admitted and registered, shall be subject to all rules, regulations and policies cited in the Calendar, as amended from time to time.

All University policies can be found at www.governingcouncil.utoronto.ca/policies.htm. Some policies or portions of policies are published in the "Rules and Regulations" section of this Calendar. Those which are of particular importance to students are: the Policy on Access to Student Academic Records; the Code of Behaviour on Academic Matters; the Code of Student Conduct; the Grading Practices Policy; and the Policy on Official Correspondence with Students.

More information about students' rights and responsibilities can be found at www.students.utoronto.ca/The_Basics/Rights_and_Rules.htm.

## Enrolment Limitations

The University makes every reasonable effort to plan and control enrolment to ensure that all of our students are qualified to complete the programs 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 programs, courses, or sections listed in the calendar, and to withdraw courses or sections for which enrolment or resources are insufficient. The University will not be liable for any loss, damages, or other expenses that such limitations or withdrawals might cause.

## Copyright in Instructional Settings

If a student wishes to tape-record, photograph, video-record or otherwise reproduce lecture presentations, course notes or other similar materials provided by instructors, he or she must obtain the instructor's written consent beforehand. Otherwise all such reproduction is an infringement of copyright and is absolutely prohibited. In the case of private use by students with disabilities, the instructor's consent will not be unreasonably withheld.

## 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 Academic Records, strictly controls access to Person I.D. numbers. The University assumes and expects that students will protect the confidentiality of their Person I.D.'s.

## Fees and Other Charges

The University reserves the right to alter the fees and other charges described in the Calendar.

## Notice of Collection concerning Freedom of Information and Protection of Privacy

The University of Toronto respects your privacy. Personal information that you provide to the University is collected pursuant to section 2(14) of the University of Toronto Act, 1971. It is collected for the purpose of administering admission, registration, academic programs, university-related student activities, activities of student societies, financial assistance and awards, graduation and university advancement, and for the purpose of statistical reporting to government agencies. At all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act.

If you have questions, please refer to www.utoronto.ca/privacy or contact the University Freedom of Information and Protection of Privacy Coordinator at 416 946-7303, McMurrich Building,room 201, 12 Queen's Park Crescent West, Toronto, ON, M5S 1A8.

An expanded version of this Notice can be found at www.fippa.utoronto.ca/policy/nocx.htm.

## Registration

Details of the procedures by which students of the Faculty of Arts and Science register and enrol in courses for which they are eligible, and pay or make arrangements to pay fees, are found in the *Registration Handbook and Timetable*, which students receive from their college. (Any student allowed to register one day after the end of the first week of classes is charged a late fee.

## Passed Courses May Not Be Repeated

Students may not repeat any course in which they have already obtained a mark of 50% or higher. The only exceptions occur when students require a course with a specific grade for entry to a limited-enrolment Program. Students may repeat such a course only once as an "extra" course, which will have no effect on status or Grade-Point Average. There are no supplemental examinations or provisions to "upgrade" a mark. All courses taken, except those officially cancelled, remain on the record.

## Degree Courses and "Extra" Courses: Chronological Principle

Courses are credited towards a degree chronologically. For example, if a student has already passed six 100-series courses and then enrols in further 100-series courses, the more recent courses are counted as "Extra" courses. An exception occurs when a student who has completed 5.5 100-series courses enrols in a full course at the 100-level in a subsequent session; the most recently taken half-course becomes "extra."

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## Where to Look to Find What You Need....

A quick guide to information on the main topics of interest to Arts & Science students.

(*Calendar* = this publication ; RHT = *Registration Handbook & Timetable* ; ASW = Arts & Science Faculty Registrar's website: www.artsci.utoronto.ca/current/undergraduate)

### COURSES:

Descriptions listed alphabetically by sponsoring unit in the *Calendar*.

Scheduling information and enrolment instructions in the *RHT*.

### PROGRAMS

General definitions and rules, *Calendar* pp. 24. Alphabetical listing of all Subject POSts (programs of study), *Calendar* pp. 37 & *RHT*. Contacts & enrolment instructions, *RHT*.

### DEGREE REQUIREMENTS

Hon.BA/BSc, *Calendar* p. 24; B.Com p. 25.

### FEES

Amounts, payment deadlines, refund schedules: Student Accounts website: www.fees.utoronto.ca.

See also *Calendar* p. 490.

### GRADING & MARKS

A&S grading scale & policies, pp. 495; *UofT Grading Practices Policy*, p. 501 ff.

### PETITIONS

Official rules, *Calendar* p. 497. See also the informal *Petitions Guide* on the *ASW*. Advising: see your College Registrar's Office.

### EXAMS

Final Examination timetables, ASW.

Rules, *Calendar* p. 493. Also see Appendix to the *Petitions Guide*, which gives all the rules for exams, ASW.

### ACADEMIC MISCONDUCT

*Code of Academic Behaviour* (i.e., plagiarism, cheating, etc), *Calendar* p. 504. Also *Code of Student Conduct*, *Calendar* p. 507.

### FINANCIAL AID

Admissions & Awards website: www.adm.utoronto.ca/fa. Advising from your college Registrar's Office and Admissions & Awards.

### SCHOLARSHIPS

Admissions & Awards website: www.adm.utoronto.ca/awd; Arts & Science web site: http://www.artsci.utoronto.ca/current/undergraduate/undergraduate-scholarships.

### TRANSCRIPTS

Ordered from the Transcript Office, Sidney Smith, room 1006, or on ROSI at www.rosi.utoronto.ca. (Use a credit card to order.) Information on ASW.

### ADVISING

Your reliable first stop is your College Registrar's Office. They can help you sort things out and get the support you need. Departmental and program advisors advise on matters related to specific courses, programs, or instructional matters. You may also access specialized University Student Services directly. See: www.studentservices.utoronto.ca/services.asp or Intuit: Your guide to student life @ U of T.

### COURSE EVALUATIONS

The ASSU *Anti-Calendar* appears on the ASSU website: www.assu.ca.

### OLD EXAMS

The Library website: http://eres.library.utoronto.ca.

**For updates to this Calendar, check www.artsci.utoronto.ca/current/undergraduate. Please note that not all courses listed in the *Calendar* are offered every year; for course schedules, check the *Registration Handbook and Timetable*.**

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## 2008 Summer Session

### May 2008

| | |
|---|---|
| 12 | Classes begin in F and Y section code courses |
| 19 | Last day to add courses with F and Y section codes; Victoria Day; University closed |

### June 2008

| | |
|---|---|
| 6 | Fees payment deadline for deferred examinations in June 2008; deferred examination cancelled and grade with "0" for examination reinstated to academic record for students who have not paid. |
| 8 | Last day to drop courses with F section codes from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a "0" is assigned for incomplete work), and calculated into the GPA. |
| 5-18 | Arts and Science Spring Convocations |
| 13 | Personal deferred examination schedule for June examination period available online to students who have paid deferred examination fee |
| 20 | Classes end in F section code courses; Fees payment deadline for deferred examinations in August 2008; deferred examination cancelled and grade with "0" for examination reinstated to academic record for students who have not paid. |
| 23-27 | Final examinations in F section code courses, and deferred examinations in specified S section code courses from April/May 2008 |
| 27 | Last date to file a petition regarding term work in 2008 summer session F section code courses |
| 30 | University closed |

### July 2008

| | |
|---|---|
| 1 | Canada Day holiday; University closed |
| 2 | Classes begin in S section code courses; First day to request November 2008 graduation |
| 4 | Last date to file a petition regarding a final examination in 2008 summer session F section code courses |
| 8 | Last day to add courses with S section codes |
| 16 | Examination timetable for S and Y section code courses posted |
| 20 | Last day to drop courses with Y section codes from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a "0" is assigned for incomplete work), and calculated into the GPA. |
| 25 | Personal deferred examination schedule for August examination period available online to students who have paid deferred examination fee |
| 29 | Last day to drop courses with S section codes from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a "0" is assigned for incomplete work), and calculated into the GPA. |

### August 2008

| | |
|---|---|
| 4 | Civic holiday; University closed; Last day to request November 2008 graduation |
| 8 | Classes end in S and Y section code courses |
| 11-15 | Final examinations in S and Y section code courses, deferred examinations from April/May 2008, and specified courses from June 2008 |
| 15 | Last date to file a petition regarding term work in 2008 summer session Y/S section code courses |
| 22 | Last date to file a petition regarding a final examination in 2008 summer session Y/S section code courses |

## 2008 Fall Session

Meeting dates for the Faculty of Arts and Science Council and its Standing Committees will be posted on the Arts & Science Governance web site: www.artsci.utoronto.ca/main/facultygovernance.

### August 2008

| | |
|---|---|
| 29 | Bank tuition fee payment (or official deferral) must be done by this date for automatic registration |

### September 2008

| | |
|---|---|
| 1 | Labour Day; University closed |
| 8 | Fall term classes begin in F and Y section code courses |
| 17 | Proof of tuition fee payment must be shown to College Registrars' Offices for registration if payment made after August 29 |
| 21 | Last day to add courses with F and Y section codes; Last day to enrol in Subject POSt for 2008-2009 Session |

### October 2008

| | |
|---|---|
| 3 | Fees payment deadline for deferred examinations in December 2008; deferred examination cancelled and grade with "0" for examination reinstated to academic record for students who have not paid |
| 6 | First date to request June 2009 graduation |
| 13 | Thanksgiving; University closed |
| 17 | Examination timetable for F section code courses posted |
| 24 | Personal deferred examination schedule for December examination period available online to students who have paid deferred examination fee |

### November 2008

| | |
|---|---|
| 3 | Last day to drop courses with F section codes from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a "0" is assigned for incomplete work), and calculated into the GPA. |
| 15 | Deadline to request corrections to 2007-2008 Fall/Winter academic record |
| TBA | Arts and Science Fall Convocations. Please check "Ceremony Dates" at www.utoronto.ca/convocation. (tentative) |

# Sessional Dates

### December 2008

| | |
|---|---|
| 5 | Classes end (December 6 for Saturday classes) |
| 7 | Last date to request June 2009 graduation |
| 8-19 | Final examinations in F section code courses, and deferred exams from August 2008; Term tests in Y section code courses |
| 19 | Last date to file a petition regarding term work in 2008 fall session F section courses |
| 22 | Winter holidays begin; University is closed December 22 to January 2, 2009 inclusive |

## 2009 Winter Session

### January 2009

| | |
|---|---|
| 5 | Winter Session classes begin |
| 9 | Last date to file a petition regarding a final examination in 2008 fall session F section courses |
| 18 | Deadline to enrol in S section code courses |
| 23 | Fees payment deadline for deferred examinations to be written in February; deferred examination cancelled and grade with "0" for examination reinstated to academic record for students who have not paid fee |

### February 2009

| | |
|---|---|
| 2 | Personal deferred examination schedule for February examination period available online to students who have paid deferred examination fee |
| 13 | Final examination timetable for S/Y courses posted |
| 16 | Last day to drop courses with Y section codes from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a "0" is assigned for incomplete work), and calculated into the GPA. |
| 16 | Family Day; University closed |
| 16-20 | Reading Week; deferred examinations from December 2008 |
| 20 | Fees payment deadline for deferred examinations to be written in April/May; deferred examination cancelled and grade with "0" for examination reinstated to academic record for students who have not paid |
| 28 | Deadline to request corrections to 2008 Summer academic record |

### March 2009

| | |
|---|---|
| 6 | Personal deferred examination schedule for April/May examination period available online to students who have paid deferred examination fee |
| 8 | Last day to drop courses with S section codes from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a "0" is assigned for incomplete work), and calculated into the GPA. |

### April 2009

| | |
|---|---|
| 9 | Classes end (April 11 for Saturday classes) |
| 10 | Good Friday: University closed |
| 13-17 | Study period; no tests or examinations in this period |
| 20-May 8 | Final examinations in S and Y section code courses and deferred examinations from December 2008 |

### May 2009

| | |
|---|---|
| 8 | Last date to file a petition regarding term work for 2008-2009 fall-winter sessions Y/S section code courses |
| 15 | Last date to file a petition regarding a final examination for 2008-2009 fall-winter sessions Y/S section code courses |
| 18 | Victoria Day; University closed |

### June 2009

| | |
|---|---|
| TBA | Arts and Science Spring Convocations. Please check "Ceremony Dates" at www.utoronto.ca/convocation. |

## Admission to the Faculty of Arts and Science

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UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

# Admission

## Admission to the Faculty

Detailed admission requirements are contained in the University of Toronto Viewbook, which is available in secondary school guidance offices throughout Ontario, on the University's web site for prospective students at www.prospective.utoronto.ca, through the Faculty of Arts and Science Student Recruitment Office, or on the Admissions and Awards web site at www.adm.utoronto.ca. Candidates from countries other than Canada should also consult the International Undergraduate Admissions Bulletin available on the Admissions and Awards web site.

**Admissions and Awards**

University of Toronto, 315 Bloor St. W.
Toronto, Ontario, Canada M5S 1A3
416-978-2190
www.adm.utoronto.ca

**Arts & Science Student Recruitment Office**

2032-100 St. George St.
Toronto, Ontario, Canada M5S 3G3
416-978-4272
recruit@artsci.utoronto.ca
www.artsci.utoronto.ca/prospective

### Minimum Admission Requirements for Applicants from Ontario Secondary Schools

Applicants must be eligible to receive the Ontario Secondary School Diploma, present six Grade 12 U or M courses including ENG4U/EAE4U, and meet any prerequisites for their intended program of study.

### Minimum Admission Requirements for Applicants from Outside Ontario Secondary Schools

The Faculty of Arts and Science is home to a rich and varied student body. Although most of our students are from Southern Ontario, we have students from every province of Canada and from over 90 foreign countries. We encourage application by qualified students from outside Ontario. Applicants must present a satisfactory academic record from recognized academic institutions and meet the requirements listed in the International Undergraduate Admissions Bulletin, available for download from the Admissions and Awards web site at www.adm.utoronto.ca/adm. The specific average or standing required for admission varies from year to year.

### Canadian Students

Applicants from the Province of Quebec must present twelve academic C.E.G.E.P. courses including two terms of English/anglais. Applicants from all other provinces and territories in Canada must present grade 12 matriculation. For detailed information, check the Admissions and Awards web site at www.adm.utoronto.ca/adm.

### American Students

Applicants from the United States must present Grade 12 matriculation and present good scores in SAT Reasoning or ACT examinations. Students must present the Writing Test. Applicants must also present at least three SAT Subject Test scores or AP scores in subjects appropriate to their proposed area of study. Those seeking admission to science or business/commerce programs are strongly advised to complete AP Calculus AB or BC or IB Mathematics. For detailed information, check the Admissions and Awards web site at www.adm.utoronto.ca/adm.

### Other Applicants

Information on admission requirements for international applicants is available on the Admissions and Awards web site at www.adm.utoronto.ca/adm.

### All Applicants from Outside the Ontario School System

In addition to meeting the Faculty of Arts and Science admission requirements, students intending to enrol in Commerce, Economics or Science programs must have completed, or must take, a full credit secondary school course or equivalent in Calculus which covers the geometric notion of a limit, the differentiation and integration of elementary functions and provides them with a geometric grasp of differentiation and integration in place of Grade 12 Calculus.

Please note that Commerce and Computer Science require a second math. As of 2008, Life Science and Physical and Mathematical Science will also require a second math.

For further information on acceptable mathematics courses or equivalents, please contact the Department offering the program in which you intend to enrol.

The Faculty of Arts and Science offers a special first-year calculus course entitled MAT 136Y - Calculus and its Foundations, limited to students from outside of Ontario interested in the biological, physical, commerce or computer sciences and commerce and whose high school mathematics preparation is strong but does not include calculus. For more information, consult the Mathematics listing starting on page 327 of this *Calendar* for a full course description as well as the *Registration Handbook and Timetable*.

### PUMP (Preparing for University Math Program)

PUMP is a non-credit, intensive course specially designed to prepare students for entry-level mathematics courses, like calculus and linear algebra. It is designed primarily for students from outside Ontario who require additional pre-university mathematics background. The course costs $600.00 (subject to change). For more information, see the web site at www.math.utoronto.ca/pump.

### English Facility Requirement

Applicants whose first language (language learned at home as a child) is not English may have to present proof of English facility. For details, see the Admissions and Awards web site at www.adm.utoronto.ca/adm.

## Other Admission Categories

### Admission with Transfer Credit

Candidates with acceptable standing at other universities, or at other divisions of this University, may be considered for admission with transfer credit provided that the content of the studies for which credit is sought is considered appropriate for inclusion in a degree program offered by the Faculty. Transfer credits are assessed after admission once the student has completed the online application and paid the assessment fee. Students who have completed a bachelor's degree: see section entitled "Admission of External Students to a Second Degree Program" in the next column. The Faculty grants up to a maximum of five credits to candidates who have completed a three-year diploma at Ontario Colleges of Applied Arts and Technology/Institutes of Technology and Advanced Learning, and a maximum of two generic credits to candidates who have completed a two-year diploma at Ontario Colleges of Applied Arts and Technology/Institutes of Technology and Advanced Learning. Otherwise a maximum of ten transfer credits may be granted. Students who have completed post-secondary studies are required to apply for on-admission transfer credit.

Regardless of the number of transfer credits granted, at least five of the six 300+series courses required for an Honours degree must be completed with a passing mark in this Faculty. Newly admitted students have one year from the date of their transfer credit assessment, or from the date of their first registration in the Faculty, whichever is later, to request a reassessment or adjustment. The same time limit applies to all departmental interviews.

Candidates who have completed Arts & Science courses while enrolled in other Divisions of this university or while enrolled as non-degree students in this Faculty prior to degree studies will have these courses and grades included in the academic record.

### Admission from the University of Toronto Mississauga and the University of Toronto Scarborough

Candidates admitted for transfer from the University of Toronto Mississauga and the University of Toronto Scarborough will have all University of Toronto Mississauga or University of Toronto Scarborough courses and grades included in their Arts & Science academic record, and will have Faculty rules and regulations applied to these; e.g., academic status, degree regulations, Dean's List. Note: a limit of six 100-level/A-level credits is applied. All 300+ level credits may apply to the 6.0 requirement for the degree in the Faculty of Arts & Science. Students admitted to Arts & Science may not retain University of Toronto Mississauga or University of Toronto Scarborough subject POSts, whether complete or incomplete. Only Arts & Science subject POSts may be used to complete degree requirements in the Faculty.

### Admission Restricted to "Part-Time"

Students restricted to a reduced course load on admission may take no more than 2.5 courses over the Fall-Winter Sessions. They may take a maximum of 1.0 course in the Summer Session. If these students wish to transfer to full-time studies, they may apply through their College Registrar after the session in which they pass at least 4 courses in the Faculty with a minimum cumulative Grade Point Average of 2.50. (Transfer credits are not counted.) See also Number of Courses Taken ("Course Load").

### Admission "On Probation"

Candidates who fail to satisfy the Faculty's admission requirements, but successfully appeal for special consideration of the circumstances which have affected their studies at other universities, or other Faculties or Schools of this University including the University of Toronto Scarborough and the University of Toronto Mississauga, may be admitted On Probation. The academic requirements that such students must meet are the same as those required of students who encounter academic difficulties while registered in the Faculty. The academic status will remain, "On Probation", until the session in which the student attempts his/her fourth course, at which time a further status will be assigned. Students who are admitted on probation and who have retained credits from previous courses in this Faculty will have the total number of retained credits and grades included in the four course attempts. Refer to Section Six, Rules and Regulations: Academic Status, in this *Calendar*. Students may be at risk of academic suspension from the Faculty and are strongly urged to consult their college registrar for appropriate counselling before registering and if necessary, during the course of their studies.

### Admission as a Non-Degree Student

Non-degree students are registered in the Faculty but are not proceeding towards a degree offered by the Faculty. Most Non-degree students have completed a degree and are taking further courses for their own purposes, including admission to graduate studies. Students admitted as degree students cannot become Non-degree students unless they have completed an Honours or Four Year degree, or are returning to the Faculty as Non-degree students on a Letter of Permission from another institution. To apply for admission as a Non-degree student, download the application from the Admissions and Awards web site at www.adm.utoronto.ca/adm (click "Applications/ Deadlines").

### Admission of External Students to a Second Degree Program

Applicants with a Bachelor of Arts or Bachelor of Science or equivalent from another university who wish to complete a second undergraduate degree in the Faculty of Arts and Science may apply for admission to a second degree program. Before applying, external candidates are urged to determine whether a second degree is actually required for their purposes; for example, a "make-up" year as a non-degree student may satisfy admission requirements for a graduate program. The Faculty grants a maximum of five transfer credits—four at the 100 level and one at the 200 level. It is not possible to complete a second undergraduate degree in the same field as the first degree. Students who have completed post-secondary studies are required to apply for on-admission transfer credit. To apply, check the Admissions and Awards web site at www.adm.utoronto.ca/adm (click "Applications/Deadlines").

### Admission as Non-Degree Visiting Students

Students with valid Letters of Permission from other accredited North American universities who have not been officially admitted to the Faculty of Arts and Science may register as visiting students at Woodsworth College, taking courses for transfer credit at their own home university. Non-degree visiting student registration does not imply acceptance as either a student proceeding towards a degree or a Non-degree student. Students will receive grade point averages and status as outlined in Section 6. Students must observe Faculty policies, including the prohibition on repeating a "passed" course. For application information and deadlines, check www.wdw.utoronto.ca/visit or contact Woodsworth College, University of Toronto, Toronto M5S 1A9 (416-978-5880).

Students who have transferred to other universities, but wish to return to the Faculty on a Letter of Permission should re-register at their original college as non-degree students.

### Admission as International Non-Degree Visiting Summer Students

Students with valid Letters of Permission from recognized International universities who have not been officially admitted to the Faculty of Arts and Science may register as visiting students through the International Summer Program (ISP) at Woodsworth College. Students would take summer courses for transfer credit at their own home university. Non-degree international visiting student registration does not imply acceptance as either a student proceeding towards a degree or a Non-degree student. Students will receive grade point averages and status (see page 496). Students must observe Faculty policies, including the prohibition on repeating a "passed" course. For application information and deadlines, check www.isprogram.utoronto.ca or contact Woodsworth College, University of Toronto, Toronto M5S 1A9, (416-978-8713).

### Admission as Non-Matriculants; Academic Bridging Program

Candidates at least twenty-one years of age who are Canadian citizens or permanent residents of Canada and who do not hold the published admission requirements, may apply for admission as non-matriculants. They must present proof of age, and must complete, with high standing, at least one of the Academic Bridging courses offered by Woodsworth College. All candidates should consult Admissions and Awards concerning their eligibility to qualify as a non-matriculant through the Academic Bridging Program. Information on the Academic Bridging Program is provided on page 53 of this *Calendar*. Further information is also available at www.wdw.utoronto.ca or by contacting Woodsworth College, University of Toronto, Toronto M5S 1A9 (416-978-7487; email academic.bridging@utoronto.ca).

### Admission of Senior Citizens

Canadian citizens or permanent residents of Canada who are at least sixty-five years of age by the first day of the term, may register in the Faculty at Woodsworth Colleges as part-time Special Students. They do not have to meet the academic requirements for admission. Applicants should contact Woodsworth College at 416-978-4444 for admission and tuition fee information.

### Re-Registration in the Faculty

Students previously registered as degree or non-degree students in this Faculty who wish to return after an absence must submit a "Request for Re-registration Form" (charge $24) through their college registrar's office. Re-registration is necessary for students who have not registered in this Faculty within the previous 12 months.

Students with outstanding accounts may not re-register at the University until these accounts are paid. See page 490 for payment deadlines.

"Request for Re-Registration" forms should be submitted at least one week prior to the fall/winter enrolment window for your year of study (see the *Registration Handbook & Timetable* for details). Prior to course selection you will need to make sure you are enrolled in an appropriate combination of Subject POSts (programs of study) for your degree. It is advisable for you to make arrangements to see a counsellor at your college to go over changes in policies and procedures as well as to clarify the degree requirements you are following.

"Request for Re-Registration" forms can be accepted until mid-August for Fall/Winter enrolment although space in courses will be limited at this point.

Students who previously studied as non-degree visiting students do not request re-registration. They must submit a new visiting student application and valid letter of permission through Woodsworth College (see "Admission as Non-Degree Visiting Students" in the previous column for details).

### Admission to Other University of Toronto Faculties/Programs

Many professional studies require completion of one or more years of study in Arts and Science before you apply to them. For detailed admission and contact information on professional studies, please refer to www.artsci.utoronto.ca/prospective/programsofstudy/professprogs.

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UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

# Student Services & Resources

## Academic & Personal Counselling

### The Colleges

Every Arts and Science student is a member of a college. Think of your college as a familiar neighbourhood within the university. All the colleges provide advising and support services for students. Academic advising, as well as counselling on financial and personal matters, is available through your college registrar's office. Also, each college provides its students with academic support services such as writing skill centres, math aid centres, libraries and computer facilities. And remember, no matter which college you belong to, you have access to all the courses and programs offered in Arts and Science.

The Registrar's Office of each student's college is the focal point for information and advice of all kinds, and should be consulted as soon as any problems of an academic or personal nature are encountered.

Most of the Colleges offer academic support services, such as Writing Laboratories to provide students with assistance in writing assignments, essays and reports; Mathematics Aid Centres; tutorial services; etc. For further information, see the individual College listings (see page 494) or consult the College Registrar.

Students with problems relating to the teaching of courses (lectures, tutorials, evaluation, work-load, etc.) that they cannot resolve with the instructors concerned, can obtain advice and assistance either from the Undergraduate Secretary of the particular Department, or from their College Registrar.

The Departments and College Program offices should be consulted for advice on courses and programs they sponsor. They also have brochures giving more details of courses and programs than is possible in the Calendar. First-year students are particularly urged to consult program sponsors during the Fall-Winter Session for details on enrolling in programs. (All students must enrol in at least one Specialist or Major or two Minor program(s) upon passing four courses.)

Students registered in Divisions other than Arts and Science who have problems with Arts and Science courses should go for advice either to the departmental Undergraduate Secretary or to the registrar of their own Faculty or School.

**Innis College-Office of the Registrar**

2 Sussex Avenue, Toronto, ON M5S 1J5
416-978-2513 phone/416-978-5503 fax
registrar.innis@utoronto.ca
www.utoronto.ca/innis

Hours: Monday 9 a.m.-1 p.m., 2-6 p.m.; Tuesday 10 a.m.-1 p.m., 2-4:30 p.m., Wednesday/Thursday/Friday 9 a.m.-1 p.m., 2-4:30 p.m.

**New College-Office of the Registrar**

300 Huron Street, Room 107, Toronto, ON M5S 3J6
416-978-2460 phone/416-978-0554 fax
newcollege.registrar@utoronto.ca
www.newcollege.utoronto.ca

Hours: Monday to Friday 9 a.m.-12:30 p.m., 1:30-4:30 p.m. (until 4 p.m. in July-August); Wednesday also 5-6 p.m.

**St. Michael's College-Office of the Registrar & Student Services**

Room 207, 121 St. Joseph Street, Toronto, ON M5S 3C2
416-926-7117 phone/416-926-7266 fax
ask.smc@utoronto.ca
www.utoronto.ca/stmikes

Hours: Monday, Tuesday, Wednesday, Thursday 9:30 a.m. - 12:30 p.m.; 1:30-4:30 p.m.; Friday 9:30 a.m. - 12:30 p.m.; 1:30-4:00 p.m.

**Trinity College-Office of the Registrar**

6 Hoskin Avenue, Toronto, ON M5S 1H8
416-978-2687 phone/416-978-2831 fax
registrar@trinity.utoronto.ca
www.trinity.utoronto.ca

Hours: Monday, Wednesday, Thursday, Friday: 9 a.m.-1 p.m., 2-5 p.m. , Tuesday: 10 a.m.-1 p.m., 2-5 p.m.

Summer hours: Monday, Wednesday, Thursday, Friday: 9 a.m.-1 p.m., 2-4 p.m. , Tuesday: 10 a.m.-1 p.m., 2-4 p.m.

**University College-Office of the Registrar**

15 King's College Circle, Toronto, ON M5S 3H7
416-978-3170 phone/416-978-6019 fax
uc.registrar@utoronto.ca
www.uc.utoronto.ca

Hours: Monday to Friday: 10 a.m.-12:30 p.m.; 1:30-4:30 p.m..

**Victoria College-Office of the Registrar**

Northrop Frye Hall, Room 106, 73 Queen's Park Crescent East, Toronto, ON M5S 1K7
416-585-4508 phone/416-585-4459 fax
vic.registrar@utoronto.ca
www.vicu.utoronto.ca

Hours: Monday, Thursday,: 9:30 a.m - 4:30 p.m.; Tuesday: 9:30 a.m. -6 p.m.; Wednesday: 10:00 a.m. - 4:30 p.m.; Fridays: 9:30 a.m. - 4:00 pm

**Woodsworth College-Office of the Registrar**

119 St. George Street, Toronto, ON M5S 1A9
416-978-4444 phone/416-978-6111 fax
wdwregistrar@utoronto.ca
www.wdw.utoronto.ca

Hours: Monday, Wednesday, Thursday: 10 a.m.-5 p.m. (4:30 p.m. in July & August); Tuesday: 10 a.m.-6 p.m. (5:30 p.m. in July & August); Friday: 10 a.m.-4 p.m.

### Office of the Faculty Registrar

The Office of the Faculty Registrar works closely with departments and colleges concerning virtually all matters relating to Arts and Science students: it coordinates counselling, registration and enrolment, student records, transfer credit, petitions, final examinations and graduation. The Office of the Faculty Registrar, located in Sidney Smith Hall, 100 St. George Street, Room 1006, can provide general information about registration and enrolment, course listings, building and classroom locations, etc. It is also the location of the University of Toronto Transcript Centre, which produces transcripts for all divisions of the University.

You can also get useful information about Arts and Science from the Faculty Registrar's web site (www.artsci.utoronto.ca/current/undergraduate). In addition, if you have questions about any aspect of your undergraduate experience, you can e-mail the Faculty Registrar at ask@artsci.utoronto.ca.

**Office of the Faculty Registrar/University of Toronto Transcript Centre**

100 St. George Street, Toronto, ON M5S 3G3
416-978-3384 phone, 416-978-2487 fax
ask@artsci.utoronto.ca
www.artsci.utoronto.ca/current/undergraduate

Hours: Monday-Friday: 8:45 a.m.-5 p.m. (until 4:30 p.m. in July-August)

### Arts & Science Student Computer Program

Shopping around for a new computer? Want to take advantage of U of T's growing wireless environment?

Check out the Arts & Science Student Computer Program.

Find out more:
Visit: www.studentcomputers.artsci.utoronto.ca
Email: support@chass.utoronto.ca
Call: 416-978-4481

## Other Student Services Offices

### Accessibility Services: Programs and Services for Students with a Disability

Accessibility Services
St. George Campus
Robarts Library, 130 St. George Street
Toronto, Ontario M5S 3H1
Voice: (416) 978-8060
TDD: (416) 978-1902
Fax: (416) 918-8246
e-mail: disability.services@utoronto.ca
web site: www.studentlife.utoronto.ca/accessibility

**University Commitment**

The University's statement of institutional purpose states: "The University of Toronto is dedicated to fostering an academic community in which the learning and scholarship of every member may flourish with vigilant protection for individual human rights, and a resolute commitment to the principles of equal opportunity." The University's "Statement of Commitment Regarding Persons with Disabilities" is part of the UofT Ontarians with Disabilities Act Plan 2004-05 and can be found at www.accessibility.utoronto.ca.

Faculty and staff carry a responsibility for creating and maintaining a community that is inclusive of all persons and treats all members of the community in an equitable fashion, responding appropriately to requests for accommodation of a disability per the Ontario Human Rights Code "Guidelines on Accessible Education" (2004) http://www.ohrc.on.ca/english/consultations/ed-consultation-report.shtml.

**Responsibilities of Students who have Disabilities**

Students who request accommodations for their academic programs and related activities at the University are obligated to disclose their disabilities to the respective campus Service for Students with Disabilities, and request accommodations in a timely manner to facilitate the implementation of support and services. It is important that students discuss their needs as early as possible with the Service in order to put accommodations in place. Students must present relevant and up-to-date documentation, as outlined on our website, from an appropriate health care professional. Any information about a student's disability is confidential and is not shared outside the Service unless the student gives permission. Students are encouraged to meet and discuss their academic accommodation needs with their instructors.

**Support Services for Students**

There are offices on all three UofT campuses that work to facilitate the inclusion of students with disabilities into all aspects of university life. The focus is on skills development, especially in areas of self-advocacy and academic skills. Services are provided to students who have a physical, sensory, or learning disability, mental health disability, acquired brain injury or chronic health condition (e.g. epilepsy, cancer, bowel disease) as well as students who have temporary disabilities such as a broken arm.

The Service provides a wide range of support, including:

- Accommodation advice
- Assessments (e.g. learning disability, adaptive technology)
- adaptive equipment
- learning strategy support
- test and examination accommodations
- note taking services
- sign language interpreters; computer note-taking
- scribes; attendant care
- advice and information on disability issues
- liaison with university faculty and staff and off-campus agencies
- campus transportation

To access the Service, students make an appointment to meet with a Disability Advisor to discuss individual needs, appropriate accommodations, and strategies for academic success. There is a Bursary for Students with a Disability (BSWD) for students who have applied and established eligibility for OSAP. The BSWD assists student with disability related educational costs while attending post-secondary institutions. University alternate bursaries are also available for eligible students

### Career Centre Services

Koffler Student Services Centre, 214 College Street
(416) 978-8000; *www.careers.utoronto.ca*

The Career Centre is one of the places to include on your "must take advantage" of lists. As career educators on campus, the Centre has a team of professional career counsellors and support staff ready to assist, coach, guide, encourage, and counsel U of T students and recent graduates so that they can:

- Learn how to make career choices that are right for them
- Learn about careers and how to develop the kinds of work experience needed by employers

• Increase their job search and interview confidence

Typical career questions asked by Arts& Science students

• What can I do with my degree in ____?
• What careers are best suited to my interest/personality?
• What if I want to be my own boss?
• How do I know I will like the career I'm interested in?
• How do I get work experience?
• I want to pursue further education, what do I do?
• How do I stand out in the interview?
• How do I write an effective resume and cover letter?
• Where do I look for work?

Services available

• Career counselling and coaching for students who are undecided or unsure about their career future
• Assistance in career exploration and gaining work experience
• Extensive career planning and job search resources in the Career Library
• Job shadowing of career professionals through the Extern program
• Access to part-time, summer, volunteer jobs and full-time work for graduating students and recent graduates
• Resume critiques, practice interviews, and work search techniques assistance
• Employer supported industry panels, career fairs, mock interviews, podcasts and information sessions

Whatever your career needs, start at the Career Centre. Register with us to access the full range of programs and services: www.careers.utoronto.ca

## Counselling & Learning Skills Service

**Personal Counselling**

Personal Counsellors help students with a broad range of issues such as adjusting to university life, anxiety, depression, anxiety, relationship problems, sex and gender concerns, prolonged stress, and other personal difficulties. Attend a confidential initial consultation to determine what CALSS has to offer. Check our website or call for information about the daily walk-in times.

**Assault Counselling and Education**

Specialized counselling is provided to students who have experienced sexual assault, harassment, or physical or psychological abuse in a relationship. Call the Assault Counsellor directly at 416-978-0174 for an appointment. Workshops are also provided on healthy relationships and verbal self-defence skills for women.

**Learning Skills & Academic Success Centre**

Lectures, workshops and individual consultations are offered on the reading of course material; exam preparation; coping with writer's blocks & writing/exam anxiety; note taking; procrastination; motivation, concentration; memory strategies; time management; writing theses and comprehensive exams and other aspects of study.

Our Academic Success Centre (ASC) offers students the opportunity to walk-in for assistance in developing strategies for improving academic performance. Visit our website for walk-in hours, for information on booking individual appointments as well as dates and times of workshops and lectures. If your concerns involve academic difficulties then the learning skills program has many lectures on various aspects of study. Individual appointments for assistance with study problems can be arranged with our learning skills counsellors by calling CALSS reception. Check our website to see the variety of workshops are offered throughout the year.

CALSS web site: http://www.calss.utoronto.ca
CALSS Reception: 416-978-7970

## Family Care Office

Telephone: 416-978-0951
Fax: 416-978-3247
E-mail: family.care@utoronto.ca
Web: www.familycare.utoronto.ca

Many students balance family obligations with their studies. The University of Toronto is committed to fostering a family-friendly learning environment. The Family Care Office is a service that provides information, guidance, referrals, educational programming, and advocacy for the University of Toronto community. Our office embraces an inclusive definition of family, and can assist students who require information on child care (facilities, programs, or subsidies), elder care, and other family matters. Additional services include family events, discussion and support groups, such as our Student Parents Group, Fathers' Group, etc. We also offer many workshops including "Choosing Child Care that Works for Your Family" and "Financial Survival for Student Families". The Family Care Office maintains a resource centre containing practical material on family issues ranging from pregnancy and infant care to lesbian and gay parenting and caring for elderly family members. The resource centre also contains information for student families on activities and facilities on campus and in the community. Our services are free and confidential. Please contact us by phone, e-mail, or simply drop-in. The Family Care Office is located in the Koffler Student Services Centre mall, on the northwest corner of College and St. George. Our office hours are Monday to Friday from 9:00 a.m. to 5 p.m., and we are open late to 7:00 p.m. on Tuesday evenings.

## First Nations House: Office of Aboriginal Student Services and Programs

"Leadership, Spiritual Growth & Academic Excellence"

First Nations House is a home away from home for students of Aboriginal ancestry to seek culturally supportive programs and services. Founded in 1992, First Nations House has welcomed the entire university community to participate and learn about Aboriginal people and their culture.

The Aboriginal staff at First Nations House assist all students by covering a wide array of supportive services which include: academic/financial aid counselling, personal counselling, scholarships and grants, Elders teachings, cultural events, Writer-in-Residence, tutoring, and community information/referral services. Students can also use the computer lab, photocopier, fax machine, study areas, lounge, library, and kitchen. The Native Students Association is also located at First Nations House.

For more information, please contact:

First Nations House
University of Toronto
Borden Building North, 563 Spadina Avenue, 3rd floor

Toronto, Ontario M5S 2J7
416-978-8227
1-800-810-8069
Web: www.fnh.utoronto.ca
Email: fnh.info@utoronto.ca

## First-Year Initiative Program (FYI)

(416) 946-0147
214 College Street, Koffler Student Services Building
http://www.studentservices.utoronto.ca/fyi

The First-Year Initiative Program is your front door to Student Services. FYI helps first-year students make a smooth transition into university through teaching effective study and learning skills, and providing workshops designed for first-year students on a variety of career, personal and psychological, housing, parenting, health, international and Aboriginal issues. A personalized web site is available to first-year students and provides a number of resources as well as discussion forums.

## Health Service

Health Service offers U of T students the same services as a family doctor's office, and more. We provide confidential, student-centred health care including comprehensive medical care, travel education, immunization, counselling, and referrals. The multidisciplinary team includes family physicians, registered nurses, a health promotion coordinator, peer health educators, a community health coordinator and a lab technician.

Comprehensive sexual health care and counselling are available, and prescriptions and contraceptive products can be purchased at a reduced cost. Emergency contraception, pregnancy testing, pregnancy support as well as sexually transmitted infection testing, treatment, and education is also available. When you visit Health Service, bring your OHIP or UHIP card, or health card from another province, and your student card.

Health Service is located in the Koffler Student Services Centre at 214 College Street, Second Floor. To book an appointment, call 416-978-8030. Registered users can also book appointments online. If you feel you need to be seen more urgently, there is also a drop-in option. For hours and other information, please visit the Health Service Web site at www.utoronto.ca/health.

## International Student Centre

At the International Student Centre (ISC) all students are welcome to take part in social and cultural programs with an international focus, or just take a break from the pressures of busy studies. ISC also offers special services to international students: pre-arrival information (sent with the admission offer), reception service and orientation events, University Health Insurance Plan (UHIP) registration and information, English language program, Newsletter, personal counselling and advice on non-academic concerns. ISC's Work and Study Abroad resource office, provides general information on opportunties overseas.

Contact: ISC, 33 St. George Street, Toronto, Ontario, M5S 2E3
Telephone: 416-978-2564
Web site: www.isc.utoronto.ca

## The Office of LGBTQ Resources & Programs

The Office of LGBTQ Resources & Programs office works with students, staff and faculty to provide programs, services, training, resources and outreach on issues related to the LGBTQ population at the University of Toronto. The office develops initiatives and programming which support the lives of individuals at the University of Toronto who are lesbian, gay, bisexual, transgender or queer, or questioning their sexual orientation or gender identity. Our initiatives also focus on providing a positive learning and work environment for all that is free of discrimination and harassment. Any member of the University community is welcome to contact the office with concerns, complaints, issues or ideas. Services are provided confidentially to anyone experiencing a problem related to heterosexism or homophobia, or who has questions, educational needs or other related concerns.

Contact: Jude Tate, MSW
Coordinator, LGBTQ Resources & Programs
Email: j.tate@utoronto.ca
Phone: 416-946-5624
Suite 417, 21 Sussex Ave.
Toronto, Ontario M5S 1J6
www.utoronto.ca

## Office of the University Ombudsperson

As part of the University's commitment to ensuring that the rights of its individual members are protected, the University Ombudsperson investigates complaints from any member of the University not handled through regular University channels. The Ombudsperson offers advice and assistance and can recommend changes in academic or administrative procedures where this seems justified. In handling a complaint, the Ombudsperson has access to all relevant files and information and to all appropriate University officials. The Ombudsperson handles all matters in strict confidence, unless the individual involved approves otherwise. The Ombudsperson is independent of all administrative structures of the University and is accountable only to Governing Council.

The services of the office are available by appointment at all three UofT campuses (for an appointment, please telephone or e-mail us). For additional information, please visit our website at:

www.utoronto.ca/ombudsperson (please consult website for office location)
Telephone: 416-978-4874
E-mail: ombuds.person@utoronto.ca

## Psychiatric Service

The Psychiatric Service offers assessment and/or treatment for students with emotional and psychological concerns such as anxiety, depression, obsessions and compulsions, phobias, relationship difficulties, eating and body image issues, attention and/or concentration problems, problems with sleep, and substance abuse.

Clinical staff possess expertise in a wide variety of therapeutic methods including individual, couple, and group psychotherapy. This is a confidential service available to all full and part-time students who have paid their incidental fees and is fully covered by OHIP, other provincial insurance plans, or the University

Health Insurance Plan (UHIP).

The Psychiatric Service is located in the Koffler Student Services Centre at 214 College Street, Main Floor. No referral is necessary. To make an appointment, drop in or call 416-978-8070. For further information, visit our Web site at www.psychiatricservice.utoronto.ca.

## Sexual Harassment Office

Sexual harassment is unwanted sexual attention & includes any unwelcome pressure for sexual favours, or any offensive emphasis on the sex or sexual orientation of another person which creates an intimidating, hostile or offensive working or learning environment. The Sexual Harassment Office deals with complaints under the University's Policy & Procedures: Sexual Harassment. The policy covers complaints of harassment based on sex or sexual orientation, sets out a formal resolution procedure & provides for mediation, counselling & public education. Members of the University may also contact the office on an informal basis for information or assistance in resolving an issue.

Calls to the office, & the complaints procedure itself, are confidential.

You can contact the office just for advice or information: you are not committing yourself to any formal process.

Responsibilities of the Sexual Harassment Office include:

- providing information & advice to all parties regarding sexual harassment complaints;
- acting as a non-partisan mediator in complaints;
- providing referrals to other offices & resources when appropriate;
- initiating & conducting public education activities such as talks,workshops, & the distribution of resource materials.

3rd Floor, 40 Sussex Avenue
Telephone: (416) 978-3908, Fax Number: (416) 971-2289
Call to make an appointment.
Web Address: http://www.utoronto.ca/sho/

## Student Housing Service

Student Housing Service – Main Office
Koffler Student Services Centre
214 College Street
Toronto, ON M5T 2Z9
Tel.: 416-978-8045
Fax: 416-978-1616
E-mail: housing.services@utoronto.ca
Web: www.housing.utoronto.ca

Student Family Housing
Main Floor Admissions Office
35 Charles St. W.
Toronto, ON M4Y 1R6
Tel.: 416-978-8049
Fax: 426-946-5466
E-mail: family.housing@utoronto.ca
Web: www.housing.utoronto.ca

The University of Toronto Student Housing Service is a year-round source of up-to-date housing information for off-campus, single-student residence, and student family housing. Our online registry of off-campus housing is available to U of T students, providing listings for both individual and shared accommodations. Students interested in learning more about their housing options are encouraged to contact the Student Housing Service or visit www.housing.utoronto.ca.

### Residence

First year Arts & Science students apply for residence by indicating their interest in residence on their application for admission. Do not wait until you have been admitted to apply for residence. For more information on University of Toronto residences visit our housing website at www.housing.utoronto.ca .

### The Guarantee

For the 2008-2009 school year, a residence offer will be guaranteed for all full-time students entering their first year of university in an undergraduate program, whether they live outside or inside Toronto, provided they are offered admission by July 1st, and indicated their interest in residence on their application for admission.

If you wish to be considered for residence, but did not indicate your interest on the application form, and have not yet been accepted to the University, contact the Admissions and Awards office as soon as possible - do not wait until you have been admitted. If you have received your admission to the University, but did not indicate that you were interested in residence on your application form, contact the Manager, Residence Communications at res.communications@utoronto.ca or 416.978.8027. The University does not guarantee an offer of residence to students who did not indicate an interest in residence until after they were admitted to U of T, or to those who are new to U of T but with previous university experience, such as transfer students. However, if non-guaranteed students indicate an interest in residence, residence information and application procedures will be sent to them. The University will offer residence to this group of new students only once all students with the guarantee of residence have been accommodated.

### Off-Campus Housing

The Student Housing Service maintains a registry of available off-campus housing advertised by private landlords, and by students seeking others to room with them. The registry of housing ads is available to students in the Housing office, as well as on the web. Students search the ads in the registry as they would the classifieds section of a newspaper, and make appointments to view potential units. Students coming to Toronto from outside the area should arrange to stay in temporary housing while conducting their housing search. The Student Housing Service will provide a list of temporary accommodations on request.

Housing in Toronto is usually advertised four to six weeks in advance of the date the unit becomes available for occupancy. If you will be looking for rental housing off-campus, please note that it generally takes one to three weeks to locate suitable accommodation, depending on the type of housing desired and one's budget. At the Student Housing Service, phones are provided free of charge for students to contact landlords. Since the accommodations listed are not inspected, the quality cannot be estimated or guaranteed therefore it is very important for students to meet with the landlord and inspect the premises

before entering into any rental agreement.

**Student Family Housing**

Student Family Housing is available in 713 apartments on the St. George campus. Priority for these unfurnished apartments is given to student families. The term "family" refers to students residing with their dependent children and to childless couples in a permanent relationship.

While many students can be housed within 9 to 18 months of their application, this is only an average and depends on many variables, the most important of which is the supply of vacant apartments in any given month. However, if you are able to move with less than two months' notice, then the waiting period can be significantly shorter. It is advisable to apply as soon as you are seriously considering attending the University – if possible before being given an offer of admission to the University. For more information, or to apply, contact the Student Family Housing offices or visit the web site.

**Cost of Student Housing - Residence, Family Housing, and Off-Campus**

As a guideline, in the 2007/2008 school term, the cost of residence with a full meal plan was approximately $7500 to $12,800 for the eight-month academic session. The cost of a shared apartment-style residence with no compulsory meal plan was approximately $5,500 to $5904. Please note, however, that residence fees for the upcoming school year are expected to rise. After paying an initial deposit, the balance of fees is usually paid in two instalments at the beginning of each of the four-month fall and spring terms.

As of September 1, 2007, rent for the bachelor, one- and two-bedroom units located in the Student Family Housing complex range from $598 to $981 depending on the size of the unit, and is payable monthly.

Students looking for rooms in shared houses or apartments off-campus should expect to budget $400 to $600 per month. A student requiring a private apartment off-campus usually pays $600 to $750, $750 to $900, or $900 to $1300 for a bachelor, one-bedroom, or two-bedroom unit respectively. A three-bedroom house or apartment will usually rent for $1300 to $1800.

## Study Abroad and Student Exchange

**The International Student Exchange Office (ISXO)**

**The World Could Be Yours!**

Arts & Science students in all departments are encouraged to participate in the international and Canadian study abroad opportunities offered through the International Student Exchange Office. These exchanges allow you to experience new cultures and languages in an academic setting while earning credits towards your U of T degree. Exchanges may be for one term or a full year or summer, and most are open to both undergraduate and graduate students..

**Cost:** The cost of an exchange includes your U of T tuition plus incidental fees, along with the cost of living and studying abroad. While on exchange, you are still eligible to receive government assistance such as OSAP. There are also many specific scholarships and bursaries run by various U of T offices, and the ISXO itself administers a needs-based bursary program; for exchange students who qualify, this bursary will usually cover at least the cost of airfare.

**Eligibility:** In general, undergraduate or graduate U of T students who have completed at least one year of full-time studies, with a minimum CGPA of 2.25, are eligible to apply. You must also achieve a minimum annual GPA of 2.5 for the year during which you apply. A few exchange programs do have higher GPA cutoffs, and others have special language requirements.

**Destinations:** Arts & Science students may choose from over 135 universities in the following locations: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, India, Ireland, Israel, Italy, Japan, Kenya, Korea (South), Mexico, Netherlands, New Zealand, Norway, Poland, Scotland, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, United States, Wales and the West Indies. Please check our website for an up-to-date list of listing of our exchange partners.

**Application:** Applications for most programs are due late February, but you should always check the ISXO website regarding the specific exchanges that interest you.

For more information, please contact the ISXO:

Koffler Student Services Centre
214 College Street, Room 202
www.utoronto.ca/student.exchange/
student.exchange@utoronto.ca
Telephone: 416-946-3138

## Summer Abroad Program

**Where will you be next summer?**

Prepare yourself for a future in the global village by participating in one of the highly rated Faculty of Arts & Science Summer Abroad programs. These programs are designed to enrich students' academic lives by providing an exciting and educational international experience.

**Locations:** Administered through Woodsworth College, the 2008 programs are offered in:

- Australia (Sydney)
- Central Europe (based in the Czech Republic)
- China (Hong Kong)
- England (Oxford)
- Ecuador (Amazon & Galapagos)
- France (Tours)
- Germany (Berlin)
- Italy (Siena)
- Japan (Tokyo)
- Jordan (Madaba)
- Kenya (Nairobi, Masai Mara, Mombasa)
- Mexico (Guadalajara)
- Russia (Moscow)

Check the Summer Abroad web site in the fall to see the 2009 program list!

**Courses:** Students take specially designed University of Toronto undergraduate degree credit courses, relevant to the location, for a period of 4 to 6 weeks. The courses have field trips that complement and highlight the academic materials. Courses are taught predominantly by University of Toronto

professors and, with the exception of language courses, are offered in English. Typically, full-year second and third year courses are offered in disciplines such as history, political science, management, literature, architecture, fine art, religion, and languages. Most courses do not have pre-requisites.

All Summer Abroad courses and grades show on students' transcripts as regular U of T credits and are calculated into their CGPA.

**Application:** All University of Toronto students in good standing are eligible to apply. Students from other universities are also welcome to apply.

Applications are available in early January. The application deadline for most programs is March 1, but spaces in some programs fill up well in advance. Late applications will be accepted if space and time permit.

Financial aid is available for most programs. The application deadline for awards offered through Woodsworth College is February 1.

For further information please contact:

Professional & International Programs
Woodsworth College
119 St. George Street, 3rd Floor
Phone: 416-978-8713
E-mail: summer.abroad@utoronto.ca
Web: www.summeraboad.utoronto.ca

## Professional Experience Year

The Professional Experience Year (PEY) provides students an opportunity to gain work experience in fields related to their programs of study. Full-time students with a CGPA of at least 2.0, with a minimum of 10.0, and a maximum of 15.0 full course equivalents, may apply to spend a twelve-to- sixteen-month period working in a related industry. This internship period normally occurs after second year for students completing a B.A./B.Sc., or after second or third year for students enrolled in an Hon. B.A./Hon. B.Sc. The 12 to 16-month period of employment, normally beginning in May, gives students the opportunity to become fully acquainted with the work environment. PEY students are often involved in challenging work projects from inception to completion, and are paid at competitive workforce salaries. They gain new insights into their academic and professional goals and return to their studies with a greater understanding of their discipline from a practical, hands-on perspective.

Students pay a one-time-only registration fee at the time of application. If a position is accepted, a placement fee will be required from the student at the time of fall registration, no later than the first Friday after classes begin in September. Incidental fees granting part-time student status and allowing continued access to University facilities and services are also required at fall registration. The PEY Program strives to provide opportunities for all students registered in it, but cannot guarantee employment. For further information, contact the PEY Office at 416-978- 6649 or visit www.peyonline.com.

## Co-op Japan Program

The Co-op Japan Program is a Canadian university/college based, international co-op/internship program linking some of the best engineering, science, business and arts discipline undergraduate students from across the country with highly committed Japanese businesses. The Co-op Japan Program formally integrates an undergraduate student's Canadian academic studies with valuable work experience in a Japanese company. The program is open to universities and colleges nationally and is currently administered from The University of British Columbia.

The Co-op Japan Program's mandate is to provide Canadian undergraduate students with career-related work experience within a Japanese company during their undergraduate curriculum and at the same time to provide Japanese companies with the opportunity to employ highly capable and motivated Canadian undergraduate students.

For more information check the website at www.thecoopjapanprogram.com.

## Student Unions and Associations

### The Arts and Science Students' Union (ASSU)

The Arts and Science Students' Union (ASSU) represents over 20,000 full-time undergraduates in the Faculty of Arts and Science on the St. George Campus. ASSU is an umbrella organization with 40 student Course Unions. Getting involved with a Course Union is the best way to be directly involved in your education and it's an excellent way to meet other students in your discipline. Annually, ASSU publishes student evaluations of courses and instructors in the ANTI-CALENDAR, which is free to all students. Other services include past final exams, lockers, photocopying, faxing and pop. Also, if you have any problems with your courses or instructors go to the ASSU office and discuss your options in complete confidence. ASSU is in Room 1068 Sidney Smith Hall; telephone 416-978-4903.

E-mail: students.assu@utoronto.ca
Web site: assu.ca

### The Association of Part-Time Undergraduate Students (APUS)

All part-time undergraduate students at the University of Toronto are members of APUS. The role of the Association is to ensure its members have access to a broad range of services, programs and resources within the University. This is achieved by representing part-time students throughout the decision-making process of the University, and of governments, as well as by acting as a voice for the concerns of its members. APUS also offers a number of scholarships and bursaries to part-time students throughout the year, and services such as final exams and photocopying. The APUS office, in Room 1089 of Sidney Smith Hall, is open days and evenings during the summer and winter sessions. For further information telephone 416-978-3993.

## Jack McClelland Writer-in-Residence

Each year the University appoints a well-known Canadian writer to work with students, faculty and staff interested in creative writing. For further information, contact the Department of English, 416-978-3190.

## Awards

For students with particularly noteworthy academic results, there are three specific forms of recognition:

### Recognition of Exceptional Academic Achievement: "Dean's List"

This designation is given to degree students in the Faculty having a Cumulative Grade Point Average of 3.50 or higher, at the end of the Fall-winter or Summer Session in which the fifth, tenth, fifteenth and twentieth course, offered by the Faculty and taken for credit, has been passed.

The Dean of the Faculty sends a signed certificate to each student. There is no monetary value. Students who satisfy these criteria but do not receive the certificate at the end of the appropriate session should write to the Faculty Registrar, Faculty of Arts and Science, Sidney Smith Hall, 100 St. George St., Toronto ON, M5S 3G3. Dean's List certificates are not issued at the end of the Fall Session.

### Recognition of Exceptional Academic Achievement: "High Distinction" and "Distinction"

Students who graduate with a Cumulative GPA* of 3.50 or above are described as graduates "With High Distinction". This achievement is noted on the diploma and transcript.

Students who graduate with a Cumulative GPA* of 3.20 to 3.49 are described as graduates "With Distinction". This achievement is noted on the diploma and transcript.

* Note: the Cumulative GPA must be based on at least 5.0 credits taken in the Faculty and used for degree credit.

### Faculty Scholarships

The Faculty offers many academically-based scholarships and other awards to exceptional degree students. Full details of these scholarships are available on the Faculty web site at www.artsci.utoronto.ca/current/undergraduate.

## Faculty of Arts & Science Language Citation Program

The University of Toronto is an ideal place for students to pursue the advanced study of languages. Our students live in a country that promotes multiculturalism, and our university is located in one of the world's most diverse cities. We offer significant language opportunities in both ancient and modern languages. We also offer a variety of international academic programs and the number of such programs will expand. As our students seek further international study, work opportunities, and post-graduate study, they may be assisted by a notation on their academic record of language proficiency.

The Language Citation in the Faculty of Arts & Science is official recognition on a student's transcript that the student has progressed to an advanced level in the study of a language, and has been assessed as achieving "good" results in that study. In particular, to achieve the Language Citation, a student must complete two full courses or their equivalent beyond the first-year level of language instruction, and must achieve at least a B- in each of the courses beyond the introductory level. The two full-course equivalents may be language instruction or may be those taught in the language to be assessed.

The Language Citation will consist of a notation on the transcript that reads: "Completed Requirements of Language Citation in [name of language]." This will appear in the Arts & Science sessional segment of the student's academic record on the transcript describing the courses and marks for the session in which the Citation is assessed as complete.

Note that Language Citation is not a "program of study" or Subject Post, and will not satisfy the degree requirement that specifies the minimum programs of study to qualify for the degree. The Citation may be of interest to those who are completing programs involving language study, but it may also be of interest to those whose program interests lie elsewhere, but wish to have achievement in a language noted on their academic record.

The Language Citation will be available to students beginning with the graduating class of 2007. Students who have already graduated may be eligible if they return for further language study that contributes to the assessment of the Citation. The Citation will not be assessed for students who have completed their studies and have not re-enrolled.

To be assessed for the Language Citation, students should contact the department or program that will be assessing the language for the Citation. They should present a copy of their academic record, and indicate which courses they would like considered for the assessment. If students already have proficiency in a language and wish to move directly to courses beyond the introductory level, they should consult the relevant department about appropriate placement. Also, students wishing to include courses taken in the country where the language is spoken should consult the relevant department about appropriate study abroad options.

The Citation can be earned in any language, modern or ancient, which provides sufficient advanced training at the University of Toronto, provided the unit offering the instruction participates in the Citation. Courses taken at the University of Toronto Mississauga or University of Toronto Scarborough may also be eligible for assessment for Arts & Science students.

The list below identifies the departments which participate in the Lanaguage Citation program. For details, including the languages in which students may achieve a Citation, see the departmental entries in this Calendar.

Aboriginal Studies (page 49)
Classics (page 99)
East Asian Studies (page 127)
French (page 183)
Germanic Languages & Literatures (page 210)
Italian Studies (page 245)
Near & Middle Eastern Civilizations (page 342)
Portuguese (page 400)
Slavic Languages & Literatures (page 425)
Spanish (page 445)

## First-Year Learning Communities

The First-Year Learning Communities (FLCs) program in the Faculty of Arts and Science is designed to improve the transitional experience for first-year students. Now in its third year, the FLC program offers FLCs in five broad areas of study: commerce, computer science, economics, life science, and two themed areas sponsored by the Department of Philosophy: "History of Ideas" and "Ethics & Society."

FLCs (pronounced "flicks") provide first-year students with the opportunity to meet classmates, develop friendships, form study groups, and develop academic and personal skills, as well as introduce you to the resources, opportunities, culture, and treasures of the campus and its surrounding community.

The 24 students in each FLC, who will be enrolled in the same core courses, will meet regularly outside of class time for useful and fun activities. Each FLC group is facilitated by an upper-year student Peer Mentor and an Assistant Peer Mentor, under the guidance of a Staff Advisor (from the college, department, or program) and a Faculty Advisor; these four individuals are the FLC Team. The content of FLC meetings will address three broad transition areas: academic, developmental, and social. Training in facilitation and programming for the Peer Mentors and advisors will be provided by FLC Program staff and the Office of Student Affairs. Each FLC group will have a modest budget to assist with planning recreational and social activities.

Some of the interesting and fun topics that may be covered in FLC meetings include: time management, study strategies, campus traditions and history, mastering tests and exams, choosing a program of study, and career explorations. There will also be recreational and social activities, and much more!

You can find more detailed information about the "flick" program on the FLC web site: www.flc.utoronto.ca.

Contact:

Heidi Pepper
FLC Program Coordinator
heidi.pepper@utoronto.ca
416.978.5471

Corey Goldman
FLC Program Director
corey.goldman@utoronto.ca
416.978.7163

# Degree Requirements

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UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

# Degree Requirements

Students completing a second Faculty of Arts & Science degree: please see "Second Degree Requirements" below.

In the requirements below the word "course" means one full course equivalent—a "full course" or two "half-courses"; in the Programs and Courses section, "full courses" are listed as Y1 courses, and "half-courses" are listed as H1 courses.

## Honours Bachelor of Arts/Honours Bachelor of Science

### General Degree Requirements

**Please note: in the requirements below the word "course" means one full-course equivalent.**

To qualify for an Honours Bachelor of Arts (Hon.B.A.) or Honours Bachelor of Science (Hon. B.Sc.), you must:

(a) Obtain standing (i.e., receive 50% or more) in at least 20 courses that meet the following criteria:
1. No more than six courses may be 100-series.
2. At least six courses must be 300+series courses (no more than one 300+series transfer credit may be counted towards these six).
3. No more than fifteen courses may have the same three-letter designator ("AST", "ENG", etc.).

(b) Complete one of the following program requirements
One specialist program (which includes at least one course at the 400-level)
or
Two major programs, which **must include at least 12 different courses**
or
One major and two minor programs, which **must include at least 12 different courses**
or
Students registered in the Faculty before the 2000-2001 session may also complete three minor programs, which must include 12 different courses; this option is discontinued for students registering for the first time in 2000-2001 and thereafter.
Note: whether you receive an Hon. B.A. or an Hon. B.Sc. depends on the program(s) you complete; see Program Requirements, below.

(c) Complete the Distribution Requirement (see page 26).

(d) Obtain a Cumulative GPA of 1.85 or more by the time of graduation. Students who meet all the requirements for the Hon.B.A./Hon.B.Sc. except for the GPA requirement may elect to graduate with a B.A./B.Sc. degree provided they are In Good Standing (i.e., CGPA is 1.50 or more).

### Bachelor of Arts/Bachelor of Science

Effective for all students registered for the first time in a degree program in the Faculty of Arts & Science for the summer 2001 session and thereafter, the St. George Campus of the Faculty has discontinued the 15 course (three-year) B.A. and B.Sc. degrees. Students registered in a degree program in the Faculty before Summer 2001 may still choose a 15-course (three-year) degree; these students should consult their college registrar's office.

Students with a B.A. or B.Sc. who return to upgrade that degree to an Hon. B.A. or Hon. B.Sc. must exchange the B.A. or B.Sc. for an Honours degree. A B.A. leads only to an Hon. B.A.; a B.A. CANNOT be upgraded to an Hon. B.Sc., and a B.Sc. CANNOT be upgraded to an Hon. B.A. Students who upgrade to an Honours degree are not eligible to attend the convocation ceremony for the upgrade.

Different degree regulations apply to students who first registered in the Faculty before Winter Session 1992; these students should consult their College Registrar.

### Graduation

Students who expect to graduate at the end of a given session must use the Student Web Service or notify their College Registrars in writing to make their degree requests by the dates specified in the *Calendar*. Prospective graduands should receive the following documents from the University:

1. a Program of Study Assessment form (late April/early October) from the program sponsor;
2. a letter from the Office of Convocation providing details of the convocation ceremony (late March/mid-October);
3. a Statement of Results (or letter for non-registered students) from the Office of the Faculty Registrar confirming degree eligibility (early June/late October).

## "Second Degree" Requirements

Students must petition through their college by June 30 to begin a second degree. Before applying, students are urged to determine whether a second degree is actually required for their purposes; for example, a "make-up" year as a non-degree student may satisfy admission requirements for graduate school. Students are governed by the rules of the Faculty in place at the time they commence their second degree. Students who already hold a degree from the Faculty of Arts & Science, the University of Toronto Scarborough or the University of Toronto Mississauga may complete a second degree only of an alternate type (i.e. if a student has a B.A. degree then he/she may not complete a second B.A. degree). The Faculty normally exempts students from the first year of the degree requirements (five (5.0) credits: four 100-level and one 200-level), regardless of the number of previous degrees held. Second degree candidates may not repeat courses taken in a previous degree; they may however, count such courses towards satisfying pre-requisite and program requirements, on approval of the department/programs office concerned. A new Grade Point average will commence with the second degree courses.

## Program Requirements

Completion of a program of study (also known as a subject POSt) is only one part of the general degree requirements. Variations made in program details for individual students do not in any way affect degree requirements.

**Meaning of "Program"**

Programs are groupings of courses in one or more disciplines; these groupings are listed with each college or department entry in the "Programs and Courses" section of this *Calendar*.

Types of programs are:

Specialist Program: a sequence of between 9 and 17.5 courses* in one or more disciplines. Specialist programs must include at least four 300+series courses, one of which must be a 400-series course.

Major Program: a sequence of between 6 and 8 courses* in one or more disciplines. Major programs must include at least two 300+series courses.

Minor Program: a sequence of 4 courses* in one or more disciplines. Minor programs must include at least one 300+series course.

**PLEASE NOTE**

**Courses may have prerequisites not listed in the program but which must be taken. Programs which list optional courses do not necessarily list prerequisites. Students are responsible for fulfilling prerequisites; students enroled in courses for which they do not have the published prerequisites may have their registration in those courses cancelled at any time without warning.**

**Program Requirements**

1. You must enrol in at least one and no more than three subject POSts (of which only two can be majors or specialists), in the session in which you pass your fourth course (see the *Registration Handbook and Timetable* for details). Students admitted with transfer credit for four courses or more must do this immediately upon admission.)
2. You must meet any enrolment requirements for a program as stated in the *Calendar*. If you do not meet these requirements, you may be removed from the subject POSts.
3. The subject POSts(s) you complete determine whether you receive a science or an arts degree upon graduation. In the "Programs and Courses" section, each program indicates the type of degree to which it leads. For example, in the English section, the English Specialist listing is followed by "Arts program"; the Geology Major is followed by "Science program", etc.

   To receive an Hon. B.Sc., for example:

   One Specialist in a science area leads to an Hon. B.Sc.;

   One Major in a science area plus one Major in an arts. area leads to either an Hon. B.Sc. or an Hon.B.A. - your choice (**two Majors must include at least 12 different courses**);

   In combinations of one Major and two Minors, at least one Major, or both the Minors, must be in the Science area for an Honours Bachelor of Science (**combinations must include at least 12 different courses**).

### Note:

In biological and science programs there may be occasions when scientific observations are made by students on themselves or on fellow students. These include common diagnostic or immunization procedures. Unless a valid reason exists, students are expected to participate in such exercises. If any investigative work involving student participation does not form part of the program, participation is voluntary.

### Self-Designed Programs

Students may design their own Programs, which must be substantially different from any Program in this *Calendar*. Such a Program, if formally adopted by the student's College on the basis of its academic rigour and coherence, and if approved by the Committee on Academic Standards, will be accepted as fulfilling the degree requirement for certification in a Program (transcripts indicate only "Completed Self-designed Programs approved by 'X' College"). Since the approval process is necessarily a long one, students following this alternative must discuss this process with their College Registrar immediately after completion of the fourth course in the Faculty.

## Bachelor of Commerce (B.Com.) Degree Requirements

For the complete Commerce degree, program and course listing, see page 26.

## Bachelor of Commerce (B.Com.) Degree Requirements

This is a four-year Honours program.

To qualify for a Bachelor of Commerce degree, a student must:

(a) Complete twenty full-course equivalents, including no more than six 100-series courses;
(b) Complete one of the Specialist programs - Management, Finance and Economics, or Accounting;
(c) Complete the Faculty Distribution Requirement for B.Com. students (see below);
(d) Complete ten full course equivalents from Management (RSM/MGT/COM) and ten full course equivalents from disciplines outside of RSM/MGT/COM which include Economics (ECO) and other Arts & Science courses.
(e) Obtain standing (i.e., complete with a grade of 50% or more) in at least six 300- or 400-series courses, including at least one 400-series course. No more than one 300+series transfer credit may be counted towards these six. (Students participating in an approved exchange program may count all 300+ transfer credits from the exchange towards the required six.)
(f) Achieve a cumulative GPA of 1.85 or more by the time of graduation.

### Graduation

Students who expect to graduate at the end of a given session must use the Student Web Service or notify their College Registrars in writing to make their degree requests by the dates specified in the Calendar. Prospective graduands should receive the following documents from the University:

1. a Program of Study Assessment form (late April/late August) from the program sponsor;
2. a letter from the Office of Convocation providing details of the convocation ceremony (late March/mid-October);
3. a Statement of Results (or letter for non-registered students) from the Office of the Faculty Registrar confirming degree eligibility (early June/early September).

### Faculty Distribution Requirement for B.Com. Students

Faculty Distribution Requirement for B.Com. Students

As part of the degree requirements for the B.Com., STUDENTS MUST COMPLETE ONE FULL COURSE EQUIVALENT IN EACH OF THE HUMANITIES, THE SOCIAL SCIENCES AND THE SCIENCES AREAS as defined below:

1. ONE full course equivalent must be from the Humanities (see page 26).
2. ONE full course equivalent must be from the Social Sciences (MGT/RSM courses may be used to meet this requirement with the exception of MGT120H1/MGT201H1, COM110H1, and RSM100Y which have NO Distribution Requirement status; see page 26).
3. ONE full course equivalent must be from the Sciences (see page 26), with the following exceptions: all 100-series courses in CSC, MAT, STA; STA250H1, STA255H1, STA257H1, STA352Y1.
4. NOTE: transfer students from University of Toronto Mississauga or Scarborough must meet the St. George B.Com. Distribution Requirement.

# Degree Requirements

## The Distribution Requirement

On the St. George Campus Arts & Science courses fall into three areas:

Humanities
Social Science
Sciences

To qualify for any degree you must complete at least one full course equivalent in each of these three areas, for a total of 3.0 full course equivalents.

Courses that you take as part of your Specialist, Major or Minor programs may also be used to count towards the Distribution Requirement.

To help you understand the Distribution Requirement, there is a sample student course enrolment on next page.

The courses in these three areas are as follows:

### Humanities

Courses with the three-letter designators below are Humanities courses. (In addition, other designators have courses in more than one area; these designators are listed on the next page.)

Architecture (ARC course designators)
Art History (FAH course designators)
Classics (CLA course designators)
Drama (DRM course designators)
East Asian Studies (EAS course designators)
English (ENG course designators)
Estonian (EST course designators)
Finnish (FIN course designators)
French (FCS, FRE, FSL course designators)
German (GER course designators)
Greek (GRK course designators)
History (HIS course designators); except HIS 103Y1
Humanities First-Year Seminars (HUM199 course designators)
Hungarian (HUN course designators)
Italian (ITA course designators)
Latin (LAT course designators)
Music (MUS, HMU, TMU course designators)
Near & Middle Eastern Civilizations (NMC and NML course designators)
Philosophy (PHL course designators), except PHL245H1, which has NO Distribution Requirement status)
Portuguese (PRT course designators)
St. Michael's College Courses (SMC course designators)
Slavic Languages & Literatures (SLA course designators)
Spanish (SPA course designators)
Visual Studies (VIS course designators; listed with Art)

### Social Science

Courses with the three-letter designators below are Social Science courses. (In addition, other designators have courses in more than one area; these designators are listed on the next page.)

Archaeology (ARH course designators)
Economics (ECO course designators)
Mathematics: MAT 123H, 124H and 133Y are Social Science courses; ALL other MAT are Science courses
Management (MGT/RSM course designators), except COM110H1, MGT120H1, MGT201H1, and RSM100Y1, which have NO Distribution Requirement status)
Political Science (POL course designators)
Sociology (SOC course designators)
Social Science First Year Seminars (SSC 199 course designators)
Woodsworth College (WDW course designators)

### Science

Courses with the three-letter designators below are SCIENCE courses. (In addition, other designators have courses in more than one area; these designators are listed on the next page.) Some restrictions in the applicability of 100-series Science courses apply to B.Com. students; see the Commerce Programs listing starting on page 40 of this *Calendar* for more information.

Actuarial Science (ACT course designators)
Anatomy (ANA course designators)
Applied Mathematics (APM course designators; listed with Mathematics)
Astronomy (AST course designators)
Biochemistry (BCB, BCH course designators)
Biology (BIO course designators); except JBS 229H1
Cell & Systems Biology (CSB course designators)
Chemistry (CHM course designators)
Computer Science (CSC course designators)
Ecology & Evolutionary Biology (EEB course designators)
Geology (GLG course designators)
Human Biology (HMB course designators); all HMB courses except HMB303H1, HAJ453H1, and HMB498Y1, which are both Science and Social Science courses
Immunology (IMM course designators)
Laboratory Medicine & Pathobiology (LMP course designators)
Mathematics (MAT course designators); all Mathematics courses except 123H, 124H, 133Y1, which are Social Science courses)
Materials Science (MSE course designators)
Molecular Genetics & Microbiology (MGY course designators)
Nutritional Sciences (NFS course designators)
Pharmacology (PCL course designators)
Pharmaceutical Chemistry (PHC course designators)
Physical Education & Health (PHE course designators)
Physics (PHY course designators)
Planetary Science (PLN course designators)
Physiology (PSL course designators)
Psychology (PSY course designators)
Science First-Year Seminars (SCI199 course designators)
Statistics (STA course designators); all STA courses except 220H, 221H,250H, 255H, 257H, JBS 229H which have NO Distribution Requirement status)

### Courses Which Can Fall in More than One of the Three Areas

To find which area each course is in, check the individual course descriptions:

- Aboriginal Studies (ABS course designators)
- Anthropology (ANT course designators)
- Asia-Pacific Studies (ASI course designators)
- Diaspora & Transnational Studies (DTS course designators)
- Environment (ENV course designators)
- European Studies (EUR course designators)
- Geography (GGR course designators)
- History & Philosophy of Science and Technology (HPS course designators)
- Innis College (INI course designators)
- Interdisciplinary First Year Seminars) (INX199H1/Y1 course designators)
- Joint courses (JXX course designators)
- Latin American Studies (LAS course designators)
- Linguistics (LIN course designators)
- National University of Singapore (NUS course designators; see entries for Chemistry and Life Science: Ecology & Evolutionary Biology for details)
- New College (NEW course designators)
- Religion (RLG course designators)
- Trinity College (TRN course designators)
- University College (UNI course designators)
- Victoria College (VIC course designators)
- Women and Gender Studies (WGS course designators)

### Sample Student Course Enrolment Allowing for Distribution Requirements

Sokit wants to do a major in political science and a major in anthropology. She needs ANT 100Y1 for the first year of an anthropology major and POL 103Y1 or 105Y1 or 108Y1 for the first year of the political science major. She is also interested in sociology, so chooses SOC 101Y1.

The ANT, POL, and SOC courses are in Social Sciences, so they fulfill that part of the Distribution Requirement. She needs the following to fulfill the rest of her Distribution Requirement:

- One course from Humanities
- One course from Sciences

Sokit thinks that a History course would be a useful complement to her Political Science interest; at the same time it will fulfill the Humanities Distribution Requirement, so she enrols in HIS 104Y1: Ten Days that Shook the World.

To fulfill the Science Distribution Requirement she chooses ENV 200Y1: Science and the Environment.

Sokit's first year courses (and their respective Distribution Requirement areas) are thus as follows:

| | |
|---|---|
| ANT 100Y1 | Introduction to Anthropology (Social Science) |
| ENV 200Y1 | Assessing Global Change (Sciences) |
| HIS 104Y1 | Ten Days that Shook the World (Humanities) |
| POL 105Y1 | Ethics & the Public Sphere (Social Science) |
| SOC 101Y1 | Introduction to Sociology (Social Science) |

Sokit's course choices fulfill the first year course requirements for the programs she wants to pursue; they also fulfill all three Distribution Requirements, giving her lots of flexibility in future years.

### Humanities Courses for Science and Social Science Students

These courses are especially designed for science and social science students to fulfill the Humanities Distribution Requirement; none of them has Grade 12 prerequisites.

**CLA201H1 Latin & Greek in Scientific Terminology [39L]**
The study of technical and scientific terms derived from Latin and Greek: word elements, formation, analysis. The course is designed to give students in any field of specialization a better grasp of the derivation and basic meaning of English words derived from Latin and Greek elements.

**CLA203H1 Science in Antiquity [39L]**
The first scientific traditions in the classical Mediterranean and the Near East, with emphasis on Greek science. Discussions of early physical science, biology, mathematics, and astronomy, and their place in ancient life and thought, based on primary sources in translation. Designed for students in both the sciences and humanities.

**CLA204H1 Introduction to Classical Mythology [39L]**
A survey of the myths and legends of ancient Greece (and their extension to Rome) with some consideration of their role in ancient and modern literature and art.
Exclusion: CLA205Y1

**CLA206H1 Ancient Astronomy [39L]**
The rise, development, and practical applications of the study of the heavens in Mesopotamia, Egypt, and the Greco-Roman world.

**FCS195H1 French Culture from Napoléon to Astérix [26S]**
A multi-media course, analyzing the contributions the French have made to world culture in such domains as architecture, art, literature, and music, as well as some of the implications of the appropriation of French cultural icons by big business and the media.

**FCS298H1 French Culture and Asia [26S]**
From the arrival, in the 17th century, of magnificent porcelain from the East to the borrowings of contemporary fashion designers, French culture has been exposed to Asian influences which have become part of the national fabric. This course explores some of these manifestations in literature, film and the arts.

**HPS100H1 Introduction to History and Philosophy of Science [26L, 13T]**
An investigation of some pivotal periods in the history of science with an emphasis on the influences of philosophy on the scientists of the period, and the philosophical and social implications of the scientific knowledge, theory and methodology that emerged.
This counts as a Humanities or Science course

**HPS201H1 Origins of Western Technology [26L, 13T]**
Technology and its place in our culture from Antiquity to the beginnings of the Industrial Revolution. Relations between technology and science, religion, the arts, social institutions, and political beliefs.
This is a Humanities course

**HPS202H1 Technology in the Modern World [26L, 13T]**
A survey of technical change and its social implications from the Industrial Revolution to the present.
Recommended preparation: HPS201H1
This is a Humanities course

**HPS210H1 Scientific Revolutions I (formerly HPS200Y1) [26L, 13T]**
Case studies in the history of science from antiquity to 1800, including the revolutionary work of Copernicus, Kepler, Galileo, Descartes, Newton, Linnaeus, Lavoisier, and Herschel. The course

is designed to be accessible to science students and non-scientists alike.
This counts as a Humanities or Science course
Exclusion: HPS200Y1

**HPS211H1 Scientific Revolutions II (formerly HPS200Y1) [26L, 13T]**
Case studies in the history of science from 1800 to 2000, including Volta, Lyell, Darwin, Mendel, Einstein, Schrödinger, Watson, and Crick. The course is designed to be accessible to science students and non-scientists alike.
This counts as a Humanities or Science course
Exclusion: HPS200Y1

**HPS250H1 Introductory Philosophy of Science [26L, 13T]**
This course introduces and explores central issues in the philosophy of science, including scientific inference, method, and explanation. Topics may include underdetermination, realism and empiricism, and laws of nature.
This is a Humanities course

**HUM199H1 First Year Seminar**

**HUM199Y1 First Year Seminar**
The Faculty offers several different sections of HUM 199H1/Y1, open only to students newly-admitted to the St. George campus of the Faculty. Check the A&S web site at www.artsci.utoronto.ca/current/undergraduate/course for detailed course descriptions.

**JEF100Y1 The Western Tradition [78L]**
An introduction to literature through major works of the Western literary tradition. What constitutes a literary "classic"? How have the great concerns of the Western tradition - human nature, its place in society, its mythmaking, its destiny - been represented in literature? These and other questions are examined by reference to 11-12 works, from ancient times to the twentieth century, by such authors as Homer, Sophocles, Ovid, Virgil, Dante, Shakespeare, Cervantes, Molière, Austen, Dostoevski, Kafka, Camus, Beckett and Márquez. (A joint course offered by the Departments of English and French; see also JEF 100Y1 in the French program listings.)

## Science Courses for Humanities & Social Science Students

These courses are especially designed for humanities and social science students to fulfill the Science Distribution Requirement; none of them has OAC/Grade 12 prerequisites.

**AST101H1 The Sun and Its Neighbours [26L]**
Our place in the Universe. Phenomena we see in the sky. What we know about the Sun, the planets and comets, and the formation of the solar system - and how we know it. What makes planets suitable for life. Finding out about the nearest stars and their planets.
This course is intended for students with no science or engineering background.
Exclusion: AST121H1, 210H1, 221H1. Also excluded are CIV101H1, any 100- or higher-series CHM/PHY courses taken previously or concurrently (with the exception of PHY100H1, 101H1, 201H1, 205H1, CHM200Y1)

**AST201H1 Stars and Galaxies [26L]**
What we know about the properties and life cycles of stars, of galaxies, and of the Universe itself - and how we know it. How astronomers develop methods for understanding phenomena that span such vast ranges in distance and time.
This course is intended for students with no science or engineering background.
Exclusion: AST121H1, 210H1. Also excluded are CIV101H1 and any 100- or higher-series CHM or PHY courses taken previously or concurrently (with the exception of PHY100H1, 101H1, 201H1, 205H1, CHM200Y1)

**AST210H1 Great Moments in Astronomy [26L]**
The history of Western astronomy: Copernican Revolution to twentieth century astrophysics. Emphasis is placed on the process of discovery which has led to major advances in knowledge about the Universe. The course ends with an outline of one of the most significant puzzles of our day and an examination of the potential for a new revolution in knowledge in our lifetime. This course is best suited to physical science students. Exclusion: AST101H1, 121H1, 201H1

**CSB200Y1 Current Topics in Molecular Biology [52L, 26P]**
This course is intended to provide non-science students with an understanding of basic concepts in molecular biology to allow them to explore, and analyze current scientific issues and controversies covered in the media and relevant to society at large.
This course counts as a Science Distribution Requirement for students in all years and disciplines; particularly suitable for Humanities and Social Science students.
Exclusion: BIO (240H1, 241H1)/250Y1/255Y1

**CSC104H1 The Why and How of Computing [26L, 13T]**
An introduction to computing for non-computer scientists. History of computing machinery; representation of data and their interaction with operations; hardware, software, operating systems; problem solving and algorithms; social issues in computing; a gentle introduction to programming. This course is an introduction to becoming actively engaged with computing, not a tutorial on using particular computer applications.
Exclusion: SMC104H1; VIC104H1; any CSC course.

**EEB202H1 Plants and Society (formerly BOT202Y1) [26L]**
The importance of plants to society. Plant biology, domestication of crop plants, plant breeding and genetic engineering, biologicial invasions, conservation, biodiversity and genetic resources. Evaluation of the ecological implications of advances in modern plant science.
Exclusion: BIO150Y/BOT202Y1
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**EEB214H1 Evolution and Adaptation (formerly ZOO214Y1) [26L, 12T]**
Evolution and adaptation through natural selection. Concepts and application based on faunal life goals of habitat survival, food acquisition, predator avoidance, and reproduction. Topics include: speciation, mutation, co-evolution, symbiosis, pollination, cannibalism, parasitism, eusociality, and sexual and parental conflict. Essays, debates, and reading required.
Exclusion: BIO150Y1/323H1/EEB323H1/ZOO214Y1/324Y1
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**EEB215H1 Conservation Biology (formerly ZOO215H1) [39L]**
Introduction to the scientific discipline that deals with endangered wildlife. Topics include: biodiversity, extinction, threats, demography, genetic diversity, nature reserves, and captive breeding. Also, endangered species laws, moral philosophies, and political, economic and social justice issues surrounding biodiversity. Essays and reading required.
Exclusion: EEB/BIO 365H1/ZOO215H1
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**EEB216H1 Marine Mammal Biology and Conservation (formerly ZOO216H1) [26L, 12T]**
Introduction to ecological, evolutionary, physiological, and anatomical adaptations of marine mammals to their aquatic environment. Issues of conservation and environmental biology will also be covered. In tutorials the use of anatomical specimens (skulls, teeth, etc.) will be supplemented with video and other teaching tools.
Prerequisite: Biology 12 or equivalent
Exclusion: Enrolment in a Science program; SCI199Y1: Marine Mammals in Their Environment
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**ENV200Y1 Assessing Global Change: Science and the Environment [52L, 12T]**
The perspective scientists bring to the understanding and resolution of environmental concerns having global implications: atmospheric systems and climate change, the biosphere and conservation of biodiversity.
Exclusion: BIO150Y1 (applies only to students in Arts & Science)
This Science course is intended to fulfill the environmental literacy requirement for students in the BA programs of the Centre for Environment or the science distribution course requirement for Commerce, Humanities and Social Science students.

**GLG103H1 Geology in Public Issues [26L]**
Geologic hazards: earthquakes, volcanoes, landslides, tsunamis. The distribution and politics of natural resources, including petroleum and ore deposits. Nuclear power and nuclear waste disposal. Global change: the geologic record of hot and cold climates, and how the earth survives.
GLG103H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science.

**GLG105H1 Evolution of the Earth: Controversy over the Last 2300 Years [26L]**
The evolution of ideas about the origin and development of the earth from the Athenians to the 20th Century. With attention on whether the earth has an infinite or a finite life; on the evolution and disappearance of species; on the origin of oceans, continents and mountains; on the forces that have shaped the earth's surface; and on the courage of scientists in confronting the religious and political views of their time.
GLG105H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science students.

**GLG110H1 Introductory Geology [26L]**
The nature and evolution of the Earth; plate tectonics; rocks and minerals; volcanism; geological time; fossils; geology of Ontario; environmental issues.
GLG110H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science students

**GLG205H1 Confronting Global Change [26L, 8T]**
The emergence of society as a major geological force is considered in terms of the evolving debate about the consequences of human activity for the habitability of our planet. Major issues such as climate change, environmental pollution, and depletion of natural resources are examined.
GLG205H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science students

**HPS100H1 Introduction to History and Philosophy of Science [26L, 13T]**
An investigation of some pivotal periods in the history of science with an emphasis on the influences of philosophy on the scientists of the period, and the philosophical and social implications of the scientific knowledge, theory and methodology that emerged.
This counts as a Humanities or Science course

**HPS210H1 Scientific Revolutions I (formerly HPS200Y1) [26L, 13T]**
Case studies in the history of science from antiquity to 1800, including the revolutionary work of Copernicus, Kepler, Galileo, Descartes, Newton, Linnaeus, Lavoisier, and Herschel. The course is designed to be accessible to science students and non-scientists alike.
This counts as a Humanities or Science course
Exclusion: HPS200Y1

**HPS211H1 Scientific Revolutions II (formerly HPS200Y1) [26L, 13T]**
Case studies in the history of science from 1800 to 2000, including Volta, Lyell, Darwin, Mendel, Einstein, Schrödinger, Watson, and Crick. The course is designed to be accessible to science students and non-scientists alike.
This counts as a Humanities or Science course
Exclusion: HPS200Y1

**JUM202H1 Mathematics as an Interdisciplinary Pursuit (formerly JUM102H1) [26L, 13T]**
A study of the interaction of mathematics with other fields of inquiry: how mathematics influences, and is influenced by, the evolution of science and culture. Art, music, and literature, as well as the more traditionally related areas of the natural and social sciences may be considered. (Offered every three years)
Exclusion: JUM102H1
JUM202H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**JUM203H1 Mathematics as a Recreation (formerly JUM103H1) [26L, 13T]**
A study of games, puzzles and problems focusing on the deeper principles they illustrate. Concentration is on problems arising out of number theory and geometry, with emphasis on the process of mathematical reasoning. Technical requirements are kept to a minimum. A foundation is provided for a continuing lay interest in mathematics. (Offered every three years)
Exclusion: JUM103H1
JUM203H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**JUM205H1 Mathematical Personalities (formerly JUM105H1) [26L, 13T]**
An in-depth study of the life, times and work of several mathematicians who have been particularly influential. Examples may include Newton, Euler, Gauss, Kowalewski, Hilbert, Hardy, Ramanujan, Gödel, Erdös, Coxeter, Grothendieck. (Offered every three years)
Exclusion: JUM105H1
JUM205H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**PHY100H1 The Magic of Physics [26L, 13T]**
In 1915 Einstein presented a quartet of papers that revolutionized our understanding of gravity. He commented: "Hardly anyone who has truly understood this theory will be able to resist being captivated by its magic." The General Theory of Relativity is not the only theory of physics that is magical, and Einstein was not physics' only magician. We uncover the wonders of the classical and the quantum world courtesy of Galileo, Newton, Maxwell, Einstein, Heisenberg and others. Topics include planetary motion, chaos, the nature of light, time travel, black holes, matter waves,

Schrödinger's cat, and quarks. No mathematics is required, and any necessary elementary classical physics is reviewed.
Exclusion: PHY131H/132H/151H/152H /110Y1/138Y/140Y taken previously or concurrently
PHY100H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**PHY101H1 Emergence in Nature [26L, 13T]**
The universe is not a rigid clockwork, but neither is it formless and random. Instead, it is filled with highly organized, evolved structures that have somehow emerged from simple rules of physics. Examples range from the structure of galaxies to the pattern of ripples on windblown sand, to biological and even social processes. These phenomena exist in spite of the universal tendency towards disorder. How is this possible? Self-organization challenges the usual reductionistic scientific method, and begs the question of whether we can ever really understand or predict truly complex systems.
Exclusion: PHY131H/132H/151H/152H 110Y1/138Y/140Y taken previously or concurrently
PHY101H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**PHY201H1 Concepts of Physics [26L, 13T]**
A conceptual overview of some the most interesting advances in physics and the intellectual background in which they occurred. The interrelationship of the actual practice of physics and its cultural and intellectual context is emphasized.
PHY201H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**PHY205H1 The Physics of Everyday Life [26L, 13T]**
An introduction to the physics of everyday life. This conceptual course looks at everyday objects to learn about the basis for our modern technological world. Topics may include anything from automobiles to weather.
Exclusion: PHY131H/132H/151H/152H/110Y/138Y/140Y taken previously or concurrently
PHY205H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**SCI199H1 First Year Seminar Courses**

**SCI199Y1 First Year Seminar Courses**
The Faculty offers many sections of SCI 199H1/Y1, open only to students newly-admitted to the St. George campus of the Faculty. Check the A&S web site at www.artsci.utoronto.ca/current/undergraduate/course for detailed course descriptions.

## Guide to Programs & Courses

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UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

## Definition of "Course" in this Calendar

In these two pages the word "course" is used in two senses:

1. In reference to a single course (such as "standing in a course" etc.) "course" refers equally to a full course or a half course.
2. In reference to a given number of courses (such as the requirement of obtaining standing in at least 20 courses for an HBA or HBSc) "courses" refer to FULL courses OR the equivalent number in FULL AND HALF courses combined. To "pass a course" or "obtain standing in a course" normally means to obtain a mark of 50 or more in that course.

## Codes used in the Program of Study Listings

"Specialist Program (X full courses or their equivalent)"; "X" is the number of courses required for that program out of the total of 20 courses needed for an Hon. B.A. or Hon. B.Sc.

"Major Program (X full courses or their equivalent)"; "X" is the number required for that program out of the total of 20 courses needed for an Hon. B.A. or Hon. B.Sc.

"First Year", "Second Year", etc.: Sequences of courses are given as guides, but need not be followed in the exact order listed, provided all pre- and co-requisites are observed.

Higher Years = Second, Third and Fourth Years

An oblique stroke ("/") means "or". A comma and a semi-colon both mean "and".

200-series = courses numbered in the 200's ONLY;

200+series = courses in the 200's or 300's or 400's

300+series = courses numbered in the 300's or 400's

Approved = approved by the college or department sponsoring the program

Group = a group of related courses; Groups are at the end of the relevant program listings

Courses = full courses or the equivalent in full and/or half courses.

The code Y1 or H1 in a course code in this *Calendar* indicates the credit value:

Y1 = a full course, for which one credit is given, e.g., ANT 100Y1;

H1 = a half course, for which one-half credit is given, e.g., HIS 321H1.

## Choosing Courses

NOTE: While Departmental counsellors and College Registrars are always available to give advice, THE ULTIMATE RESPONSIBILITY RESTS WITH THE STUDENT for completeness and correctness of course selection, for compliance with exclusions, prerequisite and co-requisite requirements, for completion of Program details, for proper completion of the Distribution Requirement, and for observance of regulations, deadlines, etc. Students are responsible for seeking guidance from a responsible officer if they are in any doubt; misunderstanding, misapprehension or advice received from another student will not be accepted as cause for dispensation from any regulation, deadline, Program or Degree requirement.

### Please Note:

1. The Faculty of Arts & Science Council reserves the right to change the content of, or to withdraw, any course. In such cases every effort is made to provide equivalent alternative instruction, but this cannot be guaranteed.
2. The Faculty reserves the right to limit the number of students in any course or any section of a course if the number wishing to take the course should exceed the resources available. Notwithstanding this, every effort is made to accommodate students in 100-series courses.

## Key to Course Descriptions

Course descriptions, in alphabetical order by Department/ College, are listed in the "Programs and Courses" section starting on page 36 For an explanation of terms and abbreviations used in these descriptions, including prerequisites, co-requisites, exclusions, etc., see below. Students may choose from among these courses, subject to the following rules:

1. Students must satisfy the degree and program requirements and other regulations set out in the *Calendar* and its supplements.
2. Students must meet all prerequisite, co-requisite and exclusion requirements.
3. Students may take no more than six 100-series courses for degree credit.

### Number of Courses Taken ("Course Load")

Students may proceed towards the degree at a rate of their own choosing, except as provided below:

1. The recommended course load for full-time students in each of the Fall and Winter Sessions is no more than five courses.
2. The recommended course load during the Summer Session is a maximum of two courses.
3. Students "On Academic Probation" may take no more than five courses in each of the Fall and Winter Sessions except as provided under "students restricted to a reduced course load" (see 4. below).
4. Students restricted to a reduced course load on admission may take no more than 2.5 courses over the Fall-Winter Sessions. They may take no more than 3 course activities in a Fall or Winter Session unless approved by their College Registrar. They may take a maximum of 1.0 courses in the Summer Session. Students restricted to part- time studies who wish to transfer to full-time studies should consult with their College Registrar.)
5. Students should attempt to balance their course load between the Fall and Winter Sessions.

6. To calculate course loads, students should consult this *Calendar* together with the *Registration Handbook & Timetable*.
   The code "Y1" or "H1" in a course code in the *Calendar* indicate the credit value:
   Y1 = a full course, for which one credit is given, e.g., ANT 100Y1
   H1 = a half-course, for which one-half credit is given, e.g., HIS 332H1
7. In the *Timetable* a section code is associated with a course code to indicate when the course is offered:
   F = first half of the Fall-Winter Sessions (Sept-Dec), or first half of the Summer Session (May-June), e.g., HIS322H1 F
   S = second half of the Fall-Winter Sessions (Jan-Apr), or second half of the Summer Session (July-Aug), e.g., HIS322H1 S
   Y = Fall and Winter sessions, or First and Second subsessions of the Summer Session, e.g., ANT100Y1 Y
8. Students should note that courses designated as "...Y1F" or "...Y1S" in the *Timetable* are particularly demanding.
9. Full-time students (except those in 3. and 11.) may select a sixth course after the priority period expires during the course enrolment cycle (see the *Registration Handbook and Timetable* for details).
10. Students are advised to use discretion in adding any more courses to their program than the number recommended in 1. and 2. Students will not receive special consideration of any kind on account of a course overload. Examination schedules may be affected by a course overload.
11. In each of the Fall and Winter Sessions, students who are in good standing may request to add additional courses, beyond six, through their College Registrar. In the Summer Session, students may request to add additional courses, beyond two, through their College Registrar. The College Registrar, following Faculty guidelines, has the discretion to approve such requests. Note: students enrolled in Commerce subject POSts cannot add additional courses.
12. Students are not allowed a sessional course activity overload in any session until they have completed four full courses in the Faculty. This applies to first year students and transfer students from other institutions.

## Credit/No Credit

Effective beginning the 2008-09 Fall-Winter Session, degree students in the Faculty of Arts & Science may select up to 1.0 full-course equivalents of their degree credits to be assessed on a Credit/ No Credit basis. Students must choose this mode of assessment **no later than the last day to enrol in the relevant course**. Once the deadline has passed, students may not under any circumstances reverse this decision.

To achieve a status of CR (Credit), a student must achieve a final mark of at least 60%. Marks below that will be assessed as NCR (No Credit). Courses with a final status of CR will count as degree credits but will have no effect on the student's GPA. They will count as Distribution Requirements and degree credits, but cannot be used to satisfy subject POSt requirements.

Courses with a final status of NCR will not count as degree credits but will not count as failures, and will also not be included in the GPA calculation.

Students may exercise this option to a total of 1.0 full-course equivalents within the total number of credits required for a degree. The choice is not restricted as to year or level of course. This option is not available to Arts & Science non-degree students or to students from other faculties/divisions of the University of Toronto.

## "Extra" and "Supplemental" Courses

Each course counts for credit towards a degree unless:

- the course is a 100-series course and the maximum of SIX 100-series courses allowable for degree credit has already been completed; it will then be designated as an "Extra". "Extra" courses have no effect on status or Grade-Point Average; or

- advance permission has been given by petition for a course to be taken as an "Extra" course. Students may not petition to have completed courses designated as "Extra", nor will they be removed from the record. "Extra" courses have no effect on status or Grade-Point Average; or

- more than the maximum number of courses allowed with the same designator have been passed. These "supplemental" courses will count in the grade point average, program and distribution requirements.

**Repeating a Courses as an "Extra"**

A student may repeat 1.0 full-course equivalent in which he or she has received a passing mark for reasons other than to gain a required mark above passing to qualify for entry into a Subject POSt or a course required for a prerequisite. Such a repeated course will be designated an "Extra" course: it will appear on the academic record, but will be marked "Extra" and will not be included in GPA calculations or in the degree credit count.

Students requesting to repeat a course in this way must do so at their college registrar's office, where they will receive appropriate advising and will be enrolled, provided there is space available, only after other degree students have had an opportunity to enroll.

## Year of Study

The University of Toronto uses the following to define the year equivalency and therefore the academic status of a student:

4th year St. George degree student: has completed 14.0 full course equivalents or more;
3rd year St. George degree student: has completed 9.0 to 13.5 full course equivalents;
2nd year St. George degree student: has completed 4 to 8.5 full course equivalents;
1st year St. George degree student: has completed less than 4 full course equivalents.

## Full/Part-Time Status

**Part-time status**

A student enroled in 2.5 full course equivalents or fewer for the Fall-Winter sessions is considered to be part-time; a student enroled in 1.0 full-course equivalents or fewer for the Summer session is considered to be part-time.

### Full-time status

A student enroled in 3.0 full course equivalents or more for the Fall-Winter sessions is considered to be full-time; a student enroled in 1.5 full-course equivalents or more for the Summer session is considered to be full-time.

## Cancelling Courses, Courses Outside the Faculty and University

For information on cancelling courses, see page 491. For information on courses outside the Faculty and University, see page 490.

## Codes Used in the Course Descriptions

### Course Designators

Course designators are the three-letter codes which appear at the beginning of each course code (e.g., CHM is the designator for chemistry courses; PHL for philosophy courses).

All courses are listed in the following pages by sponsoring department in alphabetical order. See the Table of Contents for a complete listing of sponsoring departments, and page 37 for a full alphabetical list of programs available to students in the Faculty.

### Course Number

The course number generally indicates the level of difficulty, e.g., a 100-series course normally indicates an introductory course, a 400-series course is an intensive course at the senior level. In some departments several courses may have the same general title; in these cases, the numbers are listed together, separated by "/" which means "OR"; for instance, "ECO 350Y1/351H1/352H1" = ECO 350Y1 OR ECO 351H1 OR ECO 352H1, each one being a seminar on a selected subject.

### "Y1" and "H1" Course Suffixes

The codes "Y1" or "H1" in a course code in the *Calendar* indicate the credit value:

Y1 = a full course, for which one credit is given, e.g., ANT 100Y1

H1 = a half-course, for which one-half credit is given, e.g., HIS 322 H1

### Types and Duration of Instruction

L= Lectures; S= Seminars; P= Practical work in laboratories or studios; T= Tutorials

In the Fall-Winter Sessions the normal period of instruction is 26 weeks; the Fall Session lasts 13 weeks, and the Winter Session lasts 13 weeks. The number preceding the instruction codes opposite the course number and title indicates the total number of hours of instruction given in the course. The number of hours listed is approximate only; the actual contact hours of a course, or of different sections of a course, may vary from the number indicated in the *Calendar*, due to the size of the class or section, and the use being made of the tutorial or practical components of the class. This variation is at the discretion of the "course sponsor" (the college or department sponsoring the course); any questions concerning the allotment of hours in a course should be addressed to the course sponsor.

### Prerequisites, Co-requisites, etc.

Students are responsible for fulfilling prerequisites and co-requisites; students enroled in courses for which they do not have the published prerequisites may have their registration in those courses cancelled at any time without warning. Students must also observe exclusions. Failure to meet these requirements may result in academic difficulties. If students withdraw from a course they must also withdraw from any course for which it is a co-requisite unless the Department giving the latter course agrees to waive the co-requisite.

### Explanation of Symbols

The comma (,) the semi-colon(;) the ampersand (&) and the plus sign (+) all mean "AND". The slash (/) means "OR".

### Exclusions

Students may not enrol in a course if that course lists as an exclusion a course they are currently taking or a a course they have already passed. If allowed by special permission to enrol in an excluded course, the second course taken will be listed as an "Extra" course. Students will be required to withdraw from the course if discovered during the session of enrolment and will be refused degree credit in the excluded course if discovered at any time in a subsequent session.

### Prerequisite

A course (or other qualification) required as preparation for entry to another course. If students consider that they have equivalent preparation, they may ask the Department concerned to waive the stated prerequisite.

### Co-requisite

A requirement to be undertaken concurrently with another course. The co-requisite will be waived if a student has previously obtained standing in it, or if the Department consents.

### Recommended Preparation

Background material or courses that may enhance a student's understanding of a course.

The next page shows a course description in diagram form, with explanations of all the various symbols.

### Section Code

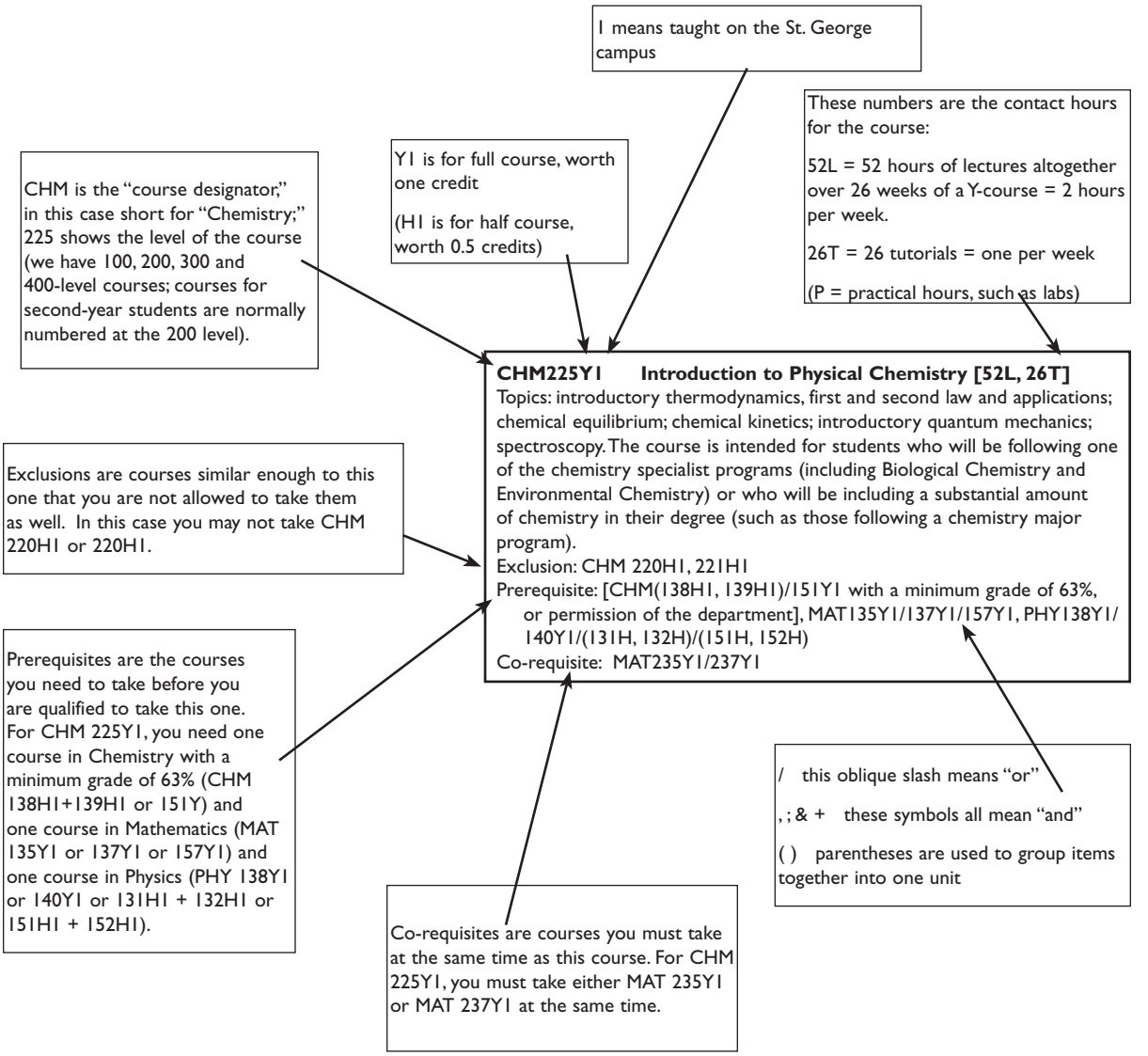
Section codes do not appear in the *Calendar*. In the *Registration Handbook & Timetable*, however, a section code is listed with a course code to indicate when the course is offered:

F = first half of the Fall-Winter Sessions (Sept-Dec), or first half of the Summer Session (May-June), e.g., HIS 322H1 F

S = second half of the Fall-Winter Sessions (Jan-Apr), or second half of the Summer Session (July-Aug), e.g., HIS 322H1 S

Y = Fall and Winter sessions, or First and Second subsessions of the Summer Session, e.g., ANT 100Y1 Y

# How to Read a Course Description



# Programs and Courses

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Writing in Arts & Science


UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

The next section contains detailed information about the programs of study and courses offered by the Faculty of Arts and Science, St. George campus. This, for reference, is an alphabetical listing of all programs of study, which includes the level and title of the program. For example,

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| SPE/MAJ/MIN | African Studies | 356 |

means that you can take a Specialist, Major or Minor program in African Studies. The program is sponsored by New College; details about program requirements and course descriptions are available beginning on page 356.


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| SPE | Accounting (B.Com.) | 40 |
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| SPE/MAJ/MIN | African Studies | 356 |
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| MAJ | Animal Physiology | 269 |
| SPE/MAJ/MIN | Anthropology | 58 |
| SPE/MAJ | Anthropology (Biological) | 58 |
| MAJ | Anthropology (Linguistic & Semiotic) | 58 |
| SPE | Anthropology (Social & Cultural) | 58 |
| SPE | Applied Mathematics | 327 |
| SPE | Applied Physics | 375 |
| SPE/MAJ | Archaeological Science | 68 |
| SPE | Archaeology | 68 |
| MAJ | Architectural Studies (Design) | 70 |
| MAJ | Architectural Studies (History, Theory,Criticism) | 70 |
| SPE | Astronomy & Physics | 88 |
| MAJ/MIN | Astronomy and Astrophysics | 88 |
| SPE | Behaviour | 275 |
| SPE/MAJ | Biochemistry | 261 |
| SPE/MAJ/MIN | Bioethics | 364 |
| SPE | Biogeography | 193 |
| SPE | Bioinformatics & Computational Biology | 261 |
| SPE | Biological Chemistry | 91 |
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| MAJMIN | Book & Media Studies | 415 |
| SPE/MAJ/MIN | Botany | 266 |
| MIN | Buddhism, Psychology & Mental Health | 356 |
| SPE/MAJ | Buddhist Studies | 403 |
| MIN | Business German | 210 |
| SPE/MAJ/MIN | Canadian Studies | 458 |
| SPE/MAJ/MIN | Caribbean Studies | 356 |
| SPE/MAJ | Cell & Molecular Biology | 269 |
| SPE/MAJ/MIN | Celtic Studies | 415 |
| SPE | Chemical Physics | 91 |
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| MAJ | Christianity & Culture: Religious Education | 415 |
| SPE/MAJ/MIN | Cinema Studies | 236 |
| MAJ/MIN | Classical Civilization | 99 |
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| SPE | Computer Science & Economics | 106 |
| SPE | Computer Science & Mathematics | 106 |
| SPE | Computer Science & Physics | 106 |
| SPE | Computer Science & Statistics | 106 |
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| SPE | Computer Science: Information Systems Option | 106 |
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| SPE/MAJ | Criminology | 482 |
| MAJ/MIN | Croatian & Serbian Studies | 425 |
| MAJ/MIN | Czech & Slovak Studies | 425 |
| SPE | Developmental Biology | 269 |
| MAJ | Dr. David Chu Program In Asia-Pacific Studies | 87 |
| MAJ/MIN | Diaspora & Transnational Studies | 120 |
| SPE/MAJ/MIN | Drama | 123 |
| SPE | Earth Systems: Physics & the Environment | 375 |
| SPE/MAJ/MIN | East Asian Studies | 127 |
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| SPE | Economics & Geography | 138 |
| SPE | Economics & Mathematics | 138 |
| SPE | Economics & Philosophy | 138 |
| SPE | Economics & Political Science | 138 |
| SPE | Economics & Sociology | 138 |
| SPE | Economics & Statistics | 138 |
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| SPE | English & Philosophy | 148 |
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| MIN | Environment & Energy | 158 |
| SPE | Environment & Health | 158 |
| SPE/MAJ | Environment & Resource Management | 158 |
| SPE/MAJ/MIN | Environment & Science | 158 |
| SPE/MAJ/MIN | Environment & Society | 158 |
| SPE | Environment & Toxicology | 158 |
| MIN | Environmental Anthropology | 158 |
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| SPE/MAJ/MIN | Environmental Geosciences | 158 |
| SPE/MAJ/MIN | Environmental Policy & Practice | 158 |
| MAJ | Equity Studies | 356 |
| MIN | Estonian Studies | 425 |
| MAJ | Ethics, Society & Law | 454 |
| MAJ | European Studies | 172 |
| MIN | European Union Studies | 172 |
| SPE | Evolutionary Biology | 275 |
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| SPE/MAJ/MIN | Fine Art (History of Art) | 74 |
| MAJ/MIN | Finnish Studies | 173 |
| MAJ/MIN | Forest Biomaterials Science | 178 |
| SPE/MAJ/MIN | Forest Conservation | 178 |
| SPE/MAJ/MIN | Forest Conservation Science | 178 |
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| SPE/MAJ/MIN | Mathematics | 327 |
| SPE | Mathematics & Its Applications | 327 |
| SPE | Mathematics & Philosophy | 327 |
| SPE | Mathematics & Physics | 327 |
| SPE/MAJ/MIN | Mediaeval Studies | 415 |
| SPE | Molecular Biophysics | 375 |
| SPE | Molecular Genetics & Microbiology | 296 |
| SPE/MAJ | Music | 338 |
| MIN | Music History & Culture | 338 |
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| SPE/MAJ/MIN | Near and Middle Eastern Civilizations | 342 |
| SPE | Neuroscience | 284 |
| SPE/MAJ | Nutritional Science | 299 |
| MIN | Paradigms & Archetypes | 356 |
| SPE | Past Environments | 158 |
| SPE | Pathobiology | 293 |
| SPE/MAJ | Peace & Conflict Studies | 458 |
| SPE | Pharmaceutical Chemistry | 301 |
| SPE/MAJ | Pharmacology | 303 |
| SPE | Pharmacology & Toxicology | 303 |
| SPE/MAJ/MIN | Philosophy | 364 |
| SPE | Philosophy & Political Science | 364 |
| SPE | Philosophy & Religion | 364 |
| SPE | Philosophy & Sociology | 364 |
| SPE/MAJ/MIN | Physical & Environmental Geography | 193 |
| SPE/MAJ/MIN | Physics | 375 |
| SPE | Physics & Philosophy | 375 |
| MAJ | Physics (General) | 375 |
| SPE/MAJ/MIN | Physiology | 307 |
| SPE | Planetary Science | 384 |
| SPE | Polish & French | 425 |
| SPE | Polish & German | 425 |
| SPE | Polish & Russian | 425 |
| MAJ/MIN | Polish Language & Literature | 425 |
| MAJ/MIN | Polish Studies | 425 |
| SPE/MAJ/MIN | Political Science | 385 |
| SPE | Political Science & Sociology | 385 |
| SPE/MAJ/MIN | Portuguese | 400 |
| SPE | Portuguese & Spanish | 400 |
| MAJ | Prehistoric Archaeology | 68 |
| SPE/MAJ/MIN | Psychology | 311 |
| SPE | Psychology (Research Specialist) | 311 |

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| SPE/MAJ/MIN | Religion | 403 |
| SPE | Religion: Christian Origins | 403 |
| SPE/MAJ/MIN | Renaissance Studies | 469 |
| MIN | Russian Language | 425 |
| SPE/MAJ/MIN | Russian Language & Literature | 425 |
| MIN | Russian Literature in Translation | 425 |
| MAJ/MIN | Semiotics & Communication Theory | 469 |
| SPE/MAJ/MIN | Sexual Diversity Studies | 458 |
| SPE | Slavic Languages | 425 |
| SPE | Slavic Languages & Literatures | 425 |
| SPE/MAJ/MIN | Sociology | 436 |
| SPE | Sociology & Urban Studies | 436 |
| SPE/MAJ/MIN | South Asian Studies | 356 |
| SPE/MAJ/MIN | Spanish | 445 |
| SPE/MAJ/MIN | Statistics | 450 |
| SPE/MAJ | Toxicology | 303 |
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| SPE/MAJ/MIN | Urban Studies | 235 |
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| MIN | Al & Malke Green Program in Yiddish | 210 |
| SPE/MAJ/MIN | Zoology | 266 |

# Commerce

## The Rotman Commerce Program is jointly offered by the Faculty of Arts & Science and the Rotman School of Management

Faculty from the Rotman School of Management who teach in the Rotman Commerce Program are listed below.

The Rotman Commerce Program at the University of Toronto offers an innovative and integrative curriculum with a global perspective for an enriched professional undergraduate experience. The program explores the role of commerce in modern society while developing skill and confidence in analysis, effective communications and decision making.

The Bachelor of Commerce degree builds on a common foundation of business and liberal arts courses. Rotman Commerce students go on to specialize in one of three programs: finance and economics, management, or accounting. Each stream combines career-oriented courses in management and applied economics with a variety of advanced courses in the Arts & Sciences. The balance assures graduates of a solid understanding of business and modern society along with a command of critical skills in decision-making and organizational leadership.

The Major in Commerce provides students with a foundation in business while allowing them to concentrate in another discipline within Arts & Science.

Rotman Commerce graduates frequently become economists, accountants, actuaries, financial analysts, marketing analysts, managers of firms and government, or proprietors of small businesses. Some commerce students elect to undertake post-graduate studies in the form of further university education: law schools and MBA programs have been particularly favoured destinations of recent graduates.

Assistant Director, Academic Services: N. Martin-Sperry, 321 Bloor Street West (416-978-3339)

Enquiries: 321 Bloor Street West (The entrance is on St. George Street just south of Bloor.); (416-978-3339)

## Faculty

### Professor Emeritus

J.H.G. Crispo, B Com, Ph D

### Professor and Director of the Programs

W. Rotenberg, MBA, Ph D

### Professors

T.L. Amburgey, BS, MA, Ph D
J.H. Amernic, B Sc, MBA, FCA
O. Berman, BA, Ph D
L. Booth, MA, MBA, DBA
D.J.S. Brean, MBA, M Sc, Ph D
J. Callen, BA, MBA, Ph D
J-C Duan, BS, MBA, Ph D
I. Horstmann, BA, Ph D
D. Krass, BA, MSE, Ph D
T. McCurdy, MA, Ph D
A.A. Mitchell, BA, Ph D
D.A. Ondrack, MBA, Ph D
G. Richardson, BA, MBA, Ph D
B. Silverman, AB, SM, MA, Ph D
W. Smieliauskas, MS, Ph D
A. Verma, B Tech, MBA, Ph D
A. White, B Eng, MBA, Ph D
Glen Whyte, LLB, MPhil, MA, MBA, Ph D

### Associate Professors

J. Berdahl, MA, Ph D
S. Côté, B Sc, MA, PH D
S. Hawkins, BA, MS, Ph D
R. Kan, MBA, Ph D
M. Rindisbacher, BA, M Sc, Ph D
K. Wang, MA, Ph D
P. Zhang, B Sc, MA, M Acc, Ph D

### Assistant Professors

O. Baron, B Sc, MBA, PhD
S. Buti, MA, Ph D
A. Ching, B. Econ, MA, Ph D
K.B. Dahlin, M Sc, Ph D
S. Davydenko, M.SC, MA, Ph D
F. Derrien, Ph D
S. DeVoe, BA, Ph D
C. Doidge, B Com MSC, Ph D
A. Goldfarb, MA, Ph D
L. Han, BA, MA, Ph D
M. Lederman, BA, Ph D
H. Lu, BE, MS, MBA, Ph D
N. Mazar, MBA, Ph D
S.A. McCracken, B Com, Ph D, CA
J. Milner, MS, Ph D
J. Oesch, B Sc, M Ed, MBA, M Sc, Ph D
L. Pomorski, BA, MA, Ph D
D. Segal, BA, Ph D
T. Simcoe, AB, MA
C. Tsai, MBA, Ph D
A. Wojnicki, B Com, MBA, DBA
B. Xin, Ph D
M. Zhao, Ph D
C. Zhong, BA, MA, Ph D

### Senior Lecturers

J. Kitunen, BBM, CA
D.L. Losell, MBA, CA
C. Reed, MA, CMA (University of Toronto Mississauga)
M.S. Schneider, LLB, MBA, CA (University of Toronto Mississauga)

### Lecturers

E. Zuliani, B Com, CA

### Adjunct Professor

D. Dunne, B Com, Ph D
H. Honickman, B Com, CA

## Bachelor of Commerce (B.Com.) Degree Requirements

This is a four-year Honours program.

To qualify for a Bachelor of Commerce degree, a student must:

(a) Complete twenty full-course equivalents, including no more than six 100-series courses;
(b) Complete one of the Specialist programs - Management, Finance and Economics, or Accounting (see below);
(c) Complete the Faculty Distribution Requirement for B.Com. students (see below);
(d) Complete ten full course equivalents from Management (RSM/MGT/COM) and ten full course equivalents from disciplines outside of RSM/MGT/COM which include Economics (ECO) and other Arts & Science courses.
(e) Obtain standing (i.e., complete with a grade of 50% or more) in at least six 300- or 400-series courses, including at least one 400-series course. No more than one 300+series transfer credit may be counted towards these six. (Students participating in an approved exchange program may count all 300+ transfer credits from the exchange towards the required six.)
(f) Achieve a cumulative GPA of 1.85 or more by the time of graduation.

### Graduation

Students who expect to graduate at the end of a given session must use the Student Web Service or notify their College Registrars in writing to make their degree requests by the dates specified in the Calendar. Prospective graduands should receive the following documents from the University:

1. a Program of Study Assessment form (late April/late August) from the program sponsor;
2. a letter from the Office of Convocation providing details of the convocation ceremony (late March/mid-October);
3. a Statement of Results (or letter for non-registered students) from the Office of the Faculty Registrar confirming degree eligibility (early June/early September).

### Faculty Distribution Requirement for B.Com. Students

Faculty Distribution Requirement for B.Com. Students

As part of the degree requirements for the B.Com., STUDENTS MUST COMPLETE ONE FULL COURSE EQUIVALENT IN EACH OF THE HUMANITIES, THE SOCIAL SCIENCES AND THE SCIENCES AREAS as defined below:

1. ONE full course equivalent must be from the Humanities (see Page 26).
2. ONE full course equivalent must be from the Social Sciences (MGT/RSM courses may be used to meet this requirement with the exception of MGT120H1/ MGT201H1, COM110H1, and RSM100Y which have NO Distribution Requirement status; see Page 26).).
3. ONE full course equivalent must be from the Sciences (see Page 26).), with the following exceptions: all 100-series courses in CSC, MAT, STA; STA250H1, STA255H1, STA257H1, STA352Y1.
4. NOTE: transfer students from University of Toronto Mississauga or Scarborough must meet the St. George B.Com. Distribution Requirement.

## Commerce Programs

### Notes

- Tuition fees for students enroling in the Commerce programs from 2001 onwards will be higher than for other Arts & Science programs.
- MAT133Y1/(MAT123H1, MAT124H1) are courses which satisfy the minimum Program requirements. Students who are likely to enrol in 200+ series MAT or CSC courses are advised to take MAT137Y1 instead, noting that MAT137Y1 is a theoretically-oriented course for Specialists in Mathematics and mathematically-based disciplines such as Actuarial Science.
- Enrolment in the Commerce and Finance Program is limited. The majority of spaces each year will be reserved for students admitted to First Year Commerce. A limited number of places will be available for other Arts & Science students not admitted to First Year Commerce; these students normally apply for admission in April of their first year. Such students must complete the First Year requirements with the minimum marks specified below, but must also meet a competitive standard established each year by the number of places available.
  **o First Year Commerce:**
  These students are offered on admission a guaranteed space in the Commerce Program after first year provided they complete the following--upon their first attempt:
  (i) a minimum of four credits with a cumulative grade point average of at least 2.00 (See the "Degree Requirements section of the Calendar);
  (ii) a minimum grade in the three required courses: ECO100Y1 and RSM100Y1 each with at least 67%, and MAT133Y1 or equivalent with at least 50%.
  o **All other students:** Students not admitted to First Year Commerce with a guaranteed space must meet the following admission requirements
  • Complete a minimum of 4.0 credits
  • Complete RSM100Y1 and ECO100Y1, each with a mark of at least 67%, and complete one of MAT133Y1/ MAT135Y1/MAT136Y1/MAT137Y1/(MAT123H1, MAT124H1)/(MAT125H1, MAT126H1), with a mark of at least 50%
  • Obtain a CGPA to be determined each year on a competitive basis (CGPA based on all courses taken for credit in the Faculty of Arts & Science)
  • Complete on-line applicant profile and pay applicant profile fee
  • Admission will be based on marks, CGPA, and applicant profile
- Commerce students are limited to a maximum of 6.0 credits in any Fall/Winter session

### Accounting (B.Com)

**Specialist program:**
(15 full courses or their equivalent out of 20 courses, for a B.Com.)

First Year:
1. ECO 100Y1, RSM100Y1
2. MAT 133Y1/(123H1, 124H1)/135Y1/137Y1/157Y1
3. Students are encouraged to take one course towards the Distribution Requirement (above) in First Year

Second Year:
4. ECO 204Y1/206Y1; ECO 220Y1/227Y1/(STA 257H1, 261H1)

5. RSM220H1, 221H1, 222H1, 225H1
6. 1.0 from: RSM230H1, 250H1, 260H1

Third Year:

7. RSM320H1, 321H1, 322H1, 323H1, 324H1, 332H1, 333H1
8. Any 1.0 300+ ECO except ECO301Y1, 302H1, 303Y1, 307H1, 308H1, 309H1, 321Y1, 342Y1, 353Y1, 354H1, 355H1, 423H1, 429Y1, 435H1

Fourth Year:

9. RSM422H1, 423H1, 424H1, 426H1, 427H1

Note: Students must take a minimum of 10.0 RSM and 10.0 non-RSM courses (See B. Com. degree requirements above).

ECO 209Y1 and 374H1 are strongly recommended.

### Finance and Economics (B.Com.)

**Specialist program:**
(14 full courses or their equivalent out of 20 courses, for a B.Com.)

First Year:

1. ECO 100Y1, RSM100Y1
2. MAT 133Y1/(123H1, 124H1)/135Y1/137Y1/157Y1
3. Students are encouraged to take one course towards the Distribution Requirement (above) in First Year

Second Year:

4. ECO 204Y1/206Y1; ECO 208Y1/209Y1; ECO 220Y1/227Y1/(STA 257H1, 261H1)
5. RSM220H1, 221H1, 222H1, 230H1
6. 0.5 from: RSM225H1, 250H1, 260H1, 324H1

Third Year:

7. RSM330H1, 332H1, 333H1,
8. 2.5 300+ ECO of which no more than 1.0 can be from ECO301Y1, 302H1, 303Y1, 307H1, 308H1, 309H1, 321Y1, 342Y1, 353Y1, 354H1, 355H1, 423H1, 429Y1, 435H1

Fourth Year:

9. RSM433H1, 435H1
10. 0.5 from: RSM437H1, 480H1, 490H1

Note: Students must take a minimum of 10.0 RSM and 10.0 non-RSM courses (See B. Com. degree requirements above).

ECO 374H1 is strongly recommended.

### Management (B. Com.)

**Specialist program:**
(12 full courses or their equivalent out of 20 courses, for a B.Com.)

First Year:

1. ECO 100Y1, RSM100Y1
2. MAT 133Y1/(123H1, 124H1)/135Y1/137Y1/157Y1
3. Students are encouraged to take one course towards the Distribution Requirement (above) in First Year

Second Year:

4. ECO 204Y1/206Y1; ECO 220Y1/227Y1/(STA 257H1, 261H1)
5. RSM220H1, 222H1, 250H1, 260H1

Third Year:

6. RSM332H1, 333H1, 370H1, 392H1
7. Any 1.0 300+ ECO except ECO301Y1, 302H1, 303Y1, 307H1, 308H1, 309H1, 321Y1, 342Y1, 353Y1, 354H1, 355H1, 423H1, 429Y1, 435H1

Fourth Year:

8. 1.0 from: ECO 364H1, 365H1, 419H1, RSM437H1, 480H1, 490H1
9. 1.0 400-level RSM, in addition to any courses taken in # 8 above.

Note: Students must take a minimum of 10.0 RSM and 10.0 non-RSM courses (See B. Com. degree requirements above).

ECO 209Y1 and 374H1 are strongly recommended.
RSM499Y1 is strongly recommended.

### Commerce (Arts program)

Students taking this program follow the degree requirements for the Honours Bachelor of Arts (see page 24).

**Major program:**
(7.5 full courses or their equivalent)

First Year:

1. RSM100Y1, ECO100Y1, MAT133Y1/(MAT123H1, MAT124H1)/MAT135Y1/MAT137Y1/MAT139Y1/MAT157Y1

Higher Years:

1. ECO220Y1/ECO227Y1/(STA 257H1, 261H1) - Statistics
2. RSM220H1 - Financial Accounting I
   RSM222H1 - Management Accounting I
   RSM250H1 - Marketing
   RSM332H1 - Capital Market Theory
   RSM333H1 - Introduction to Corporate Finance
3. 1.0 courses from:
   RSM225H1 - Legal Environment of Business I
   RSM260H1 - Organizational Behaviour
   RSM327H1 - Business Information Systems
   RSM330H1 - Investments
   RSM370H1 - Operations Management
   or any 400-level RSM course

## Commerce Courses

For Distribution Requirement purposes (see page 27), all MGT/RSM courses (except COM110H1, MGT120H1, MGT201H1, and RSM100Y1, which have NO distribution requirement status) are classified as SOCIAL SCIENCE courses.

(Economics course descriptions begin on Page 138).

**MGT201H1 Introduction to Financial Accounting (formerly MGT120H1) [26L]**
Introduction to financial reporting and analysis that is used by companies to organize and evaluate data in light of their organization's goal. Emphasis is on decision-making and interpretation of financial statements and how they can be used to plan a firm's overall business activities through the use of real-world companies.
Not open to Commerce students.
Exclusion: MGT120H1
This course has no status for distribution requirement purposes.

**RSM100Y1 Introduction to Management [52L]**
Introduction to management and its various subdisciplines-accounting, finance, marketing, organizational behaviour, operations management, and strategy.
Enrolment priority is given to students entering the University with an expressed interest in studying Commerce. Other Arts & Science students will be allowed to enrol, space

permitting. Non-Arts & Science students are ineligible to enrol in this course.
Exclusion: COM110H1
Co-Requisite: ECO100Y1, MAT133Y1
This course has no status for distribution requirement purposes.

**RSM220H1 Financial Accounting (formerly MGT220H1) [26L, 26T]**
This course introduces Commerce students to financial accounting including both conceptual and technical aspects.
Exclusion: MGT220H1
Prerequisite: MGT120H1/201H/RSM100Y1

**RSM221H1 Intermediate Financial Accounting I (formerly MGT224H1) [26L]**
Covers topics such as income statement and balance sheet topics with an emphasis on quality of earnings.
Exclusion: MGT224H1
Prerequisite: MGT220H1/RSM220H1

**RSM222H1 Management Accounting I (formerly MGT223H1) [26L, 26T]**
Covers the conceptual and analytical foundations of management accounting and the applications of cost accounting information. Costing and control concepts are analyzed to equip students with tools for establishing costing systems, making business decisions, and evaluating management performance. Materials are designed to help students understand strategic cost management principles.
Exclusion: MGT223H1
Prerequisite for students enrolled in Employment Relations or Human Resource Management: MGT201H1
Co-requisite for students enrolled in Rotman Commerce: RSM220H1

**RSM225H1 Legal Environment of Business I (formerly MGT393H1) [26L]**
Introduces students to the Canadian legal system focusing on business entities, the structure of the Canadian court system, the various elements of contract law and the law of negligence.
Exclusion: MGT393H1
Prerequisite: COM 110H1/RSM100Y1

**RSM230H1 Financial Markets [26L]**
Introduction to Canadian and international financial markets. It provides an overview of the major financial institutions, their roles and some problems they face, the major types of financial securities and the mechanisms under which they are traded. It is a helpful preparation for students thinking of taking the Canadian Securities Course.
Exclusion: ACT349H1, ECO358H1, ECO359H1
Prerequisite: COM110H1/RSM100Y1

**RSM250H1 Principles of Marketing (formerly MGT252H1) [26L]**
Students receive an introduction to the basic concepts, theories, and methods of contemporary marketing. The course offers a comprehensive framework to develop successful marketing efforts and allows students to create a marketing plan. Specific topics examined: market research, consumer behaviour, segmentation, product policy, pricing, distribution, communications, sales, and direct marketing.
Exclusion: MGT252H1
Prerequisite: COM110H1/RSM100Y1

**RSM260H1 Organizational Behaviour (formerly MGT262H1) [26L]**
Theoretical ideas and practical applications concerning the behaviour of individuals and groups in organizations. We explore relevant problems confronting management: motivation, influence, communication, supervision, decision-making, work force diversity.
Exclusion: MGT262H1, PSY332H1, WDW260H1
Prerequisite: COM 110H1/RSM100Y1

**RSM295Y0 Special Topics [26L]**

**RSM296Y0 Special Topics [26L]**
The areas of concentration depend on the instructor teaching the course. (Offered only during the summer through the Woodsworth Summer Abroad Program)

**RSM320H1 Intermediate Financial Accounting II (formerly MGT322H1) [26L]**
Covers broader areas in financial reporting, drawing upon regulatory documents and corporate communications. Topics include corporate reporting quality, employee future benefits, employee compensation disclosure and analysis, income tax accounting, narrative reporting. Emphasis on the context of financial reporting including an organization's 'tone at the top' and the adoption of international standards.
Exclusion: MGT322H1
Prerequisite: MGT224H1/RSM221H1

**RSM321H1 Advanced Financial Accounting Topics (formerly MGT426H1) [26L]**
This course covers accounting issues and practices relating to long-term investments, consolidations, foreign transactions and foreign investments. International accounting issues are also introduced.
Exclusion: MGT426H1
Prerequisite: MGT322H1/RSM320H1

**RSM322H1 Management Accounting and Decision Making (formerly MGT323H1) [26L]**
The course focuses on making managerial decisions based on cost information. The relationship between strategy and costing systems is explored and as are the economic characteristics which form the context for business decisions.
Exclusion: MGT323H1
Prerequisite: MGT223H1/RSM222H1

**RSM323H1 Auditing I (formerly MGT321H1) [26L]**
This course introduces students to the concepts and theory underlying audit practice. Practical examples are used to help students develop skills in exercising professional judgment.
Exclusion: MGT321H1
Prerequisite: MGT224H1/RSM221H1, MGT393H1/RSM225H1

**RSM324H1 Canadian Income Taxation I (formerly MGT423H1) [26L, 26T]**
This course gives a basic understanding of the Income Tax Act and its administration. Topics covered include administration of the tax system, residence, and the sources of income included in the computation of net income for individuals, partnerships, and corporations, computation of taxable income and taxes payable for individuals.
Exclusion: MGT423H1
Prerequisite: MGT220H1/RSM220H1

**RSM325H1 Legal Environment of Business II (formerly MGT394H1) [26L]**
This course canvasses areas of law that impact on a business entity. Topics dealt with are the Sales of Goods Act and relevant consumer protection legislation, employment law, environmental law, the Personal Property Security Act and the rights of the secured creditor.
Exclusion: MGT394H1
Prerequisite: MGT393H1/RSM225H1

**RSM327H1 Business Information Systems (formerly MGT371H1) [26L, 13T]**
This course helps students use, develop, and manage computer-based systems. The first half covers the basic features of hardware, software, communications, and databases. The second half examines how users, businesses, the economy, and society are affected by the development of this technology. No previous background in computing is assumed.
Exclusion: CSC340H1, MGT371H1

**RSM330H1 Investments (formerly MGT330H1) [26L]**
This course provides an introduction to financial theories and analytical tools for making investment decisions and for understanding how prices are determined for stocks and bonds. The course covers a broad range of topics including asset allocation, technical analysis, fundamental analysis, anomalies, and bond portfolio management.
Exclusion: ACT349H1, MGT330H1
Prerequisite: MGT337Y1/RSM230H1/332H1

**RSM332H1 Capital Market Theory [26L]**
An introduction to capital market theory explaining how financial securities are priced. Topics covered include the time and risk value of money, the use of discounted cash flow techniques, efficient set theory, asset pricing and market efficiency.
Exclusion: ACT349H1, ECO358H1, ECO359H1, MGT337Y1
Prerequisite: ECO204Y1/206Y1, ECO220Y1/ECO227Y1/(STA250H1, STA255H1)/(STA257H1, STA261H1), MGT220H1/RSM220H1, MGT223H1/RSM222H1

**RSM333H1 Introduction to Corporate Finance [26L]**
Application and development of the ideas in RSM332H1 to corporate finance problems such as determining the weighted average cost of capital, project evaluation, corporate financing decisions, working capital management and initial public offerings.
Exclusion: ACT349H1, ECO358H1, ECO359H1, MGT337Y1
Prerequisite: RSM332H1

**RSM350H1 Marketing Management (formerly MGT353H1) [26L]**
This course employs the case method of instruction to develop the skills required of marketing managers. Students will learn to diagnose marketing problems and develop, present, and defend their recommendations. They will also gain experience analyzing marketing situations, identifying market opportunities, developing marketing strategies, and designing the marketing mix.
Exclusion: MGT353H1
Prerequisite: MGT252H1/RSM250H1
Recommended Preparation: ECO220Y1/ECO227Y1/(STA250H1, STA255H1)/(STA257H1, STA261H1)

**RSM360H1 Organization Theory and Design (formerly MGT363H1) [26L]**
The course looks at how organizations function as collective social systems, trying to succeed in their environment. An extensive body of research and theory about organizations has developed. Discussion of the theories with a focus on practical applications about managing organizations. Topics include strategy, structure, environment, technology, culture, change and global management.
Exclusion: MGT363H1
Prerequisite: MGT262H1/RSM260H1

**RSM370H1 Operations Management (formerly MGT374H1) [26L]**
Introduction to the management of business processes that convert inputs (labor, material, equipment) into outputs (goods and services) for internal and external markets. Topics include aggregate planning, inventory processes, supply chain management and service operations management. Presents modern quantitative and computing tools necessary for in-depth operational design and analysis.
Exclusion: MGT374H1
Prerequisite: ECO220Y1/ECO227Y1/(STA250H1, STA255H1)/(STA257H1, STA261H1)

**RSM392H1 Strategic Management (formerly MGT492H1) [26L]**
Introduces core ideas, concepts and models in the area of Strategic Management. Addresses the following questions: Why does firm performance vary across industries, and across firms within a given industry? What types of competitive strategies can managers pursue? When are different types of strategies more or less likely to be successful?
Exclusion: MGT492H1
Co-requisite: MGT337Y1/RSM332H1

**RSM395Y0 Special Topics**
The areas of concentration depend on the instructor teaching the course. (Offered only during the summer through the Woodsworth Summer Abroad Program)

**RSM401H1 Independent Study Course [TBA]**

**RSM402H1 Independent Study Course [TBA]**
Open when a faculty member is willing and able to supervise. Students must obtain the approval of the Director of Commerce and the supervising faculty member before enrolling. Enrolment is restricted to fourth-year St. George Commerce students. Consult the Commerce Programs Office for details.
Prerequisite: Cumulative GPA of at least 2.70

**RSM403Y1 Independent Study Course [TBA]**

**RSM404Y1 Independent Study Course [TBA]**
Open when a faculty member is willing and able to supervise. Students must obtain the approval of the Director of Commerce and the supervising faculty member before enrolling. Enrolment is restricted to 4th year St. George Commerce students. Consult the Commerce Programs Office for details.
Prerequisite: Cumulative GPA of at least 2.70

**RSM410H1 Special Topics in Management [TBA]**

**RSM411H1 Special Topics in Management [TBA]**

**RSM412H1 Special Topics in Management [TBA]**

**RSM413H1 Special Topics in Management [TBA]**

**RSM414H1 Special Topics in Management [TBA]**

**RSM415H1 Special Topics in Management [TBA]**

**RSM416H1 Special Topics in Management [TBA]**

**RSM417H1 Special Topics in Management [TBA]**

**RSM418H1 Special Topics in Management [TBA]**

**RSM419H1 Special Topics in Management [TBA]**
Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Commerce website for course description and Prerequisites. Enrolment is restricted to 4th year St. George Commerce students.

**RSM422H1 Management Control (formerly MGT428H1) [26L]**
This course considers the processes and systems, many accounting-based, by which key managers allegedly ensure that resources are acquired and used effectively and efficiently in the accomplishment of an organization's goals.
Exclusion: MGT428H1
Prerequisite: MGT323H1/RSM322H1

**RSM423H1 Auditing II (formerly MGT421H1) [26L]**
The course focuses on the reasoning and evidence theory underlying audit decision making. Coverage includes professional judgment, statistical auditing, framework for assurance engagements, and responsibilities to detect fraud.
Exclusion: MGT421H1
Prerequisite: MGT321H1/RSM323H1

**RSM424H1 Canadian Income Taxation II (formerly MGT429H1) [26L, 26T]**
This course is designed to give the student an understanding of more complex issues of Canadian income tax law and tax planning. Topics include computation of corporate taxes, integration, corporate reorganizations, business acquisitions and divestitures, partnerships and trusts.
Exclusion: MGT429H1
Prerequisite: MGT423H1/RSM324H1

**RSM426H1 Critical Thinking, Analysis and Decision Making (formerly MGT420H1) [26L, 13T]**
This is a capstone case course stressing the pervasive competencies and critical thinking skills required from Commerce graduates, professional accountants and advisors. The course integrates the technical and practical knowledge obtained in previous courses by applying this knowledge to case type situations. Aimed at students seeking an accounting designation.
Exclusion: MGT420H1
Prerequisite: MGT426H1/RSM321H1, MGT323H1/RSM322H1, MGT321H1/RSM323H1, MGT423H1/RSM324H1

**RSM427H1 Auditing and Information Systems (formerly MGT422H1) [26L]**
This course investigates strategies and procedures used to audit computerized accounting systems based upon their special control characteristics. Special attention is devoted to computerized statistical procedures.
Exclusion: MGT422H1
Prerequisite: MGT321H1/RSM323H1

**RSM428H1 Analysis of Banking Financial Institutions and Instruments (formerly MGT427H1) [26L]**
Covers financial analysis of firms in the financial services industries: accounting and disclosure rules for financial instruments. Gives an in-depth understanding of how financial reports provide fairly accurate information about the risks and performance of banks and other financial services firms.
Exclusion: MGT427H1
Prerequisite: MGT337Y1/RSM333H1, MGT426H1/RSM321H1

**RSM430H1 Fixed Income Securities (formerly MGT430H1) [26L]**
Describes important fixed income securities and markets. The course emphasizes traditional bond and term structure concepts crucial to understand the securities traded in these markets. Students are required to work in the Rotman Financial Research & Trading Lab to solve the assigned problems using real time data.
Exclusion: MGT430H1
Prerequisite: MGT337Y1/RSM333H1/ACT 349H1

**RSM432H1 Risk Management for Financial Managers (formerly MGT432H1) [26L]**
This course examines the ways in which risks are quantified and managed by financial institutions. The principal risks considered include market risk, credit risk and operational risk. The course also covers the evolution of bank regulation and the regulatory limits on risk taking.
Exclusion: MGT432H1
Prerequisite: MGT337Y1/RSM333H1

**RSM433H1 Advanced Corporate Finance (formerly MGT431H1) [26L]**
Applying fundamental finance ideas developed in RSM332H1, 333H1 to real-life problems. The course will focus on business valuation and financial decisions in practical situations, on the assumption that students are already familiar with basic concepts from previous finance courses.
Exclusion: MGT431H1
Prerequisite: ECO204Y1/206Y1, MGT337Y1/RSM333H1/ACT 349H1

**RSM435H1 Futures and Options Markets (formerly MGT438H1) [26L]**
This course covers the analysis of derivative instruments such as forwards, futures, swaps and options. By the end of the course, students will have good knowledge of how these contracts work, how they are used and how they are priced.
Exclusion: ACT370H1, MGT438H1
Prerequisite: ECO204Y1/206Y1, MGT337Y1/RSM333H1

**RSM437H1 International Finance (formerly MGT439H1) [26L]**
International financial markets, exchange rates, forward markets, interest rate parity. International dimensions of investment, including both portfolio and foreign direct investment. International dimensions of corporate finance, including valuation and the cost of capital of foreign investments.
Exclusion: MGT439H1
Prerequisite: ECO 204Y1/206Y1, MGT337Y1/RSM333H1/ ACT349H1

**RSM451H1 Consumer Behaviour (formerly MGT455H1) [26L]**
Formulating successful marketing strategies requires an understanding of consumers' cultures, motivations, cognitions, and emotions. Students will learn how to use theoretical

perspectives from psychology, economics, anthropology, and other disciplines to generate predictions about consumers, interpret consumer reactions to marketing stimuli, and develop rigorous skills in marketing analysis.
Exclusion: MGT455H1
Prerequisite: MGT353H1/RSM350H1

**RSM452H1 Marketing Research (formerly MGT453H1) [26L]**

Marketing research is studied from the perspective of the marketing manager. The course focuses on the initiation, design, and interpretation of research as an aid to marketing decision making. Case studies and projects are used to provide students with some practical research experiences.
Exclusion: MGT453H1
Prerequisite: MGT353H1/RSM350H1, ECO220Y1/ECO227Y1/(STA250H1, STA255H1)/(STA257H1, STA261H1)

**RSM458H1 Branding Strategy (formerly MGT452H1) [26L]**

Students will assume the role of senior marketing managers responsible for the design, implementation, and evaluation of branding strategies. Brands represent valuable assets that must be created, sustained, leveraged, and defended. This course will use case analysis and a group project to reinforce successful decision making and communication skills.
Exclusion: MGT452H1
Prerequisite: MGT455H1/453H1/RSM451H1/452H1

**RSM460H1 Human Resource Management (formerly MGT460H1) [26L]**

Human resource management is studied from the perspective of the manager/practitioner. The course focuses on current theory and practices in the major functions of human resource management. Class exercises and projects are used to provide students with some practical HR experience.
Exclusion: MGT460H1
Prerequisite: MGT363H1/RSM360H1/WDW 260H1

**RSM461H1 Managerial Negotiations (formerly MGT461H1) [26L]**

Students learn to recognize, understand, analyze, and practice essential concepts in negotiations required for understanding more complex relations within and between organizations. The main objective is to learn how to analyze the critical factors of a negotiation situation and then to be able to prescribe a course of action.
Exclusion: MGT461H1
Prerequisite: MGT363H1/RSM360H1

**RSM470H1 Management Science (formerly MGT475H1) [26L]**

The course presents quantitative methods of modeling business and other systems in order to objectively evaluate available alternatives and select the 'best' one with respect to pre-defined criteria. Topics include: Decision Analysis, Linear Programming, Integer Programming, Network Methods, Simulation and Waiting Line Models.
Exclusion: MGT475H1
Prerequisite: MGT374H1/RSM370H1

**RSM480H1 Business in a Global Economy (formerly MGT480H1) [26L]**

Application of the analytic framework of international trade, foreign investment and exchange rate economics to management of business. Special topics include the industrial effects of trade liberalization, the role of the World Trade Organization, foreign exchange risk management, competition policy and international taxation.
Exclusion: MGT480H1
Prerequisite: ECO208Y1/209Y1, MGT337Y1/RSM333H1

**RSM481H1 Organization Strategies (formerly MGT481H1) [26L]**

Explores the issue of outsourcing, broadly defined: which activities should a firm do "in house" and which should it take outside? Using a combination of cases and economic analysis, it develops a framework for determining the "best" firm organization.
Exclusion: MGT481H1
Prerequisite: MGT337Y1/RSM332H1

**RSM482H1 Market Strategies (formerly MGT482H1) [26L]**

Applies game-theoretic reasoning to analyze business strategy problems, focusing specifically on pricing, advertising, product positioning, product introduction, and relationships with upstream and downstream firms.
Exclusion: MGT482H1
Prerequisite: ECO208Y1/209Y1, MGT337Y1/RSM332H1

**RSM490H1 International Business (formerly MGT491H1) [26L]**

Focuses on developing an understanding of the fundamentals of doing business in an international environment. Based on the application of management theory (trade theory, modes of entry, foreign direct investment, theory of the multinational) to the strategic management problems of organizing business in the international arena.
Exclusion: MGT491H1
Prerequisite: MGT337Y1/RSM333H1

**RSM493H1 Entrepreneurship (formerly MGT493H1) [26L]**

Introduces essentials of starting a new business: how to evaluate new opportunities, craft strategy, obtain resources, manage growth, and distribute ownership. Applies concepts from strategic management to challenges facing new/small businesses. Examines the role of entrepreneurs in spurring technological innovation and economic growth, and the effect of government policy on entrepreneurial activity.
Exclusion: MGT493H1
Prerequisite: MGT252H1/RSM250H1, MGT337Y1/RSM333H1

**RSM494H1 Technology Strategy (formerly MGT494H1) [26L]**

Teaches about technological evolution and how evolutionary stages impact firms' strategic choices. Important issues in technological evolution are technological discontinuities, standards wars, dominant designs and patenting. Important strategic decisions concern innovation management, product versus process focus and intellectual property strategies. Project oriented coursework based on patent and business data bases.
Exclusion: MGT494H1
Prerequisite: MGT492H1/RSM392H1

**RSM499Y1 Integrated Management Course (formerly MGT499Y1) [52L, 26T]**

An experiential business simulation in which students form the executive committee of a fictitious company and compete in a virtual computer simulation. Students interact and work together as a team, guide a company to success and communicate with stakeholders by reporting to a board of directors composed of business executives.

Exclusion: MGT499H1, 499Y1

Prerequisite: MGT337Y1/RSM333H1, one of: (MGT252H1/RSM250H1)/(MGT262H1/RSM260H1)/(MGT374H1/RSM370H1)

## First Year Seminars: 199H1/Y1 Courses

First-Year Seminars: 199H1 and 199Y1 Courses

Coordinator: Professor Suzanne Stevenson, Vice-Dean, Students and First-Year Seminar Office (416-978-0359)

Web site: www.artsci.utoronto.ca/current/undergraduate

The 199Y1 and 199H1 seminars are designed to provide entering undergraduates with the opportunity to work closely with an instructor in a class of no more than twenty-four students. Each Seminar focuses on specific disciplinary or interdisciplinary issues, questions or controversies of particular interest to the instructor, and introduces the students to the excitement of discovery inherent in academic work at the University of Toronto. In addition, students are encouraged to develop their ability to think analytically and to express ideas and logical arguments clearly and coherently, both orally and in writing.

These interactive seminars are not designed as introductory surveys to a discipline or program. Rather, they are intended to stimulate the students' curiosity and provide an opportunity to get to know a member of the professorial staff in a seminar environment during the first year of study. Thus, students are encouraged to experience material and methods that are outside the area in which they will eventually concentrate in order to benefit fully from the scope and diversity of the Faculty of Arts and Science. All 199Y1 and 199H1 seminars are described within the First-Year Handbook that is distributed to every newly admitted first-year student.

NOTE: 198H1 may be used in circumstances where a student enrols in two 199H1 seminars.

All 199Y1 and 199H1 seminars have generic designators HUM (HUManities) or SCI (SCIence) or SSC (Social SCience), or INX (Interdisciplinary), according to the disciplinary content of the seminar.

All 199Y1 and 199H1 courses count for degree credit in the same way as any other course. STUDENTS MAY ENROL IN ONLY ONE 199Y1 SEMINAR OR TWO 199H1 SEMINARS. These courses can under most circumstances fulfill breadth requirements. For details see the Calendar (under Distribution Requirements, page 26) and the First-Year Handbook.

## Research Opportunity Program: 299Y1 Courses

Coordinator: Professor Suzanne Stevenson, Vice-Dean Students and Research Opportunity Program Office (416-978-0359)

Web site: www.artsci.utoronto.ca/current/undergraduate

The Research Opportunity Program ("ROP") provides an opportunity for students in their second year (i.e., after completing at least four but not more than eight and a half courses) to earn one 299Y1 course credit by participating in a faculty member's research project.

Descriptions of ROP projects are in the ROP 299Y1 Project Binder in the ROP Office (Room 1067, Sidney Smith Hall, 100 St. George Street), and on the Faculty's web site at www.artsci.utoronto.ca/current/undergraduate course in late February.

Students wishing to apply (to a maximum of five) for places in the ROP should submit ROP Application forms (found onine) to UGResearchOpps@artsci.utoronto.ca by mid-March. Students will be informed in early May whether or not they have been accepted. Successful applicants will be registered in their 299Y1 course by the Program office.

A student may accept only one 299Y1 course. Each 299Y1 course will bear the three-letter designator of the department or program sponsoring it, e.g., ANT 299Y1, CSB 299Y1, etc. Not all departments or programs will necessarily participate in the ROP each year.

Students will be expected to keep a journal recording meetings, progress, and what was learned about the project in particular and the nature of research in general. Full details of 299Y1 course requirements are in the ROP 299Y1 Project Binders and online. For further information contact the Coordinator.

### Summer Research Opportunities

A limited number of ROP 299Y1 courses are offered each summer. Applications for summer 299Y1s are due in mid-March at the same time as fall/winter 299Y1s.

## Independent Experiential Study Program: 398H0/399Y0 Courses

Coordinator: Professor Suzanne Stevenson, Vice-Dean Students and Program Office (416-978-0359)

A limited number of 398H0/399Y0 courses are available each year. Faculty supervisors propose the projects and choose the students who apply for the projects as they now do for the 299Y1s. They also sign a contract with the successful candidates as with the 299Y1 projects. Students must also attend a Safety Abroad Seminar offered by the Safety Abroad Office.

Students must normally have completed a minimum of nine FCEs and a maximum of thirteen and a half FCEs of their studies by the time they begin a 398H0/399Y0 project. The 398H0/399Y0 would be eligible to count towards program completion if the program sponsor (Chair or Director) so chooses. The 398H0/399Y0 would normally have a program-specific designator, such as ANT, CLA, CSB, VIC, etc.

The projects normally run within the May-August period, when both Faculty and students would be able to make the time commitments necessary. Regular tuition fees apply. The practical, experiential component can take the form of research/learning under the supervision of a faculty member in archives, laboratories, libraries, or in a field camp, etc. - but not in a classroom at another university (that is covered by the Faculty's summer abroad and exchange programs).

Details of individual 398H0/399Y0 projects will be available in the Program office and online at www.artsci.utoronto.ca/current/undergraduate after March 1 each year.

## Faculty

### Assistant Professor

D. McGregor
Cynthia Wesley-Esquimaux

### Senior Lecturer

A. McKay

Aboriginal Studies focuses on the languages, cultures, histories, arts, creativity and well-being of Indigenous Peoples and on their knowledges within Canada and worldwide. It is an interdisciplinary program which is sponsored by the Faculty of Arts & Science. Students are encouraged to seek counselling and information about this program from Ruby Eisen (ruby.eisen@utoronto.ca) or on our web site at http://www.utoronto.ca/abs.

## Aboriginal Studies Programs

### Aboriginal Studies (Arts program)

#### Specialist program

(10 full courses or their equivalents, including at least one 400-series course)

1. ABS 201Y1
2. ABS 210Y1/220Y1/230H1 and 231H1
3. ABS 300Y1 and ABS 301Y1
4. ABS 460Y1
5. Four additional full-course equivalents from Group A below (note: some of these courses have prerequisites)
6. One additional full-course equivalents from Group A or one full-course equivalent from Group B below (note: some of these courses have prerequisites)

#### Major program

(7 full courses or their equivalent, including at least two 300+level courses)

1. ABS 201Y1
2. ABS 210Y1/220Y1/230H1 and 231H1
3. ABS 300Y1 and ABS 301Y1
4. Two additional full-course equivalents from ABS, JFP, or JAG designators (note: some of these courses have prerequisites)
5. One additional full-course equivalent from Group A or one full-course equivalent from Group B below (note: some of these courses have prerequisites)

#### Minor program

(4 full courses or their equivalent, including at least one full-course equivalent at the 300+-level)

1. ABS 201Y1
2. ABS 300Y1/301Y1
3. One additional full-course equivalent ABS, JFP, or JAG (note: some of these courses have prerequisites)
4. One additional full-course equivalent from Group A below (note: some of these courses have prerequisites)

**Group A:**

| | |
|---|---|
| ABS205Y1 | Aboriginal Spirituality |
| ABS210Y1 | Introduction to the Ojibwa Language |
| ABS220Y1 | Introduction to an Iroquoian Language |
| ABS230H1 | Introduction to Inuktitut |
| ABS231H1 | Elementary Inuktitut |
| ABS250H1 | Indigenous Environmental Knowledge |
| ABS302H1 | Aboriginal People in the Mass Media |
| ABS310Y1 | Ojibwa Language II |
| ABS323Y1 | Intermediate Iroquoian Language |
| ABS320Y1/ 321H1 | Aboriginal Visual Expression: Technical and Theoretical Aspects |
| ABS330Y1/ 331H1 | Aboriginal Music: Technical and Theoretical Aspects |
| ABS341H1 | Indigenous Theatre |
| ABS350Y1 | Aboriginal Health Systems |
| ABS351Y1 | Aboriginal Legends and Teaching |
| ABS352H1 | The Indian Act |
| ABS353H1 | Aboriginal Perspectives in Canadian Politics and Law 1 |
| ABS354H1 | Aboriginal Perspectives in Canadian Politics and Law 2 |
| ABS402H1 | Traditional Indigenous Ecological Knowledge |
| ABS403H1 | Aboriginal People in Urban Areas |
| ABS404H1 | Politics of Aboriginal Nursing |
| ABS405Y1 | Indigenous Thought and Expression: Creative Non-fiction |
| ABS460Y | Methodology in Aboriginal Studies |
| ABS495Y1/ 496H1/ 497H1 498Y1 | Independent Research |
| ANT315H1 | Arctic Archaeology |
| ANT365Y1 | Native America and the State |
| ANT453H1 | Sub-Arctic Issues |
| ENG254Y1 | Indigenous Literatures of North America |
| ENG355H1 | Indigenous Women's Literature |
| HIS369Y1 | The Aboriginal Peoples of the Great Lakes |
| HIS472H1 | Topics in Canadian Aboriginal/Non-Aboriginal Relations |
| HIS493H1 | Cultural Encounters in Early Canada |
| JAG321H1 | Aboriginal People and Environmental Issues in Canada |
| JFP450H1 | First Nations Issues in Health and Healing (offered by the Faculty of Pharmacy) |
| LIN458H1 | Revitalizing Languages |
| RLG201Y1 | Aboriginal Religion |
| UNI317Y1/ 317H1 | Politics of Aboriginal Self-Government |

**Group B:**

| | |
|---|---|
| ANT200Y1 | Introduction to Prehistoric Archaeology |
| ANT204Y1 | Social and Cultural Anthropology |
| ANT319Y1 | Archaeology of North America |
| ANT311Y1 | Archaeological Fieldwork |
| ANT348Y1 | Anthropology of Health |
| ANT367Y1 | Indigenous Spirituality |
| ANT410H1 | Hunter-Gatherers Past and Present |
| ANT454H1 | The Anthropology of Music |
| DRM268H1 | Canadian Theatre History |
| ENV236Y1 | Human Interactions with the Environment |
| FOR200H1 | Conservation of Canada's Forests |

| | |
|---|---|
| GGR240Y1 | Historical Geography of the Americas |
| HIS106Y1 | Natives, Settlers, and Conquistadors: Colonizing the Americas, 1492-1776 |
| HIS294Y1 | Caribbean History and Culture |
| HIS358H1 | How the West was Colonized |
| HIS384H1 | Colonial Canada: The East |
| HIS402Y1 | Indigenous Colonial Cultures in the Spanish and Portuguese Americas |
| HIS468H1 | Atlantic Canada |
| INI327Y1 | Race and Representation |
| INI333H1 | Ecological Worldviews |
| JAL253H1 | Language and Society |
| JAL254H1 | Sociolinguistics |
| JIE222Y1 | The Study of Environment |
| NEW224Y1 | Caribbean Thought I |
| NEW240Y1 | Introduction to Equity Studies |
| NEW324Y1 | Caribbean Thought II |
| NEW369Y1 | Studies in Post-Colonialism |
| POL304Y1 | Ethnicity and Politics in Canada |
| POL340Y1 | Ethnicity and Politics in Canada |
| SOC220Y1 | Social Inequality in Canada |

### Faculty of Arts & Science Language Citation

Aboriginal Studies participates in the Faculty of Arts and Science's Language Citation Initiative for Ojibwa. The study of Ojibwa is a demanding and intellectually rewarding educational experience. Successful study of this language demonstrates intelligence, discipline, analytical sophistication, and an excellent memory. The study of any language provides invaluable insights into the varieties of human culture and expression.

In each language the Language Citation recognizes a significant level of achievement in language study with a high level of academic success. The Citation in Ojibwa is available to students who complete ABS 210Y1 and earn a grade of at least B- in ABS 310Y1 and ABS 301Y1.

Students should note that, as explained on page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

## Aboriginal Studies Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), ABS courses are classified in different categories; check individual course descriptions.

**ABS201Y1 Introduction to Aboriginal Studies [52L/26T]**
An introduction to Canadian Aboriginal studies and Aboriginal world views, including language, culture, history, politics, economics, sociology, and science. A focus on critical thinking, the introduction of new perspectives, and community context.
This is a Social Science or Humanities course

**ABS205Y1 Aboriginal Spirituality [52L]**
An exploration of spiritual practices and beliefs of Indigenous peoples with emphasis on Canada's First Nations. Spirituality through an historic lens, highlighting rituals such as Ghost Dances, Midewiwin Lodge, and Wabung, and contemporary spiritual practices, including evolving belief systems, ritual and spiritual practice in today's world, and the balance of spirituality and spiritual practice with modernity.
Recommended preparation: ABS201Y1
This is a Humanities course

**ABS210Y1 Introduction to the Ojibwa Language [78L]**
An introduction to the Ojibwa language, including the syllabic writing system.
This is a Humanities course

**ABS220Y1 Introduction to an Iroquoian Language [78L]**
An introduction to one of the languages of the Iroquoian language family.
This is a Humanities course

**ABS230H1 Introduction to Inukitut [26L]**
An introduction to one dialect of Inuktitut, the language of the Inuit, including aspects of other dialects and the syllabic writing system.
This is a Humanities course

**ABS231H1 Elementary Inuktitut [26L]**
This course builds on the introduction to Inuktitut from ABS230H. Emphasis will be placed on developing grammatical complexity and vocabulary in students' oral skills, as well as dialect and cultural awareness.
Prerequisite: ABS230H1
This is a Humanities course

**ABS250H1 Indigenous Environmental Education [26S]**
An exploration of traditional environmental education and its relevance in contemporary Aboriginal society, with a focus on the process of environmental education as well as on theory and conceptual understanding.
Prerequisite: ABS201Y1
This is a Social Science course

**ABS300Y1 Worldviews, Indigenous Knowledges, and Oral Tradition [52L]**
A study of the languages and culture of Aboriginal peoples through exploration of oral histories, from creation stories until present times, including the role of oral history and methods for studying oral history through accounts told by elders.
Prerequisite: ABS201Y1
This is a Social Science or Humanities course

**ABS301Y1 Native Language and Culture [52L]**
Examination of the historical interplay of Aboriginal languages and cultures in Canada. Particular focus is on the language and culture of a First Nation in Ontario.
Exclusion: ABS200Y1
Prerequisite: ABS201Y1
This is a Social Science or Humanities course

**ABS302H1 Aboriginal Representation in the Mass Media and Society [26L]**
A survey of historical and contemporary representations of Aboriginal people in the mass media. Introduction to basic techniques for evaluating, analyzing, and understanding the construction of 'Nativeness' as it is communicated through film, television, and other media. Examination of racial stereotypes and the role of mass communication in perpetuating and challenging stereotypes, cultural appropriation, Aboriginal media production, impact of media portrayal of Aboriginal peoples.
Prerequisite: ABS201Y1
This is a Social Science or Humanities course

**ABS310Y1 Ojibwa Language II [78L]**
Further study of the Ojibwa language with emphasis on speaking and writing.
Prerequisite: ABS210Y1
This is a Humanities course

**ABS320Y1 Aboriginal Visual Expression: Technical and Theoretical Aspects [52L, 26P]**

**ABS321H1 Aboriginal Visual Expression: Technical and Theoretical Aspects [26L, 13P]**
An introduction to expressive aboriginal visual art from a regional Anishnaabe perspective, including beading, leather work, quillwork, birchbark baskets, with a concentration on technical, theoretical, historical, esthetic and cultural aspects and contemporary practice.
Prerequisite: ABS201Y1 or permission of the instructor
This is a Humanities course

**JAG321H1 Aboriginal People & Environmental Issues in Canada [39L]**
This course explores Aboriginal views of environment and resource management from pre-European contact times through to the present from an Aboriginal perspective. Emphasis will be placed on the emerging role of Aboriginal people in environmental and resource management in Canada. Topics to be covered include: history of Aboriginal/non-Aboriginal relations, Aboriginal world view and philosophy, Aboriginal environmental ethics and principles, and current environmental issues confronting Aboriginal people. (Offered by Aboriginal Studies and the Geography Department)
Prerequisite: Two credits in Geography or Aboriginal Studies
This is a Social Science course

**ABS323Y1 Intermediate Iroquoian Language [78L]**
Further study of an Iroquoian language.
Prerequisite: ABS 220Y1
This is a Humanities course

**ABS330Y1 Aboriginal Music: Technical and Theoretical Aspects [52L]**

**ABS331H1 Aboriginal Music: Technical and Theoretical Aspects [26L]**
Contemporary and historical musical performance practices of Aboriginal people of North and South America.
Prerequisite: ABS201Y1
This is a Humanities course

**ABS341H1 North American Indigenous Theatre [26L]**
An introduction to the evolution of Indigenous theatre in North America, examining traditional oratory, ceremony, community responsibility, and social construct and their impact on current Indigenous theatre.
Prerequisite: ABS300Y1/301Y1/331H1/DRM100Y
This is a Humanities course

**ABS350Y1 Aboriginal Health Systems [52L]**
An overview of Aboriginal health systems, internationally, nationally, provincially and locally, with a focus on Ontario. Discussion of health models and strategies, policy, legislation, jurisdictional issues, Aboriginal health initiatives
Prerequisite: ABS201Y1/(UNI200H1 + UNI210H1)
This is a Social Science course

**ABS351Y1 Aboriginal Legends & Teaching (formerly ABS351H1) [26L]**
An introduction to laws of Aboriginal societies, focusing on the Nishnabe, as seen through legends and teachings.
Prerequisite: ABS201Y1
Exclusion: ABS351H1
This is a Social Science or Humanities course

**ABS352H1 The Indian Act 26L**
The history of the Indian Act from its creation to the present.
Prerequisite: ABS201Y1
This is a Social Science or Humanities course

**ABS353H1 Aboriginal Perspectives in Canadian Politics and Law I [26L]**
A study of the development of Aboriginal/Western relations from a legal and political standpoint and the evolution of Aboriginal issues and Native rights since contact. Aboriginal perspectives, customary law, restorative justice initiatives and self-government, effects of Canadian law on Indigenous beliefs and life ways, political and economic development potential.
Prerequisite: ABS201Y1
Recommended preparation: a course in Canadian history or politics
This is a Social Science or Humanities course

**ABS354H1 Aboriginal Perspectives in Canadian Politics and Law 2 [26L]**
A continuation of ABS353H1.
Prerequisite: ABS353H1
This is a Social Science or Humanities course

**ABS398H0 Independent Experiential Study Project**

**ABS399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting.
See page 48 for details.

**ABS402H1 Traditional Indigenous Ecological Knowledge [39L]**
An overview of the relationships between Indigenous peoples and their environments, including an exploration of cultural, historical, and contemporary aspects of Indigenous environmental philosophies; the nature, control and transmission of Traditional Ecological Knowledge (TEK), and historical uses of TEK in managing the environment.
Prerequisite: ABS201Y1 plus one additional ABS designator course
This is a Social Science or Humanities course

**ABS403H1 Aboriginal People in Urban Areas [26L]**
An examination of Aboriginal peoples' experiences in urban centres, including an examination of increasing Aboriginal migration to Canadian and American cities, government policy affecting off-reserve Indians, and urban Indians' concerns and goals.
Prerequisite: ABS201Y1 plus two additional full-course equivalents in ABS
This is a Social Science or Humanities course

**ABS404H1 Politics of Aboriginal Nursing [26L]**
An examination of the impacts of policies and practices on the health of Aboriginal people in Canada which honours Native world view and traditions and values cultural safety. Includes historical and social determinants of health, historical events, policies and social realities and their consequences.
Prerequisite: Two full ABS courses plus permission of the instructor.
This is a Social Science course

**ABS405Y1 Indigenous Thought & Expression: Creative Non-fiction [52S]**
An investigation of (Anishnaabe, Iroquoian, Athapaskan, Salish), examined through the study of research and writing of creative-nonfiction.
Prerequisite: ABS201Y1 plus one additional ABS designator course and permission of instructor
This is a Humanities course

**JFP450H1 First Nations Issues in Health and Healing [28L]**
An examination of issues about the health of Aboriginal people in Canada, providing an understanding of present day health issues from the perspective of their historical and political context and effects of health care policy. (Offered by the Faculty of Pharmacy)
This is a Social Science or Humanities course

**ABS460Y Methodology in Aboriginal Studies [78L]**
Basic methods in research in Aboriginal Studies, including oral tradition and community-based research, as well as discussion of ethics, protocols, priorities, and comparative Indigenous methodologies.
Prerequisite: ABS201Y1 + permission of the instructor + 4th year status in Specialist or Joint Specialist program in Aboriginal Studies.
This is a Social Science or Humanities course

**ABS495Y1 Independent Research [TBA]**

**ABS496H1 Independent Research [TBA]**

**ABS497H1 Independent Research [TBA]**

**ABS498Y1 Independent Research [TBA]**
Supervised independent research on a topic agreed on by the student and the supervisor before enrolment in the course. Available only when someone is willing and able to supervise.
Prerequisite: ABS201Y1 plus one additional ABS designator full-course equivalent
This is a Social Science or Humanities course

# Millie Rotman Shime Academic Bridging Program

The Academic Bridging Program enables many mature students who are at least 20 years of age to pursue degree studies at the University of Toronto. The courses in the program are designed for students who have been away from formal education for some time and are intended to bridge the gap between a student's prior secondary education and the requirements of first year university courses. They feature study skills, essay writing skills, library research skills and the methodology of the specific academic discipline involved. Students are admitted by Woodsworth College to one of three Academic Bridging courses: ENG 185Y (Introduction to the Study of Literature), JWH 100Y (Canadian History), and JWU 100Y (Contemporary Canada).

Enquiries: Millie Rotman Shime Academic Bridging Program, Woodsworth College (416-978-7487)

## Academic Bridging Program Courses

See page 32 for Key to Course Descriptions.

1. For Distribution Requirement purposes, see classification listed after each course.

2. Only students admitted to the Academic Bridging Program may enrol in these courses.

**ENG185Y1 Introduction to the Study of Literature 78L**

A writing intensive course that introduces essential rhetorical and critical skills, focusing on how to recognize major literary forms; how to read critically, comprehend more fully, analyze outstanding literary works of drama, poetry and fiction; how to write more clearly and effectively, and how to use the library to do research.
This is a Humanities course

**JWH100Y1 Canadian History 78L**

This course is a survey of Canada's political, social, and economic history from European settlement to the present, featuring Canada's native peoples, Anglophone-Francophone issues, Canada's relations with Britain and the United States, and the growth of national institutions. Other themes include regionalism, immigration and multiculturalism.
This is a Humanities course

**JWU100Y1 Contemporary Canada78L**

This interdisciplinary course provides an introduction to contemporary Canadian society. The course includes the study of geography, politics, literature and culture through a historical framework of the twentieth century. It also emphasizes particular themes including aboriginal issues, regionalism, French-English conflict, gender/women's issues and immigration/ multiculturalism.
This is a Humanities or a Social Science course.

# Actuarial Science

**Given by Members of the Department of Statistics**

## Faculty

### Professor and Chair of the Department

K. Knight, M Sc, Ph D

### Professors

S. Broverman, M Sc, Ph D, ASA
X.S. Lin, M Sc, Ph D, ASA

### Assistant Professor

A. Badescu, BSc, MSc, Ph D
S. Jaimungal, BASc, MSc, PhD

Actuarial Science is based upon the application of mathematical techniques to reduce the impact of such hazards as loss of income through death, disability, or retirement, or loss of property through fire, accident, or theft. Actuaries are the chief architects of life, health, and property insurance plans, and pension plans, and bear the major responsibility for their financial soundness. By using concepts from the areas of probabilities and finance, actuaries model, forecast and value the costs of benefits that will be provided to the participants in such plans. Methods developed for modeling insurance risk can also be applied to modeling investment risk, and actuaries apply their expertise to the valuation of sophisticated investment vehicles such as options on equities, bonds and other investment derivatives.

ACT 240H1, though somewhat technical, is a course of interest to a wide audience, since almost every student will from time to time be either a saver or a borrower, and will be covered by insurance and pension plans.. Other actuarial courses deal with more specialized topics, and are generally taken by students with a more serious interest in the field or who want to pursue a career as an actuary.

Professional accreditation as an actuary is obtained via the Canadian Institute of Actuaries by passing a series of examinations set by the Society of Actuaries or the Casualty Actuarial Society. Some professional requirements can be satisfied through courses in the actuarial program. For more information about actuarial studies and careers, contact Professor Broverman or Professor Lin.

Enquiries: 100 St. George Street, Sidney Smith Hall, Room 6018 (416-978-3452)

Associate Chair, Undergraduate Studies: Professor D. Brenner; e-mail: brenner@utstat.utoronto.ca

## Actuarial Science Programs

Enrolment in these programs requires completion of four courses including MAT 137Y1(55%)/157Y1 and ECO100Y1(70%).

### Actuarial Science (Science program)

Consult Department of Statistics.

NOTE: it is the student's responsibility to meet any prerequisites for courses offered by other departments.

**Specialist program**
(13 courses or their equivalent, including at least four 300+-series courses, one of which must be at the 400-level)

This program is designed to prepare a student for professional work as an actuary, and more generally in the financial risk management industry.

First Year:
1. ECO 100Y1(70%)
2. MAT 137Y1(55%)/157Y1
3. MAT 223H1/240H1 (should be taken in first year)

Second Year:
1. ACT 240H1, 245H1, 247H1
2. MGT120H1/201H1
3. MAT 237Y1/257Y1
4. ECO 206Y1
5. STA (257H1, 261H1)

Higher Years:
1. ACT348H1, 349H1, 370H1, 451H1, 455H1, 460H1, 466H1
2. One of: ACT 470H1, 471H1, 472H1
3. STA 302H1, 347H1, 457H1

NOTE:
In order to enroll in any 300- or 400-level ACT course, the minimum grade of C must be obtained in each of ACT240H1, ACT245H1 and ACT247H1. These prerequisites will be strictly enforced.

4. ECO 208Y1 (strongly recommended); STA 352Y1; MAT 244H1, 246H1 are recommended
5. Students in the Actuarial Science Specialist program who have successfully completed ACT 348H1 may be eligible to enrol in the following MGT courses (provided the appropriate prerequisites and co-requisites are met): MGT 430H1, 431H1, 439H1
6. CSC 108H1 recommended

**Major program:**
(8-8.5 courses or their equivalent, including at least two full-course equivalents at the 300+-level)

First Year:
1. MAT 137Y1 (55%)/157Y1
2. ECO 100Y1 (70%)
3. MAT 223H1/240H1 (should be taken in first year)

Higher Years:
1. MGT120H1/201H1
2. ACT 240H1,245H1, 247H1, 348H1, 370H1
3. MAT 237Y1/257Y1
4. STA (257H1, 261H1)
5. Two of: ACT349H1, 451H1,455H1, 460H1, STA302H1, 347H1, 457H1

## Actuarial Science Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), ACT courses are classified as Science courses

**ACT230H1 Mathematics of Finance for Non-Actuaries [26L, 13T]**
Introduction to financial mathematics, interest measurement, present value calculation, annuity valuation, loan amortization, consumer financing arrangements, bond valuation. The course is aimed at a general audience who will not be continuing in the actuarial science program.
Prerequisite: First-year Calculus
Exclusion: ACT240H1

**ACT240H1 Mathematics of Investment & Credit [26L, 13T]**
Interest, discount and present values, as applied to determine prices and values of annuities, mortgages, bonds, equities; loan repayment schedules and consumer finance payments in general; yield rates on investments given the costs on investments.
Prerequisite: MAT133Y1/135Y1/137Y1/157Y1

**ACT245H1 Financial Principles for Actuarial Science I [26L, 13T]**
Term structure of interest rates, cashflow duration, convexity and immunization, forward and futures contracts, interest rate swaps, introduction to investment derivatives and hedging strategies.
Prerequisite: ACT240H1, MAT137Y1/157Y1
Co-requisite: MAT237Y1, STA257H1

**ACT247H1 Introductory Life Contingencies [39L]**
Probability theory applied to survival and to costs and risks of life assurances, life annuities, and pensions; analysis of survival distributions; international actuarial notation.
Prerequisite: ACT240H1; MAT 137Y1/157Y1; STA257H1
Co-requisite: MAT237Y1

**ACT348H1 Advanced Life Contingencies [39L]**
Determination of benefit premium and benefit reserves for life insurance and annuities; analysis of insurance loss random variables; theory of life contingencies for multiple lives.
Prerequisite: ACT240H1 (minimum grade C); ACT245H1 (minimum grade C); 247H1 (minimum grade C); (STA257H1,261H1); MAT237Y1

**ACT349H1 Corporate Finance for Actuarial Science Mathematics [26L, 13T]**
Actuarial applications of financial mathematics and economics.
Prerequisite: ACT240H1 (minimum grade C); ACT245H1 (minimum grade C); 247H1 (minimum grade C); (STA257H1, 261H1); MAT237Y1; ECO206Y1
Exclusion: ECO358H1, 359H1, MGT331Y1, 337Y1

**ACT370H1 Financial Principles for Actuarial Science II [39L]**
Mathematical theory of financial derivatives, discrete and continuous option pricing models, hedging strategies and exotic option valuation.
Prerequisite: ACT240H1 (minimum grade C); ACT245H1 (minimum grade C); 247H1 (minimum grade C); (STA257H1,261H1); MAT237Y1
Exclusion: MGT438H1

**ACT398H0 Independent Experiential Study Project**

**ACT399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.
This is a Science course.

**ACT451H1 Loss Models [39L]**
Loss models and their estimation, mixture distributions, compound distributions, partial insurance, stop-loss insurance, censoring and truncation of data, product-limit estimation, Cox proportional hazard model.
Pre- or co-requisite: ACT348H1; STA347H1, STA261H1

**ACT452H1 Loss Models II [39L]**
Estimation of Loss and Survival Models using complete, censored and truncated data. Product-Limit estimation, empirical estimation, moment and percentile estimation, maximum likelihood estimation and simulation models.
Prerequisite: ACT451H1

**ACT455H1 Advanced Topics in Actuarial Science [39L]**
Advanced life contingencies, multiple decrement theory, insurance policy expenses, multi-state transition models, Poisson processes.
Prerequisite: ACT348H1; STA347H1

**ACT460H1 Stochastic Methods for Actuarial Science [39L]**
Applications of the lognormal distribution, Brownian motion, geometric Brownian motion, martingales, Ito's limma, stochastic differential equations, interest rate models, the Black-Scholes model, volatility, value at risk, conditional tail expectation.
Prerequisite: ACT370H1; STA347H1

**ACT466H1 Credibility and Simulation [39L]**
Limited fluctuation credibility, Bayesian estimation, Buhlmann credibility, non-parametric credibility methods, inverse transformation simulation method, specialized simulation methods for the normal and lognormal distributions, Monte Carlo methods, the bootstrap method.
Prerequisite: ACT451H1; STA347H1

**ACT470H1 Advanced Pension Mathematics [39L]**
Topics in pension mathematics; funding methods for pension plans. (Offered in alternate years)
Prerequisite: ACT348H1 or permission of instructor
Corequisite: ACT455H1

**ACT471H1 Actuarial Applications of Finance [39L]**
Assets, liability and investment management for pension plans. (Offered in alternate years)
Prerequisite: ACT349H1/ /MGT337Y1/(ECO 358H1, ECO 359H1) or permission of instructor

**ACT472H1 Issues in Actuarial Practice [39L]**
Practical issues that arise for insurance, pension and casualty actuaries.
Prerequisite: ACT348H1

**ACT496H1 Readings in Actuarial Science [TBA]**

**ACT497H1 Readings in Actuarial Science [TBA]**
Independent study under the direction of a faculty member. Persons wishing to take this course must have the permission of the Undergraduate Secretary and of the prospective supervisor.

**ACT498Y1 Readings in Actuarial Science [TBA]**

**ACT499Y1 Readings in Actuarial Science [TBA]**
Independent study under the direction of a faculty member. Persons wishing to take this course must have the permission of the Undergraduate Secretary and of the prospective supervisor.
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The American Studies Program is designed to provide students with a broad, yet deep, education about the United States. To ensure breadth, students are required to take an interdisciplinary core course that ranges widely both with respect to the themes covered and disciplinary perspectives applied. As well, the Program offers a wide selection of courses from participating departments and programs in the Faculty, giving students broad exposure to fundamental themes of American life. To ensure depth, the American Studies Program relies heavily on upper level courses, including its own capstone seminars at the 400-level.

## American Studies Program

Enrolment in the programs listed below is open to students who have completed four courses; no minimum GPA is required.

### American Studies (Arts program)

Consult Prof. Elspeth Brown, Room 327N, Munk Centre for International Studies (416-946-8011) for general program requirements.

**Major program:**

(6 full courses or their equivalent, including at least two 300+ series courses and at least three disciplines)

Second year:

1. HIS 271Y1/ENG 250Y1/POL 203Y1

Third year:

2. USA 300Y1

Second, third, or fourth year:

3. Four courses from the following: ABS302H1, 341H1, 403H1, 405Y1; ANT362Y1, 365H1; DRM310H1; ECO 307H1, 423H1; ENG 254Y1, 268H1, 275Y1, 360H1, 363Y1, 364Y1, 368H1, 434H1/435H1/436H1, 437Y1/438Y1; FAH 375H1; GGR 240H1, 254H1, 336H1, 339H1; HIS 106Y1, 202H1, 316H1, 327H1, 365H1, 369Y1, 370H1, 374H1, 375H1, 376H1, 377Y1, 378H1, 379H1, 389H1, 393H1, 401Y1, 404H1, 408Y1, 436H1, 447Y1, 471H1, 473Y1, 475H1, 476H1, 478H1, 479Y1, 484H1; INI 225Y1, 322H1, 324Y1, 383H1, 429H1, 460H1, 463H1, 482Y1, 483H1, 484H1; MUS 230H1, 306H, 315H1, POL 319Y1, 326Y1, 349Y1, 420Y1, 433Y1; RLG 315H1, 442H1; USA 400H1, 401H1, 494H1, 495Y1

**NOTE:** Other 300+ series courses with American content may be allowed; students should seek early approval of program credit for such courses.

**Minor program:**

(4 full courses or their equivalent, including at least one 300+ series course and at least two disciplines)

Second year:

1. HIS 271Y1/ENG 250Y1/POL 203Y1

Third year:

2. USA 300Y1

Second, third, or fourth year:

3. Two courses from the following: ABS302H1, 341H1, 403H1, 405Y1; ANT362Y1, 365H1; DRM310H1; ECO 307H1, 423H1; ENG 254Y1, 268H1, 275Y1, 360H1, 363Y1, 364Y1, 368H1, 434H1/435H1/436H1, 437Y1/438Y1; FAH 375H1; GGR 240H1, 254H1, 336H1, 339H1; HIS 106Y1, 202H1, 316H1, 327H1, 365H1, 369Y1, 370H1, 374H1, 375H1, 376H1, 377Y1, 378H1, 379H1, 389H1, 393H1, 401Y1, 404H1, 408Y1, 436H1, 447Y1, 471H1, 473Y1, 475H1, 476H1, 478H1, 479Y1, 484H1; INI 225Y1, 322H1, 324Y1, 383H1, 429H1, 460H1, 463H1, 482Y1, 483H1, 484H1; MUS 230H1, 306H, 315H1, POL 319Y1, 326Y1, 349Y1, 420Y1, 433Y1; RLG 315H1, 442H1; USA 400H1, 401H1, 494H1, 495Y1

**NOTE:** Other 300+ series courses with American content may be allowed; students should seek early approval of program credit for such courses.

## American Studies Courses

See page 32 for Key to Course Descriptions.

The Distribution Requirement status (see page 26) is listed below each course description.

**USA300Y1 Thinking about the U.S.A. [52L, 26T ]**
An interdisciplinary introduction to the practice of American Studies organized around key periods in the history of the United States in which Americans reinvented themselves, thought in novel ways about who they were, and redrew the boundaries that defined citizenship and membership in the nation. This course illustrates the multi-disciplinary nature of American Studies, creating a conversation about the United States using materials and approaches from history, literature, cultural studies, economics and political science.
Prerequisite: HIS 271Y1/ENG 250Y1/POL 203Y1
Exclusion: USA 200Y1
This is a Humanities or Social Science course

**USA400H1 Topics in American Studies I [26S]**
In depth examination of specific themes relating to American Studies.
Prerequisite: At least two courses from the American Studies list
This is a Humanities or Social Science course

**USA401H1 Topics in American Studies II [26S]**
In depth examination of specific themes relating to American Studies.
Prerequisite: At least two courses from the American Studies list
This is a Humanities or Social Science course

**USA494H1 Independent Studies**
This is a Humanities or Social Science course

**USA495Y1 Independent Studies**
This is a Humanities or Social Science course

## Anatomy: see Life Sciences: Anatomy

# Anthropology

## Faculty

### University Professor Emeritus

R.B. Lee, MA, Ph D, FRSC

### Professors Emeriti

F.D. Burton, MA, Ph D (S)
W.P. Carstens, BA, Ph D (U)
J.J. Chew, MA, Ph D
R.B. Drewitt, Ph D
M.R. Kleindienst, MA, Ph D (University of Toronto Mississauga)
J. Mavalwala, M Sc, Ph D
F.J. Melbye, MA, Ph D (University of Toronto Mississauga)
S. Nagata, MA, Ph D (U)
S.B. Philpott, MA, Ph D
A.K. Ray, M Sc, Ph D
T.E. Reed, BA, Ph D
W.J. Samarin, BA, Ph D
R.W. Shirley, M Sc, Ph D (S)
B.A. Sigmon, MS, Ph D (University of Toronto Mississauga)
R.M. Vanderburgh, MA, Ph D (University of Toronto Mississauga)

### Professor and Chair of the Department

J.P. Boddy, MA, Ph D, FRSC

### Professors

E.B. Banning, MA, Ph D (U)
D.R. Begun, MA, Ph D
G.G. Coupland, MA, Ph D
G.W. Crawford, MA, Ph D (University of Toronto Mississauga)
M. Danesi, MA, Ph D, FRSC
M.J. Lambek, MA, Ph D, FRSC (S)
T. Li, MA, Ph D
H.V. Luong, MA, Ph D
S.K. Pfeiffer, MA, Ph D
G.A. Smith, MA, Ph D (U)
D.H. Turner, BA, Ph D (T)

### Associate Professors

S. Bamford, MA, Ph D (S)
J. Barker, MA, Ph D
M. Chazan, M Phil, Ph D (V)
H. Cunningham, MA, Ph D (U)
M.P. Evison, M Sc, Ph D (University of Toronto Mississauga)
T.M. Friesen, MA, Ph D
G.S. Gillison, BA, Ph D (S,T)
I. Kalmar, MA, Ph D (W,V)
M.A. Latta, MA, Ph D (S)
S. Lehman, MA, PhD
M.D. Levin, MA, Ph D (N)
B. McElhinny, MA, Ph D
H. Miller, MA, PhD (University of Toronto Mississauga)
T.L. Rogers, MA, PhD (University of Toronto Mississauga)
T. Sanders, MA PH D (University of Toronto Mississauga)
L.A. Sawchuk, MA, Ph D (S)
D. Sellen, MA, Ph D
J. Sidnell, MA, Ph D (University of Toronto Mississauga)
K. Sieciechowicz, MA, Ph D (U)
D.G. Smith, MA, Ph D (University of Toronto Mississauga)
H. Wardlow, MA, Ph D, MPH

### Assistant Professors

D. Clark, MA, Ph D (University of Toronto Mississauga)
G. Daswani, MSc, Ph D (S)
N. Dave, MA, Ph D
J. Jackson, MA, Ph D (University of Toronto Mississauga)
H. Kurki, MSc, Ph D
H. G. McKenzie, MA, Ph D (S)
L. Mortensen, MA, Ph D (S)
V. Napolitano-Quayson, AM, Ph D
J. Parga, MA, Ph D (S)
E. Parra, BS, Ph D (University of Toronto Mississauga)
S. Satsuka, MA, Ph D
M. Schillaci, MA, PH D (S)
W.C. Sung, MA, Ph D

Anthropology is concerned with human biological, social, and cultural development. This broad mandate has led to the division of the discipline into four distinctive areas of research.

Archaeology studies surviving evidence of people's activities in the past. From the excavation of sites and the analysis of artifacts uncovered, archaeologists draw conclusions about the organization of social groups, their adaptations to environment, and their spatial and temporal relations. General research topics include the origins of culture and technology, adaptations to extreme climates, the peopling of the New World, development of food production and political inequality in the Old and New Worlds.

Linguistic and Semiotic Anthropology studies how language and other systems of human communication contribute to the reproduction, transmission, and transformation of culture. It is concerned with the role of language and other communicative systems in reproducing and transforming such aspects of society as power relations, ideology, subcultural expression, as well as class, gender and ethnic identity.

Biological Anthropology is the study of the biological diversity of humans, the history of this diversity, and the biological relationships between humans and non-human primates. Major foci in Biological (Physical) Anthropology include Human Biology, the study of modern humans; Osteology, the study of the human skeleton; Paleoanthropology, the study of human evolution; and Primatology, the study of non-human primates. Biological anthropologists integrate biological and social variables in their explanations of the effects of evolution on humans and other primates.

Social and Cultural Anthropology: traditionally, Social Anthropology dealt with non-literate and isolated societies, which could be observed in their totality. Today, many social anthropologists also study such aspects of complex societies as peasantry, ethnic minorities, and industrial work groupings. Institutions and models of social behaviour are compared cross-culturally to establish more general concepts and theories.

Careers in Anthropology emphasize either theoretical, academic aspects or practical applications. Most institutions involved in teaching and research require anthropologists with a Ph.D. For practical applications, at least an M.A. is usually required. The Undergraduate Program provides excellent preparation for

business or public service careers in which international and human diversity issues are important. Courses in anthropology provide a unique grounding and can be fruitfully combined with courses in a wide variety of other disciplines.

Undergraduate Program Administrator/Student Counsellor: Anthropology Building, 19 Russell Street, Room 258 (416-978-6414).

## Anthropology Programs

Enrolment in the Specialist, Major and Minor Programs is limited to students with a cumulative GPA of 2.5 or above. Students may enroll at the end of First Year, or at any later time if they have a cumulative GPA of 2.5 or above.

PLEASE NOTE THAT NOT ALL COURSES ARE OFFERED EVERY YEAR. CONSULT THE CURRENT TIMETABLE FOR COURSE OFFERINGS.

* Note: ANT courses are those offered with the following prefixes: ANT, ABS, ARH, JAC, JAL, JAP and JPA.

### Anthropology (General) (Arts program)

**Specialist program:**
(11 full courses or their equivalent, including at least one 400-series course)

1. ANT 100Y1
2. Three 200+ series ANT* courses from one of Groups A, B, C, D
3. Three 200+ series ANT* courses from a Group other than the group chosen in 2. (above)
4. Four additional ANT* courses with at least one full course at the 400-level

**Major program:**
7 ANT* full courses including ANT 100Y1 and at least three 300+ series courses

**Minor program:**
4 ANT* full courses, of which at least one must be 300+ series course; excluding ANT497/498/499

### Anthropology (Linguistic & Semiotic) (Arts program)

**Major program:**
(7 full courses or their equivalent, including at least two 300+ series courses)

1. ANT 100Y1
2. ANT253H1, and either ANT204Y1 or VIC220Y1
3. Three courses from Group B (VIC 220Y1 may be substituted for one full course, if it is not used to satisfy requirement 2)
4. 1.5 additional ANT* courses

### Anthropology (Biological) (Science program)

**Specialist program:**
(11.5 full courses or their equivalent, including at least one 400-series course)

First Year
1. ANT 203Y
2. BIO 150Y
3. One of: MAT135Y1/137Y1/157Y1/(CHM 138H1, 139H1)/PHY(131H, 132H)/(151H, 152H)/GGR (100H1, 101H1)/GLG (105H1, 110H1)

Higher Years
1. One full course equivalent from: BIO (240H1, 241H1)/251Y1/260H1/(270H1, 271H1)/CHM220H1/247H1/EEB 214H1/215H1/263Y1/265Y1/ENV234Y1/235Y1/GGR201H1/GLG 217H1/HMB 200H1/201H1/202H1/265H1/320H1/NFS284H1/PSL201Y11
2. One of: STA220H1/221H1/GGR270H1/271H1/PSY201H1/202H1
3. Two of ANT326Y1/333Y1/334Y1
4. Two additional 300+ series full course equivalents from group C, with at least one full course at the 400 level.
5. One additional full course equivalent from another ANT group.
6. Two full courses or their equivalent from the following: ANA300Y1/ANT311Y1/330Y1/406H1/410H1/415Y1/419H/EEB318H1/319H1/321H1/322H1/323H1/324H1/328H1/362H1/365H1/428H1/462H1/GGR272H1/273H1/GLG206H1/216H1/217H1/360H1/436H1/HMB300H1/302H1/310H1/420H1/MGY312H1/NFS382H1/PSL302Y

**Major program:**
(7 full courses or their equivalent, including at least two 300+series courses)

First Year:
1. BIO 150Y1
2. One of: MAT 135Y/137Y/157Y/(CHM 138H, CHM 139H)/PHY (131H, 132H)/(151H, 152H)/GGR (100H1, 101H1)/GLG (105H1, 110H1)

Higher Years:
1. ANT 203Y1
2. At least 2 courses from ANT326Y1, 333Y1, 334Y1
3. Two other courses from Group C

### Anthropology (Social/Cultural) (Arts program)

**Specialist program:**
(11 full courses or their equivalent, including at least one 400-series course)

1. ANT 100Y1
2. ANT 204Y1
3. One from ANT 200Y1, 203Y1, ANT253H (if ANT253H is taken, one additional ANT half course must be taken)
4. Six courses from Group D (one of ANT 323Y1 or ANT 329H1 may be substituted), with at least one full course at the 400-level
5. Two additional ANT* courses

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**Anthropology Groups**

**Group A: (Archaeology)**
ANT 200Y1, 299Y1, 311Y1, 315H1, 316H, 317H, 319Y1, 406H1, 409H1, 410H1, 411H1, 412H1, 415Y1, 417H1, 419H1, 420H1, 421H, 431H1, 497Y1/498H1/499H1; ARH 305H1, 312Y1, 360Y1, 361H1, 482H1; JPA 305H1, 310H1, 400Y1

**Group B: (Linguistic and Semiotic)**
ANT 253H, 299Y1, 323Y1, 329H1, 359H1, 425H1, 426H1, 427H1, 444Y1, 483H, 497Y1/498H1/499H1; JAL 328H1, 355H1,

401H1

**Group C: (Biological)**
ANT 203Y1, 299Y1, 326Y1, 330Y1, 333Y1, 334Y1, 429H1, 430H, 431H1, 434H1, 436H1, 471H1, 481H1, 497Y1/498H1/499H1

**Group D: (Social-Cultural)**
ANT 204Y1, 210H1, 299Y1, 322H1, 324H1, 340H1, 341H1, 343H1, 346H1, 347Y1, 348H1, 349H1, 350H1, 352Y, 353H1, 354Y, 356H1, 357H1, 358H1, 359H1, 362Y1, 363Y1, 364Y1, 365H1, 366H1, 367Y1, 426H1, 440H1, 442H1, 444Y1, 445H1, 446H1, 447H1, 448H1, 450H1, 452H1, 454H1, 455Y1, 456H, 459H, 460H, 461Y1, 462H, 463H1, 464H1, 465H1, 466H1, 471H, 480H1, 490Y1, 497Y1/498H1/499H1; EAS 272H; JAG 321H1; HAJ 453H1; NEW252H1, 350H1; WGS385H1

## Aboriginal Studies - See Aboriginal Studies

## Archaeological Science & Archaeology - See Archaeology

## Environmental Anthropology Minor- See Centre for Environment

A program focused on understanding the diverse nature of interactions between humans and their environments, both in the past and in modern global society.

## Past Environments Specialist - See Centre for Environment

A multi-disciplinary program focused on the changing nature of the relationship between the environment and humans over the past 2 million years. Co-sponsored by the Centre for Environment, the Department of Anthropology, and the Program in Archaeology. Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Undergraduate Program Administrator, Department of Anthropology, Room 258, Anthropology Building, 416-978-6414.

# Anthropology Courses

Anthropology offers Social Science and Science Courses; below are first, Social Science courses, then Science courses.

## Anthropology Social Science Courses

See page 32 for Key to Course Descriptions.

**SSC199Y1 First Year Seminar [52S]**

**SSC199H1 First Year Seminar [26S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first-year students. It may serve as a distribution requirement course; see page 48.

**ANT100Y1 Introduction to Anthropology [52L]**
Society and culture from various anthropological perspectives: socio-cultural, biological, archaeological, and linguistic.

**ANT200Y1 Introduction to Archaeology (52L, 26P)**
Cultures in the Old and New Worlds from an archaeological perspective. Principles of prehistoric research are applied to archaeological information, from the Early Pleistocene to the beginning of written history.
Recommended Preparation: ANT100Y1

**ANT204Y1 Social & Cultural Anthropology [52L, 26T]**
Basic approaches to the understanding of social and cultural organization in societies of varying complexity. Comparative social institutions: economic, political, familial, and ritual. Belief systems and symbolic thought, the individual in society, sources of stability and change in socio-cultural systems. Anthropological perspectives on current social issues.
Recommended preparation: ANT100Y1

**ANT 210H1 Craft of Social/Cultural Anthropology [26S]**
This course introduces students to the skills they need to read theory, conduct research, write essays, and do presentations in the field of social/cultural anthropology. The emphasis is on interactive, small group learning. The course is highly recommended for students pursuing a specialist in social/cultural anthropology.
Co-requisite: ANT 204Y1

**ANT253H1 Language & Society [26L]**
This course introduces linguistic analysis with a view towards its application to the study of the relation between culture and social structure. The interplay of pronunciation, grammar, semantics, and discourse with rituals, ideologies, and constructions of social meaning and worldview are discussed in tandem with the traditional branches of linguistic analysis—phonology, morphology, grammar, syntax, and semantics. The objective of the course is to provide a broad framework for understanding the role of language in society.
Recommended Preparation: ANT 100Y1
Exclusion: JAL253H1

**ANT299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**ARH305H1 Archaeological Interpretation**
See Archaeology

**ANT311Y1 Archaeological Fieldwork [TBA]**
Practical field training through six weeks of excavation on an archaeological site. Basic principles of artifact handling and classification. (Offered only in Summer Session)
Prerequisite: ANT200Y1

**ARH312Y1 Archaeological Laboratory**
See Archaeology

**ANT315H1 Arctic Archaeology [26L]**
Archaeology and ethnohistory of Arctic cultures. Emphasis is on variation in social organization, settlement pattern, economy, ideology, and interaction with the expanding European world-system.
Prerequisite: ANT200Y1

**ANT316H1 Ancient Cultures of Mesoamerica [26L]**
This course provides an introduction to the cultures of Mesoamerica, from the first arrival of indigenous peoples to the appearance of the Spaniards in the sixteenth century. Students will become acquainted with cultures including Olmec, Zapotec, Teotihuacan, Maya, and Aztec, while also considering issues of method and evidence.
Prerequisite: ANT200Y1
This is a Social Science course.

**ANT317H1 Archaeology of Eastern North America [26L]**
This course examines the precontact and early contact period culture history of eastern North America, including Ontario, through archaeological evidence. Topics covered include the earliest peopling of the region at the end of the Ice Age, diversity of hunter-gatherer societies, introduction of agriculture, and the development of the dynamic First Nations societies who eventually met and interacted with Europeans.
Prerequisite: ANT 200Y
This is a Social Science course.

**ANT319Y1 Archaeology of North America (formerly ANT 310Y1) [52L]**
This course examines human prehistory in North America, North of Mexico, from the time of earliest occupation to European contact. Special topics include Paleoindian and Archaic adaptations, the rise of complex hunter-gatherers, origins of farming and the evolution of complex chiefdoms.
Exclusion: ANT309H1, 310Y1
Prerequisite: ANT200Y1

**ANT322H1 Anthropology of Youth Culture [26L]**
This course will present various perspectives on the nature and dynamics of youth culture. It will discuss the research accumulated over the past quarter century on youth lifestyles, from fashion and music to the formation and spread of slang. It will also look at the various critical and controversial aspects of adolescence in contemporary culture.
Prerequisite: ANT 204Y1

**ANT323Y1 Social Theory through Contemporary Culture [52L, 26T]**
Theories of culture and society, with examples from ordinary life and fantasy and their popular expressions.
Prerequisite: ANT204Y1/ANT253H1/ one other 200+ course in ANT/SOC

**ANT324H1 Tourism & Globalization (formerly ANT443H1) [26L]**
The course uses tourism as a lens to examine global connections. Particular focus will be on the politics of cultural encounters. Drawing examples from diverse ethnographic materials, the course explores how different visions of the world come into contact, negotiated and transformed, and how tourist encounters shape people's everyday lives.
Exclusion: ANT 443H1
Prerequisite: ANT204Y plus any 300-level course in Social-Cultural or Linguistic Anthropology
This is a Social Science course.

**JAL328H1 Writing Systems [26L]**
Introduction to writing systems; their historical development, their relationship to language, and their role in culture and society. (Given by the Departments of Anthropology and Linguistics)
Prerequisite: ANT100Y1/LIN100Y1

**ANT329H1 Language & Power Structure (formerly ANT329Y1) [26L]**
The role of language and symbolism in the representation and manipulation of ideology and power structure. Case materials drawn from the study of verbal arts, gender, law, ethnic relations, consumption patterns, advertising, and politics with a focus on North America.
Prerequisite: ANT204Y1/ANT253H1/ one of 200+ series "Y1" course in SOC/POL/Women's Studies
Exclusion: ANT329Y1

**ANT340H1 Anthropology of Latin America [26L]**
Provides a framework for understanding current anthropological issues in the different geo-political regions of Latin America. Special attention will be paid to historical/conceptual development of the discipline in the region, and the course will introduce a debate about the dealth and "resurgence" of area studies.
Prerequisite: ANT204Y1

**ANT 341H1 China in Transition (formerly ANT 341Y1) [26L]**
This course offers a general introduction to contemporary China in a global context from an anthropological perspective. This year-long course covers four major aspects of Chinese culture and society: Political Economy, Social Relations, Modernities and Modernization, and Overseas Chinese.
Exclusion: ANT 341Y1
Prerequisite: ANT 204Y1

**ANT343H1 Social Anthropology of Gender (formerly ANT 343Y1) [26L]**
Social anthropological perspectives on variations in gender roles and systems. Examines, through comparison of ethnography, the relationship of gender to social organization, economic and political processes, belief systems and social change.
Exclusion: ANT 343Y1
Prerequisite: ANT204Y1

**ANT346H1 Anthropology of Food [26L]**
Social anthropological perspective on the nature and meaning of food production, culinary cultures, industrial food, food as metaphor, and famine and hunger.
Prerequisite: ANT100Y1/204Y1

**ANT347Y1 Metropolis: Global Cities [52L]**
The role of culture, cultural diversity, space and performance in urban institutions and settings. The cultural context and consequence of urbanization.
Recommended preparation: ANT204Y1

**ANT348H1 Anthropology of Health (formerly ANT 348Y1) [26L]**
Aspects of health and disease in cross-cultural perspective. Critical views on the interface between conventional "western" medicine and alternative, indigenous, and traditional therapeutic systems.
Exclusion: ANT 348Y1
Prerequisite: ANT204Y1

**ANT349H1 Globalization & Underdevelopment [26L]**
The contribution of ethnographic study to the understanding of regional disparities within Western and Third World nations. The inter-relationship between persistent economic underdevelopment, expressions of regional identity and class formation by reference to comparative ethnographic examples.
Prerequisite: ANT204Y1

**ANT350H1 Globalization and the Changing World of Work [26L]**
The course uses ethnographic material to examine the ways in which global forces have changed the nature of work in different sites since World War Two - North America, Europe, and the countries of the South are selectively included.
Prerequisite: ANT204Y1

**ANT352Y1 South Asia: Practices, Theories, Representations [ 52L]**
This course examines key themes in the constitution of South Asia as an area for ethnographic analysis. The first half analyzes classic texts in the anthropology of South Asia, examining the rise of gatekeeping concepts such as caste, the village, collectivity, and patriarchal social organization. The second half focuses on ethnographies of popular culture, sexuality and gender and political mobilizations.
Prerequisite: ANT204Y1
This is a Social Science course.

**ANT 353H1 Anthropology of Indigeneity, Primary Resources and Environment in Canada [26L]**
The course will focus on the dynamic interplay between developments in Canadian Indigenous rights, contested understandings of the environment and primary resource exploration/development in mining, forestry and hydro. The changing relationship is challenging industry to re-think social/environmental responsibility, local vs national equity with implications beyond the Aboriginal community.
Prerequisite: ANT204Y1

**ANT354Y1 Japan in Global Context: Anthropological Perspectives [52L]**
This course examines how what we know as Japan and its culture has been constructed through various types of global interactions. The course uses popular culture, travel encounters and transnational capitalism as lenses for analyzing the dynamics of Japanese society. Topics include gender and sexuality, race and ethnicity, social and family life, work and leisure, and Japanese identity amid changing global power relations. The focus will be on cultural politics: how competing ideas of Japanese society are expressed through particular cultural practices, and how people engage with these practices in order to negotiate their positions in the world.
Prerequisite: ANT204Y1
This is a Social Science course.

**JAL355H1 Language and Gender [26L]**
An introduction to some of the principal questions of feminist theory, as viewed from sociolinguistics. Topics include: socialization into gendered discourse patterns, cultural and ethnic differences in gendered interactions; the role of language and gender in legal, medical and labour settings; multilingualism, migration, imperialism and nationalism; sexuality, desire and queer linguistics, language, gender and globalization.
Prerequisite: One full course equivalent at the 200-level in ANT/JAL/LIN/SOC/WGS.
Recommended preparation: ANT 204Y/ANT 253H/NEW 262Y/SOC 200Y/214Y/215Y

**ANT356H1 Anthropology of Religion [26L]**
This course introduces anthropological definitions of religion; debates on rituals and rites of passage; rationality, religion and modernity; belief and body; religion and the media. It also engages with studies in the anthropology of popular and transnational religion, and the politics of religious movements.
Prerequisite: ANT204Y1

**ANT357H1 Cultures of U.S. Empire [26L]**
Anthropological perspectives on how continental and overseas expansion and conquest have shaped the cultures of the U.S. and of those it has dominated within and beyond its borders. Topics include interventions into health and education of colonized groups, sport and imperial masculinity, culture of U.S. military bases/cities, living with "terror."
Prerequisite: ANT204Y1

**ANT358H1 Medical Anthropology and Social Justice [26L]**
It is widely acknowledged that sharp disparities in disease burden and access to medical care characterize global patterns in health. These disparities affect the life chances of much of the world's population, based on class position, gender, and geographical region.
Prerequisite: ANT204Y1

**ANT359H1 Culture and Difference [13L, 10T]**
The concept of culture in historical and current debates about difference between human beings. The relationship between anthropological and other treatments of difference (psychoanalytical, philosophical, literary, and artistic). Political implications: multiculturalism, separatism, imperialism.
Prerequisite: At least two 200-level courses in the humanities or social sciences.
Recommended preparation: ANT 204Y1

**ARH360Y1 Prehistory of the Near East [52L]**
See Archaeology

**ARH361H1 Field Archaeology TBA**
See Archaeology

**ANT362Y1 Anthropological Studies of Poverty, Social Inequality and the U.S. State [52L]**
This course examines the growing field of U.S. anthropology through ethnographic studies focusing on state institutions and patterns of social inequality. Particular emphasis is placed on research examining local models of governance, policing, immigration reform, unionization and social assistance programs in the context of shifting governmental policies.
Prerequisite: ANT 204Y1

**ANT363Y1 Anthropology of State Societies [52L, 26T]**
Origins, history and internal dynamics of early and modern state societies, examined with a view to placing our own system in an historical and comparative perspective. Case studies include material from Africa, Asia, the Americas and Europe.
Exclusion: ANT363H1
Prerequisite: ANT204Y1

**ANT364Y1 Environment & Globalization [52L]**
This course will examine the relationships between humans and the environment in the context of contemporary efforts to 'develop' within or in opposition to the political economy of neoliberal globalization. We will critically examine the discourses of progress and environment within a broader theoretical inquiry of structure/agency and power.
Prerequisite: ANT 204Y1

**ANT365H1 Native America and the State (formerly ANT365Y1) [26L]**
Culture areas and types existing in precontact and early contact times in North America; problems arising out of contacts between North American Indians and Euroamericans.
Prerequisite: ANT204Y1
Exclusion: ANT 365Y1

**ANT366H1 Anthropology of Social Movements: Theory and Method (formerly ANT366Y1) [26L, 13T]**
Explores how anthropologists have traditionally studied social movements and how new social movements have challenged

anthropologists to rethink some of their ethnographic methods and approaches. Some specific movements covered include those related to indigenous rights, environmentalism, refugees, gay and lesbian issues, biotechnology, new religions, and globalization.
Prerequisite: ANT204Y1
Exclusion: ANT366Y1

**ANT367Y1 Indigenous Spirituality [52L]**
This course focuses upon religion and spirituality amongst peoples with a direct, experiential relationship to the world. The first term examines case studies from Australia, Native North America and Africa; the second term examines aspects of the "world religions'.
Prerequisite: ANT204Y1/RLG201Y1

**ANT395Y0 Special Topics in Anthropology [52S]**

**ANT396Y0 Special Topics in Anthropology [52S]**
Studies in anthropology taken abroad. Areas of concentration vary depending on the instructor and year offered.
Recommended Preparation: ANT 100Y1/204Y1

**ANT398H0 Independent Experiential Study Project**

**ANT399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**JAL401H1 Field Linguistics [52P]**
Practice in language analysis based on elicited data from a native speaker of a foreign language, emphasizing procedures and techniques. (Given by the Departments of Anthropology and Linguistics)
Prerequisite: Completion of LIN322H1, 331H1 except for students in their final year where LIN331H1 is a corequisite.

**ANT406H1 Lithic Analysis [26L,13P]**
Core reduction strategies, replication, experimental archaeology, use-wear, design approaches, ground stone, inferring behaviour from lithic artifacts.
Prerequisite: ANT200Y1, ARH312Y1, 305H1

**ANT409H1 Archaeology of Landscapes & Regions [26L,13P]**
The survey and spatial analysis of archaeological evidence over territories larger than individual camps, villages or towns. Settlement systems, regional exchange and communication, rank-size analysis, nearest neighbour analysis etc.
Prerequisite: ARH305H1
Recommended preparation: GGR270H1

**ANT410H1 Hunter-Gatherers Past & Present [26S]**
Examines the diversity of recent hunter-gatherer societies, as a source of analogues for understanding the archaeological record of past foraging peoples.
Prerequisite: ARH305H1

**ANT411H1 Advanced Archaeological Theory [26S]**
Seminar in the critical examination of major schools of archaeological thought.
Prerequisite: ARH305H1

**ANT412H1 Historical Archaeology [26L, 13P]**
Introduces the problems, methods and some of the material culture of colonial and industrial archaeology with emphasis on Canada and colonial America. Covers the use of documentary evidence, maps, architecture, and a variety of artifact classes.
Prerequisite: ANT200Y1/HIS374H1/384H1

**ANT415Y1 Laboratory in Faunal Archaeo-Osteology [52S, 52P]**
Examination and interpretation of faunal material from archaeological sites as evidence for culture.
Prerequisite: ARH312Y1

**ANT417H1 Archaeology of Settlements & Households [26L]**
Methods for studying the socio-spatial aspects of the archaeological evidence for households and communities.
Prerequisite: ANT200Y1, ARH305H1

**ANT419H1 Current Debates in Palaeolithic Archaelogy [26S]**
Current research in Palaeolithic Archaeology reflecting emerging issues.
Prerequisite: ANT 200Y1 or ANT 203Y1

**ANT420H1 Archaeology of Inequality [26L]**
How social complexity is manifested in the archaeological record. Origins and evolution of prehistoric complex societies, from small-scale chiefdoms to large-scale states.
Prerequisite: ANT200Y1, ARH305H1
Recommended preparation: ANT363Y1

**ANT421H1 Royal Courts of the Ancient New World [26L]**
This course examines the institution of the royal court in the ancient New World as a nexus for negotiation of power and assertion of cultural identity. Case studies concentrate on the Maya; Aztec and Inca cultures provide important comparative contexts. We also explore the integration of textual and material evidence in investigating ancient cultures.
Prerequisite: ARH305H1
This is a Social Science course.

**ANT425H1 Language in Anthropological Thought [26L]**
How ideas about language fit into the overall views of humankind as expressed by selected anthropologists, linguists, sociologists, and philosophers.
Exclusion: ANT425Y1
Prerequisite: ANT204Y1/ ANT253H1

**ANT426H1 Orientalism: Western Views of of Muslims and Jews [39L]**
Language and imagery representing the "oriental" in the West. Emphasis on representations of the "Semites", the Islamic peoples of North Africa, the Middle East and South Asia, as well as the Jews from the mid-nineteenth to the mid-twentieth century.
Prerequisite: ANT323Y1/329H1/any 300-level course in INI/VIC/NMC/Jewish Studies

**ANT427H1 Language, Ideology, & Political Economy [26S]**
Theoretical and empirical studies on the role of language in the reproduction and transformation of ideology, hegemony and political economy. Topics may include language & colonialism, imperialism, globalization, nationalism, racism, sexism, bureaucratic interactions, environmentalism, migration, gentrification. Compares and contrasts critical discourse analytic and linguistic anthropological approaches to method and politics.

Prerequisite: ANT 253H1
Recommended Preparation: ANT 329H1

**ANT431H1 Mortuary Practices in the Archaeological Record [26L]**
Death is the only rite of passage that leaves frequent archaeological traces, through burial and mortuary rituals. It provides us with a rare opportunity to move beyond material culture and look into the cognitive, ritual and ideological aspects of a past human group, bringing archaeology closer to addressing anthropological questions. As we learn how to examine cultural identity, represented through burial and ancestral ritual, and biological reality of demographic, occupational and pathological conditions, the course will provide students with an understanding of the interpretative potential of the human skeleton as a central feature of any burial. The course is of interest to archaeological and biological anthropology students but is not limited to these two fields..
Prerequisite: Any 300-level course from Group A or C
This is a Social Science or Science course.

**ANT440H1 Society in Transition [26L]**
An exploration of the conceptual tools used to understand reflexive modernity. Focus on the articulated web of global and local networks that produce simultaneously inequalities and potentially new identities and collectivities.
Exclusion: ANT440Y1
Prerequisite: ANT204Y1, at least one area course in anthropology

**ANT442H1 Anthropology and New Technologies [26L]**
The relationship between technology and culture through a focus on reproductive, genetic and communications technologies.
Prerequisite: ANT 204Y1, a 300 level, or above, Social Cultural Anthropology course

**ANT444Y1 Research Methods in Social & Linguistic Anthropology [52S]**
Social and linguistic anthropological approaches to research in urban settings. Methodology, field techniques and research ethics. Students must formulate and complete a field research project.
Prerequisite: ANT204Y1

**ANT445H1 Science as Culture and Practice [26S]**
This course examines science and technology from an anthropological perspective. Throughout the course, in addition to introducing major concepts of science studies, we will examine multiple "concrete things," like computers as cultural artifacts, connected to wider social, political, economic, ideological, and cultural contexts.
Prerequisite: ANT 204Y1
Recommended Preparation: one science course

**ANT446H1 Anthropology of Western Europe: Issues and Ideas (formerly ANT 446Y1) [26L]**
Europe is a, landmass and a (transnational) collection of people – in both cases rather vaguely defined. Europe is also an idea, one often closely associated with "western civilization". So if anthropology is a combination of the ethnographic study of a place and its people, and also the critical study of a culture, then certainly both of these perspectives could usefully be applied to a course on Europe. Both of these dimensions are also of pressing concern to within Europe today.
Exclusion: ANT 446Y1
Prerequisite: ANT204Y1

**ANT447H1 Aboriginal Australia [26S]**
The course investigates the nature and significance, in history and the history of ideas, of the ways of life of the Australian Aborigines. The emphasis is on the influence of religion and music on the economic, political and social organization of the people.
Prerequisite: ANT 367Y1/permission of the instructor

**ANT448H1 Ethnicity & Nationalism [26S]**
An examination of theories and critique of ethnicity and nationalism from an anthropological perspective. The problem of the cultural context of ethnicity. Case studies.
Prerequisite: ANT204Y1, one 300-level course in Social Cultural or Linguistic Anthropology

**ANT450H1 Anthropological Approaches to Environmentalism [26S]**
Comparative examination of human ecological adaptations, livelihood strategies, spiritual and cultural values and their relation to environmental maintenance or degradation. Explores contemporary "grass roots" environmental movements and ideologies.
Prerequisite: ANT204Y1, a 300-level or above Social Cultural Anthropology course

**ANT452H1 Anthropology & Human Rights [26S]**
The concept of human rights in its universal claims rises fundamental questions for anthropology as it challenges a central value of the discipline: cultural relativism. Students are asked to consider epistemological and theoretical questions and case studies (e.g. claims of rights by ethnic collectivities).
Prerequisite: ANT204Y1, one 300 level social-cultural/linguistic ANT course

**ANT454H1 The Anthropology of Music & Art (formerly ANT360Y1) [26S]**
This course investigates the connection between religion, music and society from an anthropological point of view. The primary focus is on societies where music is seen by people as the principal vehicle for religious expression. Examination of religions and musics of Australian aboriginal, Melanesian, Native North America, African societies, others.
Prerequisite: ANT367Y1
Exclusion: ANT360Y1

**ANT455Y1 International Health: Anthropological Perspectives [52L]**
This course examines international health, focusing on the health problems of "third world" populations and the contributions and critiques provided by medical anthropology. Topics include: the political ecology of infectious disease, disease eradication campaigns, population policy and reproductive health, the AIDS pandemic, and the quest for culturally appropriate interventions.
Prerequisite: ANT348H1

**ANT456H1 Sexuality, Culture and Movement [26L]**
This course explores, first, how and where forms of desire and sexual practice have become sites of anthropological inquiry and exemplars of particular cultural logics. Tracing, then, the "transnational turn" in the anthropology of sexuality, the course engages important debates about culture, locality, and globalization. By focusing on the transnational movement of desires, practices, and pleasures through activisms, mass media, and tourism, the course asks how sex is global and how globalization is thoroughly sexed. Course material will stress,

but not be limited to, forms of same-sex or otherwise "queer" sexualities.
Exclusion: ANT343H1/Y1
Prerequisite: ANT 204Y plus any 300-level course in Social-Cultural or Linguistic Anthropology
This is a Social Science course.

**ANT459H1 Maps and Places [26L]**
A study of the cross-cultural meaning of two-dimensional representations of space and the socio-political relevance of place.
Prerequisite: ANT204Y1

**ANT460H1 Global Perspectives on Women's Health [26S]**
This fourth-year seminar examines how female gender shapes health and illness. Using case studies of sexual health, fertility and its management, substance use/abuse, mental health, and occupational/labor health risks, the course investigates the material, political, and socio-cultural factors that can put women at risk for a range of illness conditions.
Prerequisite: ANT 343H1/348H1

**ANT461Y1 The History of Anthropology and the Limits of Theory [52L]**
History and development of theories which underlie contemporary anthropology.
Prerequisite: ANT204Y1

**ANT462H1 Anthropology and the Intimate: Studies in Affect and Action [26S]**
This course examines how anthropologists have studied the way that people hope, imagine, love, and despise. Ethnography of "the intimate" realms of affect raises important questions about knowledge production and methodology as well as offering insight into how people come to act upon the world and what the human consequences of such action are. The course will also examine how "the intimate" is socially produced and harnessed in the service of politics and culture. Topics will include grief and its lack; dreams and activism; love and social change; memory and imperialism; sexuality and care; and violence and hope.
Prerequisite: ANT 204Y plus any 300-level course in Social-Cultural or Linguistic Anthropology

**ANT463H1 Native Rights, Canadian Law [26S]**
Drawing on ethnographies, anthropological theories of social change and case law, the course will explore recent Canadian legal decisions dealing with Native issues and review how the Indigenous argument for Aboriginal difference (land and treaty rights, customary law, self-governance) is shaped in legal contexts and affects changes to the practice of Aboriginality in Canada.
Prerequisite: ANT 204Y1
Recommended Preparation: ANT 365H1

**ANT464H1 Anthropology of Oral History and Narrative [26S]**
This course reviews the issues in theory and practice of oral history and narratives, examining the multiple forms of oral evidence, its reliability, and strategies for compilation and analysis of oral data. One important component of the course will be the conducting of interviews.
Prerequisite: ANT 204Y and one other anthropology course from Group D

**ANT465H1 Anthropology of Subjectivity [26S]**
This course explores themes such as the emergence of political and religious imaginaries; the relationship between anthropology and psychoanalysis; anthropology of transnational and diasporic subjectivity; affect and violence; subjectivity and the state.
Prerequisite: ANT 204Y1 and at least one other 300+ social-cultural anthropology course

**ANT466H1 The Philippines and the Filipino Diaspora [26S]**
This seminar studies the Philippines and in the Filipino diaspora. It draws on anthropological, historical, and literary perspectives on culture and social practices, with an eye to considering the ways "the Philippines" as an object of inquiry is differently understood in a real/anthropological studies, feminist, North American ethnic studies and transnational studies.
Prerequisite: ANT 204Y1or permission of instructor

**ANT471H1 Human Nutritional Ecology [26S]**
Approaches from various sub-fields within anthropology are combined with others from zoology, ecology, community nutrition, and global health to enrich our understanding of the evolved nutritional needs of humans across time and space and their changing relationship to culture. Through intensive reading and discussion of a wide range of recent primary research articles, we explore ways in which the study of foodways, food systems, and human ecology can help us design better strategies for improving health in different settings.
Prerequisite: ANT 203Y1/204Y1
This is a Social Science or Science course.

**ANT480H1 Special Topics in Anthropological Research [26S]**
Unique opportunity to explore a particular anthropological topic in-depth. Topics vary from year to year.
Prerequisite: A 200+ level ANT course

**ARH482H1 Special Topics in Archaeology [26S]**
See Archaeology
Unique opportunity to explore a particular archaeological topic in-depth. Topics vary from year to year.
Prerequisite: A 200+ level ANT course

**ANT483H1 Special Topics in Linguistic Anthropology [26S]**
This course will focus on an advanced topic in Linguistic Anthropology. Topic will vary from year- to-year.
Prerequisite: ANT204Y1/ANT253H1/300 Level course in Linguistic and Semiotic anthropology

**ANT490Y1 Field Course in Social and Cultural Anthropology [26L, 52P]**
An instructor-supervised experiential study project in social and cultural anthropology. Course takes place in an off-campus setting.
Prerequisite: ANT 204Y1 and two additional social-cultural anthropology courses

**ANT497Y1 Independent Research [TBA]**

**ANT498H1 Independent Research [TBA]**

**ANT499H1 Independent Research [TBA]**
Supervised independent research on a topic agreed on by the student and supervisor before enrolment in the course. Open in exceptional circumstances to advanced students with a strong background in Anthropology. Course Supervisor must be a member of the Anthropology faculty. Application for enrolment should be made to the Department in the preceding term. A maximum of one year of Independent Research courses is allowed per program.
Prerequisite: A minimum of 10 credits, permission of Supervisor and Undergraduate Coordinator.

## Anthropology Science Courses

See page 32 for Key to Course Descriptions.

**ANT203Y1 Human Biology & Evolution [52L, 26P]**
Introduction to Biological Anthropology, investigating various lines of evidence for human evolution including our primate relatives and an exploration of the relevance of human origins to contemporary human biology and variability.
Recommended preparation: ANT100Y1/BIO150Y1

**JPA305H1 Introduction to Archaeometry [26L, 13P]**
Introduction to methods for remote sensing of buried archaeological remains, dating, and analysis of ancient materials. Application of methods and interpretation of results in archaeological contexts. (Offered in alternate years) (Given by the Departments of Physics and Anthropology)
Exclusion: JPA300Y1

**JPA310H1 Physics and Archaeology [26L, 13P]**
Introduction to the principles behind archaeometric methods for remote sensing, dating, and analysis of archaeological materials, and interpretation of results. Offered in conjunction with JPA305H1. (Offered in alternate years) (Given by the Departments of Physics and Anthropology)
Exclusion: JPA300Y1
Prerequisite: Any 1st-year Physics course/permission of instructor
Co-requisite: JPA305H1

**ANT326Y1 Human Evolutionary Anatomy (formerly ANT 332Y1) [26L, 39P]**
A detailed examination of human musculo-skeletal anatomy from the comparative and evolutionary perspectives. Allometry, basic biomechanics, functional anatomy, and the structure and function of human mastication, the brain, the forelimb and bipedalism. Labs make use of the large collection of primate skeletal material and fossil human casts.
Exclusion: ANT332Y1
Prerequisite: ANT203Y1

**ANT330Y1 Paleoanthropology Field School (Offered on an irregular basis) [26L, 78P]**
This course provides background in the practical and theoretical aspects of fieldwork in Paleoanthropology. Students are trained in the treatment and analysis of fossil vertebrates, plant macro- and micro-fossils and sediments. Excursions to paleoanthropological localities of Homo erectus and Homo sapiens, and excavation at a hominoid site. (Joint undergraduate-graduate)
Prerequisite: ANT203Y1

**ANT333Y1 Living Primate Adaptations [52L, 26P]**
A survey of living primates, this lab-oriented course describes and compares the diverse behavioural and anatomical adaptations that are characteristic to this order of mammals. The understanding of the biological diversity and evolutionary history of primates is important for further understanding of human adaptation and evolution.
Exclusion: ANT333H1
Prerequisite: ANT203Y1
Recommended preparation: ANT326Y1, 334Y1; BIO150Y1

**ANT334Y1 Human Skeletal Biology [39L, 39P]**
Exploration of the development and maintenance of the human skeleton and dentition, with emphasis on application to archaeological, forensic and biomedical sciences.
Prerequisite: ANT203Y1

**JPA400Y1 Advanced Physics & Archaeology [156P]**
An introduction to research in archaeometry and archaeological prospecting. Possible projects: magnetic and resistivity surveying of archaeological sites; thermoluminescence measurements; neutron activation analysis and x-ray fluorescence analysis of artifacts; radiocarbon dating by atom counting; lead isotope analysis. (Offered in alternate years) (Given by the Departments of Physics and Anthropology)
Prerequisite: JPA300Y1/(JPA305H1, 310H1)

**ANT415Y1 Laboratory in Faunal Archaeo-Osteology [52S, 52P]**
Examination and interpretation of faunal material from archaeological sites as evidence for culture.
Prerequisite: ARH312Y1

**ANT429H1 Palaeoanthropology (formerly ANT429Y1) [26L, 52P]**
Method and theory in paleoanthropology focusing on reconstructions of human evolutionary history and the behaviou r of fossil hominids. Identification and analysis of fossil human material and hominid systematics. Includes an extensive lab component using a large collection of primate skeletons and fossil human casts.
Exclusion: ANT429Y1, ANT 332Y5 (University of Toronto Mississauga), ANTC17H3 (Scarb)
Prerequisite: ANT203Y1, ANT326Y1

**ANT430H1 Primate Conservation Biology [26L]**
The focus of this course is on the science of primate conservation biology in an anthropological context. Topics will include primate biodiversity and biogeography, human impacts, and conservation strategies/policies. The effects of cultural and political considerations on primate conservation will also be discussed.
Prerequisite: ANT203Y1

**ANT431H1 Mortuary Practices in the Archaeological Record [26L]**
Death is the only rite of passage that leaves frequent archaeological traces, through burial and mortuary rituals. It provides us with a rare opportunity to move beyond material culture and look into the cognitive, ritual and ideological aspects of a past human group, bringing archaeology closer to addressing anthropological questions. As we learn how to examine cultural identity, represented through burial and ancestral ritual, and biological reality of demographic, occupational and pathological conditions, the course will provide students with an understanding of the interpretative potential of the human skeleton as a central feature of any burial. The course is of interest to archaeological and biological anthropology students but is not limited to these two fields.
Prerequisite: Any 300-level course from Group A or C
This is a Social Science or Science course.

**ANT434H1 Health, Diet & Disease in the Past [26L, 13P]**
Advanced exploration of the life histories of past populations, through the application of palaeodietary analyses, palaeopathology and other appropriate research methods.
Prerequisite: ANT334Y1

**ANT436H1 Primate Ecology & Social Behavior [26L]**
This course will provide an overview of the ecology and social behavior of extant nonhuman primates. Topics will include socioecology, conservation biology, biogeography, aggression and affiliation, community ecology, communication, and socio-sexual behavior. There will also be extensive discussions of methods used in collecting data on primates in the field.

Prerequisite: ANT203Y1

**ANT471H1 Human Nutritional Ecology [26S]**
Approaches from various sub-fields within anthropology are combined with others from zoology, ecology, community nutrition, and global health to enrich our understanding of the evolved nutritional needs of humans across time and space and their changing relationship to culture. Through intensive reading and discussion of a wide range of recent primary research articles, we explore ways in which the study of foodways, food systems, and human ecology can help us design better strategies for improving health in different settings.
Prerequisite: ANT 203Y1/204Y1
This is a Social Science or Science course.

**ANT481H1 Special Topics in Biological Anthropology [26S]**
Unique opportunity to explore in-depth a particular topic in Biological Anthropology. Topics vary from year to year.
Prerequisite: A 200+ level ANT course

# Archaeology

The Archaeology Program focuses on the study of past human societies primarily through their material remains, or "material culture." Archaeologists explore the nature of and changes in past cultures around the world through survey, excavation and analyses of stone tools, pottery, bones, plant remains, architecture and other cultural residues. Some of the major research foci of archaeologists are the nature of hunter-gatherer technology and economy in the Pleistocene, the origins of agriculture, pastoralism, urbanism and politically complex states, the workings of ancient exchange systems, and the development of class-based and gender-based political and economic inequalities in complex societies. Working archaeologists often specialize geographically, chronologically or thematically. Classical archaeologists, for example, specialize in the cultures of the ancient Greco-Roman world, while palaeoethnobotanists explore ways that botanical residues of ancient and prehistoric cultures can inform us about their economies and social systems. The specialist programs allow students to explore archaeology in a multidisciplinary setting.

Students in either specialist program should consult the program coordinator or faculty members in their intended areas of specialization for advice on the selection of courses. Those intending to go on to graduate studies in departments such as Fine Art History and Near and Middle Eastern Civilizations should pay particular attention to language requirements at the graduate level.

The Archaeology Specialist (Arts program) is designed for students in the Social Sciences or Humanities, who may be interested in such fields as prehistoric, Aegean, Classical, historical and Near and Middle Eastern archaeology. See details below. Students interested in pursuing graduate studies should combine it with study of the ancient and modern languages relevant to their primary area of interest.

The Prehistoric Archaeology Major (Arts program) is designed for students whose interests are in prehistoric archaeology, and who want to combine it with a Major in a field not traditionally associated with archaeology. See details below.

The Archaeological Science Specialist (Science program) allows students with science backgrounds to obtain training in areas of study related to archaeometry, geoarchaeology, osteoarchaeology, paleoethnobotany, and other archaeological sciences. See details below.

The Archaeological Science Major (Science program) allows students doing a Major in the mathematical or life sciences to combine that Major with training in archaeological sciences. See details below.

Students are encouraged to seek counselling and information about this program from the Anthropology Undergraduate Administrator/Student Counsellor, Anthropology (416-978-6414).

## Archaeology Programs

1. Enrolment in the Specialist, Major and Minor Programs is limited to students with a cumulative GPA of 2.5 or above. Students may enroll at the end of First Year, or at any later time if they have a cumulative GPA of 2.5 or above.
2. Only ONE Archaeology Program may be selected.

### Archaeology (Arts program)

**Specialist Program:**
(10.5 full courses or equivalent, including at least one 400+series course)

First Year:
1. ANT 200Y1
2. One of: ANT 100Y1/CLA 160H1/GGR (100H1, 101H1)/ NMC 101Y1. If CLA160H1 is taken, an additional half course from Archaeology group A, B or C is required.

Second Year:
1. ARH 305H1
2. GGR 270H1* ( or a half-course from STA 220H1, 221H1, 247H1, 248H1, 250H1, 255H1, 257H1, 261H1, ANT C35H3**)
3. Two full course equivalents from ANT 203Y1/204Y1; CLA 230H1, 231H1;FAH 206H1, 207H1; NMC 260Y1

NOTES:
* Geography pre- or co-requisites waived for Anthropology students.
** To be taken at the Scarborough Campus

Third and Fourth Years:
1. One full course equivalent from Group A
2. 2.5 courses from Groups B-C
3. Field Requirement: ANT 311Y1/ARH 361H1/NMC 261Y1. If ARH 361H1 is taken, an additional ANT half-credit is required.
4. Lab Requirement: ARH 312Y1/JPA (305H1, 310H1)

### Prehistoric Archaeology (Arts program)

**Major Program:**
(6 full courses or equivalent, including at least two 300+series courses)

First Year:
ANT 100Y1
Second Year:
ANT 200Y1
Third and Fourth Years:
1. ARH 305H1
2. 2.5 courses from the Anthropology Group A
3. Field and Lab Requirement: 1.0 course equivalent from: ANT 311Y1/ARH 361H1/NMC 261Y1/ARH 312Y1/JPA 305H1, 310H1

### Archaeological Science (Science program)

**Specialist Program:**
(12 full courses or equivalent, including at least one 400+series course)

First Year:
1. ANT 200Y1
2. One of: ANT 100Y1/GGR (100H1, 101H1)/GLG (102H1, 110H1)
3. One of: BIO 150Y1/CHM (138H1, 139H1)/MAT 135Y1/137Y1/157Y1/PHY (131H, 132H)/ (151H, 152H)

Second Year:
1. ARH 305H1
2. ENV 236Y1
3. One full course equivalent from: BIO251Y1/EEB202H1; BIO (240H1,241H1)/EEB214H1/263Y1; CHM 217H1; GGR 201H1, 205H1/270H1/272H1, 273H1; GLG 206H1/207H1/ 216H1/ 217H1

Third and Fourth Years:
1. One course from Group A
2. One course from Group C
3. 2.5 courses from Group B
4. Field Requirement: ANT 311Y1/ARH 361H1/NMC 261Y1. If ARH 361H1 is taken, an additional ANT half-credit is required.
5. Lab Requirement: ARH 312Y1/JPA (305H1, 310H1)

**Major Program:**
(7 full courses or equivalent, including at least two 300+series courses)

First Year:
1. ANT 100Y1
2. At least one of: GGR (100H1, 101H1); MAT 135Y1/137Y1/157Y1; BIO 150Y1; CHM (138H1, 139H1); PHY (131H, 132H)/(151H, 152H)

Second Year:
ANT 200Y1

Third and Fourth Years:
1. ARH 305H1
2. One 300+series course from Groups A or C
3. 1.5 courses from Group B
4. Field and Lab Requirement: 1.0 course equivalent from: ANT 311Y1/ARH 361H1/NMC 261Y1 or ARH 312Y1/JPA (305H1, 310H1)

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### Archaeology Groups

**Group A: Advanced Theory**
ANT 409H1, 410H1, 411H1, 417H1, 420H1; HIS 425H1

**Group B: Method and Interpretation**
1. Archaeometry: CHM 317H1, 414H1, 416H1; ENV 315H1; GGR 337H1; JPA 400Y1; NMC 369Y1
2. Ceramic and Lithic Analysis: ANT 406H1; NMC 369Y1, 462Y1, 465H1, 466H1, 469Y1
3. Geoarchaeology: ANT 409H1; ENV 315H1; GGR 301H1, 302H1, 307H1, 337H1, 373H1, 390H1, 413H1; GLG 340H1, 360H1; NMC463Y1
4. Osteoarchaeology and Zooarchaeology: ANT 326Y1, 334Y1, 415Y1, 429H1, 434H1; EEB 318H1, 323H1, 324H1
5. Paleoethnobotany: EEB 330H1, 337H1, 340H1; GGR 302H1, 305H1, 331H1, 390H1; HIS 318Y1

**Group C: Area Courses**
1. Classical and Aegean Archaeology: CLA 230H1, 231H1, 232H1, 233H1, 362H1, 389H1; FAH 206H1, 207H1, 300H1, 304H1, 403H1
2. Egyptian Archaeology: JAL 328H1; NMC 343H1, 344H1, 362Y1, 368H1, 382Y1, 461Y1, 467H1, 468H1
3. European and Celtic Archaeology: HIS 322Y1; SMC 344Y1, 345Y1
4. Historical Archaeology: ANT 412H1,GGR 336H1, 366H1, 421H1; HIS 456Y1
5. Islamic Archaeology: NMC 348Y1, 365Y1, 366Y1, 374H1, 376H1, 393H1, 394H1, 396Y1, 464H1
6. Near Eastern Archaeology: JAL 328H1; NMC 346H1, 347H1, 360H1, 361H1, 363H1, 364H1, 370H1, 461Y1, 466H1
7. North American Prehistory: ANT 315H1, 316H, 317H, 319Y1, 365H1, 421H
8. Old World Prehistory: ANT 419H1; ARH 360Y1

## Archaeology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), ARH courses are classified as Social Science courses

**ARH305H1 Archaeological Interpretation [26L]**
Transforming archaeological results into statements about people and their life ways. Covers basic archaeological theory, including research design, sampling, stratigraphy, seriation, formation and testing or evaluation of hypotheses, regional analyses. Introduces some of the major schools of archaeological theory, including New Archaeology and Post-Processual Archaeology.
Prerequisite: ANT200Y1
This is a Social Science course

**ARH312Y1 Archaeological Laboratory [26L, 52P]**
Techniques for making archaeological data meaningful after excavation or survey. Archaeological measurements, compilation of data, database design, archaeological systematics, and sampling theory in the context of lithics, pottery, floral, faunal and other archaeological remains.
Prerequisite: ANT200Y1, a half statistics course (e.g. GGR270H1*, STA220H1, 221H1, 250H1, 257H1, 261H1, ANTC35H3**.
**Note**:
*Geography pre- or co-requisites waived for Anthropology and Archaeology students;
** to be taken at the Scarborough Campus
This is a Social Science course

**ARH360Y1 Prehistory of the Near East [52L]**
From earliest times through the rise of complex hunter-gatherers, and the food producing revolution to politically complex societies in Southwest Asia.
Prerequisite: ANT200Y1/NMC260Y1
This is a Social Science course

**ARH361H1 Field Archaeology [TBA]**
Opportunity for students participating in non-degree credit archaeological digs to submit reports, field notes and term papers for degree credit.
Prerequisite: Permission of Undergraduate Co-ordinator and Supervisor

**ARH398H0 Independent Experiential Study Project**

**ARH399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**ARH482H1 Special Topics in Archaeology [26S]**
Unique opportunity to explore a particular archaeological topic in-depth. Topics vary from year to year.
Prerequisite: A 200+ level ANT course

# Architectural Studies

## A Collaborative Program of the Faculty of Arts & Science and the Faculty of Architecture, Landscape, and Design

## Faculty

### Program Director and Assistant Professor

To Be Announced

### Professors Emeriti

C. Corneil, B Arch
A. Eardley, AA Dip (Hons), MA, M Arch
A. Elken, Dipl Ing Arch
D. H. Lee, B Arch, M Sc, MBA
P. Prangnell, AA Dipl, M Arch
P. Sandori, Dipl Ing Arch
B. L. van Ginkel, B Arch, MCP

### Professor

G. Baird, B Arch, AM (Hon)
L. W. Richards, B Arch, M Arch
B. W. Sampson, B Arch

### Associate Professors

R. el-Khoury, BFA, B Arch, M Arch, MScAS, PhD
S. T. Fong, B Arch, M Arch
T. Kesik, MA Sc, Ph D
R. Levit, BA, M Arch
D. Lieberman, BFA(Cal Arts, AA Diploma (London)
A.T. Liu, BA, M Arch
P. Petricone, B Arch, M Arch
B. S. Shim, BES, B Arch
J. Shnier, BES, B Arch
S. Williamson, B Sc, M Arch

### Assistant Professors

T. Bessai, B Arch, M Arch
A. Blackwell, BES, B Arch, MUD
M.L. Lobsinger, BA, BES, B Arch, M Des
C. Moukheiber, B Env, B Arch

* For additional faculty listings please see Faculty of Architecture, Landscape, and Design web site (www.ald.utoronto.ca).

Architecture is both a profession and a discipline of study, offering a broad variety of career opportunities. As a profession it plays a pivotal role in the production of the built environment, bridging the technical and social, practical and theoretical. It is a cultural and artistic practice that is critically engaged with the forces of urbanization and technological change, the challenges of environmental sustainability, and the struggle for cultural expression. It involves the design, production, and organization of material culture from the scale of domestic objects to the scale of the metropolitan region. As such, studies in architecture interact with numerous related disciplines in the social sciences and humanities, as well as engineering, technology, and media. These studies may lead to professional graduate programs in architecture, landscape architecture, planning, and urban design, as well as careers in related design disciplines, the arts, history, business, journalism, and public policy.

The Architectural Studies programs provide Major degree options for students wishing to study architecture as part of a liberal arts education. The program serves as an introduction to the discipline of architecture, focusing on the state of the art, current issues and emerging practices, all considered from critical, theoretical, and historical perspectives. Studio courses in design and visual communication provide opportunities to learn practical, formal, and analytical skills.

The Architectural Studies Major Programs (Hon. BA) contain concentrations in Architectural Design or in History, Theory, Criticism. The Architectural Design concentration is intended for students wishing an intensive exposure to architectural design within a broad liberal arts education; the History, Theory, Criticism concentration is intended for students wishing a broad interdisciplinary education in architectural studies but not wishing to pursue design. Introductory courses begin at the first-year level and lead into a sequence of courses in architectural design and representation, history, theory, and technology. Emphasis is placed on advanced theory and interdisciplinarity, since contemporary architecture is intimately tied to knowledge and practice in urbanism, environmentalism, literature, media, cultural theory, art, science and technology, as well as philosophy, economics, and political science. This program could usefully be combined with a major in another discipline, such as fine art, urban studies, or computer science.

Graduates who have completed the Architectural Studies Major program and have an Honours B.A. degree may apply to graduate professional programs in architecture or landscape architecture. For further information regarding the BA Architectural Studies program, contact: enquiry.ald@utoronto.ca.

Students who are interested in pursuing graduate professional studies in architecture or landscape architecture and wish to apply to the Faculty's Master of Architecture or Landscape Architecture programs are advised that for the Master of Architecture the following specific courses are required: secondary school calculus (OAC Calculus, or MCB4U Advanced Functions and Introductory Calculus, Grade 12, University Preparation, or equivalent); secondary school physics (OAC Physics, SPH4U Physics, Grade 12, University Preparation, or equivalent); and, a university level half-credit course in architectural history. For the Master of Landscape Architecture the following specific courses at the undergraduate level are highly recommended: biology/ecology, geography, English, and history. For further information regarding admission to these programs, visit www.ald.utoronto.ca or contact the Faculty of Architecture, Landscape, and Design at 416-978-5038. The Faculty sponsors a variety of lectures, exhibitions and other special events for members of the architectural community and the general public.

## Architectural Studies Programs

**NOTE: The Architectural Studies Specialist Program has been discontinued effective the 2006/07 academic year. The Specialist option will not be available to incoming students when choosing a Major. The Program will however honour those Specialist students currently in the Program. Program requirement courses will be offered to ensure students graduate from the program. If you are in the Specialist Program and wish to complete your Program, please consult with the Program Office for further details.**

### Architectural Studies (Arts program)

**Major programs:**
(8 full courses or their equivalent, including 2.0 FCEs at the 300+series)

Enrolment in the Architectural Studies Major Programs is limited. Students must have completed 4.0 full courses or their equivalent, including ARC 131H1 and ARC 132H1. Minimum marks of at least 70% in both ARC 131H1 and ARC 132H1 are required. The student's Cumulative Grade Point Average will also be considered. Achieving minimum levels above does not guarantee admission.

NOTE: The Major programs include the 4.0 Core FCEs below plus 4.0 FCEs from one of the Concentrations below. Students must check all required prerequisites and co-requisites for courses before registering.

**Core Courses for Architectural Studies programs (4.0 FCEs):**
First Year:
1. Theory/Criticism: ARC 131H1, 132H1

Second Year:
1. Design: ARC 213H1
2. Visual: ARC 221H1
3. Theory/Criticism: ARC 231H1, and one of ARC 232H1, 233H1, 234H1, 235H1, 236H1, 237H1, 238H1 or 239H1
4. History: FAH 270H1, FAH 272H1

**Major with Concentration in Architectural Design (4.0 FCEs):**
1. Design: ARC 313H1, 314H1
2. Visual: ARC 321H1
3. History:
   1.0 FCE from: ARC 333H1, 337H1, 338H1; FAH 206H1, 207H1, 215H1, 216H1, 230H1, 231H1, 246H1, 300H1, 309H1, 316H1, 328H1, 330H1, 362H1, 364H1, 370H1, 371H1, 372H1, 373H1, 374H1, 375H1, 376H1, 380H1, 391Y0, 392Y0, 393Y0, 394Y0, 395Y0, 396Y0, 397Y0, 400H1, 404H1, 405H1, 410H1, 413H1, 421H1, 442H1, 470H1, 471H1, 477H1; NMC 366Y1, 368H1, 393H1, 394H1
4. Technics: one of ARC 341H1/342H1
5. 1.0 FCE from any of the courses in Groups A, B, C, D, E listed below. Students are encouraged to take additional courses from these Groups beyond the Major to fulfill degree requirements.

**Major with Concentration in History, Theory, Criticism (4.0 FCEs):**
1 Theory/Criticism: one additional of ARC 232H1, 233H1, 234H1, 235H1, 236H1, 237H1, 238H1, 239H1
2. History:
   0.5/1.0 FCE from: FAH 206H1, 207H1, 215H1, 216H1, 230H1, 231H1, 246H1

   1.0/1.5 FCEs from: ARC 333H1, 337H1, 338H1, 431H1, 432H1; FAH 300H1, 309H1, 316H1, 328H1, 330H1, 362H1, 364H1, 370H1, 371H1, 372H1, 373H1, 374H1, 375H1, 376H1, 380H1, 391Y0, 392Y0, 393Y0, 394Y0, 395Y0, 396Y0, 397Y0, 400H1, 404H1, 405H1, 410H1, 413H1, 421H1, 442H1, 470H1, 471H1, 477H1; NMC 366Y1, 368H1, 393H1, 394H1
3. 1.5 FCEs from any of the courses in Groups A, B, C, D, E listed below. Students are encouraged to take additional courses from these Groups beyond the Major to fulfill degree requirements.

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**Group A (Literary):**
ENG 280H1, 285H1, 290Y1, 389Y1; JEF 100Y1; VIC 201Y1, 210Y1, 300Y1, 309H1, 310H1, 320Y1, 410Y1, 411H1/Y1; PHL 285H1; WLD 300Y1

**Group B (Urban):**
ARC 331Y0, 333H1, 334H1, 335H1, 436H1; FAH 391Y0, 392Y0, 393Y0, 394Y0, 395Y0, 396Y0, 397Y0; GGR 124H1, 220Y1, 339H1, 354Y0, 357H1, 361H1, 363H1, 366H1; HIS 304H1; INI 235Y1, 306Y1, 430Y1, 446H1; JGI 216H1, 346H1, JIE 307Y1; JPF 455Y1

**Group C (Environ):**
ENV 200Y1, 321Y1, 332H1, 335H1, 450H1; GGR 107Y1; INI 446H1; JGE 221Y1; JIE 222Y1

**Group D (Sci/Tech):**
HPS 201H1, 202H1, 306H1, 430H1, 431H1

**Group E (Media):**
INI 115Y1, 322H1, 325Y1, 428H1; VIC 220Y1, 320Y1, 323Y1 (formerly 420Y1), VIS 120H1

## Architectural Studies Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), ARC courses are classified as Humanities courses

**ARC131H1 Introduction to Architecture [26L]**
A comprehensive introduction to the discipline, art and profession of architecture using case studies, both historical and contemporary, local and international.

**ARC132H1 Contemporary Architecture [26L]**
An introductory survey of contemporary international architecture that examines how design is responding to technological change, environmental degradation, accelerating globalization of economy and media, and the politics of regional and cultural identity.

**ARC213H1 Architectural Design I [39P]**
Introduction to architectural design conducted in a studio setting using a series of design projects that develop students' understanding of and skills with fundamental aspects of designing buildings and their environments.
Prerequisite: ARC221H1; Enrolment in an ARC program

**ARC221H1 Architectural Representation I [39P]**
An introduction to architectural drawing and representation in various media.
Prerequisite: Enrolment in an ARC program

**ARC231H1 Architecture and Technology [26L]**
A selected survey of projects in the history of architecture exemplary for exploring the relationship between architecture and technological change.

**ARC232H1 Architecture, Media and Communication [26L]**
An introduction to the interrelationship between architectural theory and studies in media and communications during the twentieth century.

**ARC233H1 Post-Colonial Studies in Architecture [26L]**
An introduction to the emerging field of research in history and theory concerning the role of architecture, urban design and allied design areas in the relationship between western and non-western nations during and after the period of colonialism.

**ARC234H1 Architecture & Cultural Difference [26L]**
An introduction to contemporary issues in architecture pertaining to cultural difference, the politics of cultural identity, and possible structures and strategies for heterogeneity.

**ARC235H1 Architectural Criticism [26L]**
An introductory course in architectural criticism that reviews the writings of major critics, the history of criticism in architecture and the use of alternative critical perspectives.

**ARC236H1 Design and Cultural Transformation [26L]**
A survey of the social, economic, technological and cultural factors that have been instrumental in transforming material culture since the Industrial Revolution.

**ARC237H1 Topics in the History and Theory of Landscape Design [26L]**
An introduction to the history and theory of urban landscape design.

**ARC238H1 Topics in Urban Design History and Theory [26L]**
An introduction to projects and practices, theories and issues in contemporary urban design considered from a historical perspective and in the context of changing forces and paradigms or urbanization, technology, ecology and culture.

**ARC239H1 Introduction to Architectural Theory [26L]**
An introduction to the history and current state of architectural theory.

**ARC313H1 Architectural Design II [39P]**
A second introduction to architectural design conducted in a studio setting using a series of design projects that develop students' understanding of and skills with fundamental aspects of designing buildings and their environments.
Prerequisite: ARC213H1, ARC221H1; Enrolment in the Major program with Concentration in Architectural Design
Co-requisite: ARC321H1

**ARC314H1 Architectural Design III [39P]**
A third introduction to architectural design conducted in a studio setting using a series of design projects that develop students' understanding of and skills with fundamental aspects of designing buildings and their environments.
Prerequisite: ARC313H1; Enrolment in the Major program with Concentration in Architectural Design

**ARC321H1 Architectural Representation II [39P]**
An introduction to the history, theory and present state of building technology in the context of architectural design.
Prerequisite: ARC213H1, ARC221H1; Enrolment in the Major program with Concentration in Architectural Design
Co-requisite: ARC313H1

**ARC331Y0 Studies in International Architecture [52L]**
For students in the International Summer Program. Documentation and analysis of architecture and urbanism in the city where the programme is based. Topics may include building types, urban morphology and development, public spaces, urban precincts, and ways of life supported by them. Cities may vary each year.
Prerequisite: One half course in architectural history/theory

**ARC333H1 Urban Design History, Theory Criticism [26L]**
An introduction to selected projects and practices, theories and issues in contemporary urban design considered from an historical perspective and in the context of changing forces and paradigms of urbanization, technology, ecology and culture.
Prerequisite: Enrolment in an ARC Major program with Concentration in Architectural Design/Major program with Concentration in History, Theory, Criticism

**ARC334H1 Urban Design History, Theory Criticism II [26L]**
A selective survey of the interrelationships between theories and practices of landscape, ecology, and urbanism from the mid-eighteenth century to the late twentieth.
Prerequisite: Enrolment in the ARC Major program with Concentration in History, Theory, Criticism/Major program with Concentration in Architectural Design

**ARC335H1 History/Theory of Urban Landscape Architecture Design I [26L]**
Study of landscape architecture elements in gardens, public open space, parks, and urban development. Fosters an understanding of landscape architecture considering examples from ancient to modern times. Places historical positions in landscape architecture within a more contemporary context. Landscape architectural design from the standpoint of: a work of art, a manifestation of cultural ideologies, and an act of humans in "nature".
Prerequisite: Enrolment in the ARC Major program with Concentration in History, Theory, Criticism /Major program with Concentration in Architectural Design

**ARC337H1 Housing Design: Theory & Practice [26L]**
Urban housing forms and processes since 1800. Contemporary housing theories and policies in the context of world issues. Design principles, criteria and practice investigated through case studies.
Prerequisite: Enrolment in the ARC Major program with Concentration in History, Theory, Criticism/Major program with Concentration in Architectural Design

**ARC338H1 Mies van der Rohe [26L]**
An in depth examination of the work and thought of German-American architect Ludwig Mies van der Rohe.
Prerequisite: FAH 270H1/281H1/372H1, 272H1/282H1/373H1; Enrolment in the ARC Major program with Concentration in History, Theory, Criticism/Major program with Concentration in Architectural Design

**ARC341H1 Building Technology-Ecology I [26L]**
An introduction to building technology considered historically, in its relation to design theory, and its relation to the history and theory of technology.
Prerequisite: ARC231H1; Enrolment in the Major program with Concentration in Architectural Design

**ARC342H1 Building Technology-Ecology II [26L]**
A topic-based course in the history and theory of building science and structures.
Prerequisite: ARC231H1; Enrolment in the Major program with Concentration in Architectural Design

**ARC398H0 Independent Experiential Study Project**

**ARC399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.
Prerequisite: Enrolment in the Major program with Concentration in Architectural Design

**ARC431H1 Historical Perspectives on Topics in Architecture [26L]**
An introduction to selected projects, writings and issues in contemporary world architecture considered from an historical perspective and in the context of changing technologies, ecologies and cultural formations.
Prerequisite: ARC Major program with Concentration in History, Theory, Criticism

**ARC432H1 Historical Perspectives on Topics in Architecture II [26L]**
A second introduction to selected projects, writings and issues in contemporary world architecture considered from an historical perspective and in the context of changing technologies, ecologies and cultural formations.
Prerequisite: ARC Major program with Concentration in History, Theory, Criticism

**ARC436H1 History/Theory of Contemporary Urban Landscape Design II [26L]**
The nature and origin of theories and principles in contemporary landscape architecture through lectures, seminar discussions and workshops. Design problems and the historic relationship to landscape issues; alternative design methods and characteristics of design motivations, constraints and expression in landscape as a media of practice.
Prerequisite: Enrolment in the ARC Major program with Concentration in Architectural Design/Major program with Concentration in History, Theory, Criticism

# Art

## Faculty

### Professors Emeriti

K. Andrews, MFA
H.A. Brooks, MA, Ph D, D Eng
L.E. Eleen, MA, Ph D
W. McA. Johnson, MA, MFA, Ph D, FRSC
H.K. Lücke, Dr Phil
D.S. Richardson, MA, Ph D (U)
D. Rifat, DA
J.W. Shaw, MAT, Ph D, D Hum Lett, FSA, FRSC (T)
M.C. Shaw, MA, Ph D (S)
B. Welsh-Orcharov, MA, Ph D
F.E. Winter, Ph D

### Chair of the Department

E. M. M. Legge, MA, Ph D

### Associate Chair - Visual Studies

L. Steele, Dr. of Arts

### Professors

M.A. Cheetham, MA, Ph D (U)
D. Reid, MA (AGO)
P.L. Sohm, MA, Ph D (U)
L. Steele, Dr. of Arts

### Associate Professors

C. Anderson, MA, PhD
J. Caskey, MA, Ph D (University of Toronto Mississauga)
M. Gotlieb, MA, M Phil, Ph D (T)
L. Kaplan, MA, Ph D (University of Toronto Mississauga)
E.M. Kavaler, MA, Ph D
E.M.M. Legge, MA, Ph D (V)
E. Levy, MA, Ph D (University of Toronto Mississauga)
J. Massey
L. Safran, MA, Ph D
S. Schelle
J. Tod
K. Tomczak
J.T. Wollesen, Dr. phil. habil. (V)

### Assistant Professors

A. S. Cohen MA, Ph D
B. C. Ewald, MA, Dr. Phil
E. Harney, MA, Ph D (University of Toronto Scarborough)
Kajri Jain, MA, PhD (UTM)
S. Lloyd MFA
N. O'Laoghaire, MA, Ph D
E. Pien, MFA
J. Purtle, MA, M Phil, Ph D
J. Ricco, AM, Ph D (University of Toronto Mississauga)
P. Scrivano, MA, Ph D
A. Syme, MA, Ph D (University of Toronto Mississauga)
S. Wiitasalo

### Senior Lecturers

Barbara Fischer, MA
G. Hawken, BA
D. Hlynsky (University of Toronto Scarborough)
W. Kwan (University of Toronto Scarborough)
T. Mars (University of Toronto Scarborough)

### Special Lecturers

E. Leesti, MA, Ph D

### Associate Faculty

K.R. Bartlett, MA, Ph D (V)

### Royal Ontario Museum

D. Dewan, MA, Ph D
A. Gehmacher, MA, Ph D
A. Liivandi, MA, MLS
A. Palmer, MA, Ph D
S. Stock, MA, Ph D

Courses in the Department of Art are offered in two basic areas: lecture courses or seminars in the History of Art (FAH) and practical studios or seminars in Visual Studies (VIS). Minor, Major and Specialist programs are offered in both the History of Art and Visual Studies.

The FAH curriculum covers the Bronze Age to the present in several global regions: the Mediterranean area, Europe and North America, and Asia. FAH101H1 is an overview of the major periods and monuments in the history of art and architecture, and FAH102H1 serves as a practical and critical introduction to the practice of art history and is an integral component of the curriculum; students are encouraged to take this class early in their progress toward an FAH degree. Half courses at the 200 level are more comprehensive surveys that thematically introduce the material from specific chronological periods, regional areas, or the history of archtiecture. Many of these courses, which are offered on a regular basis, serve as "gateway" preprequisites for courses at the 300 and 400 level; students are advised to check the prerequisites for each upper-level course carefully.

Visual Studies is the studio component of the Department of Art. Visual Studies Foundation courses are designed for Humanities and Social Science students who intend to seriously pursue Visual Studies upper level courses. There is a two-stage enrolment process. Humanities and Social Science students who have been accepted into a Visual Studies Program of Study may register for Visual Studies courses from mid-July until early August. First-year students and other upper-year students may apply for available spaces in late August.

Foundation courses: VIS 120H1, Visual Concepts, a lecture-based course that investigates a wide range of topics situated in Modernism and Post-Modernism. This course rigorously examines diverse art concepts in order to prepare students for interdisciplinary perspectives on art practice and critical theory in upper level courses. VIS 130H1, Visual Strategies, an H course taught throughout the Fall and Spring sessions, is an intensive interdisciplinary course that stresses the formulation and communication of visual ideas, primarily through a variety of media and must be taken in conjunction with VIS 120H1, Visual Concepts.

Visual Studies emphasizes a strong commitment to the social, cultural and theoretical issues embodied in contemporary art practice. Some Visual Studies courses are credits in other programs, for example, Women in Visual Art, and Performance in the Women's Studies program, Video for Artists in the Cinema Studies program and the Sexual Diversity program. . Students in these programs will need to fulfill the VIS120 and VIS130 prerequisites for upper level VIS courses and might consider entering a VIS Minor POSt. The scope and variety of available courses will provide students with preparation for careers in teaching, museum and gallery work, conservation and complementary fields, though further professional training will

normally be necessary.

Courses in the history of art (FAH) and in the practice of art (VIS) are useful to students in other departments or faculties; history, literature, music, and philosophy are likewise concerned with systems of thought and imagery. Fundamental concepts in such disciplines are embodied or reflected in related works of art of the same general period and area. Students in architecture, geography, or city planning will find courses in the history of architecture of benefit. Those with a special interest in the practice of architecture will find studio courses of value.

At the same time, the Department directs the attention of its students to the wide range of offerings in other departments and urges them to acquire the broad cultural background essential to an understanding of the arts. Of special importance are familiarity with history, a knowledge of the various traditions of literature and mythology, and an acquaintance with philosophy. Courses in cultural, historical or urban geography may also be relevant in programs that include the history of architecture. It is imperative that students interested in pursuing an advanced degree in art history acquire the foreign languages necessary for such work. Although the choice of languages will be dependent on an individual's program of study, it is generally recommended that students learn German and at least one other European language. The Department web site provides a list of courses in other departments that can be counted toward an art history degree.

In conjunction with Woodsworth College, the Department offers courses during the summer term at the University of Siena, Italy, and at other locations abroad. For information about these degree-credit courses, please consult the Department of Art web site or contact the Summer Abroad Program at Woodsworth College, 119 St. George Street (416-978-8713).

The Fine Art Student Union (FASU) sponsors a variety of lectures and other activities for members of the departmental community.

Many courses in the Department, whether history or studio, are offered in alternate years only, or on a three-year cycle. The studio program requires no prerequisite at the secondary school level, but enrolment is limited in all studio courses. For more detailed information on courses and degree programs, consult the Department of Art web site and Undergraduate Handbook at www.art.utoronto.ca. Counselling is available, by appointment, from the Undergraduate Coordinators.

Enquiries:

FAH: Ms. Ilse Wister, Undergaduate Secretary, Sidney Smith Hall, Room 6036 (416-978-7892)

VIS: George Hawken, Number 1, Spadina Crescent, Room 226 (416-946-8153)

## Art Programs

### History of Art (Arts program)

Students may enroll in the Major or Minor program in Art History after completing at least four courses; there is no minimum GPA required. Students may enroll in the Specialist Program in Art History after completing at least four courses, including four half FAH courses with a mark of at least 70% in each and must also have obtained a a cumulative GPA of at least 2.5.

**Specialist program:**
(11 FCES)

At least nine FAH FCE's, and two FCE's in one or more languages (including at least one German, French, or Italian), fulfilling the following distribution requirements:

First Year:
FAH 102H1
Higher Years:
1. At least one half course in each of Groups A, B, C, and D (see below for definitions).
2. One additional half course in Group A and Group B.
3. No more than 3.5 FCEs may be taken at the 200-level.
4. 3.5 FCEs at the 300+level
5. 1 FCE at the 400 level.
6. No more than 1.5 FCEs at the 400-level will be counted toward fulfilling program requirements.
7. No more than 10 FCEs of FAH courses may be taken in total.

**Notes:**
1. It is strongly recommended that students acquire a reading knowledge of German, French, or Italian by the end of the Third Year.
2. No more than 13 FAH and VIS FCEs may be taken in combination.
3. Approved courses in other programs may be substituted for up to two FAH FCEs. See Department web site for details.

**Major program:**
(6 FCEs)

At least six FAH FCEs fulfilling the following distribution requirements:

First Year:
FAH 102H1
Higher Years:
1. At least one half course in three of the four FAH Groups (see below for definitions).
2. Three FCEs at the 300+ level.
3. At least one half-course at the 400-level.
4. No more than 1.0 FCE at the 400-level will be counted toward fulfilling program requirements.
5. No more than 7.5 FCEs of FAH courses may be taken in total.

**Notes:**
1. No more than 13 FAH and VIS FCEs may be taken in combination; of these, no more than 7.5 may be FAH FCEs.
2. Approved courses in other programs may be substituted for up to one FAH FCE. See Department web site for details.

**Minor program:**
(4 FCEs)

At least four FAH courses fulfilling the following distribution requirements:

1. FAH102H1
2. At least one half course in two of the four FAH Groups (see below for definitions)
3. At least one FCE at the 300-level.
4. No more than 5 FCEs of FAH courses may be taken in total

### FAH Course Groups

**Group A: Ancient, Medieval**
FAH courses numbered 200–229, 300–329, 400–429

**Group B: Renaissance–Baroque, Modern–Contemporary–Canadian**
FAH courses numbered 230–59, 330–59, 430–59

**Group C: Asian**
FAH courses numbered 260–69, 360–69, 460–69

**Group D: History of Architecture**
FAH courses numbered 270–79, 370–79, 470–79, plus FAH300, 309, 328, 362, 364, 404, 421

**Note:**
1. Certain courses, including FAH101H1, do not satisfy the requirement for any group, but do count toward any FAH degree program.
2. Students who have already taken FAH100Y1 are encouraged, but not required, to take FAH102H1 for the fulfillment of degree requirements.
3. Courses used to satisfy one group requirement, e.g., FAH300, cannot be counted toward another group requirement.

## Visual Studies Program (Arts program)

Enrolment in the VIS program is limited. To apply to the program, students must have completed at least four full course equivalents including VIS 120H1 and VIS130H1; must have a cumulative GPA of at least 2.80; and must have at least a B in each of VIS 120H1 and 130H1. Achievement of these minimum marks does not guarantee enrolment in the program.

### Specialist program:
(Ten full courses or their equivalent, including four 300/400 VIS half courses, two of which must be VIS401H1 and VIS402H1, and two FAH full courses or their equivalent including FAH102H1 and three other FAH half courses)

Requirements as follows: at least eight VIS and two FAH full courses or their equivalent including FAH102H1 and three other FAH half courses

First Year:
VIS 120H1, FAH 102H1 and VIS 130H1
Higher Years:
1. 14 half-courses in VIS
2. Thesis Text/Critique VIS401H; Thesis project VIS402H

Notes:
1. A full 400-series course is mandatory
2. Prerequisites for all courses beyond first year will be VIS 120H1 and VIS130H1
3. No more than 13 FAS/VIS and FAH full courses may be taken in combination

### Major program:
(Six Visual Studies full courses or their equivalent, including at least two 300+ half courses)

First Year:
VIS 120H1 and VIS 130H1
Higher Years:
Ten half-courses in VIS
Notes:
No more than 13 FAH and FAS/VIS courses may be taken in combination

### Minor program:
(No more than four Visual Studies full courses or their equivalent, including at least one full 300-level course or its equivalent.)

Note:
No more than 4 full courses may be taken in a Minor Subject POSt
1. VIS 120H1 and VIS 130H1
2. Six half-courses in VIS
3. Note: VIS minors are not permitted to take any Independent VIS courses

## Art History Courses

See page 32 for Key to Course Descriptions

For Distribution Requirement purposes (see page 26), all FAH and FAS/VIS courses are classified as HUMANITIES courses.

**FAH101H1 Monuments of Art History [26L]**
Consideration of the stylistic and contextual significance of representative monuments in the history of art.
Exclusion: FAH100Y/FAH105H5

**FAH102H1 The Practice of Art History [26L, 13T]**
An investigation of the intellectual foundations of the discipline and an introduction to working methods in the study of art history.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

### Note
The recommended preparation for all 200 level courses is FAH102H1

**FAH206H1 Prehistoric Aegean and East Mediterranean Art and Archaeology [26L, 11T]**
An overview of the major monuments, artifacts, themes and problems in the study of the archaeology, art and architecture of the Aegean region and the east Mediterranean to 1000BC.
Exclusion: FAH101Y5/203H5/204H5/205H1

**FAH207H1 Greek and Roman Art and Archaeology [26L, 11T]**
An overview of the major monuments, artifacts, themes and problems in the study of the archaeology, art and architecture of the civilizations of Greece and Rome.
Exclusion: FAH101Y5/203H5/204H5/205H1

**FAH215H1 Early Medieval Art and Architecture [26L, 11T]**
An overview of major monuments and themes in the art and architecture of Western Europe and the Byzantine East from the third until the eleventh century.
Exclusion: FAH102Y5/261H1/267H5/271H5

**FAH216H1 Later Medieval Art and Architecture [26L, 11T]**
An overview of major monuments and themes in the art and architecture of Western Europe and the Byzantine East from the eleventh until the fifteenth century.
Exclusion: FAH102Y5/261H1/267H5/271H5

**FAH230H1 Renaissance Art and Architecture (formerly FAH274H1) [26L, 11T]**
A selective survey of the major art centres and types of artistic and architectural production in Italy and northern Europe, from the early fifteenth century to the mid-sixteenth. Themes include the relations--artistic, economic and ideological--between northern and southern Europe during this period, the changing role of art in religious life, the emergence of secular themes, and the legacies left by Renaissance art to modern life and culture.
Exclusion: FAH200Y5/274H/274H51

**FAH231H1 Baroque Art and Architecture (formerly FAH279H1) [26L, 11T]**
Major forms of expression in the visual arts ca. 1600 - ca. 1750 with particular attention to forms, techniques, theories, and patronage of the arts as well as biographies of artists in Italy, France, the Netherlands, Flanders, Germany and England.
Exclusion: FAH200Y5/279H1/279H5

**FAH245H1 Modernism and anti-Modernism, c. 1750–1900 [26L, 11T]**
An introduction to the advent and development of art movements including Rococo and Neoclassicism; Romanticism and Revolution, Realism and the advent of Photography, Impressionism; Academic art; Post-Impressionism.
Exclusion: FAH280H1/287H1/287H5

**FAH 246H1 The Rise and Fall of the Modernist Empire c. 1900 to the Present [26L, 11T]**
An introduction to the consolidation of Modernist tendencies in Europe to the mid 20th century and to the many contemporary responses to these achievements. Individual artists, including Picasso, Matisse, Duchamp, and Matthew Barney are considered in their relationship to various art movements and the theories that supported them, including Expressionism; Abstraction and Constructivism; Dada and Surrealism; Neue Sachlichkeit; Abstract Expressionism; Pop; Conceptual Art; Earth Art; Feminist Art; Postmodernism; New Media Art.
Exclusion: FAH288H1/288H5/289H1/289H5

**FAH248H1 Canadian Painting and Sculpture (formerly FAH286H1) [26L, 11T]**
An introductory survey of the history of painting and sculpture in Canada from the 17th to the 20th century.
Exclusion: FAH286H1

**FAH260H1 The Artistic Landscape of East Asia (formerly FAH290H1) [26L, 11T]**
An overview of major monuments and themes in the art and architecture of East Asia (China, Japan, Korea, Vietnam, Mongolia and Tibet), from the neolithic to the present.
Exclusion: FAH290H1

**FAH262H1 Art and Visual Experience in Modern and Contemporary East Asia [26L, 11T]**
An overview of major monuments and themes in the art and architecture of East Asia (China, Japan, Korea, Vietnam, Mongolia and Tibet) and its diaspora in the nineteenth and twentieth centuries.

**FAH270H1 Architecture: Rituals and Monuments [26L, 11T]**
A survey of architecture from pre-history to the start of modernism, with attention given to the ways in which architecture shapes human experience.

**FAH272H1 Modern Architecture from 1750 to the Present [26L, 11T]**
An introduction to the buildings, issues and ideas from Neoclassicism to the present.
Exclusion: FAH282H1

**FAH299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

### Note
In addition to the prerequisites listed below, enrolment is also possible for each course with permission of instructor.

**FAH300H1 Archaeology of the Greek World: Cities and Sanctuaries [26L]**
An investigation of the major archaeological sites and landscapes of the ancient Greek world, c.750-100BC.
Prerequisite: FAH205H1/207H1

**FAH303H1 Emergence of Greek Civilisation [26L]**
This course investigates the material culture, art and architecture of the Aegean civilizations from the Neolithic through to the building of the palaces of Crete around 2000BC.
Prerequisite: FAH205H1/FAH207H1

**FAH304H1 Minoan and Mycenaean Art and Archaeology [26L]**
An investigation of the palace civilizations of Minoan Crete and Mycenaean Greece in the second millennium BC; their development, art, architecture, foreign connections, religion, and collapse, and role in the foundations of Classical Greece.
Prerequisite: FAH205H1/206H1

**FAH305H1 Art and Archaeology of the Roman Empire [26L]**
The art, archaeology and architecture of the Roman empire outside Rome.
Prerequisite: FAH205H1/207H1
Exclusion: FAH302H1

**FAH309H1 City of Rome [26L]**
The art, architecture and archaeology of the city of Rome to AD476.
Prerequisite: FAH205H1/207H1
Exclusion: FAH302H1

**FAH310H1 Looking at Greek Vases [26L]**
Approaches to and investigations of the extraordinary wealth of imagery on Greek vases from the 8th to 4th centuries BC and the evidence these provide for accessing ancient society in the Greek world.
Prerequisite: FAH205H1/207H1

**FAH311H1 Understanding Greek Sculpture [26L]**
Examination of the contexts in which Greek statuary was made, displayed and viewed, and its cultural significance.
Prerequisite: FAH205H1/207H1

**FAH312H1 Art of the Hellenistic Age (formerly FAH317H1) [26L]**
Transformation in the visual arts, paintings, sculpture, and mosaics of the expanding Greek world c.400BC to c.100BC; the response to Hellenization from the new artistic centres of Asia Minor and Italy.
Prerequisite: FAH205H1/207H1
Exclusion: FAH317H1

**FAH313H1 Greek Myth in Ancient Art [26L]**
A general introduction to Greek mythology and its uses (and abuses) by the Greeks and Romans through the art of antiquity. Students will learn about gods and goddesses, heroes and heroines, their attributes and stories which constituted the subjects of (not only) ancient art.

**FAH316H1 Accessing the Sacred [26L]**
Pilgrimage, relics, and icons are among the vehicles for gaining access to God and the saints in the Middle Ages that are examined in this course.
Prerequisite: FAH215H1/216H1/261H1/343H5

**FAH318H1 Monastic Art and Architecture [26L]**
An examination of the role played by monks and nuns in the creation and use of art and architecture in the Middle Ages.
Prerequisite: FAH215H1/216H1/261H1/454H5

**FAH319H1 Illuminated Manuscripts [26L]**
A focused survey of different types of manuscripts and their images from the origins of the book in Late Antiquity to the invention of printing.
Prerequisite: FAH215H1/216H1/261H1
Recommended Preparation: SMC358H

**FAH325H1 Church Decoration [26L]**
The church was the primary locus of artistic elaboration in the Middle Ages. This course explores the wall paintings, mosaics, sculptures, textiles, and stained glass programs used to decorate churches throughout the medieval period.
Prerequisite: FAH215H1/216H1/261H1

**FAH326H1 Art and Liturgy [26L]**
Religious practices in the Middle Ages were expressed and enhanced with a variety of objects often made of precious materials. This course examines the forms and functions of these sacred implements.
Prerequisite: FAH215H1/216H1/261H1

**FAH327H1 Secular Art and Architecture of the Middle Ages [26L]**
A consideration of art and architecture made for the court, the aristocracy, and other patrons outside the realm of the Christian church.
Prerequisite: FAH215H1/216H1/261H1/337H5

**FAH328H1 Gothic Cathedral (formerly FAH369H1) [26L]**
An examination of the Gothic cathedral from its origins in Paris in the 1130's through its development and elaboration in France, England and Italy. This course also considers monumental decorations in painted glass, wall painting, tapestry and portal sculpture.
Prerequisite: FAH215H1/216H1/261H1/351H5
Exclusion: FAH369H1

**FAH330H1 German Art and Architecture in the Age of Dürer (formerly FAH306H1) [26L]**
Albrecht Dürer and the painting and printmaking of his contemporaries. Consideration of the great Hall churches of Saxony and the altarpieces of Tilman Riemenschneider and his contemporaries; the status of the arts and attitudes towards Italian art, and the consequences of the Reformation for religious imagery.
Prerequisite: FAH230H1/231H1/274H1/279H1
Exclusion: FAH306H1

**FAH331H1 Netherlandish Renaissance Art and Culture (formerly FAH307H1) [26L]**
Painting, sculpture and architecture of the Netherlands in the sixteenth century with reference to the arts in Italy, France, Germany and Spain. Consideration of Netherlandish art in the context of literature, religion, urban expansion, political and economic developments; and as a system of communication. Particular attention devoted to Hieronymus Bosch, Pieter Bruegel, the rise of secular art.
Prerequisite: FAH230H1/231H1/274H1/279H1
Exclusion: FAH307H1

**FAH333H1 The Altarpiece in Italy ca. 1400 - ca. 1600 [26L]**
Focusing on developments in Venice, Florence and Rome during the Renaissance, this course examines altarpieces both as aesthetic objects and as expressions of the social, religious and political structures for which they were made.
Prerequisite: FAH230H1/231H1/274H1/279H1

**FAH335H1 The Art of Love in the Renaissance [26L]**
Love is studied not only as a favorite theme of Renaissance art, but as the basis of some of its fundamental aesthetic claims. The question of love connects Renaissance art to important strains of philosophical thought and religious spirituality, as well as to some urgent realities of social life.
Prerequisite: FAH230H1/231H1/274H1/279H1

**FAH339H1 Art and Politics in Italy, 1480-1527 [26L]**
A wide array of works in architecture, painting and sculpture studied in light of some of the most important political and social developments of the period: the French invasion of Italy, the rise of Savonarola and the fate of the Medici, the imperialization of the papacy under Julius II, and the Sack of Rome.
Prerequisite: FAH230H1/231H1/274H1/279H1

**FAH340H1 17th-Century Art of the Netherlands (formerly FAH308H1) [26L]**
Concentration on the major masters of Holland's Golden Age, ca. 1580-ca. 1700. Particular attention is paid to genre painting and the notion of "Dutch realism." Consideration of art within its social and historical contexts.
Prerequisite: FAH230H1/231H1/274H1/279H1
Exclusion: FAH308H1

**FAH341H1 Venetian Renaissance Art and Architecture [26L]**
Form and meaning, theory and practice of painting and architecture in Venice, ca. 1450-ca. 1600. Social, political and cultural contexts of making and viewing art, including works by Giorgione, Titian, Veronese, Tintoretto and Palladio.
Prerequisite: FAH230H1/231H1/274H1/279H1

**FAH342H1 Mannerism [26L]**
The symptoms and causes of Mannerism, ca. 1520 to ca. 1600, as seen through shifting historical perspectives. The contested status of Mannerism opens questions about the relation of style and content, the uses of quotation and formulae in art, and the rhetorical functions of beauty in religious art.
Prerequisite: FAH230H1/231H1/274H1/279H1

**FAH344H1 Rembrandt, Rubens and their Age (formerly FAH277H1) [26L]**
Introduction to the art of Rembrandt and Rubens in the context of Netherlandish painting of the seventeenth century. Lectures will treat the approaches of these two artists to biblical and mythological subjects, landscape, portraiture, and their involvement in contemporary politics.

Exclusion: FAH277H1
Recommended preparation: FAH101H/102H

**FAH345H1 The Romantic Movement in French Art (formerly FAH383H1) [26L]**
This course explores the painting, sculpture, and graphic arts of the Romantic era in France, from about 1820 to 1850. Major emphasis on Gericault, Delacroix, and Ingres in their artistic, cultural, and political context. Key topics in Romanticism, including Orientalism and gender, are also explored.
Prerequisite: FAH245H1/246H1/287H1
Exclusion: FAH383H1

**FAH346H1 Impressionism (formerly FAH378H1) [26L]**
The origin and development of Impressionism in France and Europe, 1860-1886, in its social, political and intellectual context. Painting, graphics and sculpture by Monet, Renoir, Degas, Pissarro, Sisley, Cassatt and Morisot.
Prerequisite: FAH245H1/246H1/287H1
Exclusion: FAH378H1/378H5

**FAH347H1 Cubism and Related Movements (formerly FAH384H1) [26L]**
An investigation of the birth and development of Cubism, Futurism and Orphism in Europe and North America.
Prerequisite: FAH245H1/246H1/287H1/288H1
Exclusion: FAH384H1

**FAH348H1 The Dada and Surrealist Tradition (formerly FAH385H1) [26L]**
The origins and development of the Dada and Surrealist movements in early 20th-century Western art, and their lasting impact on art after World War II. Painting, sculpture, graphic arts, and the theoretical preoccupation which accompanied artistic production.
Prerequisite: FAH245H1/246H1/288H1/289H1
Exclusion: FAH385H1/447H5

**FAH349H1 Abstraction in Twentieth-Century Art (formerly FAH387H1) [26L]**
The origins, development, and critical issues pertaining to abstract or non-figurative modes of art as manifested in painting, sculpture and other selected media in the 20th century. Movements include European abstract art before World War II as well as post-war developments.
Prerequisite: FAH102H1/245H1/246H1/288H1/289H1/385H1
Exclusion: FAH387H1

**FAH350H1 Minimalism (formerly FAH389H1) [26L]**
An investigation of the different definitions and issues of minimal art including seriality, materials, process, objecthood, chance, installation, reception, relations to music and film, and the influence of structuralism.
Prerequisite: FAH102H1/245H1/246H1/288H1/289H1
Exclusion: FAH389H1

**FAH351H1 Theory in Art History (formerly FAH388H1) [26L]**
The role of Theory in the art of the modern period. The texts studied include works by the principal theoreticians and critics from the late 18th century to the present.
Prerequisite: FAH102H1/245H1/246H1/287H1/288H1/289H1
Exclusion: FAH388H1/388H5

**FAH354H1 Recent and Contemporary Canadian Art (formerly FAH386H1) [26L]**
Survey of the visual arts in Canada from the 1960's to the present. A large and diverse range of media, practices, artists, and theoretical contexts will be examined. Emphasis is placed on work that can be seen in the original.
Prerequisite: FAH102H1/245H1/246H1/248H1/286H1/288H1/289H1
Exclusion: FAH386H1

**FAH361H1 Art and Ritual in East Asia [26L]**
Bronze vessels, tomb furnishings, and Buddhist images are among the images and objects explicitly manufactured for ritual use to be examined in this course.
Prerequisite: any 200 level FAH half course/any 100 or 200 level EAS Society-Culture course
Recommended preparation: FAH260H1

**FAH362H1 Landscape and the Built Environment in East Asia [26L]**
In East Asia the idea of landscape significantly shaped artistic production. This course explores human representation of, and architectonic intervention in the landscape through media that include tombs, Buddhist caves, painting, gardening, and architecture.
Prerequisite: any 200 level FAH half course/any 100 or 200 level EAS Society-Culture course
Recommended preparation: FAH260H1

**FAH363H1 The Mechanics of the Image in East Asia [26L]**
East Asian images differ from Western ones in material support, format, and technologies of image-making. This course probes how East Asian images -- painting on objects, handscrolls, prints, optical media, film, and new media – work.
Prerequisite: any 200 level FAH half course/any 100 or 200 level EAS Society-Culture course
Recommended preparation: FAH260H1

**FAH364H1 Art and Architecture in South Asia [26L]**
An overview of major monuments and themes in the art and architecture of South Asia (India, Pakistan, Sri Lanka, Bangladesh, Nepal, Bhutan, Tibet, Afghanistan), from the Indus Valley Civilization (3500 BCE) to the present. Includes first-hand study of objects in ROM collection.
Prerequisite: any 200 level FAH half course/ any course in Asian history, culture, or religion
Recommended: FAH260H1

**FAH365H1 Colonialism, Nationalism and Modernity in South Asian Art [26L]**
Intersections of politics and the production of visual culture during the 19th and early 20th century are examined in this course, from picturesque paintings by European visitors to early Bollywood cinema. Includes first-hand study of objects in ROM collection.
Prerequisite: FAH260H1/262H1/ 364H1

**FAH368H1 Encounters: Art Within and Beyond East Asia [26L]**
Artistic production moved fluidly within and beyond East Asia. To understand the artistic world of East Asia, this course probes phenomena that may include Buddhist art, art of conquest dynasties, Chinoiserie, art of the Pacific Rim, film, and contemporary art.
Prerequisite: any 200 level FAH half course/any 100 or 200 level EAS Society-Culture course
Recommended preparation: FAH260H1

**FAH370H1 European Renaissance Architecture (formerly FAH324H1) [26L]**
Architecture and architectural theory ca. 1400 – ca. 1600.
Prerequisite: FAH270H1/278H1
Exclusion: FAH324H1

**FAH371H1 Architecture and Urbanism in Baroque Europe (formerly FAH355H1) [26L]**
Architecture studied through its various building types and in its urban context. Themes include architecture and power under Absolutism, and the rise of the modern city.
Prerequisite: FAH270H1/278H1/281H1
Exclusion: FAH355H1

**FAH372H1 Architecture in the Age of Historicism ca. 1750–ca. 1900 (formerly FAH281H1) [26L]**
Major monuments and key figures in architecture and urbanism in Europe and North America from the Enlightenment to the birth of Modernism.
Prerequisite: FAH270H1/272H1/278H1
Exclusion: FAH281H

**FAH373H1 Modern Architecture Since 1890 (formerly FAH282H1) [26L]**
Major monuments and key figures in architecture and urbanism from Industrialization to the mid-twentieth century. Topics may include architectural theory, colonialism, and new technologies.
Prerequisite: FAH270H1/272H1/278H1/281H1
Exclusion: FAH282H1

**FAH374H1 Consequences of Modernism: Architecture after 1945 (formerly FAH382H1) [26L]**
An examination of architectural theory and practice from the end of Modernism to the present.
Prerequisite: FAH270H1/272H1/278H1/281H1/282H1

**FAH375H1 American Architecture: A Survey [26L]**
Vernacular traditions of the colonial period, patterns of settlement and urbanization, the emergence of the architect and development of high styles of architecture throughout representative parts of what is now the United States, from ca. 1650 to ca. 1925.
Prerequisite: FAH270H1/272H1

**FAH376H1 Canadian Architecture: A Survey [26L]**
Vernacular traditions in building, patterns of settlement and urbanization, and development of high styles in architecture in New France, British North America, and what is now Canada, from ca. 1650 to ca. 1925. Material economy, cultural identity, local character, regional expression, national symbolism and international influences.
Prerequisite: FAH270H1/272H1

**FAH380H1 Special Topics in Art History (formerly FAH395H1) [26L]**

**FAH380Y1 Special Topics in Art History (formerly FAH395H1) [52L]**
The study of various aesthetic, cultural, social, political, and theoretical aspects of Western art and photography across the centuries.
Prerequisite: Two FAH half courses or permission of instructor
Exclusion: FAH395H1

**FAH381H1 Problems in Jewish Art (formerly 329H1) [26L]**
This course investigates the changing definition of Jewish art and the status of Jewish artists. Other issues explored include Jewish-Christian visual polemics, the construction of individual and communal Jewish identity through art, architecture, and texts, and the conceptual transformation of Jewish craft and ritual objects into art.
Recommended preparation: FAH102H1, a 200 level FAH half course
Exclusion: FAH329H1

**FAH390H1 Art and Power [26L]**

**FAH390Y1 Art and Power [52L]**
Investigates the intersection of art and power in history and in our own time. Explores how city plans, landscapes, buildings, paintings, sculpture, costumes, advertisements, monuments, parades, and other art forms create and expand personal, national, institutional, political, sexual, spiritual, and other kinds of power. May be offered at St. George or abroad through Woodsworth College.
Recommended preparation: FAH100Y/101H1/102H1

## Studies Abroad

Studying original works of art and architecture is a key component in the history of art. The Department of Art offers, through Woodsworth College, courses abroad on a regular basis and encourages students to consider enroling in these. Courses are offered on a rotating basis; please consult Woodsworth College Summer Abroad web site, www.summerabroad.utoronto.ca, the department's web site, and the registration handbook for information on specific courses offered in any given year.

**FAH391Y0 Studies Abroad in Ancient Art and Architecture**
Prerequisite: one FAH half course in ancient art, architecture, and archaeology/permission of instructor

**FAH392Y0 Studies Abroad in Medieval Art and Architecture**
Prerequisite: one FAH half course in medieval art and architecture/ permission of instructor

**FAH393Y0 Studies Abroad in Renaissance and Baroque Art and Architecture**
Prerequisite: one FAH half course in Renaissance or Baroque art and architecture/permission of instructor

**FAH394Y0 Studies Abroad in Modern and Contemporary Art and Architecture**
Prerequisite: one FAH half course in Modern or Contemporary art and architecture/permission of instructor

**FAH395Y0 Studies Abroad in Canadian Art and Architecture**
Prerequisite: one FAH half course in Canadian art and architecture/permission of instructor

**FAH396Y0 Studies Abroad in Asian Art and Architecture**
Prerequisite: one FAH half course in Asian art and architecture/ permission of instructor

**FAH397Y0 Studies Abroad in Architectural History**
Prerequisite: one FAH half course in architectural history/ permission of instructor

**FAH398H0 Independent Experiential Study Project**

**FAH399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting.
See page 48 for details.

## Note

Enrolment is limited in 400 level courses. In addition to the prerequisites listed below, enrolment is also possible for each course with permission of instructor. For additional information, refer to the annual registration handbook and timetable.

**FAH401H1 Aegean Wall Paintings [26S]**
Investigation of the wall-paintings of the Minoan, Cycladic and Mycenaean worlds in the second millennium BC: context, associations, viewing and historical interpretations.
Prerequisite: FAH205H1/206H1
Recommended preparation: FAH300H1/303H1/304H1/

**FAH403H1 Art and Archaeology of Ancient Cyprus (formerly FAH423H1) [26S]**
Examination of the art, archaeology and architecture of Cyprus from its first colonization c.10,000BC through to the 7th century AD.
Prerequisite: FAH205H1/206H1
Recommended preparation: FAH303H1/304H1/
Exclusion: FAH423H1

**FAH404H1 Greek Architecture (formerly FAH419H1) [26S]**
Architecture and its development in Archaic through Classical Greece, looking at the major monuments of Greece and the wider Greek world.
Prerequisite: FAH206H1/207H1
Recommended preparation: FAH300H1/
Exclusion: FAH419H1

**FAH406H1 Studies in Greek Painting and Sculpture [26S]**
An examination of selected works in sculpture and/or painting from the Archaic, Classical, and Hellenistic periods through a consideration of iconography, style, technique, distribution, and use.
Prerequisite: FAH206H1/207H1
Recommended preparation: FAH310H1/311H1/312H1

**FAH407H1 Studies in Roman Painting and Sculpture [26S]**
Issues explored might cover Republican and Imperial painting; its Hellenistic sources and parallel media (mosaic, relief). The four distinctive genres of Roman sculptural production: the portrait, the historical relief, sarcophagi, and replicas of famous Greek sculptures. Styles, themes and modes of display in cultural context.
Prerequisite: FAH206H1/207H1
Recommended preparation: FAH305H1/309H1/312H1

**FAH418H1 Studies in Early Christian and Byzantine Art and Architecture [26S]**
In-depth examination of key monuments and issues in art and architecture from the Early Christian (1st-5th centuries) or Byzantine (6th-15th centuries) periods.
Prerequisite: FAH215H1/216H1/261H1
Recommended preparation: FAH316H1/321H1

**FAH420H1 Studies in Western Medieval Art and Architecture [26S]**
In-depth examination of monuments and issues in the art and architecture of Western Europe from the sixth to the fifteenth century.
Prerequisite: FAH215H1/216H1/261H1

**FAH421H1 Studies in Medieval Cities [26S]**
A focused examination of urbanism, art and architecture of a specific medieval city, such as Jerusalem, Rome, Constantinople, or Paris.
Prerequisite: FAH215H1/216H1/261H1
Recommended preparation: FAH325Y0/FAH327H1/328H1

**FAH424H1 Studies in Medieval Book Illumination [26S]**
A consideration of individual types of books, their decoration, function, and cultural context. Topics might include, for example, Gospels, Psalters, or Books of Hours.
Prerequisite: FAH215H1/216H1/261H1
Recommended preparation: FAH319H1/SMC358H

**FAH425H1 Studies in Medieval Art and Gender [26S]**
An investigation of the role played by gender in the creation and use of art and architecture in the Middle Ages.
Prerequisite: FAH215H1/216H1/261H1
Exclusion: FAH435H5

**FAH426H1 Medieval Art in Local Collections [26S]**
First hand examination of objects of medieval art from local Toronto collections.
Prerequisite: FAH215H1/216H1/261H1

**FAH430H1 Pieter Bruegel (formerly FAH428H1) [26S]**
The study of Pieter Bruegel's works in the context of Netherlandish culture. Emphasis on secular works.
Prerequisite: FAH307H1/331H1; permission of instructor
Exclusion: FAH428H1
Recommended preparation: Reading knowledge of French or German

**FAH432H1 Caravaggio [26S]**
The life and work of Caravaggio in the context of 17th-century Roman and Neapolitan art theory and patronage, with a particular emphasis on the contentious issue of realism.
Prerequisite: Permission of instructor
Recommended preparation: FAH230H1/231H1/274H1/279H1/341H1/342H1

**FAH434H1 Art Before and After Modernity (formerly FAH435H1) [26S]**
The convulsive redefinitions of art during the sixteenth and twentieth centuries serve as an indirect introduction to modern aesthetics and a basis for reflection on the future of art. Classes in seminar room and in art galleries. Readings by Hans Belting, T. J. Clark, Arthur Danto, Rosalind Krauss.
Prerequisite: At least three 300-level half courses in FAH
Exclusion: FAH435H1

**FAH438H1 Rereading the "High Renaissance" in Italy [26S]**
A careful reading of some classic accounts of the "High Renaissance", from Vasari and Reynolds to Wolfflin and Freedberg, serves as the basis for an analysis of developments within various genres and types of art production in the period: drawings, altarpieces, portraits, cabinet pictures and sculpture.
Prerequisite: At least one 300-level half course in Renaissance art

**FAH439H1 Art and Reform in the Renaissance [26S]**
Consideration of European art ca. 1500 in the context of the reform debates that mark the period. Students study original works of art in the AGO and read period texts by, among others, Girolamo Savonarola, Desiderius Erasmus, and Martin Luther.
Prerequisite: At least one 300-level half course in Renaissance art
Exclusion: FAH441H5

**FAH440H1 Dutch Genre Painting of the 17th Century [26S]**
Study of so-called "scenes of everyday life." Special attention given to cultural context and problems of interpretation, the work of Jan Vermeer, and the reputation of this art in following centuries.
Prerequisite: FAH307H1/308H1/331H1/340H1428H1; permission of instructor
Recommended preparation: Reading knowledge of French or German

**FAH443H1 Visual Modes of Communication [26S]**
A history of gesture and physiognomy in Italian Renaissance and Baroque art and literature as narrative and rhetorical techniques.
Prerequisite: FAH230H1/231H1/274H1/279H1/333H1/341H1/342H1

**FAH445H1 The Paris Salon and French Art of the Nineteenth Century [26S]**
French painting, sculpture, and criticism of the mid-19th century, with particular to the key role played by the Paris Salon: its emergence and decline as a public space for exhibitions, its impact on the shape of artistic careers, and the relation between the Salon and artistic practices. Attention both to Modernist artists, such as Manet, and to their opponents. Students will engage in critical readings of primary and secondary texts (Baudelaire, T. J. Clark, Michael Fried), as well as conduct original research on important Salon paintings and sculptures. Assignments will include a book review, an annotated bibliography, and a research paper.
Prerequisite: FAH245H1/280H1/287H1
Recommended preparation: FAH346H1/345H1/378H1/383H1. Reading knowledge of French strongly recommended.

**FAH446H1 Realism [26S]**
An examination of mid-19th century French Realism with emphasis on Courbet, Millet, the Barbizon School, Daumier and Manet.
Prerequisite: FAH245H1/287H1
Exclusion: FAH315H5
Recommended preparation: Reading knowledge of French

**FAH447H1 19th-Century Landscape Painting [26S]**
Investigation of English, French, German and Swiss landscape painting from the birth of the Romantic movement to Post-Impressionism.
Prerequisite: FAH245H1/287H1
Recommended preparation: Reading knowledge of French or German

**FAH448H1 International Art Since 1940 (formerly FAH402H1) [26S]**
Developments in the mainstream of Western painting and sculpture since World War II with special emphasis upon interrelations between Europe and North America.
Prerequisite: FAH246H1/288H1/289H1/348H1/350H1/351H1/385H1/388H1/389H1
Exclusion: FAH402H1

**FAH449H1 Contemporary Art Movements (formerly FAH411H1) [26S]**
Selected aspects of the complex array of international contemporary art movements, their artists, objects, and critical discourses. Potential issues include the theoretical, philosophical, and political concerns addressed by given artworks and artists; the role of art journals, the private patron, and museum display.
Prerequisite: FAH246H1/289H1
Exclusion: FAH411H1

**FAH457H1 Issues in Canadian Art, ca. 1900–1940 (formerly FAH415H1) [26S]**
Focused, thematic examinations of the visual arts in Canada in the first half of the twentieth century.
Prerequisite: FAH248H1
Exclusion: FAH415H1/FAH416H1

**FAH458H1 Issues in Recent Canadian Art (formerly FAH416H1) [26S]**
Focused, thematic examinations of the visual arts in Canada from 1940 to the present.
Prerequisite: FAH246H1/286H1/352H1/386H1
Exclusion: FAH416H1

**FAH461H1 East Asian Art as a Cultural System [26S]**
Methodologically-focused seminar engaged with recovering and articulating in Western terms indigenous ways of seeing and thinking about East Asian art.
Prerequisite: FAH260H1/262H1/290H1/361H1/362H1/363H1/364H1/365H1/368H1/EAS211YO/227Y/233H1/237Y1/305Y1/331Y1/418H1

**FAH462H1 Outside East Asian Art [26S]**
Methodologically- and historiographically-focused seminar that attends to the contiguities and ruptures of approaching East Asian art through Western art historical methods.
Prerequisite: FAH260H1/262H1/290H1/361H1/362H1/363H1/364H1/365H1/368H1/EAS211YO/227Y/233H1/237Y1/305Y1/331Y1/418H1

**FAH463H1 Materiality, Objecthood, Connoisseurship and Collecting in the Arts of East Asia [26S]**
Seminar based on firsthand examination of East Asian objects in Toronto collections that attends to the historical processes by which such objects were valued and collected.
Prerequisite: FAH260H1/262H1/290H1/361H1/362H1/363H1/364H1/365H1/368H1/EAS211YO/227Y/233H1/237Y1/305Y1/331Y1

**FAH464H1 Transregional East Asian Art [26S]**
In-depth examination of the play of East Asian Art within and beyond East Asia.
Prerequisite: FAH260H1/262H1/290H1/361H1/362H1/363H1/364H1/365H1/368H1/EAS211YO/227Y/233H1/237Y1/305Y1/331Y1

**FAH466H1 Contemporary South Asian Art [26S]**
Examination of current issues in and methods of studying contemporary art from South Asia and the South Asian Diaspora. Includes first-hand study of objects in ROM collection, exhibit and studio visits, and possible guest lectures.
Prerequisite: FAH262H1/364H1/365H1

**FAH470H1 Studies in Renaissance and Baroque Architecture (formerly FAH450H1) [26S]**
An in-depth study of themes and problems in architecture in Renaissance and Baroque Europe.
Prerequisite: FAH324H1/355H1/370H1
Exclusion: FAH450H1

**FAH471H1 Major Figures of Twentieth-Century Architecture [26S]**
A close study of the major architects, designers and theorists of 20th-century architecture
Prerequisite: FAH372H1/373H1/374H1/375H1/376H1

**FAH477H1 Toronto Architecture (formerly FAH377H1) [26S]**
A first-hand study of the architecture and urban planning of Toronto.
Prerequisite: FAH372H1/373H1/374H1/375H1/376H1
Exclusion: FAH377H1

**FAH480H1 University Art Centre Exhibition Course (formerly FAH454H1) [26S]**
Students work together designing and installing an exhibition of works of art, normally drawn from the collections of the University Art Centre. The course meets every two weeks at the University Art Centre over the entire academic year.
Prerequisite: 8 FAH half courses; permission of instructor (application in department)

Exclusion: FAH451H5/454H1/455H1

**FAH481H1 Internship at the University Art Centre (formerly FAH455H1) [26S]**

The internship is designed to offer hands-on experience pertaining to the study, exhibition, and care of works of art, focused on the collections and activities of the University Art Centre. The course extends over the entire academic year.

Prerequisite: 8 FAH half courses; permission of instructor (application in department)

Exclusion: FAH454H1/455H1

**FAH482H1 Master works of Art at the Art Gallery of Ontario [26S]**

This course develops art historical, connoisseurship, and analytical skills based on works of art in the permanent collection of the Art Gallery of Ontario. The course is designed to expose students to key issues in visual analysis, art history, and art historical interpretation arising from the direct study and investigation of art objects. The course will be located at the Art Gallery of Ontario. Its focus may shift around different aspects of the collections (works on paper, modern and contemporary art, the Thompson Collection, and other collections, depending availability and access.

**FAH483H1 Introduction to Conservation: Materials, Deterioration, and Preservation in Art and Material Culture (formerly FAH453H1) [26S]**

An introduction to conservation, designed to give students a basic understanding of the field, its techniques, and its purposes. Sessions conducted by specialists in the Royal Ontario Museum conservation department.

Prerequisite: 8 FAH half courses; permission of instructor.

Exclusion: FAH453H1

**FAH484H1 Fashion, & Textiles: Culture & Consumption (formerly FAH459H1) [26S]**

This course examines the history, meaning and consumption of Western European textiles (Late Antique - 18th century) and fashionable dress (18th - 21st centuries). Analysis and research will combine student seminars with the study of actual artefacts in the Textile & Costume Collection of the Royal Ontario Museum.

Prerequisite: 8 FAH half courses; permission of instructor.

Exclusion: FAH459H1

**FAH485H1 Collecting Canada: Art in the Royal Ontario Museum (formerly FAH456H1) [26S]**

Theoretical and first-hand practical engagement with the Canadian picture collection (18th-20th C) in the ROM. Through seminars, workshops, and lectures, we address issues of collecting, display, and the interpretation of objects that historically have been collected primarily as "documentary art."

Prerequisite: FAH248H1/286H1, one FAH FCE at the 300-level; permission of instructor

Recommended preparation: FAH352H1/386H1

Exclusion: FAH456H1

**FAH486H1 Case Studies at the Royal Ontario Museum [26S]**

In-depth investigation of objects at the Royal Ontario Museum. Content will vary according to the museum department offering the course in any given semester.

Prerequisite: 8 FAH half courses; permission of instructor.

**FAH489H1 Topics in the History of Art and Architecture [26S]**

Focused examination of special topics in any period of Mediterranean, European, North American, or Asian art and architecture.

Prerequisite: 8 FAH half courses; permission of instructor

### Independent Studies

Students may request to undertake supervised research projects culminating in a major research paper. Such projects are often the continuation of work in a previous FAH course, usually at the 400 level. Not more than one course in Independent Studies may be taken in a single year. Students must obtain in advance the written consent of a faculty supervisor(s) and the Undergraduate Secretary before registering.

Prerequisite for all independent studies: five FAH courses; permission of instructor

**FAH491H1 Independent Studies in Ancient Art and Architecture**

**FAH491Y1 Independent Studies in Ancient Art and Architecture**

**FAH492H1 Independent Studies in Medieval Art and Architecture**

**FAH492Y1 Independent Studies in Medieval Art and Architecture**

**FAH493H1 Independent Studies in Renaissance and Baroque Art and Architecture**

**FAH493Y1 Independent Studies in Renaissance and Baroque Art and Architecture**

**FAH494H1 Independent Studies in Modern and Contemporary Art and Architecture**

**FAH494Y1 Independent Studies in Modern and Contemporary Art and Architecture**

**FAH495H1 Independent Studies in Canadian Art and Architecture**

**FAH495Y1 Independent Studies in Canadian Art and Architecture**

**FAH496H1 Independent Studies in Asian Art and Architecture**

**FAH496Y1 Independent Studies in Asian Art and Architecture**

**FAH497H1 Independent Studies in Architectural History**

**FAH497Y1 Independent Studies in Architectural History**

## Visual Studies Courses

### Note 1.

Visual Studies has replaced the previous FAS program. Students in the FAS program requiring credits should select courses from the VIS program to complete their FAS program requirements.

### Note 2.

VIS and FAH courses except VIS 120H1 and VIS 130H1 give priority to students enroled in our Specialist, Major and Minor programs. Students must follow procedures as outlined in the *Registration Handbook and Timetable* and instructions in the Department of Art web site.

### Note 3.

Exclusions have been included for many FAS studio courses at the University of Toronto Mississauga. St George students wishing to take any remaining FAS courses there will need the written

permission of the Undergraduate Coordinator for VIS.

**VIS120H1 Visual Concepts [26L, 13T]**
Visual concepts introduces students to a wide range of topics situated in Modernism and Post-modernism that inform current art practice and critical discourse. The course investigates post-1970 art practice through the diverse societal, cultural and political influences of post-modernism.

**VIS130H1 Visual Strategies [52P, 13T]**
A studio based course that employs intensive and diverse investigation of drawing strategies that stress the formulation and communication of visual ideas.NOTE enrolment instructions in the *Registration Handbook and Timetable* for this course! A studio fee of $50 is payable with tuition. Note: this is a half course taught over the entire academic year.
Co-requisite: VIS120H1
Exclusion: FAS 143H1

**VIS201H1 Painting: Methods and Materials [39P]**
This is a hands-on course that deals with technical and theoretical issues of painting in the early 21st century. The act of painting and the relevance of painting are stressed through both historical and current issues. This course is very project oriented. A studio fee of $50 is payable with tuition.
Prerequisite: VIS120H1, 130H1
Exclusion: FAS 145H1

**VIS202H1 Video For Artists [39P]**
A studio course that introduces the history and contemporary practice of video art. In addition to hands-on instruction in digital production and post-production, the course includes seminars, readings and screenings. Students produce a number of short digital video projects and participate in group seminars and critiques. A studio fee of $75 is payable with tuition.
Prerequisite: VIS120H1, VIS130H1

**VIS203H1 Time-Based Arts [13L, 26P]**
A studio course examining the particular properties of various time-based art forms, including audio and audio installation, video and video installation, interactive performance and other time-based media used by artists. Readings, gallery visits and screenings and slide presentations provide background to these art practices. Students produce projects responding to assignments. A studio fee of $75 is payable with tuition.
Prerequisite: VIS120H1, VIS130H1

**VIS204H1 3D Installation [13L, 26P]**
This course is designed to introduce students to the basic principles of working in 3 dimensions, using projects, slide lectures and writing. A studio fee of $50.00 is payable with tuition.
Prerequisite: VIS120H1, 130H1
Exclusion: FAS146H1

**VIS205H1 Drawing [39P]**
Studio-based projects explore drawing practice in the early 21st century. Materials and approaches both bear witness to continuity and respond to changing contemporary cultural issues. (A studio fee of $25 is payable with tuition.)
Prerequisite: VIS120H1, 130H1
Exclusion: FAS 243H1

**VIS206H1 Print Media One - Relief (formerly VIS203H1) [39P]**
Principles and practices of Relief Printmaking. Projects in single and multiple block edition production. (A studio fee of $120 is payable with tuition.)
Prerequisite: VIS120H1, 130H1
Exclusion: FAS 232H1

**VIS207H1 Print Media II - Intaglio (formerly VIS303H1) [39P]**
An introduction through studio projects to the principle forms of intaglio printmaking, including etching and collagraph. (A studio fee of $120 is payable with tuition.)
Prerequisites: VIS120H1, VIS130
Exclusion: FAS 324H1

**VIS208H1 Performance Art [13L, 26P]**
Practical and aesthetic concerns in the evolution of Performance against the backdrop of critical and historical perspectives. Students explore a range of Performance possibilities, alone and collaboratively to develop both intellectual and physical skills which will inform both their performance work and their view of art. Seminars focus on critical aspects of Performance.
Prerequisite: VIS120H1, 130H1

**VIS209H1 Women in Visual Art [13L, 26P]**
The emergence and incorporation of the feminist perspective in current art theory and practice form the basis of lectures, seminars, projects and essays that focus on language, photography and other mediums that signal the shift to a variety of strategies shaping art in the post-modern era.
Prerequisite: VIS120H1 VIS130H1

**VIS211H1 Works on Paper (formerly VIS 205H1) [13L, 26P]**
A studio based course which explores the potential of paper from drawing to object making, in the context of contemporary art practice. A studio fee of $25 is payable with tuition.
Prerequisite: VIS120H1, 130H1
Exclusion: FAS143H1, FAS243H1

**VIS212H1 Colour [13L, 26P]**
Colour may be claimed as the property of all: for most everyone sees, uses, and knows colour. Studying colour takes us into areas of humanities and sciences. This study, through lectures, projects and readings aims to develop a student's understanding and use of colour. A studio fee of $50 is payable with tuition.
Prerequisite: VIS120H1 VIS130H1

**VIS213H1 Drawing and the Body [39P]**
Drawing strategies and media are explored through the reference of the human form. The body becomes the site of self and a vehicle for expression. A studio fee of $30.00 is payable with tuition.
Pre-requisites: VIS120H1, VIS130H1
Recommended preparation: VIS205H1
Exclusion: FAS243H1

**VIS217H1 Photobased (Chemical) [13L, 26P]**
Photobased projects in which the fundamentals of optical-chemical-mechanical photographic processes and technologies are integrated with concepts in contemporary photobased practice. A studio fee of $75 is payable with tuition.; student must have light metre and 35mm camera that allows full manual control.
Prerequisite: VIS120H1, 130H1
Exclusion: FAS147H1

**VIS218H1 Photobased (Digital) [13L, 26P]**
Photobased projects in which the fundamentals of optical/digital photographic processes and technologies are integrated with concepts in contemporary photobased practice. A studio fee of $75 is payable with tuition.
Prerequisite: VIS120H1, 130H1
Exclusion: FAS147H1

**VIS220H1 Painting and the Subject [39P]**
Painting and the subject continue the exploration of formal and material issues introduced in Painting, Method and Materials. Representation and abstraction are investigated through the development of subject matter and themes drawn from personal, social and cultural sources. A studio fee of $50 is payable with tuition.
Prerequisite: VIS120H1, 130H1

**VIS301H1 Painting: The Painted Edge [39P]**
This studio based, project oriented course critically examines contemporary visual culture through painting. Projects are presented and discussed during regular class critiques. Lectures will take place throughout the course.
Prerequisite: VIS120H1, VIS 130H1, VIS201H1
Exclusion: FAS245H1

**VIS302H1 Video: Advanced Projects [39P]**
Emphasis on pre-production, production and post-production of a video project. Students script, shoot and edit a tape through rough cut to fine cut. Class discussions focus on all stages of the work-in-progress. Strategies for distribution, exhibition and funding are examined. A studio fee of $75 is payable with tuition
Prerequisite: VIS120H1, VIS130H1, VIS202H1

**VIS303H1 Advanced Time-Based Arts [13L, 26P]**
A studio course that continues the students' development in all areas of time-based art practice through seminars, readings and self-directed projects. A studio fee of $75 is payable with tuition.
Prerequisite: VIS120H1, 130H1, VIS202H1/203H1

**VIS305H1 Drawing and Painting [39P]**
Time and place in drawing and painting. This course provides a discourse with which to continue the evolution of the students' work in drawing and painting.
Prerequisite: VIS120H1, VIS130H1, 201H1 and one of VIS205H1/211H1/213H1
Exclusions: FAS243H1, FAS343H1, FAS345H1

**VIS306H1 Site/Installation and 3-D Construction [13L, 26P]**
An investigation into the history and practice of site/installation and 3 dimensional fabrication through slide lectures, projects and seminar discussions. Earth works, large scale public projects, and site specific installations will be explored.
Prerequisite: VIS120H1, 130H1, 204H1
Exclusion: FAS348H1

**VIS307H1 Art and Context [13L, 26P]**
Applying art to the borders of other disciplines or issues within the university community, students develop projects with the objective of opening spaces for discourse: art as a transgressive device.
Prerequisite: VIS120H1, 130H1 and one VIS 200-level course.

**VIS309H1 The Processed Image [13L, 26P]**
Seminars and studio projects give the more advanced students the opportunity to address issues of transformation in Print technology. A studio fee of $120 is payable with tuition.
Prerequisite: VIS120H, VIS130H, VIS (206H1/207H1)
Exclusion: FAS334H1

**VIS310H1 Imaging the Political [13L, 26P]**
Studio projects complemented by seminars and readings examine plastic, social and gender politics in contemporary imaging.
Prerequisite: VIS120H1 VIS130H1 and one VIS 200-level course

**VIS311H1 Independent Projects [TBA]**
Students propose and produce projects in media that are offered in Visual Studies.
Prerequisite: Permission of instructor

**VIS312H1 Collage [13L, 26P]**
An investigation of collage through the 20th century. The evolution of collage as a means of expression will be explored in the form of studio projects and lectures.
Prerequisite: VIS120H1, 130H1 and one VIS 200-level course

**VIS313H1 The Body [13L, 26P]**
Ideas about the body are challenged by developments in technology, culture and politics. This course studies the metamorphosis of gender, age and culture through projects, lectures and readings.
Prerequisites VIS120H1, VIS130H1 and one VIS 200-level course

**VIS318H1 Integrated Photobased Explorations [13L, 26P]**
Studio projects are based on issues and writing relevant to contemporary photobased practice; seminars and readings are integral. Students will work with both chemical and digital processes. A studio fee of $75 is payable with tuition.
Prerequisite: VIS (120H1, 130H1), and one of VIS217H1/218H1
Exclusion: FAS347H1

**VIS319H1 Defining Landscapes [13L, 26P]**
The concept of "landscape" is the entry point for investigating the relationship between people and their environments: landscape as both the source of inspiration and the vehicle of expression. Exploration through open media studio projects, written work, readings and seminars.
Prerequisite: VIS120H1, VIS130H1 and one VIS 200-level course

**VIS320H1 Critical Curatorial Lab [13L, 26P]**
Projects and seminars, in collaboration with The Power Plant, develop an understanding of curatorial and critical practices in contemporary visual and media arts.
Prerequisite: VIS (120H1, 130H1)/FAH102H1 and one FAH OR VIS 200-level course
Exclusion: FAH 451H1

**VIS321H1 Artists' Multiples [13L, 26P]**
Production of artists' multiples in various media is augmented with gallery and archive visits, screenings and artist talks. Historical and contemporary technologies for reproduction are examined.
Prerequisite: VIS120H1, VIS130H1 and one VIS 200-level course

**VIS322H1 The Constructed Image [13L, 26P]**
Composing an image is a skill. Students increase their skill and methodology in constructing their own images; they explore the construction of the image as an intersection of theory and practice.
Prerequisite: VIS120 and VIS130 and any 200 level VIS course

**VIS323H1 Painting: Contemporary Practice [39P]**
Painting: Contemporary Practice introduces philosophical and theoretical issues raised by the conceptual relationship of painting to other artistic strategies and the contemporary environment. Studio work will be complemented by the study of advanced

artists working in this medium. A studio fee of $50 is payable with tuition.
Prerequisite: VIS120H1, VIS130H1, VIS220H1
Recommended preparation: VIS201H

**VIS324H1 The Aesthetics of Everyday Life [39P]**
This interdisciplinary seminar course examines the aesthetic qualities of objects and experiences not usually considered by philosophers, including such things as sports, food, human relationships and weather. Projects are based on the textbook, "The Aesthetics of Everyday Life" and students will be evaluated through open-media studio projects and class participation.
Prerequisite: VIS120H1, VIS130H1, a minimum of one 200-level VIS course

**VIS325H1 Contemporary Art Issues [39P]**
Everything was contemporary once; this course explores the idea of contemporaneity. Students will be asked to identify themselves in the present-day landscape and to convey that awareness in seminar discussions and studio projects.
Prerequisite: VIS120H1, VIS130H1, a minimum of one 200-level VIS course

**VIS326H1 Studio Practice [39P]**
A project-based studio course in which each student works to advance and to articulate their visual arts practice, and to develop individual process, themes and influences, the articulation. Group critiques, seminars, reading and writing assignments. Open media, students must have access to own means of production.
Prerequisite: VIS120H1, VIS130H1, at least two 200-level VIS courses

**DRM354Y1 Production II [13L, 26P]**
The course explores the meaning and function of stage and costume design for the theatre with emphasis on creative thinking, text analysis and concept development. Limited enrolment for Visual Studies students who must be at the 3rd-year level.
Prerequisite: Permission of University College Drama Program Committee

**VIS401H1 Thesis Text and Critique [39P]**
This course is taken in conjunction with VIS402H1 : Thesis Project students develop and fabricate a series of projects over the course of the academic year. Studio, ,textual and critical analysis forms the basis for the final exhibition. The student is required to actively participate in all aspects of the course . Class discussions with faculty This class is intended for 3rd and 4th year VIS Majors and Specialists.
Prerequisite: VIS120H1, 130H1 and at least two 200-level VIS courses and two 300-level VIS courses and permission of the instructor.
Exclusions: FAS 434-5, FAS 447-8, FAS 450-3

**VIS402H1 Thesis Project [39P]**
Students realize projects embarked upon in VIS 401H1 Thesis Text and Critique. Class discussions with faculty.
Co-requisite: VIS401HF
Exclusions: FAS 434-5H1, FAS 447-8H1, FAS450-3H1

**VIS403H1 Secondary Focus Project [39P]**
A variety of projects developed in various media with a strong interdisciplinary focus.
Prerequisite: Permission of instructor

**VIS404H1 Independent Studies [39P]**
Individual advanced projects, including texts, that are subject to group critiques.
Prerequisite: Permission of instructor

**VIS405H1 Visual Studies Internship [13L, 26P]**
A one semester Internship provides placement at a gallery, media arts centre, artist run centre, artist or publication with a focus on contemporary art practice
Prerequisite: VIS120H1, 130H1, permission of Undergraduate Secretary

**Notes:**
Only three of VIS311H1, VIS403H1, VIS404H1, VIS405H1 may be taken.

Independent Studies credits (VIS311H1, 403H1, 404H1, and 405H1 are only open to VIS Specialists and VIS Majors.

**VIS410H1 Artist In Residence Master Class [TBA]**
Students work under the supervision of a visiting artist who provides the students with a full introduction to the specifics of her/his practice as an artist. A variety of media are explored specific to the visitor's own practice. Seminars are augmented with critiques in response to assignments.
Prerequisite: VIS120H1, VIS130H1, at least two 300-level VIS courses and permission of Graduate Program Director

The Dr. David Chu Program in Asia-Pacific Studies welcomes students who wish to combine concentrated study in a traditional academic discipline with an interdisciplinary major program that focuses on contemporary developments in this rapidly changing region. A broad survey course offered by the Department of Political Science provides students with a solid understanding of the complex political, economic, social and cultural life of the region. An additional range of optional courses that span the humanities and the social sciences allow students to develop more specialized knowledge of the region. Finally, a fourth-year capstone course allows students in the program to synthesize what they have learned in various optional courses while undertaking independent research on a topic of special interest.

Study of a major language of the region is an important component of the program. In many cases, this can be achieved by taking two courses in one of the three main languages taught in the Department of East Asian Studies: Chinese, Japanese or Korean. All possible efforts will also be made to assist and support students who wish to achieve basic fluency in another language of the region, such as Indonesian, Vietnamese, Malay, Tagalog or Thai.. Students who are already fluent in a language of the region are allowed to substitute optional courses for the language course requirements.

Students may consult the Director of the Program at the Munk Centre for International Studies, Room 265S. For general inquiries contact the Program Administrator at 416-946-8996, Munk Centre for International Studies, Room 227N or munk.aps@artsci.utoronto.ca. For current developments, please check the Program's University web site (www.utoronto.ca/davidchu).

## Dr. David Chu Program in Asia-Pacific Studies

Enrolment in the Dr. David Chu Program in Asia-Pacific Studies is open to students who have successfully completed four full courses. A minimum CGPA of 2.5 is required. Those who seek advanced language standing must receive permission from the Program Director, and will be required to complete recommended substitute courses. Formal admission to the program is achieved by completing a required enrolment form. The required form is available from the Director, the Program Administrator, or the Program's web site.

**Major program:**
(7 full courses or their equivalent, including at least two 300+series courses)

1. POL 215Y1; ASI 400Y1. These courses must be taken in sequential order.
2. Two sequential Y1 courses in an East Asian or Southeast Asian language. Students may choose to study one of three languages - Chinese, Japanese, Korean - offered by the Department of East Asian Studies. For other languages, such as Thai, Vietnamese, Malay and Indonesian, students should consult with the Program Director. Generally two sequential courses are required for these languages as well but the Program will consider other ar-rangements including study abroad and intensive summer courses at other universities.
3. Three additional full course equivalents on appropriate Asia-Pacific topics from offerings in the following departments: ANT, EAS, GGR, HIS, PHL, POL, RLG, SOC. Students are invited to select any courses on the Asia Pacific region that are offered by the above departments (or by other departments not listed here). Please consult with the Program Director if you have any questions about your course selection.

## Asia-Pacific Studies Courses

See page 32 for Key to Course Descriptions.

**ASI400Y1 Seminar in Asia-Pacific Studies 52L**
**(formerly ASI300Y1)**

This seminar course examines diverse postwar experiences and realities of the Asia Pacific region, which comprises a range of countries that differ in cultural, ethnic, and religious backgrounds, in levels of social and economic developments, and in political regimes. Unlike Europe, which has gone through a steady process of integration since WWII, regional links among Asia Pacific countries have been rather weak and often limited. Attempts to forge regional economic cooperation within the Asia Pacific region, such as ASEAN, have been fraught with political and historical tensions. As a result, much of the linkage has been limited to investment, trade, and production networks. This seminar will examine the various social, economic, and political experiences and realities of the countries in this region and their implications.
Prerequisite: POL215Y1 and enrolment in the Asia Pacific Studies major/permission of the Program Director
Exclusion: ASI300Y1
This is a Humanities or Social Science course.

# Astronomy & Astrophysics

## Faculty

### Professors Emeriti and Directors Emeriti of the David Dunlap Observatory

J.D. Fernie, M Sc, Ph D, FRSC
E. R. Seaquist, MA, PhD

### Professors Emeriti

C.M. Clement, B Sc, MA, Ph D
M.J. Clement, M Sc, Ph D
R.F. Garrison, BA, Ph D
P.P. Kronberg, M Sc, Ph D, D Sc
C.M. Clement, B Sc, MA, Ph D

### Professor and Chair of the Department and Director of the David Dunlap Observatory

P.G. Martin, M Sc, Ph D, FRSC †

### Associate Chair, Graduate Studies

H.K.C. Yee, B Ap Sc, Ph D

### Associate Chair, Undergraduate Studies

R.G. Carlberg, M Sc, Ph D

### University Professor

J.R. Bond, OC, MS, Ph D, FRSC, FRS †

### Professors

P. Artymowicz, MSc, PhD (University of Toronto Scarborough)
C.T. Bolton, M Sc, Ph D, FRSC
C.C. Dyer, M Sc, Ph D (University of Toronto Scarborough)
L. Kofman, BS, Ph D †
J.B. Lester, MS, Ph D (University of Toronto Mississauga)
N.W. Murray, BS, Ph D †
J .R. Percy, B Sc, MA, Ph D (University of Toronto Mississauga)
S.M. Rucinski, M Sc, Ph D (Associate Director, DDO)
A.C. Thompson, BS, Ph D †
M.H. van Kerkwijk, MA, Ph D

### Associate Professors

R. G. Abraham, B Sc, D Phil
R. Jayawardhana, BS, AM, PhD
S.W. Mochnacki, M Sc, Ph D
C. B. Netterfield, BS, Ph D
U-L. Pen, M Sc, Ph D †

### Assistant Professors

W.H. Clark, MA, Ph D
B.P. Crill, Sc B, Ph D
J. P. Lowman, M Sc, Ph D (University of Toronto Scarborough)
C.D. Matzner, AB, MA, Ph D
D-S. Moon, Ph D
G. Srinivasan, Ph D † †
S. Stanley, MA, Ph D † †
Y. Wu, Ph D

† Cross-appointed, CITA

† † Cross-appointed, PLN

Astronomy is the quest to explore the universe beyond the earth and to understand the physical processes that describe its contents. Essentially all civilizations have developed astronomy to some degree, with records extending back to the Babylonians. The modern development of astronomy began with Galileo turning a telescope to the sky and has undergone a revolution in the past fifty years as telescopes ranging from the radio to the gamma ray have discovered the relict radiation from the Big Bang, planets around other stars and the time and which the first stars were just beginning to form. Astronomy as a discipline is a distinctive integration of many of the sciences. At the introductory level it is used to provide a non-technical overview of the scientific approach to questions and our current understanding. At the more advanced level a quantitative physical understanding of astrophysical systems is developed. A graduate in astronomy has a wide grounding in modern physical science which is important for a wide range of roles in society.

Several courses are offered to suit persons of diverse backgrounds and depths of interest. Two beginning courses (AST 101H, 201H) require no special knowledge of mathematics or other sciences and are best suited to students taking non-science programs. These courses develop an understanding of the universe in a qualitative way and in terms of natural laws familiar to us on Earth. Audiovisual demonstrations are used extensively. AST121H is an introductory astronomy course for science students. The course AST 210H1 is intended for students in other areas of the physical sciences. AST251H1 is best suited to life science students. The remaining courses are designed for physical sciences and astronomy program students. The first physics and math based astronomy courses normally start in the second year. In some of these courses, the objective is to provide for practical involvement by the student. This is achieved by the use of the remotely-controlled telescopes at the St. George and Scarborough Campus observatories by day as well as by night.

Undergraduate Enquiries: ungrad.sec@astro.utoronto.ca (416-946-5243)

Web site: http://www.astro.utoronto.ca

## Astronomy & Astrophysics Programs

Enrolment in the Astronomy and Astrophysics programs requires completion of four courses; no minimum GPA is required.

### Astronomy & Astrophysics (Science program)

**Major program:**
(8 full courses or their equivalent, including at least two courses at the 300+-level)

First Year:
MAT 135Y1/137Y1; PHY131H/132H or PHY151H/152H1
Second Year:
1. AST 221H1, 222H1; MAT 235Y1/237Y1
2. PHY 252H1 and one of PHY 225H1, 251H1, 255H1, 256H1

Third Year:
1. AST 320H1, 325H1/326Y
2. One course from: CSC 336H1, 350H1, 351H1, 418H1, 456H1; ECE 385H1; PHY 305H1, 307H1/308H1, 315H1, 351H1, 352H1, 353H1, 355H1, 357H1, 358H1, 359H1

3. One additional course or half course in APM/AST/CSC/MAT/PHY/STA, to make up the total of 8 full-course equivalents.

**Minor program:**
(4 full courses or their equivalent)

1. AST 221H1, 222H1, 320H1, 325H1/326Y1
2. PHY 138Y1/140Y1
3. PHY 252H1 and one of PHY 225H1, 251H1, 255H1, 256H1

**Please note:**
PHY138Y1/140Y1 requires MAT135Y1/137Y1/151Y1 and PHY252H1 requires MAT235Y1/237Y1/257Y1.

## Astronomy & Physics (Science program)

Consult Departments of Astronomy & Astrophysics and Physics.

**Specialist program:**
(14 full courses or their equivalent, including at least one 400-series course)

First Year:
MAT 137Y1, 223H1/240H1; PHY 151H1, 152H1
Second Year:
AST 221H1, 222H1; MAT 237Y1, 244H1; PHY 251H1, 252H1, 256H1
Third Year:
1. APM 346H1; AST 320H1, 325H1/326Y; PHY 225H1, 255H1, 351H1, 355H1
2. One of MAT 224H1, 327H1, 334H1, 363H1, STA 257H1

Fourth Year:
1. AST 425Y1; PHY 352H1, 353H1
2. One half course from each of groups A and B
3. One additional half course from either group A, group B or group C

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**Group A:**
PHY 357H1, 358H1, 359H1, 495H1

**Group B:**
PHY 457H1, 459H1, 460H1, 483H1, 484H1

**Group C:**
PHY 407H1, 408H1, 409H1

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**Planetary Sciences Specialist Program - See Planetary Sciences**

## Astronomy & Astrophysics Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all AST courses are classified as SCIENCE courses (see page 26).

**SCI199H1 First Year Seminar [26S]**

**SCI199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**AST101H1 The Sun and Its Neighbours [26L]**
Our place in the Universe. Phenomena we see in the sky. What we know about the Sun, the planets and comets, and the formation of the solar system - and how we know it. What makes planets suitable for life. Finding out about the nearest stars and their planets.
This course is intended for students with no science or engineering background.
Exclusion: AST121H1, 210H1, 221H1. Also excluded are CIV101H1, any 100- or higher-series CHM/PHY courses taken previously or concurrently (with the exception of PHY100H1, 101H1, 201H1, 205H1, CHM200Y1)

**AST121H1 Origin and Evolution of the Universe [26L]**
The origin of the Universe, the origin of the chemical elements, the origin of stars and galaxies, the origin of life in the Universe. This course is intended for students who are enrolling in science courses.
Exclusion: AST101H1, 201H1, 210H1. Also excluded are AST221H1, 222H1 if taken previously or concurrently
Prerequisite: OAC Physics/ SPH4U and OAC Calculus/MCB4U

**AST201H1 Stars and Galaxies [26L]**
What we know about the properties and life cycles of stars, of galaxies, and of the Universe itself - and how we know it. How astronomers develop methods for understanding phenomena that span such vast ranges in distance and time.
This course is intended for students with no science or engineering background.
Exclusion: AST121H1, 210H1. Also excluded are CIV101H1 and any 100- or higher-series CHM or PHY courses taken previously or concurrently (with the exception of PHY100H1, 101H1, 201H1, 205H1, CHM200Y1)

**AST210H1 Great Moments in Astronomy [26L]**
The history of Western astronomy: Copernican Revolution to twentieth century astrophysics. Emphasis is placed on the process of discovery which has led to major advances in knowledge about the Universe. The course ends with an outline of one of the most significant puzzles of our day and an examination of the potential for a new revolution in knowledge in our lifetime. This course is best suited to physical science students. Exclusion: AST101H1, 121H1, 201H1

**AST221H1 Stars and Planets [39L]**
Concepts of basic physics applied to a treatment of the solar system and stars. Telescopes and instrumentation are introduced.
Exclusion: AST101H1/201H1
Prerequisite: PHY138Y1/140Y1, MAT135Y1/137Y1

**AST222H1 Galaxies and Cosmology [39L]**
Concepts of basic physics applied to a treatment of stellar systems and the structure of the Universe.
Exclusion: AST201H1
Prerequisite: AST221H1

**AST251H1 Life on Other Worlds [26L]**
Scholarly discussion of the probability that there are planets with life elsewhere in the universe, from the perspective of current ideas concerning the origin and evolution of the universe, the solar system and life Search techniques and possibilities for interstellar travel and space colonies are discussed. This course is best suited to life sciences students.
Prerequisite: OAC Biology/OAC Chemistry/OAC Physics/ SBI4U/SCH4U/ SPH4U

**AST299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**AST320H1 Introduction to Astrophysics [26L]**
The formation, equilibrium and evolution of structure on all astronomical scales from the largest to the smallest: universe, clusters of galaxies, galaxies, clusters of stars, gas clouds and stars.
Prerequisite: AST222H1, PHY252H1

**AST325H1 Introduction to Practical Astronomy [39P]**
Observational projects in astrophysics involving work with telescopes and CCD detectors. Principles of photometry. Use of standard software packages for data reduction and analysis. Students will be required to use UNIX/Linux operating systems.
Exclusion: AST 326Y1
Prerequisite: AST221H1/222H1, PHY251H1/252H1/255H1/256H1

**AST326Y1 Practical Astronomy [78P]**
Observational projects in astrophysics involving work with telescopes and CCD detectors. Principles of photometry and spectroscopy. Use of UNIX/Linux-based software packages for data reduction and analysis. This course is an expanded version of AST 325H1 designed to give students a wider exposure to practical astronomy.
Exclusion: AST 325H1
Prerequisite: AST 221H1/222H1, PHY 251H1/252H1/255H1/256H1

**AST398H0 Independent Experiential Study Project**

**AST399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**AST425Y1 Research Topic in Astronomy [TBA]**
A research project done in consultation with an individual staff member in the Department leading to a detailed written report and oral presentation. This course is intended for students in the final year of the Astronomy and Physics specialist program. Students must enrol with the Undergraduate Secretary of the Department.
Prerequisite: Two of PHY 307H1, 308H1, 309H1, 351H1, 352H1, 353H1, 355H1, 357H1, 358H1, 359H1, AST325H1/326Y1

## Faculty

### University Professors Emeriti

A.G. Brook, BA, Ph D, FRSC
J.B. Jones, B Sc, Ph D, D Phil, FRSC, FCIC

### Professors Emeriti

M. Bersohn, BS, Ph D
G. Burns, B Sc, Ph D
I.G. Csizmadia, Dip Eng, M Sc, Ph D
A.G. Harrison, M Sc, Ph D, FCIC
A.J. Kresge, BA, Ph D, FRSC (University of Toronto Scarborough)
R.A. McClelland, B Sc, Ph D, FRSC (University of Toronto Scarborough)
S. McLean, B Sc, Ph D. FCIC
M. Menzinger, Dip Eng, M Sc, Ph D (SM)
S.C. Nyburg, B Sc, Ph D, D Sc
A.J. Poë, B Sc, MA, Ph D, D Sc, DIC, Sc D, FCIC (University of Toronto Mississauga)
W.F. Reynolds, M Sc, Ph D
E.A. Robinson, B Sc, Ph D, D Sc (University of Toronto Mississauga)
G.H. Schmid, B Sc, Ph D, FCIC
I.W.J. Still, B Sc, Ph D, D Sc (University of Toronto Mississauga)
J.C. Thompson, BA, Ph D (University of Toronto Scarborough)
T.T. Tidwell, B Sc, AM, Ph D, FRSC (University of Toronto Scarborough)
J.P. Valleau, MA, Ph D (I)
A. Walker, B Sc, Ph D (University of Toronto Scarborough)
S.C. Wallace, B Sc, Ph D

### Professor and Chair of the Department

S.A. Mabury, BS, Ph D (U)

### Professor and Associate Chair (Graduate)

G. Walker, BA, Ph D

### Senior Lecturer and Associate Chair (Undergraduate)

A.P. Dicks, B Sc, Ph D (SM)

### University Professors

P.W. Brumer, B Sc, Ph D, FRSC
R.J.D. Miller, B S, Ph D, FRSC, FCIC
G.A. Ozin, B Sc, D Phil, FRSC, FCIC
J.C. Polanyi, M Sc, Ph D, D Sc, FRS, FRSC, FRSEd
M.A. Winnik, BA, Ph D, FRSC

### Professors

J.P. Abbatt, B Sc, Ph D
R.A. Batey, BA, Ph D
J. Chin, M Sc, Ph D
D.J. Donaldson, B Sc, Ph D (University of Toronto Scarborough)
M. Georges, B Sc, Ph D (University of Toronto Mississauga)
M.C. Goh, BS, Ph D (U)
R.E. Kapral, B Sc, Ph D, FRSC
R.H. Kluger, AM, Ph D, FCIC, FRSC
U.J. Krull, B Sc, Ph D, FCIC (University of Toronto Mississauga)
E. Kumacheva, M Sc, Ph D, FRSC
M. Lautens, B Sc, Ph D, FCIC, FRSC (T)
P.M. Macdonald, M Sc, Ph D (University of Toronto Mississauga)
R.H. Morris, B Sc, Ph D, FRSC, FCIC
J. Powell, B Sc, Ph D, FCIC
D. Stephan, B Sc, Ph D, FCIC, FRSC
M. Thompson, B Sc, Ph D, D Sc, FRSC, FCIC
S.G. Whittington, MA, Ph D (T)
G.A. Woolley, B Sc, Ph D
A. Yudin, BS, Ph D

### Associate Professors

A. Dhirani, M Sc, Ph D
S.J. Fraser, BA, Ph D (University of Toronto Scarborough)
S. Prosser, M Sc, Ph D (University of Toronto Mississauga)
J. Schofield, BA, Ph D
G.D. Scholes, B Sc, Ph D
F. Wania, B Sc, Ph D (University of Toronto Scarborough)
D.B. Zamble, B Sc, Ph D

### Assistant Professors

U. Fekl, M Sc, Ph D (University of Toronto Mississauga)
V. Dong, B Sc, Ph D
P. Gunning, B Sc, Ph D (University of Toronto Mississauga)
R.A. Jockusch, BA , Ph D
V. Kanelis, B Sc, Ph D (University of Toronto Mississauga)
D. McMillen, MA Sc, Ph D (University of Toronto Mississauga)
J. Murphy, B Sc, Ph D
M. Nitz, B Sc, Ph D
D. Segal, B Sc, Ph D
J. Shin, AB, Ph D (University of Toronto Mississauga)
A. J. Simpson, B Sc, Ph D (University of Toronto Scarborough)
D. Song, B Sc, Ph D
M. Taylor, B Sc, Ph D
A. Wheeler, B Sc, Ph D

### Senior Lecturers

C.S. Browning, M Sc, Ph D (SM)
C.M. Kutas, B Sc, M Ed
D. F. McIntosh, B Sc, Ph D
H.O. Ohorodnyk, M Sc
J. C. Poë, ARCS, M Sc, DIC, FCIC (University of Toronto Mississauga)
S. Skonieczny, D Sc, Ph D

### Lecturers

S. Chulliparambil, B Ed, Ph D
K. Quinlan, B Sc, Ph D
D. Stone, B Sc, Ph D

Chemistry is a challenging intellectual pursuit and a dominant force in shaping our civilization. Chemistry places strong emphasis on an understanding of the structures and properties of individual atoms and molecules, and on using this understanding to interpret and predict the behaviour of matter. Many of the concepts of physics, and the methods of mathematics, are basic to chemistry. Chemistry is of fundamental importance to many other subjects including astrophysics, biological sciences, environmental science, geology, materials science, and medical sciences. These and other aspects

of the subject are reflected in the courses offered, and the programs recommended by the Department.

The Department has made extensive changes to its course and program offerings in the last few years. These changes included a revision of first year courses, substantial modifications to later-year courses, the introduction of new specialist programs in Biological Chemistry, Materials Chemistry, and in Environmental Chemistry, and more flexibility for students choosing areas of specialization both within chemistry and in combination with other disciplines.

Students can choose between two first year options according to their intended area of specialization.

CHM151Y1 is the course that is strongly recommended for all students who will be following one of the specialist programs involving chemistry, including Biological Chemistry and Environmental Chemistry or who will be including a substantial amount of chemistry in their degree (such as those following a chemistry major program).

The combination of CHM138H1 and CHM139H1 is recommended for students who intend to take programs in the Life or Health Sciences that do not require a large amount of chemistry. These courses may be taken in any order, and not in the same session.

The outlines of these first year courses, together with those for later-year offerings, are shown in this Calendar. More detailed information is available from the Department, and is posted on the World Wide Web at www.chem.utoronto.ca/undergraduate/courses/1st.html. Students who are following programs that contain a substantial number of chemistry courses are strongly advised to take courses in the proper year (i.e. 200-series in second year, etc.). Following the correct sequence will enhance the level and balance of preparation for all later year courses, and timetable conflicts will be avoided.

Students whose current programs may be affected by the introduction of new or revised chemistry courses are advised to consult the Department at the earliest possible opportunity. Students requiring more information about Chemistry programs and courses are invited to visit or phone the Undergraduate Office, Lash Miller Chemical Laboratories, Room 151 (416-978-6033).

## Chemistry Programs

### Biological Chemistry (Science program)

Consult Professor M. Nitz, Department of Chemistry.

Enrolment in this program requires completion of four courses; no minimum GPA required.

**Specialist program:**

(14 full courses or their equivalent, including at least two 400-series courses)

First Year: BIO 150Y1; (CHM 151Y1 strongly recommended)/(138H1, 139H1); MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1)

Second and Higher Years:

1. BCH 210H1; BIO 250Y1/(BIO 240H1, BIO 241H1); CHM 217H1, 225Y1/(220H1, 221H1), 238Y1, 247H1/249H1 (CHM249H1 strongly recommended); 0.5 MAT/CSC/STA credit
2. CHM 347H1, 348H1, 379H1.
3. At least one of the following: CHM 317H1, 327H1, 338H1, 343H1, 410H1, 438H1, 499Y1
4. Further 300/400-series courses in BCH or CHM, including CHM 437H1, 447H1, and 479H1 to make a total of 14 full courses. CSB 450H1 is also acceptable.

### Chemical Physics (Science program)

Consult Professor J. Schofield, Department of Chemistry.

Enrolment in this program requires completion of four courses; no minimum GPA required.

**Specialist program:**

(14 full courses or their equivalent, including at least 1.5 400-series courses)

First Year: (CHM 151Y1 strongly recommended)/(138H1, 139H1), MAT 137Y1/157Y1; PHY 140Y1/(131H1, 132H1)/(151H1, 152H1)

Higher Years:

1. APM 346H1; CHM 225Y1, 326H1, 327H1, 328H1; MAT 223H1/240H1, 235Y1/237Y1, 244H1, 334H1; PHY 251H1, 255H1, 351H1, 352H1; CHM 423H1/PHY (355H1, 457H1)
2. Two full course equivalents from CHM 217H1, 238Y1, 247H1/249H1 (CHM249H1 strongly recommended), 310H1, 317H1, 338H1, 348H1, 415H1
3. Further 400-series half-courses in CHM/PHY to make a total of 14 full courses

### Chemistry (Science program)

Consult Dr. A. Dicks, Department of Chemistry.

Enrolment in the Specialist, Major and Minor Chemistry programs requires completion of four courses; no minimum GPA required.

**Specialist program:**

(14 full courses or their equivalent, including at least three 400-series courses)

First Year: (CHM 151Y1 strongly recommended)/(138H1, 139H1); MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1)

Second Year: BCH 210H1, CHM 217H1, 225Y1/(220H1 with minimum grade of B, 221H1), 238Y1, 249H1; MAT 235Y1/237Y1

Third and Fourth Years:

1. CHM 326H1/328H1, 327H1
2. Further 300/400-level full course equivalents in CHM/MAT/another science, including at least three of CHM 317H1, 338H1, 343H1/346H1, 379H1, 410H1, 438H1, 499Y1 and at least three 400-level CHM full course equivalents to make a total of 14 full courses.

**Major program:**

(8 full courses or their equivalent)

First Year: (CHM 151Y1 strongly recommended)/(138H1, 139H1); MAT 135Y1/137Y1

Second Year: At least two of CHM 217H1, 220H1/225Y1, 238Y1, 247H1/249H1 (CHM249H1 strongly recommended)

Third Year: At least two of CHM 317H1, 327H1, 338H1, (343H1/346H1)/348H1, 379H1

Fourth Year: Further 200/300/400-level CHM courses to make a total of seven CHM full course equivalents (CHM 299Y1 excluded)

**Minor program:**
(4 full courses or their equivalent, including at least one full-course equivalent at the 300+ level))

First Year: CHM 151Y1/(138H1, 139H1)
Second Year: At least one of CHM 217H1, 220H1/225Y1, 238Y1, 247H1/249H1(CHM249H1 strongly recommended)
Third Year: At least one of CHM 317H1, 327H1, 338H1, 343H1/346H1, 348H1, 379H1
Fourth Year: Further 200/300/400-level CHM courses to make a total of four CHM full course equivalents (CHM 299Y1 excluded)

## Environmental Chemistry (Science program)

Consult Professor J. Abbatt, Department of Chemistry

**Specialist program:**
(13.5 full courses or their equivalent, including at least one 400-series course)

Jointly sponsored by the Centre for Environment and the Department of Chemistry, this program focuses on analytical theory, instrumentation and mechanistic understanding of organic and inorganic contaminants in soil, water, air and biological tissues.

Enrolment in this program is limited. It requires prior completion of 4 courses with a minimum GPA of 2.3. Three courses must be from the First Year list. Apply through the Centre for Environment by: 1st Round: TBA; 2nd Round: TBA at: www.artsci.utoronto.ca/current/undergraduate.

First Year: BIO 150Y1; (CHM 151Y1 strongly recommended)/(138H1, 139H1); MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1)
Second Year: CHM 217H1, 225Y1/(220H1, 221H1), 238Y1, 247H1/249H1 (CHM249H1 strongly recommended); ENV 235Y1
Third and Fourth Years:
1. CHM 310H1, 410H1, 415H1; ENV 234Y1, ENV321Y1/(JGE 221Y1/JIE222Y1)
2. One additional FCE from 300/400-series CHM courses
3. (ENV 410H1, 421H1)/CHM 499Y1

### Minor program:

(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)
Environmental chemistry is the study of the chemical impacts of humankind's activities on the soil, air, and water. This minor provides a balanced fundamental background in chemistry as well as an introduction to the major issues associated with environmental chemistry. It is a Type 1 program.

1 CHM (138H1, 139H1)/151Y1
2. One full course equivalent from CHM 217H1, (220H1, 221H1)/225Y1, 238Y1, 247H1/249H1
3. ENV235Y
4. Any two of CHM 310H1, 317H1, 410H1, 415H1

## Nanoscience Minor Program (offered jointly with the National University of Singapore)

This physical science-based Type 3 minor program represents a unique opportunity to study chemistry and physics in a different cultural environment. Students take core subjects at the first-year level in Toronto and spend the spring semester of their second or third year at the National University of Singapore, where they are enrolled in lecture courses and undertake a faculty-supervised research project.

(4 full courses or their equivalent, including at least one full-course equivalent at the 300+ level)

1. CHM 151Y1/139H1, PHY 140Y1/(151H1, 152H1)
2. NUS 227H0, 228H0, 328H0, 398H0*
3. Further CHM courses to make a total of four full course equivalents

*NUS courses must be taken at the National University of Singapore during either the spring semester of second year studies or the spring semester of third year studies.

For more information, contact the Undergraduate Office (LM 151, 416-978-6033, undergrd@chem.utoronto.ca), and the International Student Exchange Office (ISXO, www.utoronto.ca/student.exchange).

### Nanoscience Minor Program Courses (offered jointly with the National University of Singapore)

**NUS227H0 Science at the Nanoscale [52L, 13T]**
Students are introduced to fundamental principles of physics and chemistry important to the nanoscale. Some basic physical tools that can be used to explore structures at this length scale are discussed. Linkages between the fundamental sciences and practical applications in nanotechnology are also made.
Prerequisite: CHM 139H1/151Y1; PHY (151H1, 152H1)/140Y1

**NUS228H0 Principles of Spectroscopy [39L, 39P, 13T]**
Topics discussed include microwave spectroscopy, infrared spectroscopy, Raman spectroscopy, electronic spectroscopy, electron and nuclear spin resonance spectroscopy. The fundamental principles such as energy quantization, rigid rotors and harmonic oscillators are discussed, the techniques and instrumentation are studied, and the practical applications are emphasized.
Prerequisite: CHM 139H1/151Y1; PHY (151H1, 152H1)/140Y1

**NUS328H0 Nanochemistry [52L, 13T]**
The synthesis, characterisation and application of nanostructures using chemical routes, incorporating various concepts from colloidal chemistry, supramolecular chemistry, polymer chemistry and electrochemistry. Applications of nanostructures such as quantum dots, nanoparticles, nanorods and nanowires in the areas of biosensors, bioimaging, LEDs and photonic crystals are highlighted.
Corequisite: NUS 227H0

**NUS398H0 Nanoscience Research [130P]**
An experimental or theoretical research problem in nanoscience under the supervision of a faculty member.

## Materials Chemistry Program - See Materials Science

## Pharmaceutical Chemistry - See Pharmaceutical Chemistry

## Planetary Science Program - See Planetary Science

## Chemistry Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all CHM courses are classified as SCIENCE courses (see page 26).

**SCI199H1 First Year Seminar [26L]**

**SCI199Y1 First Year Seminar [52L]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly-admitted first year students. It may serve as a distribution requirement course; see page 48.

**CHM138H1 Introductory Organic Chemistry I [39L, 18P, 12T]**
An introduction to principles of structure and their relation to reactivity of organic molecules: molecular structure, stereochemistry, functional groups, and reactions. Recommended for students in life and health science programs that involve a small amount of chemistry
NOTE: CHM138H1 and 139H1 may be taken in either order, but not both in the same session.
Exclusion: CHM 151Y1, CHM242H5, CHMB41H3
Prerequisite: Chemistry SCH4U, Mathematics (MHF4U + MCV4U) or (MCB4U + MHF4U/MDM4U/MCV4U) or (MCV4U + MDM4U/MGA4U)
Co-requisite: MAT135Y1/137Y1/157Y1 recommended, but may be required pre-requisite in 2nd year Chemistry courses; PHY138Y1/140Y1/(131H, 132H)/(151H, 152H) recommended

**CHM139H1 Chemistry: Physical Principles [39L, 18P, 12T]**
Structure of matter, gases, liquids and solids; phase equilibria and phase diagrams; colligative properties; chemical equilibria; electrolyte solutions and electrochemistry; reaction kinetics; introduction to thermodynamics. Recommended for students in life and health science programs that involve a small amount of chemistry
NOTE: CHM138H1 and 139H1 may be taken in either order, but not both in the same session.
Exclusion: CHM 151Y1, CHMA10H3, CHMA11H3, CHM140Y5
Prerequisite: Chemistry SCH4U, Mathematics (MHF4U + MCV4U) or (MCB4U + MHF4U/MDM4U/MCV4U) or (MCV4U + MDM4U/MGA4U)
Co-requisite: MAT135Y1/137Y1/157Y1 recommended, but may be required pre-requisite in 2nd year Chemistry courses; PHY138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1) recommended

**CHM151Y1 Chemistry: The Molecular Science [78L, 35P, 26T]**
An introduction to the major areas of modern chemistry, including organic and biological chemistry; physical chemistry and chemical physics; and inorganic/materials chemistry. The course is intended for students who will be following one of the chemistry specialist programs (including Biological Chemistry and Environmental Chemistry) or who will be including a substantial amount of chemistry in their degree (such as those following a chemistry major program). The combination of CHM151Y1 and CHM249H1 serves as a full year introductory course in organic chemistry with laboratory. Note: Students taking Chemistry and Physics may schedule the labs on alternate weeks. CHM151Y1 has a unique "Course Community" where the undergraduate experience in chemistry is greatly enhanced through a series of workshops, research seminars, tours, outreach opportunities and social activities. Two hour biweekly Course Community meetings, during laboratory class hours (3:00 - 5:00 p.m.) will alternate weeks with the CHM151Y1 lab classes. The lab time is reserved for CHM151Y1 activities every week of each semester.
Exclusion: CHM (138H1, 139H1), CHM140Y5, CHMA10H3, CHMA11H3
Prerequisite: Chemistry SCH4U, Mathematics (MHF4U + MCV4U) or (MCB4U + MHF4U/MDM4U/MCV4U) or (MCV4U + MDM4U/MGA4U); Physics SPH4U recommended
Co-requisite: PHY138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1) recommended, but may be required pre-requisite in 2nd year courses; MAT135Y1/137Y1/157Y1

**CHM217H1 Introduction to Analytical Chemistry [26L, 52P, 13T]**
Introduction to the science of chemical measurement, from sampling through analysis to the interpretation of results, how water, food products, pharmaceuticals, and dietary supplements are analysed for content, quality, and potential contaminants. Also how to interpret experimental measurements, compare results and procedures, and calibrate analytical instrumentation. Through closely integrated lectures, laboratories, and tutorials, this highly practical course will introduce you to a variety of analytical techniques including volumetric methods, potentiometry, uv/visible and infrared spectrophotometry, flame atomic absorption spectrometry, and chromatography.
Prerequisite: CHM(138H1, 139H1)/151Y1 with a minimum grade of 63%, or permission of the department

**CHM220H1 Physical Chemistry for Life Sciences [39L, 13T]**
Introduction to thermodynamics; phase equilibrium, properties of mixtures, chemical equilibrium, electrochemistry; introduction to quantum mechanics and spectroscopy. This course is recommended for students in life and health science programs that involve a small amount of chemistry. Students enrolled in any chemistry specialist programs (including Biological Chemistry and Environmental Chemistry) or who will be including a substantial amount of chemistry in their degree (such as those following a chemistry major program), are strongly encouraged to take CHM225Y1.
Exclusion: CHM 225Y1, 221H5
Prerequisite: CHM(138H1, 139H1)/151Y1; MAT135Y1/137Y1/157Y1
Recommended co-requisite: MAT235Y1/237Y1

**CHM221H1 Physical Chemistry: The Molecular Viewpoint [26L, 13T]**
A continuation of CHM220H1 for students wishing to take some additional material in Physical Chemistry. The course covers topics in quantum mechanics and spectroscopy as well as an introduction to reaction kinetics.
Exclusion: CHM 225Y1, 221H5
Prerequisite: CHM220H1 with a minimum grade of B, or permission of the department
Co-requisite: MAT235Y1/237Y1 recommended, but may be required pre-requisite in 3rd year Chemistry courses

**CHM225Y1 Introduction to Physical Chemistry [52L, 26T]**
Topics: introductory thermodynamics, first and second law and applications; chemical equilibrium; chemical kinetics;

introductory quantum mechanics; spectroscopy. The course is intended for students who will be following one of the chemistry specialist programs (including Biological Chemistry and Environmental Chemistry) or who will be including a substantial amount of chemistry in their degree (such as those following a chemistry major program).
Exclusion: CHM 220H1, 221H1, 221H5
Prerequisite: [CHM(138H1, 139H1)/151Y1 with a minimum grade of 63%, or permission of the department], MAT135Y1/137Y1/157Y1, PHY138Y1/140Y1/(131H, 132H)/(151H, 152H)
Co-requisite: MAT235Y1/237Y1

**ENV235Y1 Physics and Chemistry of the Evolving Earth [52L, 26T]**
(see Centre for Environment)
This course considers the fundamental chemical and physical processes of the Earth's natural environment. The first semester of the course focuses primarily on the atmosphere: its evolution, structure, composition and dynamical character. Particular emphasis is given to a discussion of global climate and the underlying physical, chemical and biogeochemical factors that drive climate change. Within this context, stratospheric ozone depletion, ocean chemistry, urban air pollution, acid rain and water quality are also discussed. The second semester focuses on the solid Earth: its formulation and evolution, internal dynamics, mantle-core differentiation, volcanism, tectonics and paleoclimate/ice ages. Throughout the course, the operation of the Earth as a coupled physico-chemical system over a range of timescales is emphasized.
Prerequisite: CHM (138H1, 139H1)/151Y1, MAT 135Y1/137Y1/JMB170Y1, PHY 138Y1/140Y1 or permission of the department

**CHM238Y1 Introduction to Inorganic Chemistry [52L, 52P]**
The first part (with CHM338H1) of a two-year sequence in Inorganic Chemistry, designed to illustrate and systematize the rich variety of structures, physical properties and reactions of compounds of the elements across and down the Periodic Table. Introduction to structure, symmetry and bonding of molecules and lattices; acid-base and redox reactions; d-metal complexes; systematic chemistry of metals and elements of the s and p blocks; inorganic materials and solid state chemistry with applications in advanced technologies.
Prerequisite: CHM151Y1/(138H1, 139H1) with a minimum grade of 63%, or permission of the department

**CHM247H1 Introductory Organic Chemistry II [39L, 22P, 12T]**
Reactions of organic compounds. Principles of mechanism, synthesis, and spectroscopy, continuing from CHM 138H1. This course is recommended for students in life and health science programs that involve a small amount of chemistry. Students enrolled in any chemistry specialist programs (including Biological Chemistry and Environmental Chemistry) or who will be including a substantial amount of chemistry in their degree (such as those following a chemistry major program) are strongly encouraged to take CHM249H1. Tutorial (12T) is optional.
Exclusion: CHM249H1, CHM243H5, CHMB42H3
Prerequisite: CHM(138H1, 139H1)/151Y1

**CHM249H1 Organic Chemistry [39L, 52P]**
An introductory course in organic chemistry, based around the themes of structure, bonding, reaction mechanism and synthesis. Reactions are discussed with a view to understanding mechanism and how they are useful in the multi-step synthesis of medicinally and industrially important compounds. An introduction to the spectroscopy of organic molecules is also given, as well as discussion of topics relating to the biological behaviour of organic molecules and medicinal chemistry. This course continues from CHM 151Y1 or CHM 138H1 and is designed for students in the chemistry specialist and major programs. This course is highly recommended for students in the Biological Chemistry program.
Exclusion: CHM247H1, CHM242H5, CHM243H5, CHMB41H3, CHMB42H3
Prerequisite: CHM151Y1/(138H1, 139H1) with a minimum grade of 63%, or permission of the department

**CHM299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**CHM310H1 Environmental Chemistry [26L]**
Major chemical pollutants and their sources, the environmental reactions they undergo, and how they become distributed throughout the environment. Focus is on the principal routes of chemical and biological degradation of toxicants; oxidation, photodegradation, hydrolysis, reduction, biotic metabolism, and microbial degradation. The principal physical processes by which chemicals move, concentrate, and dissipate.
Prerequisite: CHM247H1/249H1

**CHM317H1 Introduction to Instrumental Methods of Analysis [26L, 52P]**
Scope of instrumental analytical chemistry; Fourier transform IR absorption spectroscopy; molecular luminescence; emission spectroscopy; mass spectroscopy, electrochemical techniques; sensors; gas and high performance liquid chromatography; instrument design principles and applications in industry and the environment.
Prerequisite: CHM217H1 with a minimum grade of 63%, or permission of the department
Recommended preparation: CHM (220H1, 221H1)/225Y1

**CHM325H1 Introduction to Inorganic and Polymer Materials Chemistry [26L]**
Fashioned to illustrate how inorganic and polymer materials chemistry can be rationally used to synthesize superconductors, metals, semiconductors, ceramics, elastomers, thermoplastics, thermosets and polymer liquid crystals, with properties that can be tailored for applications in a range of advanced technologies. Coverage is fairly broad and is organized to crosscut many aspects of the field.
Prerequisite: CHM220H1/225Y1, 238Y1, 247H1/249H1

**CHM326H1 Introductory Quantum Mechanics and Spectroscopy [26L]**
This course introduces the postulates of quantum mechanics to develop the fundamental framework of quantum theory. A number of exactly soluble problems are treated in detail as examples. Perturbation theory is introduced in the context of understanding many body problems. Various applications to chemical bonding and molecular spectroscopy are covered in detail.
Prerequisite: CHM225Y1/(CHM 220H1, 221H1), MAT235Y1/237Y1

**CHM327H1 Experimental Physical Chemistry [13L, 52P]**
Students are exposed to experiments to help them experience modern physical chemistry. Labs designed to illustrate physical

chemistry principles and practical techniques as well as their real world state of the art applications. The course also involves some lecture material to broaden the laboratory experience.
Prerequisite: CHM225Y1/(CHM220H1, 221H1) with a minimum grade of 63%, or permission of the department
Recommended co-requisites: CHM326H1 or CHM328H1

**CHM328H1 Modern Physical Chemistry [26L]**
This course explores the microscopic description of macroscopic phenomena in chemistry. Statistical mechanics is introduced as the bridge between the microscopic and macroscopic views, and applied to a variety of chemical problems including reaction dynamics. More advanced topics in thermodynamics are introduced and discussed as required.
Prerequisite: CHM225Y1/(CHM 220H1, 221H1), MAT235Y1/237Y1

**CHM338H1 Intermediate Inorganic Chemistry [26L, 52P]**
Further study of the structures, physical properties and reactions of compounds of the main group elements and the transition metals. Introductions to spectroscopy and structural analysis, reaction mechanisms, d- and f- block organometallic compounds, catalysis, structures of solids and bioinorganic chemistry. The weekly laboratory demonstrates aspects of transition metal chemistry.
Prerequisite: CHM238Y1 with a minimum grade of 63%, or permission of the department
Recommended Preparation: CHM217H1, 247H1/249H1

**CHM342H1 Modern Organic Synthesis (formerly CHM345H1) [26L]**
An overview of the preparation of various classes of organic compounds. Strategies and tactics of synthetic organic chemistry using examples from natural products and pharmaceuticals. C-C bond formation, functional group reactivity, structure, stereochemistry and selectivity.
Exclusion: CHM345H1, CHM346H1
Prerequisite: CHM247H1/249H1

**CHM343H1 Organic Synthesis Techniques [26L, 52P]**
This laboratory course showcases modern organic synthesis techniques and introduces chemical research principles. It provides excellent preparation for a CHM499Y1 project in organic chemistry. Associated lectures teach theory and problem-solving approaches from a practical perspective.
Exclusion: CHM346H1
Prerequisite: CHM247H1/249H1 with a minimum grade of 63%, or permission of the department

**CHM347H1 Organic Chemistry of Biological Compounds [26L, 13T]**
An organic chemical approach to the structure and reactions of major classes of biological molecules: carbohydrates, amino acids, peptides and proteins, phosphates, lipids, heterocycles, vitamins, nucleotides and polynucleotides. This is achieved through studies of advanced stereochemistry, chemical modification, reactions and synthesis. In addition to lectures and reading from texts, there will be opportunities for independent written assignments on several of the topics.
Prerequisite: CHM247H1/249H1
Recommended preparation: CHM217H1

**CHM348H1 Organic Reaction Mechanisms [26L, 26P]**
An advanced survey of principles and methods that deal with organic chemical structure and reactivity: advanced stereochemistry, conformational analysis, reaction kinetics, isotope effects, mechanistic approaches, applications of free energy relationships, orbital transformations, systematization of mechanisms, testing hypotheses.
Prerequisite: CHM247H1/249H1 with a minimum grade of 63%, or permission of the department

**CHM379H1 Biomolecular Chemistry [26L, 52P]**
This course provides an opportunity to learn core techniques in biological chemistry in a small group laboratory setting. Lectures will discuss the theory behind the techniques and highlight how they are used in current biological chemistry research and practice.
Exclusion: BCH370H1, BCH 371H1
Prerequisite: (CHM247H1/249H1, with a minimum grade of 63%, or permission of the department), 347H1, BCH 210H1
Recommended preparation: CHM217H1

**CHM398H0 Independent Experiential Study Project**

**CHM399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**CHM410H1 Analytical Environmental Chemistry [26L, 44P]**
An analytical theory, instrumental, and methodology course focused on the measurement of pollutants in soil, water, air, and biological tissues and the determination of physical/chemical properties including vapour pressure, degradation rates, partitioning. Lab experiments involve application of theory.
Prerequisite: CHM310H1
Recommended preparation: CHM317H1

**CHM414H1 Biosensors and Chemical Sensors [26L]**
The development, design, and operation of biosensors and chemical sensors, including: biosensor technology, transducer theory and operation, device design and fabrication, surface modification and methods of surface analysis, flow injection analysis and chemometrics.
Prerequisite: CHM217H1/220H1/225Y1
Recommended preparation: CHM/317H1

**CHM415H1 Atmospheric Chemistry [26L]**
This course considers the chemistry occurring in the Earth's atmosphere, with emphasis on developing molecular-level understanding of the photochemistry, free-radical kinetics, and heterogeneous chemistry that occurs. Topics include stratospheric ozone depletion, trace gas oxidation, urban air pollution, acid rain, and the connections between aerosols and climate.
Prerequisite: CHM220H1/225Y1/310H1
Recommended preparation: MAT135Y1/137Y1; PHY 138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1)

**CHM416H1 Separation Science [26L]**
Principles of separation in analytical chemistry. Fractionation processes and solvent extractions; theory of chromatography, retention time, column efficiency and resolution. Principles of gas-liquid chromatography; instrumentation for gas chromatography. High performance liquid chromatography - practice and equipment design. Ion exchange, size-exclusion and affinity chromatography. Electrophoretic techniques.
Prerequisite: CHM317H1

**CHM417H1 Instrumentation for Chemists [26L]**
Basic understanding of components used in machines conventionally applied to chemical analysis and research. Electronic circuits and measurement; optical components; analog-digital conversion; lock-in amplifiers and frequency

counters; interfaces for data acquisition and LabView; signal control.
Prerequisite: CHM317H1

**CHM421H1 Chemical Kinetics & Dynamics [26L] (Not offered in 2008-09)**
The course provides an introduction to 1) molecular reaction dynamics (potential energy surfaces, bimolecular collisions, dynamics of bimolecular and unimolecular reactions, transition state theory) and to the modern tools (often laser based) to explore such dynamics, 2) relation of dynamics to classical chemical kinetics (rate, rate laws and mechanisms), 3) modern methods to control molecular processes.
Prerequisite: CHM (326H1, 328H1)

**CHM423H1 Applications of Quantum Mechanics [26L]**
Applications of time independent and time dependent perturbation theory to atomic and molecular problems, selection of topics from WKB approximation and the classical limit; the interaction of light with matter; elementary atomic scattering theory; molecular bonding.
Prerequisite: CHM326H1
Recommended preparation: MAT223H1

**CHM426H1 Polymer Chemistry [26L]**
Scope of polymer chemistry. Classification of polymers. Synthesis and characterization. Polymers in solution. Thermodynamics of polymer solutions and blends, Flory-Huggins theory. Polymers in the solid state. Crystalline and amorphous polymers. Glass transition and melting temperature. Mechanical properties. Polymers as advanced materials.
Prerequisite: CHM325H1; two of CHM328H1, 338H1, 348H1/ permission of the department

**CHM427H1 Statistical Mechanics [26L]**
Ensemble theory in statistical mechanics. Applications, including imperfect gases and liquid theories. Introduction to non-equilibrium problems.
Prerequisite: CHM(326H1, 328H1)

**CHM432H1 Organometallic Chemistry and Catalysis [26L]**
Structure, bonding, and reactions of organometallic compounds, with emphasis on basic mechanisms, and industrial processes. Addition, metalation, substitution, elimination, important catalytic cycles, electrophilic, and nucleophilic reactions are considered on a mechanistic basis. Properties of s and p block organometallics.
Prerequisite: CHM338H1
Recommended preparation: CHM348H1

**CHM434H1 Advanced Materials Chemistry [26L]**
A comprehensive investigation of synthetic methods for preparing diverse classes of inorganic materials with properties intentionally tailored for a particular use. Begins with a primer on solid-state materials and electronic band description of solids followed by a survey of archetypical solids that have had a dramatic influence on the materials world, some new developments in materials chemistry and a look at perceived future developments in materials research and technology. Strategies for synthesizing many different classes of materials with intentionally designed structures and compositions, textures and morphologies are then explored in detail emphasizing how to control the relations between structure and property of materials and ultimately function and utility. A number of contemporary issues in materials research are critically evaluated to appreciate recent highlights in the field of materials chemistry - an emerging sub-discipline of chemistry.
Prerequisite: CHM325H1, 338H1

**CHM437H1 Bioinorganic Chemistry [26L]**
Essential elements in biology; naturally occurring and medicinal ligands; transport, uptake and control of concentration of metal ions; physical methods of characterization of metal binding sites. Roles of metal ions: as structural and signaling elements in proteins, nucleic acids and DNA-binding complexes and proteins; as Lewis-acid centres in enzymes; as carriers of electrons, atoms and groups in redox proteins and enzymes; as sources of biominerals; as radiopharmaceuticals.
Prerequisite: CHM238Y1
Recommended preparation: CHM338H1(strongly recommended), CHM347H1/379H1

**CHM438H1 Advanced Inorganic and Materials Chemistry Laboratory [130P]**
The 4-week format of the lab bridges the gap between typical undergraduate labs and the realities of academic and industrial research and provides an exceptional educational opportunity for students intending to do CHM499Y1 research and/or considering going on in graduate studies. The lab is open throughout the day for the first four weeks of the fall term and instructional staff are available during this time to provide guidance on an individual basis. Applications for enrolment should be made to the Department in the preceding Winter Session.
Prerequisite: Chemistry Specialist students: CHM238Y, CHM338H1 and permission of Department. Materials Science Specialist students: CHM238Y, CHM325H and permission of department

**CHM440H1 The Synthesis of Modern Pharmaceutical Agents [26L]**
This course provides an overview of reactions and synthetic strategies that are being used at different stages of the drug development process. Using representative examples from the literature, we will concentrate on synthesis of complex heterocyclic compounds.
Prerequisite: CHM342H1/345H1/346H1

**CHM441H1 Spectroscopic Analysis in Organic Chemistry [26L, 16P]**
Structure and stereochemistry determination using modern spectroscopic techniques. Several techniques are discussed but particular emphasis is given to NMR (1H and 13C NMR) and mass spectrometry. The approach taken emphasizes applications of these spectroscopic methods to organic problems. Students are trained to run their own spectra (IR, UV, NMR, GC-MS).
Prerequisite: CHM249H1/343H1/346H1

**CHM443H1 Physical Organic Chemistry [26L]**
Noncovalent binding forces, solutions, and molecular recognition. Electronic structure theory and computational techniques. Reaction mechanisms: experimental probes and reactive intermediates, including carbenes and radicals. Photophysics and photochemistry of organic compounds.
Prerequisite: CHM220H1/225Y1, 348H1

**CHM447H1 Bio-organic Chemistry [26L]**
Applications of principles of physical organic chemistry to the study of biologically important processes: principles of catalysis, acceleration mechanisms, enthalpy and entropy barriers, magnitudes of enzymatic rate constants, enzyme kinetics, mechanisms of inhibition, pH-dependence, stereochemical

analysis, reaction patterns, selected cofactor mechanisms, case studies of enzymes, additional topics.
Prerequisite: CHM347H1, CHM348H1 or permission of the department

**CHM479H1 Biological Chemistry [26L]**
An in depth examination of biological systems at the molecular level. Several complex, multi-component molecular machines with a central role in life will be examined. For each system studied, the focus will be on understanding the chemical mechanisms that underlie the biological activities, and how these processes fit into a cellular context.
Prerequisite: CHM447H1, BCH210H1/242Y1

**CHM499Y1 Introduction to Chemistry Research [260P]**
An experimental or theoretical research problem under the supervision of a faculty member. Applications for enrolment should be made to the Department in the preceding Winter Session. Projects in the areas of environmental, analytical, physical, inorganic, materials, organic and biological chemistry are offered*.
Prerequisite: Permission of the department. Research positions are limited. Students with strong background in courses in the sub-discipline of research interest will be given preference.
*students wishing to enrol in CHM 499Y1 in the fields of inorganic or inorganic materials chemistry must enrol in CHM 438H1 as a co-requisite.

## Faculty

### Professors Emeriti

T.D. Barnes, MA, D Phil, FRSC
R.L. Beck, AM, Ph D (University of Toronto Mississauga)
A. Dalzell, B Litt, MA
J.N. Grant, MA, Ph D
Rev. M.O. Lee, MA, Ph D
C.J. McDonough, MA, Ph D
W.E. McLeod, AM, Ph D
D.P. de Montmollin, D ès L
K.F. Quinn, MA
J.M. Rist, MA, FRSC
E.I. Robbins, MA, Ph D
T.M. Robinson, B Litt, D Litt
A. E. Samuel, MA, Ph D
R.M.H. Shepherd, MA
D.F.S. Thomson, MA
J.S. Traill, AM, Ph D

### Professor and Chair of the Department

A.M. Keith, MA, Ph D

### Professor and Associate Chair, Graduate Affairs

C.F.M. Bruun, MA, Ph D

### Undergraduate Coordinator

TBA

### University Professor

E.J. Weinrib, AM, Ph D (Cecil A. Wright Professor of Law)

### Professors

M.J. Dewar, MA, D Phil
B.C. Inwood, MA, Ph D, FRSC (Canada Research Chair)
A.R. Jones, BA, Ph D, FRSC
J.C. Magee, MA, Ph D

### Associate Professors

R. Barney, BA, Ph D (Canada Research Chair)
J.S. Burgess, MA, Ph D
E. Gunderson, MA, Ph D
H. J. Mason, AM, Ph D
C.I. Rubincam, BA, Ph D (University of Toronto Mississauga)
V. Wohl MA, PhD

### Assistant Professors

B. Akrigg BA, PhD
A.E. Bendlin, MA, D Phil (University of Toronto Mississauga)
M. Cottier, L ès L, D Phil
R. Höschele, MA, Ph D
E. Lytle BA, PhD
M. Revermann, MA, D Phil (University of Toronto Mississauga)

The field of Classics is concerned with the languages, literature, philosophy, myth, religion, politics, and history of Greece and Rome. For the linguist, Greek provides an unbroken tradition from the earliest to modern times, while Latin is the parent of the Romance languages.

Students and lovers of literature are introduced to works in every genre which have contributed form, content, and critical standards to every European literature. The philosopher encounters the seminal ideas of European philosophy clearly and simply expressed. The political scientist observes a people passionately interested in the theory and practice of politics who explored the possibilities of elitist governing groups, despotism, and democracy, singly and in a variety of combinations, in national, federal, and imperial contexts. The student of religion discovers a rich variety of religious experience, interesting in itself and for its formative influence upon Christianity and Islam. The historian surveying an entire civilization can compare it with our own and can trace the evolution of a great social experiment from its first creative phase through its mature achievement to its final period of consolidation and obsolescence. Our understanding of the present is enhanced by understanding these formative influences from the past.

The Department of Classics welcomes students of all academic backgrounds who wish to take courses in the field but do not wish to specialize in Classical Studies. Even without knowing Greek or Latin, students can profitably study Greek and Roman history or Greek and Latin literature in translation - two areas combined under the designation CLA (for Classical Civilization courses) below. Similarly, the Major and Minor Programs in Classical Civilization presuppose no knowledge of the classical languages.

Advanced work in Greek and Latin does require study of the basic language courses in sequence. These are listed below under the designations GRK (for Greek courses) and LAT (for Latin courses).

The Department of Classics publishes an undergraduate handbook which may be obtained from the departmental office and is published on the internet; this and other information about the Department is available at: http://www.chass.utoronto.ca/classics.

Undergraduate Coordinator: TBA, 125 Queen's Park, room 110 (undergrad.classics@utoronto.ca; 416-978-4848)

Enquiries: 125 Queen's Park, room 108 (416-978-5698)

## Department of Classics Programs

Enrolment in Classical Civilization programs is limited to students who have completed 2 CLA half-courses with a grade of 65 or above; enrolment in the language programs listed below (Classics, Greek, Latin) is open to students who have completed 4 full course equivalents (FCEs) of any kind; no minimum grade is required. PLEASE NOTE THAT NOT ALL COURSES ARE OFFERED EVERY YEAR. CONSULT THE CURRENT TIMETABLE OR UNDERGRADUATE HANDBOOK FOR CURRENT COURSE OFFERINGS

# Classics

**NOTES**
FCE = "full course equivalent"

1. Approved courses involving the ancient Greek and Roman civilizations in other departments can be substituted for CLA courses; consult the Undergraduate Coordinator.
2. Such CLA substitutions should not exceed 3 FCEs for the Major Classical Civilization program, and 2 FCEs for the Minor Classical Civilization program.
3. GRK or LAT courses may be substituted for 200-level CLA courses: up to 2 FCEs in the Classical Civilization Major program and up to 1FCE in the Classical Civilization Minor program.

## Classical Civilization (Arts program)

**Major program:**
(6 FCEs)
1. CLA160H1
2. 5.5 FCEs of CLA courses at the 200+ level, including at least 2 FCEs at the 300+ level

**Minor program:**
(4 FCEs)

1. CLA160H1
2. 3.5 FCEs of CLA courses at the 200+ level, including 1 FCE at the 300+ level

## Classics (Arts program)

**Specialist program:**
(13 FCEs)

1. 1 FCE of CLA courses, including CLA160H1
2. 12 FCEs of GRK/LAT courses including 5 FCEs in each of GRK and LAT; 4 FCEs of GRK/LAT courses must be at the 300+ level, and include GRK 330H, LAT 330H, and 1 FCE at the 400-level

**Major program:**
(7 FCEs)

1. 1 FCE of CLA courses, including CLA160H1
2. 6 FCEs of GRK/LAT courses, including 2 FCEs in each of GRK and LAT; 2 FCEs GRK/LAT courses must be at the 300+ level and include GRK/LAT 330H1 (both recommended)

## Greek (Arts program)

**Major program:**
(6 FCEs)

1. 1 FCE of CLA courses, including CLA160H1
2. 4 FCEs of GRK courses; 2 FCEs must be at the 300+ level, and include GRK330H1
3. 1 additional FCE of CLA/GRK/LAT courses

**Minor program:**
(4 FCEs)

1. 1 FCE of CLA courses, including CLA160H1
2. 3 FCEs of GRK courses, of which at least 1 must be a 300+ series course

## Latin (Arts program)

**Major program:**
(6 FCEs)
1. 1 FCE of CLA courses, including CLA160H1
2. 4 FCEs of LAT courses; 2 FCEs must be at the 300+ level, and include LAT330H1
3. 1 additional FCE of CLA/GRK/LAT courses

**Minor program:**
(4 FCEs)

1. 1 FCE of CLA courses, including CLA160H1
2. 3 FCEs of LAT courses, of which at least 1 must be a 300+ series course

## Faculty of Arts & Science Language Citation

The Department of Classics participates in the Faculty of Arts and Science's Language Citation initiative for Ancient Greek and Latin. The study of Ancient Greek and Latin is a demanding and intellectually rewarding educational experience which makes available to the modern student the rich resources of classical texts in the original languages. Successful study of these languages demonstrates intelligence, discipline, analytical sophistication, and an excellent memory. The study of any foreign language provides invaluable insights into the varieties of human culture and expression.

In each language the Language Citation recognizes a significant level of achievement in language study with a high level of academic success. The Citation in Latin is available to students who complete LAT 100Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in LAT 201H1, 202H1 and any two LAT courses at the 300 level.

The Citation in Ancient Greek is available to students who complete GRK100Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in GRK 201H1, 202H1 and any two GRK courses at the 300 level.

Students should note that, as explained on page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

# Department of Classics Courses

For Distribution Requirement purposes (see page 26), all CLA, GRK, and LAT courses are classified as HUMANITIES courses. See page 32 for Key to Course Descriptions.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

## Classical Civilization Courses

**NOTE**
CLA courses do not require knowledge of Greek or Latin.

**CLA160H1 Introduction to Classical Studies (formerly CLA160Y1) [39L, 6T]**
An introduction to major themes in the development of Greek and Roman civilization, literature and culture.
Exclusion: CLA160Y1

**CLA201H1 Latin & Greek in Scientific Terminology [39L]**
The study of technical and scientific terms derived from Latin and Greek: word elements, formation, analysis. The course is designed to give students in any field of specialization a better grasp of the derivation and basic meaning of English words derived from Latin and Greek elements.

**CLA203H1 Science in Antiquity [39L]**
The first scientific traditions in the classical Mediterranean and the Near East, with emphasis on Greek science. Discussions of early physical science, biology, mathematics, and astronomy, and their place in ancient life and thought, based on primary sources in translation. Designed for students in both the sciences and humanities.

**CLA204H1 Introduction to Classical Mythology [39L]**
A survey of the myths and legends of ancient Greece (and their extension to Rome) with some consideration of their role in ancient and modern literature and art.
Exclusion: CLA205Y1

**CLA206H1 Ancient Astronomy [39L]**
The rise, development, and practical applications of the study of the heavens in Mesopotamia, Egypt, and the Greco-Roman world.

**CLA219H1 Women in Antiquity [39L]**
A survey of the position of women in ancient Greece and Rome, with focus on women's sexuality and socialization; their economic, religious, and political roles; and their creative production in the arts.
Recommended preparation: CLA160Y1/230H1/231H1

**CLA220H1 Women in Classical Literature [39L]**
This course studies the various images of women presented in the literature of Graeco-Roman antiquity.
Recommended preparation: CLA160Y1

**CLA230H1 Introduction to Greek History [39L]**
A historical survey of the most significant features in the development of the civilization and states of ancient Greece from the Bronze Age to the second century B. C.

**CLA231H1 Introduction to Roman History [39L]**
A historical survey of the most significant features in the development of the civilization and state of ancient Rome from the mythical beginnings to the fourth century A. D.

**CLA232H1 Introduction to Greek Society and Culture [39L]**
A general introduction to the society and culture of Ancient Greece. Topics may include literature, art, social customs, gender and sexuality, daily life, and religious festivals (the theatre, the Olympic Games etc.).

**CLA233H1 Introduction to Roman Society and Culture [39L]**
A general introduction to the society and culture of Ancient Rome. Topics may include literature, art, social customs, gender and sexuality, daily life, and religious festivals (the circus, the gladiatorial games etc.).

**CLA236H1 Greek and Roman Epic [39L]**
A study of one or more of the epic poems of Greek and Roman antiquity (e. g. The Iliad and Odyssey of Homer and the Aeneid of Virgil).
Exclusion: CLA301H1, 302H1

**CLA299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

### 300-Series Courses

**CLA305H1 Theories of Myth [39S]**
A detailed study of the major modern approaches to the analysis and interpretation of myth with specific reference to their applications to ancient Graeco-Roman myth.
Prerequisite: CLA204H1/205Y1

**CLA336H1 Roman Law [39S]**
Roman law with emphasis on how it reflected community values. The nature of Roman legal reasoning. The historical development of Roman law against the background of the evolution of Roman society and Roman power.

**CLA362H1 Mycenaean and Archaic Greece [39S]**
The Greek world from the second millennium B. C. to the end of the Archaic Age
Prerequisite: CLA230H1

**CLA363H1 The Rise and Fall of Athens [39S]**
The Greek world in the fifth and fourth centuries B. C.
Prerequisite: CLA230H1
Exclusion: CLA345H1

**CLA364H1 The Hellenistic World [39S]**
The Greek world in the age of Alexander the Great and his successors (336 B. C. to 31 B. C.)
Prerequisite: CLA230H1

**CLA365H1 Topics in Greek Social History [39S]**
Topics vary from year to year.
Prerequisite: CLA230H1

**CLA366H1 Topics in the Study of Greek History [39S]**
Topics vary from year to year.
Prerequisite: CLA230H1

**CLA367H1 The Roman Republic [39S]**
The Roman world from 510 B. C. to 44 B. C.
Prerequisite: CLA231H1
Exclusion:CLA334H1

**CLA368H1 Augustus and the Julio-Claudians [39S]**
The Roman world in the age of Augustus and his dynasty (44 B. C. to A. D. 68)
Prerequisite: CLA231H1
Exclusion: CLA351H1

**CLA369H1 The Roman Empire [39S]**
The Roman world from A. D. 68 to A. D. 378
Prerequisite: CLA231H1
Exclusion: CLA351H1, 352H1

**CLA370H1 Topics in Roman Social History [39S]**
Topics vary from year to year.
Prerequisite: CLA231H1

**CLA371H1 Topics in the Study of Roman History [39S]**
Topics vary from year to year.
Prerequisite: CLA231H1

**CLA378H1 Late Antiquity [39S]**
The history and culture of the Roman Empire from Theodosius the Great to Justinian, concentrating on the interplay of modern interpretations and ancient evidence.
Prerequisite: CLA231H1

**CLA382H1 The Classical Greek Theatre [39S]**
The origins of the theatre, its social function, the dramatic genres, and a study of representative plays.
Prerequisite: CLA232H1/DRM260H1
Exclusion: CLA300Y1

**CLA383H1 Hellenistic and Roman Theatre [39S]**
The development of the theatre, its social function, the dramatic genres, and a study of representative plays.
Prerequisite: CLA232H1/233H1/DRM260H1
Exclusion: CLA300Y1

**CLA384H1 Greek Literature in Translation [39S]**
A selection of Greek literary texts from one or more genres.
Prerequisite: CLA232H1/236H1

**CLA385H1 Roman Literature in Translation [39S]**
A selection of Roman literary texts from one or more genres.
Prerequisite: CLA233H1/236H1

**CLA386H1 Classical Literature in Translation [39S]**
A selection of Greek and Roman literary texts from one or more genres.
Prerequisite: CLA232H1/233H1/236H1

**CLA387H1 Spectacle in the Roman World [39S]**
The role in Roman society and culture of public spectacles, including the chariot-races, the gladiatorial games, executions, and triumphal processions.
Prerequisite: CLA233H1

**CLA388H1 Classical Antiquity and the Cinema [39S]**
A study of the representation of ancient Greece and/ or Rome in cinema.
Prerequisite: CLA232H1/233H1

**CLA389H1 Classical Spaces: Sites and Monuments [39S]**
A close study of one or more sites in the ancient world and the cultural significance of the site(s) in question.
Prerequisite: CLA230H1/231H1/232H1/233H1

**CLA390H1 Topics in the Study of Greek Culture and Society [39S]**
Topics vary from year to year.
Prerequisite: CLA232H1

**CLA391H1 Topics in the Study of Roman Culture and Society [39S]**
Topics vary from year to year.
Prerequisite: CLA233H1

**CLA398H0 Independent Experiential Study Project**

**CLA399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

### 400-Series Courses

**CLA400Y1 Independent Studies [TBA]**
Prerequisite: Permission of Department

**CLA401H1 Independent Studies [TBA]**
Prerequisite: Permission of Department

**CLA402H1 Special Topics in Classical Literature [TBA]**
Prerequisite: One FCE in the CLA 300-series, permission of Department

**CLA403H1 Special Topics in Ancient History [TBA]**
Prerequisite: One FCE in the CLA 300-series, permission of Department

## Greek Courses

**GRK100Y1 Introductory Ancient Greek [104S]**
An intensive introduction to Ancient Greek for students who have no knowledge of the language; preparation for the reading of Ancient Greek literature.
Exclusion: GRK101H1, 102H1. Students who have studied Ancient Greek previously must obtain permission from the Undergraduate Coordinator before enrolling.

**GRK102H1 Introductory Ancient Greek: Continuation [52S]**
An intensive language course for students who have some Ancient Greek. This course is equivalent to the second part of GRK100Y1.
Exclusion: GRK100Y1
Prerequisite: Some background in Ancient Greek

**GRK200H1 Intensive Intermediate Ancient Greek [52S]**
Further language training, with readings in Greek prose.
Prerequisite: GRK100Y1/102H1 and permission from the Department

**GRK201H1 Intermediate Ancient Greek I [52S ]**
Reading of selections of Ancient Greek prose works with systematic language study.
Prerequisite: GRK100Y1/102H1. Students who have completed Grade 12 in Ancient Greek must obtain permission from the Undergraduate Coordinator before enrolling.

**GRK202H1 Intermediate Ancient Greek II [52S]**
Continued language training with readings in Ancient Greek prose and verse.
Prerequisite: GRK201H1

**Note:**
Frequency of Offering: in each fall-winter session, GRK 330H1 will be offered and a minimum of 3 half-courses in each of the 300 and 400-series. In odd-numbered years the courses offered in the 300 and 400-series will normally be drawn from those with odd numbers, and in even-numbered years from those with even numbers.

**GRK330H1 Advanced Greek Language Study [39S]**
A course designed to enhance language skills. Prose composition, sight translation, stylistic analysis of classical Greek prose.
Prerequisite: GRK202H1

**GRK340H1 Plato I [39S]**
Readings from one or more Platonic Dialogues.

Exclusion: GRK440H1
Prerequisite: GRK202H1

**GRK341H1 Herodotus I [39S]**
Readings from Herodotus' Histories.
Exclusion: GRK441H1
Prerequisite: GRK202H1

**GRK342H1 Thucydides I [39S]**
Readings from The Peloponnesian War.
Exclusion: GRK442H1
Prerequisite: GRK202H1

**GRK343H1 Prose Authors I [39S]**
Readings from Greek prose (e.g., oratory, novels).
Exclusion: GRK443H1
Prerequisite: GRK202H1

**GRK350H1 Epic I [39S]**
Readings from Greek epics, including Homer.
Exclusion: GRK450H1
Prerequisite: GRK202H1

**GRK351H1 Drama I [39S]**
Readings from Euripides and Aristophanes.
Exclusion: GRK451H1
Prerequisite: GRK202H1

**GRK352H1 Tragedy I [39S]**
Readings from Aeschylus and Sophocles.
Exclusion: GRK452H1
Prerequisite: GRK202H1

**GRK353H1 Verse Authors I [39S]**
Readings from Greek verse (e.g., elegy, iambics, lyric).
Exclusion: GRK453H1
Prerequisite: GRK202H1

**GRK354H1 Koine Greek I [39S]**
Readings from Hellenistic and early Imperial Greek, with emphasis on Jewish and Christian texts.
Exclusion: GRK454H1
Prerequisite: GRK202H1

**GRK428Y1 Independent Studies [TBA]**
Prerequisite: Permission of Department

**GRK429H1 Independent Studies [TBA]**
Prerequisite: Permission of Department

**GRK440H1 Plato II [52S]**
Advanced readings from one or more Platonic Dialogues.
Exclusion: GRK340H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK441H1 Herodotus II [52S]**
Advanced readings from Herodotus' Histories.
Exclusion: GRK341H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK442H1 Thucydides II [52S]**
Advanced readings from The Peloponnesian War.
Exclusion: GRK342H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK443H1 Prose Authors II [52S]**
Advanced readings from Greek prose (e.g., oratory, novels).
Exclusion: GRK343H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK450H1 Epic II [52S]**
Advanced readings from Greek epics, including Homer.
Exclusion: GRK350H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK451H1 Drama II [52S]**
Advanced readings from Euripides and Aristophanes.
Exclusion: GRK351H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK452H1 Tragedy II [52S]**
Advanced readings from Aeschylus and Sophocles.
Exclusion: GRK352H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK453H1 Verse Authors II [52S]**
Advanced readings from Greek verse (e.g., elegy, iambic, lyric).
Exclusion: GRK353H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK330H1

**GRK454H1 Koine Greek II [52S]**
Readings from Hellenistic and early Imperial Greek, with emphasis on Jewish and Christian texts.
Exclusion: GRK354H1
Prerequisite: One FCE in the GRK300-series
Co- or prerequisite: GRK 330H1

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### Latin Courses

**LAT100Y1 Introductory Latin [104S]**
An intensive introduction to Latin for students who have no knowledge of the language; preparation for the reading of Latin literature.
Exclusion: LAT101H1, 102H1. Students who have studied Latin previously must obtain permission from the Undergraduate Coordinator before enrolling.

**LAT102H1 Introductory Latin: Continuation [52S]**
An intensive language course for students who have some Latin. This course is equivalent to the second half of LAT 100Y1.
Exclusion: LAT100Y1
Prerequisite: Some background in Latin.

**LAT201H1 Intermediate Latin I [52S]**
Reading of selections of Latin prose works with systematic language study.
Prerequisite: LAT100Y1/102H1. Students who have completed Grade 12 in Latin must obtain permission from the Undergraduate Coordinator before enrolling.

**LAT202H1 Intermediate Latin II [52S]**
Continued language training with readings in Latin prose and verse.
Prerequisite: LAT201H1

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### 300-Series Courses

**Notes**
Frequency of Offering: in each fall-winter session, LAT 330H1 will be offered and a minimum of 3 half-courses in each of the 300 and 400-series. In odd-numbered years the courses offered

in the 300 and 400-series will normally be drawn from those with odd numbers, and in even-numbered years from those with even numbers.

**LAT330H1 Advanced Latin Language Study [39S]**
A course designed to enhance language skills. Prose composition, sight translation, stylistic analysis of Latin prose.
Prerequisite: LAT202H1

**LAT340H1 Latin Novelists I [39S]**
Readings from one or more Latin novelists.
Exclusion: LAT440H1
Prerequisite: LAT202H1

**LAT341H1 Latin Historians I [39S]**
Readings from one or more Latin historians.
Exclusion: LAT441H1
Prerequisite: LAT202H1

**LAT342H1 Latin Orators I [39S]**
Readings from Latin orators, including Cicero.
Exclusion: LAT442H1
Prerequisite: LAT202H1

**LAT343H1 Prose Authors I [39S]**
Readings from Latin prose authors (e. g. biography, letters, philosophy).
Exclusion: LAT443H1
Prerequisite: LAT202H1

**LAT350H1 Epic I [39S]**
Readings from one or more Latin epics, including Virgil.
Exclusion: LAT450H1
Prerequisite: LAT202H1

**LAT351H1 Drama I [39S]**
Readings from Latin comedy and/or tragedy.
Exclusion: LAT451H1
Prerequisite: LAT202H1

**LAT352H1 Satire I [39S]**
Readings from one or more Latin satirists.
Exclusion: LAT452H1
Prerequisite: LAT202H1

**LAT353H1 Verse Authors I [39S]**
Readings from Latin verse (e. g. elegy, lyric, bucolic).
Exclusion: LAT453H1
Prerequisite: LAT202H1

**LAT428Y1 Independent Studies [TBA]**
Prerequisite: Permission of Department

**LAT429H1 Independent Studies [TBA]**
Prerequisite: Permission of Department

**LAT440H1 Latin Novelists II [52S]**
Advanced readings from one or more Latin novelists.
Exclusion: LAT340H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

**LAT441H1 Latin Historians II [52S]**
Advanced readings from one or more Latin historians.
Exclusion: LAT341H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

**LAT442H1 Latin Orators II [52S]**
Advanced readings from Latin orators, including Cicero.
Exclusion: LAT342H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

**LAT443H1 Prose Authors II [52S]**
Advanced readings from Latin prose authors (e. g. biography, letters, philosophy).
Exclusion: LAT343H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

**LAT450H1 Epic II [52S]**
Advanced readings from one or more Latin epics, including Virgil.
Exclusion: LAT350H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

**LAT451H1 Drama II [52S]**
Advanced readings from Latin comedy and/or tragedy.
Exclusion: LAT351H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

**LAT452H1 Satire II [52S]**
Advanced readings from one or more Latin satirists.
Exclusion: LAT352H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

**LAT453H1 Verse Authors II [52S]**
Advanced readings from Latin verse (e. g. elegy, lyric, bucolic).
Exclusion: LAT353H1
Prerequisite: One FCE in the LAT 300-series
Co- or prerequisite: LAT330H1

## Cognitive Science & Artificial Intelligence: see University College

## Cognitive Science: see University College

## Commerce: see Commerce, page 40

## Faculty

### Professors Emeriti

J.E. Chamberlin, BA, Ph D. FRSC, D.Litt (hon.)
L. Dolezel, MA, Ph D, FRSC
J.A.Fleming, MA, Ph D
E. Kushner, MA, Ph D, FRSC
P.W. Nesselroth, MA, Ph D, Ch PA
B. Stock, AM,, Ph D
M.J. Valdés, MA, Ph D, FRSC, Miembro Correspondiente de la Academia Mexicana

### Professor and Director of the Centre

R.J. Le Huenen, L ès L, DES, D en Ph, Ch PA, FRSC, D.Litt (hon.)

### Associate Professor and Co-ordinator of Graduate Studies

B. Havercroft, MA, Ph D

### University Professors

L.A.M. Hutcheon, MA, Ph D, FRSC, D.Litt (hon.)

### Professors

P. Kleber, MA, Ph D
T. Lahusen, MA, Ph D
J. LeBlanc, MA, Ph D

### Associate Professors

V. Ambros, MA, Ph D
E. Cazdyn, MA, Ph D
R. Comay, MA, Ph D
U. Esonwanne, MA, Ph.D
V. Li, MA, Ph.D
Y. Meng, MA, Ph.D
J. Ross, MA, Ph D
S.J. Rupp, MA, Ph D
J. Zilcosky, MA, Ph D

### Assistant Professors

A. Budde, MA, Ph.D
E.-L. Jagoe, MA, Ph.D
A. Komaromi, MA, Ph D

### Northrop Frye Visiting Professor

TBA

The Centre for Comparative Literature offers M.A.and Ph.D. degree programs of study in every major area from medieval to contemporary literatures with particular emphasis on literary theory and criticism, to candidates qualified to pursue literary studies involving several languages. Provided the language requirements of the Centre are satisfied, students may pursue theoretical issues that cross traditional disciplines.

Enquiries:
Bader Theatre, 93 Charles Street. 3rd Floor (416-813-4041)

## Comparative Literature Courses

(See page 32 for Key to Course Descriptions)

**JDC299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details. Offered by the Centre for Comparative Literature in collaboration with the University College Drama Program.

**JUC299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details. Offered by the Centre for Comparative Literature in collaboration with University College.

**JDC400Y1 Dramatic Text and Theatrical Communication**
See Drama.

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### Note

Undergraduate students may sometimes take one half-course or one full course at the graduate level adapted to meet the needs of undergraduate students. If granted permission the students will then register for the course using the COL490H1/ COL491Y1 designators. For more information contact the Graduate Coordinator: 416-813-4043.

**COL490H1 Independent Study [TBA]**

**COL490Y1 Independent Study [TBA]**
A scholarly project supervised by a member of staff on a literary topic of common interest including readings, discussions, and papers.
Prerequisite: Permission of the Centre for Comparitive Literature

# Computer Science

## Faculty

### University Professor Emeritus

S.A. Cook, AM, Ph D, DM, FRS, FRSC (T)

### Professors Emeriti

C.C. Gotlieb, MA, Ph D, D Math, D Eng, FRSC
R.C. Holt, Ph D
J.N.P. Hume, MA, Ph D, FRSC, CM
R.A. Mathon, MSc, PhD (University of Toronto Mississauga)

### Professor and Chair of the Department

C. Boutilier, M Sc, Ph D

### Professor and Vice Chair of the Department

H. Levesque, M Sc, Ph D, FRSC

### Associate Professor and Associate Chair - Graduate Studies

R. Zemel, M Sc, Ph D

### Senior Lecturer and Associate Chair - Undergraduate Studies

J.N. Clarke, M Sc, Ph D (V)

### University Professor

G.E. Hinton, Ph D, FRS, FRSC

### Professors

T.S. Abdelrahman, M Sc, Ph D
F. Bacchus, M Sc, Ph D
R.M. Baecker, M Sc, Ph D
A.B. Borodin, M Sc, Ph D, FRSC
D.G. Corneil, MA, Ph D
S. Dickinson, MS, Ph D
S. Easterbrook, B Sc, Ph D
F.Ellen, M Math, Ph D
W.H. Enright, M Sc, Ph D (University of Toronto Scarborough)
E. Fiume, M Sc, Ph D
D. Fleet, M S, PhD (University of Toronto Scarborough)
V. Hadzilacos, M Sc, Ph D (University of Toronto Scarborough)
E.C.R. Hehner, M Sc, Ph D
G. Hirst, M Sc, Ph D (University of Toronto Scarborough)
K.R. Jackson, M Sc, Ph D
A.D. Jepson, B Sc, Ph D
L. Libkin, MS, Ph D
R. Miller, MS, Ph D
M. Molloy, M Math, Ph D (University of Toronto Scarborough)
R. Neal, B Sc, Ph D
J. Mylopoulos, M Sc, Ph D
T. Pitassi, M Sc, Ph D
C.W. Rackoff, SM, Ph D (University of Toronto Mississauga)
S. Toueg, MA, Ph D
D.B. Wortman, M Sc, Ph D

### Associate Professors

R. Balakrishnan, M Sc, Ph D
A.J. Bonner, M Sc, Ph D (University of Toronto Mississauga)
M. Chechik, MS, PhD
C. Christara, MS, Ph D
J.N. Danahy, BLA, URP
E. DeLara, MS, Ph D
G.S. Graham, M Sc, MA, Ph D (University of Toronto Mississauga)
A. Hertzmann, MS, Ph D
N. Koudas, M Sc, Ph D (University of Toronto Scarborough)
K. Kutulakos, M Sc, PhD
P.J. Marbach, M Sc, Ph D
S. McIlraith, Ph D
G. Penn, MS, Ph D
S. Roweis, BAS, Ph D
K. Singh, MS, Ph D
S. Stevenson, MS, Ph D

### Assistant Professors

M. Brudno, M.Sc. Ph.D
A. Demke-Brown, M Sc, Ph D
Y. Ganjali, Ph D
R. Lilien, B S, PhD, MD
A. Magen, M Sc, Ph D (University of Toronto Mississauga)
S. Saroiu, MS, PhD (University of Toronto Mississauga)
K.N. Truong, Ph D
G.V. Wilson, M Sc, Ph D

### Senior Lecturers

G. Baumgartner, M Sc
M. Craig, M Sc
S. Engels, M Math
T. Fairgrieve, M Sc, Ph D
P. Gries, M Eng
D. Horton, M Sc
F. Pitt, M Sc, Ph D
K. Reid, M Sc

### Lecturers

J. Campbell, M Math
D. Heap, B Sc, M Sc

### Cross Appointed

C. Amza, Ph D
G. Bader, Ph D
C. Beck, Ph D
B. Cantwell Smith, MS, Ph D
M. Carter, M Math, Ph D
M. Chignell, MS, Ph D
A. Clement, M Sc, Ph D
M. Consens, Ph D
M.S. Fox, Ph D
B. Frey, Ph D
A. Goel, Ph D
M. Gruninger, Ph D
G. Gulak, M Sc, Ph D
A. Jacobsen, MS, Ph D
B. Li, M Sc, Ph D
D. Lie, Ph D
J.Liebeherr, Ph D
J. MacLean, Ph D
S. Mann, M Eng, Ph D
E. Mendelsohn M Sc, Ph D (University of Toronto

Scarborough)
A. Mihailidis, Ph D
Q. Morris, Ph D
A. Moshovos, M Sc, Ph D
M. Shub, Ph D
G. Steffan, MA Sc, Ph D
M. Stumm, MS (Math), Ph D
T. Topaloglou, Ph D
A.I.F. Urquhart, MA, Ph D
M. Voss, Ph D
E. Yu, M Sc, Ph D
S.G. Zaky, MA Sc, Ph D

### Status Only Faculty

A. Bilas, Ph D
A. Borgida, Ph D
B. Buxton
S. Carpendale, Ph D
J. Glasgow, Ph D
I. Jurisica, M Sc, Ph D
A. Kreinin, MSc, Ph D
Y. Lesperance, MSc, Ph D
D. Penny, Ph D
M.C. Schraefel, Ph D
C. Sminchiesescu, MS, Ph D
D. Terzopoulos, Ph D
J. Tsotsos, Ph D
M. Van de Panne, Ph D

What is Computer Science?

Despite the name, Computer Science is not really a "science of computers" at all. Computers are quite remarkable electronic devices, but even more remarkable is what they can be made to do: simulate the flow of air over a wing, manage communication over the Internet, control the actions of a robot, synthesize realistic images, play grandmaster-level chess, and on and on. Indeed the application of computers in activities like these has affected most areas of modern life. What these tasks have in common has little to do with the physics or electronics of computers; what matters is that they can be formulated as some sort of computation. This is the real subject matter of Computer Science: computation, and what can or cannot be done computationally.

In trying to make sense of what we can get a computer to do, a wide variety of topics come up. There are, however, two recurring themes. The first is the issue of scale: how big a system can we specify without getting lost in the design, or how big a task can a computer handle within reasonable bounds of time, memory and accuracy. A large part of Computer Science deals with these questions in one form or another. In the area of programming languages and methodology, for example, we look for notations for describing computations, and programming methodologies that facilitate the production of manageable and efficient software. In the theory of computation area, we study resource requirements in time and memory of many basic computational tasks.

The second theme concerns the scope of computation. Computers were originally conceived as purely numerical calculators, but today, we tend to view them much more broadly. Part of Computer Science is concerned with understanding just how far computational ideas can be applied. In the area of artificial intelligence, for example, we ask how much of the intelligent behaviour of people can be expressed in computational terms. In the area of human/computer interaction, we ask what sorts of normal day-to-day activities of people might be supported and augmented using computers.

Many of our Programs combine another field with computer science, such as Information Systems, Economics, Mathematics, Physics or Statistics. The Programs in Software Engineering and Human-Computer Interaction focus on developing areas of computing.

Some Computer Science courses are offered in the evening, to allow part-time students to pursue our Programs. Introductory courses and some higher-level courses are offered in the summer.

The Professional Experience Year Program (PEY) offers students the opportunity to gain valuable work experience in industry, over a twelve to sixteen-month period. It, and the Co-Op Japan Program, are available to eligible, full time students pursuing their first degree. Please refer to Page 20 for more information.

Associate Chair - Undergraduate Studies: J.N. Clarke

Undergraduate Office: Bahen Building, 40 St. George Street, Room 4252/4254, M5S 2E4 (416-978-6360)

Student Counsellors: Bahen Building, 40 St. George Street, Room 4252/4254 (416-978-6360)

Web site: www.cs.utoronto.ca

## Computer Science Programs

Enrolment is restricted in all CSC Programs. You may request a CSC subject POSt in April-June or July-August depending on when you have completed the required 100-level courses listed below. Consult the 2008-2009 Registration Handbook & Timetable for details of how to apply. Admission to restricted Programs depends on performance in the required 100-level courses (listed in Program descriptions) and on cumulative GPA.

Tuition fees for students enrolled in Computer Science Major or Specialist Programs are higher than for other Arts and Science Programs.

### Course Categories

A number of Computer Science Programs are described based on the following course categories: English Writing Requirement, Basic Courses, Core Courses, and Additional Courses. Also, all CSC courses and a few related ECE/MAT/STA courses are further grouped into subject areas and sub-areas.

#### English Writing Requirement

Students in any Specialist Program sponsored by the Department of Computer Science (including Combined Specialist Programs) must complete one credit requiring substantial written work in English. The courses accepted for this purpose are listed below. Courses not on this list do not satisfy the requirement without departmental approval. Students in the Major Program in Computer Science must take one-half credit from the same list. Departments offering these courses have agreed to accept our students, but will not give you special preference in admission. You must satisfy the prerequisite and other requirements listed in this Calendar. Make sure to check

that the course you want to take is offered in the year you want it, and to follow the enrolment requirements stated in the Arts and Science Registration Handbook and Timetable. A Transfer credit, whether it is for a specific course on the list below (e.g., "RLG100Y1") or is a generic credit (e.g., "RLG 1**Y1"), must be approved by the Department in order to count towards the writing requirement. Please contact the Department for approval. In order to accept such a course, we must assess the role of written work in the course, and determine that it was taught in English, at an English-speaking university.

ANT204Y1; CLA160Y1, any 200- or 300-level except CLA201H1; CSC290H1, CSC300H1; ENG – any 100- or 200-level; GER235Y1, GER251Y1; HIS – any 100- or 200-level; HPS – all courses; HUM101Y1, HUM199H1/Y1; INI115Y1, INI202Y1, INI203Y1, INI204Y1, INI224Y1, INI225Y1, INI235Y1, INI300Y1; ITA240Y1, ITA245Y1, ITA340Y1; JAL328H1; JEF100Y1; NEW150Y1, NEW160Y1, higher-level courses in the "Humanism" grouping; NMC101Y1, NMC185Y1, higher-level courses in the "History" grouping; PHL100Y1, any 200- or 300-level PHL except PHL245H1, PHL246H1, PHL247H1, PHL344H1, PHL345H1, PHL346H1, PHL347H1, PHL348H1, PHL349H1, PHL356H1; POL100Y1, POL102Y1, POL103Y1, POL104Y1, POL108Y1, any 200-level except POL242Y1; RLG100Y1, RLG101Y1, any 200-level; TRN200Y1, UNI130Y1, UNI201H1, UNI202H1, UNI250Y1; UNI310Y1; VIC120Y1; WRT300H1.

Courses not accepted to satisfy the writing requirement include SCI199H1/Y1, SSC199H1/Y1, and the "Research Opportunity Program" courses numbered 299Y1 in any Department. INX199H1/Y1 is not automatically accepted towards the writing requirement. Students may, however, request Department approval for a particular INX199H1/Y1 course.

In addition to completing their English Writing Requirement, Computer Science students do significant writing in a number of their CSC courses. The quality of their writing, as well as its content, is important and is normally part of the grading scheme.

### Basic Courses (5.5 full courses): Courses required in the Major and most Specialists

**First Year:**

| | |
|---|---|
| CSC 108H1/150H1 | [Software Engineering sub-area] |
| CSC 148H1/150H1 | [Software Engineering sub-area] |
| CSC 165H1/240H1 | [Logic and Complexity sub-area] |
| MAT 137Y1/157Y1 | [Mathematics sub-area] |

**First or Second Year:**

| | |
|---|---|
| CSC 207H1 | [Software Engineering sub-area] |
| CSC 236H1/240H1 | [Logic and Complexity sub-area] |
| CSC 258H1 | [Core Systems sub-area] |
| MAT 223H1/240H1 | [Mathematics sub-area] |

**Second Year:**

| | |
|---|---|
| CSC 263H1/265H1 | [Logic and Complexity sub-area] |
| STA 247H1/257H1 | [Mathematics sub-area] |

**Notes:**

1. Students with a strong background in Java or C++ may omit CSC108H1 and proceed directly with CSC 148H1.
2. CSC 150H1 is an accelerated alternative to CSC108H1 and CSC 148H1, intended for students with previous programming experience in a procedural language.
3. CSC 240H1 is an accelerated and enriched version of CSC 165H1 plus CSC 236H1, intended for students with a strong mathematical background, or who develop an interest after taking CSC 165H1.
4. Students may not omit CSC 165H1 and proceed directly to CSC236H. Either (CSC 165H1 and CSC236H1), or CSC240H is required for Program completion. CSC165H1 is different from CSC108H1 in this respect.
5. Consult the Undergraduate Office for advice about choosing among CSC108H1, CSC148H1, and CSC150H1, and between CSC165H1 and CSC240H1.

### Core Courses (3.5 full courses): Courses required in most Specialists

| | |
|---|---|
| CSC 209H1 | [Core Systems sub-area] |
| CSC 324H1 | [Software Engineering sub-area] |
| CSC 336H1/350H1 | [Numerical Analysis sub-area] |
| CSC 343H1 | [Information Systems sub-area] |
| CSC 363H1/365H1 | [Logic and Complexity sub-area] |
| CSC 369H1 | [Core Systems sub-area] |
| CSC 373H1/375H1 | [Logic and Complexity sub-area] |

**Notes**

1. CSC 350H1 is required in the Computer Science Specialist Program – Foundations Option; students who take CSC 336H1 and later decide to enrol in the Foundations Option will be required to take extra credits as determined by the Undergraduate Program Director.
2. MAT 237Y1/257Y1 is a direct or indirect prerequisite for a number of CSC courses. MAT 237Y1/257Y1 is also required in most Computer Science Programs. Students are advised to take MAT 237Y1/257Y1 unless they have planned their Program and course selection carefully and are certain that they will not need it.

### Additional Courses

**Systems Area**

*I. Core Systems*
CSC 354H1, 358H1/458H1, 372H1; ECE 385H1
CSC 458H1, 469H1, 488H1; ECE 489H1

*II. Software Engineering*
CSC 301H1. 302H1
CSC 410H1, 404H1, 465H1

*III. Information Systems*
CSC 309H1, 310H1
CSC 443H1

**Human Factors and Graphics Area**

*I. Human Factors*
CSC 300H1, 318H1
CSC 428H1, 454H1

*II. Graphics*
CSC 320H1
CSC 418H1

**Artificial Intelligence Area**

*I. Reasoning*
CSC 384H1
CSC 486H1

*II. Language*
CSC 401H1, 485H1

*III. Vision*
CSC 420H1, 487H1

*IV. Learning*
CSC 321H1
CSC 411H1, 412H1

**Foundations Area**

*I. Logic and Complexity*
CSC 330H1
CSC 438H1, 448H1

*II. Numerical Analysis*
CSC 351H1
CSC 446H1, 456H1

*III. Mathematics*
MAT 224H1/240H1, 237Y1/257Y1; STA 248H1

## Computer Science (Science Program)

Consult Student Counsellor, Department of Computer Science.

Enrolment in the Specialist and Major Programs is limited. Specialist Program admission requires (1) 65% in CSC 148H1/150H1, (2) either 60% in MAT 137Y1/157Y1 or 65% in CSC 165H1/240H1, and (3) a minimum CGPA of 2.0. Major Program admission requires (1) 50% in CSC 148H1/150H1, (2) either 50% in MAT 137Y1/157Y1 or 50% in CSC 165H1/240H1, and (3) a minimum CGPA of 1.5. Students who not meet these requirements on the first attempt will be considered on a case-by-case basis.

### Specialist Program

(14 full courses or their equivalent, including at least one 400-series course)

1. One full course English Writing Requirement.
2. All Basic Courses and Core Courses (9 full courses).
3. MAT 237Y1/257Y1.
4. Six half courses from the Additional Courses, with at least two 400-level half courses.

**Notes:**

1. This flexible Program allows students to concentrate in one or more areas for which there is currently no other Program. Students are strongly encouraged to seek advice from a faculty member in the Department of Computer Science in order to ensure that their course selection meets their academic goals. This is particularly important for students planning to apply to graduate school.

### Major Program

(8 full courses or their equivalent, including at least two 300+ series courses)

1. One half course English Writing Requirement.
2. All Basic Courses (5.5 full courses).
3. Four 300+ level half courses from the Core Courses and/or Additional Courses.

**Notes:**

1. CSC 209H1 is a direct or indirect prerequisite for a number of CSC courses. Students who intend to take one of these courses will also have to take CSC 209H1 as an additional half course.

## Computer Science – Artificial Intelligence Option (Science Program)

Consult Student Counsellor, Department of Computer Science.

Enrolment in this Program is limited. Admission requirements are the same as for the Specialist Program in Computer Science.

**Specialist Program**

(13.5 full courses or their equivalent, including at least one 400-series course)

1. One full course English Writing Requirement.
2. All Basic Courses and Core Courses (9 full courses).
3. One full credit from MAT 237Y1/257Y1, MAT 224H1/240H1/247H1, STA 248H1/261H1.
4. Five half courses from the Artificial Intelligence area, with at least one half course from each of three different Artificial Intelligence sub-areas.

**Notes:**

1. Students may be interested in taking UNI250Y1 to satisfy their English Writing Requirement. This course can be taken in first year.
2. The additional half course CSC 320H1 is recommended for students interested in taking CSC 420H1.
3. The additional half course CSC 330H1 is recommended for students interested in taking CSC 486H1.

## Computer Science – Foundations Option (Science Program)

Consult Student Counsellor, Department of Computer Science.

Enrolment in this Program is limited. Admission requirements are the same as for the Specialist Program in Computer Science.

**Specialist Program**

(14 full courses or their equivalent, including at least one 400-series course)

1. One full course English Writing Requirement.
2. All Basic Courses and Core Courses (9 full courses), except that students must take CSC 350H1 rather than CSC 336H1.
3. MAT 224H1/240H1, 237Y1/257Y1.
4. MAT 301H1/315H1/334H1/344H1/401H1.
5. CSC 351H1.
6. CSC 438H1/448H1/465H1.
7. Two half courses from the Additional Courses, with at least one 400-level half course – these may include any half course not taken to satisfy the requirement CSC 438H1/448H1/465H1.

## Computer Science – Information Systems Option (Science Program)

Consult Student Counsellor, Department of Computer Science.

Enrolment in this Program is limited. Admission requirements are the same as for the Specialist Program in Computer Science.

**Specialist Program**

(14 full courses or their equivalent, including at least one 400-series course)

1. One full course English Writing Requirement.
2. All Basic Courses and Core Courses (9 full courses).
3. MAT 237Y1/257Y1.
4. CSC 309H1, 310H1,CSC 301H1/318H1.
5. CSC 443H1.
6. (CSC 384H1, 486H1) / (STA 248H1, CSC 411H1)

## Computer Science – Software Engineering Option (Science Program)

Consult Student Counsellor, Department of Computer Science.

Enrolment in this Program is limited. Admission requirements are the same as for the Specialist Program in Computer Science.

**Specialist Program**
(13.5 full courses or their equivalent, including at least one 400-series course)

1. One full course English Writing Requirement.
2. All Basic Courses and Core Courses (9 full courses).
3. CSC301H1, CSC302H1,CSC 318H1.
4. Two of CSC 354H1, 372H1,320H1/321H1/330H1/384H1, 401H1, 410H1, 454H1, 465H1; ECE385H1.
5. Two of CSC 309H1, 404H1, 418H1, 443H1, 358H1/458H1, 469H1; CSC 488H1/ECE 489H1.
6. The courses chosen from groups 4 and 5 must include at least two half courses at the 400 level.

**Notes:**
1. This Program does not lead to certification as a Professional Engineer.
2. Students in this Program are strongly encouraged to consider participating in the Professional Experience Year (PEY) Program.
3. It is recommended, although not necessary, to take CSC 301H1 and 302H1 in sequence in third year. Students who do so will likely defer some other third year course until fourth year.

## Computer Science & Economics (Science Program)

Consult the Undergraduate Secretary, Department of Economics or Student Counsellor, Department of Computer Science.

Enrolment in this Program is limited. Admission requires: (1) 70% in ECO 100Y1, (2) 65% in CSC 148H1/150H1, (3) either 60% in MAT 137Y1/157Y1 or 65% in CSC165H1/CSC240H1, and (4) a minimum CGPA of 2.0. The requirements of the two Departments, Computer Science and Economics, must both be met.

### Specialist Program
(17 full courses or their equivalent, including at least one 400-series course)

First Year:
CSC 165H1/240H1, (108H1,148H1)/150H1; ECO 100Y1; MAT 137Y1/157Y1 (See the Notes following the list of Basic Courses in the Course Categories above.)

Higher Years:
1. One full course English Writing Requirement (See the Course Categories above.)
2. CSC 207H1, 236H1/240H1, 258H1, 263H1/265H1, 324H1, 336H1/350H1.
3. ECO 206Y1, 208Y1, 325H1, 326H1, 327Y1, 416H1/418H1.
4 APM 236H1, MAT (223H1, 224H1)/240H1, 235Y1/237Y1/257Y1.
5. ECO 227Y1/STA (257H1, 261H1).
6. One and a half courses from the following groups, of which at least one half-course must be from each of Groups A and B:

**Group A:**
CSC 343H1, 358H1, 369H1

**Group B:**
Any 300+ series ECO course

**Group C:**
APM 462H1; CSC 301H1, 302H1, 351H1, 354H1, 363H1/365H1, 373H1/375H1, 401H1, 454H1; ECE 385H1; STA 322H1, 347H1, 437H1, 457H1

Note: The courses chosen from groups A, B and C must include at least one half credit at the 400 level.

## Computer Science & Mathematics (Science Program)

Consult Student Counsellor, Department of Computer Science or Professor S.A. Cook, Department of Computer Science.

Enrolment in this Program is limited. Admission requirements are the same as for the Specialist Program in Computer Science.

### Specialist Program
(15.5 full courses or their equivalent, including at least one 400-series course)

First Year:
CSC (108H1, 148H1)/150H1; MAT 157Y1, 240H1 (See the Notes following the list of Basic Courses in the Course Categories above.)

First or Second Year:
CSC 240H1, 258H1, 207H1; one full course English Writing Requirement (See the Course Categories above.)

Second Year:
CSC 265H1; MAT 247H1, 257Y1, 267H1; STA 257H1/352Y1

Third Year:
CSC 324H1, 365H1, 375H1

Third or Fourth Years:
1. MAT 327H1, 347Y1, 354H1, 357H1.
2. One of CSC 438H1, 448H1, 465H1; MAT 443H1.
3. CSC 350H1, 351H1.
4. One of CSC 401H1, 418H1, 420H1, 428H1, 443H1, 456H1, 458H1, 469H1, 485H1, 486H1, 487H1, 488H1; ECE 489H1.
5. APM 351Y1/MAT 457Y1.
6. One of APM 461H1; MAT 344H1, 464H1, 477H1.

**Notes:**
1. It is recommended that PHY 151H1, 152H1 be taken.

## Computer Science & Physics (Science Program)

Consult Student Counsellor, Department of Computer Science, or Associate Chair (Undergraduate Studies), Department of Physics.

Enrolment in this Program is limited. Admission requirements are the same as for the Specialist Program in Computer Science. NOTE: Students in this Program should consult one or both Departments during the spring of each year, to ensure that they choose courses appropriate to their intended careers.

### Specialist Program
(17.5 full courses or their equivalent, including at least one 400-series course)

First Year:

CSC (108H1, 148H1)/150H1; MAT 137Y1/157Y1, 223H1/240H1; PHY 151H1, 152H1 (See the Notes following the list of Basic Courses in the Course Categories above.)

First or Second Year:

CSC 240H1, 207H1; STA 247H1; one full course English Writing Requirement (See the Course Categories above.)

Second Year:

CSC 263H1/265H1; MAT 237Y1/257Y1, 244H1/267H1; PHY 225H1, 251H1, 252H1, 255H1, 256H1

Third Year:

APM 346H1; CSC 324H1, 350H1; MAT 334H1; PHY 351H1, 352H1, 355H1

Third or Fourth Years:

1. CSC 351H1, 363H1/365H1/373H1/375H1
2. PHY 457H1/459H1/460H1
3. CSC 401H1418H1/420H1/428H1/443H1/458H1/469H1/485H1/486H1/487H1/488H1/ECE 489H1
4. 1.5 courses from the 300-/400-level lab courses as described in the Notes to the Physics Specialist Program.

### Computer Science & Statistics (Science Program)

Consult Student Counsellor, Department of Computer Science, or Undergraduate Secretary, Department of Statistics.

Enrolment in this Program is limited. Admission requirements are the same as for the Specialist Program in Computer Science.

#### Specialist Program

(14.5 full courses or their equivalent, including at least one 400-series course)

First Year:

CSC (108H1, 148H1)/150H1, 165H1/240H1; MAT 137Y1/157Y1 (See the Notes following the list of Basic Courses in the Course Categories above.)

First or Second Year:

1. CSC 236H1/240H1, 258H1, 207H1
2. MAT (223H1, 224H1)/(240H1,247H1)
3. One full course English Writing Requirement (See the Course Categories above.)

Second Year:

CSC 263H1/265H1; STA 257H1, 261H1; MAT 237Y1/257Y1

Third Year:

CSC 324H1, 350H1, 351H1, 363H1/365H1, 373H1/375H1; STA 302H1, (347H1, 447H1)/352Y1

Third or Fourth Years:

1. One of CSC 418H1, 443H1, 456H1, 458H1, 469H1, 487H1; MAT 443H1
2. STA 437H1/442H1/457H1
3. Two of CSC 310H1, 321H1, 354H1, 401H1, 411H1, 412H1; STA 410H1

### Human-Computer Interaction (Science Program)

Consult Student Counsellor, Department of Computer Science.

Enrolment in this Program is limited. Admission requires (1) 65% in CSC 148H1/150H1, (2) either 60% in MAT 135Y1/137Y1/157Y1 or 65% in CSC165H1/CSC240H1, and (3) a minimum CGPA of 2.0. Students who do not meet these requirements on the first attempt will be considered on a case-by-case basis.

#### Specialist Program

(15 full courses or their equivalent, including at least one 400-series course)

First Year:

1. CSC 165H1/240H1, (108H1, 148H1)/150H1 (See the Notes following the list of Basic Courses in the Course Categories above.)
2. MAT 135Y1/137Y1/157Y1,
3. SOC 101Y1,

First or Second Year:

CSC 207H1, 236H1/240H1; PSY100H1; one full course English Writing Requirement (See the Course Categories above.)

Second Year:

1. CSC 258H1, 263H1/265H1; STA 247H1
2. MAT 223H1/240H1; SOC 200H1

Third Year:

1. CSC 300H1, 301H1, 318H1
2. CSC 324H1/343H1
3. STA 248H1/PSY (201H1, 202H1)/SOC (202H1, 300H1)
4. PSY 270H1, 280H1

Third or Fourth Year:

1. CSC 363H1/365H1/373H1/375H1, 428H1
2. Two of CSC 302H1, 418H1/487H1/420H1, 401H1/485H1/486H1/411H1, 443H1/458H1/469H1
3. WDW 260H1

**Notes:**

1. Students in this Program should consult the Department of Computer Science at least annually to discuss their choice of courses, especially if they plan on graduate study.
2. Students who may be interested in other Programs sponsored by the Department of Computer Science must take MAT 137Y1/157Y1 and not MAT 135Y1.
3. It is recommended that you take a physical science course such as PHY (131H1, 132H1)/(151H1, 152H1)1.
4. It is strongly recommended that you take at least one half-course in Human Factors or Ergonomics offered by the Department of Mechanical and Industrial Engineering, such as MIE 343H1, 448H1, 449H1.
5. Other recommended courses include: CSC 309H1, 369H1, 454H1, 469H1; SOC 387Y1; PSY 305H1, 312H1, 370H1, 371H1, 372H1, 375H1, 312H1; JLP 374H1

For advice on course choice and assistance in enrolment consult the Department of Computer Science.

### Bioinformatics and Computational Biology – see Life Sciences: Biochemistry

### Cognitive Science & Artificial Intelligence - See University College Programs

### Linguistics and Computing- See Linguistics

## Computer Science Courses

See page 32 for Key to Course Descriptions

For Distribution Requirement purposes (see page 26), all CSC courses are classified as SCIENCE courses.

**Enrolment notes**

NOTE: The University of Toronto Mississauga computer science

Minor subject POSt is not recognized as a restricted CS subject POSt for St. George courses enrolments.

NOTE: No late registration is permitted in any CSC course after the first two weeks of classes.

Enrolment in most CSC courses above 100-level is restricted. Consult the Calendar or the Arts and Science Registration Handbook and Timetable for details.

**Prerequisites and exclusions**

Prerequisites and exclusions are enforced. Please refer to the 2006-2007 Registration Handbook and Timetable for prerequisite waiver deadlines.

**Dropping down from enriched to regular courses**

Students may go to their college to drop down from enriched courses to regular courses. The courses are as follows: from CSC148H1 to CSC108H1, from CSC150H1 to CSC108H1, from CSC240H1 to CSC165H (or to CSC236H1 if you have already passed CSC165H1), from CSC265H1 to CSC263H1, from CSC365H1 to CSC363H1, and from CSC375H1 to CSC373H1.

Drop down deadlines:
Fall session – October 3, 2008
Winter session – February 6, 2009

**Students with transfer credits**
If you have transfer credits in Computer Science or a similar subject for courses done at another university or college, contact our Undergraduate Office (BA4252/4254) for advice on choosing courses. Ask for advice also even if you don't have transfer credits yet but are considering degree study at the University of Toronto. Without advice, you risk poor course choice or other adverse consequences.

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**INX199H1 First-Year Seminar [26S]**

**INX199Y1 First-Year Seminar [52S]**

**SCI199H1 First Year Seminar [26S]**

**SCI199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**CSC104H1 The Why and How of Computing [26L, 13T]**
An introduction to computing for non-computer scientists. History of computing machinery; representation of data and their interaction with operations; hardware, software, operating systems; problem solving and algorithms; social issues in computing; a gentle introduction to programming. This course is an introduction to becoming actively engaged with computing, not a tutorial on using particular computer applications.
Exclusion: SMC104H1; VIC104H1; any CSC course.

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### Choosing first year courses:

To help you select the programming course that is right for you, see www.cs.toronto.edu/dcs , click Current students, select Choosing your First Year Courses.

**CSC108H1 Introduction to Computer Programming [39L, 12T, 12P]**
Structure of computers; the computing environment. Programming in a language such as Python. Program structure: elementary data types,statements, control flow, functions, classes, objects, methods, fields. Lists; searching, sorting and complexity. Practical (P) sections consist of supervised work in the computing laboratory. These sections are offered when facilities are available, and attendance is required.
Exclusion: CSC107H1, 120H1, 139H1, 148H1, 149H1, 150H1.
NOTE: You may not take this course after or concurrently with CSC148H1, but you may take CSC148H1 after CSC108H1.

**CSC120H1 Computer Science for the Sciences [26L, 12P]**
An introduction to computer science for students in other sciences, with an emphasis on gaining practical skills. Introduction to programming; web programming; database design; software tools; examples and exercises taken from the sciences. At the end of this course you will be able to develop computer tools for scientific applications, such as the structuring and analysis of experimental data. Practical (P) sections consist of supervised work in the computer laboratory. No programming experience is necessary. Students who wish to do more can progress directly to CSC150H1.
Exclusion: any CSC course.

**CSC148H1 Introduction to Computer Science [26L, 13T, 12P]**
Abstract data types and data structures for implementing them. Linked data structures. Encapsulation and information-hiding. Object-oriented programming. Specifications. Analyzing the efficiency of programs. Recursion. This course assumes programming experience in a language such as Python, C++, or Java, as provided by CSC108H1.
Students who already have this background may consult the Computer Science Undergraduate Office for advice about skipping CSC108H1. Practical (P) sections consist of supervised work in the computing laboratory. These sections are offered when facilities are available, and attendance is required. Students may go to their college to drop down from CSC148H1 to CSC108H1. See above for the drop down deadline.
Exclusion: CSC139H1, 149H1, 150H1; you may not take this course after taking more than two CSC courses at the 200-level or higher.
Prerequisite: CSC108H1; MHF4U(advanced functions)/ MCV4U(calculus and vectors)

**CSC150H1 Accelerated Introduction to Computer Science [39L, 13T, 12P]**
An accelerated course covering object-oriented topics from CSC108H1 (classes, objects, methods and fields, and program design), as well as all the material of CSC148H1. Suitable for students with a solid programming background in Turing, C, Scheme, or a similar language, who are willing to accept a heavier workload than in CSC108H1 and CSC148H1.
Exclusion: CSC107H1, 108H1, 139H1, 148H1, 149H1; you may not take this course after taking more than two CSC courses at the 200-level or higher.
Prerequisite: MHF4U(advanced functions)/MCV4U(calculus and vectors). Students should thoroughly understand arrays, searching, sorting, functions/procedures/subprograms, arguments and parameters, and modular design.
Students may go to their college to drop down from CSC150H1 to CSC108H1. See above for the drop down deadline.

**CSC165H1 Mathematical Expression and Reasoning for Computer Science [39L, 26T]**

Introduction to abstraction and rigour. Informal introduction to logical notation and reasoning. Understanding, using and developing precise expressions of mathematical ideas, including definitions and theorems. Structuring proofs to improve presentation and comprehension. General problem-solving techniques. Unified approaches to programming and theoretical problems. Representation of floating point numbers and introduction to numerical computation.

Exclusion: CSC236H1, 238H1, 240H1; MAT102H5 (University of Toronto Mississauga); You may not take this course after taking more than two CSC courses at the 200-level or higher.

Prerequisite: CSC108H1/(CSC148H1/150H1 taken concurrently); MHF4U(advanced functions)/MCV4U(calculus and vectors). Recommended preparation: first term of MAT135Y1/137Y1/157Y1.

NOTE: It is recommended that CSC148H1/150H1 and CSC165H1/240H1 be taken at the same time, since each course relies on material from the other. If you take one before the other, it is preferable to take CSC148H1/150H1 first. In any case, you will be at a modest disadvantage in the first of the two courses, and will be expected to pick up the relevant material from the other course on your own.

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**Note**

To enrol in any CSC course at the 200-level or higher, you must have a cumulative GPA of at least 1.50 (3.00 for 300- and 400-level courses) or be enrolled in a restricted subject POSt sponsored by the Department of Computer Science. The University of Toronto at Mississagua Computer Science Minor is not a restricted subject POSt. If you are in your first year of degree studies, the GPA requirement does not apply.

**CSC207H1 Software Design [26L, 13T]**

An introduction to software design and development concepts, methods, and tools using a statically-typed object-oriented programming language such as Java. Topics from: version control, build management, unit testing, refactoring, design patterns, advanced IDE usage, regular expressions, markup languages, parsing using finite state machines, and reflection.

Prerequisite: CSC148H1/150H1; CGPA 1.5/enrolment in a CSC subject POSt.

**CSC209H1 Software Tools and Systems Programming [26L, 13T]**

Software techniques in a Unix-style environment, using scripting languages and a machine-oriented programming language (typically C). What goes on in the operating system when programs are executed. Core topics: creating and using software tools, pipes and filters, file processing, shell programming, processes, system calls, signals, basic network programming.

Exclusion: CSC372H1, 408H1, 369H1, 468H1, 469H1.

Prerequisite: CSC207H1/270H1/enrolment in Bioinformatics and Computational Biology (BCB) subject POSt; CGPA 1.5/enrolment in a CSC subject POSt.

**CSC236H1 Introduction to the Theory of Computation [26L, 13T]**

The application of logic and proof techniques to Computer Science. Mathematical induction; correctness proofs for iterative and recursive algorithms; recurrence equations and their solutions (including the "Master Theorem"); introduction to automata and formal languages.

Exclusion: CSC238H1, 240H1.

Prerequisite: CSC148H1/150H1, 165H1/(148H1 as given before Fall 2003); CGPA 1.5/enrolment in a CSC subject POSt.

**CSC240H1 Enriched Introduction to the Theory of Computation [26L, 13T]**

The rigorous application of logic and proof techniques to Computer Science. Propositional and predicate logic; mathematical induction and other basic proof techniques; correctness proofs for iterative and recursive algorithms; recurrence equations and their solutions (including the "Master Theorem"); introduction to automata and formal languages. This course covers the same topics as CSC236H1, together with selected material from CSC165H1, but at a faster pace, in greater depth and with more rigour, and with more challenging assignments. Greater emphasis will be placed on proofs and theoretical analysis. Certain topics briefly mentioned in CSC165H1 or CSC236H1 may be covered in more detail in this course, and some additional topics may also be covered.

Exclusion: CSC236H1, 238H1.

Prerequisite: OAC Calculus and one of Algebra & Geometry or Finite Mathematics OR U Advanced Functions and Introductory Calculus, and one of U Geometry and Discrete Mathematics or U Mathematics of Data Management, with high grades.

Recommended preparation: first term of MAT137Y1/157Y1.

Co-requisite: CSC148H1/150H1; CGPA 1.5/enrolment in a CSC subject POSt.

NOTE: Students may go to their college to drop down from CSC240H1 to CSC165H1 (or to CSC236H1 if you have already passed CSC165H1). See above for the drop down deadline.

**CSC258H1 Computer Organization [26L, 9P, 10T]**

Computer structures, machine languages, instruction execution, addressing techniques, and digital representation of data. Computer system organization, memory storage devices, and microprogramming. Block diagram circuit realizations of memory, control and arithmetic functions. There are a number of laboratory periods in which students conduct experiments with digital logic circuits.

Exclusion: CSC257H1 as given before 1985.

Prerequisite: CSC148H1/150H1, 165H1/240H1/(148H1 as given before Fall 2003); CGPA 1.5/enrolment in a CSC subject POSt.

**CSC260H1 Introduction to Scientific, Symbolic, and Graphical Computation [26L, 13T]**

Problems in transforming continuous mathematical models to discrete computational models. Inadequacy of naive computer solutions, and techniques to remedy inadequacies. Symbolic computation, plotting, 3-D graphics, and conventional programming languages. Intended for students from computer science, sciences and mathematics: for computer scientists, introduction to design and implementation of robust algorithms; for scientists, techniques in transforming scientific problems into computational solutions; for mathematicians, insight into differences between mathematical models and computational solutions.

Exclusion: CSC160H1 as taught in Spring 1992; after taking CSC270H1/CSC263H1/265H1 and any 300-/400-level CSC course, you may not take CSC260H1 without Departmental permission in writing.

Prerequisite: CSC108H1/computing experience, as from a good high school programming course; CGPA 1.5/enrolment in a CSC subject POSt.
Co-requisite: MAT135Y1/137Y1/157Y1, 223H1/240H1.

**CSC263H1 Data Structures and Analysis [26L, 13T]**
Algorithm analysis: worst-case, average-case, and amortized complexity. Standard abstract data types, such as graphs, dictionaries, priority queues, and disjoint sets. A variety of data structures for implementing these abstract data types, such as balanced search trees, hashing, heaps, and disjoint forests. Design, implementation, and comparison of data structures. Introduction to lower bounds.
Exclusion: CSC265H1, 378H1.
Prerequisite: CSC207H1/270H1, 236H1/238H1/240H1; STA247H1/255H1/257H1; CGPA 1.5/enrolment in a CSC subject POSt.

**CSC265H1 Enriched Data Structures and Analysis [26L, 13T]**
Algorithm analysis: worst-case, average-case, and amortized complexity. Standard abstract data types, such as graphs, dictionaries, priority queues, and disjoint sets. A variety of advanced data structures for implementing these abstract data types, such as AVL trees, self-adjusting data structures, perfect hashing, and binomial heaps. Design and comparison of data structures. This course covers the same topics as CSC263H1, but at a faster pace, in greater depth and with more rigour, and with more challenging assignments. Greater emphasis will be placed on proofs, theoretical analysis, and creative problem-solving. Certain topics briefly mentioned in CSC263H1 may be covered in more detail in this course, and some additional topics may also be covered. Students without the exact course prerequisites but with a strong mathematical background are encouraged to consult the Department about the possibility of taking this course.
Exclusion: CSC263H1, 378H1.
Prerequisite: CSC207H1/270H1, 240H1; CGPA 1.5/enrolment in a CSC subject POSt.
Co-requisite: STA247H1/255H1/257H1
NOTE: Students may go to their college to drop down from CSC265H1 to CSC263H1. See above for the drop down deadline.

**CSC290H1 Communication Skills for Computer Scientists [39L]**
Targeted instruction and significant practice in the communications required for careers in computer science. The curriculum covers written, oral, and interpersonal communication. Students will hand in short pieces of writing each week, will make oral presentations several times in the semester, and will work together in simulated project meetings and other realistic scenarios of pair and small group interaction.
Prerequisite: enrolment in a CSC subject POSt.

**CSC300H1 Computers and Society [26L, 13T]**
Privacy and Freedom of Information; recent Canadian legislation and reports. Computers and work; employment levels, quality of working life. Electronic fund transfer systems; transborder data flows. Computers and bureaucratization. Computers in the home; public awareness about computers. Robotics. Professionalism and the ethics of computers. The course is designed not only for science students, but also those in social sciences or humanities.
Exclusion: PSCD03H (University of Toronto Scarborough)
Prerequisite: Any half-course on computing; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC301H1 Introduction to Software Engineering [26L, 13T]**
An introduction to agile development methods appropriate for medium-sized teams and rapidly-moving projects. Basic software development infrastructure; requirements elicitation and tracking; estimation and prioritization; teamwork skills; basic UML; design patterns and refactoring; security, discussion of ethical issues, and professional responsibility.
Prerequisite: CSC209H1, CSC263H1; CGPA 3.0/enrolment in a CSC subject POSt

**CSC302H1 Engineering Large Software Systems [26L, 13T]**
An introduction to the theory and practice of large-scale software system design, development, and deployment. Project management; advanced UML; reverse engineering; requirements inspection; verification and validation; software architecture; performance modeling and analysis.
Prerequisite: CSC301H1; CGPA 3.0/enrolment in a CSC subject POSt

**CSC309H1 Programming on the Web [26L, 13T]**
An introduction to software development on the web. Concepts underlying the development of programs that operate on the web; survey of technological alternatives; greater depth on some technologies. Operational concepts of the internet and the web, static client content, dynamic client content, dynamically served content, n-tiered architectures, web development processes, and security on the web. Assignments involve increasingly more complex web-based programs. Guest lecturers from leading e-commerce firms will describe the architecture and operation of their web sites.
Prerequisite: CSC209H1, 343H1/228H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC310H1 Information Theory [26L, 13T]**
Measuring information. The source coding theorem. Data compression using ad hoc methods and dictionary-based methods. Probabilistic source models, and their use via Huffman and arithmetic coding. Noisy channels and the channel coding theorem. Error correcting codes, and their decoding by algebraic and probabilistic methods.
Prerequisite: CSC148H1/150H1/260H1; STA247H1/255H1/257H1/107H1; MAT135Y1/137Y1, MAT223H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC318H1 The Design of Interactive Computational Media [26L, 13T]**
User-centred design of interactive systems; methodologies, principles, and metaphors; task analysis. Interdisciplinary design; the role of graphic design, industrial design, and the behavioural sciences. Interactive hardware and software; concepts from computer graphics. Typography, layout, colour, sound, video, gesture, and usability enhancements. Classes of interactive graphical media; direct manipulation systems, extensible systems, rapid prototyping tools. Students work on projects in interdisciplinary teams. Enrolment limited, but non-computer scientists welcome.
Prerequisite: Any CSC half-course; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: CSC300H1 provides useful background for work in CSC318H1, so if you plan to take CSC300H1 then you should do it before CSC318H1.

**CSC320H1 Introduction to Visual Computing [26L, 13P]**
A unified introduction to image synthesis and image analysis aimed at students with an interest in computer graphics, computer vision or the visual arts. Focus on three major topics: (1) visual computing principles - computational and mathematical methods for creating, capturing, analyzing and manipulating digital photographs (raster algorithms, image acquisition, basic image processing, image warping, anti-aliasing); (2) digital special effects - applying these principles to create special effects found in movies and commercials; (3) visual programming - using C/C++ and OpenGL to create graphical user interfaces for synthesizing and manipulating photographs.
Prerequisite: CSC209H1/270H1/(207H1,proficiency in C or C++); MAT137Y1, MAT223H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC321H1 Introduction to Neural Networks and Machine Learning [26L, 13P]**
Supervised neural networks: the perceptron learning procedure, the backpropagation learning procedure and its applications. Elaborations of backpropagation: activation and error functions, improving speed and generalization, Bayesian approaches. Associative memories and optimization: Gibbs sampling, mean field search. Representation in neural networks: distributed representations, effects of damage, hierarchical representations. Unsupervised neural networks: competitive learning, Boltzmann machines, sigmoid belief nets.
Prerequisite: CSC207H1/270H1; MAT137Y1, MAT223H1/240H1; STA247H1/255H1/257H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC324H1 Principles of Programming Languages [26L, 13T]**
Major topics in the development of modern programming languages. Syntax specification, the evolution of programming languages (including abstract data types and object orientation, and contributions of C++ to language design) design and implementation of subprograms (including parameter passing techniques, and scope and lifetime of variables), run-time storage management (including garbage collection), and programming paradigms. Two non-procedural programming paradigms: functional programming (illustrated by languages such as Lisp, Scheme, ML or Haskell) and logic programming (illustrated by languages such as Prolog, XSB or Coral).
Exclusion: CSC248H1.
Prerequisite: CSC207H1/270H1, 236H1/238H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC330H1 Logical Specifications [26L, 13T]**
Logic and its use as a declarative language in computer science. Syntax and semantics of propositional and predicate calculus. Proving entailment and non-entailment rigorously. Formal derivations. Satisfiability. Applications, including information systems, program verification, artificial intelligence, software engineering. Computational tools, including Prolog. Other logics.
Exclusion: CSC230H1.
Prerequisite: CSC236H1/238H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC336H1 Numerical Methods [26L, 13T]**
The study of computational methods for solving problems in linear algebra, non-linear equations, approximation, integration, and ordinary differential equations. The aim is to give students a basic understanding of both floating-point arithmetic and the methods used to solve numerical problems as well as a familiarity with the types of subroutines found in typical software packages.
Exclusion: ACT323H1, 335H1; CSC350H1, 351H1.
Prerequisite: CSC207H1/270H1/(260H1,148H1/150H1); MAT133Y1(70%)/135Y1/137Y1/157Y1, 223H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC343H1 Introduction to Databases [26L, 13T]**
Introduction to database management systems. The relational data model. Relational algebra. Querying and updating databases: the query language SQL. Application programming with SQL. Integrity constraints, normal forms, and database design. Elements of database system technology: query processing, transaction management.
Exclusion: CSC434H1.
Prerequisite: CSC 263H1/265H1/(228H1,238H1)/378H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC350H1 Numerical Algebra and Optimization [26L, 13T]**
Floating-point arithmetic. The efficiency and stability of solution techniques for systems of linear equations and least squares problems, including LU- and QR-based methods. Eigenvalue and eigenvector calculations. Algorithms for systems of non-linear equations and optimization problems, including linear programming.
Exclusion: CSC336H1; ACT323H1, 335H1.
Prerequisite: CSC 207H1/270H1/(260H1,148H1/150H1); MAT223H1/240H1, 237Y1/257Y1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC351H1 Numerical Approximation, Integration and Ordinary Differential Equations [26L, 13T]**
Analysis of methods for approximation, integration and the solution of ordinary differential equations. Emphasis on the convergence and stability properties of the algorithms, rather than on their implementation.
Exclusion: ACT323H1, 335H1; CSC336H1.
Prerequisite: CSC350H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC354H1 Discrete-Event Simulation and Modelling [26L, 13T]**
Simulation and mathematical analysis of models of queuing systems. Concentration on dynamic, stochastic, discrete-event systems. Simulation topics: selecting input probability distributions, generating random numbers and random variates, output data analysis for one or more system configurations, variance reduction techniques. Analysis topics: queuing characteristics, transient and steady-state behaviour, performance measures, the M/M/1 queue in detail, some non-Markovian queues.
Prerequisite: CSC 209H1/270H1; MAT137Y1; STA 247H1/255H1/257H1, 248H1/250H1/261H1; CGPA 3.0/ enrolment in a CSC subject POSt.

**CSC358H1 Introduction to Computer Networks [26L, 13T]**
Introduction to computer networks with an emphasis on fundamental principles. Basic understanding of computer networks and network protocols. Topics include network hardware and software, routing, addressing, congestion control, reliable data transfer, performance
analysis, local area networks, and TCP/IP.
Prerequisites: CSC209H1, CSC 258H1, CSC263H1, STA 247H1/ STA257H1/ECO227Y1

**CSC363H1 Computational Complexity and Computability [26L, 13T]**
Introduction to the theory of computability: Turing machines, Church's thesis, computable and noncomputable functions, recursive and recursively enumerable sets, reducibility. Introduction to complexity theory: models of computation, P, NP, polynomial time reducibility, NP-completeness, further topics in complexity theory.
Exclusion: CSC364H1, 365H1.
Prerequisite: CSC236H1/238H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.
NOTE: Although the courses CSC363H1 and CSC373H1 can be taken in any order, we recommend that CSC373H1 be taken first.

**CSC365H1 Enriched Computational Complexity and Computability [26L, 13T]**
This course covers the same topics as CSC363H1, but at a faster pace, in greater depth and with more rigour, and with more challenging assignments. Greater emphasis will be placed on proofs, theoretical analysis, and creative problem-solving. Certain topics briefly mentioned in CSC363H1 may be covered in more detail in this course, and some additional topics may also be covered. Students without the exact course prerequisites but with a strong mathematical background are encouraged to consult the Department about the possibility of taking this course.
Exclusion: CSC363H1, 364H1.
Prerequisite: CSC240H1; CGPA 3.0/enrolment in a CSC subject POSt.
NOTE: Students may go to their college to drop down from CSC365H1 to CSC363H1. See above for the drop down deadline.
NOTE: Although the courses CSC365H1 and CSC375H1 can be taken in any order, we recommend that CSC375H1 be taken first.

**CSC369H1 Operating Systems [26L, 13T]**
Principles of operating systems. The operating system as a control program and as a resource allocator. The concept of a process and concurrency problems: synchronization, mutual exclusion, deadlock. Additional topics include memory management, file systems, process scheduling, threads, and protection.
Exclusion: CSC468H1.
Prerequisite: CSC258H1, 209H1, 207H1/270H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC372H1 Microprocessor Software [26L, 13T, 39P]**
Development of reliable efficient software for controlling and monitoring an environment. Concurrent programming techniques, such as interrupt handling, buffer management, polling and time outs. Projects use microprocessors to control equipment (such as a robot arm) and to read sensors. Design, implementation and testing of software using a language such as C.
Prerequisite: CSC209H1;258H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC373H1 Algorithm Design & Analysis [26L, 13T]**
Standard algorithm design techniques: divide-and-conquer, greedy strategies, dynamic programming, linear programming, randomization, network flows, approximation algorithms, and others (if time permits). Students will be expected to show good design principles and adequate skills at reasoning about the correctness and complexity of algorithms.
Exclusion: CSC375H1, 364H1.
Prerequisite: CSC263H1/265H1/378H1; CGPA 3.0/enrolment in a CSC subject POSt.
NOTE: Although the courses CSC373H1 and CSC363H1 can be taken in any order, we recommend that CSC373H1 be taken first.

**CSC375H1 Enriched Algorithm Design & Analysis [26L, 13T]**
This course covers the same topics as CSC373H1, but at a faster pace, in greater depth and with more rigour, and with more challenging assignments. Greater emphasis will be placed on proofs, theoretical analysis, and creative problem-solving. Certain topics briefly mentioned in CSC373H1 may be covered in more detail in this course, and some additional topics may also be covered. Students without the exact course prerequisites but with a strong mathematical background are encouraged to consult the Department about the possibility of taking this course.
Exclusion: CSC373H1, 364H1.
Prerequisite: CSC 265H1; CGPA 3.0/enrolment in a CSC subject POSt.
NOTE: Students may go to their college to drop down from CSC375H1 to CSC373H1. See above for the drop down deadline.
NOTE: Although the courses CSC375H1 and CSC365H1 can be taken in any order, we recommend that CSC375H1 be taken first.

**CSC384H1 Introduction to Artificial Intelligence [26L, 13T]**
Theories and algorithms that capture (or approximate) some of the core elements of computational intelligence. Topics include: search; logical representations and reasoning, classical automated planning, representing and reasoning with uncertainty, learning, decision making (planning) under uncertainty. Assignments provide practical experience, both theory and programming, of the core topics.
Exclusion: CSC484H1.
Prerequisite: CSC324H1; STA247H1/255H1/257H1; CGPA 3.0/enrolment in a CSC subject POSt.

**ECE385H1 Microprocessor Systems [26L, 39P]**
A hardware-oriented course dealing with microprocessor systems. Microprocessor components, memory devices, input/output techniques, bus structure, peripheral device controllers, hardware system and programming considerations. Laboratory experiments provide "hands-on" experience.
Prerequisite: CSC258H1; 209H1/proficiency in C; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC401H1 Natural Language Computing [26L, 13T]**
Introduction to techniques involving natural language and speech in applications such as information retrieval, extraction, and filtering; intelligent Web searching; spelling and grammar checking; speech recognition and synthesis; and multi-lingual systems including machine translation. N-grams, POS-tagging, semantic distance metrics, indexing, on-line lexicons and thesauri, markup languages, collections of on-line documents, corpus analysis. PERL and other software.
Prerequisite: CSC207H1/209H1/228H1; STA 247H1/255H1/257H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: MAT223H1/240H1 is strongly recommended.

**CSC 404H1 Introduction to Video Game Design [26L, 13T]**
Concepts and techniques for the design and development of electronic games. History, social issues and story elements. The business of game development and game promotion. Software engineering, artificial intelligence and graphics elements. Level and model design. Audio elements. Practical assignments leading to team implementation of a complete game.
Prerequisites: Two of CSC 301H1, 318H1, 384H1, 418H11; CGPA 3.0/enrolment in a CSC subject POSt

**CSC410H1 Software Testing and Verification [26L, 13T]**
Concepts and state of the art techniques in quality assessment for software engineering; quality attributes; formal specifications and their analysis; testing, verification and validation.
Prerequisite: CSC301H1..

**CSC411H1 Machine Learning and Data Mining [26L, 13T]**
An introduction to methods for automated learning of relationships on the basis of empirical data. Classification and regression using nearest neighbour methods, decision trees, linear models, and neural networks. Clustering algorithms. Problems of overfitting and of assessing accuracy. Problems with handling large databases.
Prerequisite: CSC263H1/265H1/270H1; MAT137Y1, STA 247H1/255H1/257H1, 248H1/250H1/261H1; CGPA 3.0/ enrolment in a CSC subject POSt.
Recommended preparation: CSC 336H1/350H1.

**CSC412H1 Probabilistic Learning and Reasoning [26L, 13T]**
An introduction to probability as a means of representing and reasoning with uncertain knowledge. Qualitative and quantitative specification of probability distributions using probabilistic graphical models. Algorithms for inference and probabilistic reasoning with graphical models. Statistical approaches and algorithms for learning probability models from empirical data. Applications of these models in artificial intelligence and machine learning.
Prerequisite: CSC411H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC418H1 Computer Graphics [26L, 13T]**
Identification and characterization of the objects manipulated in computer graphics, the operations possible on these objects, efficient algorithms to perform these operations, and interfaces to transform one type of object to another. Display devices, display data structures and procedures, graphical input, object modelling, transformations, illumination models, primary and secondary light effects; graphics packages and systems. Students, individually or in teams, implement graphical algorithms or entire graphics systems.
Prerequisite: CSC336H1/350H1/351H1/363H1/364H1/365H1/ 373H1/375H1/378HI, MAT137Y1, CSC209H1/proficiency in C or C++ ; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: MAT237Y1, MAT244H1.

**CSC420H1 Introduction to Image Understanding [26L, 13P]**
Introduction to fundamental concepts in image understanding, the subdiscipline of artificial intelligence dealing with the automation of visual tasks by computer. Exploration of a number of real-world image interpretation problems, as motivation for key low- and intermediate-level vision algorithms. A course project will include the construction of a number of practical vision systems.
Prerequisite: CSC260H1/263H1/265H1, MAT135Y1/136Y1/ 137Y1/157Y1, 223H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: CSC320H1.

**CSC428H1 Human-Computer Interaction [26L, 13T]**
Understanding human behaviour as it applies to user interfaces: work activity analysis, observational techniques, questionnaire administration and unobtrusive measures. Operating parameters of the human cognitive system, task analysis and cognitive modelling techniques and their application to designing interfaces. Interface representations and prototyping tools. Cognitive walkthroughs, usability studies and verbal protocol analysis. Case studies of specific user interfaces.
Prerequisite: CSC318H1; STA247H1/255H1/257H1, STA(248H1/ 250H1/261H1)/(PSY201H1, 202H1)/(SOC 202H1, 300H1); CSC 209H1/proficiency C++ or Java; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: A course in PSY; CSC209H1, 407H1.

**CSC438H1 Computability and Logic [26L, 13T]**
Computable functions, Church's thesis, unsolvable problems, recursively enumerable sets. Predicate calculus, including the completeness, compactness, and Lowenheim-Skolem theorems. Formal theories and the Gödel Incompleteness Theorem.
Exclusion: MAT309H1; PHL344H1.
Prerequisite: CSC363H1/364H1/365H1/373H1/375H1/ MAT247H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC443H1 Database System Technology [26L, 13T]**
Implementation of database management systems. Storage management, indexing, query processing, concurrency control, transaction management. Database systems on parallel and distributed architectures. Modern database applications: data mining, data warehousing, OLAP, data on the web. Object-oriented and object-relational databases.
Prerequisite: CSC343H1/434H1, 369H1/468H1, 364H1/373H1/ 375H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC446H1 Computational Methods for Partial Differential Equations [26L, 13T]**
Finite difference methods for hyperbolic and parabolic equations; consistency, convergence, and stability. Finite element methods for 2-point boundary value problems and elliptic equations. Special problems of interest.
Prerequisites: CSC351H1/(336H1 (75%))/equivalent mathematical background; MAT237Y1/257Y1; APM346H1/ 351Y1/(MAT244H1/267H1 and exposure to PDE's); CGPA 3.0/enrolment in a CSC subject POSt.

**CSC448H1 Formal Languages and Automata [26L, 13T]**
Regular, deterministic, context free, context sensitive, and recursively enumerable languages via generative grammars and corresponding automata (finite state machines, push down machines, and Turing machines). Topics include complexity bounds for recognition, language decision problems and operations on languages.
Prerequisite: CSC236H1/238H1/240H1, 363H1/364H1/365H1/ MAT247H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC454H1 The Business of Software [26L, 13T]**
Overview of the software industry, and principles of operation for successful software enterprises. Software business definition

and planning; market and product planning; management of innovation, research and software development; software marketing and sales management; software manufacturing and support; financial management of high-technology ventures; human resource management and development in high-technology industries. (Ordinarily offered in alternate years.)
Prerequisite: Five CSC half-courses at the 200-level or higher; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: MGT120H1.

**CSC456H1 High-Performance Scientific Computing [26L, 13T]**
Computationally-intensive applications in science and engineering are implemented on the fastest computers available, today composed of many processors operating in parallel. Parallel computer architectures; implementation of numerical algorithms on parallel architectures. Topics from: performance evaluation; scientific visualization; numerical methods; applications from science and engineering. For students in computer science, applied mathematics, science, engineering.
Prerequisite: CSC350H1/(336H1 (75%))/equivalent mathematical background; CSC209H1/proficiency in C, C++ or Fortran; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC458H1 Computer Networks [26L, 13T]**
Computer communication network design and implementation. Packet switching systems; socket programming; network software, hardware, and protocols; congestion control schemes; traffic generation and measurement; network security; wireless networks. Emphasis on programming and experimental analysis of real network components.
Prerequisite: CSC 258H1, 354H1/363H1/364H1/365H1/372H1/373H1/375H1/378H1/ECE 385H1; STA 247H1/255H1/257H1/(80% in STA 220H1/ECO 220Y1); CGPA 3.0/enrolment in a CSC subject POST.

**CSC465H1 Formal Methods in Software Design [26L, 13T]**
The use of logic as an aid to programming. Formal semantics of programming languages: imperative programs, functional programs, parallel processes, communicating processes. Partial and total correctness. Refinement theorems: by steps, by parts, by cases. Semantics of recursion and the least-fixed-point construction; monotonicity, continuity. Semantics of data types; data refinement.
Prerequisite: CSC236H1/238H1/240H1/MAT309H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: CSC363H1/364H1/365H1.

**CSC469H1 Operating Systems Design and Implementation [26L, 13T]**
An in-depth exploration of the major components of operating systems with an emphasis on the techniques, algorithms, and structures used to implement these components in modern systems. Project-based study of process management, scheduling, memory management, file systems, and networking is used to build insight into the intricacies of a large concurrent system.
Exclusion: CSC468H1.
Prerequisite: CSC369H1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC485H1 Computational Linguistics [26L, 13T]**
Computational linguistics and the understanding of language by computer. Possible topics include: augmented context-free grammars; chart parsing, ,statistical parsing; semantics and semantic interpretation; ambiguity resolution techniques; discourse structure and reference resolution. Emphasis on statistical learning methods for lexical, syntactic and semantic knowledge.
Prerequisite: STA 247H1/257H1 or familiarity with basic probability theory; CSC 209H1 or proficiency in C++, Java, or Python; CGPA 3.0/enrolment in a CSC.subject POSt. Suggested preparation: CSC 324H1/330H1/384H1.

**CSC486H1 Knowledge Representation and Reasoning [26L, 13T]**
Representing knowledge symbolically in a form suitable for automated reasoning, and associated reasoning methods: first-order logic, entailment, the resolution method, Horn clauses, procedural representations, production systems, description logics, inheritance networks, defaults and probabilities, tractable reasoning, abductive explanation, the representation of action, planning.
Prerequisite: CSC384H1, CSC363H1/365H1/373H1/375H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: CSC330H1.

**CSC487H1 Foundations of Computer Vision [26L, 13T]**
Introduction to vision, visual processes, and image understanding. Brief biological motivation for computational vision. Camera system geometry and image acquisition, basic visual processes for recognition of edges, regions, lines, surfaces. Processing colour, stereo images, and motion in image sequences. Active vision methods such as visual attention and interpretation-guided imaging system geometry changes. Object recognition. Applications of visual systems.
Prerequisite: CSC320H1/420H1; MAT235Y1/237Y1/257Y1; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC488H1 Compilers and Interpreters [26L, 13T]**
Compiler organization, compiler writing tools, use of regular expressions, finite automata and context-free grammars, scanning and parsing, runtime organization, semantic analysis, implementing the runtime model, storage allocation, code generation.
Prerequisite: CSC258H1, 324H1, 263H1/265H1/378H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: Proficiency in C such as from CSC209H1.

**ECE489H1 Compilers II [26L, 39P]**
Theoretical and practical aspects of building modern optimizing compilers. Topics: intermediate representations, basic blocks and flow graphs, data flow analysis, partial evaluation and redundancy elimination, loop optimizations, register allocation, instruction scheduling, interprocedural analysis, and memory hierarchy optimizations. Students implement significant optimizations within the framework of a modern research compiler. (This course is a cross-listing of ECE540H1, Faculty of Applied Science and Engineering.)
Prerequisite; CSC488H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended preparation: ECE385H1, proficiency in C.

**CSC490H1 Capstone Design Project [52L]**
This half-course gives students experience solving a substantial problem that may span several areas of Computer Science. Students will define the scope of the problem, develop a solution plan, produce a working implementation, and present their work using written, oral, and (if suitable) video reports. Class time will focus on the project, but may include some lectures. The class will be small and highly interactive. Project

themes change each year. In 2006/07 the theme was User interfaces for video games. At the time of printing, the theme for 2007/08 had not been chosen but see www.cs.utoronto.ca/~csc490h for information about this year's topic themes and required preparation.
Prerequisite: Permission of the instructor; CGPA 3.0/enrolment in a CSC subject POSt.

**CSC494H1/495H1 Computer Science Project [TBA]**
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.
Prerequisite: Three 300-level Computer Science half-courses, a CGPA of 3.00 (2.50 for students in a CSC Program), and permission of the Program Director, Undergraduate Studies.

## Criminology: see Woodsworth College

## Croatian: See Slavic Languages and Literatures

## Czech: See Slavic Languages and Literatures

# Diaspora & Transnational Studies

## Interdisciplinary program

Where is home? Need it be in one place? Is it always attached to territory? Diaspora and transnational studies examines the historical and contemporary movements of peoples and the complex problems of identity and experience to which these movements give rise as well as the creative possibilities that flow from movement. The program is comparative and interdisciplinary, drawing from the social sciences, history and the arts. Students are required to take two linked half-courses that offer an introduction to a broad array of themes and disciplinary methodologies. The program offers a wide selection of additional courses, giving students the opportunity to learn about a range of diasporic communities as well as key debates in the field.

## Diaspora and Transnational Studies Programs

### Major program

(7 full courses or their equivalent, including at least two 300+ series courses)

1. DTS200Y1
2. Five full-course equivalents (FCEs) from Group A and B courses, with at least two FCEs from each group. Coverage must include at least two diasporic communities or regions, to be identified in consultation with the program advisor.
3. DTS401H1, DTS402H1

### Minor program

(4 full courses or their equivalent, including at least one 300+ series course)

1. DTS200Y1
2. Three full-course equivalents (FCEs) from Group A and B courses, with at least one FCE from each group.
3. Either DTS401H1 or DTS402H1

### Group A (Humanities) Courses

Students are responsible for checking the co- and prerequisites for all courses in Groups A and B.

Note: course = one full course or the equivalent in half courses.

**East-Asian Studies**

| | |
|---|---|
| EAS202Y1 | Modern East-Asian History |
| EAS271H1 | 20th Century Korean History |

**English**

| | |
|---|---|
| ENG275Y1 | Jewish Literature in English |
| ENG277Y1 | Introduction to African Canadian Literature |
| ENG268H1 | Asian North American Literature |
| ENG285H1 | The English Language in the World |
| ENG368H1 | Asian North American Poetry and Prose |
| ENG370H1 | Postcolonial and Transitional Discourses |

**Finno-Ugric Studies**

| | |
|---|---|
| FIN320H1 | The Finnish Canadian Immigrant Experience |

**French**

| | |
|---|---|
| FRE332H1 | Francophone Literature I |
| FRE431H1 | Francophone Literature II |

**German**

| | |
|---|---|
| GER362H1 | Soviet and Kosher: Jewish Culture in the Soviet Union |
| GER364H1 | History of Yiddish Cinema |

**History**

| | |
|---|---|
| HIS202H1 | Gender, Science and Technology |
| HIS206Y1 | Medieval History of the Jewish People |
| HIS208Y1 | Modern History of the Jewish People |
| HIS232Y1 | The British Imperial Experience |
| HIS294Y1 | Caribbean History and Culture |
| HIS296Y1 | Black Freedom |
| HIS303Y1 | The Mediterranean, 600-1700: Crusade, Colonialism, Diaspora |
| HIS305H1 | Popular Culture and Politics in the Modern Caribbean |
| HIS312H1 | Immigration to Canada |
| HIS324Y1 | Science, Technology, and the Development of Modern Culture |
| HIS326Y1 | Chinese Migration |
| HIS338Y1 | The Holocaust: Nazi Germany, Occupied Europe and the Destruction of European Jewry |
| HIS345H1 | History and Film |
| HIS356H1 | Zionism and Israel |
| HIS359H1 | Regional Politics and Radical Movements in the 20th Century Caribbean |
| HIS360Y1 | African-Canadian History, 1606-Present |
| HIS366Y1 | Black Canadian Women's History |
| HIS367H1 | History of Images |
| HIS369Y1 | Aboriginal Peoples of the Great Lakes from 1500 |
| HIS370H1 | The Black Experience in the United States Since the Civil War |
| HIS476Y1 | Voices From Black America |
| HIS384H1 | Colonial Canada: the East |
| HIS386H1 | Muslims in India and Pakistan |
| HIS393H1 | Slavery and the American South |
| HIS394H1 | South Asian Migration and Settlement |
| HIS403Y1 | Jews and Christians in Medieval and Renaissance Europe |
| HIS408Y1 | History of Race Relations in America |
| HIS417H1 | Globalization, Science, and Technology |
| HIS433H1 | Polish Jews Since the Partition of Poland |
| HIS435Y1 | Linguistic and Cultural Minorities in Europe |
| HIS437H1 | A History of the Black Autobiographical Tradition in Canada |
| HIS444H1 | Topics in Jewish History: Jewish Identity in the Modern World |
| HIS445H1 | Nationalism |
| HIS446Y1 | Gender and Slavery in the Atlantic World |
| HIS456Y1 | Black Slavery in Latin America |
| HIS472H1 | Topics in Canadian Aboriginal/Non-Aboriginal Relations |
| HIS480H1 | Modernity and its Others: History and Postcolonial Critique |
| HIS484H1 | The Car in History: Business, Space, and Culture in North America |
| HIS487H1 | Travelers and Scholars East/West |

**Innis College**

| | |
|---|---|
| INI327Y1 | Race and Representation |
| INI380Y1 | Contemporary World Cinema |

**Italian Studies**

| | |
|---|---|
| ITA233Y1 | Ethnicity and Mainstream Italian Canadian Culture |
| ITA334H1 | Italian Canadian Literature I: Life in a New World |
| ITA493H1 | Italian Canadian Literature II |

**Near and Middle Eastern Civilizations**

| | |
|---|---|
| NMC274Y1 | Steppe Frontier in Islamic History |
| NMC357H1 | Mass Media and/in the Middle East |

NMC370Y1 Ancient Israel
NMC385H1 Intellectuals of the Arab World
NMC475H1 Orientalism and Occidentalism

**New College - African Studies**
NEW296Y1 Black Freedom

**New College - Caribbean Studies**
NEW223Y1 Caribbean Literature and Society
NEW224Y1 Caribbean Thought I
NEW324Y1 Caribbean Thought II
NEW325H1 Caribbean Women Thinkers
NEW326Y1 Indenture, Survival, Change
NEW327Y1 The Hispanic Caribbean: Insights and Images of Cuba

**New College - Equity Studies**
NEW343H The Romani Diaspora in Canada

**New College - Women's Studies**
WGS368H1 Gender and Cultural Difference: Transnational Perspectives
WGS369Y1 Studies in Post-Colonialism
WGS380H1 Aboriginal, Black and Immigrant Women in the Land of Dollars
WGS445H1 Migrations and the Sacred

**Religion**
RLG243H1 Diasporic Religions
RLG341H1 Dreaming of Zion: Exile and Return in Jewish Thought
RLG430H1 Jewish Culture in Medieval Latin, Greek, and Arabic Europe

**Slavic Languages and Literature**
SLA 302H1 The Imaginary Jew

**St. Michael's College**
SMC413H1 The Irish in Canada
SMC414H1 The Scots in Canada
SMC416H1 Irish Nationalism in Canada and the United States

**Spanish and Portuguese**
SPA480H1 Theories of Culture in Latin America
SPA486H1 Contemporary Caribbean Literatures and Identities

**Victoria College**
VIC350Y1 Creative Writing: A Multicultural Approach

## Group B (Social Sciences) courses

**Anthropology**
ANT347Y1 Metropolis: Global Cities
ANT426H1 Orientalism: Western Views of the Other
ANT440Y1 Global Society in Transition
JAP256H1 African Systems of Thought

**Geography**
GGR216H1 Global Cities
JGI216H1 Urbanization & Global Change
GGR256H1 Recreation and Tourism
GGR336H1 Urban Historical Geography of North America
GGR346H1 The Urban Planning Process
GGR350H1 Canada in a Global Context
GGR361H1 Understanding the Urban Landscape
GGR362H1 Cities of Difference
GGR363H1 Critical Geographies: An Introduction to Radical Ideas on Space, Society and Culture
GGR366H1 Historical Toronto
GGR368H1 Geography of Language
GGR435H1 Technology, Toronto, and Global Warming
GGR452H1 Space, Power, Geography: Understanding Spatiality
GGR459H1 Urban Form, Structure and Growth

**Political Science**
POL215Y1 Politics and Transformation of Asia-Pacific
POL304H1 Ethnicity and Politics in Canada
POL321H1 Ethnic Politics in Comparative Perspective
POL349Y1 Globalization and Urban Politics in Europe and North America
POL358Y1 Post-Colonial Questions: Politics, Knowledge, Power
POL364H1 Religion and Politics
POL403H1 Colonialism/Post-Colonialism: The Colonial State and Its Forms of Power
POL405Y1 Marxism
POL425Y1 Multiculturalism in Canada
POL429Y1 Nationalism, Ethnic Conflict and Democracy
POL430Y1 Comparative Studies in Jewish and Non-Jewish Political Thought
JHP435Y1 Linguistic and Cultural Minorities in Europe
POL436Y1 Problems of Political Community
POL439H1 The Canadian Welfare State in Comparative Perspective
POL443H1 The Colonial State and its Forms of Power
POL445Y1 Canada and The Third World
JPF455Y1 Cities

**Sociology**
SOC218Y1 Asian Communities in Canada
SOC341Y1 The Jewish Community in Europe and North America
SOC344Y1 Contemporary International Migration
SOC383H1 The Sociology of Women and International Migration

## University of Toronto Scarborough courses that can be applied to the program

### Group A (Humanities) Courses
ENGB17H3 Contemporary Literature from the Caribbean
ENCC13H3 Ethnic Traditions in American Literature
ENGC70H3 The Immigrant Experience to 1980
ENCC71H3 The Immigrant Experience in Literature since 1980
ENGD87H3 Between Traditions and Freedoms: Writing by Canadians of Asian Descent
FREB28H3 The Francophone World
FREB35H3 Francophone Literature
FREB70H3 Cinema of the Francophone World
FREC47H3 Special Topics in Linguistics: Pidgin and Creole Languages
HISC14H3 Edible History: History of Global Foodways
HISC36H3 People in Motion: Immigrants and Migrants in U.S. History
HISC45H3 Immigrants and Race Relations in Canadian History
VPAB09H3 Dialogues in the Diaspora
VPHB50H3 Africa through the Photographic Lens
VPHC52H3 Issues in Contemporary Global Arts

Plus courses identified by University of Toronto Scarborough as a Group A courses

### Group B (Social Science) Courses

| | |
|---|---|
| ANTB08H3 | The Chinese Diaspora |
| ANTC34H3 | The Anthropology of Transnationalism |
| GGRC19H3 | Spaces of Multiraciality: Critical Mixed Race Theory |
| GGRC45H3 | Local Geographies of Globalization |
| POLA81H3 | Leaving Home: Politics and Emigration |
| SOCC25H3 | Comparative Ethnic and Race Relations |
| SOCC34H3 | Globalization: Causes, Consequences and Critique |

Plus courses identified by University of Toronto Scarborough as Group B courses.

### University of Toronto Mississauga courses that can be applied to the program

### Group A (Humanities) Courses

| | |
|---|---|
| ENG272H5 | Literature and Exile |
| ENG271H5 | Diasporic Literatures in Toronto |
| ENG370H5 | Postcolonial and Transitional Discourses |
| FRE290Y5 | Aspects of Francophone Cultures |
| FRE390H5 | Women of the Francophone World |
| FRE395H5 | Films of the Francophone World |
| LIN366H5 | Creoles |
| VCC302H5 | Visual Culture Through the Post Colonial Lens |
| VCC304H5 | Visual Culture and the Construction of Identity |
| WGS335H5 | Immigrant and Refugee Women |
| WGS369Y5 | Gender, Colonialism and Cultural Resistance |

### Group B (Social Science) Courses

| | |
|---|---|
| ANT361H5 | African Cultures |
| POL362H5 | Decolonizing Political Science I |
| POL363H5 | Decolonising Political Science II |
| SOC236H5 | Critical Theories of Globalization |
| SOC332H5 | Race and Ethnicity |
| SOC333H5 | Race and Ethnicity II |
| SOC338H5 | Global Diasporas |
| SOC339H5 | Social and Ecological Issues in Globalization |
| SOC353H5 | Sociology of Globalization since 1945 |
| SOC354H5 | Global Sociology |

Plus courses identified by University of Toronto Mississauga as Group B courses

## Diaspora and Transnational Studies Courses

For Distribution Requirement purposes (see page 26), all DTS courses are classified as SOCIAL SCIENCE or HUMANITIES courses.

**DTS200Y1 Introduction to Diaspora and Transnational Studies I (formerly DTS201H1, 202H1)** **52L**

An interdisciplinary introduction to the study of diaspora, with particular attention to questions of history, spatiality, globalization, cultural production and the creative imagination. Material will be drawn from Toronto as well as from diasporic communities in other times and places.
Exclusion: DTS201H1, 202H1

**DTS401H1 Advanced Topics in Diaspora and Transnationalism (Postcolonialism and Diaspora)** **26S**

This will be a course using the intersections between Postcolonialism and Diaspora Studies to explore issues of place, memory, and identity. The course will be comparative and interdisciplinary with a focus on literature, anthropology, political science and cultural studies.

**DTS402H1 Advanced Topics in Diaspora and Transnationalism (Critical Approaches to Diaspora Studies)** **26S**

Course critically examines theoretical and methodological approaches adopted by different disciplines to the subject of Diaspora and Transnational Studies. Classes will engage with community actors and organizations and will be comparative and interdisciplinary with a focus on literature, anthropology, political science and cultural studies.

## Drama is sponsored by University College

## Faculty

### Director
T. Trojanowska, MA, Ph D

### Professor
P. Kleber, MA, Ph D

### Associate Professor
A. Ackerman, MA, Ph D

### Assistant Professors
A. Budde, MA, Ph D
A. Egoyan, BA
A. Janson, MA

### Senior Lecturers
S. Bush
K. Gass, BA

### Lecturers
S. Lyons, BA

The Drama Program (Specialist, Major, Minor) offers students the opportunity to combine high standards of practical, professional theatre training with a rich and rigorous academic program. The Program offers courses in dramatic literature, dramaturgy, stage theory, theatre history, production, design, direction, and performance. Students are required to take structured combinations of courses interrelated so as to lead to a broad knowledge of the field as a whole. The Combined Specialist programs in English and Drama also provides a specialist alternative to Drama alone, while a Drama Major or Minor may be valuably combined with programs in a wide variety of other fields, as offered both by language and literature departments (English, French, German, Italian, Spanish and Portuguese, etc.) and other departments and programs such as Anthropology, Canadian Studies, Cinema Studies, Classics, Commerce, Fine Art, History, Music, Psychology, Religion, Sociology, and Women's Studies.

The Drama Program is housed in the Helen Gardiner Phelan Playhouse at University College. Besides providing instruction in theatre studies, the Drama Program has mounted international theatrical events and conferences, and its students have toured Europe and Asia. The Program has also forged links with leading Canadian theatres and has regular contact with world-renowned international theatre artists. More details on the Drama Program, including application forms, can be found on the web site at: www.ucdp.utoronto.ca. The Program Director and Academic Administrative Assistant are also available for consultation. For enquiries or an appointment call the Drama Program Administrative Assistant at 416-978-8099 or send an e-mail to uc.drama@utoronto.ca

DRM courses are staffed by a combination of theatre professionals, members of other university departments, and specific DRM staff members. Some courses are restricted to students in a Drama Specialist, Major, or Combined Specialist program; some are open to all students of the University.

## Drama Programs

### Drama (Arts program)

Consult the Director, Room 300, 79A St. George St., University College.

Enrolment in the Specialist and Major programs is limited and selection is made after a personal interview and audition. Students will be admitted to the Major only after they have been admitted to DRM 200Y1 (with DRM 201Y1) or DRM 254Y1, and to the Specialist only after they have been admitted to a third course from Group B (other than DRM 301Y1). Enrolment in the Minor program is unrestricted. Students in the Minor program may only take academic courses.

**Specialist program:**
(12 full courses or their equivalent, including at least four 300+ series with at least one 400 level)

First Year:
One or both of DRM 100Y1, DRM 200Y1 (with DRM 201Y1 as co-requisite)
Higher Years:
1. DRM 200Y1 (and DRM 201Y1) if not taken in First Year
2. From Group A (below): DRM 230Y1 and three of DRM 260H1, 262H1, 266H1, 268H1 and 364H1
3. DRM 300Y1 and 301Y1 or DRM 254Y and DRM 354Y
4. From Group C: one full-course equivalents
5. From Group D: one full-course equivalents
6. 2.5 courses from Groups A, B, C, D, E, to make up the total of 12 courses

**Major program:**
(8 full courses or their equivalent including at least two 300+ series courses)

**Option A**
First Year:
One or both of DRM 100Y1, DRM 200Y1 (with DRM 201Y1 as co-requisite)
Higher Years:
1. DRM 200Y1 & 201Y1 (if not taken in first year)
2. DRM 300Y1 & 301Y1
3. From Group A: DRM 230Y1 and two of DRM 260H1, 262H1, 266H1, 268H1 and 364H1
4. From Groups C and/or D: one full-course equivalent

**Option B**
First Year:
One or both of DRM 100Y1, DRM 200Y1 (with DRM 201Y1 as co-requisite)
Higher Years:
1. DRM 200Y1 & DRM 201Y1 (if not taken in first year)
2. DRM 254Y1
3. From Group A: DRM 230Y1 and three of DRM 260H1, 262H1, 266H1, 268H1 and 364H1
4. From Groups C and/or D: one and a half course equivalents

**Option C**
First Year: DRM 100Y1
Higher Years:
1. DRM 254Y1
2. DRM 354Y1
3. From Group A: DRM 230Y1 and three of DRM 260H1, 262H1, 266, 268H1, and 364H1
4. From Groups C and/or D: two and a half course equivalents

**Minor program:**
(4 full courses or their equivalent including at least one 300+ series course)
1. DRM 100Y1 and one full-course equivalent from Groups C, D (below)
2. Two half-courses from Group A (excluding DRM 230Y1 and DRM 431Y1)
3. One full-course equivalent from Groups A (excluding DRM 230Y1 and DRM 431Y1), C, D or E

**Note:**
Students in the Minor program are not eligible for practical courses

**Group A:**
DRM 230Y1, 260H1, 262H1, 268H1, 364H1, 386H1, 431Y1, JDC 400Y1, 410H1
**Group B:**
DRM 200Y1, 201Y1, 254Y1, 300Y1, 301Y1, 328H1, 354Y1, 400Y1, 401H1, 402Y1, 403Y1, 486H1; ENG 369Y1 (playwriting section) Note: Students taking a practical course (Group B) are required to take an academic co-requisite (Groups A, C, D)
**Group C:**
ENG 220Y1, 330H1, 331H1, 332Y1, 333H1, 335H1, 336H1, 337H1, 338Y1, 340H1, 341H1, 342H1, 352H1
**Group D:**
ABS 341H1; CLA 382H1, 383H1; EAS 233H1; FRE 372Y0; GER 232H1; GRK 351H1, 352H1, 451H1, 452H1; HUN 450H1; ITA 390H1, 409H1, 410H1, 415H1, 426H1; JDC 400H1; LAT 351H1/451H1; NEW 422Y1; SLA 337H1, 367H1, 418H1, 424H1, 476H1; SPA 452H1: UNI 202H1
**Group E:**
MUS 206H1; SLA 424H1
**Other:**
DRM 100Y1, 390Y1/391H1, 490Y1/491H1. (These may be applied to Groups A,B,C,D,E on petition to, and approval by, the Drama Program Committee)

## Drama and English (Arts program)

Consult the Director, Room 300, 79A St. George Street, University College.

Enrolment in this program is limited and selection is made after a personal interview and audition. Upon admission to DRM 200Y1 or DRM 254Y1 students may enroll in the double major in English and Drama; upon admission to a third course from Group B students may change their enrolment to the Drama and English Specialist program.

### Specialist program:
(14 to 15 full courses or their equivalent, with at least four 300+ series courses including at least one 400-series course)

**English:**
Same as the English Major program (see English)

**Drama:**
First Year:
One or both of (a) DRM 100Y1, (b) DRM 200Y1 (with DRM 201H1 as co-requisite)
Higher Years:
See Drama Major requirements (Please note: the combination of Majors require twelve separate courses to meet Honours degree requirements).

## Drama Courses

See page 32 for Key to Course Descriptions.
For Distribution Requirement purposes, all DRM courses are classified as HUMANITIES courses.

**DRM100Y1 Drama: Form and Style [78L]**
An introduction to the study of dramatic literature, with particular reference to the realization of plays upon the stage. Plays from a variety of periods and countries are studied in terms of the use of theatrical space, plot and generic structure, characterization, theme, and language.

**DRM200Y1 Introduction to Performance [104P]**
Emphasis is initially on ensemble, non-verbal, and improvisational work. Students proceed to the application of their acquired skills to scripted material.
Pre- or Co-requisite:DRM100Y1 or DRM230Y1
Co-requisite: DRM201Y1

**DRM201Y1 Voice for the Actor I [52P, 2T]**
**Movement for the Actor I [52P, 5T]**
A voice and movement component, taken in conjunction with DRM200Y1: Introduction to Performance. Work consists of both theory and practice of voice and movement as they relate to the development of the actor.
Co-requisite: DRM200Y1

**DRM230Y1 Concepts of Twentieth-Century Theatre [78L]**
(Drama Minors are not eligible to enroll)
The work of selected theorists and practitioners of the 20th century and their contrasting ideas on the kind of expression and communication possible through the medium of the theatre. A study of how the interrelationship between director, actor, playwright and text influences the style of performance and the nature of audience response.
Prerequisite:DRM100Y1

**DRM254Y1 Production [56L, 100P]**
A detailed analysis of the production element of theatre: the conceptual and practical problems of design, production personnel and organization, production facilities, business management, publicity, sound and lighting equipment.
Prerequisite:DRM100Y1
Co-requisite: DRM230Y1

**DRM260H1 History of the Greek and Roman Theatre [39L]**
The physical structures of the Greek and Roman theatre and the major conventions of production and staging, based on the evidence of art, archaeology, and the texts of the plays themselves, from the origins and development of the drama at Athens in the 6th century B.C. to the decline of stage drama in Rome in the 1st century B.C. (Not offered in 2007/2008))

**DRM262H1 Experimentation and Innovation: A Comparative History of World Theatre from Ancient Times Until the Present [39L]**
An intercultural and comparative analysis of innovative processes within world theatre. Focusing on selected periods, the course explores the cultural backgrounds of key events or turning points in pre-modern and modern theatre and their indications for post-modern theatre developments in a globalized world.
Recommended Preparation: DRM364

**DRM268H1 Canadian Theatre History [39L]**
A survey of Canadian theatre history with an emphasis on developments since 1950 including the Regional and alternate theatre movements; trends in Canadian playwriting and their relationship to theatre history; cultural diversity and native voices in contemporary Canadian theatre.

**DRM299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**DRM300Y1 Performance I [156P]**
Continuation of DRM200Y1, concentrating upon scene study. Scenes are developed through analysis of text and sub-text, the establishing of scene objectives, improvisation, and physical action.
Prerequisite: DRM200Y1, permission of University College Drama Program Committee
Co-requisite: DRM230Y1 (or full course from Group A if DRM230 already completed),

**DRM301Y1 Voice for the Actor II [52P, 2.5T]**
**Movement for the Actor II [52P, 2T]**
A voice and movement component, taken in conjunction with DRM300Y1: Performance I. Work consists of both theory and practice of voice and movement as they relate to the development of the actor.
Prerequisite: DRM200Y1, 201Y1
Co-requisite: DRM300Y1

**DRM310H1 Contemporary American Drama [39L]**
American dramas of the last 50 years. Structural, historical, and thematic approaches to self-consciously theatrical works and to the idea of America itself. Authors include Miller, Williams, Albee, Baraka, Kennedy, Hansberry, Shepard, Fornes, Mamet, Kushner, and performance artists such as Karen Finley and Laurie Anderson. (Not offered in 2008/2009)

**DRM328H1 The Art and Craft of Playwriting [39L]**
A hands-on study of the craft of dramatic writing. The class examines the basic elements of playwriting such as plot, structure, theme, character, dialogue, setting, with an emphasis on storymaking. Attention is given to the development of students' own work through written assignments and in-class exercises.
Prerequisite: Permission of the instructor, restricted to upper-level English and Drama students

**DRM354Y1 Stage and Costume Design I [52L, 26P]**
A detailed exploration of theatrical stage and costume design, historical and contemporary, theatrical and practical.
Prerequisite: Permission of University College Drama Program Committee

**DRM364H1 History of Western Theatre from the Renaissance to 1900 (formerly DRM 264H1) [39L]**
Modes of theatre in selected periods and cultures in Early Modern Europe from the Renaissance to the end of the 18th century. Constitution of the audience and of acting companies; the relationship between the plays, the players, and the audience. The development of theatre theory, criticism and dramaturgy in their historical and cultural context. (Offered in alternate years)
Exclusion: DRM264H1

**DRM385Y1 Topics in Drama [TBA]**

**DRM386H1 Topics in Drama [TBA]**
An in-depth examination of selected issues in the Theatre. Content may vary depending on instructor. See Undergraduate Handbook or the UC Drama Program website for more details.

**DRM390Y1 Independent Studies in Drama [TBA]**

**DRM391H1 Independent Studies in Drama [TBA]**
A topic chosen by the individual student. The student must work out details with a member of faculty who is willing to act as supervisor. A written proposal, signed by both student and instructor, must then be submitted for approval to the Drama Program Committee prior to registration and normally by May 31 of the preceding academic year. Open to advanced Specialist and Major students in the program.
Prerequisite: Permission of University College Drama Program Committee

**DRM400Y1 Performance II [247P]**
Continuation of DRM300Y1, concentrating on advanced performance techniques.
Prerequisite: DRM300Y1, permission of University College Drama Program Committee
Co-requisite: DRM401H1

**DRM401H1 Voice for the Actor III [52P, 2T]**
**Movement for the Actor III [52P, 2T]**
A voice and movement component to be taken with DRM400Y1: Performance II. Work consists of both theory and practice of voice and movement as they relate to the development of the actor.
Co-requisite: DRM400Y1

**JDC400Y1 Dramatic Text and Theatrical Communication [52S]**
This course tests Brecht's idea of theatrical two-way communication by addressing three topics: what did Brecht mean; how can theatre communicate; how far did Brecht, Robert Wilson and Robert LePage move in their direction.
Prerequisite: DRM230Y1; permission of instructor. Limited to fourth-year students.

**JIA400H1 Interdisciplinary Practice for the Arts [156P]**
This course will examine different versions of Salome to explore the interconnectedness of the arts. Between sessions, students will be required to meet and develop projects connected to their study that will involve a range of media, including theatre, film, music and visual art (installation). This is a Humanities course limited to fourth-year students.

**DRM402Y1 Seminar in Directing [156P]**
Techniques of rehearsal process; staging. The role of the director in its varying relationships to text, actor and audience.
Prerequisite: DRM200Y1, 230Y1, 254Y1, two group A courses and permission of the University College Drama Program Committee
Co-requisite: DRM431Y1

**DRM403Y1 Performance III [208P]**
An in-depth study on a theoretical and practical level of a specific play which is presented to the public. This involves an intensive exploration of character in rehearsal and its discovery in performance.
Prerequisite: Permission of University College Drama Program Committee

Co-requisite: DRM431Y1
Pre- or co-requisite: DRM400Y1
Exclusion: DRM401Y1

**JDC410H1 New Approaches to Theatre History [52S]**
An upper level seminar in Theatre History. Topics vary from year to year.
Prerequisite: DRM230Y1

**DRM431Y1 Studies in Performance History, Dramaturgy [78L]**
A play is chosen from a specific period. A textual analysis of the selected play is followed by a study of the most significant productions of the work in terms of differing text interpretations, use of theatrical conventions, set and costume designs, and acting style. Students are introduced to various aspects of dramaturgical work.
Prerequisite: DRM230Y1, permission of University College Drama Program Committee

**DRM485Y1 Topics in Drama [TBA]**

**DRM486H1 Topics in Drama [TBA]**
An in-depth examination of selected issues in the Theatre. Content may vary depending on instructor. See Undergraduate Handbook or the UC Drama Program website for more details.

**DRM486H1 A Short History of Theatre Violence [TBA]**
A half-credit practical course in staged combat and other elements of violence for the theatre, resulting in a Basic Level certification with Fight Directors Canada in: unarmed combat, single sword and quarter staff (students will have the choice to take the certification exam).
Prerequisite: DRM100Y1, 200Y1, 201Y1 and permission of department. (Offered in alternate years)

**DRM490Y1 Independent Studies in Drama [TBA]**

**DRM491H1 Independent Studies in Drama [TBA]**
A scholarly project chosen by the individual student. The student must work out details with a member of faculty who is willing to act as supervisor. A written proposal, signed by both student and instructor, must then be submitted for approval to the Drama Program Committee before registration and normally by May 31 of the preceding academic year. Open to advanced Specialist and Major students in the program.

## Faculty

### Professors Emeriti

S. Arntzen, MA, Ph D
E-J. Baek, MA, Ph D
J. Ching, MA, Ph D
R.W. Chu, BLS, MA
M. Dolezelova, MA, Ph D
F.P. Hoff, MA, Ph D (V)
A.V. Liman, MA
R.J. Lynn, MA, PhD
K. Nakajima, MA, M Phil (N)
L.C.D.C. Priestley, MA, M Phil, Ph D
W.A. Schlepp, B Sc, BA, Ph D
R. Tsukimura, MA, Ph D
A.H.C. Ward, MA
A.K. Warder, BA, Ph D
D.B. Waterhouse, MA, LRAM, FRSC, FRAS (U)

### Chair of the Department

V.T. Shen, MA, M Phil, Ph D

### Graduate Coordinator

R. Guisso, Ph D
A Sakaki, Ph D

### Undergraduate Coordinator

K. Kawashima, Ph D

### Professors

V.C. Falkenheim, MA, Ph D
J. Liu,MA, PhD
A. Sakaki, MA, Ph D
V.T. Shen, MA, M Phil, Ph D

### Associate Professors

E. Cazdyn, MA, PhD
R. Guisso, BA, D Phil
Y. Johnson, MA, Ph D
T. Keinstead, Ph D
Y. Meng, MA, Ph D
S. Sandahl, MA, Ph D
G. Sanders, BA, Ph D
A. Schmid, MA Ph D
S. Uyenaka, MA, Ph D *

### Assistant Professors

J. Ahn, Ph D
K. Kawashima, MA, Ph D
Y.G. Kim, MA M Ed, Ed D*
J. Poole, MA, Ph D
J. Song, MA, PhD
C. Virag,MA, PhD
Y.S. Yoo, Ph D*

### Senior Lecturer

I. Komuro-Lee, MA

### Lecturers

J. Arimori, MA
H.Y. Im,M Ed, MA*

* Part-time

The Department of East Asian Studies offers instruction to students who wish to learn about the historic and contemporary cultures of China, Japan and Korea, their interaction with one another, and their encounters with Western cultures. The disciplines pursued in the Department fall mostly within the humanities; additional courses on Asia are given by other departments in the Faculty of Arts and Science (Anthropology, Economics, Geography, History, Philosophy, Political Science, Sociology, and others). The Department of East Asian Studies recommends such courses to its students and will count many towards program requirements.

Courses offered by the Department of East Asian Studies fall into two main categories:

a) Courses that can be taken by students in other disciplines who wish to broaden their horizons. These encompass a variety of topics in the cultures of East Asia. They require no knowledge of East Asian languages.

b) Language and specialized courses for those in East Asian Studies programs. A full range of courses is available in Chinese, Japanese and Korean areas from the first year onwards, along with some instruction in Vietnamese.

Students seeking counseling should first contact the Undergraduate Co-ordinator, and in addition, all members of the Department provide advice and information, and the Undergraduate Co-ordinator or Program Administrator may direct students to them. In conjunction with Woodsworth College, the Department offers courses during June and July at the University of Hong Kong and in conjunction with the International Student Exchange Office, offers opportunities for exchanges with universities in China, Korea, Japan, Taiwan and Singapore. Students should also check the web page of the Asian Institute and the Dr. David Chu Program in Asia-Pacific Studies.

General Enquiries:
Robarts Research Library, 14th Floor, (416-946-3625)

## East Asian Studies Programs

### East Asian Studies Specialist, Major, Minor (Arts programs)

1. Enrolment in the program is open to students who have completed four full courses or their equivalent. Students who were enrolled in any EAS program prior to 2004-2005 may either switch to this new program, or may follow the criteria in place for the year in which they enrolled.
2. Students with an adequate knowledge of Mandarin Chinese, Japanese, or Korean should consult the Undergraduate Coordinator about the possibility of applying for a "language requirement waiver". This waiver allows students to substitute non-language courses for the language courses required by the program.
3. The department reserves the right to place students in the language course appropriate to their skill level. See Timetable for information on placement tests and interviews.
4. Students may count toward an EAS program those courses with East Asian content offered by other departments provided they appear in the Department web site or they have the permission of the Undergraduate Coordinator of EAS.

5. EAS102Y1 is a required course for all levels of the program.
6. EAS209Y is a required course for Specialist and Major programs.

**EAS Language Courses**
EAS 100Y1, 101Y1, 104Y1, 110Y1, 120Y1, 121H1, 122Y1, 200Y1, 201Y1, 210Y1, 216Y1, 220Y1, 222Y1, 223Y1, 282Y1, 290Y1, 300Y1, 310Y1, 320Y1, 321Y1, 322Y1, 381H1/Y1, 382Y1/H1, 383H1, 390Y1, 400Y1, 410Y1, 415Y1, 460Y1, 461Y1, 462Y1, 463Y1, 480Y1/H1, 482Y1/H1

**EAS Society-Culture EAS Courses**
EAS 102Y1, 202Y1, 206Y1, 207H1,209Y1, 211Y1, 215H1, 217H1, 233H1, 235H1, 237Y1, 238H1, 241H1, 246H1, 247H1, 251H1, 256H1, 257H1, 271H1, 272H1, 284H1, 293H1, 295Y1, 299Y1, 303H1, 305H1, 306Y1, 307H1, 309H1, 318H1, 324H1, 325H1, 327H1, 330H1, 333H1, 334Y1, 338H1, 340H1, 344H1, 345H1, 346H1, 347H1, 362Y1, 368Y1, 369H1, 372H1, 373H1, 374H1, 379H1, 389Y1, 395Y1, 398H1, 399Y1, 402Y1, 406Y1, 407H1, 408H1, 411H1, 412H1, 418H1, 431H1, 434H1, 435H1, 436Y1, 437Y1, 438Y1, 439H1, 442H1, 444H1, 452H1, 453H1, 456H1, 457H1, 462H1, 468Y1, 469Y1, 473H1, 476Y1, 477Y1, 485H1, 486H1, 488H1, 490H1, 493H1, 495Y1, 496H1

**Non-EAS Courses on East Asia**
Please see EAS Department web site

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NOTE on Language Requirements: The Major and Specialist programs require a certain level of language proficiency. If students can demonstrate during their placement interviews for language courses that they have already attained this level, they will be given a language requirement waiver and will be free to complete their programs with EAS society-culture courses. Although the language requirement for the Major and Specialist program is 2nd and 3rd year level, respectively, it does not prevent students from continuing to study language at higher levels. However, only two credits for major and three credits for specialist will be counted toward the fulfillment of the program regardless of the numbers of language courses students may take.

### Specialist program:
EAS specialists are especially urged to explore the avenues for study abroad in East Asia offered by the Faculty of Arts and Science Exchange Program.

12 full courses
1 EAS 102Y1, EAS 209Y1 (total of 2 credits)
2. Three full EAS language courses in one language. (total of 3 credits of any levels)
3. Seven full EAS society-culture courses, three of which may be non-EAS courses as listed on the departmental website; four courses must be at the 300/400-level. (total of 7 credits)

### Major program:
7 full courses
1. EAS102Y1, EAS 209Y1 (total of 2 credits)
2. Two full EAS language courses in one language. (total of 2 credits of any levels)
3. Three full EAS society-culture courses, one of which may be a non-EAS course as listed on the departmental website; one course must be at the 300/400-level. (total of 3 credits)

**Minor program:**
4 full courses (Language courses are not subject to the requirement of the minor program.)
1. EAS 102Y (1 credit)
2. Three full EAS society-culture courses, one of which must be 300/400-level; one of which may be a non-EAS course as listed on the departmental website. (total of 3 credits)

## Faculty of Arts & Science Language Citation

The Department of East Asian Studies participates in the Faculty of Arts and Science's Language Citation initiative for Chinese, Japanese, and Korean. The study of any of these languages is a challenging and time consuming endeavour, which offers rich rewards for students interested in the cultures, societies, and economies of East Asia.

In each language the Language Citation recognizes a significant level of achievement in language study with a high level of academic success. The Citation in Chinese is available to students who complete EAS 100Y1 or EAS 101Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in EAS 200Y1 or EAS201Y1 and EAS300Y1. The Citation in Japanese is available to students who complete EAS120Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in EAS220Y1 and EAS 320Y1. The citation is Korean is available to students who complete EAS110Y1 (or the equivalent prerequisite training) and earn a B- in EAS210Y1 and EAS310Y1.

Students should note that, as explained on page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

## East Asian Studies Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, (see page 26) all EAS courses are classified as HUMANITIES COURSES except for JMC 301Y1 which is classified as both a Humanities and Social Science course.

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### EAS Language Courses:
Note 1.

The Department reserves the right to place students in the language course appropriate to their level of language skill. For EAS 290Y1 and all language courses at the 100-level, preference is given to students who need these courses to fulfill the requirements for Specialist and Major programs in the Department.

Note 2.

Students who enroll in any EAS language courses and are subsequently discovered to have prior background and/or have higher language competency than is appropriate for enrolment in that course may be removed at any time at the discretion of the Department.

## Chinese

**EAS100Y1 Modern Standard Chinese I [52T, 52S]**
Intended for students with no or minimal background in any Chinese dialect, this course is an introduction to Modern Standard Chinese as a foreign/second language in listening, speaking, reading, writing and translation. Minimum of 550 Chinese characters will be covered.
Exclusion: EAS101Y1

**EAS101Y1 Modern Chinese I for Students with Prior Background [26T, 52S]**
Designed for students who can speak and understand elementary Chinese of any dialect because of family backgrounds but have not studied pinyin, nor read and write enough to take a second-year course. Minimum of 700 single Chinese characters will be covered.
Exclusion: EAS100Y1

**EAS200Y1 Modern Standard Chinese II [52T, 52S]**
As a continuation of EAS100Y. Those who are suitable for this course but have not studied some content in EAS100Y, especially pinyin, must make an effort to catch up by themselves.
Prerequisite: EAS100Y1 (minimum grade 67%)

**EAS201Y1 Modern Chinese II for Students with Prior Background [26T, 52S]**
As a continuation of EAS101Y. Those who are suitable for this course but have not studied some content of EAS101Y, especially pinyin, must make an effort to catch up by themselves.
Exclusion: EAS200Y1, EAS290Y1, LGGB01H3F, LGGB02H3S, or those with near native fluency in any Chinese dialect.

**EAS290Y1 Chinese Language for Non-Mandarin Speakers I [78S]**
For students who speak a Chinese dialect other than Mandarin and have acquired a basic knowledge of written Chinese. Gives basic knowledge of spoken Mandarin and ability to read both literary and modern texts.

**EAS300Y1 Modern Standard Chinese III [52S]**
An intermediate level language course. Original writings chosen from the literature and social history of modern China. Oral discussion, written composition, selective translation, and techniques of reading for comprehension.
Exclusion: EAS290Y1. Not open to native speakers of Chinese
Prerequisite: EAS200Y1 and EAS201Y(minimum 70 % or permission of instructor)
Recommended preparation: EAS206Y1

**EAS390Y1Y Chinese Language for Non-Mandarin Speakers II [52S]**
Stress on oral presentation and analysis of different styles of scholarly writing. Language laboratory work mandatory.
Prerequisite: EAS290Y1Y

**EAS400Y1 Modern Standard Chinese IV [78S]**
Further study of texts for a wide range of topics on Chinese society and culture
Prerequisite: EAS300Y (minimum 73%) or permission of the instructor

## Japanese

**EAS120Y1 Modern Standard Japanese I [52L, 78T]**
This course is designed for those with no or a very limited Japanese language background. The course aims to build students' basic written and spoken skills in the language as well as provide relevant cultural information. By the end of this course, students should expect to be able to read and write simple passages, as well as 220 kanji, and to engage in simple daily conversation. The course consists of mandatory lectures and tutorials. Newly admitted students and those who have formally or informally learned Japanese (e.g., at high school) are required to be interviewed to enroll in this course. receive permission to take this course
Exclusion: EAS121H1

**EAS121H1 Japanese I for Students with Prior Background [26L, 39T]**
This course is for those with a background in the Japanese language. Ability to read and write hiragana and katakana, as well as approximately 100 basic kanji is required to enroll in this course. Students are also required to have basic proficiency in the language, including the ability to describe the locations of things and people; to describe past and non-past events and states; and to provide reasons for actions and statements. Students must also have some knowledge of basic counters. The course consists of mandatory lectures and tutorials. Students are required to be interviewed and, often, to take a placement test to enroll in this course.
Exclusion: EAS120Y1

**EAS122Y0 Summer Japanese in Japan I [TBA]**
Japanese for those who have never studied or know little about the language. Those who have successfully completed this course are able to take EAS121H1 or 220Y1 based on the result of the interview and/or the placement test.
Prerequisite: passing the placement test prepared by the host school
Exclusion: EAS120Y1Y
Recommended Preparation: Hiragana and Katakana characters

**EAS220Y1 Modern Standard Japanese [78L, 52T]**
An advanced beginners' level language course. An introduction to complicated sentence structures and basic vocabulary for daily life. All four language skills are emphasized and approximately 300 kanji are introduced. Some cultural aspects are introduced as well. Both lectures and tutorials are mandatory. Open only to those whose Japanese level is equivalent to Level 4 of Japanese Language Proficiency test and/or to those who have successfully completed a full year Japanese language course at other academic institution. Those who have not taken EAS120Y1/EAS121H1 or do not have appropriate prerequisite need to pass a placement test followed by an interview
Prerequisite: EAS120Y1/EAS121H1 (minimum 67%).

**EAS222Y0 Summer Japanese in Japan II-a [TBA]**
Japanese for those who know a little about the language. Familiar with Hiragana, katakana and some kanji as well as basic sentence patterns. Those who have successfully completed this course are able to take EAS220Y1 or EAS320Y1Y based on the result of the interview and/or the placement test.
Prerequisite: Passing the placement test prepared by the host school
Recommended Preparation: Two-thirds of the contents covered in EAS120Y1

**EAS223Y0 Summer Japanese in Japan II-b [TBA]**
Japanese for those who have completed a course equivalent to EAS120Y1/EAS121H1 or passed Level 4 of the JLPT. Those who have successfully completed this course are able to take

EAS320Y1 based on the result of the interview and/or the placement test.
Prerequisite: Passing the placement test prepared by the host school
Exclusion: EAS220Y1Y
Recommended Preparation: One-third of the contents covered in EAS220Y1Y

**EAS320Y1 Modern Standard Japanese III (formerly EAS 348H1, 349H1) [130S]**
This is a low intermediate level course. Appropriate for those who have learned Japanese for two years in an academic institution and/or who have passed Level 3 of the Japanese Language Proficiency Test. The knowledge of the strong foundation of the beginners' level grammar and 500 basic kanji are required. Developing all four skills (speaking, listening, reading and writing) is equally focused. All the classes are conducted in a seminar setting. Those who have not taken EAS220Y or do not have an appropriate prerequisite need to pass a placement test after an interview
Prerequisite: EAS220Y1 (70% minimum)
Exclusion: EAS348H1, 349H1

**EAS321Y0 Summer Japanese in Japan III-a [TBA]**
Lower intermediate Japanese for those who have completed a course equivalent to EAS220Y1 or passed Level 3 of the JLPT. Those who successfully have completed this course are able to take EAS320Y1 or EAS460Y1/EAS461Y1 based on the result of the interview and/or the placement test.
Prerequisite: Passing the placement test prepared by the host school
Recommended Preparation: The contents covered in EAS220Y1

**EAS322Y0 Summer Japanese in Japan III-b [TBA]**
Lower intermediate Japanese for those who have completed a course equivalent to EAS320Y1 or passed Level 3 of the JLPT. Those who successfully have completed this course are able to take EAS320Y1 or EAS460Y1/EAS461Y1 based on the result of the interview and/or the placement test.
Prerequisite: Passing the placement test prepared by the host school
Exclusion: EAS320Y1

**EAS460Y1 Modern Standard Japanese IVa (formerly EAS460H1) [78S]**
This is a high intermediate level course. Focused on oral/aural communication. Emphasis is on acquisition of vocabulary, spoken styles and commutation strategies that are required to carry formal/informal conversation in contemporary Japanese society. Native or near-native speakers are not permitted to take this course. Those who have not taken EAS320Y and/or do not have appropriate prerequisite must attend an interview to receive permission to take this course.
Prerequisite: EAS320Y1Y
Exclusion: EAS460H1

**EAS461Y1 Modern Standard Japanese IVb (formerly EAS461H1) [78S]**
This is a high intermediate level course. Focused on advanced reading and writing skills. Emphasis is on acquisition of advanced grammar, vocabulary/kanji and expressions especially in authentic written Japanese texts. Native or near-native speakers are not permitted to take this course. Those who have not taken EAS320Y and/or do not have appropriate prerequisite must attend an interview to receive permission to take this course.
Prerequisite: EAS320Y
Exclusion: EAS 461H1, EAS462Y0, EAS463Y0

**EAS462Y0 Summer Japanese in Japan IV-a [TBA]**
Upper Intermediate Japanese for those who are prepared to take Level 2 of the JLPT. Those who have successfully completed this course might be able to take EAS460Y1 and/or EAS461Y1 based on the result of the interview and/or the placement test.
Prerequisite: Passing the placement test prepared by the host school

**EAS463Y0 Summer Japanese in Japan IV-a [TBA]**
Advanced Japanese for those who have completed a course equivalent to EAS460Y1/EAS461Y1 or passed Level 2 of the JLPT.
Prerequisite: Passing the placement test prepared by the host school
Exclusion: EAS460Y1, EAS461Y1

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### Korean

**EAS110Y1 Modern Standard Korean I [104S]**
An introductory Korean language course open to students with no prior knowledge of Korean. Comprehension, speaking, reading and writing are covered but the main emphasis is given to spoken Korean.

**EAS210Y1 Modern Standard Korean II [52S]**
Students study grammatical structure in depth through reading various forms of writing. Attention given to idiomatic expressions with emphasis on the use of language in actual context.
Prerequisite: EAS110Y1

**EAS216Y1 Modern Standard Korean for Students with Prior Background [52S]**
For students with limited prior background in spoken and/or written Korean. Reading, speaking, writing and grammar are equally emphasized. Access is limited and based on the results of a placement interview.
Exclusion: EAS210Y1, EAS110Y1
Prerequisite: Placement test
Recommended preparation: Limited prior background in spoken/or written Korean

**EAS310Y1 Modern Standard Korean III [104S]**
Expansion of vocabulary, practice in reading comprehension and active skills of writing and conversation are emphasized. Students participate in discussions and compose short essays. Selected readings include different styles of work on Korean culture, history, society and literature.
Prerequisite: EAS210Y1

**EAS410Y1 Modern Standard Korean IV [52S]**
Emphasis on communicative skills, grammatical structure, efficient reading ability and composition. Readings from original writings on various aspects of Korean culture.
Prerequisite: EAS310Y1

**EAS415Y1 Advanced Readings in Korean [52L]**
This course provides various readings of original texts and newspapers for students with knowledge and language ability at least equivalent to those who have successfully completed EAS210Y1. Besides extensive reading, the course introduces 800 Chinese characters often used in mixed-scripts.
Prerequisite: EAS210Y1

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**Sanskrit**

**EAS282Y1Y Elementary Sanskrit (formerly EAS180Y1) [104S]**
Elementary Sanskrit covers script, phonology, grammar and syntax to enable a student to read simple narrative Sanskrit texts with the help of a dictionary after one year.
Preparation: Adequate knowledge of English grammatical terminology
Exclusion: EAS180Y1

**EAS379H1 The History, Structure and Politics of the Hindi Language [52L, 26P]**
This course traces the origins and development of Hindi/Urdu via a multitude of Northern Indian dialects to the present day Modern Standard Hindi. The linguistic development in the late 19th and the 20th centuries is intimately linked to the emerging Indian, especially Hindu, nationalism. The politically complicated relationship between Hindi and Urdu will be highlighted. Knowledge of the devanagari script is required.
Recommended Preparation: 1 year of Hindi, Urdu, Sanskrit or other Indo-Aryan language

**EAS381H1 Intermediate Sanskrit I [26S]**
Ethics and worldly wisdom was taught in classical and medieval India through animal fables like the Hitopadeśa and the Pañcatantra. Along with the later tales of the Kathāsaritsāgara these stories provide suitable readings for beginning Sanskritists and serve as an introduction to ancient Indian social and cultural life.
Prerequisite: EAS282Y1 Introductory Sanskrit or equivalent
Exclusion: EAS382H1/Y1

**EAS383H1 Intermediate Sanskrit II [26S]**
The Mahābhāptrata and the Rāmāyana epics provide suitable and relatively easy readings for students who have completed an Introductory Sanskrit course. The epics illustrate the social, cultural and ethical values of classical and medieval India and play an important role even in modern India.
Prerequisite: EAS282Y1 Introductory Sanskrit or equivalent

**EAS480H1 Advanced Sanskrit I [26S]**

**EAS480Y1 Advanced Sanskrit I [52S]**
Reading in classical Sanskrit poetry and prose.
Prerequisite: EAS382Y

**EAS482H1 Advanced Sanskrit II (formerly EAS482Y) [26S]**
Technical Sanskrit: readings from alamkarasastra, dharmasastra, darsana and other non-literary texts.
Prerequisite: EAS382Y1
Exclusion: EAS482Y1

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**Vietnamese**

**EAS104Y1 Elementary Vietnamese [78S]**
An introductory course for students, with equal emphasis on reading, writing, speaking and grammar.

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**EAS Society-Culture Courses**

**100-Series Courses**

**EAS102Y1 Introduction to East Asian Civilizations [52L, 26T]**
Highlights of Chinese, Japanese and Korean civilization to about 1600.A.D. The focus is on political, social and intellectual history, as well as on the interactions among the three cultures. Required for students taking specialist, major and minor programs in East Asian Studies.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

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**200-Series Courses**

**EAS202H1 Modern East Asian History (formerly EAS204Y1) [26L, 13T]**

**EAS202Y1 Modern East Asian History (formerly EAS204Y1) [52L, 26T]**
Examines how various histories of East Asia can be written by examining specific themes in the history of China, Japan, and Korea from roughly 1600 to the outbreak of the Cold War.
Exclusion: EAS204Y1; HIS 107Y1; Not open to students who took EAS102Y1 in 2001-2002

**EAS203Y1 China and the Internet [52L]**
The course explores the history of the internet in China, studies its current and future distribution, government policies around the net, and the social implications of its spread. Hands on exploration of sites for research on Chinese culture, politics, business and economics.
Prerequisite: Reading knowledge of Chinese

**EAS206Y1 Classical Chinese I [52S]**
An introductory reading course in Classical Chinese with emphasis on Grammatical analysis and translation into English. Open only to students enrolled in an EAS Major or Specialist subject POSt.
Exclusion: EAS290Y1
Prerequisite: Must have already taken at least 3 EAS half courses
Co-requisite: EAS200Y1/201Y1
Recommended Preparation: Two or more years of Modern Standard Chinese

**EAS209Y1 Approaches to East Asia [52L]**
Intended for EAS specialists and majors, this course introduces various approaches and methodologies for the advanced study of East Asian society and culture. Required for EAS specialists and majors.

**EAS211Y0 Chinese Art [52L]**
A survey of the visual arts of China from earliest times to the end of the traditional era: the aesthetics and historical/cultural context of painting, calligraphy, sculpture, architecture, and the other arts. Field trip is included. (Normally offered only in Summer)

**EAS215H1 History of Chinese Thought: Tang through Ming Periods [26L, 26P]**
This course examines the vibrant "middle period" of Chinese history – a period of profound transformation in which some of the most distinctively traditional forms of thought, religious belief, artistic and literary expression, and scholarly practices emerged and developed in China. Topics studied include: the establishment of empire as a norm in China (and its implications); the rise of the literati and literati culture; the examination system; Neo-Confucian philosophy; visual culture; the sciences of the body; and popular and print culture.

**EAS217Y1 Major Aspects of Contemporary Korea [52L]**
A broad perspective on contemporary Korea. Emphasis is on the last 30 years of political dynamics on the peninsula which brought about the "Korean-style democracy" and "Korean-style economy" (chaebol), plus Juche ideology in North Korea.

**EAS233H1 History of China's Performing Arts [26L]**
An historical overview of Chinese theatre, a reading of selected texts, viewing of videotaped performances and class discussions of the characteristics of this art form.
Enrolment priority: Given to students enrolled in an EAS program and Drama students. Normally offered only in Summer.

**EAS235H1 Perceptions of China in Japanese Literature (formerly EAS235Y1) [26L]**
Lectures and discussions on Japanese literary negotiations with China, the Chinese and Chineseness, ranging from celebration of the same cultural practice, to nativist resistance to China the hegemonic, to aestheticization of China the exotic/erotic. Required readings are available in English translation, which include: Tale of Genji, Tale of Middle-Councillor Hamamatsu (medieval romance); Haku Rakuten (No play); Battles of Coxinga (Kabuki play); Three-Cornered World (by Soseki); Wild Goose (by Ogai)
Exclusion: EAS235Y1

**EAS237Y1 Japanese Cinema: Film Form and the Problems of Japanese Modernity [52S]**
How film aesthetics relate to the most profound socio-historical problems of Japanese modernity. How various film makers employ cinematic form to engage the social problems of their moment.

**EAS238H1 Japanese Poetry & Fiction: Earliest Times to the 14th Century [26L]**
The art of narrative and poetry from Japan's creation myths through medieval monk-poets. An introduction to Japan's classical literature. (Readings in English)

**EAS245H1 Pre-Modern Japanese History [26P]**
A survey of the history of pre-modern Japan from earliest recorded histories to the disintegration of the feudal system in the 19th century. Uses a wide range of translated primary Japanese texts to illuminate the emergence of cultural forms and their conjunctions with social, economic, religious and political trends.
Prerequisite: EAS102Y1

**EAS241H1 History of Chinese Philosophy [39L]**
An historical and systematic introduction to the basic ideas of the main Chinese philosophical schools and their development, including Confucianism, Daoism, Buddhism, and Neo-Confucianism; the challenge of Western thought and the emergence of modern Chinese philosophy.
Exclusion: PHL237H1

**EAS246H1 Pre-Modern Japanese Cultural History [26L, 13T]**
A survey of the history of pre-modern Japan from earliest recorded histories to the disintegration of the feudal system in the 19th century. Uses a wide range of translated primary Japanese texts to illuminate the emergence of cultural forms and their conjunctions with social, economic, religious and political trends
Recommended preparation: EAS102Y1

**EAS247H1 History of Capitalism in Modern Japan [26L, 13T]**
This course provides an historical narrative of the development of the capitalist mode of production in Japan, from the mid-19th century to the present day. Readings will include texts from various disciplines: economics, philosophy, social and labor history, literature.

**EAS251H1 Aesthetics and Politics in 20th Century Korea [26L]**
This lecture course examines key questions and texts in the history of literature from the Korean peninsula during the twentieth century, exploring how aesthetic form has refracted the experiences of colonialism, division, and the formation of opposing nation-states.

**EAS256H1 Chinese Literature (Pre-Qin to Tang) (formerly EAS336H1) [26L]**
A survey course of major works in premodern Chinese literature, including poetry, essays, and short narratives from the pre-Qin through Tang eras (11th BCE – 10th C CE). Readings are available in translation and in the original. All lectures and coursework are in English. Enrolment priority: Students enrolled in an EAS subject POST.
Exclusion: EAS336Y1, EAS336H1

**EAS257H1 Chinese Literature (Song to Qing) (formerly EAS337H1) [26L]**
A survey course of major works in premodern Chinese literature, including poetry, essays, short narratives and drama from the Song through Qing dynasties (10thC – 19thC). Readings are available in translation and in the original. All lectures and coursework are in English. Enrolment priority: Students enrolled in an EAS subject POST.
Exclusion: EAS337Y1, EAS337H1

**EAS271H1 20th Century Korean History [26L]**

**EAS271Y1 20th Century Korean History [52L]**
A survey of the history of Korea from the Tonghak uprising and Sino-Japanese war of 1894-1895, through the colonial period, division, and civil war, to the democratization movement.
Exclusion: EAS271Y1, EAS271H1

**EAS272H1 Post-War Korean Society & Culture [26L]**
This course focuses on critical analysis of South Korean film and literature as a way of understanding political and cultural contexts of post-Korean War South Korean Society and Culture. This class is devoted to developing critical perspectives on historical context and cultural representation of Korea. In particular, it introduces students to ongoing construction of identities about marginalized Koreans through major political incidents, such as Kwangju uprising, and LA incident.

Exclusion: EAS351H1
Prerequisite: EAS271H; EAS209Y1 for EAS students

**EAS284H1 Modern Chinese Literature [26L]**
This course offers a critical examination of twentieth-century Chinese literature. It aims to explore the various ways of being modern as well as different meanings of writing Chinese literature. We will focus upon the important developments of literary writing over time, from the inception of New Literature in the 1910s, the development of realism and modernism of the 1930s, to the emergency of post-revolution and postmodernist writings of the 1990s. Great emphasis is also placed on generating a dialogue on interpretations of key works. In doing so, we will be exercising the skills of reading literary works in terms of aesthetic choices and strategies of cultural politics.

**EAS293H1 Fundamentals of Japanese Grammar [26L]**
This course is designed for those who wish to develop a thorough knowledge of Japanese Grammar in order to advance all aspects of language skills to a higher level. All grammatical items introduced in elementary levels are examined from both linguistic and cultural perspectives in depth well beyond regular language courses.
Prerequisite: EAS120Y1/EAS121H1
Recommended Preparation: LIN204H

**EAS295Y0 Selected Topics in East Asian Studies [TBA]**
This course allows students to pursue the specialized study of specific topics tailored to the research and study opportunities available in Hong Kong and the expertise and interests of the instructor. Available only in the Woodsworth College Hong Kong Summer Program.

**EAS299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

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### 300-Series Courses

**JMC301Y1 State & Society in 20th Century China [52L]**
This course explores China's efforts to construct a modern and effective political order in the face of powerful demographic and revolutionary challenges. The clash between competing ideologies, political and social movements and institutional alternatives in the context of rapid social and economic change are analyzed.
Prerequisite: EAS102Y1/HIS280Y1/328Y1/JMC201Y1/POL215Y1
This course is classified as both a Humanities and Social Science course

**EAS303H1 Technology of Social Engineering: Women in 20th Century East Asia [26L]**
This course aims to teach how East Asian modern societies were engineered through projecting women into particular being/positions. "New women" discourse in early 20th century and industrial motherhood/wifehood to late 20th century in Japan, China, and Korea will be the central theme.
Prerequisite: EAS209Y1

**EAS305H1 Art and Literary Theory of Pre-Modern China in Translation (formerly EAS305Y1) [52L]**
A survey course of works of Chinese painting and calligraphy theory and literary criticism from the pre-Qin period to the Qing dynasty. Readings are available in English.
Exclusion: EAS305Y1

**EAS306Y1 Classical Chinese II (formerly EAS335Y1) [52S]**
The course helps students gain more in-depth control of grammatical structures, read classical materials with greater ease and discuss academic and scholarly topics more articulately.
Prerequisite: EAS206Y1 (minimum 70%)

**EAS307H1 Chinese Political Philosophy [26S]**
The course analyses both historically and systematically the development of Chinese political philosophy from ancient times to the present day.
Prerequisite: PHL237H1

**EAS309H1 Modern Chinese Prose [26S]**
A survey of representative works of prose written by twentieth-century Chinese writers. This course focuses on reading texts, as well as analyzing their textual structure, aesthetic values, and historical context. Readings are available in translation and in the original.

**EAS311H1 A History of Japanese Monsters [26L]**
This course will examine the historical development of Japanese monsters, from roughly the 7-8th centuries to modern times. We will focus on how the changing understanding of monsters in society has embodied certain fissures in Japanese culture, especially with regard to gender and class.
Prerequisite: EAS102Y1

**EAS318H1 Rethinking Modernism: The Perspectives of Mainland China, Taiwan and Hong Kong [26L]**
Modernism is one of the important cultural heritages of the last century that call for critical reflections in light of novel perspectives and new methodologies. Postmodern critical thinking and postcolonial scholarships have in particular made significant impact on ways of rethinking modernism across national histories. This course takes various forms of modernism(s) across China, Taiwan and Hong Kong as the object of study, and the postcolonial and postmodernist approaches to modernism as the refashioned methodological possibilities. Readings of main modernistic writings, studying cinema and arts originated from the above different localities. Discussions on such questions as how can theoretical generalizations about modernism be adequately grounded in interconnected histories, languages, as well as experiences of colonialism and modernity? How does the temporality of modernism get translated across different locations of writing? How do we understand the lines of solidarity and tension among artists and writers of different camps or localities? The goal of this course is not to find a better definition for modernism but to release modernisms to fresh ways of thinking and imagination.

**EAS324H1 Mysticism in East Asia Revisited [26L]**
In this course we will explore the topic of mysticism in East Asia by paying close attention to and questioning the relation between the metaphors, experiences, texts, behaviors, practices, and objects that we often label "mystical." Sources from

Daoism, Buddhism, local cults, medicine, new religions, and popular media in East Asia will be consulted.
Recommended Preparation: EAS102Y1

**EAS325H1 The Body in East Asian Religions [26L]**
In this course we will examine the history of the body and its relation to particular forms of religiosity in East Asia. What influence did the religious traditions of this region have on the way in which the body was constructed and disciplined? What role did the body play in the development of these traditions? Both pre-modern and modern forms of religiosity will be considered.
Recommended Preparation: EAS102Y1

**EAS327H1 Japanese Fiction and the Nation [26S]**
The focus is on modern Japanese literature, with special attention given to literature's relation to the nation. Students track how this literature transforms throughout Japanese modernity and how its meaning and effects function to simultaneously tie together and pull apart national identity.
Prerequisite: At least one course in literature or East Asian Studies

**EAS330H1 Narrative Strategies in Modern Japanese Fiction [26S]**
Discussion of narratives by Natsume Soseki, Mori Ogai, Tanizaki Jun'ichiro, and Ibuse Masuji, with attention to issues in narratology and contemporary narrative studies such as: the voice and perspective; the gender and power relationships of the narrator-narratee-narrated; the act of narrating, writing, listening and reading; and metafictional paradox. Reading are assigned from secondary and theoretical materials. All readings are available in English.

**EAS333H1 Modernism and Colonial Korea [26L]**
This course considers the problem of colonial modernism through a close reading of literary and other cultural tests from early 20th century Korea. It asks what it means to enter modernity under colonial rule, and questions the relationship between imperialism, writing and subjectivity in particular. Topics covered include the role of literature in elaborating new concepts of subjectivity, literature and the fine arts as assimilatory practices, the emergence of urban space and consequent reconfiguration of notions of the rural, and changing notions of time and space in the cultural products of nativism. Readings of literary works will be accompanied by showings of paintings and photographs from the period, as well as discussion of theoretical essays on modernism.

**EAS334Y1 The Chinese Novel [52L]**
The development of Chinese fiction from earliest times with emphasis on the twentieth century. Readings in English translation; lectures in English. Normally offered during summer.

**EAS338H1 Classical Daoism [52L, 26P]**
This course will examine some major issues of classical Daoist thought, such as Dao and cosmos, body and self, human nature, language and knowledge, political visions etc., based on both textual and ideological analysis of some Daoist works such as the Laozi, the Zhuangzi, and some Huanglao Daoist texts, to be updated with recently unearthed manuscripts in silk and bamboo slips.
Prerequisite: PHL237H1, EAS241H1

**EAS340Y1 The Chinese: Society & Culture in Transition (formerly EAS340H1) [52S]**
The course explores issues of identity, self, and community among other topics in a broad exploration of cultural transformation in China.
Exclusion: EAS340H1
Recommended preparation: EAS102Y1

**EAS344H1 Topics in Chinese Society and Culture [26S]**
This course addresses selected themes and issues in China's complex process of modernization and reform, the format and requirements to vary according to theme, and class and instructor preferences and interests.
Recommended preparation: One course on modern China or East Asia or equivalent

**EAS345Y1 The Rise of Greater China: Issues & Topics (formerly EAS345H1) [52S]**
This course looks at China in regional perspective, including issues of Taiwan, Hong Kong and People's Republic of China economic integration. The role of overseas Chinese communities globally and in Southeast Asia also receives attention. The form and focus of the course varies according to class and instructor interests. Normally, offered only in the Hong Kong Summer Program.
Exclusion: EAS345H1
Recommended preparation: One course on modern China or East Asia or equivalent

**EAS346H1 Self and Imagination in Pre-Modern China [52L]**
In this seminar we will explore the diverse and intriguing ways in which subjectivity was conceived in pre-modern China (up to the twelfth century) by way of the various images thinkers invoked to make sense of it. Works studied include: Warring States philosophical treatises; Buddhist and religious Daoist texts on meditation and self-cultivation; literary theory and poetry; philosophical prose essays by literati; and painting.

**EAS347H1 Everyday Life in Modern Japan [26L]**
The history of modern Japan around the problem of "everyday life" and its relationship to capitalism. Using a range of literary, philosophical, economic and ethnographic materials that deal with the development of capitalism in Japan, as well as Japanese colonialism, imperialism and fascism, explores ways to specify and critique what is called "everyday life".
Recommended preparation: EAS247H1

**EAS361Y1 Zen Buddhism [52L]**
This course will serve as an introduction to the Zen Buddhist traditions of China, Korea, and Japan. A heavy emphasis will be placed on the radical views of history, language, ritual, self, and enlightenment espoused by these traditions. The course will also examine issues related to Zen monasticism, the development of koans, and the definition of orthodoxy in both premodern and modern Zen. Students will be asked to explore these and other topics by paying close attention to the historical, doctrinal, and institutional contexts from which they arose. Readings will include both primary material in translation and secondary scholarship.

**EAS362Y1 Classical Japanese [52S]**
Introduction to classical Japanese, followed by readings of various short works by classical authors.
Prerequisite: EAS220Y1

**EAS368Y1 The Philosophy of the Buddha (formerly EAS260Y1) [52S]**
The philosophy of the Buddha as preserved in the Pali Canon and its development in the Early Schools in India.
Exclusion: EAS260Y1
Recommended preparation: RLG206Y1

**EAS369Y1 Transformation of Buddhist Practice in the Contemporary World [52L]**
The course explores various forms of traditional Buddhist practice in relation to Buddhist philosophy, and observes the transformation of these practices in the contemporary world. Principal studies include Theravada tradition, Tibetan Buddhism, Chinese Pure Land and Chan traditions. To provide a foundational understanding of Buddhist philosophy and its relation to meditative practice. This course will also examine the influence of Buddhism on films and material culture.
Recommended preparation: RLG206Y1

**EAS372H1 Early Korean History [26L]**
This course is a survey of issues in early Korean history with particular attention to theuses of and approaches to ancient history in contemporary Korea.
Prerequisite: EAS271H1/272H1

**EAS373H1 Choson History [26L]**
This course examines various approaches - economic, social, gender, political, international, and cultural - to the history of Choson Korea.
Prerequisite: EAS271H1/272H1

**EAS374H1 Modern Japan and Colonialism [52L]**
This course interrogates the history of Modern Japan from the perspective of Japan's colonial exploits in East Asia. The course will also address the political-economy and culture of the military Occupation of Japan by the Supreme Command of the Allied Powers. Texts from economics, philosophy and literature will be used.

**EAS379H1 The History, Structure and Politics of the Hindi Language [52L, 26P]**
This course traces the origins and development of Hindi/Urdu via a multitude of Northern Indian dialects to the present day Modern Standard Hindi. The linguistic development in the late 19th and the 20th centuries is intimately linked to the emerging Indian, especially Hindu, nationalism. The politically complicated relationship between Hindi and Urdu will be highlighted. Knowledge of the devanagari script is required.
Recommended Preparation: 1 year of Hindi, Urdu, Sanskrit or other Indo-Aryan language

**EAS389Y1 History of Korean Religion [52L, 26P]**
This course offers a broad overview of Korean religious tradition.

**EAS395Y0 The Development of Greater China [TBA]**
To achieve an in-depth understanding of China, this course discusses China's national and international issues in the "living textbook." It emphasizes current events and hot topics in the media. The focus may vary depending on current events and the instructor's interests. Normally offered only in the Woodsworth College Hong Kong Summer Programme.

**EAS398H0 Independent Experiential Study Project**

**EAS399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting.
See page 48 for details.

## 400-Series Courses

**EAS406Y1 Thinking about things: Material Culture in East Asia [52S]**
Intensive seminar exploring theories of the object, the histories of objects in East Asia, and critical thinking about the process of research. Through theoretical readings, class and individual research projects, the seminar asks how to formulate research questions, use the internet and other resources, and present discoveries in a class conference.

**EAS407H1 Textual Analysis of Classical Chinese Philosophy [26S]**
Readings of texts from ancient and medieval Chinese philosophy. Beginning by linguistic (especially semantic) analysis of key words, structure and meaning of sentences, paragraphs and text as a whole. Philosophical analysis proceeds from linguistic analysis.
Prerequisite: PHL237H1, EAS306Y1

**EAS408H1 Modern Taiwanese Literature [26S]**
A general survey of modern Taiwanese literature from 1949 until today. It attempts to examine issues such as historical/cultural context, oral/written language, self-identification, gender, human rights, etc., central to understanding the Taiwanese experience. Readings are available in translation and in the original.

**EAS411H1 Art and Archaelogy of Early China I [52L, 26P]**
With extensive introduction to recent archaeological discoveries in China, this course explores development of ancient societies from prehistory to the Bronze Age of China, and to offer students with an understanding of the origins and formation of Chinese civilizations.
Prerequisite: Only for third or fourth years Art and Science students.

**EAS412H1 Technology and Material Cultures of Ancient China [52L, 26P]**
This course introduces prehistoric and Bronze Age technology and material cultures of early China. The course is designed for students to have an understanding of the development of ancient technologies (e.g. bronze, jade, and lacquer) and associated life of ancient China from archaeological perspectives.
Prerequisite: EAS411H1

**EAS418H1 Topics in Chinese Art Theories [26S]**
This course will focus on theories of Chinese arts by critically analyzing various theoretical texts on music, painting, calligraphy, literature, in the form of special treatises and documents recorded in the Classics.
Prerequisite: PHL237H1, EAS306Y1

**EAS431H1 Advanced Topics in Japanese Cinema [26S]**
The focus ranges from the examination of cross-cultural theoretical problems (such as Orientalism) to a director based focus, from the examination of genre (such as documentary or the category of genre itself) to the way film intersects with other cultural forms and technologies (such as Video and New Media)
Prerequisite: EAS237Y1

**EAS439H1 The Global Bildungsroman: Narratives of Development, Time and Colonialism [26L]**
Through a sustained reading of several novels this course studies Bildungsroman, the story of an individual's "coming of age," in the context of twentieth-century political, cultural, and social developments of imperialism, anti-colonialism, human rights discourse, and globalization. Our focus will be novels from the (post)colonial world and theoretical essays on the Bildungsroman

form. The course aims to provide a model for rethinking literary history and literary genres within a global context. We will thus not read these novels as copies of European Bildungsroman, but consider how their form relates to social formations of colonialism and globalization. This will entail, for example, exploring the temporal structure which undergirds both the form of the novel and the notion of self-development that is then aligned with development of the nation, colony, or otherwise. Attention will be paid both to how these novels instantiate, resist or otherwise engage creatively with the novelistic conventions of human development, and to our own desire to read novels as Bildungsroman. Authors may include Yi Kwangsu Wu Zhuoliu Pramoedya Ananta Toer, Kang Younghill, Tsitsi Dangarembga, Camara Laye, amongst others.

**EAS444H1 The City, Body and Text in Modern Japanese Literature [26S]**
Examines how the city and body exert formative forces on the text, and how the practice of writing and reading texts might inform the ways we, corporeal beings, experience the city as manifested in the nineteenth century Japanese literature. Required readings are available in English.
Prerequisite: Successful completion with the minimum grade of 75% in EAS235, EAS237, EAS327, EAS330, EAS431, EAS456 or one of the humanities program at U of T (e.g., English, art history, philosophy, etc.)

**EAS452H1 The Construction of Gender in Traditional China [52L, 26P]**
This course examines the philosophical, societal and cultural influences which defined woman/female/femininity and man/male/masculinity in China before the seventeenth century. Some attention is devoted to sexual diversity.
Recommended Preparation: EAS102Y1Y

**EAS453H1 Gender, Sexuality & Modernity in China, Korea and Japan [52L, 26P]**
This course focuses on the changing sexual mores and the challenges to the traditional gender systems of East Asia brought by the processes of modernization and globalization/westernization.

**EAS456H1 Japan as seen by ?: Reference, Apparatus, Operation [26S]**
Discusses how images of Japan, charged with varied degrees of desire for empirical knowledge, have contributed to contemporary novels and plays by David Mitchell, Ruth L. Ozeki, David Mamet, Joy Kogawa, Kazuo Ishiguro, Marguerite Duras, and David Hwang. All the readings, including Japanese literary and theoretical, are available in English.

**EAS457H1 Special Topics in Modern Japanese History [26S]**
Analyzing contemporary monographs on modern Japanese history. This course will offer a critical survey of existing methodologies and approaches to writing about Modern Japan.
Prerequisite: EAS247H1

**EAS462H1 Ethnographic Literature on Korea: Class, Gender & Family [26L]**
This is a seminar course for upper level undergraduate students who are interested in reading ethnographic literature. This course introduces contemporary ethnographic literature written in English on South Korea. Despite the textual focus on anthropological writing, it covers interdisciplinary inquiry into cultural and historical concepts that have shaped people's lives in South Korea. This class is run as a dynamic seminar course with class discussions structured around students' presentations, and with writing and rewriting research paper.
Prerequisite: EAS209Y1 for EAS students

**EAS468Y1 Mahayana Buddhist Philosophy (formerly EAS360Y1) [52S]**
Close study of selected Indian and Chinese Mahayana texts in translation, with emphasis on Madhyamaka and Hua-yen.
Exclusion: EAS360Y1
Recommended preparation: RLG206Y1

**EAS469Y1 Chinese Sectarian Buddhism [52L]**
This course examines one or more schools of Chinese Buddhism depending upon the expertise of the instructor.

**EAS473H1 Modern Korean History Seminar [26S]**
An examination of recent research results in the modern Korean history field, focusing especially on the late 19th and 20th centuries
Prerequisite: EAS271Y1

**EAS475Y1 Issues in East Asian Historiography [52L]**
This course analyses select topics in the historiography of East Asian. Students are expected to write a major research paper of 30-40 pages in the second semester.
Recommended preparation: EAS209Y1

**EAS476Y1 Democracy and History in Korea [52S]**
This course examines approaches to the history of the south Korean democracy movement and the role of history within the democracy movement itself.
Recommended preparation: EAS271H1

**EAS477Y1 Missionaries in Korea [52L]**
This course examines the works of missionaries in Korea and the socio-political situation of the Choson Dynasty.

**EAS482H1 Advanced Sanskrit II (formerly EAS482Y1) [26S]**
Technical Sanskrit: readings from alamkarasastra, dharmasastra, darsana and other non-literary texts.
Prerequisite: EAS382Y1
Exclusion: EAS482Y1

**EAS485H1 Buddhist Hybrid Sanskrit [26S]**
This course will study Buddhist narrative literature written in a particular kind of Sanskrit which actually is a Sanskritized version of vernacular languages. Its vast literature, such as the Mahāvastu, the Sukhāvativyūha, the Saddharmapundarika and the Jātakas belongs mainly to Mahāyana Buddhism. These texts have been translated into Chinese, Japanese and Tibetan.
Prerequisite: EAS282Y1, EAS381H1 and 383H1 or equivalent

**EAS486H1 Aspects of Classical and Medieval Indian Culture Through Sanskrit Texts [26S]**
This course presents diverse mundane aspects of Indian social and culture life through selected texts on music, dance, agriculture, medicine, theatre, sports and games, hunting, cuisine, gardening, and so on. Although these texts illuminate and explain classical and medieval Hindu culture, they have rarely been translated into English.
Prerequisite: EAS282Y1, EAS381H1 and 383H1 or equivalent.

**EAS488H1/Y1 Hinduism and Politics [52L/26L]**
The political expression of Hinduism begins with religious reform movements in the 19th century, and develops into a Hindu nationalism. Although independent India is a secular state, Hindu

"fundamentalism" remains a powerful political force. This course analyzes modern Hindu political ideology.

**EAS490H1 Introduction to Japanese Linguistics: Syntax and Semantics [78L]**
This course introduces Japanese grammatical items in a scientifically and theoretically oriented manner. The goals of the course are: to gain knowledge of the basic characteristics of sentence structure and meaning in Japanese; to become familiar with selected theoretical analyses; and to develop a repertoire of linguistic vocabulary.
Prerequisite: EAS349H1
Recommended Preparation: LIN100Y1, LIN204H1

**EAS493H1 Theory and Practice of Japanese Language Instruction [39S]**
This course provides an overview of theories and issues in second language teaching for those who are or will be involved in Japanese language teaching. The class discussion includes the theory and history of teaching methods and their theoretical implications. Students will also practice actual teaching in real classroom settings.
Prerequisite: EAS460H1/461H1

**EAS495Y1 Topics in East Asian Studies [52S]**
A guided research course on a common topic of the student's choice. Students are required to produce a 20-30 page paper based on the selected topic.

**EAS496H1 Topics in East Asian Studies [26S]**
An in-depth study of Chinese, Japanese or Korean culture, history and/or literature. Content in any given year depends on the instructor.
Recommended preparation: Varies from year to year

**EAS497H1 Beyond Orientalism [26S]**
This course will confront the 'Orientalist' view of the world by looking at one Asian nation regularly exempted from that paradigm-Japan. By examining, among other topics, Japan's emperor system, its construction of a national history, and its own imperialism, this course hopes to point toward other ways of thinking about East and West.
Recommended Preparation: EAS202Y1/204Y1/247Y1/374H1

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### Independent Studies

**EAS434H1 Independent Studies [TBA]**

**EAS434Y1 Independent Studies [TBA]**

**EAS435H1 Independent Studies [TBA]**

**EAS435Y1 Independent Studies [TBA]**

**EAS436H1 Independent Studies [TBA]**

**EAS436Y1 Independent Studies [TBA]**

**EAS437H1 Independent Studies [TBA]**

**EAS437Y1 Independent Studies [TBA]**
A scholarly project chosen by the student, approved by the Department, and supervised by one of its instructors. Consult with the East Asian Studies Undergraduate Handbook for more information.
Prerequisite: Five EAS courses

# Economics

## Faculty

### University Professor Emeritus

S. Hollander, OC, BScEcon, Ph D, LLD, FRSC

### Professors Emeriti

R.A. Berry, BA, Ph D
R.M. Bird, MA, Ph D, FRSC
J.D. Bossons, AM, Ph D
A.A.Breton, OC, BA, Ph D, FRSC
N.K. Choudhry, MS, Ph D
J.S. Cohen, MA, Ph D
J.H. Crispo, B Com, Ph D
J.H. Dales, MA, Ph D, FRSC (obiit)
S.M. Eddie, B Sc, Ph D
J.E. Floyd, MA, Ph D
M.A. Fuss, MA, Ph D
M.J. Gordon, MA, Ph D
W. Haque, MA, M Sc, Ph D
M.J. Hare, B Com
G.K. Helleiner, OC, MA, Ph D, FRSC
J.A. Hynes, AB
Y. Kotowitz, BA, Ph D
A.M. Kruger, BA, Ph D
J.H.A. Munro, MA, Ph D
D.M. Nowlan, MA, Ph D
K.J. Rea, MA, Ph D
S.A. Rea, AB, Ph D
A.E. Safarian, OC, BA, Ph D, FRSC
J .A. Sawyer, MA, Ph D
L.B. Smith, AM, Ph D
D.A.A. Stager, AM, Ph D
M.H. Watkins, B Com
A.M. Watson, B Com, MA
L. Waverman, MA, Ph D
T.A. Wilson, AM, Ph D, FRSC
J.W.L. Winder, MA, Ph D

### Professor and Chair of the Department

A.J. Hosios, M Eng, MA, Ph D

### Professor and Associate Chair, Graduate Studies

A.J. Yatchew, MA, Ph D

### Professor and Associate Chair, Undergraduate Studies

F.R. Casas, MSc, Ph D

### University Professor

M. Trebilcock, FRSC, LLM

### Professors

V.A. Aivazian, BS, Ph D (University of Toronto Mississauga)
G. Anderson, M Sc, Ph D (University of Toronto Mississauga)
M. Baker, MA, Ph D
H.D. Benjamin, MA, Ph D
L. Brandt, BS, Ph D
J.L. Carr, MA, Ph D
M.G.S. Denny, B Sc, Ph D
D.N. Dewees, B Sc, LL B, Ph D
G. Duranton, MA, M Sc, Ph D
M. Faig, MA, Ph D (University of Toronto Mississauga)
D.K. Foot, AM, Ph D (N)
C. Gourieroux, Ph D
M. Gunderson, MA, Ph D
I. Horstmann, BA, Ph D +
S. Howson, MA, Ph D
G.V. Jump, BA, Ph D
H. Li, BS, Ph D
G.F. Mathewson, B Com, Ph D
T. McCurdy, BA, Ph D +
A. Melino, BA, Ph D (University of Toronto Mississauga)
D.E. Moggridge, MA, Ph D (T)
M.J. Osborne, BA, Ph D
J.E. Pesando, MA, Ph D
F.J. Reid, M Sc, Ph D (University of Toronto Mississauga)
A. Rotstein, BA, Ph D
S. Shi, MA, Ph D
M. Smart, MA, Ph D
A. Siow, BA, Ph D
W.C. Strange, MA, Ph D +
D. Trefler, MA, Ph D
M.A. Turner, AM, Ph D
X. Zhu, MS, Ph D (University of Toronto Mississauga)

### Associate Professors

V. Aguirregabiria, MSc, Ph D
M. Alexopoulos, MA, Ph D
E. Damiano, MA, Ph D
A. Erosa, MA, Ph D (University of Toronto Mississauga)
L. Fuster, MA, Ph D
G. Hamilton, MA, Ph D
J. Maheu, MA, Ph D (University of Toronto Mississauga)
R. McMillan, BA, Ph D (University of Toronto Mississauga)
P. Oreopoulos, MA, Ph D (University of Toronto Mississauga)
C. Pitchik, M Sc, Ph D (University of Toronto Mississauga)
D. Restuccia, MA, Ph D
J. Roberts, MA, Ph D
M.B. Stabile, MA, Ph D +
J. Van Biesebroeck, MA, Ph D (University of Toronto Mississauga)

### Assistant Professors

S. Board, M Phil, Ph D (University of Toronto Mississauga)
G. Bobonis, BA, Ph D
M. Burda, MA, Ph D
M. Duarte, MA, Ph D (University of Toronto Mississauga)
G. Goh, MA, Ph D
G. Kambourov, Ph D (University of Toronto Mississauga)
E. Malinova, MA, Ph D
S. Mechoulan, MA, Ph D
J. Mondria, MA, Ph D
P. Morrow, MA, Ph D
A. Park, Ph D (University of Toronto Mississauga)
C. Serrano, MS, MA , Ph D
X. Shi, BS, MA, Ph D (University of Toronto Mississauga)
C. Stewart, MA, M Phil, M Sc, Ph D

### Adjunct Professors

J. Crean, MA, Ph D
D.P. Dungan, MA, Ph D
P. Masson, BA, Ph D

### Senior Lecturer

G. Indart, MA, Ph D

### Lecturers

S.A. Hussain, MA, Ph D
J. Murdock, M Phil, Ph D

### Sessional Lecturers

M. Anjomshoa, MA, M Phil
K. Furlong, MA, Ph D
G. Gagnon, MA, Ph D
R. Ghaeli, MA, Ph D
J. Kantarevic, MA, Ph D
A. Mazaheri, MA, Ph D
R. Satchu, MBA
P. Tomlinson, BA, Ph D
W.G. Wolfson, B Com, MA
Z.F. Yang, MA
P.M.V. Yu, MS, Ph D

+ cross appointed

Economics is a social science that encompasses a broad range of human behaviour and has a strong influence on the structure, well-being and development of a society.

Much of human activity is directed towards the satisfaction of material wants. In many areas of the world, the greater part of human effort must be directed towards meeting the most elemental demands for food, clothing, and shelter. Even in technologically advanced societies, where these basic requirements can be met with comparative ease, the desire for more goods and services never appears to be fully satisfied. In consequence, every society - regardless of whether it is capitalist, socialist, or communist in political orientation - is both competitive and cooperative. It is competitive because its members contend with one another to satisfy their individual wants from a limited supply of productive resources. It is cooperative because the greatest supply of goods is available when the activity of producing them is coordinated and organized. Economics deals with any issue arising out of the conflict between the demand for goods and services, and a limited supply of resources to satisfy those demands.

Undergraduate training in economics is intended to familiarize students with the discipline of economic thinking, and to equip them for intelligent appraisal of contemporary economic problems. It is also intended to make students aware of the nature of economic science, and of the directions in which economic theory is moving.

Economic theory now makes considerable use of mathematics in some of its enquiries. A student who chooses to specialize in economics should take at least one basic course in mathematics. More such courses may be taken, and several economics courses draw on mathematical analysis.

Because of advances in economic theory, an undergraduate degree is not sufficient to become a professional economist. For this or other reasons, graduate work may be necessary.

Students who wish to do graduate work should seek advice from the Department concerning their choice of courses.

Undergraduate Administrator: R. Innes

Commerce Assistant: J. Fan

Enquiries:
100 St. George Street, 4th floor (416-978-4603)

## Economics Programs

Enrolment in Economics programs is based on grades in ECO 100Y, completion of MAT 133Y/135Y/137Y/157Y and a minimum CGPA (please read entry requirements for each program carefully). Consult the *Registration Handbook & Timetable* for details.

### Economic History (Arts program)

Enrolment in the Economic History Programs is limited to students with 67% in ECO100Y or 80% in ECO105Y, MAT 133Y/(123H,124H)/135Y/137Y/157Y and a CGPA of 2.0.

**Major program**
(6 full courses or their equivalent)

First Year:
ECO 100Y/105Y; MAT 133Y/(123H,124H)/135Y/137Y/157Y
Higher Years:
1. ECO 200Y/206Y
2. Three full Economic History courses from: ECO 301Y, 302H, 303Y, 307H, 308H, 309H, 321Y, 342Y, 353Y, 354H, 355H, 423H, 429Y, 435H

**Minor program:**
(4 full courses or their equivalent)
1. ECO 100Y/105Y; MAT133Y/(123H,124H)/135Y/137Y/157Y
2. ECO 200Y/206Y
3. One full Economic History course from: ECO 301Y, 302H, 303Y, 307H, 308H, 309H, 321Y, 342Y, 353Y, 354H, 355H, 423H, 429Y, 435H

NOTE: Students enrolled in the Minor Program in Economic History cannot be enrolled in the Minor Program in Economics or in the Minor Program in Environmental Economics.

### Economics (Arts program)

**Specialist program:**
(13 full courses or their equivalent, including at least one 400-series course)

Enrolment in the Specialist Program is limited to students with 70% in ECO 100Y, and 63% in MAT 133Y/(123H,124H)/, or 60% in MAT 135Y or 55% in MAT 137Y/157Y, and a CGPA of 2.3.

First Year:
ECO 100Y; MAT 133Y/(123H,124H)/135Y/137Y/157Y
Higher Years:
1. ECO 206Y, 208Y, ECO 220Y(70%)/227Y/STA(257H, 261H), ECO325H, 326H, 375H, 429Y
2. One full course in Economic History from: ECO301Y, 302H, 303Y, 307H, 308H, 309H, 321Y, 342Y, 353Y, 354H, 355H, 423H, 435H
3. 4.5 full additional 300+ series ECO courses (cannot be in Economic History)

4. NOTES:
   (a) Strongly recommended: ECO376H;
   (b) MAT223H/240H is strongly recommended as preparation for ECO375H. Students taking one of these MAT courses can have it count in lieu of one half 300+ ECO credit required for this program;
   (c) Additional recommended preparation: MAT235Y/237Y/ ECO210H

**Major program:**
(7 full courses or their equivalent)

Enrolment in this program is limited to students with 67% in ECO 100Y or 80% in ECO 105Y, MAT 133Y/(123H,124H)/ 135Y/137Y/157Y and a CGPA of 2.0.

First Year:
ECO 100Y/105Y; MAT 133Y/(123H,124H)/135Y/137Y/157Y
Higher Years:
1. ECO 200Y/204Y/206Y, 202Y/208Y/209Y, ECO 220Y/227Y/ STA(250H, 255H)/(257H, 261H)
2. Two full additional 300+ series ECO courses (cannot be in Economic History)

NOTE: Students in the Major program in Economics cannot be enrolled in the Minor program in Environmental Economics.

**Minor program:**
(4 full courses or their equivalent)

Enrolment in this program is limited to students with 67% in ECO 100Y or 80% in ECO 105Y, MAT 133Y/(123H,124H)/ 135Y/137Y/157Y and a CGPA of 2.0.

1. ECO 100Y/105Y; MAT 133Y/(123H,124H)/135Y/137Y/157Y
2. ECO 200Y/206Y
3. One full 300+ series ECO course (cannot be in Economic History)

NOTE: Students enrolled in the Minor Program in Economics cannot be enrolled in the Minor Program in Economic History or in the Minor Program in Environmental Economics.

### Finance & Economics (B.Com.) - See Commerce (page 40)

### Environmental Economics - See Centre for Environment

### Economics (Quantitative Methods) (Science program)

Enrolment in this program is limited to students with 70% in ECO 100Y, and 55% in MAT 137Y/157Y, and a CGPA of 2.3.

**Specialist program:**
(12 full courses or their equivalent, including at least one 400-series full course)

First Year:
ECO 100Y; MAT 137Y/157Y
Higher Years:
1. APM 236H/CSC(165H,236H)/240H/263H
2. ECO 206Y, 208Y, 325H, 326H, 375H
3. MAT 223H/240H, 235Y/237Y
4. ECO 220Y(70%)/227Y/STA(257H,261H)
5. One full course from Group A and 2.5 full courses from A or B (for a total of 3.5):

**Group A:**
ECO 376H,416H, 418H; APM 236H, 462H; CSC 148H, (165H, 236H)/240H, 207H, 260H, 263H, 336H/350H, 354H, 363H/365H, 373H/375H, MAT 315H, 337H; STA 322H, 352Y, 414H, 422H, 447H, 457H

**Group B:**
Any 300+ series ECO courses

**Note:**
At least twelve full courses, including at least four full 300+ series courses must be completed for this program.

### Financial Economics (Science program)

**Specialist program:**
(13 full courses or their equivalent, including at least one 400-series full course)

Application to this program is limited to students with 70% in ECO100Y1/100Y5, 63% in MAT133Y1/133Y5 or 60% in MAT134Y5/135Y1/135Y5 or 55% in MAT137Y1/138Y5, 70% in ECO206Y1/206Y5, 70% in ECO208Y1/208Y5, 70% in ECO227Y1/227Y5/STA(257H1,261H1)/STA(257H5,261H5), completion of at least 8.0 credits and a CGPA of 3.3. This is a limited enrolment program. Students enrolled in this program cannot simultaneously be enrolled in any other Economics specialist, joint specialist, major or minor program in Economics, or in Economic History or in the B.Com program.

NOTE – Some required courses may be offered only on the St. George or on the University of Toronto Mississauga campus in any given year. Students registered in this program at either campus may have to attend lectures on the other campus in such cases.

First Year:
ECO100Y1/100Y5, MAT132Y5/133Y1/(123H,124H)/133Y5/ 134Y5/135Y1/135Y5/137Y1/138Y5/157Y
Higher Years:
1. ECO206Y1/206Y5
2. ECO208Y1/208Y5
3. ECO227Y1/227Y5/STA(257H1,261H1)/(257H5,258H5/ 261H5)
4. ECO325H1/325H5, ECO326H1/326H5
5. ECO (375H1,376H1)*/327Y5*
6. ECO358H1/358H5, ECO359H1/359H5
7. 5 additional full 300+ ECO credits or their equivalent, of which at least 1.0 must be chosen from ECO329H1/349H5, ECO356H1, 456H1, ECO460H5, ECO461H1/461H5, ECO462H1, ECO463H5. Not more than one full credit may be in Economic History.

* MAT222H5/223H1/240H1/248Y5 is strongly recommended as preparation for ECO 375H1/327Y5. Students taking one of these MAT courses can count that course in lieu of one half or a full 300+ ECO credit required for this program

### Economics and Computer Science (Science program) - See Computer Science

### Economics and Geography (Arts program)

Consult Undergraduate Coordinator, Department of Geography.

Enrolment in this program is limited to students with 67% in ECO 100Y or 80% in ECO 105Y, MAT 133Y/(123H,124H)/135Y/137Y and a CGPA of 2.0.

**Specialist program:**
(14 full courses or their equivalent, including at least one 400-series full course)

First Year:
ECO 100Y/105Y; MAT 133Y/(123H,124H)/135Y/137Y/157Y; GGR 100H/101H/107H/124H
Higher Years:
1. ECO 200Y/206Y, 202Y/208Y, 333Y; GGR 220H, 221H
2. ECO 220Y/227Y/STA (250H, 255H)/(257H, 261H)
3. 2.5 courses from: JGE221Y, 347H, GGR249H, 252H, 254H, 256H, 323H, 324H, 332H, 333H, 334H, 344H, 357H, 436H, JGI 346H, other choices from 5. and 6. below
4. Two full 300+ ECO courses including at least one of ECO313H, 314H, 425H
5. One of GGR 271H, 272H, 273H, 371H, 373H, 462H, 473H
6. GGR 491Y/two of GGR 415H, 431H, 450H, 458H, 459H, 499H, JFG 470H

## Economics & Mathematics (Science program)

Consult Professor N.A. Derzko, Department of Mathematics, or Undergraduate Secretary, Department of Economics.

Enrolment in this program is limited to students with 70% in ECO 100Y, 55% in MAT 137Y/157Y and a CGPA of 2.3.

**Specialist program:**
(13 full courses or their equivalent, including at least one 400-series full course)

First Year:
ECO 100Y; MAT 137Y/157Y
Second Year:
ECO 206Y, 208Y, ECO 227Y/STA(257H,261H); MAT(223H/240H,237Y,246H)/257Y
Second or Third Year:
APM 236H; MAT 244H/267H
Third Year:
MAT 315H/337H/(327H,357H) (MAT 357H may be taken in Fourth Year)
Third or Fourth Year:
1. APM 462H; ECO 325H/326H
2. Two full 300+series ECO courses
3. One full course from: MAT 309H/315H/334H/337H/344H/363H/464H/any 400-series MAT course/another 300+level STA course, subject to the approval of the advisors.

## Economics & Philosophy (Arts program)

Consult the Undergraduate Coordinator, Department of Philosophy.

Enrolment in this program is limited to students with 67% in ECO 100Y or 80% in ECO 105Y, MAT 133Y/(123H,124H)/135Y/137Y/157Y and a CGPA of 2.0.

**Specialist program:**
(15 full courses or their equivalent, including at least one 400-series full course)

First Year:
ECO 100Y/105Y; MAT 133Y/(123H,124H)/135Y/137Y/157Y
Higher Years:
1. ECO 200Y/206Y, 202Y/208Y, ECO 220Y/227Y/ STA (250H,255H)/(257H,261H), ECO 429Y
2. Two additional full ECO courses
3. PHL265H1/275H1, PHL273H1/PHL295H1, PHL323H1/365H1/394H1/395H1
4. Additional PHL courses to a total of seven

**Note:**
At least four 300+ series courses must be completed for this program.

## Economics & Political Science (Arts program)

Consult Director of Undergraduate Studies, Department of Political Science.

Enrolment in this program is limited to students with 67% in ECO 100Y or 80% in ECO 105Y, MAT 133Y/(123H,124H)/135Y/137Y/157Y and a CGPA of 2.0. Students must also meet the requirements of the Political Science Department (see the Political Science listings).

**Specialist program:**
(15 full courses or their equivalent, including at least one full 400-series course)

NOTE: The 15 courses must include 8 in ECO, two of which must be 300+ series; and 7 in POL or JPE, including one 300+ series course and one 400-series course. At least one POL course must be in the area of Canadian politics.

First Year:
ECO 100Y/105Y; MAT133Y/(123H,124H)/135Y/137Y/157Y; POL103Y/105Y/108Y/214Y
Higher Years:
1. POL200Y
2. ECO200Y/206Y, 202Y/208Y, ECO220Y/227Y/STA(250H, 255H)/(257H, 261H), ECO 429Y
3. One full course in Economic History from: ECO 301Y, 302H, 303Y, 307H, 308H, 309H, 321Y, 342Y, 353Y, 354H, 355H, 423H, 435H
4. One additional full 300+ ECO course (cannot be in Economic History)
5. One full course from any of the following three fields in Political Science (see Departmental Handbook for breakdown of courses into fields):
   Comparative Politics (Developing)
   Comparative Politics (Industrial)
   International Relations
6. One full course equivalent from: POL 401, 408, 409, 418, 435, 439, 447, 458, 463, 472, 474, 475, 476, 477, 488, 489, JPF 455, JPJ 494
7. Three additional courses in POL or JPE

## Economics & Sociology (Arts program)

Consult Undergraduate Secretary, Department of Economics.

Enrolment in this program is limited to students with 67% in ECO 100Y or 80% in ECO 105Y, MAT 133Y/(123H,124H)/135Y/137Y/157Y and a CGPA of 2.0. Students must have 65% in SOC 101Y, and 70% in each of SOC 200H, 202H, 203Y, and 204H. Students must also have completed 8 full courses and be enrolled in the Sociology Major program.

**Specialist program:**
(15 full courses or their equivalent, including at least one 400-series course)

First Year:
ECO 100Y/105Y; MAT 133Y/(123H,124H)/135Y/137Y/157Y; SOC 101Y
Higher Years:
1. ECO 200Y/206Y, 202Y/208Y, ECO 220Y/227Y/SOC 300H/STA(250H, 255H)/(257H, 261H)
2. SOC 200H, 202H, 203Y, 204H, 376H, 377H, 387H, 401Y
3. Two of the following pairs of courses: ECO 321Y & SOC 220Y; ECO 310Y & SOC 317Y; ECO 333Y & SOC 205Y; ECO 339Y & SOC 207Y/370Y; ECO 340H plus a second ECO half-course & SOC 301Y; ECO 425H plus a second ECO half-course & SOC 312Y

Note: At least four 300+ series courses must be completed for this program

### Economics & Statistics (Science program)

Consult Undergraduate Secretary, Department of Economics.

Enrolment in this program is limited to students with 70% in ECO 100Y, 55% in MAT 137Y/157Y and a CGPA of 2.3.

**Specialist program:**
(14 full courses or their equivalent, including at least one 400-series full course)

First Year:
CSC 148H/150H/260H; ECO 100Y; MAT 137Y/157Y
Second Year:
ECO 206Y, 208Y; MAT 223H/240H, 237Y; ECO 227Y/STA (257H, 261H)
Third Year:
1. ECO 325H, 326H, 375H, 376H; STA 347H
2. One full 300+ series ECO course
3. STA 352Y

Fourth Year:
1. ECO 416H/418H
2. A 300+ series ECO half-course
3. STA 437H, 457H; one STA half-course from STA 414H/422H/442H/447H
4. One additional half-course from ACT 335H/MAT 244H/267H/a 300+ series ECO or STA half-course

## Economics Courses

See page 32 for Key to Course Descriptions

For Distribution Requirement purposes (see page 26), all ECO courses are classified as SOCIAL SCIENCE courses.

**SSC199H1 First Year Seminar 26S**

**SSC199Y1 First Year Seminar 52S**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

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**Note**
Enrolment in most Economics courses above the 100-level and, therefore, in all Economics Programs, is based on grades in ECO 100Y or ECO 105Y and, in most cases, MAT 133Y or MAT 135Y or MAT 137Y or MAT157Y. Additional information is contained in the Registration Handbook and Timetable. Not all courses are offered each year.

**ECO100Y1 Introduction to Economics [52L, 26T]**
An introduction to economic analysis and its applications: price determination; the role of competition; international trade and finance; the theory of production and employment; the role of money and the banking system; monetary and fiscal policy. NOTE graphical and quantitative analysis are used extensively.
Exclusion: ECO105Y
Recommended prepararation: MCB4U, MGA4U/MDM4U or equivalent secondary school mathematics credits

**ECO105Y1 Principles of Economics for Non-Specialists [52L, 26T]**
An introduction to the principles and methods of economics in association with policy issues. Lectures cover a variety of topics, including economic growth, the importance of productivity, international trade, competitive markets, macroeconomic issues and more specific topics such as rent controls, OPEC, the international debt crisis, trade restrictions, the national debt and sustainable development. Students who intend to complete a minor, major, or specialist program in Economics are advised to take ECO100Y.
Exclusion: ECO100Y

**ECO200Y1 Microeconomic Theory [52L, 26T]**
Theory of markets and prices. Determination of prices through the interaction of the basic economic units, the household as consumer and as supplier of inputs and the business firm as producer and as employer of inputs. The pricing system as the mechanism by which social decisions and allocation of goods are made in a market economy.
Exclusion: ECO204Y, 206Y
Prerequisite: ECO100Y(67%)/ECO105Y(80%); MAT133Y/(123H,124H)/135Y/137Y/157Y

**ECO202Y1 Macroeconomic Theory and Policy [52L, 26T]**
Theory of output, employment and the price level; techniques for achieving economic stability; central banking and Canadian financial institutions and markets; foreign exchange markets and the exchange rate. This course is not intended for students enrolled in the B.Com program; please see ECO209Y.
Exclusion: ECO208Y, 209Y
Prerequisite: ECO100Y(67%)/ECO105Y(80%)
Co-requisite: MAT133Y/(123H,124H)/135Y/137Y/157Y

**ECO204Y1 Microeconomic Theory and Applications (for Commerce) [52L, 26T]**
The use of microeconomics to analyze a variety of issues – from marketing and finance to organizational structure. Consumer preferences and behavior; demand, cost analysis and estimation; allocation of inputs, pricing and firm behavior under perfect and imperfect competition; game theory and public policy, including competition policy. Business cases are used to connect theory and practice and to highlight differences and similarities between economics and accounting, marketing and finance. This course is restricted to students in the B. Com program.
Exclusion: ECO200Y, 206Y
Prerequisite: ECO100Y1(67%), MAT 133Y/(123H,124H)/135Y/137Y/157Y

**ECO206Y1 Microeconomic Theory [52L, 26T]**
This course deals more rigorously and more mathematically with the topics included in ECO200Y and is intended primarily for students in certain Economics Specialist programs.
Exclusion: ECO200Y, 204Y

Prerequisite: ECO100Y(70%); MAT133Y(63%)/(123H(63%),124H(63%))/135Y(60%)/137Y(55%)/157Y(55%)

**ECO208Y1 Macroeconomic Theory [52L, 26T]**
This course deals more rigorously and more mathematically with the topics included in ECO 202Y and is intended primarily for students in certain Economics Specialist programs.
Exclusion: ECO202Y, 209Y
Prerequisite: ECO100Y(70%); MAT133Y(63%)/(123H(63%),124H(63%))/135Y(60%)/137Y(55%)/157Y(55%)

**ECO209Y1 Macroeconomic Theory and Policy (for Commerce) [52L,26T]**
Macroeconomic issues relevant for commerce students. Analytical tools are used to examine policy issues: Canadian government budgets, Bank of Canada monetary policy, exchange rate policy, foreign trade policy and government regulation of financial intermediaries. This course is restricted to students in the B. Com program.
Exclusion: ECO202Y, 208Y
Prerequisite: ECO100Y(67%)
Co-requisite: MAT133Y/(123H,124H)/135Y/137Y/157Y

**ECO210H1 Mathematical Methods for Economic Theory [26L, 13T]**
An introduction to mathematical methods commonly used in economic theory. Topics include unconstrained multivariate optimization, multivariate optimization subject to equality or inequality constraints and differential equations.
Exclusion: MAT235Y/ 237Y
Prerequisite: ECO100Y(67%)/ECO105Y(80%); MAT133Y(63%)/(123H(63%),124H(63%))/135Y(60%)/137Y(55%)/157Y(55%)
Co-requisite: ECO200Y/204Y/206Y

**ECO220Y1 Quantitative Methods in Economics [52L, 26T]**
Numerical and graphical data description techniques; data collection and sampling; probability; sampling distributions; statistical inference; simple and multiple regression analysis. Study methods, the basis for these methods, when each is or is not appropriate, and how to correctly interpret and understand results.
Exclusion: ECO227Y, GGR270Y, 270H, PSY201H, 202H, SOC300Y, STA107H, 220H, 221H, 247H, 248H, 250H, 255H, 257H, 261H
Prerequisite: ECO100Y(67%)/ECO105Y(80%); MAT133Y/(123H,124H)/135Y/137Y/157Y

**ECO227Y1 Quantitative Methods in Economics [52L, 26T]**
A rigorous introduction to probability and mathematical statistics intended for economics specialists. Probability and estimation theory, sampling distributions, hypotheses testing, multiple regression analysis. Students will learn the tools used in economics and finance to model and address randomness and uncertainty.
Exclusion: ECO220Y, GGR270Y, 270H, PSY201H, 202H, SOC300Y, STA107H, 220H, 221H, 247H, 248H, 250H, 255H, 257H, 261H
Prerequisite: ECO100Y(70%); MAT133Y(63%)/(123H(63%),124(63%))/135Y(60%)/137Y(55%)/157Y(55%)
Recommended Co-requisite: MAT223H/240H, MAT235Y/237Y/ECO210H

**ECO230Y1 International Economic Institutions and Policy [52L, 26T]**
This course is intended primarily for students in the International Relations and in the Peace & Conflict Studies programs. The key concepts of international trade and finance are reviewed with an eye to understanding contemporary issues and recommending policy initiatives. Attention is given to empirical assessment of alternative trade theories and to broader international relations issues.
Exclusion: ECO328Y/364H/365H
Prerequisite: ECO100Y(67%)/ECO105Y(80%)/enrolment in the International Relations Specialist or Major Programs, or the IR/Peace and Conflict Studies joint Specialist Program.

**ECO239Y1 Labour Markets and Policies [52L, 26T]**
This course is intended primarily for students in the Employment Relations programs. Application of economic analysis to current issues in labour policy: immigration, retirement, education, unemployment, earnings differentials, employment and pay equity, labour unions, minimum wage, income policies.
Exclusion: ECO339Y
Prerequisite: ECO100Y(67%)/ECO105Y(80%)

**WDW244H1 Labour Relations**
See Woodsworth College

**ECO250Y1 Special Topics in Economics [52L]**

**ECO251H1 Special Topics in Economics [26L]**

**ECO252H1 Special Topics in Economics [26L]**
Courses may be offered in one or more subjects each year. Students must meet the prerequisites announced by the Department (see the Undergraduate Secretary for details).
Prerequisite: TBA

**ECO299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**ECO 301Y1 European Economic History, 1250 – 1750 (formerly ECO201Y1) [52L, 26T]**
The development of the West European economy from the apogee of the Commercial Revolution in the mid-13th century and the ensuing economic crises of the later Middle Ages to the eve of the modern Industrial Revolution, in the mid-18th century, focusing on Italy, Spain, Portugal, France, Germany, the Low Countries and England. Major topics: feudalism, serfdom and other barriers to economic growth; demographic, monetary and other macroeconomic forces; the development of market economies; structural changes in and interactions among the agrarian, commercial, financial, and industrial sectors; overseas expansion and colonization; the role of Church, state, warfare, and social/political institutions; Mercantilism.
Exclusion: ECO201Y
Prerequisite: ECO200Y/204Y/206Y

**ECO302H1 Comparative Economic Institutions in History [26L]**
Contrasting ways in which the factors of production - land, labour and capital - are organized in human society. Tribal, feudal, mercantilist and market economies are considered. A conceptual framework related to both market and non-market economies, based on the work of Karl Polanyi.
Exclusion: ECO302Y, ECO354H(2001-02 and 2002-03)
Prerequisite: ECO200Y/204Y/206Y

**ECO303Y1 The Economic History of Modern Europe to 1914 [52L, 26T]**
The economic development of modern Europe, focusing on urban industrialization in the Netherlands, Great Britain, France, Germany, and Russia, up to World War I. Major topics: technological, institutional, and social factors in economic growth; demographic and monetary forces; structural changes in and interactions among the agrarian, commercial, financial, and industrial sectors; international trade and capital flows; the role of the state; the role of economic theory and ideology; theories of post-1850 imperialism.
Exclusion: ECO203Y
Prerequisite: ECO200Y/204Y/206Y

**ECO307H1 Issues in Canadian and US Economic History to 1914 [26L]**
The evolution of North American markets, with emphasis on the pre-Civil War period. Labor markets are examined, including those for indentured servants and apprentices, as well as the economics of slavery. The timing and impact of technological change and the evolution of manufacturing production. The U.S. economy and the role of Canadian economic activity within the broader North American context.
Prerequisite: ECO200Y/204Y/206Y
Exclusion: ECO221Y, 321Y, 354H (North American Economic History to 1850), ECO423H

**ECO308H1 The Economics of Life: A Historical Perspective [26L]**
Demographic economic history within a North American context. Topics include changes over time in marriage markets, fertility, mortality and stature. The impact of property rights within marriage, illegitimacy, the decline of fertility in the nineteenth century and the puzzling inter-temporal divergence between height and wealth during the early nineteenth century.
Prerequisite ECO200Y/204Y/206Y; ECO220Y/227Y/ STA(247H,248H)/(250H,255H)/(257H,261H)
Exclusion: ECO355H (The Economics of Life: A Historical Perspective)

**ECO309H1 Economic Growth and Development in Southeast Asia [26L]**
An evaluation of economic development strategies in Southeast Asia and their implications for growth, industrialization, and income inequality. A review of trade and development theory that can explain the economic development of Southeast Asia, followed by an explanation of the initial conditions provided by resource endowments, geographical location, trade-international economic relations, and domestic economic development policies, and how these conditions have affected the process of development. A focus on the five most populous and resource abundant countries of the region: Indonesia, Malaysia, Philippines, Thailand and Vietnam.
Prerequisite: ECO200Y/204Y/206Y, ECO202Y/208Y/209Y
Exclusion: ECO355H (Economic Growth and Development in Southeast Asia)

**ECO310Y1 Industrial Organization and Public Policy [52L, 26T]**
Study of how firms compete and structure of markets. Emphasize oligopoly markets and use game theory. Study differentiated goods, price discrimination, barriers to entry, vertical relationships, advertising, strategic behaviour, and empirical industrial organization including estimation of demand and costs. Applications to competition policy emphasizing evaluation of horizontal mergers.
Exclusion: ECO380H
Prerequisite: ECO200Y/204Y/206Y, ECO220Y/227Y/STA(247H, 248H)/(250H, 255H)/(257H, 261H)

**ECO313H1 Environmental Economics and Policies [26L]**
This course demonstrates the way that a rigorous application of microeconomic techniques can inform our responses to various environmental problems. Topics may include: air and water pollution and renewable resource management.
Prerequisite: ECO200Y/204Y/206Y, MAT133Y/(123H,124H)/ 135Y/137Y/157Y

**ECO314H1 Energy and Resource Economics[26L]**
An investigation of the way that a rigorous application of microeconomic techniques can 1) improve our understanding of how resources like oil, minerals, fish, and forests are extracted in equilibrium, and 2) lead to improved management policies.
Prerequisite: ECO200Y/204Y/206Y, MAT133Y/(123H,124H)/ 135Y/137Y/157Y

**ECO320H1 Economic Analysis of Law [26L]**
The practical application of microeconomic theory to common legal problems: torts, contracts, property and crime, and the limitations of economic analysis. No previous familiarity with the law is assumed. (This is an economic analysis of legal issues, not a course in law.)
Prerequisite: ECO200Y/204Y/206Y, MAT133Y/(123H,124H)/ 135Y/137Y/157Y

**ECO321Y1 Canadian Economic History since 1500 [52L]**
Canadian economic growth and development as viewed through the staples thesis of Harold Innis. Reference to United States economic history throughout the course.
Exclusion: ECO221Y1, 323Y5
Prerequisite: ECO200Y/204Y/206Y

**ECO324Y1 Economic Development [52L]**
Economic development theory and policy related to the economic transformation of the developing countries, including industrial and agricultural sector strategies, international trade policy, public sector activities and the importance of productivity growth and poverty reduction programs.
Prerequisite: ECO200Y/204Y/206Y, 202Y/208Y/209Y, ECO220Y/ 227Y/STA(247H,248H)/(250H,255H)/(257H,261H)

**ECO325H1 Advanced Economic Theory - Macro [26L, 13T]**
A development of the microeconomic foundations of macroeconomic theory to expand students' analytic skills by constructing and solving macroeconomic models. Topics may include: dynamic choice, neoclassical growth theory, uncertainty and rational expectations, business cycles, as well as fiscal and monetary policy.
Prerequisite: ECO208Y/202Y/209Y(70%), ECO220Y(70%)/227Y/ STA247H((70%),248H(70%))/(250H(70%),,255H(70%))/ (257H,261H)
Recommended preparation: MAT223H/240H, MAT235Y/237Y/ ECO210H

**ECO326H1 Advanced Economic Theory - Micro [26L, 13T]**
Game theory and applications. Topics include: strategic and extensive games, with applications to economics.
Exclusion: ECO372H5, 372Y5
Prerequisite: ECO200Y(70%)/204Y(70%)/206Y, ECO220Y(70%)/227Y/ STA247H((70%),248H(70%))/ (250H(70%),255H(70%))/(257H,261H); MAT133Y(63%)/ (123H(63%),124H(63%))/135Y(60%)/137Y(55%)/157Y(55%)

Recommended preparation: MAT223H/240H, MAT235Y/237Y/ ECO210H

**ECO329H1 Topics in Monetary Economics [26L]**
Theories and techniques in monetary economics, including the equilibrium asset-pricing theory and modeling money as a medium of exchange, the Lucas supply curve, the choice of monetary policy rules versus discretion, and the liquidity effect of open market operations. Emphasis on the interactions between macroeconomic phenomena and individual decisions.
Exclusion: ECO349H5, ECO352H (2002-03)
Prerequisite: ECO200Y/204Y/206Y, ECO202Y/208Y/209Y, ECO220Y/227Y/STA(247H,248H)/(250H,255H)/ (257H,261H)

**ECO332H1 Economics of the Family [26L]**
A use of microeconomics to study the behaviour of the family, including marriage, divorce, intra-family allocations, investment in children and gender roles.
Prerequisite: ECO200Y/204Y/206Y; MAT133Y/(123H,124H)/ 135Y/137Y/157Y

**ECO333Y1 Urban Economics [52L]**
Spatial economic theory and urban public policy: firms and individuals in partial and general equilibrium, land development and land-use controls, urban transportation, efficiency and equity in spending and taxing.
Prerequisite: ECO200Y/204Y/206Y; MAT133Y/(123H,124H)/ 135Y/137Y/157Y

**ECO336Y1 Public Economics [52L]**
Theory of public goods, externalities, and the politics of government policy. Analysis of equity, incidence and incentive effects of taxes. An analytical treatment of the public sector.
Exclusion: ECO236Y
Prerequisite: ECO200Y/204Y/206Y; MAT133Y/(123H,124H)/ 135Y/137Y/157Y

**ECO339Y1 Economics of Labour [52L, 26T]**
The operation of labour markets; determinants of supply and demand for labour; wage differentials; discrimination; investment in schooling and training; unemployment; economics of unions.
Exclusion: ECO239Y, 361Y5
Prerequisite: ECO200Y/204Y/206Y; ECO220Y/227Y/ STA(247H,248H)/(250H,255H)/(257H,261H)

**ECO340H1 Economics of Income Distribution [26L]**
The personal distribution of income and wealth; measurement of inequality and poverty. The distributional effects of the tax system, government spending and economic regulation (including policies such as minimum wages, pay equity and employment equity).
Prerequisite: ECO200Y/204Y/206Y; ECO220Y/227Y/ STA(247H,248H)/(250H,255H)/(257H,261H)

**ECO342Y1 Twentieth Century Economic History [52L]**
Economic development of Europe and certain overseas areas, particularly Japan and the United States. Special attention to globalization before 1914, problems of the interwar years, the Great Depression of the 1930's, the period since 1945, international trade, the balance of payments and exchange rate mechanisms, growth performance of the major industrial countries.
Prerequisite: ECO200Y/204Y/206Y/(ECO230Y, POL208Y)

**ECO350Y1 Special Topics in Economics [52L]**

**ECO351H1 Special Topics in Economics [26L]**

**ECO352H1 Special Topics in Economics [26L]**
Courses may be offered in one or more subjects each year. Students must meet the prerequisites announced by the Department (see the Undergraduate Secretary for details).
Prerequisite: TBA

**ECO353Y1 Special Topics in Economic History [52L]**

**ECO354H1 Special Topics in Economic History [26L]**

**ECO355H1 Special Topics in Economic History [26L]**
Courses may be offered in one or more subjects each year. Students must meet the prerequisites announced by the Department (see the Undergraduate Secretary for details).
Prerequisite: TBA

**ECO356H1 Special Topics in Financial Economics [26L]**
Courses may be offered in one or more subjects each year. Students must meet the prerequisites announced by the Department (see the Undergraduate Secretary for details).
Prerequisite: TBA

**ECO358H1 Financial Economics I [26L]**
An introduction to economics of financial assets and financial markets. Topics: inter-temporal choice, expected utility theory, security valuation, selected asset pricing models, market efficiency, and the term structure of interest rates - essential materials for an understanding of the role and operation of financial markets.
Prerequisite: ECO200Y/204Y/206Y, ECO220Y/227Y/ STA(247H,248H)/(250H,255H)/(257H,261H)
Exclusion: ACT349H1, MGT331Y1, 337Y1, RSM332H, 333H

**ECO359H1 Financial Economics II: Corporate Finance [26L]**
Agency and incomplete information problems inherent in financial transactions; the role of contractual arrangements in overcoming them. Financial constraints on investment decisions of firms; the financial system in economic growth; the legal system in the functioning of financial markets. A look at theoretical and empirical literature covering these issues.
Prerequisite: ECO358H
Exclusion: ACT349H1, MGT331Y1, 337Y1, RSM332H, 333H

**ECO360Y1 Economic Growth and Technological Change [52L]**
With emphasis on the United States, Japan and Canada, this course examines theories of capitalism; Long Wave Cycle, the importance of productivity growth and Solow's residual, the economics of technological change, the Japanese/U.S. trade interface, the economic slowdown since 1973 and the current Canadian productivity challenge.
Prerequisite: ECO200Y/204Y/206Y, 202Y/208Y/209Y, ECO220Y/ 227Y/ STA(247H,248H)/(250H,255H)/(257H,261H)
Exclusion: ECO362H5

**ECO364H1 International Trade Theory [26L,13T]**
An examination of the causes and consequences of international trade. The first half develops traditional models of comparative advantage, with the second half examines more recent theoretical and empirical work on trade & wages, the political economy of trade, outsourcing, and firm heterogeneity.
Prerequisites: ECO200Y/204Y/206Y, ECO220Y/227Y/ STA(247H,248H)/(250H,255H)/(257H,261H)
Exclusion: ECO230Y/328Y

**ECO365H1 International Monetary Economics [26L,13T]**
Introduction to open economy macroeconomics and international finance. The core objective of the course is to develop macroeconomic models of open economies that can be applied towards gaining an understanding of recent events such as US deficits, financial crises, China's exchange rate policy and the Euro.
Prerequisites: ECO202Y/208Y/209Y
Exclusion: ECO230Y/328Y

**ECO369Y1 Health Economics [52L]**
The provision of health care provides many special problems of informational asymmetry, regulation, insurance and redistribution. A consideration of the demand and supply side problems. Alternative reform proposals for health care are explored.
Prerequisite: ECO200Y/204Y/206Y, MAT133Y/(123H,124H)/135Y/137Y/157Y

**ECO370Y1 Economics of Organizations [52L]**
An introduction to the economic analysis of the firm that highlights how organizations and special .contractual relationships emerge as alternative institutions to the market for allocating resources. Incentive problems and informal relationships, within and between firms, are important components of this analysis
Exclusion: ECO381H, ECO426H
Prerequisite: ECO200Y/204Y/206Y; ECO220Y/227Y/STA(247H,248H)/(250H,255H)/(257H,261H)

**ECO374H1 Applied Econometrics (for Commerce) [26L,13T]**
An introduction to econometrics similar to ECO 375H, with greater focus on applications drawn from business and financial economics. The course is built around the statistical foundations and economic applications of the multiple regression model. Using statistical software, students will also learn how to conduct, present, and critique empirical research.
Prerequisites: ECO200Y/204Y/206Y, ECO220Y(70%)/ECO227Y/STA(257H,261H)
Recommended preparation: MAT223H/240H
Exclusion: ECO327Y/375H, STA302H

**ECO375H1 Applied Econometrics I [26L,13T]**
An introduction to econometrics , theoretical and practical, focusing on the multiple regression model. Statistical assumptions, theory, and results are carefully developed, as are the necessary conditions for the valid application of regression analysis to economic data. Students apply these techniques to economic data using statistical software.
Prerequisite: ECO200Y/204Y/206Y, ECO220Y(70%)/ECO227Y/STA(257H,261H)
Recommended preparation: MAT223H/240H
Exclusion: ECO327Y/374H, STA302H

**ECO376H1 Applied Econometrics II [26L,13T]**
A research-oriented course continuing from ECO375H. The regression model is extended in several possible directions: time series analysis; panel data techniques; instrumental variables; simultaneous equations; limited dependent variables. Students will complete a major empirical term paper, applying the tools of econometrics to a topic chosen by the student.
Prerequisite: ECO375H(60%)/ECO374H(70%), NOTE: STA302H is not adequate preparation
Exclusion: ECO327Y, STA302H

**ECO380H1 Managerial Economics I: Competitive Strategy [26L]**
This course in applied microeconomics is concerned with the functioning of markets and the behaviour of firms within these markets. The focus is on strategic relationships between organizations, including competitive relationships among firms in the same market and cooperative relationships between a firm and its suppliers and distributors.
Exclusion: ECO310Y, MGT310Y
Prerequisite: ECO200Y/204Y/206Y; ECO220Y/227Y/STA(247H,248H)/(250H,255H)/(257H,261H)

**ECO381H1 Managerial Economics II: Personnel Economics [26L]**
An examination of selected material on compensation and incentives in organizations. Topics include recruitment and hiring, training, turnover, downsizing, motivating workers, teams, allocating authority and task assignment.
Exclusion: ECO370Y,426H, MGT310Y
Prerequisite: ECO200Y/204Y/206Y; ECO220Y/227Y/STA(247H,248H)/(250H,255H)/(257H,261H)

**ECO382H1 Population Economics and Business Strategy [26L]**
Strategic business in any organization depends crucially on people – the customers using the products and the employees executing the strategy. Using population economics as a foundation, topics covered include strategic management, consumer behaviour, life cycle models, generational analysis, trend analysis, marketing, risk analysis, global competitive analysis, diversification strategy, human resource planning, government relations, change management and sustainability.
Prerequisite: ECO200Y(70%)/204Y(70%)/206Y(60%), ECO202Y/209Y(70%)/208Y(60%)/ECO220Y(70%)/227Y(60%)/STA247H,248H(70%)/250H,255H(70%)/257H,261H(60%)

**ECO398H0 Independent Experiential Study Project**

**ECO399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

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**Note:**
Many 400-level courses are offered as joint undergraduate and graduate courses. Students interested in any of these courses should consult with the instructor before enrolling.

**ECO416H1 Macroeconometric Models for Policy Analysis and Forecasting [26L, 13T]**
The construction and operation of macroeconometric models. The use of models for conducting policy simulations and for generating quantitative forecasts of economic activity.
Prerequisite: ECO325H
Co-requisite: ECO327Y/375H,376H

**ECO418H1 Empirical Applications of Economic Theory [26L]**
Topics class in applied econometrics, emphasizing empirical industrial organization. Emphasis on a balanced treatment of theory and econometric techniques used in empirical research in industrial organization (the study of firms and markets). How firms behave, how market equilibriums arise and how economic policies are used to affect market equilibriums.
Prerequisite: ECO327Y/375H,376H

**ECO419H1 International Macroeconomics [26L]**
Contemporary issues in international monetary economics and macroeconomic policy formulation in open economies like Canada. A study of forces determining interest rates and exchange rates, inflation and unemployment; analysis of government policy in relation to financial markets.
Prerequisite: ECO200Y/204Y/206Y, 202Y/208Y/209Y, ECO220Y/227Y/STA(247H,248H)/(250H,255H)/(257H,261H) permission of instructor

**ECO420Y1 Special Topics in Economics [52S]**

**ECO421H1 Special Topics in Economics [26S]**

**ECO422H1 Special Topics in Economics [26S]**
Seminars or workshops may be offered in one or more subjects each year. Students must meet the prerequisites announced by the Department. (See the Undergraduate Secretary for details.)
Prerequisite: TBA, permission of instructor

**ECO423H1 Topics in North American Economic History [26L]**
Themes are incentives, contracts, and the impetus for change. Topics include indigenous people of North America; indentured servitude; slavery; apprenticeships; the evolution of production from artisan shop to the factory; invention and the diffusion of technological innovations; institutions and growth.
Prerequisite: ECO206Y(70%),227Y(70%)/STA257H(70%),261H(70%), or permission of the instructor.
Exclusion: ECO307H1

**ECO425H1 Economics and Demographics [26S]**
A research-oriented course exploring the interrelationships between economics and demographic change, both historical and projected, with attention to the microeconomic foundations, macroeconomic performance, and policy in areas such as fertility, migration, education, labour markets, housing, crime, recreation, leisure, marketing, health, retirement and pensions. The Canadian experience, with some international comparisons.
Prerequisite: ECO200Y(70%)/ECO204Y(70%)/206Y(60%),202Y(70%)/209Y(70%)/208Y(60%)/220Y(70%)/227Y(60%)/ STA(250H(70%),255H(70%))/STA(257H(60%),261H(60%))
Co-requisite: ECO327Y/375H,376H/STA302H

**ECO426H1 Economics inside Organizations [26L]**
An examination of selected research on compensation, incentive issues, cooperation and allocation of authority in hierarchical organizations.
Exclusion: ECO370Y1, ECO381H1
Prerequisite: ECO200Y(70%)/204Y(70%)/206Y(60%), 220Y(70%)/227Y(60%)/STA(250H(70%),255H(70%))/STA(257H(60%),261H(60%))

**ECO429Y1 History of Economic Thought [52L]**
Development of analytical economics from the 18th century with emphasis on Adam Smith and the British Classical School (David Ricardo, T.R. Malthus, and J.S. Mill), Karl Marx, the Marginalists and their successors to 1939, including Keynes.
Exclusion: ECO322Y1, 322Y5
Prerequisite: ECO200Y/204Y/206Y; ECO202Y/208Y/209Y

**ECO430Y1 Reading Course or Thesis [TBA]**

**ECO431H1 Reading Course or Thesis [TBA]**
Intended for advanced Specialist students who have exhausted course offerings in a particular area. Open only when a faculty member is available and willing to supervise. Students must obtain the approval of the Associate Chair for Undergraduate Studies before enrolling.

**ECO435H1 The Economics of Modern China (formerly ECO335Y1) [26L]**
A focus on post-1949 Chinese economy, and the PRC's economic legacy. Economic development during the Maoist period, particularly post-1979 reforms. China's experience is compared to Eastern Europe's and the role of China in the rapidly growing East Asian economy. This a limited enrolment seminar requiring extensive reading.
Exclusion: ECO335Y
Prerequisite: ECO200Y(70%)/ECO204Y(70%)/ECO206Y(60%)

**ECO451H1 Macroeconomic Growth [26L]**
An introduction to modern theories of the determinants of macroeconomic growth that examines the important question of why some countries are rich and others are poor. Topics include: investigation of empirical literature pertaining to international comparisons of recent and past rates of economic growth across countries.
Prerequisite: ECO325H, ECO327Y/375H,376H

**ECO456H1 Special Topics in Financial Economics [26L]**
Courses may be offered in one or more subjects each year. Students must meet the prerequisites announced by the Department (see the Undergraduate Secretary for details).
Prerequisite: TBA

**ECO459H1 International Trade Regulation [26L]**
The theory and political economy of international trade, with examination of specific trade institutions: Bretton Woods, WTO, NAFTA, tariff administration, most-favoured nation treatment, antidumping regulation, subsidies and countervailing duties, agriculture, trade in services, trade-related intellectual property, trade and environment, trade and developing countries.
Prerequisite: ECO328Y/364H, permission of instructor

**ECO461H1 The Economics of Financial Risk Management [26L]**
This course is intended primarily for students in the Financial Economics specialist program and is not open to students in the B.com program. The role of risk management in both private and public sectors, a discussion of why firms and government should hedge financial risks; individual and social gains of financial risk management; identification and quantification of financial risks (including Value-at-Risk measures); how derivative securities can be used for financial risk management.
Exclusion: ACT349H1, MGT331Y1, 337Y1, 438H1, RSM332H, 333H, 435H
Prerequisite: ECO358H(70%)/ECO460H5(70%)

**ECO462H1 Financial Econometrics [26L]**
This course is intended primarily for students in the Financial Economics specialist program. An introduction to the econometrics used in empirical finance, with an emphasis on estimation and inference using computer based applications. Topics will include parametric and nonparametric models of volatility, evaluation of asset pricing theories and models for risk management and transactions data.
Prerequisite: ECO358H(70%),327Y(70%)/375H(70%),376H(70%)

## Employment Relations: see Woodsworth College

# English

## Faculty

### University Professors Emeriti

R. Frank, MA, Ph D, FRSC (U)
J.R. de J. Jackson, MA, Ph D, FRSC (V)
M. Millgate, MA, Ph D, FRSC

### Professors Emeriti

T.H. Adamowski, MA, Ph D
P.R. Allen, MA, Ph D (I)
F.J. Asals, MA, Ph D (N)
G.E. Bentley, B Litt, D Phil, FRSC (U)
C.R. Blake, MA, Ph D (U)
W.F. Blissett, MA, Ph D, FRSC (U)
P.L. Brückmann, MA, Ph D (T)
E. Cameron, MA, Ph D (U)
D.D.C. Chambers, MA, Ph D (T)
E. Cook, MA, Ph D, FRSC (V)
E.W. Domville, Ph D (T)
D.J. Dooley, MA, Ph D (SM)
J.D. Duffy, MA, Ph D (I) (V)
J. Dutka, MA, Ph D (University of Toronto Mississauga)
F.T. Flahiff, MA, Ph D (SM)
M. Garson, MA, Ph D (University of Toronto Mississauga)
H.A. Gleason, BS, Ph D (obiit)
R.I.C. Graziani, MA, Ph D (U)
P.M. Grosskurth, MA, Ph D (N)
W.H. Halewood, MA, Ph D (U)
G.A. Hamel, MA, Ph D (N)
B.S. Hayne, AM, Ph D (SM)
P.L. Heyworth, MA, B Litt (U) (obiit)
F.D. Hoeniger, MA, Ph D (V)
P. Howard, MA, Ph D (I)
W.J. Howard, MA, Ph D (University of Toronto Scarborough) (obiit)
A.F. Johnston, MA, Ph D, LL D, FRSC (V)
W.J. Keith, MA, Ph D, FRSC (U)
M.C. Kirkham, M Phil (U)
J.C. Kuhn, MA, Ph D (SM)
A.M. Leggatt, MA, Ph D, FRSC (U)
J.F. Leyerle, Ph D (U) (obiit)
N.R. Lindheim, MA, Ph D
J.F. Lynen, MA, Ph D (U)
H.R. MacCallum, MA, Ph D (U)
J.J. Macpherson, MA, BLS, Ph D (V)
F.J. Marker, MA, DFA (U)
G. Matteo, MA, Ph D, (SM)
J. Millgate, MA, Ph D, FRSC (V)
L. Munk, MA, Ph D (University of Toronto Mississauga)
D. Neill, MA, B Litt
S. Neuman, Ph D, FRSC
R.B. Parker, MA, Ph D (T)
A.D. Pritchard, Ph D (U)
A.G. Rigg, MA, D Phil (T)
S.P. Rosenbaum, MA, Ph D, FRSC
A. Saddlemyer, MA, Ph D, D Litt, LL D, FRSC (V)
R.M.K. Schieder, MA, Ph D (T)
P.D. Seary, MA, D Phil (N)
W.D. Shaw, AM, Ph D, FRSC (V)
M.J. Sidnell, MA, Ph D (T)
J. Skvorecky, Ph D, FRSC (University of Toronto Mississauga)
Sister G. Thompson, MA, Ph D (SM)
R.W. Van Fossen, AM, Ph D (University of Toronto Mississauga)
C. Visser, B Litt, Ph D (U)
G.T. Warkentin, MA, Ph D (V)
F.W. Watt, MA, B Litt, Ph D (U)
M. Wilson, MA, Ph D, FRSC (T)

### Professor and Chair of the Department

B. Corman, AM, Ph D (T)

### Professor and Associate Chair

J.M. Reibetanz, MA, Ph D (T)

### University Professors

J.E. Chamberlin, Ph D, FRSC (N)
L.A. Hutcheon, MA, Ph D, FRSC (N)

### Professors

J.H. Astington, MA, Ph D
J.D. Baird, MA, Ph D (V)
A.J. Bewell, MA, Ph D, FRSC (U)
R.M. Brown, MA, Ph D (University of Toronto Scarborough)
M. Cuddy-Keane, MA, Ph D (University of Toronto Scarborough)
A.H. de Quehen, Ph D (U)
D.L. Esch, MA, Ph D (V)
E.D. Harvey, MA, Ph D (U)
E.R. Harvey, M Phil, Ph D
A. diP. Healey, MA, Ph D (U)
H.J. Jackson, MA, Ph D
A. Jaffe, PhD
C. Kanaganayakam, Ph D (T)
T. Keymer, MA, Ph D
D.N. Klausner, Ph D (U)
A.C. Lancashire, AM, Ph D (U)
D.I. Lancashire, MA, Ph D, FRSC (N)
G. M. Leonard, MA, Ph D (University of Toronto Scarborough)
J.L. Levenson, MA, Ph D, FRSC (T)
S.B. MacLean, MA, PhD
L. Magnusson, MA, Ph D
J.L. Matus, MA, Ph D (U)
H. Murray, MA, Ph D (V)
A.P.M. Orchard, MA, Ph D (T)
A. Quayson, Ph D
M. Redekop, MA, Ph D (V)
J.H. Reibetanz, AM, Ph D (V)
S.Z. Solecki, MA, Ph D (U)
P.A. Stevens, MA, Ph D (T)
R. Sullivan, MA, Ph D, FRSC
L. Thomson, MA, Ph D (University of Toronto Mississauga)
D. Townsend, MA, Ph D (U)

## Associate Professors

A. Ackerman, MA, Ph D (U)
S.C. Akbari, MA, Ph D (U)
C. Bolus-Reichert, MA, Ph D (University of Toronto Scarborough)
G.E. Clarke, MA, Ph D (U)
M. Cobb, MA, Ph D
J. DeLombard, MA, Ph D (University of Toronto Mississauga)
N. Dolan, MA, Ph D (University of Toronto Scarborough)
P.B. Downes, MA, Ph D (T)
U. Esonwanne, Ph D
G. Fenwick, MA, Ph D (T)
D.I. Galbraith, MA, Ph D (V)
M. Goldman, MA, Ph D (University of Toronto Scarborough)
R. Greene, D Phil (University of Toronto Mississauga)
G. Henderson, MA, Ph D
D.H. Justice, MA, Ph D
N. ten Kortenaar, MA, Ph D (University of Toronto Scarborough)
S. Lamb, MA, Ph D (University of Toronto Scarborough)
M.J. Levene, MA, Ph D (University of Toronto Mississauga)
H. Li, Ph D
V. Li, MA, PhD
D.S. Lynch, PhD
R.R. McLeod, MA, Ph D (University of Toronto Mississauga)
N. Morgenstern, MA, Ph D
A. Most, MA, Ph D
N. Mount, MA, Ph D
M. Nyquist, MA, Ph D (N)
J.J. O'Connor, MA, Ph D (SM)
J.W.O. Patrick, MA, Ph D (V)
C.E. Percy, MA, D Phil (N)
W. Robins, MA, Ph D (V)
S. Salih, MA, D Phil
C. Schmitt, MA, Ph D
D. Seitler, MA, Ph D
K. Weisman, MA, Ph D
D.E. White, MA, Ph D (University of Toronto Mississauga)
M. Woodland, MA, Ph D

## Assistant Professors

R. Buurma, Ph D (University of Toronto Mississauga)
C. Columpar, Ph D (I)
S.E. Dickie, MA, Ph D
A. DuBois, Ph D (University of Toronto Scarborough)
A. Gillespie, MA, D Phil (University of Toronto Mississauga)
C. Hill, MA, Ph D (University of Toronto Mississauga)
K.R. Larson, MPhil, Ph D (University of Toronto Scarborough)
J. Lopez, MA, Ph D
A. Maurice, MA, Ph D (University of Toronto Scarborough)
M. Ruti, MA, Ph D (University of Toronto Mississauga)
N. Sammond, MA, Ph D (I)
H.S. Syme, AM, Ph D (University of Toronto Mississauga)
C. Warley, MA, Ph D
S. Wilson, MA, Ph D
M. Xie, Ph D
T.P. Yu, Ph D

## Senior Lecturer

J. Levine, MA, Ph D (V)

Literature in English has a long history and is now written around the world. The Department of English offers a wide range of courses which engage many aspects of this vast subject: courses in theory, language, and method, in Canadian and indigenous North American literature, in American and transnational literatures, in British literature from its beginnings to the 19th century, and in literature from the 18th century to the present. Some courses deal with historical periods, some examine particular genres or individual authors, some have a national or transnational focus, and some deal more exclusively with theory and critical methods. The Department's objective in every course is to deepen the student's awareness and appreciation of the complex and constantly evolving literary traditions of English around the world. More broadly, studying English develops skills of critical thinking, analysis, and expression that are required in all areas of research, business, and professional activity.

Courses are arranged in four series: this gradation indicates the level of work expected at each stage. In the 100 series, the emphasis falls on introducing students to the study of English at the university level through broad courses in a variety of literary forms. In the 200 series, courses are also introductory, but they focus on more specific areas. In the 300 series, courses are taught at a more advanced level. In the 400 series, the Department offers its most advanced studies in seminar format.

The Department of English offers several Programs of Study: these programs provide students with different frameworks in which to explore the field, while balancing the demands of breadth and depth. The Specialist Program constitutes the most intensive form of study, requiring a minimum of 10 English courses in a 20-course degree. Students should note that the Specialist Program is not designed to meet the requirements for admission to any graduate program: those students who are interested in proceeding to graduate school should seek advice on course selection from their professors and from the undergraduate and graduate counsellors. Similarly, students considering a teaching career in Ontario should consult the admission counsellors at the Ontario Institute for Studies in Education/UT. The Major Program in English requires a minimum of 7 English courses in a 20-course degree and is often combined with other Major Programs in different subject areas. Finally, the Minor Program requires a minimum of 4 English courses in a 20-course degree. The Department also offers joint Specialist Programs in Drama and English, English and Linguistics, and English and Philosophy. Students with questions about the requirements of the various programs in English should consult the Office of the Associate Chair.

The Department of English publishes an Undergraduate Brochure each year: it is usually available by mid-April, on line. The Brochure provides detailed course descriptions and reading lists for the particular courses being taught the following year. The general policy of the Department is to regulate class size in order to achieve the best conditions possible for teaching and learning. Enrolment in many sections is therefore limited. Students are urged to consult the Undergraduate Brochure at www.utoronto.ca/english before enrolment begins.

Associate Chair: Professor J.M. Reibetanz, Room 608, 170 St. George Street (416-978-5026)

# English

Undergraduate Counsellor: Ms. V. Holmes, Room 609, 170 St. George Street (416-978-5026)

General Enquiries: Room 610, 170 St. George Street (416-978-3190)

## English Programs

### English (Arts program)

Enrolment in any English Program of Study requires completion of four previous courses or their equivalent. Students are responsible for completing all the requirements of the English Program in which they are enrolled. No minimum GPA is required. For programs in English prior to 2007, please refer to the appropriate Arts & Science Calendar.

**Specialist program:**
Ten ENG/JEF full courses or their equivalent, including at least three 300+series full-course equivalents and one 400-series full-course equivalent. Only one 100-series ENG/JEF course may be counted toward program requirements. ENG100H1, ENG185Y1, HUM199Y1, MEJ204H1, JUM204H1 may not be counted.

Courses must fulfill the following requirements:
1. At least 1 full-course equivalent from Group 1 (Theory, Language, Methods)
2. At least 1 full-course equivalent from Group 2 (Canadian and Indigenous North American Literatures)
3. At least 1 full-course equivalent from Group 3 (American and Transnational Literatures)
4. At least 3 full-course equivalents from Group 4 (British Literature to the 19th Century)
5. At least 1.5 full-course equivalents from Group 5 (Literature since the 18th Century)

**Major program:**
Seven ENG/JEF full courses or their equivalent, including at least two 300+series full-course equivalents. Only one 100-series ENG/JEF course may be counted toward program requirements. ENG100H1, ENG185Y1, HUM199Y1, MEJ204H1, JUM204H1 may not be counted.

Courses must fulfill the following requirements:
1. At least .5 full-course equivalent from Group 1 (Theory, Language, Methods)
2. At least 1 full-course equivalent from Group 2 (Canadian and Indigenous North American Literatures)
3. At least 1 full-course equivalent from Group 3 (American and Transnational Literatures)
4. At least 2 full-course equivalents from Group 4 (British Literature to the 19th Century)
5. At least 1 full-course equivalent from Group 5 (Literature since the 18th Century)

**Minor program:**
Four ENG/JEF full courses or their equivalent, including at least one 300+series full-course equivalent. Only one 100-series ENG/JEF course may be counted toward program requirements. ENG100H1, ENG185Y1, HUM199Y1, MEJ204H1, JUM204H1 may not be counted.

**Group 1: Theory, Language, Methods**
ENG 201Y1, 205H1, 280H1 (or ENG267H1), 285H1 (or ENG367Y), 290Y1, 380H1 (or ENG467Y1), 382Y1 (or ENG366Y1), 383H1 (or ENG468H1), 385H1 (or ENG367Y1), 414H1, 415H1, 416H1, 417Y1, 418Y1, 419Y1

**Group 2: Canadian and Indigenous North American Literatures**
ENG 215H1, 252Y1, 254Y1, 277Y1, 350H1, 352H1 (or ENG223H1), 353Y1 (or ENG216Y1), 354Y1, 355H1, 357H1, 424H1, 425H1, 426H1, 427Y1, 428Y1, 429Y1

**Group 3: American and Transnational Literatures**
ENG 250Y1, 268H1 (or ENG279Y1), 270Y1 (or ENG253Y1), 273Y1, 275Y1 (or ENG256Y1), 278Y1, 360H1, 363Y1 (or ENG358Y1), 364Y1 (or ENG359Y1), 365H1 (or ENG361H1), 368H1 (or ENG279Y1), 370H1, ENG375H, 434H1, 435H1, 436H1, 437Y1, 438Y1, 439Y1

**Group 4: British Literature to the 19th Century**
ENG 202Y1, 220Y1, 240Y1, 300Y1, 301H1, 302Y1, 303H1 OR 304Y1, 305H1 OR 306Y1, 307H1, 308Y1, 311H1, 322Y1, 323H1, 330H1, 331H1 (or ENG332Y1 or ENG333H1), 335H1 (or ENG332Y1 or ENG333H1), 336H1, 337H1 (or ENG334H1), 402H1, 460H1, 461H1, 462H1, 463H1, 464Y1, 465Y1, 466Y1, 469Y1

**Group 5: Literature since the 18th Century**
ENG 210Y1, 213H1, 214H1, 232H1, 233Y1, 234H1, 235H1, 236H1, 237H1, 239H1, 324Y1 OR 325H1, 328Y1, 329H1, 340H1 (or ENG338Y1), 341H1 (or ENG338Y1), 342H1 (or ENG339H1), 347Y1 (or ENG312Y1), 348Y1, 349H1, 470H1, 471H1, 472H1, 473H1, 474Y1, 475Y1, 476Y1, 479Y1

### English and Drama - See Drama

### English and Linguistics (Arts program)

Consult the Undergraduate Counsellor, Department of English.

**Specialist Program:**
Fourteen full courses or their equivalent, including three 300+series full-course equivalents and one 400-series full-course equivalent.

**English (7 courses):**
Only one 100-series ENG/JEF course may be counted toward program requirements. ENG100H1, ENG185Y1, HUM199Y1, MEJ204H1, JUM204H1 may not be counted.

Seven ENG/JEF full courses or their equivalent, fulfilling the following requirements:
1. ENG285H1 & ENG385H1
2. At least 1 full-course equivalent from Group 2 (Canadian and Indigenous North American Literatures)
3. At least .5 full-course equivalent from Group 3 (American and Transnational Literatures)
4. At least 2 full-course equivalents from Group 4 (British Literature to the 19th Century), ENG240Y1 and ENG300Y1 specially recommended
5. At least .5 full-course equivalent from Group 5 (Literature Since the 18th Century)
5. At least 0.5 full-course equivalent from Group 5 (Literature Since the 18th Century)

**Linguistics (7 courses):**
First Year:
LIN 100Y1
Second Year:

LIN 228H1, 229H1, 241H1, 232H1
Third and Fourth Years:
Four FCEs in LIN/JAL/JFL/JLP/JLS (excluding LIN 200H1), at least one of which must be at the 400-level, and two at the 300-level (LIN 362H1 specifically recommended)

### English and Philosophy (Arts program)

Consult the Undergraduate Counsellor, Department of English.

**Specialist program:**
Fourteen full courses or their equivalent, including at least three 300+series full-course equivalents and one 400-series full-course equivalent.

**English:**
Only one 100-series ENG/JEF course may be counted toward program requirements. ENG100H1, ENG185Y1, HUM199Y1, MEJ204H1, JUM204H1 may not be counted.

1. Six to eight full courses or their equivalent.
2. Same Group Requirements as the English Major Program.

**Philosophy (6 to 8 courses):**
1. One full-course equivalent from the following: PHL200Y1/205H1/206H1/210Y1
2. One full-course equivalent from the following: PHL217H1/232H1/240H1/285H1
3. One half course from the following: PHL245H1/246H1/247H1/TRN200Y
4. Additional courses in Philosophy to a total of six to eight full courses or their equivalent.

## English Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all ENG courses are classified as HUMANITIES courses.

Please note: Not all courses are offered every year.

### 100-Series Courses

**Note**
100-series courses are designed to introduce students to the study of English at the university level. They aim to foster interpretive skills and to promote effective writing. ENG100H1 examines basic writing skills relevant to a wide range of university subject areas. ENG110Y1 focuses on elements of narrative writing in a variety of fictional and non-fictional forms. ENG125Y1 explores the theatrical aspects of various literary forms. ENG140Y1 ranges over modern and contemporary literature, considering drama, fiction, and poetry from various regions of the world. JEF100Y1 explores some of the major works of the Western literary tradition from Homer to the twentieth century. Students should note that only ONE of ENG 110Y1, 125Y1, 140Y1, and JEF100Y1 may be counted towards English program requirements. ENG100H1, ENG185Y1, HUM199Y1 may not be used to meet the requirements of any English program. First-year students may enrol in a 200-series ENG course, if they are concurrently enrolled in one of ENG 110Y1, 125Y1, 140Y1 or JEF100Y1.

**ENG100H1 Effective Writing [39L]**
A course designed to improve competence in writing expository and persuasive prose for academic and other purposes. It aims to teach the principles of clear, well-reasoned prose, and their practical applications; the processes of composition (drafting, revising, final editing); the conventions of various prose forms and different university disciplines. The course does not meet the needs of students primarily seeking to develop English language proficiency. This course may not count toward any English program.

**ENG110Y1 Narrative [78L]**
This course explores the stories that are all around us and that shape our world: traditional literary narratives such as ballads, romances, and novels, and also non-literary forms of narrative, such as journalism, movies, myths, jokes, legal judgements, travel writing, histories, songs, diaries, biographies.

**ENG125Y1 The Performance of Literature [78L]**
Considering major dramatic genres such as comedy and tragedy, this course explores how performance affects our engagement with literature by focusing on the theatrical aspects of various literary forms—plays, novels, poems, sermons, essays—as well as adaptations of these texts into other forms and media—television, film, musical recordings.

**ENG140Y1 Literature for our Time [78L]**
An exploration of how the literature of the twentieth and twenty-first centuries responds to our world through major forms of poetry, prose, and drama in texts drawn from a variety of national literatures. At least nine authors, such as Eliot, Frost, Heaney, Page, Plath, Rich, Wayman, Walcott, Yeats, Faulkner, Gordimer, Joyce, Morrison, Munro, Naipaul, Rushdie, Woolf, Beckett, Highway, O'Neill, Shaw, Soyinka, Stoppard.

**ENG185Y1 The Study of Literature [52L]**
See Academic Bridging Program.
Only for students registered in the Academic Bridging Program. This course may not count toward any English program.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first-year students. It may serve as a distribution requirement course; see page 48. This course may not count toward any English program.

**JEF100Y1 The Western Tradition [78L]**
An introduction to literature through major works of the Western literary tradition. What constitutes a literary "classic"? How have the great concerns of the Western tradition - human nature, its place in society, its mythmaking, its destiny - been represented in literature? These and other questions are examined by reference to 11-12 works, from ancient times to the twentieth century, by such authors as Homer, Sophocles, Ovid, Virgil, Dante, Shakespeare, Cervantes, Molière, Austen, Dostoevski, Kafka, Camus, Beckett and Márquez. (A joint course offered by the Departments of English and French; see also JEF 100Y1 in the French program listings.)

### 200-Series Courses

**Note**
200-series courses are open to students who have obtained standing in one full-course equivalent ENG or JEF course or in at least four full-course equivalents. Students without these prerequisites may enrol in a 200-series course if they are concurrently enrolled in one of ENG110Y1, 125Y1, 140Y1, or JEF100Y1. Not all 200-series courses are offered every year: please consult the Department's Brochure for further information. MEJ204H1 and JUM204H1 may not be used to meet the requirements of any English program.

**Please note that exclusions will be strictly enforced.**

**ENG201Y1 Reading Poetry [78L]**
An introduction to poetry through a close reading of texts, focusing on its traditional forms, themes, techniques, and uses of language; its historical and geographical range; and its twentieth-century diversity.

**ENG202Y1 British Literature: Medieval to Romantic [78L]**
An introduction to influential texts that have shaped the British literary heritage, covering approximately twelve writers of poetry, drama, and prose, from Chaucer to Keats, with attention to such questions as the development of the theatre, the growth of the novel form, and the emergence of women writers.

**ENG205H1 Rhetoric [39L]**
An introduction to the rhetorical tradition from classical times to the present with a focus on prose as strategic persuasion. Besides rhetorical terminology, topics may include the discovery and arrangement of arguments, validity in argumentation, elements of style, and rhetorical criticism and theory.

**ENG210Y1 The Novel [78L]**
An introduction to the novel through a reading of ten to twelve texts, representing a range of periods, techniques, regions, and themes.

**ENG213H1 The Short Story [39L]**
This course explores shorter works of nineteenth- and twentieth-century writers. Special attention is paid to formal and rhetorical concepts for the study of fiction as well as to issues such as narrative voice, allegory, irony, and the representation of temporality.

**ENG214H1 The Short-Story Collection [39L]**
This course explores collections of short stories. It examines individual stories, the relationships among and between stories, the dynamics of the collection as a whole, the literary history of this genre, along with its narrative techniques and thematic concerns.

**ENG215H1 The Canadian Short Story [39L]**
An introduction to the Canadian short story, this course emphasizes its rich variety of settings, subjects, and styles.

**ENG220Y1 Shakespeare [78L]**
About twelve plays by Shakespeare representing the different periods of his career and the different genres he worked in (comedy, history, tragedy). Such plays as Romeo and Juliet; A Midsummer Night's Dream; Richard II; Henry IV, Parts I and II; As You Like It, Twelfth Night; Measure for Measure; Hamlet; King Lear; Antony and Cleopatra; The Tempest. Non-dramatic poetry may be included.

**ENG232H1 Biography and Autobiography [39L]**
An introduction to the varieties of life writing. Issues discussed include the differences between biography and autobiography, the nature of sources, the ethics of life writing, and the aims and biases of the biographer.

**ENG233Y1 Women's Writing [39L]**
A study of eight to twelve women writers, this course may include fiction, drama, poetry and non-fiction. Approaches may engage feminist theories, histories, print culture, and other relevant concerns.

**ENG234H1 Children's Literature [39L]**
A critical and historical study of poetry and fiction written for or appropriated by children, this course may also include drama or non-fiction and will cover works by at least twelve authors such as Bunyan, Stevenson, Carroll, Twain, Alcott, Nesbit, Montgomery, Milne, Norton, and Fitzhugh.

**ENG235H1 The Graphic Novel [39L]**
An introduction to book-length sequential art, this course includes fictional and nonfictional comics by artists such as Will Eisner, Art Spiegelman, Frank Miller, Alan Moore, Chris Ware, Daniel Clowes, Julie Doucet, Marjane Satrapi, Chester Brown, and Seth.

**ENG236H1 Detective Fiction [39L]**
At least twelve works by such authors as Poe, Dickens, Collins, Doyle, Chesterton, Christie, Sayers, Van Dine, Hammett, Chandler, Faulkner, P.D. James, Rendell.

**ENG237H1 Science Fiction [39L]**
This course explores speculative fiction that invents or extrapolates an inner or outer cosmology from the physical, life, social, and human sciences. Typical subjects include AI, alternative histories, cyberpunk, evolution, future and dying worlds, genetics, space/time travel, strange species, theories of everything, utopias, and dystopias.

**ENG239H1 Fantasy and Horror [39L]**
This course explores speculative fiction of the fantastic, the magical, the supernatural, and the horrific. Subgenres may include alternative histories, animal fantasy, epic fantasy, the Gothic, fairy tales, magic realism, sword and sorcery, and vampire fiction.

**ENG240Y1 Old English Language & Literature [78L]**
Prepares students to read the oldest English literary forms in the original language. Introduces the earliest English poetry in a woman's voice, expressions of desire, religious fervour, and the agonies of war. Texts, written 680 - 1100, range from the epic of Beowulf the dragon-slayer to ribald riddles.

**ENG250Y1 American Literature [78L]**
An introductory survey of major works in American literature, this course explores works in a variety of genres, including poetry, fiction, essays, and slave narratives.

**ENG252Y1 Canadian Literature [78L]**
An introductory survey of major Canadian works in poetry, prose, and drama from early to recent times.

**ENG254Y1 Indigenous Literatures of North America [78L]**
An introduction to Indigenous North American writing in English, with significant attention to Aboriginal literatures in Canada. The writings are placed within the context of Indigenous cultural and political continuity, linguistic and territorial diversity, and living oral traditions. The primary focus is on contemporary Indigenous writing.

**ENG268H1 Asian North American Literature [39L]**
Introduction to the literature and culture of Asian Canadians and Asian Americans, including fiction, poetry, drama, film, video, and electronic media. The course also explores how such works respond to representations of Asians in popular culture and to Asian North American history and politics.
Exclusion: ENG279Y1

**ENG270Y1 Colonial and Postcolonial Writing (formerly ENG253Y1) [78L]**
In this course we study literary and non-literary texts from the nineteenth century to the present day. Colonial texts are analysed alongside postcolonial interpretations of the nineteenth-century archive, giving students a grasp of colonial discourse and contemporary postcolonial analyses.
Exclusion: ENG253Y1

**ENG273Y1 Queer Writing [78L]**
Introducing a lesbian, gay, bisexual, trans, and queer tradition in literature and theory, this course explores classical, modern, postmodern, and contemporary literature, criticism, art, film, music, and popular culture.

**ENG275Y1 Jewish Literature in English (formerly ENG256Y1) [78L]**
A survey of Jewish literature in English, focusing on questions of language, history, religion, national identity, and genre, this course may include works of prose, poetry, drama, film, or music from various Jewish literary communities.
Exclusion: ENG256Y1

**ENG277Y1 African Canadian Literature [78L]**
A study of Black Canadian Literature (poetry, drama, fiction, non-fiction) from its origin in the African Slave Trade in the eighteenth century to its current flowering as the expression of immigrants, exiles, refugees, and "indigenous Africans" (whose roots are essentially "Canadian"). Pertinent theoretical works, films and recorded music are also considered.

**ENG278Y1 African Literatures in English [78L]**
What, if anything, is distinctively "African" in African texts; in what form is that distinction encoded, and how? Is it possible to produce "African" readings of African texts? We address these, as well as other relevant theoretical issues, through close readings of oral performances, short stories, novels, plays, and selected essays.

**ENG280H1 Critical Approaches to Literature (formerly ENG267H1) [39L]**
An introduction to literary theory and its central questions, such as the notion of literature itself, the relation between literature and reality, the nature of literary language, the making of literary canons, and the roles of the author and the reader.
Exclusion: ENG267H1

**ENG285H1 The English Language in the World [39L]**
Many-voiced modern English dominates science, business, diplomacy, and popular cultures worldwide. This introductory course surveys transnational, regional, and social varieties of Later Modern English; the linguistic and social factors that have shaped them; their characteristic structures; and their uses in speech and in writing, both literary and non-literary.
Exclusion: ENG367Y1

**ENG290Y1 Literature and Psychoanalysis [78L]**
An introduction to psychoanalysis for students of literature, this course considers major psychoanalytic ideas through close readings of selected texts by Freud. The course also explores critiques and applications of Freud's work and examines a selection of literary texts that engage psychoanalytic theory.

**ENG299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**MEJ204H1 Mathematics and Poetry [39L]**
An interdisciplinary exploration of creativity and imagination as they arise in the study of mathematics and poetry. The goal of the course is to guide each participant towards the experience of an independent discovery. Students with and without backgrounds in either subject are welcome. No calculus required.
Exclusion: JUM204H1

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### 300-Series Courses

**Note**
300-series courses are open to students who have obtained standing in at least four full-course equivalents, including one full-course equivalent ENG or JEF course. Not all 300-series courses are offered every year: please consult the Department's Brochure for further information. Students should note the special prerequisites for ENG389Y1, 390Y1, 391Y1, 392H1, 393H1 and 394Y1: consult the Brochure before the May 15 deadline for instructions on applying for these courses.

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**Please note that exclusions will be strictly enforced.**

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**ENG300Y1 Chaucer [78L]**
The foundation of English literature: in their uncensored richness and range, Chaucer's works have delighted wide audiences for over 600 years. Includes The Canterbury Tales, with its variety of narrative genres from the humorous and bawdy to the religious and philosophical, and Troilus and Criseyde, a profound erotic masterpiece.

**ENG301H1 Spenser [39L]**
Selections from The Faerie Queene and other works.

**ENG302Y1 Poetry and Prose, 1500-1600 [78L]**
Considering literature during the reign of the Tudors, this course may include poetry of Wyatt, Sidney, Mary Sidney Herbert, Marlowe, Shakespeare, Spenser, and Donne; prose of More, Askew, Sidney, Hakluyt, Hooker, Elizabeth I, Lyly, and Nashe; and supplementary readings from such writers as Erasmus, Castiglione, and Machiavelli.

**ENG303H1 Milton [39L]**
Selections from Paradise Lost and other works.
Exclusion: ENG304Y1

**ENG304Y1 Poetry and Prose, 1600-1660 [78L]**
Considering literature during the reign of the early Stuarts and the Civil War, with special attention to Milton and Paradise Lost, this course also includes such poets as Donne, Jonson, Lanyer, Wroth, Herbert, and Marvell, and such prose writers as Bacon, Clifford, Donne, Wroth, Burton, Cary, Browne, Hobbes, Milton, and Cavendish.
Exclusion: ENG303H1

**ENG305H1 Swift, Pope, and their Contemporaries [39L]**
Selected works in prose and verse by Swift and Pope studied alongside works by their contemporaries. Topics may include the legitimacy of satire, the role of criticism, and the growing importance of writing by women.
Exclusion: ENG306Y1

**ENG306Y1 Poetry and Prose, 1660-1800 [78L]**
Writers of this period grapple with questions of authority and individualism, tradition and innovation, in politics, religion, knowledge, society, and literature itself. Special attention to Dryden, Pope, Swift, Johnson, and at least six other authors.
Exclusion: ENG305H1

**ENG307H1 Women Writers, 1660-1800 [39L]**
A study of poems, plays, novels, letters, periodical essays, polemical works, and books for children by such writers as Cavendish, Behn, Finch, Centlivre, Leapor, Burney, and Wollstonecraft. Topics may include patronage and publishing; nationality, class, and gender; and generic conventions.

**ENG308Y1 Romantic Poetry and Prose [78L]**
Poetry and critical prose of Blake, W. Wordsworth, Coleridge, Byron, P.B. Shelley, Keats; may include selections from other writers such as Crabbe, Scott, Landor, Clare, D. Wordsworth, M. Shelley, De Quincey.

**ENG311H1 Medieval Literature [39L]**
This course explores a selection of writings in early English, excluding those by Chaucer.

**ENG322Y1 Fiction before 1832 [78L]**
This course studies the emergence of prose fiction as a genre recognized in both a literary and a commercial sense. Authors may include Behn, Defoe, Richardson, Fielding, Sterne, Scott, and Austen.

**ENG323H1 Austen and Her Contemporaries [39L]**
A study of selected novels of Jane Austen and of works by such contemporaries as Radcliffe, Godwin, Wollstonecraft, Wordsworth, Edgeworth, Scott, and Shelley, in the context of the complex literary, social, and political relationships of that time.

**ENG324Y1 Fiction, 1832-1900 [78L]**
Exploring the social and political dilemmas of a culture in transition, this course studies such topics as the comic art of Dickens, Trollope, and Thackeray, the Gothicism of the Brontës, the crisis of religious faith in George Eliot, and the powerful moral fables of Hardy. Students will read 10-12 novels.
Exclusion: ENG325H1

**ENG325H1 Victorian Realist Novels [39L]**
This course explores forms of realism in Victorian fiction and includes at least six novels by such authors as Dickens, Thackeray, George Eliot, Charlotte Bronte, Gaskell, Collins, Trollope, and Hardy.
Exclusion: ENG324Y1

**ENG328Y1 Modern Fiction to 1960 [78L]**
This course explores ten to twelve works by such writers as James, Conrad, Cather, Forster, Joyce, Woolf, Lawrence, Faulkner, Rhys, Hemingway, Achebe, Ellison, Spark, and Lessing.

**ENG329H1 Contemporary British Fiction [39L]**
This course explores six or more works by at least four British contemporary writers of fiction.

**ENG330H1 Early Drama [39L]**
This course explores liturgical plays, biblical plays, religious and political morality plays, and Tudor interludes.

**ENG331H1 Drama to 1603 [39L]**
This course explores English drama to the end of the reign of Queen Elizabeth I, with attention to such playwrights as Lyly, Kyd, Marlowe, and Shakespeare.
Exclusion: ENG332Y1 and ENG333H1

**ENG335H1 Drama 1603 to 1642 [39L]**
This course explores English drama from the death of Queen Elizabeth I to the closing of the theatres, with attention to such playwrights as Jonson, Middleton, Shakespeare, and Webster.
Exclusion: ENG332Y1 and ENG333H1

**ENG336H1 Topics in Shakespeare [39L]**
A concentrated study of one aspect of Shakespeare's work, such as his use of a particular genre, a particular period of his work, a recurring theme, or the application of a particular critical approach.

**ENG337H1 Drama, 1660-1800 (formerly ENG334H1) [39L]**
At least twelve plays, including works by Dryden, Wycherley, Congreve, and their successors, chosen to demonstrate the modes of drama practised during the period, the relationship between these modes and that between the plays and the theatres for which they were designed.
Exclusion: ENG334H1

**ENG340H1 Modern Drama to World War II [39L]**
A study of plays in English by such dramatists as Wilde, Yeats, Shaw, Synge, Glaspell, Hughes, and O'Neill, as well as plays in translation by such dramatists as Ibsen, Chekhov, Strindberg, and Pirandello.
Exclusion: ENG338Y1

**ENG341H1 Modern Drama since World War II [39L]**
A study of plays by such dramatists as Beckett, Miller, Williams, Pinter, Soyinka, and Churchill, with background readings from other dramatic literatures.
Exclusion: ENG338Y1

**ENG342H1 Contemporary Drama (formerly ENG339H1) [39L]**
A study of ten or more plays by at least six recent dramatists.
Exclusion: ENG339H1

**ENG347Y1 Victorian Poetry and Prose (formerly ENG312Y) [78L]**
Writers (such as Darwin, Tennyson, Browning, Wilde, Nightingale, Christina Rossetti, Kipling) respond to crisis and transition: the Industrial Revolution, the Idea of Progress, and the "Woman Question"; conflicting claims of liberty and equality, empire and nation, theology and natural selection; the Romantic inheritance, Art-for-Art's-Sake, Fin de siècle, and "Decadence."
Exclusion: ENG312Y

**ENG348Y1 Modern Poetry to 1960 [78L]**
Special study of Yeats, Pound, Eliot, Auden, Stevens; selections from other poets.

**ENG 349H1 Contemporary Poetry [39L]**
Works by at least six contemporary poets, such as Ammons, Ashbery, Heaney, Hughes, Lowell, Muldoon, and Plath.

**ENG350H1 Early Canadian Literature [39L]**
Writing in English Canada before 1914, from a variety of genres such as the novel, poetry, short stories, exploration and settler accounts, nature writing, criticism, First Nations cultural production.

**ENG352H1 Canadian Drama (formerly ENG223H1) [39L]**
A study of major Canadian playwrights and developments since 1940, with some attention to the history of the theatre in Canada.
Exclusion: ENG223H1

**ENG353Y1 Canadian Fiction (formerly ENG216Y1) [78L]**
A study of twelve or more Canadian works of fiction, primarily novels.
Exclusion: ENG216Y1

**ENG354Y1 Canadian Poetry [78L]**
A study of major Canadian poets, modern and contemporary.

**ENG355H1 Indigenous Women's Literature [39L]**
A study of works by Indigenous women writers from North America and beyond, with significant attention to Aboriginal writers in Canada. Texts engage with issues of de/colonization, representation, gender, and sexuality, and span multiple genres, including fiction, life writing, poetry, drama, film, music, and creative non-fiction.

**ENG357H1 New Writing in Canada [39L]**
Close encounters with recent writing in Canada: new voices, new forms, and new responses to old forms. Texts may include or focus on poetry, fiction, drama, non-fiction, or new media.

**ENG360H1 Early American Literature [39L]**
This course explores writing in a variety of genres produced in the American colonies in the seventeenth and eighteenth centuries, such as narratives, poetry, autobiography, journals, essays, sermons, and court transcripts.

**ENG363Y1 Nineteenth-Century American Literature (formerly ENG358Y1) [78L]**
This course explores American writing in a variety of genres from the end of the Revolution to the beginning of the twentieth century.
Exclusion: ENG358Y1

**ENG364Y1 Twentieth-Century American Literature (formerly ENG359Y1) [78L]**
This course explores twentieth-century American writing in a variety of genres.
Exclusion: ENG359Y1

**ENG365H1 Contemporary American Fiction (formerly ENG361H1) [39L]**
This course explores six or more works by at least four contemporary American writers of fiction.
Exclusion: ENG361H1

**ENG368H1 Asian North American Poetry and Prose [39L]**
Close study of works by Asian American and Asian Canadian authors, with attention to the historical and political contexts in which such works have been written and read. Topics may include racial, diasporic, and hybrid identity; cultural nationalism and transnationalism; gender and sexuality; the politics of poetic form.
Exclusion: ENG279Y1

**ENG370H1 Postcolonial and Transnational Discourses [39L]**
This course focuses on recent theorizations of postcoloniality and transnationality through readings of fictional and non-fictional texts, along with analyses of contemporary films and media representations.

**ENG375H Studies in Jewish Literature and Culture [39L]**
This course will offer a focused exploration of a particular genre, national literature, literary period or thematic thread in modern Jewish literature and culture in English.

**ENG380H1 History of Literary Theory 39L**
Literary theory from classical times to the nineteenth century. Topics include theories of the imagination, genre analysis, aesthetics, the relations between literature and reality and literature and society, and the evaluation and interpretation of literature.
Exclusion: ENG467Y1

**ENG382Y1 Contemporary Literary Theory (formerly ENG366Y1) [78L]**
This course explores literary theory from the early twentieth century to the present. Schools or movements studied may include structuralism, formalism, phenomenology, Marxism, post-structuralism, reader-response theory, feminism, queer theory, new historicism, psychoanalysis, postcolonial theory, and cultural and race studies.
Exclusion: ENG366Y1

**ENG383H1 Critical Methods (formerly ENG468H1) [39L]**
Sustained study of one school, movement, or approach in literary theory, history, or criticism. Content varies with instructors.
Exclusion: ENG468H1

**ENG385H1 History of the English Language [39L]**
This course explores English from its prehistory to the present day, emphasizing Old, Middle, and Early Modern English and the theory and terminology needed to understand their lexical, grammatical, and phonological structure; language variation and change; codification and standardization; literary and non-literary usage.
Exclusion: ENG367Y1

**ENG389Y1 Creative Writing (formerly ENG369Y1) [52S]**
Restricted to students who in the opinion of the Department show special aptitude for writing poetry, fiction, or drama. For application procedure, see Department Brochure by May 15.
Prerequisite: Permission of instructor and the Associate Chair
Exclusion: ENG369Y1

**ENG390Y1 Individual Studies [TBA]**

**ENG392H1 Individual Studies [TBA]**

**ENG393H1 Individual Studies [TBA]**

**ENG394Y1 Individual Studies [TBA]**
A scholarly project chosen by the student and supervised by a member of the staff. The form of the project and the manner of its execution are determined in consultation with the supervisor. All project proposals should be submitted by May 15. Proposal forms are available from the Department offices.
Exclusion: ENG490Y1
Prerequisite: Three courses in English, permission of the instructor and the Associate Chair

**ENG391Y1 Individual Studies (Creative) [TBA]**
A project in creative writing chosen by the student and supervised by a member of the staff. The form of the project and the manner of its execution are determined in consultation with the supervisor. All project proposals should be submitted by May 15. Proposal forms are available from the Department offices.
Prerequisite: Three courses in English, including ENG389Y1, permission of the instructor and the Associate Chair

**ENG398H0 Independent Experiential Study Project**

**ENG399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting.
See page 48 for details.

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### 400-Series Courses

**Note**
400-series courses are open to students who have obtained standing in at least nine full-course equivalents, including at least five full-course equivalent ENG or JEF courses. Students who require a 400-series course to satisfy their program requirements have enrolment priority in the first round of course enrolment. 400-series courses are taught in a seminar format: enrolment is limited to 25 and students are expected to attend regularly and participate fully. Not all 400-series courses are offered every year: please consult the Department's Brochure for further information.

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**ENG402H1 Special Studies in Old English Poetry [26S]**
An undergraduate/graduate seminar devoted to a close reading of selected Old English texts.
Prerequisite: Five courses in English, including ENG240Y1

**ENG414H1 Advanced Studies: Theory, Language, Methods [26S]**

**ENG415H1 Advanced Studies: Theory, Language, Methods [26S]**

**ENG416H1 Advanced Studies: Theory, Language, Methods [26S]**
Individual topics to be specified by instructors.

**ENG417Y1 Advanced Studies: Theory, Language, Methods [52S]**

**ENG418Y1 Advanced Studies: Theory, Language, Methods [52S]**
Individual topics to be specified by instructors.

**ENG419Y1 Advanced Research Seminar: Theory, Language, Methods [52S]**
A seminar designed to provide students with the opportunity to practice their skills of research and interpretation at a particularly advanced level. Admission by permission of the Department.

**ENG424H1 Advanced Studies: Canadian and Indigenous North American Literatures [26S]**

**ENG425H1 Advanced Studies: Canadian and Indigenous North American Literatures [26S]**

**ENG426H1 Advanced Studies: Canadian and Indigenous North American Literatures [26S]**
Individual topics to be specified by instructors.

**ENG427Y1 Advanced Studies: Canadian and Indigenous North American Literatures [52S]**

**ENG428Y1 Advanced Studies: Canadian and Indigenous North American Literatures [52S]**
Individual topics to be specified by instructors.

**ENG429Y1 Advanced Research Seminar: Canadian and Indigenous North American Literatures [52S]**
A seminar designed to provide students with the opportunity to practice their skills of research and interpretation at a particularly advanced level. Admission by permission of the Department.

**ENG434H1 Advanced Studies: American and Transnational Literatures 26S**

**ENG435H1 Advanced Studies: American and Transnational Literatures 26S**

**ENG436H1 Advanced Studies: American and Transnational Literatures 26S**
Individual topics to be specified by instructors.

**ENG437Y1 Advanced Studies: American and Transnational Literatures [52S]**

**ENG438Y1 Advanced Studies: American and Transnational Literatures [52S]**
Individual topics to be specified by instructors.

**ENG439Y1 Advanced Research Seminar: American and Transnational Literatures [52S]**
A seminar designed to provide students with the opportunity to practice their skills of research and interpretation at a particularly advanced level. Admission by permission of the Department.

**ENG460H1 Advanced Studies: British Literature to the 19th Century [26S]**

**ENG461H1 Advanced Studies: British Literature to the 19th Century [26S]**

**ENG462H1 Advanced Studies: British Literature to the 19th Century [26S]**

**ENG463H1 Advanced Studies: British Literature to the 19th Century [26S]**
Individual topics to be specified by instructors.

**ENG464Y1 Advanced Studies: British Literature to the 19th Century [52S]**

**ENG465Y1 Advanced Studies: British Literature to the 19th Century [52S]**

**ENG466Y1 Advanced Studies: British Literature to the 19th Century [52S]**
Individual topics to be specified by instructors.

**ENG469Y1 Advanced Research Seminar: British Literature to the 19th Century [52S]**
A seminar designed to provide students with the opportunity to practice their skills of research and interpretation at a particularly advanced level. Admission by permission of the Department.

**ENG470H1 Advanced Studies: Literature since the 18th Century [26S]**

**ENG471H1 Advanced Studies: Literature since the 18th Century [26S]**

**ENG472H1 Advanced Studies: Literature since the 18th Century [26S]**

**ENG473H1 Advanced Studies: Literature since the 18th Century [26S]**
Individual topics to be specified by instructors.

**ENG474Y1 Advanced Studies: Literature since the 18th Century [52S]**

**ENG475Y1 Advanced Studies: Literature since the 18th Century [52S]**

**ENG476Y1 Advanced Studies: Literature since the 18th Century [52S]**
Individual topics to be specified by instructors.

**ENG479Y1 Advanced Research Seminar: Literature since the 18th Century [52S]**
A seminar designed to provide students with the opportunity to practice their skills of research and interpretation at a particularly advanced level. Admission by permission of the Department.

# Centre for Environment

The Faculty of Arts and Sciences offers students a number of opportunities to study environment on the St. George campus. Students are encouraged to investigate the following environmental program options, as well as those of the new Centre for Environment (www.environment.utoronto.ca). See below.

**Environment & Resource Management (Arts program):**

(See program details under Geography or at http://www.geog.utoronto.ca/)

These Specialist and Major programs can be linked with either the Centre's Arts or Science programs for an Honours Degree. This program focuses on resource and environmental planning, environmental assessment, water resources, waste management and Canada's forests from the perspective of Geography.

**Forest Conservation (Arts or Science programs):**

(See program details under Forestry or at www.forestry.utoronto.ca.)

These Specialist , Major and Minor programs can be linked with the Centre's science or arts programs for an Honours degree. Core subjects include world's forests, forest products in sustainable forestry, forest conservation practices, forest management and resource allocation, and forests and society. Other topics include biodiversity, sustainability, international policy, certification, intensive forest management, community management, forest health and forest fragmentation.

**Physical & Environmental Geography (Science program):**

(See program details under Geography or at http://www.geog.utoronto.ca/)

These Specialist and Major programs can be linked with the Centre's science or arts programs for an Honours Degree. Core subjects include geomorphology, climatology, soil science and hydrology. Other topics include biogeography, remote sensing, climate assessment, biogeochemistry and environmental contaminants modeling.

## Faculty

### Cross-Appointed Full Professors

P. H. Byer, SB, SM, PhD, PEng
I. Leman Stefanovic, MA, Ph D
W.H. Vanderberg, BASc, MASc, PhD, PEng

### Cross-Appointed Associate Professors

W.S. Prudham, BA, BSc, MA, PhD
S. Scharper, Ph D

### Cross-Appointed Assistant Professor

C. Wiseman, Dr. Phil. Nat.

### Senior Lecturers

K. Ing, M Sc
D.C. Macdonald, Ph D
B.I. Savan, Ph D

The Faculty of Arts and Science established the Centre for Environment to help students focus the diverse strengths of the Faculty's environmental scholars into an academic program. In addition, the Centre's programs offer students access to environmental scholars in other units of the University.

**Core Programs:**

The Centre offers HBA and HBSc minor, major and specialist programs: Environment and Science (Science), Environment and Society (Arts), and Environmental Policy and Practice (Arts) which are often taken in conjunction with another program(s) in a traditional academic field (e.g. Physics, Sociology, etc.). We consider this an ideal combination of disciplinary depth and interdisciplinary breadth.

The Centre's B.Sc. Environment and Science program is intended for students who are interested in studying and working in the environmental sciences with a focus on one of the Faculty's many scientific disciplines, from Actuarial Science through Psychology. The science program is a demanding one with a requirement for a number of 100-level science courses in Biology, Chemistry, Earth Sciences, Mathematics and Physics. This foundation is necessary to give students the degree of cross-disciplinary scientific literacy necessary for our 200-level science courses; ENV234Y (Environmental Biology), ENV235Y (Physics and Chemistry of Planet Earth) or ENV236Y (Human Interactions with the Environment). In most cases, students will be combining Environment and Science with another science option (a Specialist or Major or two Minors) for an Honours B.Sc. degree program.

The Centre's B.A. Environment and Society program is a broad general program intended for students interested in studying and working in an environmental area within the social sciences or humanities, e.g. geography, economics, ethics, or international relations. Environment and Society may also be appropriate for students taking a B.Sc. program who do not wish to also enroll in Environment and Science. In most cases students will be combining Environment and Society with another option (a Specialist or Major or two Minors) for an Honours B.A. or B.Sc. degree. Companion programs for students in Environment and Society could come from any of the Faculty's social sciences or humanities disciplines (including Commerce). **NOTE**: Students may not take both an Environment and Society program and an Environmental Policy and Practice program, unless one of them is not required to meet degree requirements.

In the Centre's Environmental Policy and Practice program (formerly Environmental Studies), understanding leads to action. This program offers rigorous academic study of the economic, social and political forces driving today's issues - globalization, species extinction, the Kyoto Protocol on climate change, the fight for sustainable cities, smog, toxic pollution and human health. The program links intellectual understanding of the environmental crisis with opportunities to use this knowledge to help solve these problems - here in the Toronto area, nationally and globally. Students study in small classes with extensive faculty contact. The faculty include both academic scholars and professional practitioners, which means students gain both academic skills and knowledge, and practical skills and experience, both in the class-room and in the community. The program specializes in environmental policy and governance, and gives students a grounding in scientific literacy and evolving cultural attitudes toward nature. Together, the academic and applied experience students gain in this program provides a solid foundation for graduate studies and professional careers. **NOTE**: Students may not take both an Environment and Society program and an Environmental Policy and Practice

program, unless one of them is not required to meet degree requirements.

**Interfaculty Combination: Environmental Policy and Practice and International Development Studies**

The program combination of Environmental Policy and Practice and International Development Studies is for students enrolled in the Faculty of Arts and Science on the St. George campus wishing to pursue a Specialist or Major program in Environmental Policy and Practice at the Centre in conjunction with a Major program in International Development Studies at the Scarborough campus, or for students enrolled at the Scarborough campus wishing to pursue a Specialist program in International Development Studies at Scarborough in conjunction with a Major program in Environmental Policy and Practice at the Centre (for the latter option, Scarborough students should consult the University of Toronto Scarborough *Calendar* for 2008-09).

**Collaborative Specialist Major and Minor Programs:**

The Centre offers six Science specialist programs: Environment & Health; Environmental Chemistry; Environmental Geosciences; Earth Systems: Physics and Environment; Past Environments; and Environment & Toxicology. The Centre also offers a collaborative major program in Environmental Geosciences, and a collaborative Environmental Ethics B. A. major program. New this year are collaborative minor programs in Energy and Environment, and Environment and Behaviour. These programs combine the Centre's interdisciplinary core with a deliberately focused set of discipline-specific courses.

**Directed Environmental Minor Programs:**

Environmental minor programs are offered by a number of departments. Five are science and four are arts minors. These programs are intended for students interested in acquiring a hierarchical body of environmental knowledge in a specific discipline.

These minors are open to any student irrespective of program. As with any minor, these programs can be combined with other programs of study (i.e., minors and majors) to meet the requirements for a degree. (See page 24 of the Calendar for program requirement details).

All Science programs in the Centre include a very strong first-year science component with core interdisciplinary science courses in subsequent years. Students intending to pursue Environment and Science or any of the Science specialist programs are advised to choose first year courses from BIO 150Y1 and CHM (138H1, 139H1)/151Y1, MAT 135Y1/137Y1/157Y1/JMB 170Y1, PHY(131H1,132H1)/(151H1,152H1, GGR (100H1, 101H1). Students should compare specific program requirements and the prerequisites for ENV235Y1, 236Y1 when selecting specific courses.

Arts programs in the Centre build on a base of social science and humanities courses. Environment and Society, as well as Enviromental Policy and Practice, do not require specific First Year courses. Students intending to follow arts programs in the environment might find it helpful to take ENV200Y1 in first year and to include some First Year course choices from the 100-level offerings in Anthropology, Biology, Economics, Geography, History, Philosophy, Political Science or Sociology.

Note: Majors and specialists in Centre for Environment programs are eligible for the Douglas Pimlott scholarships and awards, the new Robert Hunter Scholarship, and several other Centre-based scholarships (see http://www.environment.utoronto.ca/UndergraduatePrograms/Scholarships/)

Students interested in Centre for Environment programs should refer to the program listings on the following pages. Students should be aware that numerous programs not explicitly labeled as environmental have relevance for the study of the environment (e.g. Forestry Conservation, Ecology). For further information, see http://www.environment.utoronto.ca/ or contact David Powell, Undergraduate Student Advisor and Placement Coordinator, Centre for Environment at 5 Bancroft, room 1049A, 416-946-8100 or david.powell@utoronto.ca. Email contact is recommended.

## Centre for Environment Programs

## Core programs

### Environment & Science (Science program)

Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca

**Specialist program:**
(13 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirement; must include at least four 300+-series courses, one of which must be at the 400-level)

Enrolment in this program is limited to students already in a two major program, one major of which is Environment and Science (see Major program note below). Students must also have completed 8 credits including JGE221Y1/JIE222Y1, one of ENV234Y1, 235Y1 or 236Y1. This is a Type 2 program requiring a minimum CGPA of 2.3. Not all qualified applicants may be admitted. As part of the application process to the Specialist program, a proposal for ENV490Y1 must be approved by the Centre and must identify a three-course transdisciplinary theme. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:

Successful enrolment in the Environment and Science Specialist program requires prior enrolment in the Environment and Science Major. Consequently, students must complete the first year requirements as listed in the Major program below. These courses are part of the 13 required courses for the Specialist.

Higher Years:

1. JGE221Y1/JIE 222Y1, ENV 234Y1, 235Y1/236Y1, 321Y1, 490Y1; ENV 410H1/JIE 410H1/an alternative approved research course
2. A minimum 0.5 FCE from ENV 421H1 or any approved departmental or college independent research project
3. ECO 220Y1/GGR (270H1, 271H1)/PSY (201H1, 202H1)/SOC 300Y1/STA (220H1, 221H1/EEB 225H1)/STA (250H1, 255H1)/(257H1, 261H1) or an approved alternative
4. Three 300+-level full courses contributing to a transdisciplinary theme for the ENV490Y1 course

**Major program:**
(6 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirement; must include at least two full-course equivalents at the 300+-level)

This program must be taken in conjunction with another science major towards fulfillment of an Honours B.Sc. degree. The student must complete at least 3 courses from the first- year list before enroling in the Environment and Science Major. The six full course equivalents that constitute the Major Program are those listed below under "Higher Years." This is a Type 2 program requiring a minimum CGPA of 2.0. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:
Students must complete BIO 150Y1 and at least two of CHM (138H1, 139H1)/151Y1; GGR 100Y1/(100H1,101H1); MAT 135Y1/137Y1/157Y1/JMB 170Y1; PHY 110Y1/138Y1/140Y1/(131H1,132H1)/(151H1,152H1) (PHY 138Y1/(131H1,132H1) recommended) before applying to enrol in the Major program.
Higher Years:
1. JGE221Y1/JIE 222Y1, ENV 234Y1, 235Y1/236Y1, 321Y1; ENV 410H1/JIE 410H1/an alternative approved research course
2. A minimum 0.5 FCE from ENV 421H1 or any approved departmental or college independent research project
3. ECO 220Y1/GGR (270H1, 271H1)/PSY (201H1, 202H1)/SOC 300Y1/STA (220H1, 221H1/EEB 225H1)/STA (250H1, 255H1)/(257H1, 261H1) or an approved alternative

**Minor program:**
(4 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirement; must include at least one full-course equivalent at the 300+-level)

Students must complete at least 3 of the first-year courses before applying to enrol in the Environment and Science Minor. The four courses that constitute the Minor Program are those listed below under "Higher Years." This is a Type 3 program requiring a minimum CGPA of 2.0. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:
Students must complete BIO 150Y1 and at least two of CHM (138H1, 139H1)/151Y1; GGR 100Y1/(100H1,101H1); MAT 135Y1/137Y1/157Y1/JMB 170Y1; PHY 110Y1/138Y1/140Y1/(131H1,132H1)/(151H1,152H1) before applying to enrol in the Minor program.
Higher Years:
JGE221Y1/JIE 222Y1, ENV 234Y1, 235Y1/236Y1, 321Y1

## Environment & Society (Arts program)

Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca

**Specialist program:**
(10 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirement ; must include at least four 300+-series courses, one of which must be at the 400-level)

Enrolment in this program is limited to students already in a two major program, one major of which is Environment and Society (see Major program note below). Students must also have completed 8 credits including JGE221Y1/JIE222Y1, and their science literacy requirement (see 3. below). This is a Type 2 program requiring a minimum CGPA of 2.3. Not all qualified applicants may be admitted. As part of the application process to the Specialist program, a proposal for ENV490Y1 must be approved by the Centre and must identify a three-course transdisciplinary theme. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:
Successful enrolment in the Environment and Society Specialist program requires prior enrolment in the Environment and Society Major. Consequently, students must complete the first year requirements as listed in the Major program below.
Higher Years:
1. JGE221Y1/JIE 222Y1, ENV 223H1, 321Y1, 490Y1, 410H1/JIE 410H1/or an approved alternative research skills course
2. A minimum 0.5 FCE from ENV 421H1 or any approved departmental or college-based independent research project
3. ENV 200Y1 or one full course equivalent from Group A below or any Life Science course
4. 1.5 full course equivalents from Group B below or alternatives approved by the Undergraduate Student Advisor of the Centre
5. Three 300+-level courses contributing to a transdisciplinary theme for the ENV490Y1 course

**Major program:**
(6 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirement ; must include at least two full-course equivalents at the 300+-level)

This program must be taken in conjunction with another major towards fulfillment of an Honours degree program. However, the Major program in Environmental and Society cannot be combined with a Major or Minor program in Environmental Policy and Practice. The six courses that constitute the Major Program are those listed below under "Higher Years." This is a Type 2 program requiring completion of 4 full courses with a minimum CGPA of 2.0. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:
Students must complete at least four full courses or their equivalent before applying to enrol in the Major program
Higher Years:
1. JGE221Y1/JIE 222Y1, ENV 223H1, 321Y1, 410H1/ JIE 410H1/or an approved alternative research skills course
2. A minimum 0.5 FCE from ENV 421H1 or any approved departmental or college-based independent research project
3. ENV 200Y1 or one full course equivalent from Group A below or any Life Science course

4. 1.5 full course equivalents from Group B below or alternatives approved by the Undergraduate Student Advisor of the Centre

**Minor program:**
(4 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirement ; must include at least one full-course equivalent at the 300+-level)

The Minor program in Environmental and Society cannot be combined with a Major or Minor program in Environmental Policy and Practice. The four courses that constitute the Minor Program are those listed below under "Higher Years." This is a Type 2 program requiring prior completion of 4 courses with a minimum CGPA of 2.0. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:
Students must complete at least four full courses before applying to enrol in the Minor program
Higher Years:
1. JGE221Y1/JIE 222Y1, ENV 321Y1
2. ENV 200Y1 or one full course equivalent from Group A below or any Life Science course
3. One full course equivalent from Group B below or an alternative approved by the Undergraduate Student Advisor of the Centre

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**Group A (Environment & Society):**
ENV 200Y1; AST 121H1, 201H1; EEB/BOT 202Y1; CHM 200Y1; FOR 200H1; 201H1; GLG 102H1, 103H1, 105H1, 110H1, 205H1; JPU 200Y1; PHE 110H1; EEB/ZOO 200Y1, 214Y1, 215H1

**Group B (Environment & Society):**
ABS 250H1, 402H1; ANT 200Y1, 204Y1, 315H1, 349H1, 353H1, 364Y1, 366H1, 450H1; APS 203H1, 302H1 (App. Sci. & Eng.); ECO 313H1, 314H1, 324Y1, 333Y1; ENV 223H1, 234Y1, 235Y1, 236Y1, 332H1, 333H1, 335H1, 340H1, 341H1, 350H1, 395Y1, 420Y1, 422H1, 423H1, 424H1, 440Y1, 441H1, 442H1, 443H1, 444H1, 445H1, 446H1, 447H1, 481H1, 482H1, 483Y1, 491Y1, 492H1, 493H1; FOR 300H1, 301H1, 302H1, 303H1, 400Y1, 401H1; GGR 233Y1, 330H1, 314H1, 331H1, 332H1, 333H1, 334H1, 335H1, 338H1, 393H1, 403H1, 409H1, 415H1, 418H1, 435H1, 451H1; HIS 318Y1, 404H1; HPS 202H1, 307H1, 313H1, 328H1; JAG321H1; JIE 307Y1; JUG 320H1; UNI 460Y1; PHL 273H1, 373H1; POL 201Y1, 318H1, 341H1, 346H1, 347Y1, 413H1, 469H1; PSY 335H1; RLG 228H1, 311H1, 345H1, 484H1; SOC 205Y1, 385H1; UNI 260Y1, 360Y1; or an alternative approved by the Undergraduate Student Advisor of the Centre

## Environmental Policy and Practice (Arts program)

Environmental Policy and Practice is designed to be taken on its own, or in combination with either a BSc program (such as Biology, Geology, or Chemistry) or another BA. program (such as Geography, Political Science, or Economics). However, a Major or Minor program in Environmental Policy and Practice cannot be combined with a Major or Minor program in Environment and Society. It is recommended that students give serious consideration to combining one of these Environmental Policy and Practice programs with another program. Students are advised to consult with the Undergraduate Student Advisor about combining programs when enrolling in these programs - David Powell (416-946-8100 or david.powell@utoronto.ca).

**Specialist program:**
(11 full courses or their equivalent including at least one 400-level course)

First Year:
Successful enrolment in the Specialist requires prior enrolment in the Environmental Policy and Practice Major or Minor and completion of at least 10 full-course equivalents, with a minimum mark of 70% in JGE221Y1/JIE222Y1. The CGPA and other relevant factors will also be a consideration.
Higher Years:
1. Program Foundation: JGE221Y1/JIE222Y1, ENV 223H1, 320Y1, 332H1/333H1, 341H1, 422H1, 423H1
2. Statistics: 0.5 full-course equivalent statistics course or its equivalent in a course with significant statistics content (approved by the Undergraduate Student Advisor)
3. Applied Professional Experience: ENV 340H1, 440Y1 and ENV410H1, 420Y1/(443H1, 444H1)/one full-course equivalent of equivalent applied research course(s) approved by the Undergraduate Coordinator.
4. ENV Electives: 2 full-course equivalents from Group A below
5. Electives: 1 full-course equivalent from among Groups A, B, C and D below approved by the Undergraduate Student Advisor

Note: Students may request some modification of program course requirements (up to 1 full-course equivalent) that reflects their particular overall academic objectives. Consult with Undergraduate Student Advisor.

**Major program:**
(7 full courses or their equivalent, including at least two 300+series courses)

First Year:
Students must complete at least four full courses or their equivalent before applying to the Major, and have a minimum CGPA of 2.3, although exceptions may be made based on excellent performance in a relevant course(s), improved performance in the most recent academic year, or job and/or volunteer experience. Enrolment in this Type 2 program is limited.
Higher Years:
1. Program Foundation: JGE221Y1/JIE222Y1; ENV 223H1, 320Y1, 332H1/333H1, 341H1, 422H1, 423H1
2. Applied Professional Experience: ENV 340H1, 440Y1 or ENV410H1, 420Y1/(443H1, 444H1)/ one full-course equivalent of equivalent applied research course(s) approved by the Program Director
3. ENV Electives: 1 full-course equivalent from among Groups A and B below, of which at least 0.5 full-course equivalent must come from Group A

Note: Students may request some modification of program course requirements (up to 1 full-course equivalent) that reflects their particular overall academic objectives. Consult with Undergraduate Student Advisor.

**Minor program:**
(4 full courses or their equivalent including at least one 300+ series course)

First Year:
Students must complete at least four full courses or their equivalent before applying to the Minor, and have a minimum CGPA of 2.0, although exceptions may be made based on excellent performance in a relevant course(s), improved performance in the most recent academic year, or job and/or volunteer experience. Enrolment in this Type 3 program is limited.
Higher Years:
1. Program Foundation: JGE221Y1/JIE222Y1, ENV 320Y1, 332H1/333H1, 341H1, 422H1/423H1
2. ENV Electives: 0.5 full-course equivalent from Group A or B below

Note: Students may request some modification of program course requirements (up to 1 full-course equivalent) that reflects their particular overall academic objectives. Consult with Undergraduate Student Advisor.

**Group A (Environmental Policy and Practice):**
ENV 350H1, 422H1, 423H1, 424H1, 441H1, 445H1, 446H1, 447H1; JIE 307Y1

**Group B (Environmental Policy and Practice):**
ENV 223H1, 234Y1, 235Y1, 236Y1, 315H1, 332H1, 333H1, 335H1, 340H1, 395Y1, 420Y1, 440Y1, 442H1, 443H1, 444H1, 481H1, 482H1, 483Y1, 491Y1, 492H1, 493H1; GGR338H1; IDSBO2H1 (University of Toronto Scarborough)

**Group C (Social Science and Humanities - Environmental Policy and Practice):**
ABS 250H1, 402H1; ANT 353H1, 364Y1, 450H1; APS 203H1, 302H1 (App. Sci. & Eng.); ECO 313H1, 314H1; FOR 302H1, 303H1, 400Y1, 401H1; GGR 233Y1, 272H1, 273H1, 314H1, 330H1, 331H1, 332H1, 334H1, 335H1, 393H1, 415H1, 418H1, 435H1, 473H1; HIS 318Y1, 404H1; HPS 307H1, 313H1, 324H1, 328H1; JAG321H1; UNI 460Y1; PHL 273H1, 373H1; POL 346H1, 347Y1, 413H1; RLG 228H1, 311H1, 345H1, 484H1; SOC385H1; UNI260Y1, 360Y1; other approved courses*

**Group D (Life & Physical Science - Environmental Policy and Practice):**
EEB/BIO 301H, 302H1, 303H1, 305H1, 306H1, 307H1, 308H1, 319H1, 321H1, 328H1, 365H1, 428H1, 440H1, 465H1, 468H1, 469H1, 471H1, 495Y1, 496Y1; CHM 310H1, 409Y1, 410H1, 415H1; FOR 200H1, 201H1, 300H1, 301H1, 400Y1, 401H1, 412H1, 413H1, 416H1; GGR 303H1, 305H1, 307H1, 310H1, 333H1, 373H1, 403H1, 409H1, 413H1, 462H1; GLG 351H1, 436H1, 450H1; JFG 470H1, 475H1; JGE 347H1, 348H1; PCL 362H1, 473Y1, 474Y1, 481H1; PSY335H1; EEB/ZOO 265Y1, 304H1, 309Y1, 373H1, 375H1; other approved courses*

***NOTE:**
Some courses offered by other Faculties or at the University of Toronto Mississauga or Scarborough may be eligible for inclusion in Groups C and D above.

### Interfaculty Combination: Environmental Policy and Practice (Specialist, Major) and International Development Studies (Major) (Arts program)

Consult the Undergraduate Student Advisor, David Powell (416-946-8100 or david.powell@utoronto.ca).

This is a limited enrolment combination. Students already enrolled in the Environmental Policy and Practice Specialist or Major may ballot for the International Development Studies (IDS) Major. **Note: St. George students cannot enroll in the IDS major without first enrolling in the Environmental Policy and Practice Major or Specialist; nor can they get academic credit for the IDS major without successfully completing the Environmental Policy and Practice Major or Specialist.**

Students enrolled in the Faculty of Arts and Science at the St. George Campus who wish to complete the interfaculty combination, must concurrently complete all requirements for the Environmental Policy and Practice Specialist or Major program outlined above. In addition, they must fulfill the requirements of the International Development Studies Major program or its equivalent as outlined below (for details, consult the University of Toronto Scarborough Calendar for 2008-09 (http://www.utsc.utoronto.ca/courses/calendar/Alphabetic_Index.html) or the IDS Undergraduate Assistant, Janet Roopnarinesingh, at 416-208-2683 or janetr@utsc.utoronto.ca).

### International Development Studies (H.B.A./ H.B.SC.)

#### Major Program

Students must complete eight full-credits for the Major Program in International Development Studies. In choosing courses, students must pay careful attention to the prerequisites for higher level courses.

1. Introduction to social sciences (1 full credit from among the following)
   - ANTA02H Introduction to Anthropology: Culture, Society and Language or ANT100Y1
   - [ECMA01H Introduction to Microeconomics or ECMA04H Introduction to Microeconomics: A Mathematical Approach]
   - [ECMA05H Introduction to Macroeconomics or ECMA06H Introduction to Macroeconomics: A Mathematical Approach]
   - ECO100Y1/ECO105Y1
   - GGRA02H The Geography of Global Processes or GGR107H1
   - Any one A-level courses in Political Science, including POL 103Y1, 105Y1, 108Y1
   - SOCA01H Introduction to Sociology I
   - SOCA02H Introduction to Sociology II
   - SOC101Y1
2. Introduction to Development Studies (2.0 full credits from among the following)
   - DTSB01H Introduction to Diaspora and Transnational Studies I
   - DTSB02H Introduction to Diaspora and Transnational Studies II
   - DTS200Y1
   - GGRB20H Environmental Conservation and Sustainable Development
   - IDSB01H International Development Studies: Political Economy
   - IDSB02H International Development Studies: Development and Environment
   - POLB90H Comparative Development in International Perspective
   - POLB91H Comparative Development in Political Perspective
3. Introduction to Environmental Science (0.5 full credits)

EESA01H Introduction to Environmental Science or ENV 200Y1

4. Students must take 4.5 full course equivalents,* with at least one full credit, from two of the following groups (see courses listed under each of these groups in the Scarborough 2008-09 Calendar):
   A. Social/Cultural Perspectives
   B. Policy Perspectives
   C. Environmental Perspectives

* Students may substitute equivalent courses given in the Faculty of Arts and Science on the St. George Campus, but must get permission of the IDS Supervisor of Studies. Contact Undergraduate Assistant, Janet Roopnarinesingh, at 416-208-2683 or janetr@utsc.utoronto.ca

## Collaborative Programs

The Centre offers a number of programs in collaboration with participating departments.

### Earth Systems: Physics & Environment (Science program)

Jointly sponsored by the Department of Physics, this program focuses on the solid earth, the oceans and the atmosphere at planetary scales emphasizing the Earth as a unified, dynamic system. Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Dr. D. Bailey, Department of Physics, Room 328, McLellan Physical Labs, 416-978-6674.

**Specialist program:**
(16 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirements ; must include at least four 300+-series courses, one of which must be at the 400-level)

This is a Type 2 program requiring a minimum CGPA of 2.3. The student must complete four courses from the First Year list before enrolling in the program. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

CHM (138H1, 139H1)/151Y1; BIO 150Y1; MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1,132H1)/(151H1,152H1) (140Y/(151H1,152H1) recommended)

Second Year:

JGE221Y1/JIE 222Y1; MAT 235Y1/237Y1, 244H1; PHY 251H1, 255H1 (Note that MAT 237Y1 and 244H1 have MAT 223H1 or 240H1 as a prerequisite)

Third Year:

APM 346H1; ENV 234Y1, 235Y1, 321Y1; PHY 351H1, 352H1

Third and Fourth Years:

1. ENV 410H1/JIE 410H1, ENV 421H1
2. Three FCE from: PHY 305H1/307H1/308H1/315H1/326H1/346H1/359H1/407H1/408H1/426H1/478H1/479Y1/493H1/494H1/JGP438H1 or any other PHY4XXH course. At least one FCE must be from the fourth year Physics options

### Environmental Chemistry (Science program)

Consult Professor J. Abbatt, Department of Chemistry (416-946-7358 or jabbatt@chem.utoronto.ca)

Jointly sponsored by the Centre for Environment and the Department of Chemistry, these programs focus on the development of a fundamental background in chemistry as applied to understanding the chemical impacts of humankind's activities on the soil, air, and water. Emphasis is given to developing analytical skills and mechanistic understanding of the subject.

**Specialist program:**
(13.5 full courses or their equivalent, including at least one 400-series course)

Jointly sponsored by the Centre for Environment and the Department of Chemistry, this program focuses on analytical theory, instrumentation and methodological aspects of organic and inorganic contaminants in soil, water, air and biological tissues.

Enrolment in this program is limited. It requires prior completion of 4 courses with a minimum GPA of 2.3. Three courses must be from the First Year list. Apply through the Centre for Environment by: 1st Round: TBA; 2nd Round: TBA at: www.artsci.utoronto.ca/current/undergraduate

First Year: BIO 150Y1; (CHM 151Y1 strongly recommended)/(138H1, 139H1); MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1,132H1)/(151H1,152H1)

Second Year: CHM 217H1, 225Y1/(220H1, 221H1), 238Y1, 247H1/249H1 (CHM249H1 strongly recommended); ENV 235Y1

Third and Fourth Years:

1. CHM 310H1, 410H1, 415H1; ENV 234Y1, ENV321Y1/(JGE 221Y1/JIE222Y1)
2. One additional FCE from 300/400-series CHM courses
3. (ENV 410H1, 421H1)/499Y1

**Minor program:**
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

Environmental chemistry is the study of the chemical impacts of humankind's activities on the soil, air, and water. This minor provides a balanced fundamental background in chemistry as well as an introduction to the major issues associated with environmental chemistry. It is a Type 1 program.

1 CHM (138H1,139H1)/151Y1
2. One full course equivalent from CHM 217H1, (220H1, 221H1)/225Y1, 238Y1, 247H1/249H1
3. ENV235Y
4. Any two of CHM 310H1, 317H1, 410H1, 415H1

### Environmental Geosciences ( Science program)

Jointly sponsored by the Centre for Environment and the Department of Geology. Topics include earth materials, sedimentary geology, aqueous geochemistry, hydrogeology and biogeochemistry. For more information, please contact David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Professor J. Mungall, Department of Geology, mungall@geology.utoronto.ca Students should note that under the Professional Geoscientists Act of 2000, individuals practising Environmental Geoscience in Ontario require education equivalent to the Specialist Program listed below or a P.Eng.

**Specialist program:**
(16 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirement ; must include at least four 300+-series courses, one of which must be at the 400-level)

This is a Type 2 program requiring a minimum CGPA of 2.3. The student must complete four courses from the First Year list before enroling in the program. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

Students must complete BIO 150Y1; CHM (138H1/139H1)/151Y1; MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1,132H1)/(151H1,152H1)
Second Year:
GLG 202H1, 206H1, 207H1, 216H1, (ENV 234Y1/GLG217H1, EEB214H1); MAT 235Y1/(MAT 223H1, GLG 204H1), STA220H1
Third and Fourth Years:
1. GLG 345H, 351H1, 360H1, 436H1, 448H1, 450H1; JGE221Y1/JIE222Y1, ENV 235Y1, 315H1, 321Y1
2. ENV 410H1/JIE401H1; ENV 421H1/GLG471H1

**Note:** GLG 340H1 is recommended but not required for this specialist program.

**Major program:**
(8.5 full courses or their equivalent; must include at least two full-course equivalents at the 300+-level)

CHM (138H1, 139H1)/151Y1; MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1,132H1)/(151H1,152H1)
Second Year:
ENV 235Y1; GLG 202H1, 206H1, 207H1, 216H1, 217H1
Third and Fourth Years:
ENV 315H1; GLG 351H1, 436H1, 448H1

**Minor program:**
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. ENV 235Y1
2. GLG 202H1, 206H1, 207H1, 216H1, 351H1; ENV 315H1

## Environment and Behaviour (Science program)

Jointly sponsored by the Centre for Environment and the Department of Psychology, this program will focus on understanding issues of psychological motivation and attitudes that underlie environmental decision making. Little positive environmental change can occur in the absence of broad-based be-haviour changes.

**Minor program:**
(4 full courses or their equivalent; must include at least one full course equivalent at the 300+-level.

Enrolment in the Minor program is limited to students also enrolled in the Psychology Minor/Major/Specialist.

Higher Years:
1. JGE221Y1; PSY220H1, PSY335H1
2. One FCE from ENV 332H1, 333H1, 335H1, 424H1; SOC 385H1
3. One FCE from PSY 320H1, 321H1, 327H1, 336H1

## Environment and Energy (Science program)

Jointly sponsored by the Centre for Environment and the Department of Geography, this interdiscipli-nary program addresses the scientific, technological, environmental and policy aspects of energy use and supply, with a focus on the reduction of environmental impacts.

This is a Type 2 program requiring a minimum CGPA of 1.7. The student must complete four courses from the First Year list before enroling in the program. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

**Minor Program:**
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

First Year:
CHM (138H1, 139H1)/151Y1; MAT135Y1/MAT137Y1; PHY(131H1, 132H1)/(151H1,152H1)
Higher Years:
1. JGE221Y1
2. ENV346H1, 350H1, 450H1
3. JGE347H1, 348H1
4. 0.5 FCE from one of the following: CHM310H1/CHM415H1/ENV235Y1/GGR203H1/GGR314H1/GGR303H1/GGR330H1/GGR403H1/HPS313H1/PHY238Y1/PHY251H1/PHY315H1

## Environment & Health (Science program)

Jointly sponsored by New College, the Human Biology Program, and the Basic Medical Science Departments of the Faculty of Medicine. Provides a basic understanding of the behaviour of Planet Earth, the workings of the human body, and the complex relationships between the two. Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Office of the Registrar, New College, 300 Huron Street, 416-978-2460.

**Specialist program:**
(14.5 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirements; must include at least four 300+-series courses, one of which must be at the 400-level)

This is a Type 2 program requiring a minimum CGPA of 2.3. The student must complete four courses, including three from the First Year list below before enroling in the program. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:
Students must complete BIO 150Y1; CHM (138H1, 139H1)/151Y and one of GGR 100Y1/(100H1,101H1); MAT 135Y1/137Y1/157Y1/JMB 170Y1; PHY 110Y1/138Y1/140Y1/(131H1,132H1)/(151H1,152H1) (PHY 138Y1/(131H1,132H1) recommended); PSY100H1.

*Students are encouraged to select an FCE from ANT/ECO/GGR/HIS/SOC to maximize elective course choice in later years.

Second Year*:

(BCH 210H1, CHM 247H1); BIO 250Y1/255Y1/CSB (240H1, 241H1); JGE221Y1/JIE 222Y1; ENV 234Y1/(235Y1/236Y1)**; PHL 273H1; BIO 260H1/HMB 265H1

Third Year*:

CSB/BIO 349H1/JLM 349H1/LMB 363H1/NFS 284H1/PSL 302Y1; ENV 321Y1, 341H1; the other of ENV 234Y1/(235Y1/236Y1)**; (STA 220H1, 221H1/EEB225H1)

Fourth Year:

1. ENV 410H1/JIE410H1
2. ENV 421H1 or a minimum of 0.5 FCE from any approved departmental or college independent research project
3. JEH455H1

Elective:

One FCE, approved by the Undergraduate Student Advisor of the Centre, including at least one 300-series course from ANA/ANT/BCH/(CSB/BIO)/(EEB/BIO)/(CSB/BOT)/(EEB/BOT)/CHM/HMB/IMM/JBI/JZM/LMP/MBY/NFS/PCL/(CSB/ZOO)/(EEB/ZOO)/ECO 369Y1/(GGR 333H1, 409H1, 450H1, 451H1)/(HIS 460H1, 463H1)/NEW 367H1/(SOC 242Y1/(243H1, 244H1)/255Y1/(256H1, 257H1)/309Y1/312Y1/363H1) or any other approved course for which the student has appropriate prerequisites. The two FCE should reflect the particular academic interests of each student.

**Notes:**

1. * Some second and third year courses in this program have specific prerequisites. Students should check prerequisites for the higher level courses they are interested in prior to making first year course selections
2. ** In choosing between ENV 235Y1 and ENV 236Y1, students should pay particular attention to their respective prerequisites

## Past Environments (Science program)

A multi-disciplinary program focused on the changing nature of the relationship between the environment and humans over the past 2 million years. Co-sponsored by the Centre, the Department of Anthropology, and the Program in Archaeology. Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Undergraduate Program Administrator/Student Counsellor, Department of Anthropology, Room 1030, Sidney Smith Hall, 416-978-6414.

### Specialist program:

(15 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirements; must include at least four 300+-series courses, one of which must be at the 400-level)

This is a Type 2 program requiring a minimum CGPA of 2.3. The student must complete four courses from the First Year list. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

First Year:

ANT 100Y1; BIO 150Y1; MAT 135Y1/137Y1/157Y1/JMB 170Y1; GGR 100Y1/(100H1,101H1)

Second Year:

1. ANT 200Y1; JGE221Y1/JIE 222Y1
2. One FCE from: GGR 201H1/203H1/205H1/206H1
3. One FCE from: ENV 234Y1/236Y1

Third and Fourth Years:

1. ANT 203Y1, 311Y1/(ARH361H1 and 0.5 FCE 400-level course from Group A of Archaeology Calendar entry on page 64); ARH 305H1; ENV 321Y1
2. The other of ENV 234Y1/236Y1; GGR 302H1/GLG 436H1
3. One FCE from: ANT 409H1/410H1/434H1/436H1/471H1;
4. ENV 410H1/JIE410H1, ENV 421H1/ANT 415Y1/497Y1/498H1/499H1

## Environment & Toxicology (Science program)

Toxicology is the study of the harmful effects of chemicals. The Environment and Toxicology program examines the adverse effects of chemicals at the ecological level. This program prepares students for advanced graduate study and research in environmental toxicology, and for consultative positions in governmental agencies and industry. Students interested in biomedical toxicology (the adverse effects of chemicals on human health) should consider enrolling in the Specialist Program in Toxicology offered by the Department of Pharmacology. Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Dr. C. Woodland, Department of Pharmacology, Medical Sciences Building, 416-946-3102

### Specialist program:

(15 full courses or their equivalent which includes fulfillment of the Faculty's Distribution requirements; must include at least four 300+-series courses, one of which must be at the 400-level)

This is a Type 2 program requiring a minimum CGPA of 2.3. The student must complete four courses from the First Year list before enroling in the program. Information on application and acceptance timelines is available in the Registration Handbook and Timetable. For more information, please refer to http://www.environment.utoronto.ca/UndergraduatePrograms/ApplicationProcedures/ApplicationProcedures.

**(Program enrolment in 2005 and after)**

First Year:

Students must complete BIO 150Y1; CHM (138H1, 139H1)/151Y1 and at least two of GGR 100Y1/(100H1,101H1); MAT 135Y1/137Y1/157Y1/JMB 170Y1; PHY 110Y1/138Y1/140Y1/(131H1,132H1)/(151H1,152H1) (PHY 138Y1/(131H1,132H1) recommended). In selecting courses, students should consider prerequisites for courses they intend to take later.

Second Year:

1. BCH 210H1/BCH 242Y1; BIO 250Y1/255Y1/CSB (240H1, 241H1); JGE221Y1/JIE 222Y1; CSB/ZOO 252Y1/PSL 201Y1/PSL 302Y1; PCL 201H1
2. CHM 217H1/220H1, CHM 247H1/249H1

Third and Fourth Years:

1. ENV 234Y1/235Y1/236Y1, 321Y1
2. PCL 302H1, 362H1; PCL 376H1/STA 220H1/STA 221H1/EEB225H1 (see NOTE 1, below)
3. CHM 310H1/GGR 409H1/PCL 470Y1/481H1/LMP 301H1/363H1 (see NOTE 2, below)
4. PCL 473Y1

5. (ENV 410H1/JIE410H1, ENV 421H1)/PCL 474Y1 (see NOTE 3, below)

**(Program enrolment in 2004 and earlier)**

Students must complete BIO 150Y1 and at least three of CHM (138H1, 139H1)/151Y1; GGR 100Y1/(100H1,101H1); MAT 135Y1/137Y1/157Y1/JMB 170Y1; PHY 110Y1/138Y1/140Y1/(131H1,132H1)/(151H1,152H1) (PHY 138Y1/(131H1,132H1) recommended). In selecting 100-series courses, students should consider prerequisites for courses they intend to take later, i.e., ENV 235Y1/236Y1.

Second Year:

1. BIO 250Y1/255Y1/CSB (240H1, 241H1); ENV 221Y1/JIE 222Y1; CSB/ZOO 252Y1/PSL 201Y1/PSL 302Y1
2. CHM 220H1, PCL 376H1/STA 220H1/ STA 221H1/EEB225H1 (see NOTE 1, below)

Third and Fourth Years:

1. (BCH 310H1, JLM 349H1/CSB/BIO349H1)/BCH 242Y1/(BCH 210H1, PCL 201H1); ENV 321Y1
2. PCL 302H1, 362H1; and one of ENV 234Y1/(235Y1/236Y1)
3. CHM 310H1/GGR 409H1/PCL 470Y1/481H1/LMP(301H1/363H1) (See NOTE 2, below)
4. PCL 473Y1
5. The other of ENV 234Y1/(235Y1/236Y1), (ENV 410H1/JIE410H1, ENV 421H1)/PCL 474Y1(See NOTE 3, below)

**Notes:**

1. PCL 376H1 is a pre- or co-requisite for students intending to take PCL 474Y1. Students taking PCL 474Y1 must also take PCL 201H and PCL 302Y1 as prerequisites.
2. Students taking PCL481H1 must take BCH 210H1, LMP 363H1, and PCL 362H1 as prerequisites.
3. Students intending to take PCL 474Y1 instead of (ENV 410H1/JIE410H1, ENV 421H1) must obtain permission from the Undergraduate Student Advisor of the Centre for Environment 3 months prior to the intended date of enrolment in PCL 474Y1. Students must also consult with the Department of Pharmacology at least 3 months prior to the intended date of enrolment as the student is responsible for arranging for a supervisor.

### Environmental Ethics (Arts program)

Jointly sponsored by the Centre for Environment and the Department of Philosophy, this program explores how value judgments and worldviews affect environmental decision making. For more information, contact David Powell, Undergraduate Student Advisor, Centre for Environment, Earth Science Centre, Rm. 1049A (416-946-8100, or david.powell@utoronto.ca).

**Major program:**

(6.0-6.5 full courses or their equivalent)

This Type 2 program requires a minimum CGPA of 2.0.

1. JGE221Y1/JIE222Y1; PHL 273H1; ENV 321Y1
2. One FCE from PHL 373H1, ENV 332H1, 333H1
3. ENV 491Y1/(492H1, 493H1)/ (410H1, 421H1)
4. 1.5 FCE's from Group A below.

**Group A:**

ABS 402H1; ANT 450H1; ECO 105Y1; ENV 335H1;424H1, 442H1, 447H1; FOR 302H1; GGR 331H1; HIS318Y1; HPS 202H1, 307H1; JAG 321H1; PHL 275H1, 295H1, 375H1, 394H1, 395H1, 413H1; PSY 335H1; RLG 228H1, 311H1, 345H1, 484H1

**Minor program:**

(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. PHL273H1
2. One of PHL 373H1, ENV 332H1, 333H1
3. JGE221Y1/JIE222Y1
4. Two additional FCE's in PHL, with at least one half course at the 300+ level. It is recommended that one course be in the History of Philosophy and the other in the Problems of Philosophy, including one half-course in ethics.

## Directed Environmental Minors

### Environmental Anthropology (Arts program)

A program focused on understanding the diverse nature of interactions between humans and their environments, both in the past and in modern global society. Consult the Undergraduate Office, Department of Anthropology (416-978-6414), Sidney Smith Hall, Rm. 1030

**Minor program:**

(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. ANT 100Y1/JGE 221Y1/JIE 222Y1
2. ANT 200Y1/204Y1
3. Two FCE's from: ABS 250H1/402H1; ANT 315H1/333Y1/349H1/364Y1/365Y1/420H1/ 429Y1/450H1/453H1/471H1

### Environmental Biology (Science program)

Consult the Undergraduate Office in the Department of Ecology and Evolutionary Biology

**Minor program:**

(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. BIO 150Y1; ENV 234Y1
2. Two FCE's from: EEB/BIO 319H1, 321H1, 323H1, 324H1, 328H1, 362H1, 365H1, 370H1; EEB/ZOO 322H1 (a course in ecology and a course is evolution are recommended)

### Environmental Chemistry (Science program)

See Environmental Chemistry Minor under Collaborative Programs above.

### Environmental Economics (Arts program)

Consult Ms. R. Innes, Undergraduate Administrator, Department of Economics (416-978-8616)

Enrolment in the Environmental Economics Minor program is limited to students with 67% in ECO 100Y1 or 80% in ECO 105Y1, who have completed MAT 133Y1/135Y1/137Y1, and who have a CGPA of 2.0.

**Minor program:**

(4 full courses or their equivalent)

1. ECO 100Y1/105Y1
2. MAT 133Y1/135Y1/137Y1
3. ECO 200Y1/206Y1
4. One full ECO course at the 300+ level, including at least one of ECO 313H1 and/or ECO 314H1

**Note:**

Students enrolled in this Minor program cannot be enrolled in the Minor program in Economics or the Minor program in Economic History.

### Environmental Geosciences (Science program)

See Environmental Geosciences Minor under Collaborative Programs above

### Geographic Information Systems (Arts program)

GIS is the analysis and management of spatial data. It focuses on the mapping, modeling, and monitoring of the earth's surface, its resources, and its natural and socio-economic processes. Consult Susan Calanza, Department of Geography (416-978-6455)

**Note:**
Students combining this program with a Specialist/Major sponsored by the Department of Geography will normally be allowed to count only 1.5 (of the 4.0) credits towards both programs.

**Minor program:**
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. 1.0 courses from GGR 100H1, 101H1, 107H1, 124H1 or 1.0 other courses with permission of Geography department
2. GGR 270H1, 272H1, 273H1, 373H1
3. One half course from GGR 462H1, 473H1
4. One of GGR 337H1, 371H1, 413H1, 462H1, 473H1; JFG 470H1, 475H1

### Life, Environment and General Physics (Science program)

Basic understanding of physics for students focusing their academic studies in Life Sciences and/or the Environment. Consult Physics Undergraduate Office, Room MP301 (416-978-7057/416-978-6674)

**Minor program:**
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1,132H1)/(151H1,152H1)
2. ENV 235Y1/ PHY 238Y1 or any other 1 full course equivalent from PHY courses at the 200+ level
3. One full course or equivalent from: CSB/BIO472H1/JPA 305H1/310H1/JGP 438H1/PHY 315H1/346H1/445H1 or any other PHY300+ course. JBO302Y may count as 0.5 FCE towards this requirement.

### Physical and Environmental Geography (Science program)

Consult Susan Calanza, Department of Geography (416-978-6455)

**Minor program:**
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. 1.0 courses from GGR 100H1, 101H1, 107H1, 124H1 (GGR 100H1, 101H1 strongly recommended) or 1.0 other courses with permission of the Geography department
2. One full course or equivalent from: GGR 201H1/203H1/205H1/206H1
3. GGR 390H1, (301H1/302H1/305H1), (272H1/307H1/310H1/312H1)
4. A half-course from Group C in the Geography listings of the Calendar

## Environment Courses

See page 32 for Key to Course Descriptions.

To find ENV course categories for Distribution Requirement purposes (see page 26), see entry at end of each course.

NOTE: Many ENV courses are limited in enrolment and require specific prerequisites. Preference is given to students meeting the ROSI deadlines.

**ENV200Y1 Assessing Global Change: Science and the Environment [52L, 12T]**
The perspective scientists bring to the understanding and resolution of environmental concerns having global implications: atmospheric systems and climate change, the biosphere and conservation of biodiversity.
Exclusion: BIO150Y1 (applies only to students in Arts & Science)
This Science course is intended to fulfill the environmental literacy requirement for students in the BA programs of the Centre for Environment or the science distribution course requirement for Commerce, Humanities and Social Science students.

**JGE221Y1 Interdisciplinary Perspectives on the Environment [52L, 5P, 10T]**
The foundation for students in the Centre for Environment programs and the Environment and Resource Management Program in Geography, this course examines the social, ethical and biophysical dimensions of one or more selected environmental issues such as air pollution and climate change, why these issues need to be addressed, and some approaches for doing so. Draws from relevant interdisciplinary domains in an examination of environmental degradation, the responses of various actors and models for a more sustainable future. The environmental issues discussed vary from year to year.
Exclusion: JIE 222Y1/GGR 233Y1
Recommended Preparation: GGR 100Y1/(100H1,101H1)/107Y1/(107H1,124H1)
This is a Social Science course.

**ENV223H1 Fundamental Environmental Skills (formerly INI223H1) [26L, 13T]**
The practical, interdisciplinary and controversial nature of environmental issues, as well as the uncertainty that surrounds measures to address them demand mastery of a particular range of skills by environmental students. This course teaches the fundamental research, analysis and presentation skills required for effective environmental work.
Co-requisite: JGE221Y1 and enrolment in a Centre Major program, or permission of Undergraduate Student Advisor.
Exclusion: INI 223H1
This is a Social Science course.

**ENV234Y1 Environmental Biology [52L, 39P]**
A broad-based science course drawing on elements from geology, systematics, soil science, and ecology to understand past and present environments and how humans are altering the environment. Emphasis is placed on examination of ecological phenomena in relation to population, community and ecosystem processes with particular reference to the biomes of Ontario. Descriptive and experimental laboratory studies including a weekend field trip (total cost about $15.00). (Provided by the Department of Ecology and Evolutionary Biology, Department of Geology, and the Faculty of Forestry).
Prerequisite: BIO150Y1 (recommended) or GGR100Y1
This is a Science course.

**ENV235Y1 Physics and Chemistry of the Evolving Earth [52L, 26T]**
This course considers the fundamental chemical and physical processes of the Earth's natural environment. One semester of the course focuses primarily on the atmosphere: its evolution, structure, composition and dynamic character. Particular emphasis is given to a discussion of global climate and the underlying physical, chemical and biogeochemical factors that drive climate change. Within this context, stratospheric ozone depletion, ocean chemistry, urban air pollution, acid rain and water quality are also discussed. The other semester focuses on the solid Earth: its formulation and evolution, internal dynamics, mantle-core differentiation, volcanism, tectonics and paleoclimate/ice ages. Throughout the course, the operation of the Earth as a coupled physico-chemical system over a range of timescales is emphasized.
Prerequisite: CHM (138H1, 139H1)/151Y1/157Y1, MAT135Y1/137Y1/JMB170Y1, PHY138Y1/140Y1/(131H1,132H1) or permission of the department
This is a Science course.

**ENV236Y1 Human Interactions with the Environment [52L]**
A course emphasizing both the role of the environment in shaping human behaviour, and the impact of humans on the environment. Coverage includes human biological and cultural evolution, environmental and climatic obstacles over come by early civilizations, and human impacts on marine and terrestrial ecosystem processes. Topics may vary from year-to-year depending upon instructor interests and research specialty.
Prerequisite: BIO150Y1/GGR100Y1 or permission of instructor
This is a Science course.

**ENV299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**JIE307Y1 Urban Sustainability (formerly INI307Y1) [52L, 26P]**
This course critically examines the concept of urban sustainability in theory and application. Case studies of ongoing urban sustainability programs in the developed and developing world help students assess the successes and failures of these programs. The course also examines the current state of research and implementation efforts toward urban sustainability.
Prerequisite: One of the following: JGE221Y1/JIE222Y1 and enrolment in a Centre program OR INI235Y1 OR permission of the instructor (particularly for students who have completed JGE221Y1/GGR233Y1/POL209Y1/SOC 205Y1/260Y1)
Exclusion: INI 307Y1
This is a Social Science course.

**ENV315H1 Chemical Analysis of Environmental Samples[26L, 39P]**
Instrumental analysis techniques for environmental scientists of all disciplines. In addition to a solid grounding in the theory of each analytical technique, particular emphasis is placed on the laboratory work, which is worth 50% of the final grade. In each lab, groups of two students receive instruction from an experienced analyst and acquire hands-on experience using state-of-the-art analytical equipment. Where possible, samples supplied by the students are analyzed. Techniques covered include Neutron Activation, X-ray Fluorescence, X-ray Diffraction, Scanning Electron Microscopy, Gas Chromatography, Ion Chromatography, Atomic Absorption, Inductively Coupled Plasma Optical Emission Spectrometry and Inductively Coupled Plasma Mass Spectrometry.
Exclusion: CHM217H1, 314Y1; GLG335H1
Prerequisite: SCH4U and any second year ENV or GLG courses
This is a Science course.

**ENV320Y1 National and International Environmental Policy Making (formerly INI 320Y1) [52L, 26T]**
Examination of federal-provincial negotiation of Canadian contributions to international environmental agreements such as the UN Framework Convention on Climate Change
Prerequisite: JGE221Y1/JIE 222Y1 and enrolment in a Centre program, or permission of the Undergraduate Student Advisor.
Exclusion: INI 320Y1
This is a Social Science course

**ENV321Y1 Approaches to Environmental Issues (formerly ENV221Y1) [52L, 24T]**
Diverse approaches to environmental issues from a variety of perspectives are introduced, compared and analyzed, using topical case studies. Perspectives explored in previous years include aboriginal, scientific and psychological.
Exclusion: ENV221Y1
Prerequisite: JGE221Y1/JIE222Y1/GGR233Y1
This is classified as BOTH a Social Sciences and a Humanities course.

**ENV332H1 Culture and Nature (formerly INI332H1) [26S]**
Critical analysis of western attitudes and values respecting nature, as found in various art and popular culture genres; significance for action on the ecological crisis.
Prerequisite: a minimum CGPA of 2.3
Recommended preparation: JGE221Y1/JIE222Y1/GGR233Y1
Exclusion: INI332H1
This is classified as BOTH a Social Sciences and a Humanities course.

**ENV333H1 Ecological Worldviews (formerly INI333H1) [26S]**
Approaches to environmental concerns are often marked by assumptions that reflect distinct worldviews positing particular understandings of the role of the human with respect to nature. This course explores sundry economic, political, scientific, religious, and moral worldviews pertaining to the environment, including environmental ethics, Gaia, ecofeminism, scientific cosmology, and aboriginal perspectives.
Prerequisite: a minimum CGPA of 2.3
Recommended preparation: JGE221Y1/JIE222Y1/GGR233Y1
Exclusion: INI 333H1
This is classified as BOTH a Social Sciences and a Humanities course.

**ENV335H1 Environmental Design (formerly INI335H1) [39S]**
Introduction to understanding the complexity of relationships among people, built forms, and natural systems; systematic review of examples of environmental design at various scales.
Prerequisite: a minimum CGPA of 2.3
Recommended preparation: JGE221Y1/JIE222Y1/GGR233Y1
Exclusion: INI 335H1
This is a Social Science course.

**ENV336H1 Ecology in Human-Dominated Environments**
A two week course offered at a Southern Ontario field station during late summer. Introduction to im-pacts of humans on semi-natural and human-dominated environments of southern Ontario and over-view of the most commonly used assessment tools for

states of ecosystems. These environments play important roles in terms of ecosystem services.
Prerequisite: first year biology and permission of the instructor
This is a Science course.

**ENV340H1 Informed Environmental Practice (formerly INI340H1) [26S. 13T]**
This course will prepare students for challenging careers in the environmental field. Students will develop professional and research skills that will assist in the development of a challenging and meaningful career. Emerging social, economic, environmental, and ethical issues in the workplace will be explored.
Prerequisite: Eight full courses or their equivalent and enrolment in an environmental program at the University of Toronto
Exclusion: INI 340H1
This is a Social Science course.

**ENV341H1 Environment and Human Health (formerly INI341H1) [26L. 13T]**
Examination of the linkages between human health and environment. Addresses basic principles and scientific knowledge relating to health and the environment and uses case studies to examine current environmental health issues from a health sciences perspective.
Prerequisite: JGE221Y1/JIE222Y1 and enrolment in a Centre program; or BIO 250Y1/BIO 255Y/CSB (240H1, 241H1) and enrolment in a Human Biology program; or permission of the Undergraduate Student Advisor
Exclusion: INI 320Y1, if taken before the 2003-04 academic year; INI 341H1
This is classified as BOTH a Social Science and Science course.

**ENV 346H1 Terrestrial Energy Systems [36L, 24T]**
Various earth systems for energy transformation, storage and transport are explored. Geological, hy-drological, biological, cosmological and oceanographic energy systems are considered in the context of the Earth as a dynamic system, including the variation of solar energy received by the planet and the redistribution of this energy through various radiative, latent and sensible heat transfer mechanisms. It considers the energy redistribution role of large-scale atmospheric systems, of warm and cold ocean currents, the role of the polar regions, and the functioning of various hydrological systems. The contribution and influence of tectonic systems on the surface systems is briefly introduced, as well the im-portant role of energy storage processes in physical an biological systems, including the accumulation of fossil fuel reserves.
Prerequisites: MAT135Y1/137Y1/JMB170Y1; BIO150Y1/CHM(138H1, 139H1)/CHM151Y1/PHY138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1)
Recommended Preparation: GGR203H1
This is a Science course.

**JGE347H1 Efficient Use of Energy [26L, 6T]**
The course examines the options available for dramatically reducing our use of primary energy with no reduc-tion in meaningful energy services, through more efficient use of energy at the scale of energy-using devices and of entire energy systems. Topics covered include generation of electricity from fossil fuels and energy use in buildings, transportation, industry and agriculture.
Exclusion: GGR333H1
Recommended Preparation: First year Math and/or Physics
This is a Science course.

**JGE 348H1 Carbon-Free Energy [25L, 6T]**
The course examines the options available for providing energy from carbon-free energy sources: solar, wind, biomass, hydro, oceanic, geothermal energy, as well as through sequestration of carbon from fossil fuel sources. The hydrogen economy is also discussed.
Exclusion: GGR333H1
Recommended Preparation: First year Math and/or Physics
This is a Science course.

**ENV350H1 Energy Policy and Environment [26L]**
The course addresses: (1) physical, technological and economic aspects of energy and electricity systems and their associated environmental impacts; (2) current international, Canadian and Ontario energy policy; (3) technological, economic and political factors influencing policy which could significantly reduce environmental impacts of energy use.
Prerequisite: JGE221Y1/JIE222Y1, or permission of undergraduate student advisor
This is a Social Science course.

**ENV395Y1 Special Topics Field Course [52S]**
This course explores interdisciplinary environmental issues in the field. Project work involves students in investigating, developing and proposing sustainable practices and approaches to topical local problems. Suitable for all CFE programs.
Recommended preparation: ENV200Y1 or BIO150Y1
This is a Science or Social Science course

**ENV398H0 Independent Experiential Study Project**

**ENV399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting.
See page 48 for details.

**ENV410H1 Environmental Research Skills (formerly JIE410H1) [26L]**
The purpose of this course is to introduce students to the perspectives and methods used for quantitative and qualitative research on humans, done for both academic and professional purposes. The focus is on qualitative research on current environmental issues.
Prerequisite: Enrolment in an environmental program and completion of at least 10 full courses
Co-requisite: ENV420Y1/421H1/444H1/a recognized alternative
Exclusion: JIE410H1
This is classified as BOTH a Social Sciences and a Humanities course.

**ENV420Y1 Environmental Research (formerly INI420Y) [TBA]**
Advanced environmental research on environmental topics of current relevance, involving information sources and resources outside the University. Students work in teams to investigate and report on a specific environmental issue for an off-campus environmental agency.
Prerequisite: JGE221Y1/JIE222Y1; ENV 320Y1/321Y1 and enrolment in a Centre program, or permission of instructor
Co-requisite: ENV410H1 if taken as a program requirement
Exclusion: INI 420Y1
This is a Social Science course.

**ENV421H1 Environmental Research [26S]**
A research course for all students in the Centre combining report writing, independent and group-based research on an interdisciplinary topic. Application of skills learned in ENV410H1.
Prerequisite: JGE221Y1/JIE222Y1, ENV 320Y1/321Y1 or permission of the Undergraduate Student Advisor

Corequisite: ENV410H1
This is classified as BOTH a Social Sciences and a Humanities course.

**ENV422H1 Environmental Law (formerly INI422H1) [26S]**
An introduction to environmental law for students in Environmental Studies; legal methods available to resolve environmental problems and the scope and limits of those methods; common law and statutory "tools" as well as environmental assessment legislation; the problem of "standing to sue" and the limits of litigation.
Prerequisite: JGE221Y1/JIE222Y1 and enrolment in a Centre program, or permission of Undergraduate Student Advisor
This is a Social Science course.

**ENV423H1 Public Policy and Environment (formerly INI421H1) [26S]**
Introduces students to public policy and institutional foundations of public policy in Canada, with an emphasis on environmental policy in Ontario. Provides an "insider's" perspective on how environmental policy has been developed in Ontario.
Prerequisite: JGE221Y1/JIE222Y1 and enrolment in a Centre program, or permission of Undergraduate Student Advisor
Exclusion: INI 421H1
This is a Social Science course.

**ENV424H1 Environment and Community Engagement [26L]**
This course integrates theoretical and practical perspectives on patterns of community engagement in environmental change. Students will address theoretical perspectives on environmentalism as a social movement, and learn about key aspects of planning and implementing environmental change from veteran environmental advocates.
Prerequisite: ENV222Y1/JIE 222Y1, or permission of undergraduate student advisor
This is a social science course.

**ENV440Y1 Professional Experience Course (formerly INI440Y1)**
Regular academic seminars complement off-campus work on an environmental project. The course enables students to gain practical experience of the needs and demands of professional environmental agencies. Students are given a choice of placements in a variety of sectors (such as government, NGOs, industry).
Prerequisite: ENV340H1; 10 full courses or their equivalent, including three environmental courses in the student's environmental program completed before ENV440Y1 taken; permission of Undergraduate Student Advisor
Exclusion: INI 440Y1
This is a Social Science course.

**ENV441H1 Politics of the Environment (formerly INI494H1) [26S]**
Provides students with increased understanding of (1) the political conflicts which surround the development and implementation of environmental policy in Canada; and (2) the ways environmentalism is transforming Canadian and global politics. Examination is made, through secondary readings and case studies, of the values, perspectives, and strategies of the various actors, and the context of ideas and institutions within which they operate.
Prerequisite: JGE221Y1/JIE222Y1 and enrolment in a Centre for Environment program, or permission of Undergraduate Student Advisor
Exclusion: INI 494H1
This is a Social Science course.

**ENV442H1 Corporate Perspectives on the Environment (formerly INI442H1) [39S]**
How business in Canada and elsewhere is responding to the post-war emergence and evolution of the values of environmentalism. The corporate "perspective" includes: the external world of governments, markets, environmental pressure groups, investors, insurers, and lenders; and how the firm responds to these external pressures and manages its environmental issues.
Prerequisite: JGE221Y1/JIE222Y1 and enrolment in a Centre for Environment program, or permission of Undergraduate Student Advisor
Exclusion: INI 442H1
This is a Social Science course.

**ENV443H1 Applied Environmental Research Course (formerly INI443H1)**

**ENV444H1 Applied Environmental Research Course (formerly INI444H1)**
Advanced applied environmental research on environmental topics of current relevance, involving information sources and resources outside the University. Students work in teams to investigate and report on research conducted for an off-campus environmental organization.
Prerequisite: JGE221Y1/JIE222Y1, ENV 320Y1/ENV321Y1 and completion of at least 10 FCE and enrolment in a Centre for Environment program, or permission of the Undergraduate Student Advisor.
Exclusion: INI 443H1/444H1
This is a Social Science course.

**ENV445H1 US Environmental Politics (formerly INI445H1) [26S]**
Study of the factors which determine US federal environmental decisions which in turn both heavily influence international environmental politics and, in an integrated North American economy, comparable domestic decisions made in Ottawa.
Prerequisite: JGE221Y1/JIE222Y1 and enrolment in a Centre for Environment program, or permission of Undergraduate Student Advisor
Exclusion: INI 445H1
This is a Social Science course.

**ENV446H1 Cities & Urban Environmentalism in a Global Context (formerly INI446H1) [26S]**
Provides an opportunity for in-depth exploration of the implications for urban governance and environmental protection of three inter-connected phenomena: globalization of the political economy; restructuring of the state; emergence of the city as a global actor.
Prerequisite: JGE221Y1/JIE222Y1 and enrolment in a Centre program, or permission of Undergraduate Student Advisor
Exclusion: INI 446H1
This is a Social Science course.

**ENV447H1 The Power of Economic Ideas (formerly INI447H1) [26S]**
From Keynesianism to trading in greenhouse gas permits, the principles of economics have had far greater impact on policy than those of any other discipline; the course examines that power in the field of environmental policy, including the struggle of ecological economics with mainstream economics to introduce new ideas such as scale, place, and inherent value.
Prerequisite: JGE221Y1/JIE22Y1 and enrolment in a Centre program, or permission of Undergraduate Student Advisor
Exclusion: INI 447H1
This is a Social Science course.

**ENV450H1 Energy and Environment Solutions [26S, 13T]**
This is an interdisciplinary course in which students address current energy problems while incorporating technical, environmental, economic, social, and political concerns.
Prerequisite: ENV346H1, 350H1; JGE347H1, 348H1
This is a Science course.

**JEH455H1 Current Issues in Environment and Health [26S]**
This course introduces students to complex issues at the interface between environment and health where health is broadly defined. Each year a current and controversial case study is explored from scientific, medical, political and policy perspectives. The course takes students from the molecular to individual to population and societal levels.
Prerequisite: ENV341H1/HMB302H1 and permission of Undergraduate Student Advisor
This is a Science course.

**ENV481H1 Special Topics in the Environment [26S]**

**ENV482H1 Special Topics in the Environment [26S]**
Special topics course designed for advanced Specialist and Major students in Centre for Environment programs.
Prerequisite: JGE221Y1/JIE222Y1 and completion of at least 10 FCE and enrolment in a Centre Environmental program, or permission of Undergraduate Student Advisor.
These are Social Science courses.

**ENV483Y1 Special Topics in the Environment (formerly INI497Y1) [52S]**
Special topics course designed for advanced Specialist and Major students in Centre for Environment programs.
Prerequisite: JGE221Y1/JIE222Y1 and completion of at least 10 FCE and enrolment in a Centre for Environmental program, or permission of the Undergraduate Student Advisor
Exclusion: INI 497Y1
This is a Social Science course.

**ENV490Y1 Senior Essay**
Open only to Specialists in the Environment and Science, and Environment and Sociiety programs, who have completed 15 courses. A major scholarly essay demonstrating the student's ability to integrate the individual course elements from their theme.
Prerequisite: JGE221Y1/JIE222Y1 and completion of 14 FCE and enrolment in a Centre for Environment program
Co-requisite: ENV421H1

**ENV491Y1 Independent Studies Project (formerly INI491Y1)**

**ENV492H1 Independent Studies Project (formerly INI492H1)**

**ENV493H1 Independent Studies Project (formerly INI493H1)**
A research project or selected topic in an area of environment not otherwise available in the Faculty, meant to develop skills in independent study of interdisciplinary topics. A written proposal cosigned by the student and supervisor must be submitted for approval by the Undergraduate Coordinator of the Centre normally by 31 May of the previous academic year, or three months prior to commencing the course.
Prerequisite: A CGPA of 3.0, JGE221Y1/JIE222Y1, completion of at least 14 FCE, and enrolment in a Centre for Environment program
Exclusion: INI491Y1/492H1/493H1

## Equity Studies: see New College

## Estonian: See Slavic Languages and Literatures

## Ethics, Society & Law: see Trinity College

# European Studies

The European Studies Program is designed to develop an interdisciplinary expertise on modern Europe. Students in the Program can acquire a working fluency in one of the following languages (in addition to English) of the European Union: Croatian, Czech, Estonian, Finnish, French, German, Hungarian, Italian, Macedonian, Polish, Portuguese, Russian, Serbian, Spanish, or Ukrainian. Language instruction emphasizes written and oral communication. To ensure that graduates in European Studies have the historical understanding and specialized knowledge, as well as linguistic competence, necessary to comprehend contemporary Europe, a balanced syllabus is presented: core courses on the political evolution of Europe and on the economics and politics of European integration are complemented by choices from courses offered by the twelve academic departments participating in the Program.

## European Studies Program

This is a limited enrolment program open only to those who earn a mark of at least 70% in one of the required first-year language courses (for the major) or in a first-year history or political science course (for the minor) and who also successfully complete at least 4 full courses in first year. Visit the European Studies Program web site for updated information about requirements, course offerings, and events: *www.utoronto.ca/esp* .

### European Studies (Arts program)

Consult Dr. E. S. Klein, Room 325N, Munk Centre for International Studies (416-946-8962) for general program requirements.

**Major program:**
(7 full courses or their equivalent, including at least two 300-series courses. The language requirement consists of three full credits in a single language at a progressive level of difficulty.)

NOTE: Some of the courses listed below may have prerequisites; some may be offered in alternate years. The list reflects information available at the time of printing. Consult the Program Advisor for up-to-date information.

First Year:
One of the following: EST 100Y1; FIN 100Y1; FSL 100H1 and 102H1/121Y1; GER 100Y1/GER101H/200Y1; HUN 100Y1; ITA 100Y1/101Y1/102Y1/142Y1/152Y1; PRT 100Y1/110Y1/220Y1; SLA100Y1, SLA106Y1, SLA108Y1, SLA109Y1, SLA205Y1, SLA207Y1, SLA237Y1; SPA 100Y1/220Y1

Second Year:
1. EUR 200Y1
2. One full course equivalent from: EST 200Y1; FIN200Y1; FSL 221Y1; GER 200Y1/300Y1/370H1; HUN 200Y1; ITA 250Y1/251Y1/252Y1/253Y1; PRT 220Y1/320Y1; SLA206Y1, SLA208Y1, SLA209Y1, SLA220Y1, SLA305Y1, SLA307Y1, SLA316Y1; SPA 220Y1/320Y1

Third Year:
1. POL 207Y1/324Y1/359Y1
2. One full course equivalent from: EST 300Y1; FIN300H1; FSL 331Y1/341Y1/366H1; GER 300Y1/370H1/400Y1/470H1; HUN 310Y1; ITA 343H1, 344H1, 354H1, 355H1; PRT 320Y1/420Y1; SLA306Y1, SLA308Y1, SLA320Y1, SLA327H1, SLA326Y1; SPA 320Y1/323H1/420H1

Second, Third or Fourth Year:
Two full course equivalents from: ANT 446Y1; ECO 201Y1, 230Y1, 303Y1, 342Y1, 452H1; ENG 202Y1, 329H1; EST 400Y1; FCS 195H1, 290H1, 291H1, 292H11, 297H1, 310Y1, 331H1, 390H1, 391H1, 392H1, 395H1, 490H1, 497H1; FIN 230H1, FIN235H1 240H1, 250H1, 260H1, 310H1, FIN330H1, FIN340H1, FIN350H1, FIN410H1, FIN415H1; FRE320Y1, 322Y1, 324Y1, 326Y1, 359H1, 360H1, 364Y1, 365H1, 367H1, 368H1, 449H1; FSL 431Y1, 442H1, 443H1, 461Y1; GGR 339H1, 344H1, 361H1; GER 150H1, 204H1, 205H1, 232H1, GER260Y1, 305H1, 310H1, 324H1, 325H1, 327H1, 331H1, 334H1, 335H1, 351H1, 354Y0, 355Y0, 360H1, 362H1, 353Y, 364H1, 410H1, 422H1, 430H1, 462H1; HIS 208Y1, 220Y1, 232Y1, 241H1, 242H1, 245Y1, 251Y1, 302H1, 310Y1, 317H1, 325H1, 330H1, 331H1, 334Y1, 335H1, 337Y1, 338Y1, 339Y1, 341Y1, 344Y1, 349H1, 351Y1, 353Y1, 354Y1, 355H1, 357Y1, 388H1, 401H1, 407H1, 414H1, 415H1, 416H1, 418H1, 420H1, 421H1, 422H1, 429Y1, 436H1, 442Y1, 444H1, 445H1, 449Y1, 451H1, 453H1, 454H1, 455H1, 458Y1, 459H1, 460H1, 461H1, 477H1, 483H1, 488H1, 492Y1; HUN 320Y1, 335H1, 345H1, 351H1, 355H1, 356H1, 440H1, 450H1, 451H1, 455H1; INI 382H1, 462H1; ITA 210Y1, 240Y1, 245Y1, 301H1, 310H1, 326H1, 340Y1, 341H1, 346H1, 347H1, 358Y0, 359Y0, 381H1, 405H1, 410H1, 415H1, 421H1, 441H1, 455H1, 491H1, 492H1; JEF 100Y1; JHP 304Y1, 435Y1, 454Y1; JPD 439Y1; PHL 210Y1, 217H1, 265H1, 310H1, 311H1, 312H1, 315H1, 316H1, 317H1, 320H1, 321H1, 322H1, 326H1, 338H1, 388H1; POL 200Y1, 317Y1, 320Y1, 321H1, 324Y1, 344H1, 354H1, 359Y1, 366Y1, 405Y1, 414H1, 415H1, 422Y1, 440Y1, 452Y1, 453Y1, 462Y1; PRT 250H1; SLA 205H1, 215H1, 216Y1, 225H1, 226H1, 405Y1, 406Y1, 414H1, 416Y1, 424Y1, 425Y1, 434Y1, 445H1, 465H1, 475H1; SOC 203Y1, 341Y1, 350Y1; SPA 250H1, 341H1, 345H1, 435H1.

**Minor program in European Union Studies:**
(4 full courses or their equivalent, including at least one 300/400 full-course equivalent)

1. EUR200Y1
2. POL207Y1/POL324Y1/POL359Y1
3. Two full credits or their equivalent in eligible elective courses (see European Studies Major above)

## European Studies Courses

See page 32 for Key to Course Descriptions.

**EUR200Y1 Europe: Nation-State to Supranational Union [52L, 26T]**
An analysis of the development of European political regimes since 1789. This course identifies the decisive forces and factors affecting the operation of constitutions and institutions within the countries which came to form the European Union: nationalism, multi-nationalism, internationalism and supranationalism.
This is a Humanities or Social Science course

## Given by Members of the Department of Slavic Languages and Literatures

## Faculty

### Professor Emeritus

G. Bisztray, MA, Ph D

### Professor

B. Vähämäki, MA, Ph Lic, Ph D

### Visiting Professor

J. Kenyeres, MA, Ph D

The Finno-Ugrians are a diverse group of peoples related by an ancient common linguistic heritage distinct from that of the Indo-Europeans who surround them. Of the approximately 25 million Finno-Ugrians, the best known are the Estonians and Finns on the Eastern Baltic Littoral and the Hungarians in the Carpathian Basin. But they also include the Sámis (Lapps) in the northern Fenno-Scandian and Kola Peninsulas, the Erzas, Moksas, Maris, Udmurts, and Komis of the northern woodland zone of European Russia and the Khantys and Mansis of Western Siberia. Distantly related to the Finno-Ugrians are the various Samoyed peoples of Siberia, the Nenets, Enets, Nganassans and Selkups.

Finno-Ugric Studies at the University of Toronto is devoted to the languages, literatures and cultures of the three main groups, the Estonians, Finns and Hungarians. These areas are of interest in themselves but also because of their role in shaping the histories and cultures of their respective geographic space. Because of their centuries-long association with the Slavic peoples, in particular the Russians, Finno-Ugric Studies can be of value to students of Slavic studies. The language courses offered by the three Finno-Ugric programs will be of interest to students of general linguistics who desire to acquire knowledge of a non-Indo-European language.

Undergraduate Coordinator:
Professor Leonid Livak, 121 St. Joseph Street, Room 407, leo.livak@utoronto.ca, 416-926-1300, ext. 3143.

### Estonian Studies

Estonian is spoken by approximately one million people in present-day Estonia and some 72,000 in other parts of the world, including 18,000 in Canada. Closely related to Finnish and more distantly to Hungarian, Estonian is one of the few Finno-Ugric languages to exist surrounded by speakers of Indo-European languages.

An ancient people, the Estonians have preserved their language and culture despite centuries of domination by other nations. Not only is their heritage enormously rich in folk epics and songs, but Estonians enjoy a vigorous and diversified literary tradition which continues in Estonia proper and in their adoptive countries.

Estonian studies at the University of Toronto are concerned with the language, literature, and culture of Estonia. The language courses will be of interest to those wishing to improve their language skills, as well as to students of general linguistics who desire to acquire a knowledge of a non-Indo-European language.

### Finnish Studies

A nation of five million people, Finland is situated between West and East, between Sweden and Russia, sharing for thousands of years religious, historical, political, social, and cultural influences and experiences with its neighbours and the different worlds they represent.

Finnish, a Finno-Ugric language related to Estonian and Hungarian, is spoken by 94% of Finland's population, by 300,000 in Sweden, and by large numbers in Canada, the United States, and other countries. The other constitutionally recognized group, the Finland-Swedes, comprises over six percent of the population. The Finns have a strong commitment to their languages and to their culture. Their national epic, the Kalevala, compiled in the 19th century from old Finnish epic narrative poems and incantations, soon became a national symbol and continues to this day to inspire the growth and development of the country's creative force. Today the entire world responds to Finnish achievements in music, literature, the arts and architecture, and celebrates the work of such outstanding figures as Jean Sibelius, Aki Kaurismäki, Alvar Aalto, and Eliel and Eero Saarinen.

Finnish studies at the University of Toronto are presently engaged in teaching the Finnish language - a three-year sequence - and in offering other courses on the literature and culture of Finland.

### Hungarian Studies

Hungarian is spoken by ten and a half million inhabitants of present-day Hungary, about three million people in the neighbouring countries, and perhaps as many as an additional two million around the world. These figures make Hungarian, which is related to Finnish, Estonian, and Lappish, but virtually no other language in Europe, by far the largest minority language in a vast sea of Indo-European speakers.

Preserving their national identity by keeping their unique language alive has been a major concern for Hungarians ever since they settled in the Carpathian Basin over a thousand years ago. Yet far from secluding themselves, they have actively engaged in European history and politics and thereby have shaped their country into a highly cultured and, at times, quite powerful and influential nation. Many Hungarians settled abroad and contributed to the civilizations of their adopted countries. Those who achieved fame in recent decades include Bartók, Moholy-Nagy, Ormandy, Szentgyörgyi, Szilárd, and Vasarely.

Hungarian studies at the University of Toronto are concerned with the language, literature, and culture of Hungary and with the international role of the country, including the particular problem of Hungarian immigration to Canada.

# Finno-Ugric Studies

## Estonian, Finnish and Hungarian Programs

Enrolment in the Estonian, Finnish, or Hungarian program requires the completion of four courses; no minimum GPA required.

### Estonian Studies (Arts program)

**Minor program:**
(4 full courses or their equivalent, including at least one at the 300+ level)

Four full course equivalents from EST 100Y1, 200Y1, 210H1, 300Y1, 400Y1, 420Y1; FIN 220H1

### Finnish Studies (Arts program)

Consult Department of Slavic Languages and Literatures.

**Major program:**
(6 full courses or their equivalent)

First Year:
FIN 100Y1
Higher Years:
1. FIN 200Y1, 300H1
2. Three full course equivalents from the following: FIN 230H1, 235H1, 240H1, 250H1, 260H1, 305H11, 310H1, 320H1, 330H1, 340H1, 350H1, 410H1, 415H1, 420Y1, 430H1

**Minor program:**
(4 full courses or their equivalent, including at least one at the 300+ level)

Four full course equivalents from FIN

### Hungarian Studies (Arts program)

Consult Department of Slavic Languages and Literatures.

**Major program:**
(6 full courses or their equivalent)

First Year:
HUN 100Y1
Higher Years:
1. HUN 200Y1, 310Y1, 320Y1
2. Two courses from: HIS 453H1; HUN 335H1, 345H1, 351H1, 355H1, 356H1, 440Y1, 450H1, 451H1, 455H1; SLA 414H1

**Minor program:**
(4 full courses or their equivalent, including at least one at the 300+ level)

Four courses from: HUN 100Y1, 200Y1, 310Y1, 320Y1, 335H1, 345H1, 351H1, 355H1, 440Y1, 450H1, 451H1, 455H1; HIS 453H1

### Faculty of Arts & Science Language Citation

The Department of Slavic Languages and Literatures participates in the Faculty of Arts and Science's Language Citation initiative. Students may achieve this Citation in Finnish and Hungarian.

Language study is a demanding and intellectually rewarding educational experience. Our students learn to communicate both orally and in writing in other languages and are thus able to experience other parts of the world in more intimate ways. Their access to other cultures opens doors for further study and employment. Students in our department also have the opportunity to read a vast array of world-renowned authors in the original languages, as well as works – normally not available in English – in other areas of study, for example, cinema studies, drama, folklore, history, intellectual history, philosophy, mathematics, and political science.

The Language Citation recognizes a significant level of achievement in language study. For course selection students should consult the Undergraduate Coordinator as early as possible since not every language course is offered each year. Students who begin language study at the Intermediate level should consult the Undergraduate Coordinator for approval of advanced literature and culture courses that may satisfy the requirements for the Language Citation.

The Language Citation in Finnish is available to students who complete FIN200Y1, FIN300H1, and FIN305H1 with a grade of at least B-.

The Language Citation in Hungarian is available to students who complete HUN200Y1 and HUN310Y1 with a grade of at least B-.

Students should note that, as explained on the page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

## Estonian, Finnish and Hungarian Courses

See page 32 for Key to Course Descriptions

For Distribution Requirement purposes, all EST, FIN and HUN courses are classified as HUMANITIES courses.

### Estonian Courses

Note

The Department reserves the right to assign students to courses appropriate to their level of competence in Estonian.

**EST100Y1 Elementary Estonian130P**
The basics of Estonian: elementary phonology, morphology, and syntax. Emphasis on reading and speaking as well as writing skills. (Offered in alternate years)
Exclusion: Native Speakers

**EST200Y1 Intermediate Estonian104P**
Continued emphasis on basic language skills, on acquisition of both active and passive vocabulary. (Offered in alternate years)
Prerequisite: EST100Y or permission of instructor

**EST210H1 Introduction to Baltic Folklore26L**
A comparative survey of oral traditions of peoples on the eastern shore of the Baltic Sea (Finns, Carelians, Estonians, Livonians, Latvians) and their impact on these national cultures (e.g. Kalevala, Kalevipoeg, Lacplesis). No knowledge of Finnic or Baltic language required.

**EST300Y1 Advanced Estonian 78P**
Advanced grammar and stylistics through study of a variety of texts; problems of composition; translation; oral and written practice. (Offered in alternate years)
Prerequisite: EST200Y or permission of instructor

**EST400Y1 Estonian Literature from 170026L, 26S**
A survey of the major writers and literary periods in Estonian literature. From Käsu Hans', Lament of Tartu to the National Awakening. Republican, Soviet, expatriate literature, and the New Awakening. Readings in Estonian or English. (Offered in alternate years)
Prerequisite: Permission of instructor
Recommended preparation: EST300Y

**EST420Y1 Independent Study TBA**
A reading and research project of significant depth in a major topic in Estonian language, literature or culture approved and supervised by an instructor.
Prerequisite: EST300Y/400Y; permission of instructor

**EST421H1 Independent Study TBA**
A reading and research project of significant depth in a major topic in Estonian language, literature or culture approved and supervised by an instructor.
Prerequisite: Permission of instructor

## Finnish Courses

Note

The Department reserves the right to assign students to courses appropriate to their level of competence in Finnish.

**FIN100Y1 Elementary Finnish104P**
An introductory language course for students with no knowledge of Finnish. The acquisition of a basic vocabulary and of an understanding of elementary structural features through practice in comprehension, speaking, reading and writing. (Offered in alternate years)

**FIN200Y1 Intermediate Finnish104P**
The four language skills (speaking, listening, reading and writing) honed by discussion of Finnish literary texts as well as by compositions in Finnish about these texts, by a series of conversation exercises, and by analysis of morphology, syntax and word formation. Translation is used to aid in language learning. (Offered in alternate years)
Prerequisite: FIN100Y or permission of instructor

**FIN220H1 Introduction to Finnish Linguistics 13L, 13S**
A survey of the linguistic structures of the Finno-Ugric languages including Estonian, Finnish and Hungarian with special emphasis on Finnish. Focus is to gain insights into workings of non-Indo-European languages. No prior knowledge of Finno-Ugric languages or linguistics required.

**FIN230H1 Finnish Culture 1800 to Present (formerly FIN210Y1) 13L, 13P**
FIN230H offers an introduction to Finnish society, history and culture 1800 to present. The course examines the rise of Finnish nationalism in the 1800s, its main manifestations, particularly the developments of its cultural, educational and social institutions, its economic structures, its demographics, as well as the nation's bilingual status.
Exclusion: FIN210Y1

**FIN235H1 Finnish Literature 1800 to Present (formerly FIN210Y1) 13L, 13P**
FIN235H surveys the major works in Finnish literature 1800 to present by examining its role in the implementation of the agenda of Finnish nationalism in the 19th and the 20th century. The major genres and periods in Finnish literature are studied.
Exclusion: FIN210Y1
Recommended preparation: FIN230H1

**FIN240H1 Masterpieces of Scandinavian Literature 13L, 13S**
Introduction to the greatest authors of Scandinavian literature and their greatest works, particularly August Strinberg, Henrik Ibsen, H.C. Anderssen, Knut Hamsun, Selma Lagerlöf, Pär Lagerkvist, Aleksis Kivi, Sigrid Undset and Halldor Laxness, etc. These are situated in their Scandinavian context and in world literature. (Offered every two or three years)
Recommended preparation: Some background in literature

**FIN250H1 Finnish Cinema 26S, 13P**
Development of Finnish cinema from its parochial beginnings to its international recognition. The great pastoral tradition; the war memories (Laine, Kassila, Parikka); socio-political engagement of the 60s (Donner, Jarva), the paucity of the 70s (Mollberg); the universal outsider themes of the 80s (Aki and Mika Kaurismäki). Readings and subtitles in English. (Offered in alternate years)

**FIN260H1 Scandinavian Cinema 26S, 13P**
Major developments of cinema in Scandinavia in the 20th century with concentration on the major film makers of Denmark, Sweden, and Finland. Screening of films by directors such as Victor Sjöström, Mauritz Stiller, Alfi Sjöberg, Ingmar Bergman, August Bille, Carl Th. Dreyer, Gabriel Axel, Nils Gaupe, Aki and Mika Kaurismäki. (Offered in alternate years)

**FIN300H1 Advanced Finnish (formerly FIN300Y1) 26S, 13P**
Advanced Finnish provides a continuation of FIN200Y Intermediate Finnish.Prerequisite: FIN200Y1 or permission of instructor
Exclusion: FIN300Y1

**FIN305H1 Finnish Morphology and Syntax13L, 13S**
Finnish Morphology and Syntax is designed present the Finnish morphological system and the principles of Finnish syntax to students interested in general linguistics, morphology, syntax, or Finnish linguistics. The Finnish case system, the verb conjugation system and phenomena such as consonant gradation, vowel harmony and clitics will be explored.
Prerequisite: Introduction to linguistics or FIN100Y

**FIN310H1 Finnish Folklore: The Kalevala13L, 13S**
An examination of the Finnish national epic, the Kalevala: its relationship to the tradition of folk poetry; its quality as an epic poem; the mythological, religious, and cultural dimensions of its world view; its role in Finland's nation building in the 19th and 20th centuries. Readings in English. (Offered at least every alternate year)

**FIN320H1 The Finnish Canadian Immigrant Experience 13L, 13S**
Major issues and dimensions of the culture and experience of the Finnish immigrants to Canada, including Finnish Canadian literature, theatre, and press. Conceptual and ideological contributions to working class culture, women's lives, religious and social attitudes and values. Readings in English. (Offered every three or four years)

**FIN330H1 Regional Origins of Finnish Culture 13L, 13S**
The course traces the construction of a unified Finnish culture over the centuries from subcultures and values which ultimately

have their definitions in the regional diversity of the area now called Finland. It focuses on the main divisions into western and eastern Finland, but also explores the Swedish and the Sami (Lappish) heritage in the context of old cultural regions. The sources used are cultural history texts as well as Finnish literature.

**FIN340H1 Finland-Swedish Literature and Culture 13L, 13S**

An examination of the major Finland-Swedish authors (Rune Coerg, Tgrelicks, Sodergran, Tove Jansson) and the linguistic reality of Finland as it has changed over time. The distinctly Finland-Swedish culture is explored, analysed and assessed in its Finnish and Scandinavian context. Cultural giants are studied (Sibelius, etc.).

**FIN350H1 The Finnish Short Story 26S**

Historical, structural, and thematic study of the short fiction of Finland from the Romanticism of the 19th century to contemporary post-structuralism and post-modernism. Works of Runeberg, Topelius, Kivi, Canth, Aho, Jotuni, Lehtonen, Schildt, Sillanpää, Haanpää, Meri, Hyry, Salama, Mukka, Liksom, Huldén, and others. Readings in English. (Offered in alternate years)

**FIN410H1 Finnish Literature 1700-1900 (in Finnish) (formerly FIN410Y1) 26S**

A chronological study of the development of Finnish literature, emphasizing outstanding writers, significant movements and trends, the emergence and transformations of the major genres and their relationship to Finnish folklore and to the national awakening. Readings in Finnish. (Offered as needed)
Prerequisite: Permission of instructor
Exclusion: FIN410Y1
Recommended preparation: FIN300Y

**FIN415H1 Finnish Literature in the 20th Century 26S**

This course examines the main literary works and genres of 20th Century Finland, especially Jotuni, Sillanpää, Haanpää, Meri, Manner, Linna, Tuuri and a sample of contemporary writers. The readings are in Finnish.
Prerequisite: Reading ability in Finnish
Exclusion: FIN410Y1
Recommended preparation: FIN410H1

**FIN420Y1 Independent StudyTBA**

A reading and research project
Prerequisite: Permission of instructor

**FIN430Y1 Independent StudyTBA**

This course offers students, primarily Finnish Studies majors and minors, an opportunity to design together with the instructor an individualized course of study in Finnish literature or language. Registration requires the permission of the appropriate instructor and the Department of Slavic Languages and Literatures.
Prerequisite: Permission of instructor
Recommended preparation: At least two years of university studies

## Hungarian Courses

Note

The Department reserves the right to assign students to courses appropriate to their level of competence in Hungarian.

**HUN100Y1 Elementary Hungarian130P**

The basic features and logic of the language. Development of conversational skills and the reading of easy texts. Open only to students with little or no knowledge of Hungarian.

**HUN200Y1 Intermediate Hungarian104P**

Review of descriptive grammar; studies in syntax; vocabulary building; intensive oral practice; composition; reading and translation.
Prerequisite: Permission of instructor

**HUN310Y1 Advanced Hungarian52S**

A synchronic and diachronic survey of the Hungarian language. Conceptualized summary of grammar, syntax, and stylistics; studies in the genesis and historical stages of the language. Brief consideration of living dialects, the basics of poetics; selected problems in translation and language teaching. Readings in Hungarian.

**HUN320Y1 A Survey of Hungarian Literature52S**

A chronological study of the development of Hungarian literature since the 12th century; emphasis both on outstanding writers and on significant movements or themes. Transformations of ideas and changes in language and style. No knowledge of Hungarian required.

**HUN335H1 Urban vs. Rural: Cities and Country in Hungarian Literature and Culture 13L, 13S**

This survey of Hungarian literature and culture uses the dichotomy of rural and urban traditions to explore the history of Hungarian literature and art, including poetry, short stories, novels, and folklore. Readings in English (also available in Hungarian).

**HUN345H1 The Dynamic of Hungarian Culture, Ethnography, and Folklore 13L, 13S**

Explore the cultural traditions, historical processes, myths, and figures that have shaped and redefined Hungarian civilization and national identity. Theoretical and practical classes on ethnogenesis, anthropology, and folklore. Readings in English (also available in Hungarian).

**HUN351H1 Conformism and Subversion: Hungarian Cinema 39S**

Developments until the sixties; auteurism of the sixties (Jancsó, Szabó); documentarism of the seventies (Mészáros); new trends since the eighties. Relations with the European cinema; contributions to the international film world and to film theory.

**HUN355H1 From Totalitarianism to Democracy: History of the Past Decades and Reflections of a Changing Society in Hungarian Culture 13L, 13S**

Explore Hungary's rapidly changing place in Europe. Focus on political, sociological, and historical understandings of nationalism and identity as they manifest themselves in literature, history, and culture. Knowledge of Hungarian not required.

**HUN356H1 Hungary, 1956–2006: The Past 50 Years 26S**

On the 50th anniversary of the 1956 Hungarian Revolution, this course investigates the cultural and literary history of Hungary in the past five decades: how art and literature existed in a totalitarian regime, how they changed in the years of "goulash communism" and later, and how they manifest political,

sociological, and historical understandings of national and European identity and the place of Hungary within a dynamic Europe. Knowledge of Hungarian not required.

**HUN440H1 The Roots of Modernism: Hungarian 20th Century Fiction** **26S**

Continuity and change in form and content studied from the perspective of the native literary and social tradition and in relation to the evolution of modern European fiction; analogies with other genres and arts; survey of criticism. No knowledge of Hungarian required.

**HUN450H1 Hungary On-Stage: A History of Hungarian Drama in Social Context** **26S**

Hungarian theatre prior to the 19th century; birth of the national drama (Katona, Madách); populism and cosmopolitanism; post-war tendencies (Hubay, Orkény, Sütö). Hungarian drama in the European context; the theatre as a social institution. No knowledge of Hungarian required.

**HUN451H1 Three Hungarian Film Directors** **39S**

The course scrutinizes the oeuvre of Miklós Jancsó, Márta Mészáros, and István Szabó, tracing changes in their style and outlook.

Prerequisite: At least 10 full course credits with; at least one of these in film

**HUN455H1 Hungary and Europe: Cultural Adaptation in the Late 20th Century** **13L, 13S**

Focus on literature, art, mass media, and popular culture in post-1990 Hungary with special emphasis on the past ties to European culture and the impact of European integration. Readings in English (also available in Hungarian).

**HUN497Y1 Independent Study (Hungarian)**

Translation course concentrating on Hungarian prose translation

Prerequisite: Permission of Department

**HUN498H1 Independent Study (Hungarian)**

Translation course concentrating on Hungarian prose translation.

Prerequisite: Permission of Department

# Forest Conservation

## Forest Conservation is a collaborative program of the Faculty of Arts & Science and the Faculty of Forestry

## Faculty

### Professor and Dean of the Faculty

C.T. Smith, BA, MS, Ph D

### Professors

T.J. Blake, MF, Ph D
P.A. Cooper, M Sc, Ph D
D.L. Martell, MA Sc, Ph D
M. Sain, MTech, Ph D
S.M. Smith, M Sc, Ph D
V.R. Timmer, M Sc F, Ph D

### Associate Professors

T.J. Carleton, M Sc, Ph D
J. Caspersen, BA, Ph D
S. Kant, MA, Ph D
J.R. Malcolm, M Sc, Ph D
S.C. Thomas, BA, Ph D
N. Yan, BA Sc, Ph D

### Senior Lecturer

A. Kenney, M Sc, Ph D

Forests have traditionally been managed primarily as sources of timber and revenue. However, there is increasing recognition of their immense cultural, social and environmental role, focused particularly by recent United Nations conferences in Rio De Janeiro and Johannesburg. Increasingly the focus of forest management has shifted to include biodiversity maintenance, ecological sustainability, and the protection of wildlife and their habitats. Canadians, as custodians of 10% of the remaining global forest cover, and 25% of the undisturbed frontier forest, have both the option and the responsibility to provide global leadership in forest conservation and sustainable forest management. Forest conservation programs prepare students for this critically important role by combining traditional ecological (biology, zoology) and physical (soil science, hydrology) sciences with social sciences. Forest conservationists increasingly focus on complex, emerging social and community issues, such as aboriginal rights and land tenure, protection of wilderness parklands, preservation of urban green space, and the use of forests for carbon sequestration.

Canada is not only a key player in global forest conservation, but is also more economically dependant on forests than any other major developed country. Responsible stewardship of our forests and the changing focus from industrial timber production to forest conservation has greatly expanded the range of expertise necessary. Graduates can pursue a wide range of new career opportunities developing in private, government and non-government environmental organizations where forest conservationists increasingly work as members of multidisciplinary teams of environmental and resource managers. Graduates from forest conservation programs can also pursue graduate programs in a wide range of disciplines, including forest conservation, forestry, environmental sciences and international development.

Students may take a specialist 4-year degree leading to an H.B.A. in Forest Conservation or an H.B.Sc. in Forest Conservation Science. The arts program focuses on communal forest management, development of forest policies, forest economics and forest product trade, with electives in social sciences, while the science program concentrates on forest biology and ecology with electives in life and physical sciences.

The specialist programs provide a grounding in forest conservation with emphasis on breadth as well as research depth, and can particularly meet the needs of individuals who are considering graduate level education in forestry (M.F.C., M.Sc.F. or Ph.D.).

The major programs in Forest Conservation are intended to build on a student's interest in forestry and related issues. Students should consider combining these programs with a major in another related discipline such as environment, geography, botany, zoology, chemistry, urban studies or architecture.

A minor in Forest Conservation Science in the science stream and a minor in Forest Conservation in the arts stream are also available. Students should consider combining these programs with a minor in other related disciplines.

The major and minor in Forest Biomaterials Science will be of interest to students interested in conserving the forest through good design, application and utilization of forest based products.

Wise management and use of renewable forest-based materials can help solve many of the world's environmental problems. Forest-based materials are renewable, have low life cycle environmental costs and have potential to contribute significantly to carbon sequestration as well as serve as carbon neutral fuels and alternatives to non-renewable feed-stocks for polymers and other bio-materials. To derive the greatest environmental benefits from forest materials, a thorough understanding is needed of: forest sustainability; material science of wood and other forest based materials; biotechnology as related to bio-materials conversion to feed stock, energy and other value added products; and optimal use and maintenance of the materials. Thus it is an interdisciplinary program, combining aspects of forestry, biology, chemistry, chemical and mechanical engineering and building science.

Graduates can pursue a wide range of new career opportunities developing in industry, research organizations, and government and non-government organizations where new opportunities for use of the forest resource are of interest. Graduates from forest biomaterials programs can also pursue graduate programs in a wide range of disciplines, including forestry, wood sciences, and environmental sciences.

Undergraduate Co-ordinator:
Professor Vic Timmer, Room 3035 , Earth Sciences Centre (416-978-6774)

Undergraduate Administrator:
Ms. A. Veneziano, Room 1016E, Earth Sciences Centre (416-978-5480)

## Forest Conservation Programs

### Forest Conservation Science (Science program)

Enrolment in the specialist program is open to students who have completed four first-year courses with a minimum GPA of 2.3. Enrolment in the major and minor programs is open to students who have completed four first-year courses with a minimum GPA of 2.0.

**Specialist program:**
(13.5 full courses or their equivalent, including at least four 300+series courses and 2.5 400-series courses; other equivalent and approved courses offered by other Faculties, University of Toronto Mississauga or University of Toronto Scarborough may be eligible for inclusion.)

First Year:
BIO150Y1; Two Science FCEs (GGR100Y1; CHM138H1, 139H1 recommended)
Second Year:
1. ENV 234Y1; FOR 200H1, 201H1
2. One FCE from: ECO 220Y1, 227Y1; GGR 270H1; JBS 229H1/STA 221H1; STA 220H1
3. One FCE from: BIO 260H1; BIO 251Y1; EES C20H1 (University of Toronto Scarborough); GGR 205H1, 206H1, 272H1, 273H1; PHL 273H1; ENV236Y1; JGE221Y/JIE222Y1

Third Year:
1. FOR301H1, 305H1. At least One FCE from FOR 300H1, 302H1, 303H1, 306H1, 307H1; EEB321H1
2. 0.5 FCE from: EEB 307H1, 319H1, 323H1, 328H1, 341; CSB 340H1
3. At least 1.5 FCE from: BIO 302H1, 303H1, 306H1, 308H1, 324H1, 465H1; GGR303H1, 305H1, 310H1; EEB324Y1, 360H1, 361H1, 386H1, 388H1, 389H1

Fourth Year:
1. FOR 400Y1, 401H1
2. One FCE from: FOR 403H1, 404H1, 405H1, 412H1, 413H1, 416H1, 417H1: GGR403H1; ENV 442H1, 447H1; JFG 470H1, 475H1

**Major program:**
(8 full courses or their equivalent, including at least 2.0 300+series courses and one 400-series course; other equivalent and approved courses offered by other Faculties, University of Toronto Mississauga or University of Toronto Scarborough may be eligible for inclusion.)

First Year:
BIO150Y1; Two Science FCEs (GGR100Y1; CHM 138H1, 139H1 recommended)
Second Year:
FOR 200H1, 201H1; One FCE from ENV236Y1, 234Y1; JGE 221Y/JIE222Y1
Third Year:
FOR305H1; 1.5 FCE from: FOR 300H1, 301H1, 302H1, 303H1, 306H1, 307H1; EEB321H1
Fourth Year:
FOR 400Y1

**Minor Program:**
(4 full courses or their equivalent, including at least 1.0 300+series course and one 400-series course)

First Year: BIO150Y1/ GGR100Y1/ENV200Y1
Second Year: FOR200H1, 201H1
Third Year: One FCE from: FOR300H1, 301H1, 302H1, 303H1, 305H1, 306H1, 307H1
Fourth Year: FOR400Y1

### Forest Conservation (Arts program)

Enrolment in this program is open to students who have completed four first-year courses with a minimum GPA of 2.3. Enrolment in the major and minor programs is open to students who have completed four first-year courses with a minimum GPA of 2.0.

**Specialist program:**
(12 full courses or their equivalent, including at least 3.5 300+series courses and 2.5 400-series courses; other equivalent and approved courses offered by other Faculties, University of Toronto Mississauga or University of Toronto Scarborough may be eligible for inclusion.)

First Year:
BIO 150Y1; GGR107Y1 or One Social Science FCE
Second Year:
1. ENV 234Y1; FOR 200H1, 201H1
2. One FCE from: ECO 220Y1, 227Y1; GGR 270H1; JBS 229H1/STA 221H1; STA 220H1/250H1/255H1
3. One FCE from: ABS 201Y1; ANT 204Y1; JGE 221Y/ JIE222Y1; PHL 273H1

Third Year:
1. FOR301H1, 305H1; At least One FCE from: FOR 300H1, 302H1, 303H1, 306H, 307H1; EEB 321H1
2. At least One FCE from: ANT 365Y1; GGR 331H1, 393H1; HIS 318Y1; ENV 320Y1, 321Y1, 332H1; UNI 302H1, 315Y1, 317Y1; JAG321H1

Fourth Year:
1. FOR 400Y1, 401H1
2. One FCE from: ANT 450H1; FOR 403H1, 412H1, 416H1, 417H1; ENV 410H1, 421H1, 422H1, 423H1, 440Y1, 442H1, 447H1, 494H1; JFG 470H1, 475H1

**Major program**
(8 full courses or their equivalent, including at least 2.0 300+ series courses and one 400-series course; other equivalent and approved courses offered by other Faculties, University of Toronto Mississauga or University of Toronto Scarborough may be eligible for inclusion.)

First Year:
BIO 150Y1; GGR 107Y1 or One Social Science FCE
Second Year:
1. ENV 234Y1; FOR 200H1, 201H1
2. One FCE from: ABS 201Y1; ANT 204Y1; ECO 220Y1, 227Y1; GGR 233Y1, 270H1; JBS 229H1/STA 221H1; JGE221Y; PHL 273H1; STA 220H1/250H1/255H1

Third Year:
FOR301H1, 305H1. One FCE from: FOR 300H1, 302H1, 303H1, 306H1; EEB 321H1
Fourth Year:
FOR 400Y1

**Minor program:**
(4 full courses or their equivalent)

First Year: One of ANT100Y1/ECO100Y1/ENV200Y1/ GGR100Y1/107Y1
Higher Years: 3 FCEs from (FOR200H1, 201H1, 301H1, 302H1, 303H1, 305H1, 306H1, 307H1, 400Y1, 401H1)

# Forest Conservation

## Forest Biomaterials Science (Science program)

The Forest Biomaterials major or minor may be strengthened by accompanying major or minor(s) in Biology (major, minor), Biochemistry (major), Forest Conservation (major, minor) , Chemistry (major, minor), Environmental Chemistry (minor), Materials Chemistry (minor) or Environment and Science (major, minor).

Consult the Program Coordinator, Professor Paul Cooper, Room 2012 , Earth Sciences Centre (416-946-5078)

Enrolment in the major and minor programs is open to students who have completed four first-year courses with a minimum GPA of 2.3.

**Major program:**
(8 full courses or their equivalent, including at least 2.0 FCE 300+series courses and 2.0 FCE 400-series courses; other equivalent and approved courses offered by other Faculties may be eligible for inclusion.)

1. BIO150Y; One FCE (MSE 101H, ECO 100Y/ECO 105Y, CHM 138 H, CHM 139H, ARC 132H recommended)
2. FOR 200H; 1.5 FCE from CHM 220H, ENV 234Y, MSE 207H, BCH 210H, STA 220H, STA 221H/EEB 225H
3. FOR 300H; FOR 310H, 1.0 FCE (FOR 302H, FOR305H, ENV 315H, ENV 350H, MSE 330H, MSE 316H, FOR 305H, ARC 341H, ARC 342H, BCH 370H recommended).
4. FOR 401H; FOR 410H; one FCE from FOR 403H, FOR 405H, FOR 420H, FOR 423H, CHE 575H

**Minor Program:**
(4 full courses or their equivalent, including at least 1.5 FCE 300+series course and one FCE 400-series courses)

1. 1.5 FCE from BIO 150Y, MSE 101H, ECO 105Y, CHM 138H, CHM 139H, ARC 132H, FOR 200H, CHM 220H, ENV 234Y, MSE 207H, MGT 201H
2. FOR 300H; FOR 310H; 0.5 FCE from ENV 315H, ENV 350H, MSE 330H, MSE 316H, FOR 305H, ARC 341H, ARC 342H, BCH 370H
3. 1.0 FCE from FOR 401H,FOR 405H, FOR 410H, FOR 423H

## Forest Conservation Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26) FOR courses are classified as either Science or Social Science courses; please check individual course listings.

**FOR200H1 Conservation of Canada's Forests [26L]**
Development of forest management philosophy in Canadian and temperate forest regions; the sustained-yield paradigm and concepts of sustainability. Techniques for more sustainable forest management: structural retention; viable park and reserve networks; old growth; value-added and non-traditional forest products.
Recommended preparation: BIO150Y1/GGR100Y1
This is a Science course

**FOR201H1 Conservation of Tropical and Subtropical Forests [26L]**
The world's major tropical and subtropical forest biomes; prospects for conservation and sustainable management; consequences of different forest development strategies; tropical deforestation and selective logging; biodiversity and non-timber forest products; the fuelwood crisis; fire management and large carnivore conservation; ecological, economic and social perspectives.
Recommended preparation: BIO150Y1/GGR100Y1
This is a Science course

**FOR300H1 Forest Products in Sustainable Forestry [26L, 26P]**
Traditional and non-traditional forest products; wood structure; properties and material attributes; functional characteristics and logistics of wood product industry. Contribution of innovative product development to conservation; adding value; residue use; biorefinery; under-utilized species; wood protection. Forest product certification; eco-labelling; life cycle analysis.
Recommended preparation: FOR200H1, 201H1
This is a Science course

**FOR301H1 Field Methods in Forest Conservation [TBA]**
A practical introduction to the field methods used by forest conservationists in Ontario. This field course will last 10-days from September 1 – 10 approximately. Field exercises will provide students with practical training in tree identification, forest ecosystem classification, forest inventory, stand management prescriptions, tree marking, and silvicultural systems. Each student is required to pay an ancillary fee of $600 to cover the costs of their transportation and accommodation. Students must contact the Faculty to register – we strongly recommend that you do so by the end of May, but later registrations will be considered if class size permits.
Recommended preparation: ENV234Y1; FOR200H1, 201H1, GGR205H1
This is a Science course

**FOR302H1 Societal Values and Forest Management [26L]**
The course will provide diverse perspectives about forests, such as Aboriginal perspective, ecosystem services and human health, climate change and carbon sequestration, and forest management systems, such as community-based forest management and adaptive management systems; and will develop and understanding of the need of integrative approach to address the social, cultural, economic, and scientific issues associated with forest management.
Recommended preparation: FOR200H1, 201H1
This is a Social Science course

**FOR303H1 Human Dimensions of Global Forests [26L]**
Global forest resources; global and regional production, consumption and trade of timber and non-timber products; relationships between societies and forests; international forest policy; economic value of forests; forests and development.
Recommended preparation: FOR200H1, 201H1
This is a Social Science course

**FOR305H1 Biology of Trees and Forests [26L, 40P]**
An overview of the biology of trees and the ecological principles that govern the structure and function of forests. Topics in tree biology will include tree identification, wood anatomy, tree architecture, resource acquisition and allocation, tree growth and mortality. Topics in forest ecology will include resource competition, stand development, species succession, and the cycling of nutrients and energy. This course will include a substantial field and lab component.
Recommended preparation: FOR200H1/201H1, BIO150Y1/ ENV234Y1
This is a Science course.

**FOR306H1 Tropical Forest Ecology and Conservation Field Course [26P]**
This course will provide practical experience in tropical forest conservation, introducing tools for rapid assessment of biodiversity, analysis of human use and natural disturbance impacts on forest structure and diversity, and the development of effective forest conservation strategies. The 10-day course spanning Reading Week will be field-based in the country of Dominica, West Indies. Four additional 2-hour lectures at the university are associated with the course.
Prerequisite: FOR201H1, FOR301H1 or FOR305H1
This is a Science course.

**FOR307H1 Forest Insect Ecology & Management [26L, 26P]**
Insect identification and ecology, biodiversity and conservation, insect-tree interaction, exotic introductions, biological control, pesticide use, and integrated pest management. (Offered in alternate years.)
Recommended preparation: FOR301H1 or FOR305H1, EEB 360H1 or EEB 361H1
This is a Science course

**FOR310H1 Bioenergy from Sustainable Forest Management [26L, 13T]**
Socio-economic, technical, political and environmental issues associated with the utilization of forest biomass (e.g., harvesting residues, thinnings, salvage, short rotation woody crops) for a source of renewable energy.
Recommended Preparation: Completed at least 6 Science FCE's
This is a Science course.

**FOR400Y1 Advanced Seminar in Forest Conservation [52S]**
Examination of current and emerging critical issues affecting sustainable management and conservation of global forests. Seminars led by students, faculty and visiting speakers.
Prerequisite: At least 2 of FOR300H1, 301H1, 302H1, 303H1, 305H1, 306H1, 307H1
This is classified as BOTH a Science and a Social Science course

**FOR401H1 Research Paper/Thesis in Forest Conservation [TBA]**
Individual in-depth student research projects on significant forest conservation projects, based on field and/or laboratory research, or literature survey.
Prerequisite: At least 2 of FOR300H1, 301H1, 302H1, 303H1, 305H1, 306H1, 307H1 (minimum of 15 FCEs)
This is classified as BOTH a Science and a Social Science course

**FOR403H1 Directed Readings [26T]**
Provides opportunities for students to carry out individual in-depth study of current forest conservation issues, under the direction of a faculty member.
Prerequisite: At least 2 of FOR300H1, 301H1, 302H1, 303H1, 305H1, 306H1 307H1, (minimum of 15 FCEs)
This is classified as BOTH a Science and a Social Science course

**FOR404H1 Soil Fertility & Tree Nutrition [26L, 26P]**
Determining physical, chemical, and biological properties of soils. Soil fertility testing and plant chemical analysis. Mineral nutrition of trees and seedlings, diagnosis and interpretation of soil and foliar analyses. Prescription of soil amendments for intensive forest management.(Offered in alternate years)
Prerequisite: GGR205H1 (minimum of 15 FCEs)
Recommended preparation: GGR307H1
This is a Science course

**FOR405H1 Forest Products & Processing [26L, 12P]**
Processing of wood into commercial products including wood adhesion and composites manufacturing; specifications and testing; sawmilling; wood drying; wood deterioration and protection; life cycle analysis of wood-based products.
Prerequisite: FOR300H1 (minimum of 15 FCEs)
This is a Science course

**FOR410H1 Bioenergy and Biorefinery Technology [26L, 26T]**
Technological advances and approaches in deriving biofuels and chemical feedstocks from forest and other biomass and fundamental chemical attributes of biomass, as they affect the fuel value and potential for deriving liquid, solid and gaseous fuels and valuable chemicals for other applications from the biomass will be discussed.
Recommended Preparation: Completed at least 10 Science FCE's
This is a Science course.

**FOR412H1 Ecology, Management and Conservation of Tropical Forests [12L, 14S]**
The nature of the tropical biome; climate; ecology; carbon sequestration potential. Emerging critical ecological and social issues related to utilization, management and conservation of tropical forests.
This is a Science course

**FOR413H1 Wildlife Ecology & Conservation [26L]**
Temperate and tropical wildlife ecology and conservation; roles of wildlife in forest conservation; impacts of forestry practices and landscape modification on wildlife; ecology and viability of wildlife populations; human uses and abuses of game and non-game species.
Prerequisite: BIO319H1/321H1/323H1/324H1/ENV234Y1/ FOR200H1/201H1/EEB 22H1 (minimum of 15 FCEs)
This is a Science course

**FOR416H1 Urban Forest Conservation [26L]**
Current research and practice in the conservation and enhancement of urban forests. Reviews the role of trees and woodlands in providing environmental and socio-economic benefits to urban and peri-urban residents. Examines approaches to the characterization of urban forest ecosystems, and their planning and management to contribute to sustainable communities.
Prerequisite: FOR200H1, 201H1
This is a Science course

**FOR417H1 Ecological Principles of Agroforestry [26L]**
This course introduces students to the roles of trees and forests in agricultural land-use systems primarily in the third world. It deals primarily with the biological and management aspects of agroforestry, within the socio-economic constraints of the developing world. The sustainability of particular agroforestry systems will be a theme throughout.
This is a Science course

**FOR418H1 Urban Forest Conservation Field Camp [45L 15P]**
The course consists of ten days examining urban forestry issues in the GTA, southern and eastern Ontario, Quebec and northern New York State. Topics include: urban forest inventories, nursery production, arboricultural techniques, urban woodland management, urban forest health, urban forest administration, urban dendrology, and urban forestry research.
Prerequisite: FOR200H1/FOR201H1/permission of the instructor.
This is a Science course.

**FOR419H1 Forest Fire Behaviour and Management [26L, 26P]**
Understanding forest fire activity is important for predicting fire's impact on forests and the wildland-urban interface, as well as the impacts of climate change. Basic principles of fire occurrence and behaviour are explored. Considerable emphasis is placed on application of these models to real fire management problems.
Prerequisite:ECO220Y1/ECO227Y1/GGR270H1/PSY201H1/ SOC300Y1/STA220H1/STA250H1/STA248H1/STA261H1
This is a Science course.

**FOR420H1 Chemistry of Lignocellulosics [26L/13T]**
This course provides an overview of the chemistry of wood and wood materials involving cellulose, hemicellulose, lignin, extractives. It also covers some reaction chemistry associated with these chemical components.
Recommended Preparation: Completed at least 10 Science FCE's
This is a Science course.

**FOR423H1 Design and Manufacturing of Biomaterials [26L, 26T]**
This course focuses on the manufacturing processes, properties and uses of wood and agricultural fibre based products including wood based composites, ligno-cellulosic/thermoplastic composites and structural or engineered composites.
Recommended Preparation: Completed at least 10 Science FCE's
This is a Science course.

**JFG470H1 Forest Management [26L]**
Application of operational research and information technology to develop decision support systems for forestland management planning. Basic principles of mathematical programming, simulation and decision analysis, and their application to planning for forest conservation and sustainable development, policy analysis and other land management planning problems.
Prerequisite: One course in quantitative methods or linear algebra
Recommended preparation: ECO220Y1/227Y1/GGR270Y1/ MAT133Y1/223H1
This is a Science course

**JFG475H1 Emergency Response Systems Planning [26L, 26T]**
Use of operational research and information technology to develop mathematical models and decision support systems to design and evaluate the performance of emergency response systems. Forest fire management systems are used to illustrate the basic principles of emergency response system planning that can also be applied to urban fire, police and ambulance services.
Prerequisite: One course in quantitative methods or calculus
Recommended preparation: ECO220Y1/227Y1/GGR270Y1/ MAT133Y1/135Y1/137Y1
This is a Science course

## Faculty

### University Professor Emeritus

B.T. Fitch, BA, D 3e C (T)

### Professors Emeriti

C. Bertrand-Jennings, LèsL, Ph D (University of Toronto Scarborough)
D.E. Bouchard, AM, Ph D (V)
P.A.R. Bouissac, LèsL, DES, D Phl (V)
N. Boursier, DES, CAPES, D 3e C (U)
F.I. Case, MA D 3e (N)
J.G. Chidaine, AM, Ph D (V)
C. Cloutier-Wojciechowska, LèsL, DES, MA, M Ph, DPS, DUP (University of Toronto Mississauga)
P. Collet, AM, Ph D (SM)
J.A. Dainard, MA, Ph D (U)
L.E. Doucette, BA, Ph D (University of Toronto Scarborough)
A.G. Falconer, MA, D 3e C (U)
P. Fitting, MA, Ph D (N)
J.F. Flinn, MA, D 3e C (U)
P. Grillo, MA, Ph D (SM)
C.M. Grisé, MA, Ph D(SM)
A.R. Harden, AM, Ph D (V)
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E.A. Heinemann, MA, Ph D (N)
E.F. James, MA, D 3e C (U)
R.W. Jeanes, BA, D 3e C (V)
E.M. Kushner, MA, Ph D (V)
E. Lehouck, AGR ESS, D Phl (U)
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N. Maury, LenD, D 3e C (T)
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D.W. Smith, BA, Ph D (V)
R.A. Taylor, MA, Ph D (V)
C.D.E. Tolton, AM, Ph D (I, V)
J.A. Walker, MA, Ph D (U)
H.H. Weinberg, MA, Ph D (University of Toronto Mississauga)
T.R. Wooldridge, BA, D 3e C (T)

### Associate Professor and Chair of the Department

P. M. Bhatt, MA, Ph.D (SM)

### Associate Chair

D. Issa-Sayegh, MA, D 3e C (SM)

### Professors

D. Clandfield, MA, D 3e C (N)
D. de Kerckhove, MA, Ph D (SM)
C. Elkabas, MA, Ph D (University of Toronto Mississauga)
J. LeBlanc, MA, Ph D (V)
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P. Martin, IRAL BR, D 3e C, D Sc A (SM)
W.A. Oliver, MA, D 3e C (T)
M. O'Neill-Karch, MA (WW)
J. Paterson, MA, Ph D (I)
P.J.G.O. Perron, BA, D 3e C (U)
Y. Roberge, MA, Ph D (SM)

### Associate Professors

P. M. Bhatt, MA, Ph.D (SM)
A.-M. Brousseau, MA, PhD (SM)
A. Cozea, MA, Ph D (V)
B. Havercroft, MA, Ph D (V)
D. Kullmann, MA, PhD (SM)
M. Lord, MA, Ph D (University of Toronto Mississauga)
P. Michelucci, MA, Ph D (University of Toronto Mississauga)
S. Mittler, MA, Ph D (University of Toronto Scarborough)
A. Motsch, MA, Ph D (V)
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E. Nikiema, MA, Ph D (University of Toronto Mississauga)
Y. Portebois, MA, Ph D (SM)
J. Steele, MA, Ph D (SM)
A. Tcheuyap, MA, Ph D (SM)

### Assistant Professors

A. Glinoer, MA, PhD (SM)
N. Guilliot, MA, D3e C (SM)
G. Holtz, MA, D 3e C (OH)
G. Peureux, MA, D 3e C (University of Toronto Mississauga)
M. Pirvulescu, MA, Ph D (University of Toronto Mississauga)
P. Riendeau, MA, Ph D (University of Toronto Scarborough)
D. Speirs, MA, Ph D (SM)

### Senior Lecturers

C. Evans, MA, Ph D (University of Toronto Mississauga)
D. Issa-Sayegh, MA, D 3e C (SM)
K. McCrindle, MA, Ph D (University of Toronto Scarborough)
F. Mugnier-Manfredi, MA, Ph D (University of Toronto Scarborough)
G. Paray-Clarke, MA, Ph D (SM)

### Lecturers

C. Beauquis, MA, PhD (University of Toronto Scarborough)
M. Tsimenis, MA, PhD (SM)
M.-A. Visoi, MA, PhD (OH)

French studies in the University of Toronto provide varied and flexible approaches to one of the world's major international languages and the diversity of cultures expressed in it.

The courses listed here fall into six main sequences: Literature, Linguistics, French as a Second Language, French Culture, Translation and Second Language Learning. Through modular programming, students enjoy the freedom to concentrate or diversify their interests in these areas. The skills and knowledge acquired will lay the groundwork for careers in teaching, journalism, translation, publishing, and government service, as well as research in a variety of fields.

Literature (FRE): 200-level courses introduce students to literary analysis and present Québécois and French literature in their cultural and historical contexts. 300-level courses encompass the full range of major works of French and Québécois literature. 400-level courses raise questions about notions of literary tradition and mainstream methods of study: the scope of literature is stretched further back or ahead in time, further away in space from traditional centres (France and Québec) and away from dominant sensibilities (to include women's voices and non-traditional modes of writing); and connections are made to other disciplines. The actual content of most 400-level courses varies considerably according to the instructor. Students should consult the Department of French Undergraduate Brochure (which is also available on-line at www.chass.utoronto.ca/french/under) for content specific to a given year.

Linguistics (FRE): A 100-level course introduces students to the study of grammatical concepts. 200-level courses initiate students into analysis of contemporary French and into the history of its development. 300-level courses break the discipline of linguistic analysis into its chief component parts. 400-level courses extend the study of the French language back in time or out from the idealized standard form; and connections are made to other disciplines (including second language acquisition).

Translation (FRE): Courses on French and English translation at the 300/400-level may be used in a Minor in French Translation that may be added to any other Minor, Major or Specialist program. Such courses are, however, not limited to students taking this program. Certification for this program should not be viewed as the equivalent to a professional diploma in translation but may stand students in good stead should they seek admission to such a program following graduation.

French as a Second Language (FSL): The FSL program is designed to accommodate the widest possible range of previous learning, special needs, and particular interests of students. Emphasis is placed on both written and spoken language; at higher levels, half-courses allow for specialized study of one or the other. The on-line placement test (www.lang.utoronto.ca/placement/french) is mandatory for all students who register in an FRE or FSL course for the first time. The test must be taken prior to registration and at the latest by the end of the first week of classes in order to ensure enrolment in the appropriate course. Based on students' results, the Department reserves the right to place students in the language course most suitable to developing their French reading, writing, listening and speaking skills. Note that, given 100, 200, 300 and 400-level FSL courses correspond to levels of competence in French, a student may be recommended to enroll in a course at a level higher than his/her year of study. Students not having access to a computer capable of managing sound files should write to french.placement@utoronto.ca to arrange to take the test at the Multimedia Centre. For students in Major and Specialist French programs, emphasis is on precise academic writing and speech approximating as closely as possible that of native speakers. For students not in Major and Specialist French programs, emphasis is on listening and reading skills in varying social and cultural contexts and on the acquisition of vocabulary.

French Cultural Studies (FCS): Courses on French and Francophone culture, taught in English, may be used in a Minor in French Cultural Studies program that may be added to any other Minor, Major or Specialist program. These courses may also be used to fulfil distribution requirements.

Second Language Learning: A Major program in Second Language Learning may be combined with a similar Major program in Italian to produce a Combined Specialist program. The core course for this program is JFI 225Y1 which instructs students in the methodology of second-language learning and will be of particular interest to those planning a career in teaching. It will be taught alternately by instructors from the Departments of French and Italian Studies.

Study Elsewhere: To be entitled to participate in the Department's Third Year Study Elsewhere Program, a student must satisfy the following requirements: overall average of at least 70% in courses completed in second year, and an average of 70% in at least two French courses (FRE) required in a Major or Specialist program. Information on these programs and on the Second Language Summer Program is available on-line at www.chass.utoronto.ca/french/under/else.htm. For further counselling on these programs, contact the Study Elsewhere Advisor at 416-926-1300 ext. 3141 or french.elsewhere@utoronto.ca.

Exclusions and prerequisites: Students must abide by all requirements stated in the exclusions and prerequisites to register in a course. Students who do not have the co- or prerequisites for a given course must obtain the permission of the Department, prior to registration. The Department will assess the students' admissibility to the course in consultation with the instructor. For FSL courses, exclusions ensure that students follow the best progression in language learning.

Further Information: The Department of French Undergraduate Brochure, available at the Department, contains more detailed information about all the courses and programs listed below. It is also available in an electronic form, which is regularly updated, at www.chass.utoronto.ca/french/under.

Counselling:
50 St. Joseph St., Rm. 226 (416-926-2333), email: french.undergraduate@utoronto.ca

Enquiries:
50 St. Joseph St., Rm. 210 (416-926-2302), email: french.secretary@utoronto.ca; website: www.chass.utoronto.ca/french

## French Programs

Enrolment in all French programs requires the completion of four courses. No minimum GPA is required.

Note:

FRE 172H1 provides useful basics for further studies in Linguistics and Second Language Learning, and for students who feel they would benefit from a better understanding of the grammatical structure of the language.

### French Language and Literature (Arts program)

**Specialist program:**
(11 full courses or their equivalent)

1 FSL221Y1 (Students exempted from this course may replace it with FRE 250Y1); FSL 341Y1, FSL 442H1, FSL 443H1 (Students exempted from FSL 341Y may replace it with any FRE course. Students with 77% in FSL 341Y may replace FSL 442H, 443H with a 300+ series FRE course.
2. FRE 240Y1
3. FRE 272H1, 273H1
4. FRE 444H – Literary Theory.
5. 5.5 additional FRE literature courses including the following: at least 0.5 course in each group A, B, C and D, and another 1.0 at the 400 level

**Major program:**
(8 full courses or their equivalent)

1. FSL 221Y1. (Students exempted from this course may replace it with FRE 250Y1); FSL 341Y1 (Students exempted from this course may replace it with any FRE course)
2. FRE 240Y1
3. FRE 272H1, 273H1
4. 4 additional FRE literature courses including the following: at least 0.5 course in each group A, B, C and D, and another 1.0 course at the 400 level.

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Note: COURSES IN EACH GROUP ARE OFFERED IN ALTERNATE YEARS AS FOLLOWS:

Courses offered in Even Years (2008-09)

A – FRE 322H (18th Century); B – FRE 326H (20th Century); C – FRE 332H (Francophonie); D – FRE 319H (Renaissance)

Courses offered in Odd Years: (2009-10)

A – FRE 320H (17th Century); B - FRE 364H (19th Century); C - FRE 314H (Quebec); D - FRE 321H (Middle Ages)

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## French Language and French Linguistics (Arts programs)

**Specialist program:**
(10 full courses or their equivalent)

1. FSL 221Y1. Students exempted from this course may replace it with FRE 172H1 and an additional FRE Linguistics half-course.
2. FRE 272H1, 273H1, 274H1
3. FRE 210Y1/240Y1
4. FSL 341Y1, 442H1, 443H1. Students exempted from FSL 341Y1 may replace it with any FRE course. Students with 77% in FSL 341Y1 may replace FSL 442H1, 443H1 with a 300+ series FRE course.
5. FRE 376H1, 378H1
6. Four additional FRE Linguistics courses. At least two of these courses must be at the 300/400-level, including one at the 400-level. FRE 375Y1 may be substituted for one of these four courses.

**Major program:**
(7 full courses or their equivalent)

1 FSL 221Y1. Students exempted from this course may replace it with FRE 172H1 and an additional FRE Linguistics half-course.
2. FRE 272H1, 273H1, 274H1
3. FRE 210Y1/240Y1
4. FSL 341Y1. Students exempted from this course may replace it with any FRE course.
5. FRE 376H1, 378H1
6. 1.5 additional FRE Linguistics courses. At least one of these courses must be at the 300/400-level, including one half-course at the 400-level. FRE 375Y1 may be substituted for one of these two courses.

## Second Language Learning (French) (Arts Program)

**Major program:**
(8 full courses or their equivalent including at least 2 FRE courses at the 300+ level)

1. FSL 221Y1. Students exempted from this course may replace it with higher-level FSL courses of their choice.
2. JFI 225Y1, FRE 272H1, 273H1, FSL 277Y1, 341Y1
3. FRE 210Y1/240Y1
4. Two additional FRE courses among the following: FRE 375Y1/384H1/385H1/473H1

## French as a Second Language (Arts Program)

**Minor program:**
(4 full courses or their equivalent)

1. FSL 221Y1. Students exempted from this course may replace it with higher-level FSL courses of their choice.
2. One 300-level FSL course
3. One 400-level FSL course
4. One other FSL course or FRE 375Y1 or any 200+-level FRE course, except FRE 480Y1. (FSL 121Y1 may be included if taken before FSL 221Y1).

## French Translation (Arts Program)

**Minor program:**
(4 full courses or their equivalent)

1. FRE 375Y1
2. FRE 480Y1, 481Y1
3. An additional FRE course at the 200+level

## French Studies (Arts Program)

**Minor program:**
(4 full courses or their equivalent)

1. FSL 221Y1
2. Three FRE courses at the 200+ level including one at the 300/400-level (FSL 121Y1 may be included if taken before FSL 221Y1)

## French Cultural Studies (Arts Program)

**Minor program:**
(4 full courses or their equivalent)

Any four FCS full course equivalents including at least one course at the 300/400-level.

Note: For students meeting prerequisites set by other departments/programs, up to 1.5 courses from the following list may be substituted for FCS courses: FAH 245H1, 345H1, 346H1, 445H1, 446H1, 447H1; FRE literature courses; HIS 314Y1, 387H1, 388H1, 457H1; JEF 100Y1; JFV 323H1; INI 385Y1, 386H1; SMC 228Y1

### Faculty of Arts & Science Language Citation

The Department of French participates in the Faculty of Arts and Science's Language Citation initiative for French.

In order to receive a language citation in our Department students should have completed any two course among the following with a minimum mark of B-: FSL 300+, FRE200+.

Students should note that, as explained on page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

**For other programs in French, see also: Modern Languages and Literatures; Linguistics and Languages.**

## French Courses

See "Guide to Programs & Courses" section for Key to Course Descriptions.

For Distribution Requirement purposes all FCS, FRE, and FSL courses are classified as HUMANITIES courses.

Note: STUDENTS ENROLLED SIMULTANEOUSLY IN TWO OR MORE FRENCH PROGRAMS ARE ALLOWED TO DOUBLE-COUNT ONLY ONE COURSE TOWARDS THEIR FRENCH PROGRAMS.

### Courses Taught in English (see also all FCS courses below)

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminars that focus on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. May serve as a distribution requirement course; see the First Year Handbook for details.

**INI 214Y1 Film Theory [26L, 52P, 26T]**
See Innis College

**INI384H1 Critical Writing on Film**
See Innis College

**INI386H1 Québec Cinema**
See Innis College

**JEF100Y1 The Western Tradition [78S]**
An introduction to literature through major works of the Western literary tradition. What constitutes a literary "classic"? How have the great concerns of the Western tradition - human nature, its place in society, its mythmaking, its destiny - been represented in literature? These and other questions are examined by reference to 11-12 works, from ancient times to the twentieth century, by such authors as Homer, Sophocles, Ovid, Virgil, Dante, Shakespeare, Cervantes, Molière, Austen, Dostoevski, Kafka, Camus, Beckett and Márquez. (A joint course offered by the Departments of English and French; see also JEF 100Y1 in the English program listings.)

**JFI225Y1 Second Language Learning**
See Second Language Learning Courses at the end of the Department of French listing.

**JFL477H1 Issues in French and Linguistics I**
See French Linguistics Courses

**JFL478H1 Issues in French and Linguistics II**
See French Linguistics Courses

**JFV323H1 Semotics and Literature**
See French Literature Courses

**SMC228Y1 Books and Readers**
See St. Michael's College

**UNI202H1 Aspects of Québec Culture**
See University College

**VIC 300H1 Special Topics: Literary Studies**
See Victoria College

**VIC 301H1 Special Topics: Literary Studies**
See Victoria College

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NOTE: FCS, JFI, JFL and JFV courses are taught in English with reading and written assignments in English. No knowledge of French is required. However, students can count these courses towards a program in French (Major or Specialist) if they submit all written work and tests in French. These students must, during the first week of class, inform the instructor of their intent to do so.

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### FCS: French Cultural Studies Courses

FCS courses are taught in English with written and reading assignments also in English. Some half-courses at the 200/300/400-level have variable contents and may not be offered every year. Please consult the Department website (www.chass.utoronto.ca/french/under) or the Department of French Undergraduate brochure for more details.

**FCS195H1 French Culture from Napoléon to Astérix [26S]**
A multi-media course, analyzing the contributions the French have made to world culture in such domains as architecture, art, literature, and music, as well as some of the implications of the appropriation of French cultural icons by big business and the media.

**FCS 290H1 Special Topics in French Cultural Studies I: Pleasures of Versailles: Music in the Grand Century of France [26S]**
A survey of the rich musical heritage of France between 1650 and 1740, focusing on the composers, performers and instruments in the court of Louis XIV. Intended especially for non-musicians who are passionate about music and wish to explore French cultural history through one of its most dynamic and celebrated facets. Focus on in-class listening, including live performances on historical instruments.

**FCS 291H1 Special Topics in French Cultural Studies I: The Art and Culture of the Networked Society [26S]**
The concept of the Networked Society, with a historical perspective on the development of networking technologies, emphasizing their social and cultural consequences. The actions and the role of artists and cultural activists in various countries. Illustrated with films and other documents, the various dimensions of the Francophone digital culture in and out of Canada, including Africa and Asia.

**FCS 292H1 Special Topics in French Cultural Studies I: Sex, Love, Desire, etc. [26S]**
This course will explore the themes of love, sex and desire in French literature through close reading and interpretative analysis of novels from the eighteenth to the twentieth century. A comparative approach using various examples taken from literary texts and film adaptations will explore the concept of love and its many definitions.

**FCS297H1 Comic Books and French Culture [26S]**
An examination of the historical, social and cultural status of French comic books ("bandes dessinées" or "BDs"), based on English translations of Astérix, Tintin and other contemporary works. Analysis of thematic and narrative structures compared with traditional genres (folktales, myths, plays, novels). (Not offered in 2008-2009).

**FCS298H1 French Culture and Asia [26S]**
From the arrival, in the 17th century, of magnificent porcelain from the East to the borrowings of contemporary fashion designers, French culture has been exposed to Asian influences which have become part of the national fabric. This course explores some of these manifestations in literature, film and the arts.

**FCS310Y1 French Cinema [26L, 52P, 26S ]**
Cinema in France with emphasis on theory and practical criticism, on auteurs and movements such as the avant-garde of the twenties and the New Wave of the late fifties. Films shown are subtitled.
Prerequisite: At least 5 course credits in any subject
Recommended preparation: INI 115Y1

**FCS331H1 Cinema and Literature in France [26S]**
Film adaptations of plays and fiction from the origins of cinema to the present time.
Prerequisite: At least 5 course credits in any subject

**FCS369Y0 The Culture of Touraine (formerly FCS399Y0) [52S]**
Various aspects of culture in the region of Tours, e.g. novels by Balzac; Renaissance architecture and gardens as motifs in art, literature, cinema, music or advertising; from Tours to Québec; or Anne Hébert's Touraine. (Offered in Tours only during the summer)
Prerequisite: At least 5 course credits in any subject
Exclusion: FCS399Y0

**FCS 390H1 Special Topics in French Cultural Studies II: Cultural Studies in France: Foucault and after [26S]**
Introduction to the French tradition of cultural studies through a survey of some of the great French thinkers on culture and history (Foucault, de Certeau, Barthes, Baudrillard, Bourdieu, Derrida, Lyotard, Metz, etc.). The historical and philosophical debates that define the Humanities today.
Prerequisite: At least 5 courses in any subject.

**FCS 391H1 Special Topics in French Cultural Studies II**
(Not offered in 2008-09)
Prerequisite: At least 5 courses in any subject.

**FCS 392H1 Special Topics in French Cultural Studies II**
(Not offered in 2008-09)
Prerequisite: At least 5 courses in any subject.

**FCS395H1 Sensuality and the French [26S]**
An investigation of the French reputation for the systematic indulgence of all the senses, from the growth of sensuality-based industries and services to the discussion of works of high art and popular culture. Also focussing on elements of gender definition and exoticism within the cult of sensuality.
Prerequisite: At least 5 course credits in any subject

**FCS490H1 Special Topics in French Cultural Studies III [26S]**

**FCS491H1 Special Topics in French Cultural Studies III [26S]**

**FCS492H Special Topics in French Cultural Studies III [26S]**
In depth study within narrowly focussed topics. (Not offered in 2008-2009).
Prerequisite: At least 10 course credits in any subject

**FCS497H1 Contemporary Feminisms in France and Québec [26S]**
Various forms of recent feminist thought, theory, and artistic practice, from the 1970s, focussing on the current situation, characterized by plurality and heterogeneity, and the concern with the intersection of gender, ethnicity and class. (Not offered in 2008-09)
Prerequisite: At least 10 course credits in any subject

## FRE: French Literature Courses

Some half-courses at the 300/400-level have variable contents and may not be offered every year. Please consult the Department website (www.chass.utoronto.ca/french/under) or the Department of French Undergraduate brochure for more details.

**FRE210Y1 Introduction to Québec Literature and Culture [78S]**
A study of aspects of Québec culture (art, cinema, language, literature and music) and their role in the evolution of a distinct society. This survey course familiarizes students with the socio-historical context and way of life of the Québécois in order to better understand and appreciate Québec literature.
Co- or prerequisite: FSL161Y1 (with minimum 77%)/181Y1/221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test

**FRE240Y1 Introduction to Literary Analysis [78S]**
Techniques of literary criticism and analysis, based on a detailed study of selected novels, drama, and poetry from the 17th century to the present.
Co- or prerequisite: FSL161Y1 (with minimum 77%)/181Y1/221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test

**FRE250Y1 Literary History in Context [52S]**
The evolution and major trends of French literature from the Middle Ages to modern times set against their historical background and studied through representative texts, selected both for their historical importance and their relevance to modern readers - novels, plays, poetry, short stories.
Prerequisite: FSL161Y1 (with minimum 77%)/181Y1/221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test

**FRE299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See Section on "Research Opportunity Program" for details.

**FRE304H1 Women and Literature I: Women Writers [26S]**
An analysis of selected texts by women writers, emphasizing particular themes and textual strategies used to represent the female subject, her relationship to language, her reality and world view.
Prerequisite: FRE 240Y1

**FRE305H1 Women and Literature II: Women Writers of the Twentieth Century [26S]**
This course will examine French prose fiction by women written in the latter quarter of the twentieth century, during which an unprecedented number of texts by women writers were published. Texts representing different women's issues in contemporary society will be analyzed. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 240Y1

**FRE308H1 From Manuscript to the Printed Word [26S]**
With a view to understand the process that transforms "texts" into "books", this course will contrast the French and Anglo-Saxon schools of book history and material bibliography, and analyze the evolution of various technical innovations and their impact on the emergence of mass culture since the 1500s.
Prerequisite: FRE 240Y1

**FRE309H1 Reading, Writing and Publishing in Nineteenth-Century France [26S]**
This course will investigate the social history of the context and the construction of the literary text in nineteenth-century France: how and why one writes, reads and/or publishes will be the focus of this course. The history of reading and publishing, as well as the history of the 19th-century press will be examined. (Not offered in 2008-09).
Prerequisite: FRE 240Y1

**FRE311H1 Advanced topics in Quebec Literature I: Story Telling with Words and Images (formerly FRE410H1) [26S]**
The relationship between literary texts and images in Québécois literature is an important narrative strategy used by numerous writers to "tell stories". The focus will be on the use of photography, illustrations, paintings and cinematographic images by a number of 20th-century Québécois authors. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 240Y1 or FRE 210Y1
Exclusion: FRE 410H/411H

**FRE313H1 Advanced topics in Quebec Literature II: Diaries of Women Writers (formerly FRE411H1) [26S]**
This course aims to investigate the textual strategies which support the construction of autobiographical subjects in the diaries of certain well-known contemporary French and Québécois writers.
Prerequisite: FRE 240Y1 or FRE 210Y1
Exclusion: FRE 410H/411H

**FRE314H1 From Modernism to Postmodernism: Contemporary Québec Literature [26S]**
Québec postmodern literature speaks of vitality, liberating forces, and creativity. This course explores the textual forms and themes that challenge tradition and authority in contemporary writing. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 240Y1 or FRE 210Y1

**FRE319H1 Literature of the Renaissance (formerly FRE419H1) [26S]**
Rabelais' carnavalesque vision of the world, Ronsard's worship of Beauty, the cruel and bloody tragedy of Garnier, Montaigne's exploration of the self. A study of selected writers of the 16th century, an age of crucial epistemological shifts and of exploration by poets, artists, and humanists.
Prerequisite: FRE 240Y1
Exclusion: FRE 419H1

**FRE320H1 The 17th Century: The Rise of Classicism (formerly FRE320Y1) [52S]**
Essential works of literature from the "Grand Siècle," including court poetry, plays by Corneille, Molière and Racine and some of the earliest narratives written for and by women, explored within the social framework of Europe's most highly refined cultural period. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 240Y1
Exclusion: FRE 320Y1

**FRE321H1 Ardour and Armour in Medieval France (formerly FRE420H1) [26S]**
Religious fervour, war, chivalry, romance and ribald humour are just some of the themes found in selected texts from the French Middle Ages; readings in modern translations with appropriate reference to the original language. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 240Y1
Exclusion: FRE 420H1

**FRE322H1 The 18th Century: The Age of Enlightenment (formerly FRE322Y1) [52S]**
At the forefront of the present cultural and political organization of the West, 18th-century France defined individual and collective subjectivities (individualism, gender roles, democracy). This course explores these issues in their original context through the work of authors such as Rousseau, Voltaire, Sade, Laclos, Graffigny, and Beaumarchais.
Prerequisite: FRE 240Y1
Exclusion: FRE 322Y1

**JFV323H1 Semiotics and Literature I [26S]**
The study of readings from major French literary semioticians will be combined with the practical application of theory to the analysis of selected literary texts. This course is taught in English. (Not offered in 2008-09).
Prerequisite: At least 5 course credits in any subject.
Recommended preparation: FRE240Y1/VIC120Y1

**FRE324H1 The 19th Century: 19th-Century France (formerly FRE324Y1) [26S]**
The course will cover the period from the French Revolution to the Dreyfus Affair, that is from the romantic movement to the naturalist and decadent movements. Combining socio-intellectual history, the study of literary movements and their major authors, and the analysis of literary forms and genres, the course will examine the fundamental changes which took place in the literary imagination and in its expressions throughout the century.
Prerequisite: FRE 240Y1
Exclusion: FRE 324Y1

**FRE325H1 The 18th Century: The Book in the French Enlightenment [26S]**
This course will provide an overview on the history of the book in France in the 18th Century in order to allow for a

closer inquiry into the publishing adventure of the Encyclopédie of Diderot and D'Alembert, arguably the biggest publication undertaking of its time. (Not offered in 2008-09).
Prerequisite: FRE 240Y1

**FRE326H1 The 20th Century: From Surrealism to Post-modernism and Beyond (formerly FRE326Y1) [52S]**
Characterized by experimentation and by the crisis of representation, 20th-century French literature has undergone numerous transformations in form, content, and generic boundaries. This course studies these literary movements, trends, and transgressions in poetry, prose, and theatre.
Prerequisite: FRE 240Y1
Exclusion: FRE 326Y1

**FRE332H1 Francophone Literature I [26S]**
An introduction to francophone literature through different approaches - textual, ideological, historical. Students will be introduced to the works of francophone writers.
Prerequisite: FRE 240Y1

**FRE340H1 Literature and Society [26S]**
Lectures and discussions in this course will focus on the conceptualizations of the multifaceted relationship between literature and society, both from an external perspective (study of the cultural fields, of the institutions, of the social networks, of the sociology of edition and reading) and an internal perspective (the inscriptions of the social world in text and in discourse). (Not offered in 2008-09).
Prerequisite: FRE 240Y1

**FRE364H1 The 19th Century: The Golden Age of the Novel (formerly FRE364Y1) [26S]**
The ways in which such writers as Balzac, Stendhal, Flaubert, Maupassant, and Zola developed the techniques of the novel while exploring such themes as ambition, alienation, and class struggle.
Prerequisite: FRE 240Y1
Exclusion: FRE 364Y1

**FRE370Y0 TBA**
Offered in Nantes only. Le français langue seconde par les textes de la littérature française
Prerequisite: Any 200-series FRE or 300-series FSL course.

**FRE371Y0 TBA**
Offered in Nantes only. Écrits de femmes francophones.
Prerequisite: FRE 240Y1

**FRE372Y0 French Theatre of the 19th and 20th Centuries**
Offered in Nantes only.
Prerequisite: FRE 240Y1

**FRE373Y0 French Thought of the 17th and 18th Centuries**
Offered in Nantes only
Prerequisite: FRE 240Y1

**FRE374Y0 French Civilization from the 18th Century to Today**
Offered in Nantes only.
Prerequisite: FRE 240Y1

**FRE398H0 Independent Experiential Study Project**

**FRE399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See Section on "Independent Experiential Study Program" for details.

**FRE412H1 Francophone Cinema: French Cinema and Nation [26S]**
The course is a survey of the representations of national identity in French cinema from its origins to the present. We will examine the stereotypes which foster the myth of "frenchness" (history, love, food, landscapes, etc).
Prerequisite: FRE 240Y1
Recommended preparation: one 300+ series FRE Literature course

**FRE431H1 Francophone Literature II [26S]**
Through different approaches - textual, ideological, historical, students will be introduced to the works of francophone writers. (Not offered in 2008-2009).
Prerequisite: FRE 240Y1
Recommended preparation: One 300+ series FRE Literature course

**FRE438H1 Advanced Topics in French Studies I: Vision of the Orient in Francophone Literature [26S]**
In this course, we will seek to relate the representation of Oriental cultures in Francophone literature to social, political and economic factors. We will also survey changing attitudes among Francophone Oriental heritage. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 240Y1
Recommended preparation: One 300+ series FRE literature course

**FRE439H1 Advanced Topics in French Studies II [26S]**
An advanced seminar dedicated to specific issues of French literature and culture. Focusing on an author, a literary genre, or based on a multidisciplinary approach involving cinema, arts and music, each seminar reflects the professor's current research.
Prerequisite: Varies according to particular course offering; consult the Department website (www.chass.utoronto.ca/french/under) or the Undergraduate brochure for exact prerequisites.

**FRE441H1 Aspects of Francophone World I: Le roman policier [26S]**
An advanced seminar dedicated to specific issues of Francophone literature and culture. Focusing on an author, a literary genre, or based on a multidisciplinary approach involving cinema, arts and music, each seminar reflects the professor's current research. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 240Y1
Recommended preparation: One 300+ series FRE Literature course.

**FRE442H1 Aspects of Francophone World II [26S]**
An advanced seminar dedicated to specific issues of the Francophone literature and culture. Focusing on an author, a literary genre, or based on a multidisciplinary approach involving cinema, arts and music, each seminar reflects the professor's current research. (Not offered in 2008-2009).
Prerequisite: FRE 240Y1
Recommended preparation: One 300+ series FRE Literature course.

**FRE 444H1 Literary Theory [26S]**
An introduction to literary theory through the study of particular theories underlying specific approaches to the literary text, problems central to any theory of literature or the writings of a given critic or theoretician.
Prerequisite: FRE 240Y1
Recommended preparation: One 300+ series FRE Literature course.

**FRE449H1 French Poetry [26S]**
This course will stress specific trends in French poetry and will study the works of major poets in the context of a broader socio-cultural perspective. (Not offered in 2008-2009)
Prerequisite: FRE 240Y1
Recommended preparation: One 300+series FRE Literature course.

**FRE450H1 The Sablé Centre Seminar in 19th Century French Studies I: Émile Zola: His Editors and Translators [26S]**
This course will examine the relationship between the most widely-read novelist in late nineteenth-century France and the editors and translators who, by 1900, had made Zola's work accessible to readers in England, North and South America, Eastern and Western Europe. Also listed in the offerings of the Graduate Department of French.
Prerequisite: FRE240Y1, one 300+ series FRE Literature course
Recommended preparation: One additional 300+ series FRE Literature course

**FRE451H1 The Sablé Centre Seminar in 19th Century French Studies II: The Critical Edition: Principles & Practice [26S]**
This seminar is dedicated to specific issues of French literature and culture, in the context of research activities currently taking place at the Joseph Sablé Centre for 19th Century French Studies. Also listed in the offerings of the Graduate Department of French. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE240Y1, one 300+ series FRE Literature course
Recommended preparation: One additional 300+ series FRE Literature course

## French Linguistics Courses

**FRE172H1 French Grammar, within Reason [39S]**
An introduction to basic concepts of the grammar of French from an analytic point of view. This course is useful to anyone wishing to undertake a program in French Studies or wishing to improve their knowledge of French as a Second Language.
Prerequisite: FSL121Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test

**FRE272H1 The Structure of Modern French: An Introduction (formerly FRE272Y1) [39S]**
A general interest course on the structure of the French language including a descriptive study of meaning, sound, word and sentence structure.
Prerequisite: FSL161Y1(77%)/181Y1/221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test
Exclusion: FRE 272Y1

**FRE273H1 Introduction to the History of the French Language (formerly FRE273Y1) [39S]**
A discovery of a long and fascinating history, stretching from the spoken Latin of the Gauls to the many varieties of French found today all over the world via the investigation of the social, political and cultural causes of language change. Our focus will include topics such as medieval bilingualism, the regulation of language through the Académie française, the political use of the French language, the emergence of the Francophonie and modern Canadian French.
Prerequisite: FRE 272H1
Exclusion: FRE 273Y1

**FRE274H1 Introduction to the Linguistic Analysis of French [39S]**
An analytical study of contemporary French phonetics and phonology, morphology, syntax and semantics. This course is designed to prepare students for more advanced study of French linguistics at the 300 and 400 levels.
Prerequisite: FRE 272H1

**FRE376H1 French Phonology and Phonetics [26S]**
A study of the phonological system of modern French based on actual samples of speech taken from different regional varieties and socio-economic groups.
Prerequisite: FRE272H1

**FRE378H1 French Syntax [26S]**
A study of the distribution and relationships of the syntagmatic components of contemporary French; of sentential structure, including the principles of coordination, subordination and expansion; and of major theoretical approaches.
Prerequisite: FRE272H1

**FRE386H1 French Semantics [26S]**
Various approaches to the notion of meaning; its functioning at all levels of representation.
Prerequisite: FRE272H1

**FRE387H1 French Morphology [26S]**
A study of the morphological system of modern French, its relationship to syntax and phonology; theoretical notions derived from the analysis of specific data.
Prerequisite: FRE272H1

**FRE471H1 Medieval French Language [26S]**
Introduction to Old French phonology, morphology, syntax and vocabulary; reading of extracts from principal genres, periods and geographic areas. Also listed in the course offerings of the Graduate Department of French.
Prerequisite: FRE272H1/273H1

**FRE 473H1 The Acquisition of French [26S]**
A study of the first and second language acquisition of French syntax, phonology and morphology. (Not offered in 2008-2009).
Prerequisites: FRE 376H1, 378H1.

**JFL477H1 Issues in French and Linguistics I [26S]**
An advanced seminar on issues of current theoretical relevance in linguistics with special reference to French. This course is taught in English. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: Any 300+ series LIN or FRE Linguistics course

**JFL478H1 Issues in French and Linguistics II: French in Contact [26S]**
An overview of the various phenomena of language contact found in the bilingual (or multilingual) communities where French is one of the spoken languages, such as: Bilingualism, Language maintenance and language shift, Interference and the various components of the grammar, Borrowing, Codeswitching, Mixed language, Pidgins and Creoles.
Prerequisite: Any 300+ series LIN or FRE Linguistics course

**FRE479H1 Sociolinguistics of French [26S]**
The relationship between language use and social factors such as socio-economic status, types of situation and gender of speaker. Theoretical notions are derived through the analysis of specific data, focusing on Canadian French and other varieties spoken in the Americas.
Prerequisite: FRE272H1

**FRE488H1 Special Topics in Advanced Linguistics I:**
An advanced seminar on a specific aspect of French linguistics. (Not offered in 2008-2009; offered in alternate years)
Prerequisite: FRE 376H

**FRE489H1 Special Topics in Advanced Linguistics II: Mapping Syntax to Semantics [26S]**
An introduction to fundamental principles driving the interface between syntax and semantics. This course will explore several crucial aspects of language for which syntax and semantics clearly interact including displacement structures, interrogation, reference, quantification and (in)definiteness. It will also introduce tools to formalize natural language such as basics of formal semantics and logic.
Prerequisite: FRE378H1
Recommended preparation: FRE386H1

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### French Translation Courses

**FRE375Y1 Comparative Stylistics [52S]**
A comparative study of the characteristics of French and English expression and how they pertain to the problems of translation.
Prerequisite: FSL281Y1/341Y1/any FRE 200-series course

**FRE480Y1 Translation: French to English [52S]**
Intensive translation from French to English. Texts are drawn from diverse fields: literature, business, economics, politics, science, art, and advertising.
Prerequisite: FRE375Y1

**FRE481Y1 Translation: English to French [52S]**
Intensive translation from English to French. Texts are drawn from diverse fields: literature, business, economics, politics, science, art and advertising.
Prerequisite: FRE375Y1

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### Independent Study Courses

**FRE490Y1 Senior Essay**
An independent research paper on either a literary or linguistic topic to be proposed by the student and supervised by an instructor, culminating in a major research paper.
Prerequisite: Permission of Department

**FRE491H1 Independent Study**

**FRE492H1 Independent Study**
A scholarly project supervised by a member of staff on a literary or linguistic topic of common interest including readings, discussions, and papers.
Prerequisite: Permission of Department

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### French as a Second Language Courses (FSL)

#### Note
The following is a guide for beginners in French.

1. No knowledge of French: FSL 100H1. Students enrolled in FSL 100H1, whose command of French raises doubt about their bona fides as beginners, will be asked to do the online placement test and may be moved to a higher level FSL course.

2. Very limited knowledge of French (Placement Test required): FSL 102H1

The on-line placement test (www.lang.utoronto.ca/placement/french) is mandatory for all students who register in an FRE or FSL course for the first time. The test must be taken prior to registration and at the latest by the end of the first week of classes in order to ensure enrolment in the appropriate course. Based on students' results, the Department reserves the right to place students in the language course most suitable to developing their French reading, writing, listening and speaking skills. Note that, given 100, 200, 300 and 400-level FSL courses correspond to levels of competence in French, a student may be recommended to enroll in a course at a level higher than his/her year of study. Students not having access to a computer capable of managing sound files should write to french.placement@utoronto.ca to arrange to take the test at the Multimedia Centre.

**FSL100H1 French for Beginners [39L, 13P]**
An intensive basic course in spoken and written French for students who have no knowledge of French: comprehension, speaking, reading, and writing.
Exclusion: FSL101H1 and higher.

**FSL102H1 Introductory French [39L, 13P]**
An intensive basic course in spoken and written French for students who have studied some French, but who have not yet attained the entry level for FSL121Y1.
Prerequisite: FSL100H1/FSL101H1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL 121Y1 and higher.

**FSL121Y1 French Language I [26L, 52T, 26P]**
Written and spoken French, reinforcing oral/aural competence, reading comprehension, and writing skills.
Prerequisite: FSL 102H1, or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL161Y1 and higher.

**FSL221Y1 French Language II (formerly FSL161Y1/181Y1) [52L, 26P]**
A 3-hour per week course open to all students. Required for all students wishing to complete a minor or major program in French. Emphasis is placed on the development of written and oral comprehension and expression through a variety of approaches to language learning. Required for all students wishing to complete a minor, major or specialist program in French.
Prerequisite: FSL 121Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL 161Y1 and higher

**FSL277Y1 French Pronunciation [52L, 26P]**
A study of the French sound system with the goal of improving students' pronunciation both in reading and everyday speech. Features to be examined include vowels, consonants, stress, liaison, the E caduc and intonation in both Canadian and European varieties. Theoretical concepts learned will be put into practice via structured exercises and weekly lab sessions.
Prerequisite: FSL161Y1/181Y1/221Y1
Exclusion: FRE277Y1/Not open to fluent or native speakers of French, as determined by the results of the in-class Oral Proficiency Test to be taken during the first two weeks of classes.

**FSL331Y1 Practical French I (formerly FSL261Y1) [78S]**
Emphasis is placed on both reading and listening comprehension, expression, both written and oral, and independent learning. Particularly intended for students who wish to maintain and improve their general knowledge of French without wishing to specialize.
Prerequisite: FSL161Y1/181Y1/221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test
Exclusion: FSL 261Y1/281Y1/341Y and higher

**FSL341Y1 Language Practice I: Written and Oral French (formerly FSL281Y1) [78L, 26P]**
This course is designed for those who wish to improve their written expression with textual study and develop their oral and aural skills. The course is also designed for students who want to specialize or major in French studies.
Prerequisite: FSL161Y1(77%)/181Y1/221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test
Exclusion: FSL 261Y1/281Y1/331Y1 and higher

**FSL362Y1 La Francophonie [78S]**
An advanced course in practical French (reading, writing, listening, speaking), aimed at broadening understanding of the range of cultures and societies of the francophone world, based in part on multimedia resources available in French, including those of the Internet.
Prerequisite: Any 300-series FSL course or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL 461Y1 and higher

**FSL366H1 Business French [39S]**
A study of vocabulary, grammar and writing techniques involved in business situations, including cross-cultural transactions. Students may be introduced to business-oriented multimedia resources, including those of the Internet.
Prerequisite: Any 300-series FSL course or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL 461Y1 and higher

**FSL431Y1 Practical French II (formerly FSL361Y1) [78S]**
Emphasis is placed on both reading and listening comprehension, expression, both written and oral, and independent learning. Particularly intended for students who wish to maintain and improve their general knowledge of French without wishing to specialize.
Prerequisite: FSL 261Y1/281Y1/331Y1/341Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL 381Y1 and higher; FSL361Y1

**FSL442H1 Language Practice II: Written French (formerly FSL382H1) [39S]**
This course is designed for students who want to consolidate the writing skills they already had acquired as students specializing in French Studies.
Prerequisite: FSL281Y1/341Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test
Exclusion: FSL361Y1 and higher

**FSL443H1 Language Practice II: Oral French (formerly FSL383H1) [39S]**
This course is designed for students who want to consolidate the oral skills they already acquired as students specializing in French Studies.
Prerequisite: FSL281Y1/341Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL 361Y1 and higher

**FSL461Y1 Practical French III [78S]**
For students who wish to improve their general knowledge of French while specializing in other fields of study.
Prerequisite: FSL 431Y1/442H1, 443H1, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.

## Second Language Learning Courses

**JFI225Y1 Second Language Learning [52S]**
A theoretical and practical consideration of the ways we learn a second language, with a historical overview and critical evaluation of the various methodologies that have been developed; the role of cultural studies in language learning; practical evaluation and development of syllabus, course and textbook materials. This course is taught in English.
Prerequisite: FSL161Y1(77%)/181Y1/221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test

**FRE384H1 Teaching French as a Second Language [26S]**
Since 1970 the term "communicative approach" has been used to refer to various ways of teaching and learning FSL. The aim of this course is to attempt to clarify the notions involved in the communicative approach and examine theoretical issues and pedagogical implications related to it.
Prerequisite: FRE272H1

**FRE385H1 Teaching Young People's Literature [26S]**
Analysis of bibliographical tools available for the selection of literary materials for the FSL classroom. Study of representative works of interest to young people such as novels, detective stories, cartoons, with special emphasis on socio-cultural aspects. Critical analysis of various pedagogical approaches.
Prerequisite: FRE384H1

## Faculty

### Professors Emeriti

L.S. Bourne, MA, Ph D, FRSC, DES Hons
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R.B. Bryan, BA Ph D (Forestry)
I. Burton, Ph D, FRSC
L. Curry, MA, Ph D
A.J. Dakin, Ph D, ARIBA, FRTPI
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J. Spelt, MA, Ph D
A. Waterhouse, M Sc (Pl), Ph D
J.B.R. Whitney, MA, Ph D

### Associate Professor and Chair of the Department

V.W. Maclaren, M Pl, MS, PhD

### Professors

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J.R. Desloges, M Sc, Ph D
M.L. Diamond, M Sc, M Sc Eng, Ph D
M.S. Gertler, MCP, Ph D, FRSC
L.D.D. Harvey, M Sc, Ph D
J.R. Miron, MA, M Sc, Ph D (University of Toronto Scarborough; Chair Social Sci. University of Toronto Scarborough)
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J. Dunn, MA, Ph D
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### Assistant Professors

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A. Walks, MA, Ph D (University of Toronto Mississauga)
M. Wells, B Sc, Ph D (University of Toronto Scarborough)
K. Wilson, MA, Ph D (University of Toronto Mississauga)

### Senior Lecturers

D. Boyes, M Sc, Ph D
B. Murck, BA, Ph D (University of Toronto Mississauga)

Geography is the study of the environments created on the earth's surface by nature and people. The physical and biological elements of these environments, as well as their economic and social structure, historical development, spatial organization, interrelationships, management and planning form the subject matter of Geography. Geography, therefore, relates closely to other fields in natural science, social science and the humanities, and geographers take courses in these related fields along with their geography courses. Students specializing in other subjects often select one or more geography courses to deepen their understanding of the resource base, culture and economy of those parts of the world in which they are interested.

Employment opportunities for geographers exist in many branches of international organizations, government, industry, and education. Geographers work at all levels of government service, especially in agencies responsible for environmental management; land and resource analysis; development of historic districts and sites; urban transportation planning; regional economic planning; trade promotion; geographic systems design and data analysis; transport network design and the processing

of archival, survey, and cartographic information. In business, geographers work in marketing, locational analysis, resource development, and in consulting firms engaged in project evaluation, land use planning and natural heritage conservation.

Students studying Geography may take either an H.B.A. or H.B.Sc., depending upon the subjects they wish to emphasize. The Department offers several Specialist, Major and Minor Programs in Geography, cooperates in offering a combined program with Economics, shares with Ecology and Evolutionary Biology a program in Biogeography, and contributes courses to various departmental and college programs including American Studies; Anthropology; Archaeology; Canadian Studies and Peace and Conflict Studies; Equity Studies; Centre for Environment; Environmental Geosciences; and Urban Studies; Ethics, Society and Law and International Relations; and European Studies. Counselling and advice may be obtained from the Undergraduate Coordinator or the Undergraduate Counsellor.

Undergraduate Coordinator:
Professor D. Harvey, Sidney Smith Hall, Room 5032 (416-978-1588)

Student Counsellor:
S. Calanza, Sidney Smith Hall, Room 5050 (416-978-6455)

General Enquiries:416-978-3375

## Geography Programs

Enrolment in Minor, Major and Specialist programs sponsored by the Department of Geography requires the completion of four courses, including one of GGR100H1, 101H1, 107H1, or 124H1.Entry requirements to all Specialist programs is a CGPA of 2.5. Entry requirements for all Major programs is a CGPA of 2.0 or 67% in 1.0 GGR FCE at the 100 or 200 level. Double majors in Geography must complete at least 13 different GGR/JAG/JFG/JGF/JGI/JUG/JGE credits (only 1.0 overlap). Students combining any of our Minor programs with a Specialist/Major program would normally be allowed to count only 1.5 credits (of the 4.0 courses in the Minor program) towards both programs. Generally, students may only take 1.0 Independent Research Project credits toward their program requirements..

Note

The general Geography major program is excluded from the arrangement whereby students in a four-year degree may take two major programs sponsored by the Department of Geography.

### Biogeography (Science program)

**Specialist program:**
(13 full courses or their equivalent, including at least one 400-series course)

**Entry Requirements:**
Students must have a CGPA of 2.5
First Year:
1. BIO150Y1; GGR100H1, 101H1; CHM (138H1,139H1)/151Y1/CSC (108H1, 148H1)
2. At least one of: JMB170Y1/MAT135Y1/137Y1/PHY131H1, 132H1/151H1, 152H1

Higher Years:
1. Two of: GGR201H1, 203H1, 205H1, 206H1
2. BOT251Y1/ZOO252Y1; GGR270H1/STA220H1
3. ENV234Y1/two of BIO319H1, 321H1, 323H1, 324H1, 328H1
4. One full course equivalent from: BOT300H1, 307H1, 310H1; ZOO265Y1, 304H1, 309Y1, 361H1, 373H1, 384H1, 387H1, 389H1
5. GGR305H1, 310H1
6. Two full course equivalents from BIO/BOT/ZOO at the 300+ level
7. 1.5 full course equivalent from GGR at the 300+ level

Note:

Of the 3.5 courses from BIO/BOT/ZOO and GGR, 1.0 must be at the 400-level

### Environment and Energy – See Centre for Environment

### Environment and Resource Management (Arts program)

**Specialist program:**
(10 full courses or their equivalent, including at least one 400-series course)

**Entry Requirements:**
Students must have a CGPA of 2.5

First Year:
1.0 courses from GGR100H1, 101H1, 107H1, 124H1 (GGR107H1 recommended) or 1.0 other courses with permission of department.

Higher Years:
1. JGE221Y1; GGR270H1, 271H1, 272H1, 393H1
2. GGR491Y1/two of GGR409H1, 415H1, 418H1, 450H1, 451H1, 492H1, 498H1, 499H1
3. One additional half course from Group B
4. 4.5 courses from: GGR220H1, 221H1, 256H1, 305H1, 307H1, 314H1, 331H1, 332H1, 333H1, 334H1, 335H1, 338H1, 342H1, 343H1, 390H1, 391H1, 409H1, 415H1, 418H1, 421H1, 439H1, 450H1, 451H1, ENV236Y1/ENV440Y1/JUG320H1/JAG321H1/JGE347H1, 348H1. Of the 4.5 courses, additional options include: up to 1.5 courses from Group C; up to 1.0 courses from Group B.

**Major program:**
(7 full courses or their equivalent)

Note:

The general Geography major program is excluded from the arrangement whereby students in a four-year degree may take two major programs sponsored by the Department of Geography

**Entry Requirements:**
Students must have a CGPA of 2.0 or obtain 67% in 1.0 GGR FCE at the 100 or 200 level

First Year:
1.0 courses from GGR100H1, 101H1 107H1, 124H1 (GGR107H1 recommended) or 1.0 other courses with permission of department.

Higher Years:
1. JGE221Y1; GGR270H1, 271H1
2. 4.0 courses from last option list in Specialist program above

## Geography (Arts program)

### Specialist program:
(10 full courses or their equivalent, including at least one 400-series course)

**Entry Requirement:**
Students must have a CGPA of 2.5

First Year:
1.0 courses from GGR100H1, 101H1, 107H1, 124H1 or 1.0 other courses with permission of department.
Higher Years:
1. GGR270H1, 271H1, 272H1
2. GGR491Y1/two of GGR409H1, 413H1, 415H1, 418H1, 431H1, 439H1, 446H1, 450H1, 451H1, 452H1,457H1, 458H1, 459H1, 492H1, 498H1, 499H1
3. One additional half course from Group B
4. 6.0 GGR/JAG/JFG/JGF/JGI/JUG/JGE/ENV236Y1

### Major program:
(7 full courses or their equivalent)

Note:

The general Geography major program is excluded from the arrangement whereby students in a four-year degree may take two major programs sponsored by the Department of Geography.

**Entry Requirement:**
Students must have a CGPA of 2.0 or obtain 67% in 1.0 GGR FCE at the 100 or 200 level

First Year:
1.0 courses from GGR100H1, 101H1, 107H1, 124H1 or 1.0 other courses with permission of department.
Higher Years:
1. GGR270H1, 271H1
2. 5.0 GGR/JAG/JFG/JGF/JGI/JUG/JGE/ENV236Y1 courses of which at least 3.0 must be at the 300-400 level

**Minor program:**
(4 full courses or their equivalent)

1. 1.0 courses from GGR100H1, 101H1m 107H1, 124H1
2. Three other higher level GGR/JAG/JFG/JGI/JUG/JGE/ENV236Y1 courses, including at least one 300/400-series course

## Geographic Information Systems (Arts program)

Note:

Students combining this program with a Specialist/Major sponsored by the Department of Geography will normally be allowed to count only 1.5 (of the 4.0) credits towards both programs.

**Minor program:**
(4 full courses or their equivalent)

1. 1.0 courses from GGR100H1, 101H1, 107H1, 124H1 or 1.0 other courses with permission of department
2. GGR270H1, 272H1, 273H1, 373H1
3. One half course from GGR462H1, 473H1
4. One of GGR337H1, 371H1, 413H1, 462H1, 473H1, JFG470H1, 475H1

## Geography and Economics - See Economics

## Historical and Cultural Geography (Arts program)

### Specialist program:
(10 full courses or their equivalent, including at least one 400-series course)

**Entry Requirement:**
Students must have a CGPA of 2.5

First Year:
1.0 courses from GGR100H1, 101H1, 107H1, 124H1 (GGR107H1, 124H1 recommended) or 1.0 other courses with permission of department
Higher Years:
1. GGR240H1, 270H1, 271H1, 272H1, 336H1, 360H1
2. 1.0 courses from: GGR216H1, 241H1, 246H1, 249H1, 254H1
3. 1.5 courses from: GGR421H1, 431H1, 439H1, 452H1, 457H1, 4912Y1
4. 3.5 courses from: GGR320H1, 327H1, 328H1, 339H1, 342H1, 343H1, 346H1, 350H1, 361H1, 366H1, 391H1, JUG320H1, JAG321H1

### Major program:
(7 full courses or their equivalent)

Note:

The general Geography major program is excluded from the arrangement whereby students in a four-year degree may take two major programs sponsored by the Department of Geography

**Entry Requirement:**
Students must have a CGPA of 2.0 or obtain 67% in 1.0 GGR FCE at the 100 or 200 level

First Year:
1.0 courses from GGR100H1, 101H1, 107H1, 124H1 (GGR107H1, 124H1 recommended) or 1.0 other courses with permission of department
Higher Years:
1. GGR240H1, 270H1, 271H1
2. GGR336H1, 360H1
3. 3.5 courses from lists #2, #3 and #4 in Specialist program above

## Physical and Environmental Geography (Science program)

### Specialist program:
(12 full courses or their equivalent, including at least one 400-series course)

**Entry Requirement:**
Students must have a CGPA of 2.5

First Year:
1. 1.0 courses from GGR100H1, 101H1, 107H1, 124H1 A (GGR100H1 and 101H1 strongly recommended) or 1.0 other courses with permission of department
2. MAT135Y1/137Y1/PHY131H1, 132H1/151H1, 152H1
3. One course from: BIO150Y1/CHM137Y1/(138H1, 139H1)/151Y1

Higher Years:
4. Three of: GGR201H1, 203H1, 205H1, 206H1
5. GGR270H1, 272H1, GGR390H1

6. GGR491Y1/two of GGR403H1, 409H1, 413H1, 498H1
7. One additional half-course from Group B
8. 4.5 courses from: GGR201H1, 203H1, 205H1, 206H1, 301H1, 302H1, 303H1, 305H1, 307H1, 310H1, 314H1, 330H1, 333H1, 337H1, 391H1, 403H1, 409H1, 413H1, 421H1, 490H1, 498H1/ENV236Y/JGE347H1, 348H1. Of the 4.5 courses, additional options include up to 1.0 courses from Group B.

**Major program:**
(7.5 full courses or their equivalent)

Note

The general Geography major program is excluded from the arrangement whereby students in a four-year degree may take two major programs sponsored by the Department of Geography

**Entry Requirement:**
Students must have a CGPA of 2.0 or 67% in 1.0 GGR FCE at the 100 or 200 level

First Year:
1. 1.0 courses from GGR100H1, 101H1, 107H1, 124H1 (GGR100H1 and 101H1 strongly recommended) or 1.0 other courses with permission of department
2. One course from: BIO150Y1/CHM137Y1/(138H1, 139H1)/151Y1/MAT135Y1/137Y1/PHY110Y1/138Y1/140Y1

Higher Years:
1. Three of: GGR201H1, 203H1, 205H1, 206H1
2. GGR270H1, 390H1
3. 3.0 courses from last option list in Specialist program above

**Minor Program:**
(4 full courses or their equivalent)

1. 1.0 courses from GGR100H1, 101H1, 107H1, 124H1 (GGR100H1 and 101H1 strongly recommended) or 1.0 other courses with permission of department
2. One full course or equivalent from: GGR201H1/203H1/205H1/206H1
3. GGR390H1; (301H1/302H1/303H1/305H1); (272H1/307H1/310H1)
4. A half-course from Group C

### Urban, Economic and Social Geography (Arts program)

**Specialist program:**
(10 full courses or their equivalent, including at least one 400-series course)

**Entry Requirement:**
Students must have a CGPA of 2.5

First Year:
One course from Group A (GGR 124Y1 recommended)
Higher Years:
1.0 courses from GGR100H1, 101H1, 107H1, 124H1 (GGR124H1 recommended) or 1.0 other courses with permission of department
Higher Years:
1. GGR220H1, 221H1, 270H1, 271H1, 272H1
2. GGR491Y1/two of 431H1, 439H1, 450H1, 452H1, 455H1, 492H1, 499H1, 457H1, 458H1, JFG470H1
3. One additional half-course from Group B
4. 5.0 courses from: GGR216H1, JGE221Y1; GGR246H1, 249H1, 252H1, 254H1, 256H1, 323H1, 324H1, 326H1, 327H1, 328H1, 333H1, 334H1, 336H1, 339H1, 342H1, 343H1, 344H1, 350H1, 357H1, 361H1, 363H1, 366H1, 368H1, 391H1, 421H1, 431H1, 439H1, 450H1, 452H1; JFG470H1, 475H1; JGI216H1, 346H1. Of the 5.0 courses, additional options include up to 1.0 courses from Group B.

**Major program:**
(7 full courses or their equivalent)

Note:

The general Geography major program is excluded from the arrangement whereby students in a four-year degree may take two major programs sponsored by the Department of Geography

**Entry Requirement:**
Students must have a CGPA of 2.0 or 67% in 1.0 GGR FCE at the 100 or 200 level

First Year:
1.0 courses from GGR100H1, 101H1, 107H1, 124H1 (GGR124H1 recommended) or 1.0 other courses with permission of department
Higher Years:
1. GGR220H1, 221H1, 270H1, 271H1
2. 4.0 courses from last option list in Specialist program above

**Group B:**
GGR270H1, 271H1, 272H1, 273H1, 337H1, 371H1, 373H1, 390H1, 391H1, 393H1, 462H1, 473H1, 480Y1, 490H1; JFG470H1, 475H1

**Group C:**
ENV236Y1; GGR201H1, 203H1, 205H1, 206H1, 301H1, 302H1, 303H1, 305H1, 307H1, 310H1, 314H1, 333H1 402H1, 403H1, 404H1, 409H1, 413H1, 490H, JGE347H1, 348H1

## Geography Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), GGR courses are classified in various categories; see entry at end of each course.

**INX199H1 First Year Seminar [26S]**

**SSC199H1 First Year Seminar [26S]**

**SCI199H1 First Year Seminar [26S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**NOTE**
Prerequisites: In some cases prerequisites may be waived if equivalent background exists. Please consult the Undergraduate Coordinator or instructor.

**GGR100H1 Introduction to Physical Geography [26L, 4P]**
Inroduction to physical geography, with an earth systems approach. Topics include the atmosphere, weather and climate, Earth materials and plate tectonics, geomorphic processes and the genesis of landforms,glaciers, soils, and world biomes. Emphases placed on processes, energy flows, cycles and scale. Lab exercises and a local field trip provide practical experience with each major topic.
Exclusion: GGR100Y1
This is a Science course

**GGR101H1 Ancient Civilizations and their Environments [26L, 4T]**
This course focuses on the rise and fall of ancient civilizations (i.e. Mesopotamia, China, India, Inca, Aztec) within the context of (1) environmental barriers encountered during the development of city-states, (2) the technology advancement made to overcome physical and climate barriers, and (3) the ways in which natural resources were exploited by ancient cultures.
Exclusion: ENV236Y1
This is a Science course

**GGR107H1 Environment, Food and People [26L, 5T]**
Examines the relationship between population growth, agricultural development and the natural environment, from the origin of agriculture to the present day. Focuses on environmental change due to human activity, and the prospects for a sustainable human society.
Exclusion: GGR101Y1, 110Y1, 107Y1
This is a Social Science course

**GGR124H1 Urbanization, Contemporary Cities and Urban Life [36L, 3T]**
Introduction to the urban process. From the origin of cities to global urbanization; the evolution of systems of cities; uneven growth and the functional specialization of cities; globalization and economic restructuring, migration, public policies. World cities. Dynamics of urban property markets, population and demography, job location, housing, mobility and neighbourhood change, social structure and spatial inequalities. Planning, politics and policy issues in U.S. and Canadian cities.
Exclusion: GGR124Y1
This is a Social Science course

**GGR201H1 Geomorphology [26L, 4P]**
An introduction to the principles of geomorphology; earth materials; major features of crustal morphology; landforming processes of water, wind, waves and ice; human impact on earth surface processes. One hour laboratory session approximately every other week; a local field trip.
Recommended preparation: GGR100H1
This is a Science course

**GGR203H1 Introduction to Climatology [34L, 4T]**
Introduction to the large scale processes responsible for determining global and regional climate and atmospheric circulation patterns, as well as the small scale processes responsible for determining the microclimates of specific environments.
Recommended preparation: GGR100H1; MAT135Y1/137Y1; PHY131H1, 132H1/151H1, 152H1
This is a Science course

**GGR205H1 Introduction to Soil Science [26L]**
Introduction to soil science dealing with the chemical, physical, and biological properties of soils; soil formation and development; the classification of soils, and the application of soil science to environmental, agricultural and forestry issues.
Recommended preparation: CHM137Y1/(138H1, 139H1); GGR100H1
This is a Science course

**GGR206H1 Introduction to Hydrology [30L, 4T]**
An introduction to the hydrologic cycle with emphasis on the physical processes, including precipitation, interception, evaporation, runoff, ground water and soil water. Basic hydrological models will be practised.
Recommended preparation: GGR100H1; MAT135Y1
This is a Science course

**GGR216H1 Global Cities [26L]**
With films, fiction and critical theory, this course explores global cities from around the world by looking at their everyday life: the people of these cities; how they got to be there; what they do; and how their lives are being shaped by increasingly globalized political, economic and cultural forces.
This is a Social Science or Humanities course

**JGI216H1 Urbanization & Global Change [26L]**
In this course, we examine the processes of globalization, mass urbanization and economic change that are taking place in cities around the world. This includes an interdisciplinary exploration of the industrial and economic changes that have ensued as a result of globalization, as well as the social and cultural manifestations associated with the emergence of global cities.
Recommended preparation: GGR124H1
This is a Social Science course

**GGR220H1 The Spatial Organization of Economic Activity [26L, 2T]**
This course focuses on theoretical and empirical topics aimed at describing, analyzing and explaining the spatial distribution of economic activity at macro- and micro-spatial-scales. Topics covered could include theories of regional economic growth and change, issues surrounding uneven development in space, the empirical definition of regional economic systems, and the measurement of economic growth and structural change.
Exclusion: GGR220Y1
This is a Social Science couse

**GGR221H1 New Economic Spaces [26L]**
This course provides an introduction to economic geography and economic geography theory from the 1970s on, illustrating the different ways that geographers have conceptualized the restructuring of resource industries, manufacturing and services. The crisis of Fordism and the rise of new production models will be given particular attention, along with the reorganization of finance, the rise of cultural industries and the globalization of commodity chains. New regimes of governance of the economy will also be considered.
Exclusion: GGR220Y1
This is a Social Science course

**JGE221Y1 Interdisciplinary Perspectives on the Environment [52L, 5P, 10T]**
The foundation for students in the Centre for Environment programs and the Environment and Resource Management Program in Geography, this course examines the social, ethical and biophysical dimensions of one or more selected environmental issues such as air pollution and climate change, why these issues need to be addressed, and some approaches for doing so. Draws from relevant interdisciplinary domains in an examination of environmental degradation, the responses of

various actors and models for a more sustainable future. The environmental issues discussed vary from year to year.
Exclusion: JIE 222Y1/GGR 233Y1
Recommended Preparation: GGR 100Y1/(100H1,101H1)/107Y1/(107H1,124H1)
This is a social science course.

**GGR240H1 Historical Geography of North America [26L]**
An introduction to the historical geography of North America from the pre-Columbian period to the present. Topics include European imperialism, staple economies, colonial settlement, railroads and the West, industrialization and urbanization, sovereignty and security, environmental and agricultural change, and regional identities.
This is a Humanities course

**GGR241H1 Historical Geographies of Urban Exclusion and Segregation [26L]**
An introduction to the historical geography of urban social exclusion and segregation after 1750. Using a selection of cities from around the world (such as Berlin, Lagos, Los Angeles, Manchester, Mumbai, Shanghai and Toronto), the course examines the impacts and implications of urban social inequalities.
This is a Humanities course

**GGR246H1 Geography of Canada [26L]**
An historical, topical, and regional introduction to the geography of Canada. Primary emphasis is on the resource base, regional differences and disparities, urbanization, industrialization, social and economic policy and population change.
This is a Social Science course

**GGR249H1 Contemporary Latin America [26L]**
Conflict between the conservatism of long-established patterns of settlement and land use and the drive for economic development. Agricultural reform; colonization of the interior, emergence of industrial regions; growth of large cities. Case studies of the problems of regional development. Latin America in world trade. Trade relations with Canada. (Offered in alternate years)
This is a Social Science course

**GGR252H1 Marketing Geography [26L, 4T ]**
The problem of retail location. The spatial structure of consumer demand and retail facilities. Shopping centres and retail chains. Techniques for site selection and trade area evaluation, location strategies, retail planning.
This is a Social Science course

**GGR254H1 Geography USA [26L]**
After a brief historical overview, focuses on contemporary issues in American society: economy, politics, race, regional distinctions and disparities, urban development and the U.S. as world power.
This is a Social Science course

**GGR256H1 Recreation and Tourism [26L]**
Introduction to spatial organization and environmental impact of recreation. Prediction of demand, problems of over-use, ecological risks, conflicts of interests, planning perspectives, Canada's tourist trade.
This is a Social Science course

**GGR270H1 Introductory Analytical Methods [39L, 13T]**
Theory and practical application of elementary quantitative techniques in geography emphasizing descriptive, inferential and spatial statistical analysis, probability, and sampling.
Exclusion: ECO220Y1/ECO227Y1/GGR270Y1/PSY201H1/SOC202H1/SOC200Y1/SOC300Y1/STA220H1/STA250H1/STA248H1/STA261H1
Pre- or Co-requisite: Two courses in Geography
This is a Social Science course

**GGR271H1 Social Research Methods [26L]**
Practical course on field methods designed to enable students to carry out their own research projects. Behavioural observation, interviewing, questionnaire design, sampling theory, content analysis of written and graphic material, data coding and focus groups.
Exclusions: SOC200H1/SOC204H1/POL242/WDW350
Prerequisite : GGR270H1
This is a Social Science course

**GGR272H1 Geographic Information and Mapping I [26L, 24P]**
Introduction to digital mapping and spatial analysis using geographic information systems (GIS). Students learn how to use GIS software to find, edit, analyze and map geographic data to create their own maps, analyze geographic problems and use techniques that can be applied to a variety of subject areas.
This is a Social Science course

**GGR273H1 Geographic Information and Mapping II [26L, 24P]**
Builds on GGR272H1 by providing students with practical spatial analysis methods and the underlying theory needed to understand how to approach various geographic problems using geographic information system (GIS) software and a variety of data types and sources.
Prerequisite: GGR272H1
This is a Social Science course

**GGR299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**GGR300H1 Special Topics in Geography I [26L]**
Content in any given year depends on instructor. The program in which the course can be used depends on its content. Consult Department Office in April.

**GGR301H1 Fluvial Geomorphology [26L, 4P]**
Elements of drainage basin morphology and hydrology, classification of rivers, stream patterns and hydraulic geometry. Elements of open channel flow, sediment transport and the paleohydrology of river systems. River channel adjustments to environmental change, human impact and the management/design of river habitats. Exercises include experimentation in a laboratory flume.
Prerequisite: GGR100H1 or GGR201H1, 270H1 (or equivalent)
This is a Science course

**GGR302H1 Quaternary Paleoclimatic Reconstruction [26L, 4P]**
Principles underlying use of ice cores, marine sediments, lake sediments, tree rings, coral reefs, and pollen to reconstruct past climates. Exercises involve downloading, plotting, and analysing proxy climatic data that are available over the Internet. (Offered in alternate years)
Prerequisite : GGR201H1/203H1
This is a Science course

**GGR303H1 Climate-Biosphere Interactions [26L]**
Discussion of the exchange of energy and matter (carbon, water) between the Earth's biosphere (terrestrial vegetation) and atmosphere, with a focus on processes underlying key feedbacks on regional climate. Examples will be taken from research on contemporary as well as paleoclimate systems. Case studies to include how human disturbances like land-use change or future climate change may alter these processes.
Prerequisite : Equivalent of one full-year science course at the 200-level, or permission from the instructor.
This is a Science course

**GGR305H1 Biogeography [26 L]**
The course identifies and explains plant and animal distributions through space and time. Topics covered include ecological and evolutionary dynamics, disturbance, dispersal, migration, continental drift, paleoenvironments and island biogeography. We will also examine terrestrial and marine biomes, microbial ecosystems and address recent biogeographic changes associated with human impact.
Recommended preparation: GGR100H1 or BIO150Y
This is a Science course

**GGR307H1 Soil and Water: Landscape Processes [26L, 10P]**
An introduction to physical and chemical processes operating at micro- to landscape scales and their effects on soil and water quality. Discussion of anthropogenic impacts and management and conservation issues. Local and international case studies.
Recommended preparation: GGR205H1, GGR206H1
This is a Science course

**GGR310H1 Cultural Biogeography [26L]**
The changing relationship between people and the biosphere from the emergence of hominids to the present. Environmental constraints on human evolution, hunter-gatherer societies and their environmental impacts, evolution of agriculture and consequences of increasing population and technology, including deliberate and inadvertent introductions of plants and animals and forest fragmentation. (Offered in alternate years)
Recommended preparation: ANT200Y1/BOT430H1/GGR305H1
This is a Science course

**GGR314H1 Global Warming [26L]**
A comprehensive examination of the greenhouse warming problem, beginning with economic, carbon cycle, and climate model projections; impacts on and adaptive responses of agriculture, forests, fisheries, and water resources; abatement options; technical and institutional issues.
This is a Social Science or a Science course

**GGR320H1 Geographies of Transnationalism, Migration, and Gender [26L]**
This course examines recent changes in global migration processes. Specifically, the course addresses the transnationalization and feminization of migrant populations and various segments of the global labor force. The coursework focuses on analyzing classical paradigms in migration studies, as well as emerging theoretical approaches to gender and migration. In addition, it traces the shifting empirical trends in gendered employment and mobility patterns. It uses in-depth case study material to query the frameworks employed in migration studies and to understand the grounded implications of gendered migration. It pays particular attention to the interventions made by feminist geographers in debates about work, migration, place, and space.
This is a Social Science course

**JUG320H1 The Canadian Wilderness [26L]**
The idea of wilderness permeates narratives of Canadian national identity, while policy-makers seek to manage and contain natural areas. This course compares and contrasts historical and contemporary wilderness narratives in literature, painting and film with policies in areas such as conservation, urban planning, land claims and tourism.
This is a Social Science course

**JAG321H1 Aboriginal People and Environmental Issues in Canada [26L]**
This course explores Aboriginal views of environment and resource management from pre-European contact times through to the present from an Aboriginal perspective. Emphasis will be placed on the emerging role of Aboriginal people in environmental and resource management in Canada. Topics to be covered include: history of Aboriginal/non-Aboriginal relations, Aboriginal world view and philosophy, Aboriginal environmental ethics and principles and current environmental issues confronting Aboriginal people.
Prerequisite: Two credits in Geography or Aboriginal Studies
This is a Social Science course

**GGR323H1 Issues in Population Geography [26L]**
Explores issues in geographies of population at a variety of scales from global to local. Issues include demographic patterns and population change, fertility, families and cohorts, mortality, and migration and immigration.
This is a Social Science course

**GGR324H1 Transportation Geography and Planning [26L]**
An introductory overview of major issues in interurban and intraurban transportation at both local and national scales. Topics include causes of spatial interaction, graph theory and network analysis, gravity and entropy-maximizing models, urban transportation and land use, congestion, public transit and transport policy.
Prerequisite: GGR124H1/220H1/221H1 or permission of instructor
Recommended preparation: GGR270H1
This is a Social Science course

**GGR327H1 Geography and Gender [26L]**
An introduction to the work of feminist geographers. The course will explore the relationship between gender and space, emphasizing spatial cognition, architecture, and layout of the city.
Prerequisite: Two courses in Geography
This is a Social Science course

**GGR328H1 Labour Geographies [26L]**
This course explores changes in the nature of work and the structure and geography of labour markets. Topics will include globalization, lean production, flexibility and risk, industrial relations, workfare, the body at work, and gender and work.
Prerequisite: Two courses in Geography
This is a Social Science course

**GGR330H1 Atmosphere and Human Health [26L]**
Human activities are altering the Earth's climate and changing the chemistry of the Earth's atmosphere. Globally, climate change and stratospheric ozone depletion, and regionally,

acid precipitation, air toxics, particulate matter, and smog are receiving much attention. This course discusses these air quality issues, the human health impacts of these problems, and possible solutions
Recommended preparation: GGR100H1 or equivalent
This is a Social Science course

**GGR331H1 Resource and Environmental Theory [26L]**
Introduction to and critical evaluation of major social theoretical paradigms applied to environmental and natural resource politics and regulation. Topics include: neo-classical approaches, eco-Marxism, political ecology, social constructivism, production of nature, ecological modernization, tragedy of the commons, staples theory, science and administrative rationalism.
Prerequisite: GGR100H1/107H1/JGE221Y1
This is a Social Science course

**GGR332H1 Urban Waste Management [26L]**
This course examines 1) factors affecting the spatial distribution of wastes; and 2) models and policy implications inherent in all aspects of waste management, from waste generation through recycling and waste disposal. Contrasting waste management practices in the developed and the developing world is a central theme.
Prerequisite: JGE221Y1/200-level environmental course
This is a Social Science course

**GGR333H1 Energy Supply and Use [26L, 7T]**
Examines the technical and economic potential of advanced fossil-fuel-supply technologies, renewable energy (solar, wind, biomass, geothermal, ocean, hydro), and the potential for more efficient end use of energy in the residential, commercial, industrial, and transportation sectors. Also discusses: innovative energy systems, global scenarios, policy implications.
Exclusion: JGE347H1, 348H1
This is a Science course

**GGR334H1 Water Resource Management [26L]**
Managing demand and supply; linkages between water quality and human health. Case studies from the industrial world and from developing countries, rural and urban. Implications of population growth and climate change for water resource management.
Recommended preparation: GGR100H1/107H1, JGE221Y1
This is a Social Science course

**GGR335H1 Business and Environmental Change [26L]**
Steadily increasing pressure on biospheric resources (eg. water) and sinks (eg. the atmosphere) requires business to adapt and innovate, while simultaneously responding to globalization and the information revolution. Examples include the financial services sector, as well as energy, transportation, tourism and resource-based industries.
Recommended preparation: JGE221Y1
This is a Social Science course

**GGR336H1 Urban Historical Geography of North America [26L]**
Processes of urbanization; development of urban systems; changing internal patterns: central area, residential districts, housing, transportation, reform and planning movements. Emphasis on the 19th century and the first half of the 20th century.
Recommended preparation: GGR124H1/SOC205Y1
This is a Humanities course

**GGR337H1 Environmental Remote Sensing [26L, 26P]**
Principles of optical, active and passive microwave remote sensing; satellite orbit and sensor characteristics; image processing and analysis techniques and software; and environmental remote sensing principles.
Prerequisite: GGR272H1
This is a Science course

**GGR338H1 Environmental Problems in Developing Countries [26L]**
Describes and analyses a broad range of the key environmental issues currently facing developing countries from geographical perspectives. Emphasis is on air pollution, water contamination and treatment, residential and industrial solid waste collection and management, with multimedia and written examples drawn from throughout the developing world.
Prerequisite: 200-level environmental course
This is a Social Science course

**GGR339H1 Urban Geography, Planning and Political Processes [26L]**
The interdependence of political processes and institutions, public policy and urban geography. The political economy of federalism, urban growth, planning and public services as they shape the urban landscape. The spaces of the city as the negotiated outcomes of variously empowered people and the meanings they ascribe to localities and places. Approaches informed by post-colonial, post-modern, and feminist perspectives. Canadian, U.S. and European comparisons.
Prerequisite: GGR124H1, 246H1/254H1
This is a Social Science course

**GGR341H1 Arctic Canada [26L]**
An introduction to Canada's arctic and subarctic regions 'north of 60', an examination of physical processes that have shaped the region, as well as environmental, social, economic and political themes covering topics such as exploration and settlement, aboriginal land claims, wildlife and resource management, economic development and other current issues.
Recommended Preparation: Two courses in Geography
This is a Social Science course

**GGR342H1 The Changing Geography of Southeast Asia [26L]**
Examines changes in the social, political and economic geography of Southeast Asian countries. Examples drawn from Thailand, Singapore, Indonesia, Vietnam and the Philippines as these emerging newly industrialized countries enter the 21st century. Emphasis on political-economy, urbanization and environment since 1950.
Recommended preparation: Two courses in Geography
This is a Social Science course

**GGR343H1 The Changing Geography of China [26L]**
The evolving physical, social, political and economic landscape of China. Focus on development strategies, industry, agriculture, urbanization and the environment since 1949. Special attention paid to the character and impact of China's on-going transition from a planned to market economy.
Recommended preparation: Two courses in Geography
This is a Social Science course

**GGR344H1 Changing Geography of Russia and Ukraine [26L]**
Overview of the physical environment and historical geography; changes in population distribution during the Soviet period; current demographic and ethnic problems; the rural economy;

urbanization, industrial location, and regional development issues.
Recommended preparation: Two courses in Geography
This is a Social Science course

**JGI346H1 The Urban Planning Process [26L]**
An overview of how planning tools and practice shape the built form of cities. This course introduces twentieth century physical planning within its historical, social, legal, and political contests. Community and urban design issues are addressed at local and regional scales and in both central cities and suburbs. The focus is on Toronto and the Canadian experience, with comparative examples form the other counties, primarily the United States.
Recommended preparation: GGR124H1
This is a Social Science course

**JGE347H1 Efficient Use of Energy [24L, 6T]**
The course examines the options available for dramatically reducing our use of primary energy with no reduction in meaningful energy services, through more efficient use of energy at the scale of energy-using devices and of entire energy systems. Topics covered include generation of electricity from fossil fuels and energy use in buildings, transportation, industry and agriculture.
Exclusion: GGR333H1
Recommended preparation: First year math and/or physics
This is a Science course

**JGE348H1 Carbon-Free Energy [26L, 6T]**
The course examines the options available for providing energy from carbon-free energy sources: solar, wind, biomass, hydro, oceanic, geothermal energy, as well as through sequestration of carbon from fossil fuel sources. The hydrogen economy is also discussed.
Recommended preparation: First year math and/or physics
Prequisite: JGE347H1 or permission of instructor
Exclusion: GGR333H1
This is a Science course

**GGR350H1 Canada in a Global Context [26L]**
This course considers geographic relationships between Canada and the world in the era of globalization, from the colonial period to the present. Local and regional sites will be linked to cultural, economic, environmental, and political processes occurring at a global scale. Key themes will include trade and investment, nationalism and identity, and Canadian geopolitics.
Prerequisite: 1.0 GGR courses
This is a Social Science course

**GGR357H1 Geography of Housing and Housing Policy [26L]**
An introduction to housing in context: as a commodity, a political process and social necessity. The analysis of housing markets in an urban and spatial context, emphasizing the allocation mechanism, residential location and tenure choice, the role of the state, social housing and the relationships of housing changes to mobility, neighbourhood transition, and social equity. Case studies of specific policy issues and alternative housing strategies.
Recommended Preparation: GGR124H1
This is a Social Science course

**GGR360H1 Culture, History, and Landscape [26L]**
The history of approaches to the idea of landscape. A consideration of the origins and uses of the term in geographical inquiry will be followed by a series of case studies, global in scope, from the Early Modern period to the present. Emphasis will be placed on the representational aspects of landscapes, as well as struggles over their definition, interpretation, and use.
Prerequisite: 1.0 GGR courses
This is a Humanities course

**GGR361H1 Understanding the Urban Landscape [26L]**
Three related themes are discussed: the underlying social, cultural and economic forces that have given cities their form and image; various aesthetic and political philosophies that have been put into practice in constructing the urban landscape; and recent European and North American attempts to control the landscape of the contemporary metropolis by the application of urban policy and planning.
Recommended Preparation: GGR124H1 and one of GGR216H1, GGR240H1, GGR246H1, GGR249H1 or GGR259H1
This is a Social Science course

**GGR363H1 Critical Geographies: An Introduction to Radical Ideas on Space, Society and Culture [39L]**
This course introduces a diversity of critical perspectives in human geography, spanning anarchism, Marxism, feminism, sexual politics, 'postcolonialism' and anti-racism. In so doing it illustrates how such a range of radical ideas about space, society and culture have emerged and influenced our thought and action.
This is a Social Science or Humanities course

**GGR366H1 Historical Toronto [26L]**
Toronto's development compared to other large North American cities. Culture, social life, economy, politics, and planning process.
Recommended preparation: GGR336H1
This is a Humanities course

**GGR368H1 Geography of Language [26L]**
Topics in the distribution and spread of languages and dialects, including dialect atlases, innovation diffusion, measures of dialect distance, and linguistic consequences of urbanization and mobility. Rudiments of phonetics and grammar are integrated in the geolinguistic content.
Recommended preparation: Two courses in Geography
This is a Humanities or Social Science course

**GGR371H1 Advanced Quantitative Methods in Geography [26L]**
This course is designed to give students exposure to advanced quantitative techniques including inferential applications of the simple regression model, multiple regression analysis (MRA), data screening for MRA, model building issues in MRA, qualitative independent variable models, discrete choice models, cluster analysis and forecasting methods.
Prerequisite: GGR270H1
This is a Science course

**GGR373H1 Advanced Geographic Information Systems [26L,24P]**
Advanced theory, techniques, and applications in geographic information systems (GIS), including interpolation, geostatistics, modeling, and raster and vector analysis. GIS project design and implementation.
Prerequisite: GGR273H1
This is a Science course

**GGR390H1 Field Methods [TBA]**
Introduction to field methods in vegetation mapping/analysis, soils, hydrology and geomorphology. The course includes exercises and a project during a one-week field camp early in September, a little preparation during the preceding summer, and complementary practical work and/or seminars during the Fall Term. Each student is required to pay the costs of their transportation and accommodation. Students must register with the Department by April. Course may be limited by size.
Prerequisite: GGR100H1 and 0.5 from GGR201H1, 203H1, 205H1, 206H1, 305H1
This is a Science course

**GGR391H1 Research Design [26S]**
A seminar course in which each student prepares a research proposal incorporating relevant theory, published research, sources of data, and methods of enquiry and analysis. A proposal prepared in this course may be used to plan research for GGR 491Y1.
Prerequisite: 3.0 300/400-series GGR courses
This is a Social Science course

**GGR393H1 Environmental Impact Assessment [26L, 4T]**
Environmental impact assessment as a mechanism for avoiding or mediating the costs of development. Emphasis on the institutional development of EIA in Canada, and EIA in the context of environmental regulation. Includes case studies of EIA statements and processes at various levels of government.
Prerequisite: GGR100H1/107H1/JGE221Y1
This is a Social Science course

**GGR398H0 Independent Experiential Study Project**

**GGR399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**GGR400H1 Special Topics in Geography II [26S]**
Content in any given year depends on instructor. The program in which this course can be used depends on its context. Consult Departmental Office in April.

**GGR403H1 Global Ecology and Biogeochemical Cycles [26L]**
Seminar course on biogeochemical cycling of carbon, water, nitrogen, phosphorus, sulfur, and iron between the Earth's atmosphere, oceans, and biosphere. Focus will be placed on the global carbon cycle, including how other biogeochemical cycles feedback on carbon-based processes and mechanisms. Examples and case studies will be taken from research on contemporary as well as paleoclimate systems.
Prerequisite: Equivalent of two full-year courses at the 300 or 400 level, or permission from the instructor.
This is a Science course

**GGR409H1 Contaminants in the Environment [26L, 11T]**
The environmental behaviour and toxicology of inorganic and organic chemical contaminants is discussed in order to understand the scientific basis of pollution concerns. Theory is illustrated with qualitative and quantitative examples and case studies that extend from chemical emissions to health effects. Facility is gained with simple mathematical models. The interface between science and policy are discussed throughout.
Prerequisite: CHM137Y1/(138H1, 139H1)/151Y1/GGR205H1
This is a Science course

**GGR413H1 Watershed Hydroecology [26L]**
Modern developments in hydrology and ecology, including form and process models, interactions of hydrology, ecology and geomorphology; the course emphasizes use of computer simulation models of drainage basin processes.
Prerequisite: GGR201H1/206H1/270H1
This is a Science course

**GGR415H1 Resource and Environmental Planning [26L]**
The policy and institutional aspects of resource and environmental planning in Canada. Overview of the evolution of resource and environmental management and the examination of selected planning techniques; community involvement in planning; the ecosystem approach to planning; emphasis on environmental planning in the urban context.
Prerequisite: JGE221Y1/200-level environmental course
This is a Social Science course

**GGR418H1 Political Economy of Natural Resources [26S]**
Examines political aspects of the appropriation of natural resources, including policy and regulation, environmental impacts, and social justice. Emphasis is placed on reading contemporary literature on the politics of resource access and control from geography and other social science disciplines.
Prerequisite: JGE221Y1
This is a Social Science course

**GGR421H1 History & Philosophy of Geography [26S]**
The history of geography as an intellectual subject, focusing primarily on the modern period, and on the genealogy of central concepts such as region, landscape, and place. Disciplinary developments will be situated next to broader contexts, including imperialism and militarism, the relationship between culture and nature, and the shifting social role of the academy.
Prerequisite: Two courses in Geography
This is a Humanities course

**GGR431H1 Regional Dynamics [26L]**
Theory and analysis of regional economic change with emphasis on North America and Western Europe. Export-base, neoclassical, increasing returns, and political-economic explanations of regional growth and decline, globalization, knowledge-based economy and the role of regions. Geography of technological change, labour-markets and labour relations. Objectives and approaches for local and regional development policy, including talent-based strategies for enhancing local creativity.
Prerequisite: GGR220H1, 221H1, 270H1
This is a Social Science course

**GGR439H1 Global Political Geography [26S]**
Introduction to geopolitical theories. Emphasis on the development of the nation state, theories of land claims and the territorial manifestations of nationalism. Will examine recent theoretical as well as empirical challenges to many of the conventional geopolitical assumptions about scale, space, and power in global politics. Please note that this course is open to students who have taken GGR239H1 (formerly Global Political Geography).
Prerequisite: Two courses in Geography or permission of instructor.
Recommended preparation: This course should not be attempted until you have completed two years of full-time study or the equivalent number of credits part-time.
This is a Social Science course

**GGR450H1 Medical Geography [26L]**
This course is an introduction to medical geography. It includes the following topics: concepts and techniques of medical geography; human ecology of disease; regional patterns of diseases; biometeorological influences on health and disease; health effects of environmental modification and contamination; disease diffusion; spatial distribution of health care resources; and emerging and re-emerging infections.
Prerequisite: GGR270H1
Recommended preparation: BIO 150Y1 or equivalent
This is a Social Science course

**GGR451H1 Health and Place [26L]**
An exploration of the aspects of health in which place or location matters. Particular attention will be paid to the role of environments (physical, social, etc.) in explaining differences in health between places, the structuring of health-related behaviour in place, and the development of health policy for places.
Prerequisite: JGE221Y1
Recommended preparation: GGR270H1
This is a Social Science course

**GGR452H1 Space, Power, Geography: Understanding Spatiality [26S]**
The changing nature of space and our thinking about it, centering on works of contemporary geographers and spatial theorists such as Lefebvre, Soja, Gregory, Harvey, Massey and challenges to this thinking. Explores changing concepts of spatiality that inform geographic thought and help us understand the ways political, economic and social power is constituted and contested.
Prerequisite: At least one (or an equivalent) of GGR327H1, 328H1, 339H1, 360H1, 362H1, 363H1
This is a Social Science course

**JGI454H1 The Role of the Planner: Making a Difference [26L]**
This course will focus on the role of a planning practitioner in contemporary society using a wealth of examples drawn from recent issues and debates in Canadian cities and regions. The course will walk students through the demands made of planners in terms of both technical expertise as well as political necessity and ask them to think actively about how to prepare for the extraordinary growth of cities during the next century. Examples of issues that will be discussed in some detail include the myths surrounding the city vs. the suburbs, the creativity and passion involved in planning work and the need to see Toronto's future from a regional perspective.
Prerequisite: 15 credits, 5.0 of which must be GGR/INI Urban Studies
This is a Social Science course

**GGR457H1 The Post-War Suburbs [26L]**
This course investigates post-war suburbs, beginning with an examination of their competing contemporary meanings. It considers images of prosperous private enclaves, of declining and difficult to access places, of racialized and segregated areas, of banality and homogeneity, of precarity and polarization, and of creative social struggles. It assesses these different visions through an analysis of urban growth and change since WWII. The course will focus on themes of public and private space; class, race and segregation; gender and suburban space; immigration; 'urban sprawl', and the changing social and economic geography of the suburbs. It examines North American areas, with examples from Australia and Europe.
Prerequisite: 10 FCEs
This is a Social Science or Humanities course

**GGR458H1 Advanced Topics in Urban Geography [26L]**
Though there is some debate about the actual moment, we have either already surpassed or will very soon exceed the point when over 50 percent of the earth's inhabitants live in cities. In most developed countries, the rate of urbanization is well over 70 percent already. In short, the twenty-first century is rapidly shaping up as the urban century. The social, economic and political significance of cities is thus increasingly important to understand. This course will cover advanced work on the geography of cities to further this understanding. The first third of the course will cover foundational ideas in urban geography while the final two thirds will cover two separate contemporary topics in the field. The course will be useful for those broadly interested in the topic or more particularly interested in preparing for a career in urban planning or policymaking.
Prerequisite: 10 FCEs
This is a Social Science or Humanities course

**GGR462H1 GIS Research Project**
Students work in groups to develop their own research project and then acquire, organize and analyze geographic data to complete it. Emphasis is placed on research design, project management and the application of GIS concepts and skills learned in previous courses to a practical problem.
Prerequisite: GGR272H1, 373H1, and two other GGR courses
This is a Science course

**JFG470H1 Forest Management [26L]**
Application of operational research and information technology to develop decision support systems for forest land management planning. Basic principles of mathematical programming, simulation and decision analysis, and their application to planning for forest conservation and sustainable development, policy analysis and other land management planning problems.
Prerequisite: One course in quantitative methods or linear algebra
Recommended preparation: GGR270H1/ECO220Y1/227Y1/MAT133Y1/223H1
This is a Science course

**GGR473H1 Cartographic Design [13L, 26P]**
The design and production of maps using GIS cartographic and graphics software packages. Map perception and map use, principles and elements of cartographic design, data acquisition and manipulation, production and reproduction of maps and atlases. Practical exercises culminate in a major project in thematic map design.
Prerequisite: GGR272H1, 273H1
This is a Social Science course

**JFG475H1 Emergency Response Systems Planning [26L]**
Use of operational research and information technology to develop mathematical models and decision support systems to design and evaluate the performance of emergency response systems. Forest fire management systems are used to illustrate

the basic principles of emergency response system planning that can also be applied to urban fire, police, and ambulance services.
Prerequisite: One course quantitative methods or calculus
Recommended preparation: GGR270H1/ECO220Y1/227Y1/ MAT133Y1/135Y1/137Y1
This is a Science course

**GGR490H1 Advanced Field Research- Physical Geography [TBA]**

A two-week course emphasizing the use of advanced field methods for analyzing the pattern of variations in vegetation, soils, surface hydrology and geomorphology in montane and alpine environments. Course is offered in August at the University of Calgary's field station, Kananaskis, Alberta. Students are responsible for the cost of board, lodging and transport to and from the field. Students must register with the Department in March. (Offered in alternate years)
Prerequisite: Two Physical/Environmental courses or permission of instructors
Recommended preparation: GGR390H1
This is a Science course

**GGR491Y1 Research Project**

A course specially designed for students wishing to gain experience in conducting research in their area of specialization. Of particular value for geographers interested in graduate study, or positions in government, planning and consulting firms where research skills may be an asset. Students select a research problem and complete a project under the supervision of a faculty member. Enrolment requires written permission from a faculty supervisor and Undergraduate Coordinator; early discussion with a likely supervisor is encouraged. Enrolment may be completed at any time up to September; open to students in a Specialist or Major Program sponsored by the Department of Geography.
Prerequisite: 10 credits

**GGR492H1 Senior Practicum**

Students design and implement an independent applied geography/ planning project in consultation with an NGO or government organization, who will act as their "client." Enrolment requires written permission from a staff supervisor and Undergraduate Coordinator. Only open to students who are enrolled in a Specialist or Major program sponsored by the Department of Geography.

**GGR498H1 Independent Research I**

An independent research extension to one of the courses already completed in Physical Geography. Enrolment requires written permission from a faculty supervisor and Undergraduate Coordinator. Only open to students who have completed 10 credits and who are enrolled in a Specialist or Major program sponsored by the Department of Geography.
This is a Science course

**GGR499H1 Independent Research II**

An independent research extension to one of the courses already completed in a social science or humanities branch of Geography. Enrolment requires written permission from a faculty supervisor and Undergraduate Coordinator. Only open to students who have completed 10 credits and who are enrolled in a Specialist or Major program sponsored by the Department of Geography.
This is a Social Science or Humanities course

## Faculty

### University Professor Emeritus
A.J. Naldrett, MA, M Sc, Ph D, FRSC

### Professors Emeriti
G.M. Anderson, B Eng, MA Sc, Ph D
J.J. Fawcett, B Sc, Ph D
J. Gittins, M Sc, Ph D, Sc D (U)
A.M. Goodwin, M Sc, Ph D, FRSC
D.H. Gorman, B Sc, Ph D
G. Norris, MA, Ph D, FRSC (U)
P-Y. F. Robin, M Sc, Ph D (University of Toronto Mississauga)
J.C. Rucklidge, MA, Ph D
W.M. Schwerdtner, Dip Geol, Dr Rer Nat
S.D. Scott, Ph D, FRSC
J.C. Van Loon, B Sc, Ph D
J.A. Westgate, B Sc, Ph D (S)

### Professor and Chair of the Department
A.Cruden, B Sc, PhD

### Associate Professor and Associate Chair (Graduate Studies)
R. Pysklywec, M Sc, Ph D

### Associate Professor and Associate Chair (Undergraduate Studies)
J.E. Mungall, M Sc, Ph D

### Professors
R.C. Bailey, B Sc, Ph D
N. Eyles, M Sc, Ph D (UTS)
F.G. Ferris, B Sc, Ph D
H.C. Halls, M Sc, PhD (University of Toronto Mississauga)
K.W.F. Howard, M Sc, Ph D (UTS)
A.D. Miall, B Sc, Ph D, D Sc, FRSC
B. Sherwood Lollar, BA, Ph D, FRSC
E.T.C. Spooner, MA, Ph D (U)
P.H. von Bitter, MA, Ph D

### Associate Professors
J. Brenan, B Sc, Ph D
D. Davis, M.Sc, Ph D
M.P. Gorton, B Sc, Ph D
M.A. Hamilton, M Sc, Ph D
G.S. Henderson, M Sc, Ph D
D.J. Schulze, M Sc, Ph D (University of Toronto Mississauga)

### Assistant Professors
B.A. Bergquist, B Sc, Ph D
J. Bollmann, Dip Geol, Ph D
R. Ghent, M Sc, Ph D
J. Halfar, Dip Geol, Ph D (University of Toronto Mississauga)
G. Srinivasan, M Sc, Ph D
U. Wortmann, Dip Geol, Dr Rer Nat

### Lecturer
C.G. Bank, M Sc, Ph D

Geology means "Study of the Earth." This covers everything from the origin of the Earth and its position in the Solar System, to the physical, chemical and biological processes which have brought the Earth through its 4.5 billion year history to the present time, when society itself can be seen as an agent of geological change. Besides the fundamental studies of rocks, minerals and fossils, Geology is concerned with the exploration and responsible recovery of vital resources such as metalliferous ores, coal, petroleum, natural gas, industrial minerals and groundwater. An understanding of the way the Earth works is important to achieve effective protection of the environment. Hence, geologists are widely employed in problems of urban development, water and soil pollution, waste disposal, earthquake and volcanic risk assessment, public policy and resource management. Under the Professional Geoscientists Act of 2000, individuals practising Geoscience in Ontario require education equivalent to the one of the Specialist Programs listed below or a P.Eng.

Four Specialist Programs are offered: Geology, Environmental Geosciences, Geology and Physics, and Chemistry and Geology. Major and Minor programs are offered in Geology as well as a Major program in the Environmental Geosciences. Students are encouraged to discuss their plans on program and course selection with the Associate Chair (Undergraduate Studies) or Program Supervisor. Students wishing to enter a Geology Specialist program should have taken the following courses in Grade 12: English ENG4U, Chemistry SCH4U, Physics SPH4U, and Functions MCB4U or equivalent.

The Professional Experience Year (PEY) program (see Student Services and Resources in this Calendar) is available to eligible students after their third year of study. The PEY program is an optional 16-month work term which provides industrial experience; its length gives students the opportunity to enjoy the rewarding experience of initiating and completing a major project.

More information about undergraduate studies in Geology is contained in a booklet which is available from the departmental office (ESC 1066). Additional courses with geological content are listed in the Calendar of the Faculty of Applied Science and Engineering.

Undergraduate Coordinator:
James Mungall (416-978-2975) email: mungall@geology.utoronto.ca

Enquiries:
Department of Geology, Earth Sciences Centre (416-978-3022)

## Geology Programs

The introductory 100-level course GLG102H1 is strongly recommended for enrolment in all programs in the Department of Geology. No minimum GPA is required.

### Geology (Science program)

Consult the Undergraduate Coordinator, Department of Geology, Earth Sciences Centre

**Specialist program:**
(14 full courses or their equivalent)

First Year:
required: CHM 151Y1/(138H1, 139H1); MAT 135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1);
recommended: BIO 150Y1 and GLG102H1
Second Year:

GLG 202HI; GLG204HI; GLG 206HI, GLG207HI, GLG216HI, GLG217HI; MAT 223HI
recommended: STA220HI
Third Year:
GLG 318HI, 340HI, 345HI, 351HI, 360HI; ENV 315HI
Fourth Year
1. GLG 445HI, GLG470YI
2. 3.0 full 400-series GLG or JGP courses

**Major program:**
(8 full courses or their equivalent)

First Year:
required: CHM 151YI/(138HI, 139HI); MAT 135YI/137YI; PHY (131HI, 132HI)/(151HI, 152HI)
recommended: BIO 150YI and GLG102HI
Second Year:
GLG 206HI, 207HI, 216HI, 217HI
Higher Years:
1. GLG 340HI
2. 2.5 courses from 300/400-series GLG courses/ENV 315H1/ JGP 438H1

**Minor program:**
(4 full courses or their equivalent)

Four full course equivalents of which one full course or equivalent is at the 300/400-level

First and Second Years:
Two full course equivalents from 100-series or 200-series GLG courses includind no more than one full course equivalent at the 100 level; GLG102 is recommended; one full course equivalent of 100-series CHM, BIO, or PHY courses
Third Year:
One full course equivalent from 300/400-series GLG courses/ ENV 315HI/JGP 438HI

**NOTE:**
Some GLG courses have CHM/MAT/PHY prerequisites

**Environmental Geosciences - See Centre for Environment**

**Geology and Chemistry - see Chemistry**

**Geology and Physics (Science program)**

Consult Departments of Geology and Physics

**Specialist program:**
(14 full courses or their equivalent with at least one course at the 400-level)

First Year:
CHM 151YI; MAT 137YI; PHY (151HI, 152HI); GLG102HI is recommended
Second Year:
GLG 206HI, 207HI, 216HI, 217HI; MAT 237YI, 244HI; PHY 251HI, 255HI
Third Year:
APM 346HI; GLG 345HI; PHY 225HI, 308HI, 351HI, 352HI
Fourth Year:
1. GLG 340HI
2. 1.5 300/400-series GLG courses
3. 1.5 300/400-series PHY courses

**Note:**
1. Students are encouraged to select courses on the basis of a coherent theme such as Exploration Geology and Geophysics, Global Tectonics, or Environmental Geodynamics.
2. Students are required to register with the Departments and have their programs approved.

## Geology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all GLG courses are classified as SCIENCE courses.

**SCI199HI First Year Seminar [26S]**

**SCI199YI First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**GLG102HI Earth Science [26L, 26P]**
Introduction to the functioning of the Earth as a chemical and physical system. Topics include formation of the Earth from the solar nebula, radioactive decay and age dating, meteorite impacts, melting and crystallization of rocks, erosion and sedimentation, the carbon cycle and its effects on climate, and the transport and remediation of pollutants in the environment.
Prerequisites: Grade 12 Chemistry SCH4U, Physics SPH4U, and Functions MCB4U or equivalent.

**GLG103HI Geology in Public Issues [26L]**
Geologic hazards: earthquakes, volcanoes, landslides, tsunamis. The distribution and politics of natural resources, including petroleum and ore deposits. Nuclear power and nuclear waste disposal. Global change: the geologic record of hot and cold climates, and how the earth survives.
GLG103H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science.

**GLG105HI Evolution of the Earth: Controversy over the Last 2300 Years [26L]**
The evolution of ideas about the origin and development of the earth from the Athenians to the 20th Century. With attention on whether the earth has an infinite or a finite life; on the evolution and disappearance of species; on the origin of oceans, continents and mountains; on the forces that have shaped the earth's surface; and on the courage of scientists in confronting the religious and political views of their time.
GLG105H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science students.

**GLG110HI Introductory Geology [26L]**
The nature and evolution of the Earth; plate tectonics; rocks and minerals; volcanism; geological time; fossils; geology of Ontario; environmental issues.
GLG110H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science students

**GLG130HI Exploration of the Solar System [26L]**
Scientific findings of the solar system exploration program and their application to the origin of the earth and solar system; space resources; search for life on other planets.

Prerequisite: Grade 12 U Chemistry or Physics

**GLG202HI Introductory Geochemistry [26L, 39P]**
An introduction to thermodynamics, phase diagrams and solution chemistry, with application to geological and environmental processes.
Prerequisite: CHM151Y1/(138H1, 139H1); MAT 135Y1/137Y1

**GLG204HI Quantitative Methods in Geology [26L, 39P]**
An introduction to quantitative approaches to geological problems: use of scalars, vectors and tensors in stress and strain analysis, statistical treatment of geological datasets, heat and mass transfer in earth materials.
Prerequisite: MAT135Y1/137Y1; MAT223H1; PHY (131HI, 132HI)/(151HI, 152HI)

**GLG205HI Confronting Global Change [26L, 8T]**
The emergence of society as a major geological force is considered in terms of the evolving debate about the consequences of human activity for the habitability of our planet. Major issues such as climate change, environmental pollution, and depletion of natural resources are examined.
GLG205H1 is primarily intended as a science Distribution Requirement course for Humanities and Social Science students

**GLG206HI Materials of the Earth [26L, 39P]**
An overview of the structural, chemical and optical properties of minerals. Laboratories on the identification of minerals in hand specimen and thin section. A mandatory 2 day field trip in late September.
Prerequisite: CHM (138H1, 139H1)/151Y1 is recommended

**GLG207HI Rock-forming Processes [26L, 39P]**
Origin and classification of igneous, sedimentary and metamorphic rocks and their associated ore deposits. Emphasis is placed on formation of rock types in the context of plate tectonic theory, and the practical aspects of rock identification in hand sample and thin section.
Prerequisite: GLG206H1

**GLG216HI Dynamic Geology [26L, 39P]**
A survey of principal physical, biological and chemical processes shaping the Earth. Laboratories will explore these processes in more detail through a series of problem sets.
Prerequisite: CHM (138HI/139HI)/151YI is recommended.

**GLG217HI Earth Evolution [26L, 39P]**
An introduction to the evolution of the biosphere from the earliest stabilization of the Earth's crust. Patterns of evolution and extinction are related to physico-chemical and biologically-mediated changes at the Earth's surface. Laboratories cover major groups of invertebrate fossils, microfossils, their classification and living analogues.
Prerequisite: BIO 150Y1 is recommended

**ENV234YI Environmental Biology**
See "Centre for Environment"

**GLG299YI Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**ENV315HI Chemical Analysis of Environmental Samples**
See "Centre for Environment"

**GLG318HI Igneous and Metamorphic Processes [26L, 39P]**
An overview of the nature and origin of igneous and metamorphic rocks, with particular emphasis on the interpretation of textures and mineral assemblages as they reflect conditions of rock formation. Laboratory exercises familiarise students with the most common igneous and metamorphic rock types, and provide practical examples of the theoretical principles discussed in lectures. This course also has a mandatory weekend field trip to view igneous and metamorphic rocks and structures. The venue for the trip alternates yearly between Bancroft and the Montreal area.
Prerequisite: GLG 202HI, 206HI, 207HI

**GLG319HI Metamorphic Processes [26L, 39P]**
Descriptive petrography and classification of metamorphic rocks; metamorphic processes and evolution of metamorphic rocks; interpretation of metamorphic rocks.
Prerequisite: GLG 202HI, 206HI, 207HI

**GLG340HI Field Course I: White Fish Falls Manitoulin Island [TBA]**
A ten-day field course in mid-May or late August. Students are introduced to field geology and to basic field measurement, mapping and documentation techniques in the Espanola - Manitoulin Island area, west of Sudbury. Students are responsible for the cost of board and lodging and transport to and from the field area.
This is a summer session course and students must also register with the Department in the preceding term
Prerequisite: GLG207HI, 216HI, 217HI or permission of instructor

**GLG345HI Structural Geology [26L, 39P]**
The development of geological structures at a variety of scales is examined using the concepts of stress, strain, material behaviour and tectonic setting. Laboratory work focuses on modern methods of structural analysis and their applications in geotechnical engineering and economic geology.
Prerequisite: GLG216HI or MIN 185HI

**GLG351HI Geochemical and Biological Regulation of Aqueous Systems [26L, 26P]**
An introduction to aqueous environmental geochemistry emphasising the importance of chemical equilibria, mass transport, and microbiological activity in regulating the chemical composition of natural and contaminated systems.
Prerequisite: CHM (138HI, 139HI)/151YI; and any 2nd year science course. GLG 202HI is recommended.

**GLG360HI Sedimentary Geology [26L, 39P]**
An introduction to the methods for studying sedimentary rocks in surface and subsurface. Petrographic description and classification of sedimentary rocks are dealt with in lectures and laboratory exercises, followed by a treatment of the principles of stratigraphic documentation and correlation, facies-analysis methods, and a brief description of depositional systems.
Prerequisite: GLG207HI, 216HI/MIN 185HI

**GLG371HI Directed Studies**

**GLG372YI Directed Studies**
An individual study program chosen by the student with the advice of, and under the supervision of, a staff member. Such work may involve obtaining data in the field or lab and analysing it, an interdisciplinary research project, and supervised readings.

Prerequisite: enrolment in a Geology Major or Specialist Program of Study; completion of at least two full course equivalents of 200-series GLG courses.

**GLG398H0 Independent Experiential Study Project**

**GLG399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**GLG423HI Mineralogy [39L]**
Crystal chemistry of the major rock forming minerals. The course covers the underlying concepts behind the behaviour of minerals as solid-state materials including: Structure and bonding of minerals, chemical substitutions and solid-state transformations, high temperature and pressure behaviour, chemical weathering and kinetics.
Prerequisite: GLG206HI

**GLG430HI Basin Analysis [39L, 13P]**
Architecture and evolution of sedimentary basins in relation to plate-tectonic setting and crustal properties. Sequence stratigraphy: sequence models and sequence forcing mechanisms tectonism, eustasy, climate change. The global-cycle-chart controversy. World-wide review of basins in the context of plate tectonics.
Prerequisite: GLG360HI

**GLG436HI Paleoecological Assessment of Environmental Change [26L, 39P]**
The use of proxy data (terrestial and aquatic microfossils) to infer past environmental conditions. The nature and extent of Quaternary environmental change is considered in the context of assessing current issues such as acidification, metal pollution, eutrophication and global climate change. Paleoenvironmental techniques are applied in the laboratory.
Prerequisite: A 200-level course from one of BIO, GGR, GLG
Recommended preparation: BIO468HI/469YI/GLG217HI

**JGP438HI Shallow Crust Geophysics [26L, 39P]**
An introduction to the geophysical exploration of the subsurface. Topics include gravity, seismic, magnetic, electrical and electromagnetic surveying and their application in prospecting, hydrogeology, and environmental assessments.
Exclusion: PHY496HI
Prerequisite: GLG345HI or permission of instructor

**GLG440HI Advanced Petrology [26L, 39P]**
Integrated field, experimental and theoretical approaches to understanding the petrological diversity of igneous and metamorphic rocks. Topics include development of thermobarometers for igneous and metamorphic rocks, the importance of oxygen fugacity in petrogenesis, melting/solidification and metamorphism and igneous activity in the context of global tectonics.
Prerequisite: GLG318H1

**GLG441HI Remote Sensing of Earth and the Terrestrial Planets [26L, 39P]**
Remote sensing of Earth and terrestrial planets; introduces theory and principles of optical and radar remote sensing. Applications to new planetary data, including those from Earth, Mars, and the Moon, are emphasized. Practical components of the course involve GIS applications for the synthesis and analysis of multiple datasets.
Prerequisite: At least two full course equivalents from any 200-series Science courses.

**GLG442HI Mineral Deposits [26L, 39P]**
Geology and geochemistry of ore deposits. Origin and interpretation; systematic ore mineralogy, in hand specimen and reflected light microscopy.
Prerequisite: GLG 207HI

**GLG443HI Ore Genesis and Exploration Geochemistry [26L, 39P]**
Genesis of ore deposits. The basic tools for studying ore genesis such as stable isotopes, fluid inclusions and sulfide mineralogy and their applications to selected types of ores.
Prerequisite: GLG 442HI

**GLG445HI Field Course II: Benny Belt [TBA]**
Advanced geological mapping project in a challenging field environment. Students learn to compile existing geoscience data, create a geological map and prepare a professional final report on their activities and findings. Students are responsible for the costs of board, lodging and transportation for a 14-day field trip.
This is a summer session course and students must also register with the Department during the preceding term.
Prerequisite: GLG207HI, GLG340HI/MIN240F, GLG 345HI or permission of instructor

**GLG448HI Field Course III: Chalk River [TBA]**
A two-week course in late summer designed to familiarize students in a variety of hydrogeological and biogeochemical field techniques; based at Atomic Energy Canada Laboratories, Chalk River, and includes a mixture of lecture, laboratory and field exercises. Students are responsible for the cost of board and lodging and transport to and from the field area.
This is a summer session course and students must also register with the Department during the preceding term.
Prerequisite: GLG351H1 or permission of instructor

**GLG450HI Contaminant Fate and Transport in Subsurface Environments [26L, 26P]**
Drawing primarily on examples from hydrogeology, this course explores physical, chemical and isotopic constraints on contaminant source transport and attenuation
Prerequisite: GLG351HI or permission of instructor

**GLG465HI Geodynamics [26L, 39P]**
Exploration of physical Earth processes and their relationship to large-scale geological phenomena. Mantle convection as plate tectonic engine; intraplate/plate boundary lithospheric deformation including orogenesis and crustal subsidence. Focus on reconciling geodynamic theory/modelling with geological/geophysical observations.
Prerequisite: GLG345H1 or permission of instructor

**GLG470YI Research Project [TBA]**
Laboratory research emphasizing methods and experimental techniques applicable to geology. Students must obtain the consent of an instructor and register with the Undergraduate Coordinator before enrolling and are urged to do so toward the end of their Third Year. Students are required to give an oral presentation of research results to an open meeting of the Department.
Exclusion: GLG471HI

Prerequisite: Completion of the required 300-level courses in a specialist program involving Geology and permission of the Department

**GLG471HI Research Project [TBA]**
Laboratory research emphasizing methods and experimental techniques applicable to geology. Students must obtain the consent of an instructor and register with the Undergraduate Coordinator before enrolling and are urged to do so toward the end of their Third Year. Students are required to give an oral presentation of research results to an open meeting of the Department.
Exclusion: GLG470YI
Prerequisite: Completion of the required 300-level courses in a specialist program involving Geology and permission of the Department

# German

## Faculty

### University Professor Emeritus
H. Eichner, BA, Ph D, LL D, FRSC

### Professors Emeriti
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H.W. Seliger, M.A. Ph D ((V)
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### Associate Professor and Associate Chair for Graduate Studies
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### Full Professors
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J. Noyes, Ph D

### Associate Professors
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### Assistant Professors
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M. Stock, Dr phil

### DAAD Visiting Associate Professor
S. Haas, Dr phil habil

### Senior Lecturer (retired)
U, Sherman, Ph D

German-speaking countries enjoy a long tradition at the cultural and political core of Europe. During the last two hundred years their importance has steadily increased, and with the recent developments in eastern Europe their influence seems certain to expand even more.

The importance of the German language has grown correspondingly: it is the second foreign language after English in the countries of central and Eastern Europe, and its use is spreading within the European Community. Learning German opens the door to many fields of intellectual, technical and politico-economic endeavor. German scholars have been leaders in philosophy, the sciences, history, archaeology, sociology and political science. German literature is equally distinguished: writers like Goethe, Kafka, Rilke, Brecht, Mann, Wolf, Grass, Jelinek, etc., have dealt with the widest possible range of human problems and concerns, and have been recognized worldwide.

The Department of Germanic Languages and Literatures offers courses on literature from the Middle Ages to the present, so that the student may acquire an overview of this significant element of German life and culture. We offer language courses from beginning and intermediate to advanced levels, with practice in reading, writing, comprehending and speaking German, as well as stylistics, linguistics, and the specialized vocabulary and concepts of business. Language and literature instruction is integrated as far as possible, with the aim of teaching students advanced critical literacy in German. The department offers a minor in Yiddish, with instruction offered from beginning and intermediate to advanced levels. German combines well with other modern languages and literatures, and double-majors are encouraged. Students in a variety of programs, such as Cinema Studies, European Studies, Literary Studies, Drama, and others, will benefit from courses in German language, literature and culture.

The Department supports opportunities for students to study and work in Germany, by encouraging participation in programs established by the German government, by Canadian universities, and by our own Arts and Science Faculty's "Study Elsewhere Program." One of these is the exchange program under which Toronto students can spend the academic year at the Humboldt University in Berlin.

A knowledge of German is a virtual necessity for specialists in many disciplines; it is also very useful in certain career areas (e.g., the foreign service, interpretation and translation, librarianship, business and commerce, music, tourism, and of course teaching). The successful completion of a four-year program, including seven approved courses in German, may entitle the student to enter the M.A. or Ph.D. program in the Graduate Division of the Department.

Students entering with some previous knowledge of German but without an OAC or equivalent qualification may be asked to write an initial assessment test and will then be advised to take courses at the appropriate level. Students who have taken German in high school to OAC or equivalent level will normally begin with GER200Y1.

Information on studies in German Language and/or Literature can be obtained from the Associate Chair for Undergraduate Studies.

Enquiries: Department of Germanic Languages and Literatures, 50 St. Joseph Street, Room 322 (416-926-2324).

E-mail: german@chass.utoronto.ca

Web site: www.chass.utoronto.ca/german

## German Programs

### German Studies (Arts program)

Enrolment in the Specialist and Major programs is open to students who have successfully completed four courses and who have the required competence in German. Students without OAC German or equivalent should arrange their courses in consultation with the Department. Students who have any prior experience with German and are taking any GER language course for the first time should contact the Department for details on placement tests.

**Specialist program:**
(10 full courses or their equivalent)

The Specialist Program requires that at least four of the ten courses must be at the 300+ level and a minimum one full course at the 400+ level.

1. GER100Y1, 150H1
2. GER200Y1, 205H1
3. GER300Y1, 305H1, 310H1
4. GER400H1
5 The remainder of the courses must be chosen from: GER courses at the 200+ level. Of these courses not more than 2 full courses may be taken in English. Permission may be granted to count cognate courses from other departments.

**Major program:**
(7 full courses or their equivalent)

The Major Program requires that at least three of the seven courses must be at the 300+ level.

1. GER100Y1, 150H1
2. GER200Y1, 205H1
3. GER300Y1, 305H1, 310H1
4. The remainder of the courses must be chosen from GER courses at the 200+ level. Permission may be granted to count cognate courses from other departments. No more than 1.5 full courses may be taken in English.

**Minor program:**
(4 full courses or their equivalent)

Four GER full course equivalents, which must be approved by the Department before enrolment in the Second Year. One of these courses must be a 300-level course. No more than 0.5 full courses may be taken in English.

### Business German (Arts program)

**Minor Program:**
(4 full courses or their equivalent)

Four GER full course equivalents, including GER370H1 and GER470H1. The remainder of the four courses or equivalent must have a GER designator.

### German and Linguistics (Arts program)

**Specialist Program**
This specialist program consists of 13 or 14 courses in linguistics and German

**Linguistics**
For the linguistics requirement, see "Linguistics and Languages Other than English.

**German:**
(6 full courses or their equivalent)

1. GER100Y1
2. GER200Y1
3. GER300Y1
4. GER400 H1
5. The remainder of the six courses must have a GER designator.

### Faculty of Arts & Science Language Citation

The Department of German participates in the Faculty of Arts and Science's Language Citation initiative for German. The study of German is a demanding and intellectually rewarding educational experience, providing students with excellent resources for understanding the culture of the German speaking world. German is now the second foreign language after English in the countries of central and Eastern Europe, and its use is spreading within the European Community. Learning German opens the door to many intellectual, technical, political, and economic fields. Successful study of German demonstrates intelligence, discipline, analytical sophistication, and an excellent memory. The study of any foreign language provides invaluable insights into the varieties of human culture and expression.

The Language Citation recognizes a significant level of achievement in language study with a high level of academic success. The Citation in German is available to students who complete GER100Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in GER200Y1 and GER300Y1.

Students should note that, as explained on page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

### German - See also Modern Languages and Literatures; Linguistics and Languages

### Al and Malke Green Yiddish Program (Arts Program)

**Minor program:**
(4 full courses or their equivalent)

1. GER260Y1
2. GER360H1
3. GER361H1/362H1/363Y/364H1
4. GER462H1
5. The remaining courses should be taken from: GER490H1/490Y1, ENG256Y1, GER100Y1, HIS208Y1/433H1, SLA202H1 or other approved cognate courses.

## German Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all GER courses are classified as HUMANITIES courses.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**Notes**
Students with German-speaking background are expected to consult the Department about their programs. The Department reserves the right to place students in the language course appropriate to their level of language skill.

Reading lists for the various courses are available from the instructor.

Students intending to specialize in German may also consult the Calendar of the University of Toronto Mississauga for additional course offerings which may be counted for specialization.

**GER100Y1 Introduction to German I [104P]**
An intensive language course for students with no previous knowledge of German. Practice in comprehension, reading, writing and speaking. This course can be counted towards all programs in German.
Exclusion: OAC German or equivalent

**GER101H1 Introduction to German [52P]**
An intensive language course for students with some prior knowledge of German but not quite OAC level. This course is equivalent to the Spring Term of GER100Y1.
Prerequisite: Permission of Department

**GER150H1 Introduction to German Culture [39S ]**
A survey course which introduces students to German social, cultural, and intellectual history. This course is taught in English and is open to all students.
Exclusion: GER150Y1

**GER200Y1 Introductory German II [78P, 26T]**
Continuation of work done in GER100Y1/101H1. Further expansion of basic grammar and vocabulary, practice in comprehension, translation, composition, and conversation.
Exclusion: GER200H1/201H1; not open to fluent or nearly fluent speakers of German
Prerequisite: GER100Y1/101H1, OAC German or equivalent, or permission of the department.

**GER204H1 German Literature in Translation [39S]**
An overview of some key works in German literature. This course serves as an introduction to German literature, and is suited for students with little or no prior knowledge of the German language.
Exclusion: GER204Y1

**GER205H1 German Literature I [39S]**
An introduction to the study of German literary texts in the original German. This course is required for majors and specialists.
Exclusion: GER304H1
Prerequisite: GER100Y1, or permission of department

**GER232H1 German Drama in Translation [39S]**
Representative dramas of the 19th and 20th centuries by a variety of authors are analyzed in depth and the dramatic forms highlighted. When available, a film version of the drama will be discussed.

**GER260Y1 Elementary Yiddish [78P]**
Introduction to Yiddish language, literature, and culture, featuring intensive practice with a native speaker. The dialect taught is that of the text College Yiddish by Uriel Weinreich.

**GER299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**GER300Y1 Intermediate German [78P]**
German at the intermediate level: extension of vocabulary, specific problems of grammar, practice in translation, essay-writing, reading and conversation. The Department reserves the right to place students in the appropriate course in the series GER200Y1 and 300Y1.
Exclusion: GER300H1, 301H1
Prerequisite: GER200Y1/ or permission of the department

**GER305H1 German Literature II [26S]**
Building on the work of GER205H1, this course explores more complex literary texts in the original German. It thus provides a bridge to the other literature courses in the program. This course is required for majors and specialists.
Prerequisite: GER205H1, or permission of the department

**GER310H1 Topics in Contemporary German Culture [39S]**
Focus is on contemporary German culture as expressed through a variety of media.
Prerequisite: GER300Y1 or equivalent as decided by the department

**GER324H1 Dreams- Desires - Delusions [26S]**
These central themes of Romanticism are examined through reading texts by authors of the era.
Prerequisite: GER205H1, or permission of the department

**GER325H1 19th Century German Literature [26S]**
An examination of German literary texts in their social and historical context.
Prerequisite: GER205H1, or permission of the department

**GER327H1 Deviance - Madness - Outsiders [26S]**
An analysis of the literary confrontation with deviance, madness, and the outsider.
Prerequisite: GER205H1, or permission of the department

**GER331H1 Kafka in Context [26S]**
Franz Kafka's texts situated within the literary, historical, and philosophical context of fin-de-siècle Prague and central Europe.
Prerequisite: GER205H1, or permission of the department

**GER334H1 Weimar Culture [26S]**
Expressionism, dada, Bauhaus, the 'Golden Age' in German film: an examination of literary and artistic movements in the era between World War I and Nazism.
Prerequisite: GER205H1, or permission of the department

**GER335H1 Writing Memory: Post 1945 [26S]**
An examination of post-World War II German literature and culture from "Zero Hour" through to contemporary debates about the Holocaust and its memorialization.
Prerequisite: GER205H1, or permission of the department

**GER351H1 Topics in German Cinema [26S, 26P]**
This introduction to German Cinema will provide a historical perspective on German film and the innovations of German filmmakers. Students will engage with film language and the analysis of film.
Prerequisite: permission of the department

**GER354Y0 Special Topics Summer Course in Berlin**
The topics depend on the instructor from year to year. Interested students can address questions to Woodsworth College. This course is taught in English and is open to students from other disciplines.
Prerequisite: Permission of the department
Recommended preparation: 100-level HIS/POL/GER course/ International or European Studies
This course is either a Humanities or Social Science course for Distribution Requirement purposes.

**GER355Y0 Summer Course in Berlin**
Students who wish to petition the department for credit toward a specialist or major program in German will be required to do part of their work in German.

**GER360H1 Intermediate Yiddish [39P]**
Review of basic grammar, stylistics, study of short literary texts. Conducted in Yiddish.
Exclusion: GER360Y1
Prerequisite: GER260Y1

**GER361H1 Yiddish Literature and Culture in Translation [26S]**
An overview of the major figures and tendencies in modern Yiddish literature and culture from the beginning of the 19th century to the present. Readings (in English) of modern Yiddish prose, poetry, drama and cinema.

**GER362H1 Soviet and Kosher: Jewish Culture in the Soviet Union [26S]**
Soviet Jewish culture between 1917 and 1941. Works in translation by Soviet Yiddish writers and poets, performances of central Yiddish theatres, and publications in central Yiddish periodicals will be analyzed as expressions of Soviet ideology and of ethnic identity.
Recommended preparation: HIS208Y1, 242H1, 250Y1, or with permission of the department

**GER363Y Cultural History of East European Community 1800-2000 [52S]**
This course examines how artistic works created by Jews portrayed and interpreted historical realities during that period. All artistic media will be examined.

**GER364H1 Introduction to the History of Yiddish Cinema [26L, 26P]**
This course traces the history of Yiddish cinema from its beginnings in 1911 to the end of the twentieth century. There will be 2 hours viewing time and 2 hours lectures per week. Cross-listed with the Cinema Studies Program Innis College.

**GER370H1 Business German I [39P]**
An introduction to the use of German in the professional/ business context. Emphasis on oral and written communication.
Prerequisite: GER200Y1 or permission of the department
Note: This course is required for the minor program in Business German.

**GER398H0 Independent Experiential Study Project**

**GER399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**GER371H0 Berlin Summer Internship**
A three week intensive internship in Berlin, focusing on work/ study and intercultural learning.
Prerequisites: good working knowledge of German and permission from the instructor.

**GER400Y1 Advanced German [39P]**
For students with a firm grasp of German. Review of advanced features of the language. Emphasis on both oral and written communication. Introduction to aspects of stylistics.
Exclusion: GER403H1, GER400H1
Prerequisite: GER300Y1 or permission of the department

**GER410H1 Topics in German Intellectual History [26S]**
An examination of key moments and themes in German intellectual history from the Enlightenment to the present.
Prerequisite: GER305H1, or permission of the department

**GER411H1 Introduction to Critical Theory [26S]**
Current debates in critical theory. This course will familiarize students with some of the key issues in critical theory today, and provide the background to these debates.
Prerequisite: Permission of the department

**GER412H1 Modernity and Its Discontents [26S]**
History of various concepts of modernity. This course traces theories of modernity in German literature, culture and theory.
Prerequisite: GER305H1, or permission of the department

**GER420H1 The Age of Goethe [26S]**
An examination of Goethe and his contemporaries as they respond—through drama, prose, and poetry—to the challenges of changing times.
Exclusion: GER420Y1, 460H1, 460Y1
Prerequisite: GER305H1, or permission of the department

**GER421H1 Gender and Identity [26S]**
With the representation of gender as its focus, this course will examine key works of modern German literature, where typical themes range from love, lust and treachery to masochism, cross-dressing and other forms of gender trouble.
Prerequisite: GER305H1, or permission of the department

**GER422H1 Focus On Berlin [26S]**
An exploration of the cultural development of Berlin through literature, from the Bismarckian era through the Weimar Republic and the Third Reich to the construction of the Berlin Wall and German unification.
Prerequisite: GER305H1, or permission of the department

**GER423H Different Voices [26S]**
Different topics and a variety of different authors; to be decided from year to year.
Prerequisite: GER305H1 or permission of the department

**GER 424H1 Writing the Self in Poetry [26S]**
An exploration of representations and articulations of the self in German poetry.
Prerequisite: GER 305H1 or permission of the department.

**GER426H1 Middle High German [39S]**
An introduction to the language, literature and civilization of Medieval Germany.
Prerequisite: GER300Y1/GER205H1 or permission of the department

**GER429H1 Topics in Medieval German Literature [26S]**
A study of specific topics in Medieval Literature.
Prerequisite: GER426H1 or permission of the department

**GER 430H1 Topics in German Literature and Culture [26S]**
An open course which explores very specific aspects of German literature and culture. It may change from year to year.
Prerequisite: GER 305H1 or permission of the department.

**GER462H1 Advanced Yiddish [26P]**
Advanced reading, writing, vocabulary and conversation. Study of poetry, short fiction, and memoir literature by leading authors. Selected advanced grammatical topics presented in conjunction with the study of texts. Conducted entirely in Yiddish.
Exclusion: GER461Y1
Prerequisite: GER360Y1 or permission of the department

**GER470H1 Business German II [39P ]**
Intensive development of the linguistic skills needed in the context of a German business environment.
Prerequisite: GER370H1/370Y1 or permission of the department.
Note: This course is required for the Business German minor program.

**GER490H1 Independent Study [26S]**
A reading and research project in Germanic literature or linguistics.
Prerequisite: Permission of Department to be obtained by May 1st for the Fall Term; by November 1st for the Spring Term.

**GER491Y1 Individual Studies [52S ]**
A scholarly project chosen by the student and supervised by a member of the staff. The form of the project and the manner of its execution are determined in consultation with the supervisor. All project proposals should be submitted by June 1, 2007.

## Global Health: see Life Sciences: Human Biology

## Greek: see Classics

## Faculty

### University Professor Emeritus

J.M. Beattie, MA, Ph D, FRSC (U)
J.M. Bliss, MA, Ph D, FRSC
J.M.S. Careless, OC, AM, Ph D, FRSC (V)

### Professors Emeriti

R.D. Accinelli, MA, Ph D
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W.J. Callahan, MA, Ph D, FRHS (V)
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M. Israel, MA, Ph D
J.L.H. Keep, BA, Ph D
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N.K. Wagle, MA, Ph D
P.C.T. White, MA, Ph D (T)
N.P. Zacour, MBE, MA, Ph D

### Associate Professor and Chair of the Department

L.J. Abray, MA, M Phil, Ph D

### Associate Professor and Associate Chair

A.D. Hood, MA, Ph D

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M. Wayne, MA, Ph D
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P. Wróbel, MA, Ph D

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C. Chin, MA, Ph D
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S. Penfold, MA, Ph D
N. Rothman, MA, Ph D (University of Toronto Scarborough)
A. Tambe, MS, Ph D
N. Tran, BA, Ph D
S. Varani, MA, Ph D (University of Toronto Mississauga)
D. Williams, MA, Ph D (University of Toronto Mississauga)
R. Wittmann, MA, Ph D (University of Toronto Mississauga)

History is both an art and a science. Historians study the past to understand it in its own terms, to gain insight into how our world has developed, and in order to influence the present. Historical inquiry is a response to the need for information and an understanding of the broad patterns of social, economic, cultural and political development.

The study of history is a crucial part of any liberal arts program. To understand our own society and the forces for change that are propelling it towards an uncertain future, it is necessary to understand something of the past. Every political institution, social value and economic custom is itself the result of past change and is simultaneously being transformed. It is as difficult for us to appreciate our own society without some sense of how different things were in the past as it is for individuals to understand themselves without the aid of personal and family memory.

The Department of History offers a wide range of courses that are tailored to meet the needs of students at every stage of their undergraduate careers. The 100-series courses are designed for students who are new to the University. They cover a wide chronological period and a wide geographical area. The 200-series courses are designed to introduce students to specific national or geographic histories over a broad period of time. Although they are designated as 200-series courses they are open to first-year students, have no prerequisites, and students without previous university experience should be able to complete them without difficulty. The 300-series courses, not open to first-year students, usually deal with more specialized subject-matter and frequently have prerequisites. The 400-series courses represent the culmination of an undergraduate's study of history and consist of seminars with a maximum enrolment of 14.

There are courses at most levels in American, Asian, African, and Latin American, British, Canadian, East European, Russian, European, International Relations and Medieval history. The fifty-five full-time professional historians who constitute this Department offer a greater variety of courses in history than can be found at any other university in Canada, and to study with any of them is certain to be an enriching experience.

More detailed information concerning the department, history programs and particular courses can be found on our website: www.chass.utoronto.ca/history. There is a History Students' Association in the Department and there is student participation in the Department meetings and major standing committees.

Undergraduate Administrator:
Ms. Louise Kermode, Room 2074, Sidney Smith Hall (416-978-3362)

Enquiries:
Sidney Smith Hall, 100 St. George Street, Room 2074 (416-978-3363)

## History Programs

Students may also use certain NMC history courses to fulfill Department of History program requirements (see History website).

### History (Arts program)

**Specialist program:**
(10 full courses or their equivalent)

Students may enrol in the Specialist Program in History after completing at least four courses including two HIS courses, one of which must be a 100-level HIS course. A mark of at least 73% in two HIS courses is required.

First Year:
A 100-series HIS course; in addition, students may take one 200-series HIS course
Higher Years:
Additional HIS courses to a total of ten*, meeting the following requirements:
1. At least five 300/400-series courses including one and a half 400-series HIS courses
2. One course from each of the following divisions*
   I. Asia/Africa/Middle East
   II. Canada/United States/Latin America/Caribbean
   III. Europe
3. One pre-modern course*

* The History website identifies pre-modern courses, HIS substitutes, and indicates courses satisfying the divisional requirements. Specialists may substitute history courses taught elsewhere in the faculty for up to three of the HIS courses. These substitutes may also be used to fulfill Items 1 through 3 of the specialist program.

**Major program:**
(7 full courses or their equivalent)

Students may enrol in the Major Program in History after having completed four full courses or their equivalent, including one 100-level HIS course; a minimum grade of 65% in this or another HIS course is required.
First Year:
A 100-series HIS course; in addition, students may take one 200-series HIS course
Higher Years:
Additional HIS courses to a total of seven*, meeting the following requirements:
1. At least two 300/400-series courses (in addition to item 1 above)
2. At least one course from each of the following divisions*:
   I. Asia/Africa/Middle East
   II. Canada/United States/Latin America/Caribbean
   III. Europe
3. One pre-modern course*

* The History website identifies pre-modern courses, HIS substitutes, and indicates courses satisfying the divisional requirements. Majors may substitute history courses taught elsewhere in the faculty for up to two of the HIS courses. These substitutes may also be used to fulfil items1 through 3 of the major program.

**Minor program:**
(4 full courses or their equivalent)

Students may enrol in the Minor Program in History after having completed four full courses or their equivalent.

First Year:
A 100-series HIS course. It is recommended that students complete this requirement prior to enrolling in the minor program.
Higher Years:
Additional HIS courses to a total of four*, including at least one 300/400-series course
* As many as two courses chosen from a list of history courses taught elsewhere in the faculty may be substituted for HIS courses for the HIS Minor program. Substitutes may also be used to satisfy the 300/400-series course requirement. A list of HIS substitutes is found on the History website.

## History and Political Science (Arts program)

### Specialist program:
(14 full courses or their equivalent)

Students may enrol in the Specialist Program in History and Political Science after completing at least four full courses or their equivalent and fulfilling the following requirements: two HIS courses, one of which must be a 100-level HIS course; grades of at least 73% in two HIS courses; one POL full course or the equivalent in half courses with a mark of at least 67%; a CGPA of at least 2.0. Students applying after Second Year must have completed at least eight full courses or their equivalent and fulfill the following requirements: two HIS courses, one of which must be a 100-level course, with marks of at least 73% and two POL full courses or the equivalent in half courses with a mark of at least 70% in each; and a CGPA of at least 2.3.

**History (7 courses):**
First Year:
A 100-series HIS course; in addition, students may take one 200-series HIS course
Higher Years:
Additional HIS courses* to a total of seven, meeting the following requirements:
1. Courses must come from at least two of the following divisions*:
   I. Asia/Africa/Middle East
   II. Canada/United States/Latin America/Caribbean
   III. Europe
2. One 300/400-series course, and one additional 400-series course
3. Two HIS courses must correspond in area and theme to two POL courses (list available in the History and Political Science Departments or Department Website)

* The History website identifies pre-modern courses, HIS substitutes, and indicates courses satisfying the divisional requirements. Specialists may substitute history courses taught elsewhere in the faculty for up to three of the HIS courses.

**Political Science**
(7 courses including at least one 300+ series course and one 400-series course)

NOTE:

At least one course in Canadian politics must be completed. The Canadian politics requirement will be satisfied by only POL 103Y1/214Y1.

First Year:
POL 103Y1/105Y1/108Y1
Higher Years:
1. POL 200Y1
2. Two full courses from the following: POL 201Y1/(203Y1/207Y1)/208Y1/214Y1/215Y1
3. Three additional POL courses

## History Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all HIS courses are classified as HUMANITIES courses (except HIS 103Y1, which has NO distribution requirement status).

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

### 100-Series Courses
Note:

All 100-series HIS courses are mutually exclusive. First-Year students may take 200-series courses.

**HIS103Y1 Statecraft and Strategy: An Introduction to the History of International Relations [52L, 26T]**
An analysis of the development of the international system, from 1648 to 1945, which highlights the role of war as an instrument of national policy, as a determinant of the system of states and as a threat to international society.
Exclusion: HIS104Y1, 106Y1, 107Y1, 109Y1
HIS 103Y1 does not count as a distribution requirement course in any category

**HIS104Y1 Ten Days that Shook the World [52L, 26T]**
The events since 1600, the consequences of which continue to resonate through primary documents, historical additional reconstructions, students are exposed to the processes by which the past is given meaning. Students are encouraged to be aware of the impact of events and be sensitive to the interconnectedness of the past.
Exclusion: HIS103Y1, 106Y1, 107Y1, 109Y1

**HIS106Y1 Natives, Settlers and Slaves: Colonizing the Americas, 1492-1804 [52L, 26T]**
North and South America and the Caribbean from Columbus to the American Revolution: aboriginal cultures, European

exploration, conquest and settlement, the enslavement of Africans, the ecological impact of colonization.
Exclusion: HIS103Y1, 104Y1, 107Y1, 109Y1

**HIS107Y1 Approaches to East Asian History [52L, 26T]**
This course draws on the history of China, Korea and Japan between 1600 to 1950 to explore historical issues of gender, nationalism, war and relations with the West.
Exclusion: EAS204Y1, HIS103Y1, 104Y1, 106Y1, 109Y1

**HIS109Y1 The Development of European Civilization, 1350-1945 [52L, 26T]**
The shape of traditional society; the forces at work on the social, political, economic, cultural and intellectual structures of Western Europe since the high Middle Ages: the structure of Traditional Society; the First Period of Challenges, 1350-1650; the Second Period of Challenges, 1650-1815; Confidence, Stability and Progress, 1815-1914; the Collapse of the Old Order and the Condition of Modern Europe, 1914-1945.
Exclusion: HIS103Y1, 104Y1, 106Y1, 107Y1

## 200-Series Courses

**HIS202H1 Gender, Race and Science [26L, 10T]**
This course examines scientific ideas about human difference from the 18th-century to the present. It explores how scientists and their critics portrayed the nature of race, sex difference, and masculinity/femininity in light of debates over nation, citizenship, colonialism, emancipation, knowledge and equality. The course will also introduce students to the uses of gender and race as analytic categories within the practice of history. While the course draws much of its subject matter from the history of the United States, it also explores selective issues in European and colonial contexts.

**HIS208Y1 History of the Jewish People [52L, 20T]**
An introduction to the history of the Jews throughout the world over the past two thousand years.
Recommended preparation: HIS103Y1/108Y1/109Y1

**HIS220Y1 The Shape of Medieval Society [52L, 20T]**
Economic, political, religious, and educational ideas and institutions of the Middle Ages, from the late Roman period to the fifteenth century.

**HIS241H1 Europe in the Nineteenth Century, 1815-1914 [26L, 12T]**
An introduction to modern European history from Napoleon to the outbreak of World War I. Important political, economic, social, and intellectual changes in France, Germany, Austria-Hungary, Italy, and other countries are discussed: revolution of 1848, Italian and German unification, racism and imperialism, the evolution of science, art, and culture, labour protest, and the coming of war.
Recommended preparation: HIS103Y1/109Y1

**HIS242H1 Europe in the 20th Century [26L, 12T]**
The evolution of European politics, culture, and society from 1914: the two world wars, Fascism and Nazism, the post-1945 reconstruction and the movement towards European integration.

**HIS243H1 Early Modern Europe, 1450-1648 [26L, 10T]**
The political, social, economic, and intellectual history of continental Europe. The Renaissance, the Reformation, Counter-reformation, growth of the territorial monarchies, the religious wars.

**HIS244H1 Early Modern Europe, 1648-1815 [26L, 10T]**
The political, social, economic, and intellectual history of continental Europe. Development of royal absolutism, social change and the crisis of the ancient regime, the Enlightenment, the French Revolution, the Napoleonic era.

**HIS245Y1 Women in European History [52L, 20T]**
An introductory survey tracing women's participation in the political, economic, intellectual, and social history of Europe from the High Middle Ages to the Twentieth Century.

**HIS250Y1 History of Russia, 860-1917 [52L, 20T]**
This course is an introductory survey that examines the political, social, and cultural developments that shaped the Russian empire from the settlement of Kiev in the 9th century to the collapse of the Romanov dynasty in 1917.

**HIS251Y1 History of East Central Europe [52L, 20T]**
The Polish, Czech, and Hungarian background; the Balkans in the late medieval and early modern periods. Renaissance, Reformation and Counter-reformation, decline and national awakening to the beginning of the 19th century. Partitioned Poland, nationalism in the 19th century; World War I, Peace Settlement, interwar years and the Communist period.

**HIS263Y1 Introduction to Canadian History [52L, 20T]**
An introductory survey of Canadian History since the 16th century with extra focus on major themes and problems.
Exclusion: HIS262Y1

**HIS271Y1 American History Since 1607 [52L, 20T]**
A survey of the economic, social, cultural, and political history of the United States from the colonial era to present times.

**HIS280Y1 History of China [52L, 20T]**
A broad overview of the history of China from earliest times to the present. The emphasis is on how the meaning of China and the Chinese people has changed through history.

**HIS281Y1 History of Modern Japan [52L, 20T]**
Political, military, social, economic, and intellectual history of Japan from beginning of Tokugawa period (1603) to the present. Emphasis on the long term modernization and democratization of Japan, and passage through imperialism and militarism to peace.
Exclusion: EAS223H1/223Y1/HIS281H1

**HIS282Y1 History of South Asia [52L, 20T]**
An introductory survey addressing major themes in the history of South Asia, examining South Asian political economy, social history, colonial power relations and the production of culture. Emphasis is on the period after 1750, particularly the study of colonialism, nationalism, and postcolonial citizenship and modernity.

**HIS283Y1 Southeast Asian Crossroads [52L, 20T]**
This course surveys the historical experiences of the states that constitute present-day Southeast Asia and examines how long term socio-economic trends affected the daily lives of Southeast Asians. Lectures introduce the major themes while weekly readings explore the major themes of the course: "state" structure; cultural commonalities; ethnic, class and gender relations; religious practice and trade.

**HIS291Y1 Latin America: The Colonial Period [52L, 20T]**
The evolution of Spanish and Portuguese America from pre-Columbian civilizations to the wars of independence.

**HIS292Y1 Latin America: The National Period [52L, 20T]**
A survey of Latin American history from the wars of independence to the present day.

**HIS294Y1 Caribbean History & Culture [52L, 22T]**
An exploration of changes in the structure of Caribbean society beginning in 1492, including European contact, the conquest of native peoples, the emergence of large plantations, the impact of slavery, patterns of resistance and revolt and the changes brought about by emancipation.

**HIS295Y1 Introduction to African History (formerly HIS295H1) [52L, 20T]**
An introduction to the methodological and epistemological issues of African history-that is to say, questions about how and what we know about the African past are examined. Particular attention is paid to the differences in academic understanding of African history and African perceptions of the past. Topics include theories of diffusion, the importance of oral sources, and the interpretation of myths.

**HIS296Y1 Black Freedom [52L, 20P]**
This course explores the profound contribution of people of African descent – from Olaudah Equaino to Angela Davis – to the history of the idea and practice of freedom in the West. Black writers and historical actors have been at the vanguard of re-conceiving, implementing, and realizing the Enlightenment project of freedom.
Exclusion: NEW296Y1

**HIS299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

## 300-Series Courses

Note:

First-year students are not permitted to enrol in 300-series HIS courses.

**HIS301Y1 Imperial Spain [52L]**
This course treats the political, social, and religious history of Spain and its empire ca.1450-1714, including the history of colonial Latin America.
Recommended preparation: HIS243H1

**HIS302H1 Material Culture in Victorian Britain (formerly HIS302Y1) [26L]**
An examination of the products of the first and second industrial revolutions in Victorian England. This course focuses on the cultural history of commercialization and consumerism.
Exclusion: HIS302H1
Recommended preparation: HIS239H1/339Y1

**HIS303H1 The Mediterranean, 600-1300: Crusade, Colonialism, Diaspora [39L]**
The course treats contact and conflict between Christians, Muslims, and Jews in the premodern Mediterranean world. Within the framework of broad political and economic developments, the course explores a range of topics, including holy war, slavery, religious polemics, colonialism, the commerce in goods and ideas, and ethnic relations.
Recommended preparation: HIS220 or NMC273 or some medieval history

**HIS 304H1 Topics in Middle East History [26L]**
An in-depth examination of Middle East historical issues. Content in any given year depends on instructor. See History Website for more details.

**JHP304Y1 Ukraine: Politics, Economy and Society (formerly JHP 204Y1) [52L]**
The history of Ukraine from earliest times to the present. Economic, political, and cultural movements; Kievan Rus', Polish-Lithuanian Commonwealth, Cossack state, national revival, twentieth century statehood, and unification. As this course is designed as an introductory course, the professor welcomes first- and second-year students to enroll, as well as upper-level students. (Given by the Departments of History and Political Science)
Exclusion: JHP204Y

**HIS305H1 Popular Culture and Politics in the Modern Caribbean [26L]**
This course examines the connections between popular culture and politics in the modern Caribbean. Aspects of popular culture such as sport, religion, and social constructions of gender will be discussed. The impact of post-war migration, race and racial nationalism and the upheavals of the 1960s on popular culture in the Caribbean will also be themes.
Prerequisite: HIS294Y1

**HIS306H1 Culture, Society and Gender in England, 1560-1730 (formerly HIS306Y1) [26L]**
Some of the main themes in English political, social, religious and intellectual history in the 17th century: the origins, character, and consequences of the English Civil War, the nature and effects of social change, and the changing role of religious forces in society.
Exclusion: HIS306Y1
Recommended preparation: HIS238H1

**HIS308H1 The Mediterranean, 1300-1700 [39L]**
This course continues with the themes treated in HIS303H1, specifically in the context of relations between the Ottoman empire and European states and the growing impact of the Atlantic world on the Mediterranean.
Exclusion: HIS303Y1
Prerequisite: HIS303H1
Recommended Preparation: HIS220Y1/HIS243H1/NMC273Y1

**HIS309H1 The European Reformations [39L]**
What happens when a culture changes its religious organization and beliefs? Social and intellectual upheavals beginning in fifteenth century Europe created the split between catholic and protestant Christians and reshaped the spiritual and political landscape of sixteenth century Europe. Issues covered include religion and politics, toleration, gender, popular piety, class.
Prerequisite: HIS 243H / VIC 240Y or permission of the instructor

**HIS311Y1 Introduction to Canadian International Relations [52L, 13T]**
Canadian international affairs in a broader context. Anglo-American as well as Canadian-American relations; the European background to questions such as the League of Nations, appeasement and rearmament, which directly affected Canada without this country being consulted.

Recommended preparation: A course in Canadian history or politics

**HIS312H1 Immigration to Canada [26L]**
The peopling of Canada by immigrant groups from the 1660s to the 1970s. Immigration and multiculturalism policies; migration and settlement; ethnic communities; relations with the host society.
Recommended preparation: HIS262Y1/263Y1

**HIS313H1 Canadian Labour and the Left (formerly HIS313Y1) [26L]**
Canadian labour history from political action to collective bargaining in the period from Confederation to the present.
Prerequisite: ECO244Y1/HIS262Y1/263Y1/WDW244H1/Y1
Exclusion: HIS 313Y1

**HIS314Y1 Quebec and French Canada [52L, 13T]**
A general survey tracing the political, social, and cultural development of a distinct society in Quebec and the rise of self-conscious French-speaking communities elsewhere in Canada.

**HIS315H1 Narratives of "Viet Nam" [26L]**
This course introduces students to the multiple ways in which the diverse populations inhabiting the geographic space of "Viet Nam" construct their histories. Perspectives from Chinese, Charn, ethnic minority and Vietnamese majority populations will be explored.

**HIS316H1 History of Advertising [39L]**
The rise of advertising as an economic, moral, and cultural force in the 19th and 20th centuries. Attention to advertising as a form of communication, the role of the mass media, stereotyping and the culture of consumption. Majority of course material deals with the experiences of the United States and Canada, focusing on the period after 1945.
Recommended preparation: HIS262Y1/263Y1/271Y1

**HIS317H1 Modern Germany 1914 to the Present (formerly HIS317Y1) [26L]**
A survey of modern German history in the twentieth century. Topics include World War I and the postwar settlement, the Weimar Republic, the National Socialist dictatorship, the Holocaust, the division of Germany, the Cold War, German reunification, Germany and the European Union, nationalism, political culture, war and revolution, religious and ethnic minorities and questions of history and memory.
Prerequisite: HIS241H1, 242H1
Exclusion: HIS317Y1

**HIS318Y1 Canadian Environmental History [52L]**
A survey of major themes in the history of change in the Canadian environment from the 15th century to the present which include exploration, resource exploitation, settlement, industrialism, conservation and modern ecology.
Prerequisite: Eight full courses or equivalent

**HIS319H1 Renaissance France and the Wars of Religion, 1483-1610 [26L]**
Considers the expansion of the French state at the close of the 100 Years War, cultural and social change during the Renaissance, religious change and the Protestant Reformation, the emergence of religious conflict and the Wars of Religion. A range of primary sources and historiographical perspectives will be considered.
Prerequisite: HIS243H1/309H1/388H1/443H1 or permission of instructor

**HIS320H1 Barbarian Invasions and the Fall of the Roman Empire [26L, 6T]**
Covers major events and themes for the period 300-600, including decline of Greco-Roman paganism, conversion to Christianity, individual barbarian groups (Ostrogoths, Visigoths, Huns, Burgundians, Vandals, Franks, Lombards), their culture and impact on empire, Justinian's reconquests.
Recommended Preparation: HIS220Y1

**HIS321H1 Dark Age Europe, 7th – 10th Centuries [26L, 6T]**
Surveys major events and figures for the period c. 600-1000, including: Pope Gregory the Great, the Morovingian Franks, Lombard Italy, Byzantine civilization, the rise of Islam, Charlemagne, the Carolingian Renaissance, the Vikings, Anglo-Saxon England to King Alfred, the Ottonians.
Exclusion: HIS320Y1
Recommended Preparation: Some ancient history, ancient Greek or Latin language, early Christianity, Celtic history, Old Irish and Old English languages.

**HIS322Y1 The High Middle Ages [52L, 13T]**
Chronological survey of the history of medieval Europe from 1100 to approximately 1450. The three main topics are: the formation of the modern states, the impact of urban development, and the evolution of spirituality.
Prerequisite: HIS220Y1

**HIS323H1 Rites of Passage and Daily Life in the Middle Ages (formerly HIS323Y1) [26L, 6T]**
Reflecting on the life cycle and rites of passage in the medieval period gives the opportunity to study the daily lives of peasants, nobles, monks, nuns, and burghers, and to observe from an interesting angle the differences between female and male life experiences.
Prerequisite: A course in medieval history such as HIS220Y1
Exclusion: HIS323Y1

**HIS324Y1 Science, Technology, and the Development of Modern Culture [52L]**
Explores the impact of scientific ideas and new technologies on the development of modern culture and on notions of progress since 1800. Topics include Romantic science, degeneration, new media, knowledge and power, and are explored through scientific and literary texts and diverse secondary sources.
Recommended preparation: Background in European history or history of science strongly recommended

**HIS325H1 18th Century Imperial Russia (formerly HIS325Y1) [26L]**
This course focuses on the history of eighteenth century Russia, tracing the development of its political institutions, social and economic structures and cultural values. Examining the reign of Peter I, the age of Empresses, and Catherine the Great, we see not only internal changes within the Russian Empire itself, but also its emergence as a European power.
Exclusion: HIS325Y1
Prerequisite: HIS250Y1/permission of instructor

**HIS326H1 Topics in Chinese History [26L]**
Selected topics on a specific period in Chinese history. Topics in any given year depend on the instructor.

**HIS327H1 America and the World to 1900 [26L]**
This course examines major ideas, events, and developments in American foreign policy before 1900. Included are relations with

Great Britain, independence, hemispheric issues, commercial and landed expansion, and the rise of imperialism.
Recommended preparation: HIS 271Y1

**HIS328Y1 Modern China since 1800 [52L]**
An examination of political, social and economic developments in Chinese history from 1800 to the present day. Main topics are the decline of the Imperial order and the challenge of Western imperialism; the Republican period; the rise of the Communist movement; the People's Republic of China.
Exclusion: JMC201Y1
Prerequisite: HIS280Y1/EAS102Y1
Recommended preparation: HIS380Y1

**HIS329H1 Globalization and History [26L]**
This course will explore ways in which "globalization" is a profoundly significant and deeply rooted historical process. Although emphasis will be placed on the 19th and 20th centuries, some of the economic, political, cultural, and technological forces shaping the past millennium will also be considered.
Recommended Preparation: HIS 103Y1

**HIS330H1 Germany from Frederick the Great to the First World War (formerly HIS317Y1) [26L]**
Topics include German reactions to the French Revolution, Napoleonic occupation, the Wars of Liberation, industrial expansion, the Revolutions of 1848, unification in 1871, Bismarck and Kaiser Wilhelm II, everyday life, gender relations, local and regional identities, workers' culture, avant-garde culture, nationalism, anti-Semitism, colonialism, and the Great War of 1914-18.
Prerequisite: EUR200Y1/HIS241H1
Exclusion: HIS317Y1

**HIS331H1 Modern Baltic History (formerly HIS331Y1) [26L]**
The history of the Baltic countries, Estonia, Latvia and Lithuania from 1900 to the present day, with emphasis on the emergence of independent Baltic states, World War II, communist era, the Baltic Revolution, the restoration of independence and European integration.
Recommended preparation: HIS250Y1/251Y1
Exclusion: HIS331Y1

**HIS332H1 Crime and Society in England, 1500-1800 (formerly HIS332Y1) [26L]**
The changing nature of crime and criminal justice in early-modern England; the emergence of modern forms of policing, trial and punishment.
Exclusion: HIS332Y1
Prerequisite: Successful completion of 8 full credits, including one full HIS credit
Recommended preparation: HIS238H1

**HIS333Y1 Revolution in 20th Century Latin America [52L]**
An examination of the impact of 20th-century Latin American revolutions on the lives of their participants.
Exclusion: HIS333H1
Prerequisite: GGR249H1/HIS292Y1/IAS200Y1/POL201Y1/305Y1

**HIS334Y1 19th and 20th Century Central Europe and the Great Powers [52L]**
The diplomatic, economic and military activities of Russia, Germany, Austria, France, Great Britain and the U.S. vis a vis Central Europe. Russian and German expansion, partitions of Poland, disintegration of the Ottoman Empire, the Napoleonic and World Wars, political systems created in Vienna, Versailles and Yalta, the Cold War and the disintegration of the Soviet outer empire.
Prerequisite: EUR200Y1/HIS251Y1/permission of the instructor

**HIS335H1 Soviet Cultural History [26L]**
This course explores Russian culture - art, architecture, film and literature - from 1917 to the post-Soviet present. Readings and screenings trace the relation between culture, history, and revolution from the Russian Avant-Garde and proletarian culture to socialist realism, and from Krushchev's thaw to examples of Soviet "postmodernism".
Prerequisite: HIS250Y1

**HIS336H1 Medieval Spain [39L]**
This course emphasizes the interaction of Christians, Muslims, and Jews, and the cultural and political distinctiveness of Castile and Aragon in the development of state, society, and culture in medieval Spain.

**HIS337H1 Culture, Politics and Society in 18th Century Britain (formerly HIS337Y1) [52L]**
Major themes in late seventeenth and eighteenth century British history with a thematic focus on intellectual, cultural and social developments. Topics include the English "urban renaissance", the birth of a consumer society, the Scottish Enlightenment and the early stages of the British industrialisation.
Exclusion: HIS337Y1
Recommended preparation: HIS109Y1, EUR200Y1, HIS238H1, 239H1

**HIS338H1 The Holocaust, to 1942 (formerly HIS338Y1/398Y1) [26L, 6T]**
German state policy towards the Jews in the context of racist ideology, bureaucratic structures, and varying conditions in German-occupied Europe. Second Term considers responses of Jews, European populations and governments, the Allies, churches, and political movements.
Exclusion: HIS398Y1/338Y1
Prerequisite: Completion of six undergraduate full-course equivalents
Recommended preparation: A course in modern European history

**HIS339Y1 English History in the 19th Century [52L]**
Major aspects of English history from the end of the 18th century to the death of Queen Victoria: the Industrial Revolution, the rise of parliamentary democracy, the role of social class, the development of modern cities, the emergence of the modern state, Victorian religion, the Victorian family, the role of aristocracy in an industrialized society.
Recommended preparation: EUR200Y1/HIS238H1, 239H1

**HIS340H1 A Survey of Australian History [26L]**
This course introduces students to some of the principal themes in the history of Australia since well before the British occupation in 1788. Topics covered include the dispossession and recent partial re-possession of land by the indigenous population, the consequences of its creation as a convict colony, the creation of the Labour Party and later political and social developments.
Prerequisite: one full-year HIS course or equivalent

**HIS341Y1 Enlightenment Europe, 1660-1789 [52L]**
The comparative intellectual, cultural and social history of western Europe with particular focus on France, England, Scotland and Germany. Examines the impact of Enlightenment ideas on European attitudes to race, gender, politics, economics and religion through the study of the press, the salons, voluntary bodies and consumer culture.
Recommended preparation: HIS109Y1/220Y1/238H1/243Y1/244Y1/245Y1/EUR200Y1

**HIS342H1 Pre-Petrine Russia: Russia Before 1700 [26L]**
This course examines modern Russia's political predecessors, their contacts with Byzantium, Western Europe, and the Mongol Empire, and resulting cultural, religious, and social changes.
Prerequisite: HIS250Y1

**HIS343Y1 History of Modern Espionage [52L]**
An introduction to the historical origins and evolution of modern intelligence services. Topics to be studied include: intelligence in wartime; technological change; intelligence failures; covert operations; counter-espionage; the future of spying. The impact of the popular culture, both in fiction and film is also examined.
Recommended preparation: HIS103Y1 or an equivalent introduction to modern international relations

**HIS344Y1 Conflict and Co-operation in the International System Since 1945 [52L]**
An examination of the conduct and consequences of international politics in an atomic/nuclear age when the stakes of the "Great Game" were not just the fates of states and nations, but the survival of humanity itself. The diplomatic, strategic and economic aspects of international relations will all receive appropriate elucidation.
Recommended preparation: EUR200Y1/HIS103Y1/241H1, 242H1

**HIS345H1 History and Film [26L, 13P]**
This course is designed to further students' knowledge of films' relationship to the events they depict and their undeniable power as representational systems to render history effectively. This will necessarily entail both close examination of the formal systems film rely upon and an understanding of the distinction between fictional and non-fictional forms in film.
Prerequisite: 2 full courses in history or permission of instructor
Recommended preparation: INI212Y1

**HIS347H1 History of Modern Chinese Foreign Relations [26L]**
The history of Chinese foreign relations from 1842 to the present day, with emphasis on the foreign relations of the People's Republic since 1949. Topics include: imperialism in China, Sino-Soviet relations; the Deng era rapprochement with the West; contemporary issues such as Hong Kong, Taiwan, regional security.
Prerequisite: EAS102Y1/HIS280Y1/JMC201Y1
Recommended preparation:HIS103Y1

**HIS348H1 Topics in Gender History [26L]**
An in-depth examination of issues in gender history. Content in any given year depends on instructor. See History website for more details.

**HIS349H1 The British Search for Identity: 1800 to the Present (formerly HIS239H1) [26L, 6T]**
An introduction to the history of modern England with emphasis on the search for identity with reference to the nation, the crown, class, gender, age, political parties, race and ethnicity.
Exclusion: HIS239H1

**HIS351Y1 History of Twentieth-Century Russia [52L]**
A survey of the history of Twentieth-Century Russia. The social, economic, and political development of Twentieth-Century Russia, with an emphasis on the Russian Revolution and Stalinism. Stress is placed on modern historiographical issues.
Recommended preparation: HIS250Y1/POL204Y1

**HIS352H1 Secularism and Strife: Modern Jewish Politics and Culture [26L]**
A survey of Jewish political life from c. 1880 to 1948, with emphasis on Zionism and origins of the state of Israel.
Exclusion: HIS356Y1
Recommended Preparation: one course in European, Middle Eastern or Jewish history

**HIS353Y1 Poland: A Crossroads of Europe [52L]**
Social and political history of Poland from the 10th to the 20th century. Analysis of the political history in a broader, central European context; consequences of Christianization of medieval Poland and the Polish-Lithuanian union; Sarmatian culture, Antemurale, Polish Messianism and Cordon sanitaire.
Prerequisite: HIS251Y1/permission of the instructor

**HIS354Y1 Men, Gender and Power in Europe from the Renaissance to the French Revolution(formerly HIS399H1, 399Y1) [52L]**
An investigation of how ideas of masculinity and gender roles shaped the exercise of private and public power in early modern Europe.
Exclusion: HIS399H1, 399Y1

**HIS355H1 Crime and Society in England Since 1800 [26L]**
Crime and criminal justice in England in the industrial age; the relationship of crime, society, and economy.
Prerequisite: Successful completion of 8 full credits, including one full HIS credit
Recommended preparation: HIS332H1 and a 200-series HIS course

**HIS356H1 Zionism and Israel (formerly HIS356Y1) [26L]**
Origins of Jewish nationalism in 19th-century Europe; creation of the Zionist political movement; varieties of Zionist ideology; Zionist diplomatic and state-building activity; conflict with the Palestinian Arabs; the establishment of the state and its development since 1948.
Exclusion: HIS356Y1
Recommended preparation: A course in modern European, Jewish or Middle Eastern history

**HIS357Y1 A Social History of Renaissance Europe (formerly HIS357H1) [52L]**
A social history of the 15th and 16th centuries set against the cultural and political background. Emphasis on changes in customs and living conditions resulting from economic, legal, intellectual, and religious developments of the period.

Recommended preparation: A course in Renaissance or Early Modern European history
Exclusion: HIS357H1

**HIS359H1 Regional Politics and Radical Movements in the 20th Century Caribbean [26L]**
The role of nationalism, race and ethnicity, class conflict and ideologies in the recent development of Caribbean societies; Europe's replacement by the United States as the dominant imperial power in the Caribbean; how this mixture of regional and international pressures has led to widely differing political systems and traditions.
Recommended preparation: HIS294Y1

**HIS360Y1 African Canadian History, 1606 - Present [52L]**
This course traces the earliest known arrival of people of African descent in Canada from the early seventeenth century to the time of their more recent postwar immigration trends. Using socio-historical and multidisciplinary approaches, setttlement, community and institutional building and survival will be examined within the framework of other Canadian historical developments.
Recommended preparation: HIS263Y1

**HIS361H1 The Holocaust, from 1942 [26L, 6T]**
Follows on HIS338H1. Themes include: resistance by Jews and non-Jews; local collaboration; the roles of European governments, the Allies, the churches, and other international organizations; the varieties of Jewish responses. We will also focus on postwar repercussions of the Holocaust in areas such as justice, memory and memorialization, popular culture and politics.
Exclusion: HIS338Y

**HIS362H1 The Hansa: The World of Merchants [26L]**
The history of the Hanseatic League in medieval Europe from the late 12th to the late 16th century, with emphasis on the organization of the German Hansa, maritime activities, Hanseatic trade, and daily life of the Hanseatic merchants in Western and Eastern Europe
Prerequisite: HIS220Y1 or permission of instructor

**HIS363H1 Dynamics of Gender in Canadian History [26L]**
A lecture course which deals thematically with gender issues in Canadian history (including familial roles, changing patterns of work and employment, and participation in the public sphere).
Prerequisite: HIS262Y1/263Y1

**HIS364H1 Studies in the History of Modern India [26L]**
Selected topics in the history of modern India: the cultural, political and economic impact of the British Raj; nationalism, communalism, regional differentiation; social structure and change, cultural values and problems of identity; party structure and political change.
Recommended preparation: HIS282Y1

**HIS365H1 History of the Great Lakes Region [26L, 6T]**
A survey of the Great Lakes Region as a "trans-national space" from fur trade to free trade. Attention is given to the political, social, economic, environmental, and cultural histories that affected the development of the region.
Prerequisite: HIS263Y1/271Y1

**HIS366Y1 Black Canadian Women's History [52L]**
This course examines, by highlighting select themes and topics, African Canadian women's history. Such themes and topics include culture, sexuality, slavery, migration, Black women's activism, the rise of a female voice through writing and publishing, spirituality, community building, nation building, identity, and employment strategies. I take the position that Black Canadian women's history is informed by the historical processes of the African Diaspora, and African American history.
Recommended preparation: HIS 263Y1/360Y1 or some background in Women's Studies

**HIS367H1 History of Images [26L, 13P]**
The apparatus, the character, and the significance of an increasing volume of images, in particular of the body, since 1800 in Europe and North America. Introduction to concerns of cultural history: power and knowledge; self and identity; gender and sexuality; class, age, and race; and the pursuit of pleasure.
Recommended preparation: A course in modern European or American history

**HIS368H1 British Government and Society, 1485-1660 (formerly HIS238H1) [26L, 6T]**
An introduction to the history of early modern England with reference to politics, religion and social structure.
Exclusion: HIS238H1

**HIS369H1 Aboriginal Peoples of the Great Lakes from 1500 (formerly HIS369Y1) [52L]**
Algonkian and Iroquoian history from the eve of European contact to the present in the Great Lakes region of today's Canada and the United States. Algonkian and Iroquoian societies in the 16th century, change over time, material culture, and inter-cultural relations among natives and between natives and Euroamericans.
Exclusion: HIS369Y1
Recommended preparation: HIS106Y1/262Y1/263Y1/271Y1

**HIS370H1 The Black Experience in the United States Since the Civil War [26L]**
A survey of the economic, social, political, and cultural history of black America from Reconstruction until recent times. Among the central issues dealt with are: segregation and disfranchisement; the Great Migration; the rise of the ghetto; the Civil Rights Movement; emergence of an "underclass."
Prerequisite: HIS271Y1

**HIS371H1 19th Century Imperial Russia (formerly HIS325Y1) [26L]**
This course focuses on the political, social, intellectual and cultural history of nineteenth and early twentieth century Russia. Major topics include the rise of a Russian intelligentsia, reform and counter-reform, the nationality question, modernization, the woman question, and revolutionary movements.
Prerequisite: HIS250Y1 or permission of the instructor
Exclusion: HIS325H1/Y1

**HIS374H1 American Consumerism - The Beginnings [26L, 6T]**
This course looks at the early origins of American consumerism. It begins with 17th-century England and the economic imperatives within the Atlantic World, then traces the changing attitudes of 18th-century Americans towards consumer goods,

fashion and style that led to the mass consumption of the 19th century.
Prerequisite: HIS271Y1
Recommended preparation: At least 6 courses completed

**HIS375H1 History of 20th Century American Popular Culture (formerly HIS375Y1) [39L]**
An examination of popular culture and its relationship to society during the first eighty years of the 20th century. By examining popular music, literature, radio, movies, sports, television, and other leisure activities, the course analyzes the manner by which groups such as blacks, ethnics, young people, and women used new means of communication to create a new popular culture in America.
Prerequisite: HIS271Y1
Exclusion: HIS375Y1

**HIS376H1 The United States: Now – and Then [26L]**
An exploration of some of the historical roots of issues that are of particular importance to understanding the United States of the early 21st century: e.g., the war in Iraq and U.S. global leadership (or hegemony); the impact of globalization on the domestic economy; cultural innovation vs. neo-conservatism.
Prerequisite: HIS 271Y1

**HIS377H1 20th-Century American Foreign Relations (formerly HIS377Y1) [52L]**
A survey of the history of American foreign relations from 1898 to the present. Themes include imperial expansion and the uses of power; the relationship of business and government in U.S. foreign policy; and the role of culture and ideas in America's relations with the world.
Prerequisite: HIS271Y1/372Y1/POL208Y1
Exclusion: HIS377Y1

**HIS378H1 America in the 1960s [26L]**
A survey of one of the most turbulent decades in American history. Examines the political, social, economic and cultural revolutions that transformed the face of America.
Prerequisite: HIS271Y1

**HIS380H1 Late Imperial China (formerly HIS380Y1) [26L, 6T]**
The political, social, and economic history of China from the period of political and economic reorganization in the Song dynasty to the final glory of the imperial order down to the end of the 18th century and its decay in the 19th.
Prerequisite: EAS102Y/HIS280Y1/JMC201Y1
Exclusion: HIS380Y1

**HIS381H1 African Historiography: Knowledge and Identity [26L]**
Rather than a survey of African History, this course examines popular representations of the past in Africa, looking at the philosophical and methodological challenges that these multiple histories raise for academic historians. It asks students to think critically about the basis of historical knowledge and the ownership of history
Recommended Preparation: NEW150Y1 and NEW250Y1

**HIS382H1 African Historiography: Time and Space [26L]**
Rather than a survey of African history, this courses examines the ways in which concepts of time and space have been used to create a false sense of a separate and distinct historical field. The courses critiques ideas of tradition and modernity and challenges concepts of physical remoteness and historical isolation.
Recommended Preparation: NEW150Y1 and NEW250Y1

**HIS383H1 African Women from Colonial Conquest to the Era of Structural Adjustment (formerly HIS383Y1) [26L]**
Major themes in the history of African women. Themes include: sources and methodologies of studying African women, cultural construction of gender, changing modes of production, women and state formation, ideology and social control, education, law, race, class and gender, female resistance to colonial rule and African womanisms versus Western feminisms.
Exclusion: HIS383Y1
Prerequisite: HIS295Y1

**HIS384H1 Colonial Canada [26L]**
Early Canadian history (ca. 1500-1800), emphasizing colonization, Native peoples of Ontario, Quebec and the Maritimes; establishment of French and British colonies; interaction of natives and European colonizers.
Exclusion: HIS362Y1
Prerequisite: HIS106Y1/262Y1/263Y1 or permission of the instructor

**HIS385H1/Y1 The History of Hong Kong [26L]/52L**
A study of political, economic, and social change in the British colony of Hong Kong from 1842 until the present day.
Exclusion: Students cannot take both the Y and H version of HIS385
Recommended preparation: HIS280Y1/232Y1/JMC201Y1

**HIS386H1 Islamic Culture(s) in South Asia (formerly HIS386Y1) [26L]**
Social and political history of Muslims of South Asia since A.D. 712. The growth of Muslim community, conversion, social stratification, and social structure; mediaeval Muslim legacy in administration, art, literature, and religion. Muslim identity, nationalism, and "Islamic modernism" as reflected in the writings of intellectuals such as Sayyid Ahmad Khan, Iqbal, Jinnah, Abul-Kalam Azad, Mawdudi, and Parwiz.
Recommended preparation: HIS101Y1/282Y1
Exclusion: HIS386Y1

**HIS387H1 France, 1610-1848 (formerly HIS388Y1) [26L]**
This course considers the history of France, from the rise of absolutist monarchy under the seventeenth-century, Bourbon monarchs, through the Enlightenment, the Revolution and Napoleonic Empire, and the Restoration, to the fall of the constitutional monarchy in 1848.
Exclusion: HIS388Y1
Prerequisite: one HIS/FRE course

**HIS388H1 France Since 1848 (formerly HIS388Y1) [26L]**
A study of French society, politics and culture from the Paris Commune to the 1990's. Special attention is paid to watersheds like the Dreyfus Affair and the Vichy regime, to issues of regionalism/nationalism, cultural pluralism, women's rights, intellectual and cultural trends, and decolonization.
Exclusion: HIS388Y1
Prerequisite: EUR200Y1/one course in HIS/FRE

**HIS389H1 Topics in History [26L]**
In-depth examination of historical issues. Content in any given year depends on instructor. See Undergraduate Handbook or History website for more details.
Prerequisite: Varies from year to year; consult department

**HIS390Y1 Latin American in the Age of Revolution [52L]**
This course examines how Latin America and Latin Americans responded to the American, French, Haitian, Latin American, and industrial revolutions of the late eighteenth and early nineteenth centuries.
Prerequisite: 2 HIS courses
Recommended preparation: HIS 291Y1/294Y1/IAS 200Y1/GGR 240Y1

**HIS393H1 Slavery and the American South [26L]**
An examination of the role of slavery in the development of the American South from the early colonial period through the Civil War. Topics include: the origins of slavery, the emergence of a plantation economy, the rise of a slaveholding elite, the structure of the slave community, and the origins of the war.
Prerequisite: HIS271Y1

**HIS395Y1 Topics in History [52L]**
An in-depth examination of historical issues. Content in any given year depends on instructor. See Undergraduate Handbook.
Prerequisite: Varies from year to year; consult department

**HIS396H1 The History of Sub-Saharan Africa From Abolition of the Trans-Atlantic Slave Trade to the Era of Imperialism (formerly HIS396Y1) [26L]**
The course examines the major economic and political transitions that have occured in Africa form the abolition of the trans-Atlantic slave trade to the era of imperialism. The interaction between the internal dynamics of African history and external forces is examined and different regions of Africa compared.
Prerequisite: NEW150Y1/HIS295H1
Exclusion: HIS396Y1

**HIS398H0 Independent Experiential Study Project**

**HIS399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

## 400-Series Courses

**HIS400Y1 York University Exchange SeminarTBA**
For details, consult the Department of History.

**HIS401Y1 History of the Cold War [52S]**
This course covers international relations from World War II to the collapse of the Soviet Union. Topics include the breakdown of the wartime alliance, Soviet predominance in eastern Europe, the Western response, NATO, atomic weaponry.
Prerequisite: HIS311Y1/344Y1/377Y1

**HIS 402H1 Indigenous Colonial Cultures in the Spanish and Portuguese Americas [26S]**
Explores the changing worlds of native peoples in Latin America from the pre-Columbian period through to the late eighteenth century. Discussions focus upon the ways in which complex Indian cultures transformed and were forged in the colonial Spanish and Portuguese Americas through the interactions of Amerindians with others.
Recommended preparation: HIS 106Y1/291Y1/294Y1

**HIS403Y1 Jews and Christians in Medieval and Renaissance Europe (formerly HIS403H1) [52S]**
The course focuses on aspects of Jewish-Christian relations ca.300-1600, such as royal and ecclesiastical Jewish policies; religious polemics; intellectual collaboration; social and economic interaction; anti-Judaism and religious violence. (Joint undergraduate-graduate)
Exclusion: HIS403H1
Recommended preparation: HIS206Y1/220Y1/243H1/322Y1/357Y1

**HIS404H1 Topics in North American Environmental History [26S]**
This seminar interdisciplinary and studies past environmental change in North America. Topics include: theory and historiography; the pre-European environment; contact; resource development; settlement, industrial urban environments; ideas about nature in religion, literature and North American culture; conservation and the modern environmental movement. (Joint undergraduate-graduate)
Exclusion: HIS318Y1
Prerequisite: 8 full courses

**HIS405Y1 Canadian Foreign Relations [52S]**
A course on Canadian external relations since 1945. Topics include Canada and the Cold War, the Korean War, the Suez crisis and the war in Vietnam, membership in international organizations, and bilateral relations with other countries. (Joint undergraduate-graduate)
Prerequisite: HIS311Y1/POL312Y1

**HIS406H1 Advanced Topics in Gender History [26S]**
An in-depth examination of issues in gender history. Content in any given year depends on instructor. See History website for more details.

**HIS407H1 Imperial Germany, 1871-1918 (formerly HIS407Y1) [26S]**
Historiographical controversies and the latest empirical findings concerning social conflict and political mobilization under Bismarck and Wilhelm II. Problems raised by competing schools of interpretation include definitions of the authoritarian state, bourgeois hegemony, localism and regionalism, radical nationalism, workers' culture, and gender relations. (Joint undergraduate-graduate)
Exclusion: HIS407Y1
Prerequisite: HIS317Y1 or permission of the instructor

**HIS408Y1 History of Race Relations in America [52S]**
Relations between blacks and whites in the United States from the colonial period to recent times with emphasis on slavery.
Prerequisite: HIS271Y1

**HIS409H1 One Day in Vietnamese Religious History: the Meeting of the Four Religions [26S]**
This course examines the religious traditions of Viet Nam through a meeting between the ruling Trinh Lord in Northern Viet Nam and a Buddhist monk, a Taoist Priest, a Confucian scholar, and a Catholic Missionary. Students will read the English translation of the meeting along with scholarly readings and primary documents.
Prerequisite: HIS283Y1

**HIS410H1 Spectacle, Crowds, and Parades in Canada [26S]**
Social and cultural approaches to understanding spectacles, crowd behaviour, and parades in the Canadian past, 1660s - 1980s.
Prerequisite: HIS262Y1/263Y1/367H1

**HIS411H1 Great Trials in History [26S]**
This seminar course will study a handful of great trials – still to be selected – in close detail. Using materials from the modern period in Europe and North America, we will look at the clash of ideas represented in these high-profile cases, the historical setting in which they were embedded, the human drama, legal and sometimes constitutional issues, and their impact both on their societies and our own.

**HIS412Y1 Crusades, Conversions and Colonialization in the Medieval Baltic (formerly HIS412H1) [52S]**
Explores the impact of crusades, religious conversion and colonialization on medieval Baltic history through analysis of two medieval chronicles in English translation. Topics include 'culture clash', medieval colonialism, Europeanization as well as German expansion eastwards, the role of the Teutonic Knights and the strategies of survival of the native Baltic people after conquest and Christianization.
Exclusion: HIS412H1
Recommended preparation: HIS250Y1/353Y1/permission of instructor

**HIS414H1 The Third Reich (formerly HIS414Y1) [26S]**
An integration of current historiographical approaches to the Third Reich with a close reading of primary documents in English. The focus is on the Nazi regime as something less than a totalitarian state. Attention is given to non-conformity and other features of "everyday life" under the Nazis.
Exclusion: HIS414Y1
Prerequisite: HIS317Y1/338Y1 or permission of instructor

**HIS415H1 Nationalism & Memory in Modern Europe [26S]**
Investigates the modern concept of the nation and its connections to the idea of collective memory in twentieth-century Europe. Through reading and discussing seminal works on nationalism and national memory, we will discuss the connections between modern notions of nation and practices of remembering.
Prerequisite: two European history courses

**HIS416H1 Orientalism and Nationalism in Nineteenth-Century Germany [26S]**
In 1771, with the translation of the Zend-Avesta by the French Scholar Anquetil-Duperron, a new era opened in German national culture. From the philosophy of Johann Gottfried von Herder to the novels of Thomas Mann, this course analyzes the ways in which German writers defined the substance and place of national culture in their writings about India, Central Asia and the "East."
Prerequisite: HIS241H1, 242H1/317H1/Y1

**HIS418H1 Women and Gender in Russian History (formerly HIS418Y1) [26S]**
Focus is on the history of women and systems of gender in Russia and the Soviet Union. Themes include gender and authority during the age of empresses; pre-revolutionary radical movements; the impact 1917 Revolution and its impact on women's lives; the resurrection of conservative gender conventions during Stalin's regime; the experience of women during perestroika.
Prerequisite: HIS250Y1/351Y1/325H1/Y1
Exclusion: HIS 418Y1

**HIS419H1 Canadian Popular Culture, 1880 to the Present (formerly HIS419Y1) [26S]**
The evolution of the tastes, patterns of consumption, and leisure products which together defined the affluent lifestyle that matured in the postwar era. Attention to the effects of technology; gender stereotypes; how people used the mass media; the genres of advertising, mass entertainment, and sports; fads, fashions, and heroes. Focus on the period after 1945.
Prerequisite: A mark of 75% or higher in HIS262Y1/263Y1
Exclusion: HIS419Y1

**HIS421Y1 Soviet History Seminar (formerly HIS421H1) [52S]**
A seminar on the history of Soviet Russia in its formative years, 1917 to 1939. The revolutions of 1917, the civil war and war communism, NEP Russia, the Stalin revolution, the purges, and the "great retreat" are explored. Emphasis is on issues, interpretations and historiography, problems of study, and periodization. (Joint undergraduate-graduate)
Exclusion: HIS421H1
Prerequisite: HIS351Y1 (with a mark of at least 80%)

**HIS422H1 Vichy France, 1940-1944 [26S]**
This course examines the rise, fall, workings and legacies of a xenophobic, collaborationist regime that came to power in France in 1940. It pays special attention to everyday practices under Vichy, to individual choices, to ideological battles, and to trauma. Other major themes include anti-Semitism, issues of memory and amnesia, and socio-cultural shifts.
Recommended preparation: HIS242H1

**HIS423H1 Social History of Medicine in the 19th& 20th Centuries (formerly HIS423Y1) [26S]**
Introduces students to some of the main issues in the new field of the social history of medicine. Readings from the secondary historical literature are distributed and discussed in class, covering such topics as the history of the doctor-patient relationship, changes in physicians' social status, changing attitudes towards the body, and the history of obstetrics and gynaecology. (Joint undergraduate-graduate)
Exclusion: HIS423Y1
Prerequisite: A minimum of one course in HIS/PSY/SOC

**HIS424H1 Violence in Medieval Society (formerly HIS424Y1) [26S]**
This seminar explores the social function and meaning of violence in medieval society, and the development of rituals and institutions to control violence. Among the topics treated: Germanic blood feud, aristocratic violence and chivalry, criminal justice systems, violence against minorities, and violence and gender. (Joint undergraduate-graduate)
Prerequisite: HIS220Y1/304Y1/320Y1/322Y1
Exclusion: HIS424Y1

**HIS425H1 Historiography [26S]**
A look at some basic problems of historical study, approached by means of an analysis of the work of a number of historians and philosophers of history, representing different schools of thought and time periods from ancient times to the present.
Recommended preparation: Three HIS courses

**HIS427H1 History and Historiography in the Golden Legend [26S]**
The "Golden Legend" or Readings on the Saints, compiled by Jacobus de Voragine C. 1260, serves as the basis for a seminar on the relation of history and legend as understood in the High Middle Ages. (Joint undergraduate-graduate)
Prerequisite: HIS220Y1

**HIS428H1 Institutes of Perfection [26S]**
The first goal of this seminar is to help students read the sources with a more critical eye, especially narrative sources (Lives of Saints) and normative sources (rules and customaries). The second goal is to study the evolution of the monastic ideal from its origin to the 12th century. (Joint undergraduate-graduate)
Prerequisite: A course in Medieval history such as HIS220Y1

**HIS430H1 Canadians and the World Wars [26S]**
Topics in the political, social, cultural, and military history of Canadians during the First and Second World Wars. Emphasis on the home front.
Prerequisite: HIS263Y1

**HIS431H1 Gender and the Holocaust [26S]**
An examination of the Holocaust and the ways it has been studied and represented through the lens of gender. In what ways did being male or female make a difference for the people who were part of the Holocaust; what did Nazi ideology preach about ideas of masculinity and femininity and how did German authorities implement those notions; what roles did sex, sexuality, and sexual violence play in the Nazi assault on Jews and other groups; how have assumptions about gender shaped memories and representations of the Holocaust?

**HIS432H1 Topics in Medieval History [26S]**
The students define together with the professor eight different topics (e.g. relics, masculinity, leprosy, clothes, recluses, peasants' houses, gynecology and the peace of God). Each topic is approached through a class discussion, on the basis of a common corpus of secondary sources, plus presentations by the students.
Prerequisite: A course in Medieval history such as HIS220Y1

**HIS433H1 Polish Jews Since the Partition of Poland [26S]**
To explore the history of Polish Jews from the Partitions of Poland to the present time, concentrating on the 19th and the first half of the 20th centuries: situation of Polish Jews in Galicia; Congress Kingdom of Poland; Prussian-occupied Poland before 1914; during World War II; and post-war Poland. Focus on an analysis of primary sources. (Joint undergraduate-graduate)
Prerequisite: HIS208Y1/251Y1/permission of the instructor

**HIS434Y1 Kievan Rus' [52S]**
The origin of Rus', international trade, the impact of nomadic peoples, the introduction of Christianity, the economic system an the problem of feudalism, the political structure and the dilemma of princely succession; literature and architecture; the displacement of political power centres and depopulation, the preservation of the Kievan heritage. (Joint undergraduate-graduate)
Prerequisite: One of the following: HIS220Y1/250Y1/320Y1/322Y1/JHP204Y1

**HIS435H1 Change and Continuity in Seventeenth Century England [26S]**
This course focuses on the causes, character and consequences of the British Civil Wars (1638-60) and on the different ways historians have treated these questions over the past 150 years. Students will think about how religious issues influenced political events before, during and after the Civil Wars and on how they were influenced by contemporaneous economic and social change.
Prerequisite: four full HIS courses, including HIS238H/348H

**JHP435Y1 Linguistic and Cultural Minorities in Europe [52S]**
Examines status of minority peoples in Europe, using specific case studies to compare similarities and differences in how these minorities function in states with differing political systems and ideologies. The evolution of specific minorities focuses on questions of language, religion, historical ideology, legal status, assimilation, and political goals. (Given by the Departments of Political Science and History)
Prerequisite: POL 103Y1/312Y1/a course in European history

**HIS436H1 Culture and the Cold War (formerly HIS436Y1) [26S]**
The impact of the Cold War on life in the West through a study of selected popular culture themes and modes of production that helped shape the era. Four themes include "Living with the Bomb," "Living with the National Security State," "Living with Spies," and "Women Living with the Cold War."
Exclusion: HIS436Y1

**HIS438H1 Inquisition and Society in Medieval and Early Modern Europe [26S]**
Focusing on the institution of the inquisition, this seminar explores the response of ecclesiastical and secular authorities to religious heterodoxy. Among the groups prosecuted by the inquisition discussed: Cathar heretics in France, crypto-Jews, and crypto-Muslims in Spain, and witches in Italy.
Recommended preparation: HIS220Y1

**HIS439H1 Russia's Empire [26S]**
This course examines ways in which the Russian Empire and Soviet Union expanded their territories, the ways they controlled those colonies, and the ways in which they dealt with rising nationalism both at home and abroad.
Prerequisite: HIS250Y1

**JHP440Y1 Gender & International Relations (formerly HIS 440H1) [52S]**
The seminar explores the use of gender as a category of analysis in the study of international relations. Topics include gendered imagery and language in foreign policymaking; beliefs about women's relationship to war and peace; issues of gender, sexuality, and the military; and contributions of feminist theory to international relations theory.
Prerequisite: HIS103Y1/245Y1/377Y1/POL208Y1 or permission of instructor
Exclusion: HIS 440H1

**HIS441H1 Conversion & Christianities in the Early Modern Spanish World [26S]**
Investigates religious conversion and cultural change in the Spanish world ca. 1450-1750. Principal settings include the late medieval Spanish kingdoms, Mexico, Peru, Paraguay, and the Philippines archipelago. Fall 2007 is special: our seminar readings and assignments will take best advantage of "The Virgin, Saints and Angels", an exhibition of baroque paintings from Spanish South America in the UofT Art Centre.
Recommended Preparation: HIS106Y1 or HIS291Y1 may be useful

**HIS443H1 Society, Culture and Religion in the Renaissance and Reformation (formerly HIS443Y1) [26S]**
Developments in popular/lay/local religion as expressed in a variety of cultural, political, and social forms from 1400-1600; the relation of these forms to both Catholic and Protestant institutional churches. Impact of Renaissance humanism on notions of kinship, order, community, perfection.
Exclusion: HIS443Y1
Recommended preparation: HIS340Y1/357Y1 or permission of instructor

**HIS444H1 Topics in Jewish History: Jewish Identity in the Modern World [26S]**
Explores the construction of Jewish identity in Europe from the late 18th through mid 20th centuries. Political emancipation and unprecedented economic opportunity stimulated many Jews to adopt the cultures of their host societies while refashioning Jewishness as a form of religious or ethnic community. Others constructed identities based on a defensive Orthodoxy or revolutionary ethos. Zionism grew out of and responded to all of these options and will receive particular focus in this course.
Prerequisite: Two of the following: HIS208Y1/241H1/242H1/244H1/250Y1/251Y1/317Y1/338Y1/341H1/353Y1/356H1/388H1 or permission of instructor
Recommended Preparation: A course in Jewish history.

**HIS445H1 Nationalism [26S]**
What is a nation? Are nations ancient or modern, unchanging or malleable? Do nations create states, or does the state create the nation? This course seeks to answer these questions through an examination of nationalism, primarily in Europe, from the 1700's through the present.
Prerequisite: Two courses in European history or permission of instructor

**HIS446Y1 Gender and Slavery in the Atlantic World (formerly HIS446H1) [52S]**
The course examines the relationship between gender and the experience of slavery and emancipating several Atlantic world societies from the 17th-19th centuries. Areas to be covered are the Caribbean, Brazil, the U.S. South, West and South Africa and Western Europe.
Exclusion: HIS446H1
Prerequisite: HIS245Y1/291Y1/294Y1/295Y1

**HIS 448H1 Gender in East and Southeast Asia (formerly HIS 391H1) [26S]**
This course explores the history of gender in East and Southeast Asia from a comparative perspective. It will examine how models of Southeast Asian women have been constructed against their East Asian counterparts.
Prerequisite: HIS283Y1
Exclusion: HIS391H1

**HIS449Y1 Ukrainian National Revival [52S]**
The role of the intelligentsia in East European national revivals; the ethnographic and literary revival; the language question; the press and cultural organizations; education; religion; and political movements. (Joint undergraduate-graduate)
Recommended preparation: One of the following: JHP 204Y1/HIS 241H1/251Y1/445H1

**HIS451H1 World War II in East Central Europe [26S]**
The fall of the Versailles system, German and Soviet diplomatic and military activities and their occupational policies in East Central Europe during World War II, economic exploitation, collaboration, resistance, and genocide in the discussed region, its "liberation" and sovietization in 1944-1945. (Joint undergraduate-graduate)
Prerequisite: EUR200Y1/HIS251Y1/334Y1

**HIS452H1 Science and Society in Eighteenth Century Europe [26S]**
Comparative analysis of British and French scientific culture during the age of the Enlightenment and the French Revolution. Addresses science as a culturally constructed system of knowledge rather than a body of absolute truth. Particular attention is therefore paid to similarities and differences between "elite" and "popular" science, as manifested in the periodical press, literary texts and consumer culture. Major course themes include gender, race, imperialism and governance.
Prerequisite: HIS 244H1/337H1/324H1/324Y1/341Y1

**HIS453H1 Problems of National Survival in Eastern Europe Since 1848 [26S]**
How the peoples of Eastern Europe tried to organize their domestic affairs, and in what international context they sought to operate, in order to survive as national entities and later to preserve their newly-won independence and territorial integrity. (Joint undergraduate-graduate)
Prerequisite: HIS251Y1/334Y1 or equivalent

**JHP454Y1 Twentieth Century Ukraine [52S]**
World War I and the Russian Revolution: the Ukrainian independence movement; the Soviet Ukraine and west Ukrainian lands during the interwar period; World War II and the German occupation; the Soviet Ukraine before and after the death of Stalin. Socio-economic, cultural, and political developments. (Given by the Departments of History and Political Science) (Joint undergraduate-graduate)
Prerequisite: A course in modern European, East European or Russian history or politics such as JHP204Y1/HIS250Y1/351Y1/353Y1

**HIS454H1 Topics in Russian and Soviet Social History [26S]**
This course uses the ideas of "city" and "citizenship" as a lens for examining the social and economic development of Russia in the late imperial and early Soviet eras. In the Russian empire the rural population was the main source of urban growth throughout modern history. The interaction between city and countryside will be one of the main themes of the course. (Joint undergraduate-graduate)
Prerequisite: A course in Russian history such as HIS 250Y1

**HIS455H1 In the Soviet Archives: Text and History [26S]**
A tour of Soviet history through recently declassified archival documents (in English translation), first-hand accounts, memoirs, and literature. The primary chronological emphasis of the course will be on the years of Stalin. The focus of the course will be on close textual analysis and a critical reading of the sources. (Joint undergraduate-graduate.)
Prerequisite: HIS351Y1 with a grade of 80 or higher.

**HIS456Y1 Black Slavery in Latin America [52S]**
An examination of black slavery in Latin America, with emphasis on the lives of the slaves, from the conquest of America to abolition in the 19th century.
Prerequisite: HIS291Y1/292Y1/294Y1/295Y1/394Y1/408Y1/IAS200Y1/ 320H1

**HIS457H1 The French Revolution and the Napoleonic Empire [26S]**
Explores the central themes in the history of France during the Revolution and the First Empire. We will consider the period's principal political, social and cultural aspects: the causes of the French Revolution; the shift from constitutional monarchy to Republic; the relationship between politics and religion; the invention of a new republican political culture; counterrevolution and Terror; the Directory; Bonaparte's rise to power; the Napoleonic Empire; the nature of war during the Empire; the Restoration; and the Revolution's legacy in France and beyond today.
Prerequisite: HIS243H1/244H1/319H1/341Y1/388H1/492Y1

**HIS458Y1 Topics in Russian and Soviet Foreign Policy [52S]**
Tsarist and Soviet foreign relations from the Crimean War to the present with emphasis on continuity and change. The seminar examines major themes in Russian and Soviet foreign policy behaviour on the basis of assigned readings.
Prerequisite: HIS250Y1/334Y1/344Y1

**HIS459H1 Soviet History and Film, 1921-1946 [26S]**
The history of Soviet cinema and the importance of film as a historical source. Documentary and fiction film; editing, narration, and sound; film distribution and exhibition; the Soviet school of montage and socialist realism; nationality and gender; the Soviet musical comedy of the Stalin era; resistance and dissidence.
Prerequisite: INI115Y1/HIS250Y1
Exclusion: HIS450Y1/SLA233H1/234H1

**HIS460H1 Soviet History and Film, 1941-1991 [26S]**
Soviet film as a historical source and the institutional and ideological history of Soviet film production, distribution, and exhibition. Fiction and documentary film during World War II; the cinema of the Cold War and the "Thaw"; Soviet "new realism" and the return of the village; avant-garde cinema of the 1960s-80s; memory and historical revision in late Soviet film. Screenings include never-before-seen archival footage, as well as films and film clips subtitled by the instructor.
Prerequisite: INI115Y1/HIS250Y1
Exclusion: HIS450Y1/SLA233H1/SLA234H1

**HIS461H1 Poland in the 20th Century [26S]**
The 20th century has been an age of experiments for Poland. Universal, general problems of democracy, authoritarianism, totalitarianism, communism, socialism, free market and centrally planned economies, are examined, as are the ongoing adjustments made by the Polish people. (Joint undergraduate-graduate)
Prerequisite: HIS334Y1/353Y1/permission of the instructor

**HIS466H1 Topics in Canadian History (formerly HIS466Y1) [26S]**
Selected topics in a specific period of Canadian history. Content in any given year depends on instructor. Please see the History Department website for complete description.
Prerequisite: HIS262Y1/263Y1

**HIS467H1 French Colonial Indochina: History, Cultures, Texts, Film (formerly HIS467Y1) [26S]**
Examines French colonial Indochina through several different lenses. Themes include the cross-cultural "contact zones" between colonial and colonized societies, gender perceptions, imperial culture, expressions of colonial power, and forms of opposition. Colonial novels, translated resistance literature, documentaries, and films are utilized as primary sources to be examined critically.
Prerequisite: ANT344Y1/EAS 204Y1/GGR342H1/HIS104Y1/ 107Y1/ 280Y1/282Y1/283Y/315H1/388Y1/NEW369Y1
Exclusion: HIS467Y1

**HIS468H1 Atlantic Canada [26S]**
The emphasis in this course is on Native peoples, settlement issues and settler society; economic development; women; reform movements; other distinctive aspects of the history of the Maritime region and Newfoundland. (Joint undergraduate-graduate)
Prerequisite: HIS262Y1/263Y1

**HIS469H1 Religion, Culture and Society in Canada [26S]**
This course examines the interaction between religion and culture in Canada from colonial times to the present with emphasis on primary documents. (Joint undergraduate-graduate)
Recommended preparation: A course in Canadian history

**HIS470H1 History, Rights, and Difference in South Asia [26S]**
Addressing South Asian history after 1750, this course examines ideas of rights, contract, and the rule of law in colonial and postcolonial contexts. Attention is paid to the intellectual history of rights and the central place of colonial and postcolonial questions within that history. Topics include rights and questions concerning indigenous culture, caste and customary practice, gender and capitalist development.
Prerequisite: A mark of 73% or higher in HIS 282Y1 or instructor's permission
Recommended preparation: Background in political and social theory and some background in South Asia

**HIS471H1 United States and Globalization [26S]**
This course considers the origins and evolution of U.S. experiences with globalization: attention is paid to economic, technological, cultural, and institutional developments during the past century.
Prerequisite: HIS271Y1/377Y1
Recommended preparation: HIS377Y1

**HIS472H1 Topics in Aboriginal History (formerly HIS472Y1) [26S ]**
Major themes in the history of Aboriginal-White relations in Canada. Topics included are: role of native people in the creation of British North America and in the Western fur trade; the emergence of the Métis; analysis of colonial Indian policy; the Red River Resistance; the making of treaties; the North West Rebellion; the struggle for survival in post-treaty Canada; the emergence of "red power"; contemporary and feminist issues. (Joint undergraduate-graduate)
Exclusion: HIS472Y1
Prerequisite: HIS262Y1/263Y1

**HIS473Y1 The United States and Asia in the Cold War Era (formerly HIS 473H1) [52S]**
This seminar examines strategic, economic, ideological, and cultural factors in U.S. relations with East and Southeast Asia. Major themes include the role of cultural and informal diplomacy and the effect of perceptions and misperceptions on both sides of U.S.-Asian interactions.
Prerequisite: HIS344Y/372Y1/377Y1
Exclusion: HIS 473H1

**HIS475H1 Race, Segregation, and Protest: South Africa and the United States [26S]**
This course explores the origins, consolidation, and unmaking of segregationist social orders in South Africa and the American South. It examines the origins of racial inequality, the structural and socio-political roots of segregation, and the twin strategies of accommodation and resistance employed by black South Africans and African Americans. (Joint undergraduate-graduate)
Recommended preparation: HIS271Y1/295Y1

**HIS476H1 Voices from Black America (formerly HIS476Y1) [26S]**
The history of Black Americas seen through the eyes of some of the men and women who experienced it. Attention is given to slavery but emphasis is on the twentieth century. Students examine autobiographical works, novels, and film.
Prerequisite: HIS271Y1
Exclusion: HIS476Y1

**HIS477H1 Topics in the Social and Cultural History of Victorian Britain (formerly HIS477Y1) [26S]**
Examination of the impact of industrialism on Victorian society and values. Concentration on Victorian social critics including Engels, Owen, Maynew, Dickens and Morris.
Recommended preparation: A course in modern British History/Victorian literature
Exclusion: HIS477Y1

**HIS478H1 Hellhound on my Trail: Living the Blues in the Mississippi Delta, 1890-1945 [26S]**
This course examines black life and culture in the cotton South through the medium of recorded blues music. It seeks to restore a voice and a sense of agency to black southerners in the age of Jim Crow. Topics include the plantation economy, agricultural life, mobility, migration, and urban subcultures.
Recommended Preparation: HIS 271Y1/USA 300H1

**HIS479H1 American Foreign Policy Since World War II (formerly HIS479Y1) [26S]**
An in-depth study of U.S. behaviour in the global arena since World War II. Particular attention will be paid to the origins and evolution of the Cold War, the Vietnam War, the initiatives of the Nixon-Kissinger years, the end of the Cold War, and the relevance of "globalization."
Prerequisite: HIS271Y1/377Y1
Exclusion: HIS479Y1

**HIS480H1 Modernity and its Others: History and Postcolonial Critique [26S]**
Engaging with influential perspectives in postcolonial historiography, this seminar tracks three major themes in the history of the idea of modernity from the late 18th through the 20th centuries: political freedom, citizenship and the nation-state; capitalism and its critique; and the relationship of history, memory, and identity. (Joint undergraduate-graduate)
Prerequisite: a mark of 73% or higher in HIS 282Y1, or instructor's permission
Recommended preparation: History of colonialism, political theory, or postcolonial literatures

**HIS481H1 Elite Women, Power, and Modernity in Twentieth-Century Africa [26S]**
The role of elite women in twentieth-century Africa has been overshadowed by studies of non-elite women so much so as to suggest that all women lacked power. This course aims to show how a very limited but important group of women negotiated power in a century of increasing patriarchy. It combines gender with class analysis.
Prerequisite: HIS 295H1/296Y1/383H1/396H1 or permission of instructor

**HIS482H1 History of the Body from Antiquity to the Renaissance [26S]**
This course will explore the cultural history of the body from ancient Greece to Renaissance Italy. From an examination of both bodily practices and discourses about the body we will attempt to gain an understanding of premodern experiences of and attitudes towards the human body.
Prerequisite: one course in pre-modern History

**HIS483H1 Men, Women and Gender in Europe, 1400-1800 (formerly HIS483Y1) [26S]**
This research seminar builds on work done in lower-level gender history courses. It focuses on intensive study of sources and methodologies for the history of masculinities and women in early modern Europe. The main assignment is an independently-designed major research project.
Prerequisite: HIS245Y1/306Y1/354H1
Exclusion: HIS483Y1

**HIS484H1 The Car in North American History (formerly HIS484Y1) [26S]**
This seminar examines the history of the car in North America from the perspective of technology, business, landscape and popular culture. Particular attention is paid to issues of production, consumption, geography, and daily life, and to the importance of class race, gender, region, and age in shaping the meaning and experience of car culture.
Prerequisite: HIS263Y1/271Y1
Exclusion: HIS484Y1

**HIS485H1 Topics in Late Imperial and Modern Chinese History (formerly HIS485Y1) [26S]**
A seminar on aspects of Chinese history from 1368 to the present, with emphasis on social history. Topics vary and include: social structure in Ming-Qing China; religion and ritual in Chinese society; Chinese popular culture. (Joint undergraduate-graduate)
Exclusion: HIS485Y1
Prerequisite: EAS102Y1/HIS280Y1, HIS380Y1/JMC201Y1

**HIS487H1 Animal and Human Rights in Anglo-American Culture [26S]**
Examines the parallel discourses of animal and human rights in Anglo-American culture from the eighteenth century to the present. The courses explores issues of subjectivity and consciousness as well as cruelty and pain. Topics include slavery and abolition, animal welfare and antivivisection, anti-colonial liberation movements, and animal rights campaigns.
Recommended Preparation: HIS296Y1

**HIS488H1 The Secret War, 1939-1945 (formerly HIS488Y1) [26S]**
The development of intelligence techniques and operations in wartime conditions; the role of espionage, cryptanalysis and deception in deciding the battles and campaigns of the Second World War.
Prerequisite: Any two courses from: EUR200Y1/HIS103Y1/241H1, 242H1/343Y1/344Y1
Exclusion: HIS488Y1

**HIS489H1 The History of Psychiatry and Psychiatric Illness [26S]**
Introduces students to some of the main issues in the history of psychiatry. Readings from the secondary historical literature are distributed and discussed in class, covering such topics as changes in the nature of psychotic illness, the psychoneuroses, disorders of the mind/body relationship, and the psychiatric diagnosis and the "presentation" of illness. (Joint undergraduate-graduate)
Prerequisite: a minimum of one course in HIS/PSY/SOC
Exclusion: HIS423Y1

**HIS492Y1 Britain and the French Revolution, 1785-1801 (formerly HIS492H1) [52S]**
Britain's response to the French Revolution and revolutionary wars studied through selected topics in political theory, the history of popular movements, the experience of industrialization and foreign policy.
Prerequisite: Any course in Western European or British History
Exclusion: HIS492H1

**HIS495H1 Topics in History (formerly HIS495Y1) [52S]**
An in-depth examination of historical issues. Content in any given year depends on instructor. See Undergraduate Handbook or History website for more details.
Exclusion: HIS495Y1
Recommended preparation: Varies from year to year

**HIS496H1 Topics in History [26S]**
An in-depth examination of historical issues. Content in any given year depends on instructor. See Undergraduate Handbook or History website for more details.
Recommended preparation: Varies from year to year

**HIS498H1 Independent Studies [TBA]**

**HIS499Y1 Independent Studies [TBA]**
These courses assume the form of an undergraduate thesis. Students must find an appropriate supervisor from the Department, receive approval for the project, and submit an Independent Studies ballot. Students must be enroled in either a History Specialist or Major program, with a B+ average in no less than 4 HIS courses, or with special permission of the instructor. Applications must be received in September for first session courses; in December for second session courses.

# History and Philosophy of Science and Technology

## Sponsored by the Institute for the History and Philosophy of Science and Technology

## Faculty

### University Professor Emeritus

T.H. Levere, MA, D Phil, D Litt, FRSC (V)

### Professors Emeriti

P.M.H. Mazumdar, MB, M Tech, Ph D (V)
M.P. Winsor, M Phil, Ph D (V)

### Professor and Director of the Institute

P. Thompson, MA, Ph D (V)

### Professors

C. Fraser, MS, Ph D (V)
B.S. Hall, BA, Ph D (V)
A.R. Jones, BA, Ph D, FRSC (V)
J. Langins, M Eng, Ph D (V)

### Associate Professors

B. Baigrie, MA, Ph D (V)
J. Berkovitz, BSc, MA, Ph D (V)
A. Chakravartty, BSc, MA, M Phil, Ph D (V)
N. Krementsov, Diploma Candidate of Sciences/History and Philosophy of Science and Technology (V)
D. Walsh, BSc, BA, M Phil, Ph D, Ph D (V) Canada Research Chair

### Assistant Professors

L. Dacome, BA, M Phil, Ph D (V)
Y. Fehige, Diploma in Theology, M.A., Ph.D.
M. Solovey, BA, MA, MA, Ph.D. (V)
M. Vicedo, BA, MA, Ph.D., Ph.D. (V)
C.-P. Yeang, BS, SM, Ph D, Sc D (V)

The history and philosophy of science and technology cuts across traditional disciplines of the sciences and the humanities. HPS courses treat the sciences and technology, including mathematics and medicine, as being historically and philosophically significant in themselves, and also as being integral components of the general development of knowledge, culture, and society. The undergraduate courses serve to introduce the student to this discipline, and also to provide a wider context for understanding science and technology. All courses have a substantial historical component, and many deal with philosophical, sociological and related issues. For example, students of history will find courses in the history of science to be an important part of social and intellectual history, while students of economic history may be especially interested in the history of technology. For philosophy students, history of science courses form a natural adjunct to issues in the theory of knowledge, philosophy of science and history of philosophy. Students of the humanities with particular interests in the physical or biological sciences, technology, engineering, mathematics, or medicine will naturally be interested in HPS courses, and students in these scientific disciplines will benefit from the broad historical and philosophical perspective on their studies that HPS courses can provide.

Some students may wish to plan their entire programs around a core of HPS courses. The Major program in HPST listed is suitable training for medical school, the law, elementary and secondary school teaching, museum and library work, science writing and editing, and other fields where competence in both science and humanities is valuable. Students considering graduate study in this field should seek direction from an IHPST faculty member. For more information consult the IHPST Undergraduate Handbook, available at the Institute.

Director of Undergraduate Studies:

Professor J. Langins, Victoria College, Room 310 (416-978-4950), (Acting 2008-2009)

Professor D. Walsh, Victoria College, Room 316A (416-978-5847)
Email: denis.walsh@utoronto.ca

Enquiries:
Victoria College, Room 316 (416-978-5397)

## History and Philosophy of Science and Technology Programs

Enrolment in the History and Philosophy of Science and Technology programs requires the completion of four courses; GPA of 1.7 required.

### History and Philosophy of Science and Technology (Arts program)

**Major program:**
(7 full courses or their equivalent)

Admission requires GPA of 1.7 and continuation in the program requires maintenance of a GPA of 2.3

1. One course in science, choices subject to the approval of the Under Graduate coordinator. It is recommended that it include a laboratory or practical component; HIS109Y1
2. HPS210H1; HPS211H1; HPS250H1; HPS350H1; HPS201H1/202H1
3. One additional course at HPS300+ level
4. One 200+H science half course; one 300+ science half course; HIS200+ series half course/CLA203H1/CLA206H1

Recommended preparation: HPS100H1. It is further recommended that the first HPS courses taken (other than HPS100H1) be HPS210H1 and HPS211H1

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**All the specialist, major, and minor programs listed below will no longer be offered.**

**Students admitted to these programs prior to September 2004 may complete their programs as described below.**

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### History and Philosophy of Science (Arts program)

**Specialist program:**
(11.5 full courses or their equivalent)

1. Three 200+ series courses in science, choices subject to the approval of the Undergraduate Coordinator
2. HPS 200Y1/(210H1 + 211H1), 250H1; PHL 210Y1, 245H1

3. 2.5 additional HPS courses. Students may substitute courses in the history of science or the history of thought offered in other departments for up to two courses, with approval of the Undergraduate Coordinator
4. Four PHLI/PHI half-courses in epistemology, logic and formal semantics, philosophy of science
5. One additional 400 series HPS/PHL course. Of the other HPS/PHL courses, three must be 300+ series

**Major program:**
(7 full courses or their equivalent)

1. Two 200+ series courses in science, choices subject to the approval of the Undergraduate Coordinator
2. HPS 200Y1/(210H1 + 211H1), 250H1, PHL 210Y1, 245H1
3. One 300+ series PHL course in epistemology, logic and formal semantics, philosophy of science
4. One other HPS 300+ series course

**Minor program:**
(4 full courses or their equivalent)

1. HPS 200Y1/(210H1 + 211H1), 250H1; PHL 210Y1, 255H1
2. One HPS/PHL 300+ series course

### History of Science and Technology (Arts program)

**Specialist program:**
(11 full courses or their equivalent)

1. Two 100+ series and three 200+ series courses in science, choices subject to the approval of the Undergraduate Coordinator
2. HIS 109Y1 plus one other course in history, choice subject to the approval of the Undergraduate Coordinator
3. Three HPS courses, of which two may be courses in history of science offered by another department, subject to the approval of the Undergraduate Secretary. CLA 203H1 will be treated as an HPS course
4. One HPS 400-series course

**Note:**
At least three of the above ten courses must be 300+series

**Major program:**
(7 full courses or their equivalent)

1. Two 200+ series courses in science or technology, choices subject to approval of the Undergraduate Coordinator
2. Five HPS courses, at least two of which must be 300+ series courses; up to two courses in history or the history of science offered in other departments may be substituted with the approval of the Undergraduate Coordinator

**Minor program:**
(4 HPS full courses or their equivalent)

Four HPS courses, of which at least one must a 300+ series course. One course may be replaced by a course in the history of science offered by another department, but requires approval of the Undergraduate Coordinator.

## History and Philosophy of Science and Technology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), some HPS courses are cross-listed; check individual course descriptions.

**HPS100H1 Introduction to History and Philosophy of Science [26L, 13T]**
An investigation of some pivotal periods in the history of science with an emphasis on the influences of philosophy on the scientists of the period, and the philosophical and social implications of the scientific knowledge, theory and methodology that emerged.
This counts as a Humanities or Science course

**HPS201H1 Origins of Western Technology [26L, 13T]**
Technology and its place in our culture from Antiquity to the beginnings of the Industrial Revolution. Relations between technology and science, religion, the arts, social institutions, and political beliefs.
This is a Humanities course

**HPS202H1 Technology in the Modern World [26L, 13T]**
A survey of technical change and its social implications from the Industrial Revolution to the present.
Recommended preparation: HPS201H1
This is a Humanities course

**HPS210H1 Scientific Revolutions I (formerly HPS200Y1) [26L, 13T]**
Case studies in the history of science from antiquity to 1800, including the revolutionary work of Copernicus, Kepler, Galileo, Descartes, Newton, Linnaeus, Lavoisier, and Herschel. The course is designed to be accessible to science students and non-scientists alike.
This counts as a Humanities or Science course
Exclusion: HPS200Y1

**HPS211H1 Scientific Revolutions II (formerly HPS200Y1) [26L, 13T]**
Case studies in the history of science from 1800 to 2000, including Volta, Lyell, Darwin, Mendel, Einstein, Schrödinger, Watson, and Crick. The course is designed to be accessible to science students and non-scientists alike.
This counts as a Humanities or Science course
Exclusion: HPS200Y1

**HPS250H1 Introductory Philosophy of Science [26L, 13T]**
This course introduces and explores central issues in the philosophy of science, including scientific inference, method, and explanation. Topics may include underdetermination, realism and empiricism, and laws of nature.
This is a Humanities course

**HPS299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**HPS300H1 Topics in History and Philosophy of Science and Technology [TBA]**
Topics vary year to year.
This is a Humanities course

**HPS306H1 Technology and War [26L, 13T]**
An examination of the tools of war in the Western world from the Middle Ages to World War II, including not only weapons but the means of transportation, communication, and organization used in violent conflict. The effects of war on the development of science and technology.
Exclusion: HPS417H1

Recommended preparation: HPS201H1/202H1 or any HIS course
This is a Humanities course

**HPS307H1 History of Energy [26L, 13T]**
The history of human control of various sources of energy, including technical developments, scientific theories, and impact on culture and society. Recent debates on fossil fuel and nuclear power examined in historical context.
Recommended preparation: HPS201H1/202H1 or any HIS course
This is a Humanities course

**HPS311H1 History of Physics [13S]**
Topics in the history of physics from antiquity to the 20th century, including Aristotelian physics, Galileo, Descartes, electromagnetism, thermodynamics, statistical mechanics, relativity, quantum physics, and particle physics. The development of theories in their intellectual and cultural contexts.
Prerequisite: At least one PHY course at university level
This is a Humanities or Science course

**HPS312H1 History of Chemistry [13S]**
The emergence of the modern discipline of chemistry from 1785 to 1939. Seminar discussions focus on key papers of important Historical analysis of the interplay between theory and practice, and of the dynamics of scientific communities
Prerequisite: At least one CHM course at university level
This is a Humanities or Science course

**HPS313H1 Two Hundred Years of Electricity [26L]**
A history of the science and technology of electricity in the 19th and 20th centuries in its social, economic, and cultural context.
Prerequisite: At least one CSC/PHY or Electrical Engineering (ECE) course
This is a Humanities or Science course.

**HPS318H1 History of Medicine I [26L, 13T]**
A survey of medical theory and practice from Antiquity to the Renaissance, with emphasis on medicine's social, cultural and political setting.
Exclusion: HPS314Y1
This is a Humanities course

**HPS319H1 History of Medicine II [26L, 13T]**
A survey of medical theory and practice from the 17th century to the modern welfare state, with emphasis on medicine's social, cultural and political setting.
Exclusion: HPS314Y1;315H1
This is a Humanities course

**HPS322H1 Complexity, Order, and Emergence**
A survey of the history of and recent developments in the scientific study of complex systems and emergent order. There will be particular emphasis on the biologicaland cognitive sciences. Topics covered my include: mechanism and teleology in the history of science, 19th and 20th century emergentism, complex systems dynamics, order and adaptiveness, self-organisation in biology and congitive development.
This is a Humanities course.

**HPS324H1 Natural Science and Social Issues [26L, 13T]**
Historical examination of the interactions of science (both as body of knowledge and as enterprise) with ideological, political and social issues. The impact of science; attacks on and critiques of scientific expertise as background to contemporary conflicts. Subjects may vary according to students' interests.
This is a Humanities course

**HPS326H1 History of Science and Religion [13S, 13T]**
From its origins in the Renaissance, modern science has developed in the context of European religious beliefs and institutions. Although cases of conflict like Galileo or the "Monkey Trial" are famous, more common are cases of scientists like Newton or Faraday whose religious convictions were crucial to their scientific success.
This is a Humanities course

**HPS343H1 History of Pre-Electronic Computing [26L]**
Computing technology from Chaldean astronomy to the advent of British and U.S. mass production of electronic mainframes in 1953. Emphasis will be on uses and users, especially on great figures from Babbage through von Neumann, but hardware descriptions will also be featured.
This counts as a Humanities or Science course.

**HPS344H1 History of Mainframe Computing [26L]**
Covers the period from mass production in 1953 to the emergence of minicomputers around 1969. Beginnings of software and services industries, networking, university computer science. Emphasis on international developments.
This counts as a Humanities or Science Course

**HPS350H1 Revolution in Science [26S]**
An investigation into the nature and development of scientific knowledge, inspired by Kuhn's notion of revolutions. Topics may include incommensurability, the rationality of theory choice, and social constructivism.
Prerequisite: HPS250H1 or permission of the instructor
This is a Humanities course

**HPS352H1 History and Philosophy of the Social Sciences [26L]**
This course explores central developments, ongoing controversies, and major figures in the social sciences: sociology, economics, political science, anthropology, and the behavioral sciences. It concentrates on such prominent individuals as: Rene Descartes, Thomas Hobbes, John Locke, Adam Smith, Karl Marx, Franz Boas, Sigmund Freud, and Gunnar Myrdal.
This is a Humanities or Social Science course.

**HPS353H1 History of Evolutionary Biology (formerly HPS323H1) [26L, 13T]**
An examination of major ideas about biological evolution from the 18th century to the 1930's and of their impact on scientific and social thought. Topics include the diversity of life and its classification, the adaptation of organisms to their environment, Wallace's and Darwin's views on evolution by natural selection, sexual selection, inheritance from Mendel to T.H. Morgan, eugenics, and the implications of evolution for religion, gender roles, and the organization of society.
Exclusion: ZOO354Y1/HPS323H1/EEB353H1
Prerequisite: 6 full courses or equivalent including one HPS half course or BIO150Y.
This counts as a Humanities or Science course

**HPS355H1 History of Evolutionary Biology II (formerly HPS333H1) [26L, 13T]**
An examination of ideas about biological evolution from the 1930's to the present. Topics include the Modern Synthesis, population genetics, the concept of biological species, ecology, sociobiology, and creationism.

Exclusion: ZOO354Y1/HPS333H1/EEB355H1
Prerequisite: HPS323H1/HPS353H1/EEB353H1
This counts as a Humanities or Science course

**PHL355H1 Philosophy of Science**
See "Philosophy"

**HPS360H1 History of Modern Cosmology [26L, 13T]**
Conceptions of the universe since 1800 with attention to observational sources of changing ideas. History of large telescopes, stellar spectroscopy and radio astronomy. Relativistic conceptions of space and time, models of stellar evolution, discovery of extra-galactic nebulae, Hubble red-shift and microwave background radiation. Philosophical and religious implications are examined.
This counts as a Humanities or Science course

**HPS375H1 Science and Technology in The Realms of Islam, 600-1600, Part I: The Mathematical Sciences and their Practical Applications (formerly HPS275H1) [26L, 13S]**
First part of a series on the history of science and technology in the Islamic world. History of the exact sciences, including mathematics, astronomy, optics, and cartography.
Prerequisite: At least one MAT or Science course at university level
Exclusion: HPS275H1, NMC379H1
This counts as a Humanities or Science course

**HPS376H1 Science and Technology in the Realms of Islam, 600-1600, Part II: The Life Sciences (formerly HPS276H1) [26L, 13S]**
Second part of a series on the history of science and technology in the Islamic world. History of biological and life sciences, including history of medicine, botany, agriculture, and alchemy.
Prerequisite: At least one MAT or Science course at university level
Exclusion: HPS276H1, NMC379H1
This counts as a Humanities or Science course

**HPS390H1 History of Mathematics up to 1700 [26L, 13T]**
A survey of ancient, medieval, and early modern mathematics with emphasis on historical issues. (Offered in alternate years)
Exclusion: 310Y1; MAT220Y1
Prerequisite: At least one full course equivalent at the 200+level from CSC/MAT/STA
This counts as a Humanities or Science course

**HPS391H1 History of Mathematics after 1700 [26L, 13T]**
A survey of the development of mathematics from 1700 to the present with emphasis on historical issues. (Offered in alternate years)
Exclusion: HPS310Y1; MAT220Y1, MAT391H1
Prerequisite: At least one full course equivalent at the 200+level from CSC/MAT/STA
This counts as a Humanities or Science course

**HPS410H1 History of Mathematics [26S]**
An historical survey from pre-Greek to the present. Various themes are emphasized year to year, to show mathematics as changing and evolving. A student could expect to gain an historical overview as well as a sense of the unity of the mathematical sciences.
Prerequisite: HPS309Y1/310Y1/390H1/391H1/MAT220Y1 and permission of instructor
This is a Humanities course

**HPS412H1 History of the Biological Sciences [26S]**
Advanced level survey of biological science from ancient Greece to the 20th century emphasizing primary sources analyses.
Prerequisite: HPS 200Y1/(210H1 + 211H1)/ZOO354Y1/ HPS323H1;HPS333H1 and permission of instructor
Recommended preparation: BIO150Y1/European history/ Philosophy
This is a Humanities course

**HPS427H1 Historical Foundations of Chemistry [26S]**
The development of chemistry from the Chemical Revolution of Lavoisier to the periodic table of Mendeleev: electro-chemistry, the rise of organic chemistry, classification, valency, structural chemistry.
Prerequisite: Permission of instructor
This is a Humanities course

**HPS430H1 History of Technology I [26S]**
An advanced survey of the history of technology from Antiquity to the Industrial Revolution.
Prerequisite: Permission of instructor
Recommended preparation: HPS201H1/202H1
This is a Humanities course

**HIS431H1 History of Technology II [26S]**
An advanced survey of the history of technology from the Industrial Revolution to modern times.
Prerequisite: Permission of instructor
Recommended preparation: HPS201H1/202H1
This is a Humanities course

**HPS495Y1 Individual Studies [TBA]**
A reading and research project in some aspect of history of science and technology, supervised by a faculty member. Projects must be approved by the Institute and are subject to availability of a faculty supervisor.
Prerequisite: Two HPS courses
This is a Humanities course

**HPS496H1 Individual Studies [TBA]**

**HPS497H1 Individual Studies [TBA]**
A reading and research project in some aspect of the social, cultural or intellectual history of science and technology, supervised by a faculty member. Projects must be approved by the Institute by the previous June for a Fall course or by November for a Spring course, and are subject to availability of a faculty supervisor.
Prerequisite: Two HPS courses

**HPS498H1 Individual Studies [TBA]**

**HPS499H1 Individual Studies [TBA]**
A reading and research project in some aspect of the development of scientific theory or practice, supervised by a faculty member. Projects must be approved by the Institute by the previous June for a Fall course or by November for a Spring course, and are subject to availability of a faculty supervisor.
Prerequisite: Two HPS courses

# Innis College

## Faculty

### Professors

E.K. Armatage, Ph D

### Associate Professors

R. DiFrancesco, Ph D
C. Keil, Ph D

### Assistant Professors

C. Columpar, Ph D
A. Fenner, Ph D
R. King, Ph D
N. Sammond, Ph D

### Senior Lecturers

C. Messenger, MA
R.E. Riendeau, MA
B.W. Testa, MA

### Lecturers

S. Brail, Ph D
S. English, MA
V. Jovanovic-Kristic, Ph D

The courses offered at Innis College are integral to three academic programs: Cinema Studies; Urban Studies; Writing and Rhetoric.

### Cinema Studies

Cinema Studies treats film primarily as a unique and powerful art form with its own traditions, history, conventions, and techniques. Understanding film, its properties, methods, aesthetics, and its impact on culture and society, is the basis of Cinema Studies. The Program provides a wide variety of approaches: the history and development of cinema; film theory and critical analysis; the study of genres, national cinemas, and the works of individual masters of cinema; and the examination of film in relation to other arts and academic fields.

Further details are available on the Cinema Studies website [www.utoronto.ca/cinema].

Enquiries: Undergraduate Program Assistant, 416-978-5809, cinema.studies@utoronto.ca.

### Urban Studies

Urban Studies at Innis College provides students with the tools to make sense of their urban world. The Program examines the complex and dynamic relations among institutions, people, and physical form that create, sustain, or destroy cities.

The Program is suited for those students who wish to study cities using several disciplinary approaches. It is also of interest to those students who wish to become involved in urban issues in Toronto. The Program offers an internship in the office of either a municipal politician, non-profit research group, or other government organization as part of its experiential learning program. Because urban issues are so varied, Urban Studies combines well with many other Subject POSt areas. Students are advised to consult the Program Director when designing programs that meet their particular interests. The Program encourages students to take advantage of the Study Elsewhere Program at the University of Toronto to broaden their knowledge of cities.

Enquiries: Director of Urban Studies, Professor Richard J. DiFrancesco, Ph.D., M.C.I.P., R.P.P. (difrance@geog.utoronto.ca). Also see the Urban Studies website at www.utoronto.ca/innis/urban.

### Writing and Rhetoric

The Minor Program in Writing and Rhetoric is built on a foundation of Innis College courses that cover academic essay writing, rhetoric, critical thinking, creative writing, media analysis, and writing in the workplace. The Program also draws on relevant University of Toronto courses in a range of disciplines. The Program's design reflects three interrelated themes.

Writing:

This discipline involves more than instruction in composition skills. Writing is related to rhetoric, logic, reasoning, and critical thinking. One of the main goals of the Program is to ensure that students graduate with a solid grounding in various modes of writing and with highly developed transferable skills.

Rhetoric:

Classical rhetorical terms and methods of argumentation and persuasion are central to the study of rhetoric. One of the oldest disciplines in the liberal arts, rhetoric as a contemporary discipline focuses on the influence of discourse on social forces. For the purposes of this Program, rhetoric will, broadly speaking, be used to signify both rhetoric in the classical sense of the term and the patterns of communication identifiable in a variety of disciplines and environments.

Critical Analysis:

One of the tenets of the Program is shared by many of the University's Arts and Science disciplines: that problem-solving and creative, persuasive, and effective writing depend on the ability to analyze discourse critically.

Enquiries: Cynthia Messenger, Program Director, Room 314 Innis College (416-978-6508), cynthia.messenger@utoronto.ca

## Innis College Programs

### Cinema Studies (Arts program)

Consult the Program Assistant, 416-978-5809, cinema.studies@utoronto.ca, or the Cinema Studies website: www.utoronto.ca/cinema.

Enrolment in the Cinema Studies programs requires completion of INI115Y and three additional full-course equivalents. A minimum grade of 70% in INI115Y1 is required.

Note: All Cinema Studies programs are Type 3 (limited enrolment) programs. See Registration Handbook and Timetable for application procedures.

For students applying to the Specialist program, only those with a CGPA of at least 2.5 will be considered. Meeting the minimum GPA requirement may not guarantee admission.

For students applying to the Major program, only those with CGPA of at least 2.3 will be considered. Meeting the minimum GPA requirement may not guarantee admission.

For students applying to the Minor program, only those with

CGPA of at least 2.0 will be considered. Meeting the minimum GPA requirement may not guarantee admission.

**Specialist program:**
(10 full courses or their equivalent, with at least one at the 400-level and three others at the 300+ level)

First Year:
INI115Y1
Higher Years:
1. INI212Y1, 214Y1
2. One full-course equivalent from Group B
3. One full-course equivalent from Group C
4. Five additional full-course equivalents from Groups B, C, D, E, with no more than two from Group D

**Major program:**
(7 full courses or their equivalent, with at least two at the 300/400 level)

First Year:
INI115Y1
Higher Years:
1. INI 212Y1, 214Y1
2. One full-course equivalent from Group B or C
3. Three additional full-course equivalents from Groups B, C, D, or E, with no more than one from Group D

**Minor program:**
(4 full courses or their equivalent, with at least one at the 300+level)

1. INI115Y1
2. INI 212Y1 or 214Y1
3. Two additional full-course equivalents from Groups A, B, C, D, or E

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**Group A: Foundations:**
INI115Y1, 212Y1, 214Y1

**Group B: Theory and Genre:**
INI 224Y1, 226H, 227H, 322Y1, 323Y1, 325Y1, 327Y1, 329Y1, 330Y1, 374H1, 375H1, 383H, 384H1, 396Y1, 397H1, 398H1

**Group C: Cinema, Nation, World:**
EAS237Y1, 351H1; FCS310Y1; FIN 250H1, 260H1; GER 351H1, 352H1; 364H1; HIS 335H1, 459H1, 460H1, 467Y1; HUN 351H1, 451H1; INI 225Y1, 324Y1, 380Y1, 381H1, 382H1, 385Y1, 386H1, 390Y1; ITA240Y1, 340H1, 341H1; 347H1; NEW352Y1; SLA225H1, 226H1, 234H1, 235H1, 244H; SMC354Y1; UNI 335H1

**Group D: Interdisciplinary:**
CLA388H1; FCS 331H1; HIS 345H1, 367H1, 375Y1, 447Y1; NEW308H1; SLA424H1; UNI221H1, 325H1; VIC 311Y1, 411H1; VIS 202H1, 302H1

**Group E: Senior Seminars:**
EAS431H1; INI 423H1, 426H1, 428H1, 429H, 460H1, 461H1, 462H1, 463H1, 464H1, 465H1, 476Y1, 477H1, 478H1, 482Y1, 483H1, 484H1; ITA441H1

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## Urban Studies (Arts program)

For Program requirements and information, consult the Urban Studies website at www.utoronto.ca/innis/urban. Note: All Urban Studies programs are Type 3 (limited enrolment) programs (see Registration Handbook and Timetable for application procedures). As a Type 3 program, the admission process is competitive and meeting minimum CGPA requirements does not guarantee admission.

**Specialist program:**
(11 full courses or their equivalent including at least four 300+ series courses with at least one 400-level course)

Enrolment in the Specialist program in Urban Studies is limited. Successful enrolment requires prior enrolment in the Urban Studies Major, completion of eleven full-course equivalents, and a mark of at least 70% in INI235Y1.

First Year:
Three of ECO100Y1/105Y1, GGR124Y1, a 100-level POL course or POL214Y1, SOC101Y1
Higher Years:
1. INI235Y1, 430Y1,437Y1
2. ECO220Y1/GGR270H1, GGR271H1/POL242Y1/SOC200Y1/300Y1
3. Four full-course equivalents selected from Groups A through G; no more than one full-course from any group

**Major program:**
(7 full courses or their equivalent, including at least two 300+ series courses)

For admission to the Major program, a minimum CGPA of 2.3 is required.

First Year:
Two of ECO100Y1/105Y1, GGR124Y1, a 100-level POL course or POL214Y1, SOC101Y1
Higher Years:
1. INI235Y1
2. Either INI430Y1 or 437Y1
3. Three full-course equivalents from Groups A through G; no more than one full-course equivalent from any group

**Minor program:**
(4 full courses or their equivalent, including at least one 300+ series course)

For admission to the Minor program, a minimum CGPA of 2.3 is required.

First Year:
One of ECO100Y1/ECO105Y1, GGR124Y1, a 100-Level POL course or POL214Y1, SOC101Y1.
Higher Years:
1. INI235Y1
2. INI430Y1 or INI437Y1
3. One full course equivalent from Groups A through G

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**Group A: Architecture**
FAH 215H1, 216H1, 23023 1H1, 260H1, 270H1, 272H1, 300H1, 303H1, 309H1, 318H1, 327H1, 330H1, 339H1, 341H1, 364H1, 370H1, 371H1, 372H1, 373H1, 374H1, 375H1, 376H1, 391Y0, 392Y0, 393Y0, 394Y0, 395Y0, 396Y0, 397Y0, 404H1, 418H1, 420H1, 421H1, 470H1, 471H1, 477H1.

**Group B: Economics**
ECO 239Y1, 230Y1, 301Y1, 302H1, 303Y1, 307H1, 308H1, 309H1, 310Y1, 313H1, 314H1, 321Y1, 324Y1, 328Y1, 333Y1, 336Y1, 338H1, 339Y1, 340H1, 342Y1, 360Y1, 369Y1, 370Y1, 380H1, 382H1, 418H1, 419H1, 423H1, 424H1, 425H1, 435H1, 450H1, 451H1, 459H1, GGR 220H1, 326H1

**Group C: Geography**
GGR 216H1, 240H1, 246H1, 249H1, 252H1, 254H1, 323H1, 324H1, 327H1, 328H1, 339H1, 343H1, 344H1, 346H1, 350H1, 357H1, 361H1, 362H1, 368H1, 431H1, 450H1, 451H1, 452H1, 459H1;JGI 216H1, 346H1, 454H1.

**Group D: History**
GGR 336H1, 366H1; HIS 312H1, 313Y1, 322Y1, 329H1, 332H1, 339Y1, 355H1, 360Y1, 366Y1, 370H1, 376H1, 385Y1, 420H1, 474Y1, 484H1, INI 428H1.

**Group E: Politics**
JPF 455Y1; POL 221H1, 304H1, 311Y1, 312Y1, 314Y1, 317Y1, 318H1, 321H1, 324Y1, 333Y1, 336H1, 337Y1, 341H1, 343Y1, 344H1, 349Y1, 351Y1, 352H1, 356Y1, 401H1, 406Y1, 418Y1, 425Y1, 436Y1, 445Y1, 447Y1, 473H1, 474H1, 475H1, INI 308H1.

**Group F: Sociology**
SOC 205Y1, 207Y1, 210Y1, 218Y1, 220Y1, 243H1, 244H1, 246H1, 247H1, 260Y1, 270H1, 278Y1, 301Y1, 303H1, 304H1, 306Y1, 309Y1, 310H1, 312Y1, 317Y1, 320Y1, 330Y1, 336H1, 339H1, 344Y1, 352H1, 354H1, 356Y1, 358H1, 364H1, 365Y1, 366H1, 367H1, 369Y1, 370Y1, 382Y1, 383H1, 385H1, 386Y1.

**Group G: Environment:**
GGR 233Y1, 256H1, 314H1, 330H1, 331H1, 332H1, 333H1, 334H1, 335H1, 338H1, 393H1, 409H1, 415H1, 435H1; INI 309H1, JGE 221Y1, JAG 321H1, JGE 221Y1, ENV223H1, 236Y1, JIE 307Y1, ENV320Y1, 321Y1, 333H1, 335H1, 340H1, 341H1, 350H1, 420Y1, 423H1, 424H1, 446H1.

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**Note:**
Students may be able to substitute other courses offered by the faculty of Arts & Science, other faculties, Mississauga, and Scarborough for courses listed here. Please consult the Program Director for more details.

### Urban Studies & Sociology - See Sociology

### Writing and Rhetoric (Arts program)

For Program requirements and information, see below, and visit the Writing and Rhetoric web site: http://www.utoronto.ca/innis/wr/ and click on the FAQs page and the Program Information Sheet. Or contact Program Director Cynthia Messenger, Innis College (416-978-6508 or cynthia.messenger@utoronto.ca).

#### Minor Program:
This is a Type 2 program. See the Registration Handbook and Timetable for application procedures.

Entrance Requirements:

Students who wish to be considered for enrolment in the Minor program must meet the following requirements. Please note that meeting the minimum GPA requirement does not guarantee admission:

1. Achieve a CGPA of at least 2.3 (any discipline).
2. Complete four full-course equivalents (any discipline).

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Requirements for the Minor program: four full courses or their equivalent, as outlined below, including at least one 300/400-level course. Note: No specialist or major degree is available in this program.

1. 2.5 INI writing courses.
2. 1.5 other full-course equivalents from groups A, B, or C below. Courses outside these lists may be approved by the Program Director.

**Courses For The Minor:**
Note: Enrolment in all INI writing courses (except first-year and fourth-year courses) requires completion of 4 full-course equivalents and a CGPA of 2.3. Students do not have to be enrolled in the minor to take INI writing courses.

**Innis Writing Courses**
INI 103H, INI 104H, INI 203Y1, 204Y1, 300Y1, 301H1, 304H1, 305H1, 311Y1, INI412Y1

**A. Critical Analysis and Reasoning**
ARC235H1, 417H1; INI 204Y1, 304H1; LIN481H1; PHL 247H1, 275H1, PSY370H1; TRN 190Y1, 200Y1

**B. Workplace Writing and Media**
ARC232H1; FAH443H1; HIS316H1, 482H1; INI 104H, INI 300Y1, 301H1, 384H1; PHL295H1, POL475H1; PSY327H1; SMC 219Y1, 228Y1, 300H1; UNI221H1

**C. Language and Rhetoric**
ANT253H, 329Y, 427H; ENG 100H1, 110Y1, 205H; 285H; 385H; INI 103H, INI 203Y1, 305H1, 311Y1; 412Y; JAL328H1, 355H1; JPL315H1; LIN200H1, 201H1, 203H1, 204H1; VIC120Y1, 345H1, 350Y1; All Vic One Courses.

## Innis College Courses

Listed in this order:

Cinema Studies
Urban Studies
Writing and Rhetoric
Other Innis College courses

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### Cinema Studies Courses
See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), INI Cinema Studies courses are classified as HUMANITIES courses.

#### 100-Series Courses

**INI115Y1 Introduction to Film Study [26L, 78P, 26T]**
Introduction to film analysis; concepts of film style and narrative. Topics include documentary, avant-garde, genres, authorship, ideology, and representation.

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#### 200- Series Courses

**INI212Y1 Film History [26L, 78P, 26T]**
An introduction to major phases of international film history from its origins to the present, including screenings and

discussion of narrative films representative of film movements, technological innovations, and influential directors. Issues in the writing and reading of film history are examined.
Prerequisite: INI115Y1

**INI214Y1 Film Theory [26L, 78P, 26T]**
A study of select classical and contemporary film theories, their medium-specific arguments, and their cultural and intellectual contexts. Investigations include the nature of film theorizing, formalist and realist traditions, first and second film semiologies, apparatus theory, and debates specific to spectatorship and film viewing.
Prerequisite: INI115Y1

**INI224Y1 Filmmakers: The Personal Vision (Formerly Authorship in Cinema) [52L, 52P]**
Close examination of the careers and works of four auteur directors in commercial film production. (Offered in alternate years)

**INI225Y1 American Popular Film Since 1970 [52L, 52P]**
Examination of the art of popular film in its social, political, and commercial contexts, through study of selected popular films from 1970 to the present. Various critical approaches, genres, and directors are included.
Exclusion: INI326Y1

**INI226H1 Fantasy and Horror Film [13L, 39P, 13T]**
Study of fantasy and horror films with emphasis on literary background, political and social contexts and critical interpretations.

**INI227H1 Science Fiction Film [13L, 39P, 13T]**
Study of science fiction film in its role as a commercial film genre, social allegory and speculation on technology and the future.
Exclusion: ENG238H1

## 300-Series Courses

**INI322Y1 Avant-Garde and Experimental Film [52L, 52P]**
Film experimentation in the context of modern art and poetry (Cubism, Dada-Surrealism) from the 1920s through the 1990s. (Offered in alternate years)
Exclusion: INI322H1
Prerequisite: INI115Y1

**INI323Y1 Women and Representation [52L, 52P]**
Feminist film criticism from mid-sixties critiques of media stereotypes of women to current issues in feminist film theory. Films to be studied include mainstream narrative fiction and films by women directors: Von Sternberg, Godard, Sirk, Arzner, Dulac, Lupino, Von Trotta, Rainer, Akerman, Duras. (Offered in alternate years)
Prerequisite: INI115Y1/NEW260Y1

**INI324Y1 American Filmmaking in the Studio Era [26L, 52P, 26T]**
A study of filmmaking in the US once the studio system was in place; consideration of industrial, economic, ideological, and aesthetic dimensions of the American studio era. Topics include the primacy of classicism, the operations of the studio system (including censorship, labour relations, marketing, and star promotion), and the cultural function of American films. (Offered in alternate years)
Prerequisite: INI115Y1

**INI325Y1 Documentary Film [52L, 52P]**
A critical survey of documentary practice including newsreels, direct cinema, cinema verité, ethnographic, and various hybrid narrative forms, with emphasis on the rhetorical, aesthetic, and political dimensions of "the art of record." Topics include poetics, argument, and modes of address; evidence, authenticity, and persuasion; filmmaker/subject/audience nexus; historiography, hagiography, and memory; reflexive irony and performance. (Offered in alternate years)
Prerequisite: INI115Y1

**INI327Y1 Race and Representation [52L, 52P]**
Theories of cinematic representation emphasizing race, identity, and Diaspora, with an emphasis on post-colonial and critical race theories. Films include works from Africa and the black Diaspora, as well as selections from aboriginal and other diasporic communities. Films by Mambety, Julien, Dash, Cisse, Akomfrah, Moffat, Sembene. (Offered in alternate years)
Prerequisite: INI115Y1

**INI329Y1 Theories of Film Genres and Filmic Narration [26L, 52P, 26T]**
Study of theoretical and analytical models of film genres and narratology; structuralist, cognitive, and semiotic approaches to filmic narration. Genres to be studied include westerns, crime films, art cinema, fantasy, and horror. (Offered in alternate years)
Prerequisite: INI115Y1

**INI330Y1 Contemporary Film Theory: The Screen Revolution [52L, 52P]**
Film theory since the early 1970s. Topics include the critique of realism, suture, spectatorship, genre, the cinematic apparatus, race, and queer cinema. Films are screened as illustrations of the theoretical texts: Welles, Sirk, Godard, Duras, Potter, Ottinger, Julien. (Offered in alternate years)
Exclusion: INI 425Y1, 481Y1
Prerequisite: INI 115Y1, 214Y1

**INI374H1 Issues in Film Authorship I [26L, 39P]**
Advanced study of issues in film authorship through intensive examination of two major filmmakers. In 2008-2009, Michelangelo Antonioni in the setting of post-WWII Italian modernity and Won kar-wai in the setting of postmodern Hong Kong urbanism. (Offered in alternate years)
Prerequisite: INI115Y1

**INI375H1 Issues in Film Authorship II [TBA]**
Advanced study of issues in film authorship through intensive examination of one or more major filmmakers. (Offered in alternate years)
Prerequisite: INI115Y1

**INI380Y1 Contemporary World Cinema [52L, 78P]**
An intensive survey of world cinema since 1970, from Africa, Asia, Australia, South and North America, and Europe. (Offered in alternate years)
Prerequisite: INI115Y1

**INI381H1 Aspects of a National Cinema [52S]**
In-depth treatment of a national cinema in a seminar format. (Offered in alternate years)
Prerequisite: INI115Y1

**INI382H1 European Cinemas [26L, 26P]**
Comparative study of European film production and culture: inter-war and post-war developments; contemporary tendencies

(co-production, continental unification, immigration). (Offered in alternate years)
Exclusion: INI382Y1

**INI383H1 The Origins of the Animation Industry, 1900-1950: A Technosocial History [26S, 39P]**
An introduction to early animation, considering its vaudeville roots, its industrialization, and its emerging aesthetics and representational tropes. Examination of the early corpus of animation from 1900-1950 and in-depth study of the artistic, social and cultural mileux from which animation derived. (Offered in alternate years)
Prerequisite: INI115Y1, INI212Y1

**INI384H1 Critical Writing on Film (formerly INI384Y1) [26S]**
The practice of film criticism with concentration on film reviews and scholarly articles. The study of examples of such work is the focus of the seminars supplemented by practical sessions involving process writing and collaborative editing. (Offered in alternate years)
Exclusion: INI384Y1, NEW304Y1
Prerequisites: Any 2 courses from Group A (INI115Y; 212Y; 214Y) and 2 additional Cinema Studies full course equivalents.

**INI385Y1 Canadian Cinema [26L, 52P, 26T]**
Critical study of Canadian cinema from its inception to the present. (Offered in alternate years)
Exclusion: INI385H1; NEW 311H1
Prerequisite: INI115Y1

**INI386H1 Quebec Cinema (formerly INI486H1) [13L, 26P, 13T]**
The range of French-language filmmaking in Quebec within the context of efforts to establish a distinct national identity from the 1940s to the present day. (Offered in alternate years)
Exclusion: INI486H1/NEW312H1
Prerequisite: INI115Y1

**INI390Y1 Chinese Cinemas [52L, 52P]**
Examination of contemporary Chinese films in their three production centres: the People's Republic of China, Taiwan, and Hong Kong. Production, commercial and aesthetic trends, and international reception; major auteurs and genres. Directors include Chen Kaige, Zang Yimou, Edward Yang, John Woo, and Wang Kar-wai. (Offered in alternate years)
Exclusion: INI390H
Prerequisite: INI115Y1
Recommended preparation: INI 212Y1, 214Y1

**INI396Y1 Special Topics in Cinema Studies [TBA]**
Seminars in special topics designed for specialist and major students in Cinema Studies.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI397H1 Special Topics in Cinema Studies: B Movies and Cult Cinema [26S, 39P]**
Study of cult and exploitation cinema both as an institutional category (e.g., "B" movies) and as camp appropriation (e.g., fanzines, "cult" audiences), focusing on contexts of production, exhibition, and reception.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor

**INI398H1 Special Topics in Cinema Studies: American Animation after 1950 [26S, 39P]**
This course looks at American animation--the industry, the art form, the cultural phenomenon--after World War II. It considers animation's place in the rise of television and television's place in changing animation aesthetics and practices. It will also examine the role of animation in the emerging counterculture of the 1960s and 1970s, the transnationalization of the American industry at around the same time, and, finally, how animation's move into the digital has changed animation practices, audiences, and aesthetics. Along the way we will pay close attention to animation's always troubled and troubling relationship to something we call the real.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.
Recommended preparation: INI383H1

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### 400-Series Courses

**INI423H1 Melodrama in Film [26S, 26P]**
Intensive study of theoretical issues raised by melodrama, including gender, class, and spectatorship; emotion and the non-representational. Psychoanalytical and historical factors shaping the "melodramatic imagination" are emphasized.
Exclusion: INI423Y1
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI426H1 Film Comedy [26S, 26P]**
A study of international film comedy, including its historical development, and the difficulties that comedy poses for genre and auteur approaches.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI428H1 The Cinematic City [26S, 39P]**
Film's emergence from urban culture of the nineteenth century: the modern industrial city and the cinematic imagination between the world wars; the critical alignment of urbanism and the cinema.
Exclusion: INI321H1
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI429H1 The Revolution Will/Will Not Be Televised [26L, 26P]**
Examining the mediation of political struggle from 1964-1974, this course analyzes both how specific political issues were represented in popular media, and attempts to politicize and question representational regimes. Its primary focus will be cinematic and televisual, but by necessity it will also touch upon radio and the recording industry.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI460H1 Film Noir [26S, 26P]**
Consideration of film noir's roots, its status as a genre, and its enduring appeal, the latter evidenced by continued critical interest and neo-noir offshoots.
Prerequisite: At least full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI461H1 Models of Film Analysis [26S, 26P]**
Advanced survey of a variety of approaches to the filmic text, including structuralist variants, textual analysis, and neo-formalism.

Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI462H1 Theory, History and German Cinema [26S, 26P]**
Historiographic and theoretical issues raised by German Cinema.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI463H1 Early Cinema [26S, 26P]**
Investigation of film from the beginnings of the medium until the advent of the feature film in the mid-teens: early cinema's technological, formal, economic, and cultural dimensions; questions of audience composition, spectatorial address, and intermediality.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI465H1 Cinema and Technology (formerly INI483H1) [26S, 26P]**
How technology influences the operations and study of cinema. Includes technology's relationship to realism, apparatus theory, and cinematic style; study of widescreen, sound, colour, and emergent technologies.
Exclusion: INI483H1
Prerequisite: At least ten full-course equivalents, including INI115Y1, 212Y1, 214Y1 or permission of instructor.

**INI475H1 Advanced Studies in Cinema [TBA]**
Seminars in special topics designed for advanced specialist and major students in Cinema Studies.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI476Y1 Independent Studies in Cinema [TBA]**

**INI477H1 Independent Studies in Cinema [TBA]**

**INI478H1 Independent Studies in Cinema [TBA]**
Independent research projects devised by students and supervised by Cinema Studies faculty. Open to advanced Specialist and Major students in the Program. Applications must be submitted to the Program Office by June 1 for a Fall course, by November 1 for a Spring Course, and by April 1 for a summer course.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of the Cinema Studies Committee

**INI482Y1 Advanced Studies in Cinema [TBA]**
Seminars in special topics designed for advanced specialist and major students in Cinema Studies.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI483H1 Advanced Studies in Cinema: Children in Movies: Actors, Characters, Audience [26S, 39P]**
In its audiences, its theory, and its workers, film has a long and intimate association with children and childhood. This class examines that complex relationship, exploring arguments about the effects of movies on children, child stars and their place in arguments about culture and society, and the historically specific representation of childhood in films.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

**INI484H1 Advanced Studies in Cinema: International Film Festivals [26S, 26P]**
This is a fourth-year seminar course on major international film festivals. The course will study the industrial formations of dissemination of film texts, production of authorship by film festivals, and the history and structures of film festivals as para-industrial organizations in a geo-political circuit of cultural transnationalism.
Prerequisite: At least ten full-course equivalents, including INI 115Y1, 212Y1, 214Y1 or permission of instructor.

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### Urban Studies Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all INI Urban Studies courses are classified as SOCIAL SCIENCE courses.

**JGI216H1 Urbanization and Global Change [26L]**
Examines the process of globalization, mass urbanization and economic change taking place in cities around the world. Includes interdisciplinary exploration of the industrial and economic changes that have ensued as a result of globalization, as well as social and cultural manifestations associated with the emergence of global cities.
Recommended Preparation: GGR124Y1

**INI235Y1 A Multidisciplinary Introduction to Urban Studies [52L]**
Explores the culture, thoughts, institutions, policies, and processes shaping our urban areas. Emphasis is placed on understanding the problems and prospects associated with growth and change in the city. Disciplines used to provide various interpretations include Economics, Environmental Studies, Geography, History, Political Science, Sociology, Urban Design and Planning.
Prerequisite: Four courses with at least two from: ECO100Y1, ECO105Y1, GGR124Y1, a 100-level POL course or POL214Y1, SOC101Y1 or permission of the instructor

**JIE307Y1 Urban Sustainability (formerly INI307Y1) [52L, 26P]**
This course critically examines the concept of urban sustainability in theory and application. Case studies of ongoing urban sustainability programs in the developed world help students assess the successes and failures of these programs. The course also examines the current state of research and implementation efforts toward urban sustainability.
Prerequisite: One of the following: JEG221Y/JIE222Y1 and enrolment in a Centre for Environment program OR INI235Y1 OR permission of the instructor (particularly for students who have completed JEG222Y1/JIE222Y1/GGR233Y1/POL209Y1/SOC205Y1/260Y1)
Exclusion: INI307Y1
This is a Social Science course

**INI308H1 The City of Toronto [26L]**
Examines the struggle to create a civic society within Toronto as it becomes a global city. Sample topics include: the neighbourhood and the city, the outer city and the urban region, planning and sprawl, public and private transportation, the natural and the urban environment, housing and homelessness, levels of government, civic culture and multiculturalism.

Prerequisite: One of the following: a 100 level Political Science, GGR124Y1, INI235Y1, SOC101Y1, or permission of the instructor.

**INI309H1 Urban Infrastructure [26L]**
Examines the importance of infrastructure to urban societies from a technical, environmental, political, historical, and social perspective. Students study energy and communications systems, transportation, water, solid waste disposal, parks and recreation facilities, schools, hospitals, and community facilities and services. Key issues include growth management, financing and maintenance, public-private partnerships, and international development.
Prerequisite: One of the following: INI235Y1 or permission of the instructor.

**INI335Y1 The Changing Dynamics of Cities [26L]**
In this course, students develop an understanding of the city as a dynamic organism that is constantly changing as a result of economic, social and political pressure. The course material is organized around a series of industry cluster case studies including: automotive, culture, information technology and health care. The emphasis of the course will be on the extension and refinement of theories and arguments developed in INI235Y.
Prerequisite: INI235Y. Priority is given to students enrolled in the Urban Studies Minor, Major, or Specialist Programs. However, consideration may be given to students with suitable course background as determined by the Program Director. Note: INI335Y cannot be taken concurrently with INI235Y.)

**INI336Y1 Creative Cities [52L]**
A prominent thesis in the fields of planning and economic geography is that the presence of creative occupations in a city correlates positively with the overall health of urban regions. This course will investigate the nature of this link from theoretical and empirical perspectives and examine its potential usefulness in a planning/policy context.
Prerequisite: GGR124Y, INI235Y Recommended Preparation: GGR220Y

**INI337H1 Studies in Contemporary Urban Problems [26L[**
This course will focus on an examination of the immediate difficulties facing Toronto and by extension all Canadian cities. Instruction will consist of a combination of lectures by the instructor and by noted experts/practitioners in a range of topic areas including urban governance, finance, planning, environmental sustainability and social welfare.
Recommended preparation: GGR124Y1 and/or INI235Y1

**JGI346H1 The Urban Planning Process [26L]**
Urban planning mechanisms, the legislation, and its goals. Planning issues from negotiation to legislation to appeal. Urban and regional problems facing planners in Ontario compared with those emerging in other provinces; Ontario's legislative solutions contrasted with those developed elsewhere. (Given by the Department of Geography and Innis College)
Recommended Preparation: GGR124Y1

**INI430Y1 Urban Policy Seminar [52S]**
Examines contemporary urban problems and policy issues through seminar discussions, readings and field research. Emphasis is placed on developing an interdisciplinary approach to urban problem solving.
Prerequisite: INI235Y, enrolment in a minor, major or specialist program in Urban Studies, or permission of instructor.

**INI431Y1 Special Topics in Urban Studies [TBA]**

**INI432H1 Special Topics in Urban Studies [TBA]**

**INI433H1 Special Topics in Urban Studies [TBA]**
From time to time, the Urban Studies Program organizes community outreach and information sessions. At the discretion of the Director, students may enroll in a special topics course and investigate these issues more deeply under the supervision of an agreeable faculty member. Proposals including a letter from an agreeable faculty member should be submitted to the Director by June 1 for a Fall or Year-long course, or by November 1 for a Spring course.
Prerequisite: Enrolment in a major or specialist program in Urban Studies.
Recommended Preparation: INI235Y, INI306Y.

**INI434Y1 Independent Research in Urban Studies [TBA]**

**INI435H1 Independent Research in Urban Studies [TBA]**

**IN436H1 Independent Research in Urban Studies [TBA]**
Designed to allow strong students in the Major and Specialist programs to extend a piece of urban research under the supervision of a faculty member from any aligned departments. Choice of 'H' or 'Y' session pursuant to the scope of the research envisioned, the proposed supervisor's assessment of depth of the inquiry, and the approval of the program director. Proposals including a letter from an agreeable supervisor should be submitted to the program director by June1 for a Fall or Year session course and by November 1 for a Spring session course.
Prerequisite: Enrolment in the Urban Studies Major or Specialist Program
Recommended Preparation: INI235Y1, INI306Y1

**INI437Y Urban Experiential Learning in Toronto & the GTA (formerly INI306Y1) [78S]**
A method of studying city issues that combines readings, seminar discussions, and lectures with an internship in the office of a municipal politician, local government, or non-profit research/community organization. Readings focus on community development, urban planning, economic development and local government. Students must fill out a ballot for the course (available from the College Secretary) by June 1. Enrolment in this course is competitive and at the discretion of Dr. Shauna Brail (Director, Urban Studies Placement Program).
Prerequisite: INI235Y1, enrolment in minor, major or specialist programs in Urban Studies or permission of instructor
Exclusion: INI306Y1

**JGI454H1 The Role of the Planner: Making a Difference [26L]**
This course will focus on the role of a planning practitioner in contemporary society using a wealth of examples drawn from recent issues and debates in Canadian cities and regions. The course will walk students through the demands made of planners in terms of both technical expertise as well as political necessity and ask them to think actively about how to prepare for the extraordinary growth of cities during the next century. Examples of issues that will be discussed in some detail include the myths surrounding the city vs. the suburbs, the creativity

and passion involved in planning work and the new City of Toronto Act.
Prerequisite: 15 credits, 5.0 of which must be GGR/INI Urban Studies

## Writing and Rhetoric Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), Writing and Rhetoric courses are classified as HUMANITIES courses, except for INI 103H, 104H, 300Y1, 301H1, 304H, 405Y1/406H1/407H1, and 408Y1/409H1/410H1 which are classified as both HUMANITIES and SOCIAL SCIENCE courses.

**INI103H1 Writing Essays (formerly INI200Y1) [39S]**
Introduces the fundamentals of essay writing within an interdisciplinary context. Includes the history of the essay and its various rhetorical modes (narrative, descriptive, expository, argumentative), with a focus on humanities and social sciences essays. Both non-academic essays and essays from across the academic disciplines are examined in terms of purpose, audience, and persuasive strategies.
Exclusion: INI200Y1

**INI104H1 Writing Reports (formerly INI200Y1) [39S]**
Introduces the fundamentals of report writing within an interdisciplinary context. This writing intensive course focuses on improving writing skills appropriate to report writing genres. Informal, formal, research, and professional workplace reports are examined in terms of purpose, audience, structure, style, persuasive strategies, and use of visual rhetoric (tables, charts, graphs). This course also examines qualitative and quantitative research methods.
Exclusion: INI200Y1 and INI300Y1

**INI203Y1 Foundations of Written Discourse [78S]**
Designed to teach students to write persuasively and to recognize persuasive strategies at work in writing they analyze. Classical rhetorical terms, elements of style, and modes of argument are central to the course. Assignments include a rhetorical analysis, in-class essays, and a term essay. Readings include prose from a variety of disciplines, excluding fiction and poetry. Students who enrol in the course must demonstrate competence in the English language.
Prerequisite: Completion of 4.0 full-course equivalents and CGPA of 2.3 or higher.

**INI204Y1 The Academic Writing Process [78S]**
The strategy necessary to write complete pieces of non-fictional prose, especially exposition and argument. Concepts of planning and organization include: focusing, research, outlining, patterns of logical development, introduction, paragraph development, conclusion, argumentation and persuasion, documentation, and revision. Students for whom English is a second language should have an advanced level of fluency in English before enrolling.
Prerequisite: Completion of 4.0 full-course equivalents and CGPA of 2.3 or higher.

**INI300Y1 Strategic Writing in Business and the Professions: Theory and Practice [78S]**
Aims to teach students to recognize the rhetoric of the professional workplace and to communicate strategically and ethically using written and oral discourse appropriate to business, government, and not-for-profit organizations. Case study analysis using ethical reasoning models is a central component of the course.
Prerequisite: Completion of 4.0 full-course equivalents and CGPA of 2.3 or higher.

**INI301H1 Contemporary Issues and Written Discourse: Rhetoric and the Print Media [39S]**
Examines how the language and rhetoric of print media shape social issues. Rhetorical strategies at work in the media reporting of such controversial issues as international crises and military actions are examined. The construction of the columnist's persona and the role of editorials are also examined.
Prerequisite: Completion of 4.0 full-course equivalents and CGPA of 2.3 or higher.

**INI304H1 Critical Thinking and Inquiry in Written Communication [26L]**
This seminar in critical reading, analysis, and writing focuses on the nature, the evaluation, and the use and abuse of evidence in the process of formulating and supporting an argument. The case study method will be employed to assess the level of authority, credibility, and objectivity evident in public discourse, official sources, and academic inquiry.
Prerequisite: Completion of 4.0 full-course equivalents and CGPA of 2.3 or higher.

**INI305H1 Word and Image in Modern Writing [39S]**
The rhetorical term Ekphrasis, which refers to writing that is about visual art, is central in the examination of the persuasive power of the "conversation" or discourse that is produced when the written word attempts the evocation of visual images. Course readings will include ekphrastic texts drawn from several disciplines and genres: journalism, informal essays, poetry, and scholarly writing.
Prerequisite: Completion of 4.0 full-course equivalents and CGPA of 2.3 or higher.

**INI311Y1 Seminar in Creative Writing [78S]**
This workshop course examines methodological approaches to literary fiction from the perspective of the creator. Through course readings, discussion, and creative writing assignments, student writers will learn how prose writers combine stylistic techniques, point-of-view, setting, character, scenes, and structure to produce literary effects.
Prerequisite: Experience or strong interest in writing fiction. 4.0 full-course equivalents, fluency in English. CPA 2.3 minimum.

**INI405Y1 Independent Studies in Writing and Rhetoric [TBA]**

**INI406H1 Independent Studies in Writing and Rhetoric [TBA]**

**INI407H1 Independent Studies in Writing and Rhetoric [TBA]**
Independent research projects devised by students and supervised by the Writing and Rhetoric staff. Open only to students who are completing the Minor Program in Writing and Rhetoric Program. Applications should be submitted to the Program Director by June 1 for a Fall session course or by November 1 for a Spring session course.
Prerequisite: At least ten full-course equivalents including INI 203Y1 or 204Y1 and INI 300Y or 301H or 304H or 305H or 311Y; permission of Program Director

**INI408Y1 Special Topics in Writing and Rhetoric [TBA]**

**INI409H1 Special Topics in Writing and Rhetoric [TBA]**

**INI410H1 Special Topics in Writing and Rhetoric [TBA]**
Seminars in special topics designed for students who are completing the Minor Program in Writing, Rhetoric, and Critical Analysis.
Prerequisite: At least ten full-course equivalents including INI 203Y1 or 204Y1 and INI 300Y or 301H or 304H or 305H or 311Y; or permission of instructor

**INI412Y1 Prose Style Across Genres [39L, 39S]**
Focuses on methods for analyzing how various aspects of style shape the meaning of texts in such genres as fiction, biography, oratory, legal argument, science writing, and government reports. Also considers historical and theoretical perspectives on style. Requires a research project, which for qualified students may include a translation.
Prerequisite: 10 full course equivalents; CGPA of 2.3 or higher
Recommended Preparation: INI 200Y, INI203Y1 or 204Y1

### Other Innis College Courses

**INI299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

## International Relations: see Trinity College

## Faculty

### Professors Emeriti

M. Ciavolella, Ph D
A. Franceschetti, Dott in Lett, Ph D
M. Kuitunen, Dott in Lett, MA, Phil M,Ufficiale Ord. Merit It. Rep.
J.A. Molinaro, MA, Ph D, FRSC
M.W. Ukas, MA, Ph D

### Professor and Chair of the Department

D. Pietropaolo, MA, Ph D (SM), Commend. Rep. It.

### Associate Professor and Associate Chair

L. Somigli, Dott in Lett, Ph D (fall term)
S. Bancheri, MA, PhD (University of Toronto Mississauga) (winter term)

### Professors

R. Capozzi, MA, Ph D
K. Eisenbichler, MA, Ph D (V)
F. Guardiani, Dott in Lett, MA, Ph D (SM)
M. Lettieri, MA, Ph D (University of Toronto Mississauga)
O.L. Pugliese, MA, Ph D (V)

### Associate Professors

L. Somigli, Dott in Lett, Ph D

### Senior Lecturers

R. Longo Lavorato, MA, Ph D
B. Magliocchetti, MA
M. Pasquarelli-Clivio, MA, Ph D (SM)
M. Scarci, MA, Ph D
A. Urbancic, B Ed, MA, Ph D (V)

To study Italian is not only to acquire a language, but also to study a rich literature and many-sided culture which have played an important, and sometimes dominant, role in Western civilization. For Canadians, the Italian contribution bears a special significance: the vast influx of Italians has brought changes in our way of life and a living presence to reinforce traditional Italian influences, thus enriching the meaning of the term Canadian.

Italian combines well with other modern languages and literatures, and other programs such as European Studies, Literary Studies, and Mediaeval and Renaissance Studies, but is by no means restricted to these. Students may choose from Specialist, Major and Minor programs in Italian Studies.

Italian courses are offered for beginners as well for students with an Italian background. Oral practice is included in all language courses. Students well qualified in the Italian language may be excused from language courses in First Year (please see the Undergraduate Coordinator). 300- and 400-series courses are available to qualified third- and fourth-year students and may be taken concurrently. These courses offer a wide range of options in language, literature and linguistics. Except for specialists and majors, it is not necessary to take language courses in the 300- and 400-series, but language courses may be taken without literature courses. In addition, there are courses in culture, cinema and theatre that have no language requirement.

In conjunction with Woodsworth College, ITA courses may be taken in Italy at the University of Siena during July and August. A number of bursaries are available. Students may apply to take their Third Year in Italy under the Study Elsewhere program in conjunction with the International Student Exchange Office.

Undergraduate Coordinator: 416-926-2338

Email: italian.undergrad@utoronto.ca

Enquiries:
100 St. Joseph St. Room 204 (416-926-2345)

Web site:
http://www.utoronto.ca/italian/

## Italian Studies Programs

Enrolment in the Italian Studies programs requires the completion of four courses; no minimum GPA required.

### Italian (Arts program)

**Specialist program:**
(10 full courses or their equivalent, including at least one full course equivalent at the 400 level)

1. ITA 100Y1/101Y1/102Y1/110Y1/(133H1, 134H1)/152Y1
2. One of the following series of courses.
   a. ITA 250Y1, (343H1,344H1) (Prerequisite ITA 100Y1/102Y1(133H1, 134H1))
   b. ITA 251Y1,(354H1,355H1) (Prerequisite ITA 101Y1/110Y1)
   c. ITA 252Y1, (364H1,365H1) (Prerequisite ITA 152Y1)
3. Two 200-series ITA courses including ITA 250Y1/251Y1/252Y1
4. Two full courses or equivalent at the 300+ level in literature. Students must complete at least ONE half course in THREE separate periods of Italian literature.
5. Three and one half additional ITA 300+ series courses with at least one full course equivalent at the 400-level.
6. ITA495H1
7. No more than TWO full courses or equivalent where the language of instruction is English may be counted towards the Specialist Program.

**Major program:**
(7 full courses or their equivalent)

1. ITA 100Y1/101Y1/102Y1/110Y1/(133H1, 134H1)/152Y1
2. Two 200-series courses including ITA 250Y1/251Y1/252Y1 or JFI 225Y1
3. One full course or equivalent at the 300+ level in literature
4. Three additional ITA 300+ series courses (ex-beginners must include ITA 343H1 and 344H1 in their selection)

**Minor program:**
(4 full courses or their equivalent)

Any 4 ITA courses (at least one full course equivalent must be a 300/400-level literature course)

# Italian Studies

### Italian Culture and Communication Studies (Arts program)

**Minor program:**
4 full courses (or equivalent) including ONE full course equivalent from any of the following:
ITA 340H1/341H1/441H1/347H1/360H1/361H1/363H1/430H1/356Y1/357Y1/358Y1/359Y1/371H1/372H1/385H1/471H1/472H1/473H1

### Second Language Learning (Italian) (Arts program)

**Major program:**
(7 full courses or their equivalent)

1. ITA 100Y1/101Y1/110Y1/(133H1, 134H1) (all with minimum 73%)/152Y1
2. JFI 225Y1
3. ITA 250Y1/251Y1/252Y1/253Y1
4. One full course or equivalent at the 300+ level in literature
5. At least one full-course equivalent from: ITA 360H1, 361H1, 363H1, 430H1
6. Two additional ITA 300/400-series courses

### Faculty of Arts & Science Language Citation

The Department of Italian Studies participates in the Faculty of Arts and Science's Language Citation initiative for Italian. Proficiency in Italian is an invaluable asset for those wishing to pursue a career in social work, business, applied science, government, law, medicine or education. A knowledge of Italian complements undergraduate studies in other areas, such as music, fine art, literary studies, European history or political science, to name a few.

The Language Citation recognizes a significant level of achievement in language study with a high level of academic success. The Citation in Italian is available to students who, having completed a first year language course in Italian (ITA100Y1/101Y1/152Y1) (or the equivalent prerequisite training), earn a grade of at least B- in a second-year language course (ITA250Y1/251Y1/252Y1) and in one FCE in Italian language at the 300 or 400 level.

Students should note that, as explained on page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

**See also Modern Languages and Literatures; Linguistics and Languages; Cinema Studies (listed with Innis College); Drama; European Studies; Renaissance Studies (listed with Victoria College); Women and Gender Studies**

## Italian Studies Courses

For Distribution Requirement purposes (see page 26), all ITA courses are classified as HUMANITIES courses.

**HUM199H1 First Year Seminar 26S**

**HUM199Y1 First Year Seminar 52S**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

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**Note**
Guidelines for the selection of first-year language courses:

ITA152Y1: for students who have completed OAC/4U Italian at the high school level (or equivalent).

ITA101Y1: for students who have some passive knowledge of Italian (or an Italian dialect) or some secondary school training in Italian (but not at the senior level OAC/4U).

ITA100Y1: for students who have neither passive knowledge nor any secondary school training in Italian.

Students with an adequate knowledge of Italian may substitute for the language courses and half-courses in the First and Second years another course or half-course, subject to the permission of the Department. The Department reserves the right to place students in the language course appropriate to their level of language skill.

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**ITA100Y1 Italian Language for Beginners [78S]**
An introduction to the main elements of the Italian language. The development of speaking, reading, and writing skills. Introduction to linguistic analysis of literary prose excerpts.
Exclusion: Grade 10 Italian/ITA101Y1/102Y1/110Y1/(133H1, 134H1)/ 152Y1 (Not open to students with a knowledge, however passive, of an Italian dialect)

**ITA101Y1 Elementary Italian Language [78S]**
Main elements of Italian grammar for students who have some passive knowledge of Italian or an Italian dialect or some secondary school training in Italian (but not at the senior OAC/4U level). Introduction to linguistic analysis of literary prose excerpts.
Exclusion: OAC/4U Italian/ ITA100Y1/102Y1/110Y1/(133H1, 134H1)/ 152Y1

**ITA135Y0 Conversation and Culture: An Introduction to Italian [78S]**
The course is designed to introduce students to Italian grammar and develop basic oral and comprehension skills. Elements of Italian culture, past and present, are also examined in the context of language and communication. To select the appropriate second-year follow-up course, students are asked to contact the Undergraduate Coordinator. (Offered in Siena only)

**ITA152Y1 Language Practice [78S]**
A review of grammar, the writing of short compositions, and oral practice. Linguistic analysis based on readings of contemporary literary texts.

Exclusion: ITA100Y1/101Y1/102Y1/110Y1/(133H1, 134H1)
Prerequisite: Italian OAC/4 U or permission of Department.

**ITA210Y1 Contemporary Italy [52S]**
An analysis of literary, social and artistic movements, whose aim is to better understand the conditions that prevail in modern Italy. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field. (Given in English)

**ITA220H1 Introduction to Italian Literature: Prose [26L]**
Reading of selections of Italian prose works, with emphasis on linguistic and stylistic features. Texts to be read in Italian; both English and Italian will be used as language of instruction, as appropriate. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field.
Prerequisite: ITA100Y1/101Y1/152Y1

**ITA221H1 Introduction to Italian Literature: Poetry [26L]**
Reading of selections of Italian poetry, with emphasis on linguistic and stylistic features. Texts to be read in Italian; both English and Italian will be used as language of instruction, as appropriate. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field.
Prerequisite: Ita100Y1/101Y1/152Y1

**JFI225Y1 Second Language Learning [52S]**
A theoretical and practical consideration of the ways we learn a second language, with a historical overview and critical evaluation of the various methodologies that have been developed; the role of cultural studies in language learning, practical evaluation and development of syllabus, course and textbook materials. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field.
Prerequisite: FSL161Y1(73%)/181Y1/ITA100Y1/101Y1/102Y1/110Y1/(133H1, 134H1) (all with a minimum of 73%)/152Y1

**ITA233Y1 Ethnicity and Mainstream Italian Canadian Culture [52L]**
An examination of the Italian presence in Canada from the time of John Cabot (Giovanni Caboto) to the present through an analysis of literary and other texts and a consideration of sociological and linguistic phenomena. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field. (Given in English)

**ITA235Y0 Conversation and Culture: Intermediate Italian Intensive Oral Practice [78S]**
This course is designed to enhance students' oral proficiency in Italian, improve listening and reading comprehension and develop a broad lexical base for more effective communicating skills. Elements of Italian culture are also examined in the context of language and communication through a series of topical readings which form the basis of discussion. (Offered in Siena only)
Exclusion: ITA252Y1 (and/or higher)
Prerequisite: ITA100/101/102/(133H1,134H1)/135Y1/152Y1 or permission of Department.

**ITA240Y1 Italian Cinema [52L, 78P]**
An overview of Italian cinema from its early days to the present, which also offers a survey of Italian 20th Century history and culture. The course features films by masters Rossellini, DeSica, Fellini, Antonioni, Bertolucci, Pasolini and works by younger filmmakers, such as Academy Award winners Tornatore, Salvatores and Benigni. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field.
The course is given in English and all films shown have English subtitles.

**ITA245Y1 Italian Culture & Civilization [26L, 26T]**
The main elements of Italian civilization from the time of Dante until the present in literature, art, and thought with reference to political history where appropriate. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field. (Given in English)
Exclusion: ITA246H1/247H1/248Y1/(356/357Y1)/(358/359Y1)

**ITA249H1 Italians in China: From Marco Polo to Matteo Ricci [26L]**
The course focuses on two historical encounters of Italian civilization with imperial China: One made possible by the immensely popular book, Il Milione, an account of several years of Asian travels by the Venetian merchant Marco Polo (1245-1324), the other by the writings by Matteo Ricci (1552-1610) and other Jesuits, Catholic Missionaries. This course includes a component designed to introduce students to methods of scholarly research appropriate to the field. (Given in English)

**ITA250Y1 Intermediate Italian [78S]**
Grammar review, readings of Italian authors and oral practice to enhance comprehension and expressive skills.
Exclusion: ITA152Y1/251Y1/252Y1/253Y1 (Not open to students with a knowledge of an Italian dialect)
Prerequisite: ITA100Y1/102Y1/(133H1, 134H1)

**ITA251Y1 Intermediate Italian II [78S]**
A review of Italian grammar, readings of Italian authors and one hour of oral practice.
Exclusion: ITA152Y1/250Y1/252Y1/253Y1
Prerequisite: ITA101Y1/110Y1/(133H1, 134H1) or permission of department.

**ITA252Y1 Written and Oral Expression in Italian [78S]**
A study of fundamental grammatical structures with special emphasis on vocabulary and syntax. Some attention is paid to stylistics. Linguistic analysis of literary texts. One hour a week is devoted to oral practice.
Exclusion: ITA250Y1/251Y1/253Y1
Prerequisite: ITA152Y1

**ITA271Y1 Translating I [26L, 26T]**
An introduction to the problems of translation from English into Italian and Italian into English. Specific treatment of common difficulties and extensive exercises.
Prerequisite: Permission of Department

**ITA299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**ITA300H1 History of Italian Literature: Middle Ages and Renaissance [26L]**
This course provides a comprehensive view of Italian literature from its beginnings to the Renaissance, by focusing on the major authors. This course includes a component designed to enhance students' research experience.
Exclusion: ITA300Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA301H1 History of Italian Literature: Baroque to Contemporary [26L]**
This course provides a comprehensive view of Italian literature from the Baroque period to the present day, by focusing on the major authors. This course includes a component designed to enhance students' research experience.
Exclusion: ITA300Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA310H1 The 'Journey' in the 19th Century [26L]**
The course illustrates Italy's contribution to the history of the trope during a time when countries became increasingly interdependent and conscious of each other's cultures. Through literary and social analysis the course traces the most vital aspects of the journey motif. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA311H1 Mediaeval Italian Literature in Translation: Dante [26L]**
A study of the Vita Nuova and of the Divine Comedy within the literary and cultural context of the Middle Ages.
This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA320Y1/321Y1/320H1/321H1

**ITA312H1 Mediaeval Italian Literature in Translation: Petrarch and Boccaccio [26L]**
A study of the Petrarch's Canzoniere and of Boccaccio's Decameron considered in relation to the later Middle Ages.
This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA325H1/427H1

**ITA320H1 Dante: Vita Nuova and Divina Commedia (Inferno) [26L]**
Dante's poetry and great Christian epic of conversion explode with the passions of this world. This course focuses on intertextual and rhetorical strategies used to fashion his complex vision of contemporary society within the framework of providential history. This course includes a component designed to enhance students' research experience.
Exclusion: ITA311H1/320Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA321H1 Dante: Divina Commedia (Purgatorio and Paradiso) [26L]**
A continuation of ITA320H1, this course examines the Purgatorio and the Paradiso in the context of Dante's vision of contemporary society. This course includes a component designed to enhance students' research experience.
Exclusion: ITA311H/320Y
Prerequisite: ITA320H1

**ITA325H1 Themes and Forms of the Lyric Tradition from Petrarch to Tasso [26L]**
A comprehensive view of the Italian lyric tradition focusing on the distinctive elements of the genre, from the establishment of the canon with Petrarch to its amplification with Tasso. This course includes a component designed to enhance students' research experience.
Exclusion: ITA325Y1/ITA312H1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA326H1 Themes and Forms of the Lyric Tradition from Late Renaissance to 20th Century [26L]**
A chronological review of the forms and themes of the lyric tradition from Marino, who revised the genre inherited from the Petrarchists and Tasso, to the numerous variations of the genre culminating in the love poetry of D'Annunzio.
This course includes a component designed to enhance students' research experience.
Exclusion: ITA325Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA330H1 The Christian 'Epic' [26L]**
Italy's foremost writers' conscious attempt to write the great representative ("epic") work of their age: this course explores their struggle to find the appropriate language, style, and genre to express their vision of history. This course includes a component designed to enhance students' research experience.
Exclusion: ITA330Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA332H1 Love in the Renaissance [26L]**
An exploration of the theme of love in the Renaissance and its development in a variety of literary forms. Analysis of treatises, poetry, short stories and letters with the purpose of examining intertextuality and the practice of imitation, as well as the social and political aspects of love, such as marriage, women's position in society, homosexuality and other issues. This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA345H1

**ITA334H1 Italian Canadian Literature I: Life in a New World [13L, 13T]**
Works by first- and second-generation authors of Italian background. Among the themes explored: Italians as "pioneers", the Italian perception of Canada, the immigrant experience, the immigrants' encounter with a new world, their sense of discovery and the process of cultural adaptation. This course includes a component designed to enhance students' research experience. (Texts available in both Italian and English.) (Given in English)

**ITA340H1 Italian Neorealist Cinema I [26L, 39P]**
An analysis of the neorealist period in Italian cinema, and its relation to the political and social climate of post-war Italy. Screenings include selections from the major exponents of Italian neorealism: Rossellini, DeSica, and Visconti, among others. This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA340Y
Recommended preparation: ITA240Y1

**ITA341H Italian Neorealist Cinema II [26L,39P]**
The evolution of Italian cinematic neorealism and its historical heritage is examined in the early films of Fellini, Antonioni, Pasolini and others. This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA340Y
Prerequisite: ITA340H1 or permission of Department.

**VIC341H1 The Self and Society in the Renaissance**
See Victoria College Courses

**VIC343Y1 Sex and Gender in the Renaissance**
See Victoria College Courses

**VIC344H1 Renaissance Narrative**
See Victoria College Courses

**ITA343H1 Language Practice I [39S]**
For students who have completed ITA250Y1. Discussion of problems of grammar and composition with special emphasis on the noun phrase. Language analysis based on readings of Italian authors. One hour a week of oral practice. This course includes a component designed to enhance students' research experience.
Exclusion: ITA252Y1/350Y1/351Y1/352Y1/353Y1/(354H1,355H1)/(364H1,365H1)
Prerequisite: ITA250Y1/253Y1

**ITA344H1 Language Practice II [39S]**
Discussion of problems of grammar and composition with special emphasis on the verb phrase. Language analysis based on readings of Italian authors. One hour a week of oral practice. This course includes a component designed to enhance students' research experience.
Exclusion: ITA252Y1/350Y1/351Y1/352Y1/353Y1/(354H,355H1)/(364H1,365H1)
Prerequisite: ITA343H1

**ITA346H1 Monsters and Marvels in Italian Modernist Literature [26L]**
In this course we consider how in nineteenth- and twentieth century literature, fantastic and monstrous figures reflect the anxieties of the modern subject over the social, economic and existential transformations wrought by modernity. The course may include works by Tarchetti, Arrigo Boito, Capuana, Marinetti, Rosa, Bontempelli, Pirandello, Savino, and Landolfi. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA347H1 Studies in Italian Cinema [26L,39P]**
This course focuses on issues of "genre" and "authorship" in the context of a general discussion of Italian film-making as a national and popular tradition. This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA342Y1
Recommended preparation: ITA240Y1

**ITA354H1 Language Practice I [39S]**
For students who have completed ITA251Y1. Discussion of problems of grammar and composition with special emphasis on the noun and its derivatives. Language analysis based on readings of Italian authors. One hour a week of oral practice. This course includes a component designed to enhance students' research experience.
Exclusion: ITA252Y1/(343H1,344H1)350Y1/351Y/352Y1/353Y1/(364H,365H)
Prerequisite: ITA251Y1/253Y1

**ITA355H1 Language Practice II [39S]**
Discussion of problems of grammar, style and syntax. Language analysis based on readings of Italian authors. One hour a week of oral practice. This course includes a component designed to enhance students' research experience.
Exclusion: ITA252Y1/(343H1,344H1)350Y1/351Y/352Y1/353Y1/(364H,365H)
Prerequisite: ITA354H1

**ITA356Y0 Italian Culture from the Middle Ages to the Renaissance [26L, 26T]**

**ITA357Y0 Italian Culture from the Middle Ages to the Renaissance [26L, 26T]**
A survey of artists, writers, and thinkers from the time of Dante to the days of Leonardo. During field trips, the streets, squares, churches, and palazzi of many cities serve as living laboratories for a discussion of the topography of mediaeval and Renaissance cities. This course includes a component designed to enhance students' research experience. (Offered in Siena only.)
ITA 356Y0: This course is taught in English and is open to students from other disciplines.
ITA 357Y0: Students who wish to petition the Department for credit towards a Specialist or Major in Italian will be required to do the readings in Italian
Exclusion: ITA245Y1/246H1/248Y1

**ITA358Y0 Modern Italian Culture [26L, 26T]**

**ITA359Y0 Modern Italian Culture [26L, 26T]**
Analysis of a selection of philosophical, artistic, musical, and literary works from the age of the Baroque to the present. The main topics of discussion include: Romanticism, Italian unification, theatre, opera, Futurism, fascism, Neorealism, regional differences, and industrialization. Field trips and viewing of movies included. This course includes a component designed to enhance students' research experience. (Offered in Siena only)
ITA 358Y0: This course is taught in English and is open to students from other disciplines.
ITA 359Y0: Students who wish to petition the Department for credit towards a Specialist or Major in Italian will be required to do the readings in Italian.
Exclusion: ITA245Y1/247H1/248Y1

**ITA360H1 Italian Linguistics [26L]**
For students having a knowledge of Italian and/or Italian dialects but no background in linguistics. Concepts of general linguistics. Italy as a linguistic entity. The structure of contemporary Italian, with special regard to its sound system and grammatical categories. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA361H1 Aspects of Italian Descriptive and Applied Linguistics [26L]**
This course deals primarily with morphological, syntactic and semantic analysis, but also discusses the educational uses of linguistics. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1 and 360H1

**ITA363H1 Italian Sociolinguistics [26L]**
Starting with a survey of the sociolinguistic situation in Italy before Unification, this course deals with the complex relationship between regional languages and dialects on the one hand and Common Italian on the other. The recent rise of regional variants of Italian and its impact on the dialects are also discussed. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA364H1 Advanced Language Practice I [39S]**
Analysis and discussion of vocabulary and syntax with special emphasis on the noun phrase and Italian word derivation. Reading and linguistic analysis of selected Italian literary texts from the Middle Ages to the present. Special emphasis will be

placed on individual stylistic problems. This course includes a component designed to enhance students' research experience.
Exclusion: ITA(343H1,344H1)/350Y1/351Y1/352Y/353YO/(354H1,355H1)
Prerequisite: ITA252Y1/253Y1

**ITA365H1 Advanced Language Practice II [39S]**
Analysis and discussion of vocabulary and syntax with special emphasis on the verb phrase and other syntactic structures. Reading and linguistic analysis of selected Italian literary texts from the Middle Ages to the present. Special emphasis will be placed on individual stylistic problems. This course includes a component designed to enhance students' research experience.
Exclusion: ITA(343H1,344H1)/350Y1/351Y1/352Y/353YO/(354H1,355H1)
Prerequisite: ITA364H1

**ITA370H1 Power and Success in the Renaissance [26L]**
Concepts of power and strategies for success in Renaissance texts including Machiavelli's Il principe and Castiglione's Il libro del cortegiano. This course includes a component designed to enhance students' research experience.
Exclusion: ITA370Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA371H1 Translating II [26S]**
A course designed for advanced students. Written translation of a variety of non-technical texts from English into Italian and Italian into English. This course includes a component designed to enhance students' research experience.
Exclusion: ITA371Y
Prerequisite: Permission of Department

**ITA372H1 Translating III [26S]**
A course designed for advanced students. Written translation of a variety of non-technical texts from English into Italian and Italian into English. This course includes a component designed to enhance students' research experience.
Exclusion: ITA371Y1
Prerequisite: ITA371H1 or permission of Department

**ITA381H1 Topics in Modern and Contemporary Literature [26L]**
Focusing on compelling themes arising from critical and theoretical debates in 20th-century culture, this course analyzes poetic, narrative and dramatic works by major Italian modern and contemporary authors. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA390H1 The Commedia dell'Arte [26L]**
A study of the conventions of the Commedia dell'Arte tradition in the context of its performance history from the late Renaissance to the present. Issues examined include acting techniques, improvisation, masks and costumes, iconography and adaptation to film. This course includes a component designed to enhance students' research experience. (Given in English)

**ITA394H1 The Opera Libretto [26L]**
An in-depth study of four opera librettos, examined first in the context of contemporary theories of drama, and then in the context of recent stagings, all available in video form, by distinguished directors. This course includes a component designed to enhance students' research experience. (Given in English)

**ITA395YO Special Topics in Italian Studies [52S]**
The area of concentration will depend upon the instructor teaching the course in any given year. (Offered only during the summer through the Summer Abroad Program)

**ITA398H0 Independent Experiential Study Project**

**ITA399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**ITA400H1 Autobiography [26L]**
An introduction to the conventions of the genre as illustrated by a selection of representative autobiographies from different periods of history and by authors professionally engaged in different disciplines (artists, philosophers, playwrights, etc.). Special emphasis on narrative strategies and on the rhetoric of self-description. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA405H1 19th Century Italian Poetry [26L]**
Centred around the poetic production of Leopardi, Pascoli, and D'Annunzio, the course explores the main literary, artistic and socio-political issues that characterize Italy's cultural contribution within the context of the romantic movements in Europe. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA409H1 Masterpieces of Medieval and Renaissance Drama [26L]**
This course examines the impact of the theatrical works of Feo Belcari, Lorenzo de' Medici, Machiavelli, Ariosto and others in the development of theatre in 15th and 16th century Italy. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA410H1 Masterpieces of Modern Drama [26L]**
An analysis of the most representative works of 20th-century Italian dramatists, from Pirandello to Fabbri to Fo.
This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA415H1 Drama in Performance [26L]**
An in-depth study of two plays, one of which is studied in the context of its production history and against the background of contemporary performance theory and theatre technology, while the other is examined from the dramaturgical perspective of current theatre practice and in the context of modern theories of directing. This course includes a component designed to enhance students' research experience. (Given in English)

**ITA420H1 Spinning a Tale: The Italian Short Story from Boccaccio to Basile [26L]**
The short story genre and its development from the Middle Ages to the Baroque. In addition to Boccaccio's tales, included are some of the most famous stories of Western literature, which later inspired masterpieces in all art forms, such as Romeo and Juliet, Othello and Puss in Boots. This course

includes a component designed to enhance students' research experience.
Exclusion: ITA421Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA421H1 Spinning a Tale: The Italian Short Story after 1800 [26L]**
The short story genre and its development from 1800 to the present. Authors to include Pratesi, Verga, Negri, Landolfi.
This course includes a component designed to enhance students' research experience.
Exclusion: ITA421Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA426H1 Actors, Directors and Stage Artists of the Renaissance and Baroque Periods [26L]**
The origin and early development of the professional theatre in Italy. Among the topics examined are the composition of theatrical companies, acting conventions, theories of directing, costume design, theatre architecture, and production technology. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA430H1 History of the Italian Language [26L]**
The historical formation of the Italian language and of its dialects. Historical phonology and morphology, and problems of syntax and lexicon. Reading and linguistic analysis of early Italian texts. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA436H1 Man and Society from the Renaissance to the Enlightenment [26L]**
A study of the different concepts of man and his place in society, as exemplified in Italian literature from the late 15th to the 18th century. This course includes a component designed to enhance students' research experience.
Exclusion: ITA436Y1
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**VIC440Y1 Florence and the Renaissance**
See "Victoria College Courses"

**ITA441H1 Italian Novel into Film: Aspects of Cinematic Adaptation [26L]**
An analysis of the process of adaptation in an exploration of the ideological and narratological perspectives as well as the stylistic elements of literary and cinematic discourse. Selections include novels by Verga, Tomasi di Lampedusa, Moravia, Bassani and their filmic adaptations by directors such as Visconti, De Sica, Bertolucci. This course includes a component designed to enhance students' research experience. (Given in English)
Recommended preparation: One of: ITA240Y1/340Y1/340H1/341H1/347H1/381Y1. Knowledge of Italian recommended

**ITA451H1 Advanced Composition and Stylistics I [39S]**
A study of the more complex aspects of Italian syntax, stylistics and semantics. Discussion of problems and difficulties relating to syntax, vocabulary and style as they arise from individual compositions or essays. Reading and linguistic analysis of selected Italian literary texts. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA(343H1,344H1)/350Y1/351Y1/352Y1/353Y1/(354H1,355H1)/(364H1,365H1)
Exclusion : ITA450Y/451Y/452Y

**ITA452H1 Advanced Composition and Stylistics II [39S]**
A continuation of the study of the more complex aspects of Italian syntax, stylistics and semantics. Discussion of problems and difficulties relating to syntax, vocabulary and style as they arise from individual compositions or essays. Reading and linguistic analysis of selected Italian literary texts. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA451H1
Exclusion : ITA450Y/451Y/452Y

**ITA455H1 Women Writers in Italy [26L]**
Cultural movements and feminist issues as reflected in the writings of various periods. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA470H1 Galileo and the Scientific Revolution in Renaissance Italy [26L]**
Focusing on Galileo Galilei, this course examines the development of the language of science in Renaissance Italy using a variety of tools such as literary and scientific texts, overheads, multimedia programs, and the Internet. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA471H1 Translating IV [26S]**
Written translation of literary, administrative, business, and semi-technical texts from English into Italian and Italian into English. This course includes a component designed to enhance students' research experience.
Exclusion: ITA471Y1
Prerequisite: Permission of Department

**ITA472H1 Translating V [26S]**
Written translation of literary, administrative, business, and semi-technical texts from English into Italian and Italian into English. This course includes a component designed to enhance students' research experience.
Exclusion: ITA471Y1
Prerequisite: ITA471H1 or permission of Department

**ITA473H1 Legal, Scientific and Business Italian [26S]**
Reading, lexical and syntactic analysis of representative texts written in business, legal and scientific Italian. Translation of such texts into English and of comparable English texts into Italian. This course includes a component designed to enhance students' research experience.
Exclusion: ITA472Y1
Prerequisite: Permission of Department

**ITA475H1 Literature and Desire [26L]**
This course traces the development of erotic discourse in Italian culture. Course material is drawn from poetry, prose, and plays on love, focusing both on the literary and psychoanalytic language of love. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA489H1 Independent Studies**
An opportunity to pursue at the 400-level an independent course of study not otherwise available. A written proposal, co-signed by the instructor, must be submitted on the appropriate proposal form for approval by the Department of Italian Studies. Application deadline: April 30 for F courses, November 30 for S courses.
Prerequisite: Permission of Department

**ITA490Y1 Independent Studies**
In exceptional circumstances, students may request to pursue at the 400-level an independent course of study not otherwise available. A written proposal, co-signed by the instructor, must be submitted on the appropriate proposal form for approval by the Department of Italian Studies. Application deadline April 30.
Prerequisite: Permission of Department

**ITA491H1 Topics in Contemporary Fiction [26L]**
This course traces the debate on the relationship between writing and reality in contemporary fiction from the early 20th century to neo-realism and post-modernism. Texts studied are by such prominent writers as Pirandello, Svevo, Gadda, Vittorini, Calvino, Morante, and Eco. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA492H1 What is a Poet? The Roles and Functions of Poetry in Twentieth-Century Literature [26L]**
What function can the aesthetic experience play in capitalist society? This course examines how, through irony, humour, pathos, lyricism, or detachment, twentieth century poets sought to provide an answer, and to renew the poetic tradition. The course may include works by Gozzano, Marinetti, Palazzeschi, Montale, Luzi, Caproni, and Sanguineti. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/251Y1/252Y1/253Y1

**ITA493H1 Italian-Canadian Literature II: Identity and Voice [26L]**
Critical investigation of works by Italian-Canadian authors, focusing on themes linked to the second-generation experience, such as intergenerational conflict, gender relations, the return journey, and the quest for identity. Special attention is given to the most recent production, new narratives and artistic forms. This course includes a component designed to enhance students' research experience. (Texts are available in Italian and English)
Recommended preparation: One of ITA233Y1/334H1

**ITA494H1 The Artist as Writer [26S]**
Writings by Italian artists through the ages , including Michelangelo in the Renaissance. This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA494Y1

**ITA495H1 Directed Research**
Based on a professor's research project currently in progress, this course will enable an undergraduate student to play a useful role in the project while receiving concrete training in research. This course is mandatory for all students enrolled in the specialist's program.
Prerequisite: Permission of Department

**ITA496H1 Research Methods**
This course, linked to the instructor's research project, will provide training in a variety of research methods.
Prerequisite: Permission of Department

## Faculty

### Professors Emeriti

J. Kornberg, MA, Ph D (HIS)
A. Pietersma, BA, BD, Ph D (NMC)
G.P. Richardson, B Arch, BD, Ph D (U)(RLG)
R. Sandler, MA, Ph D (NMC)

### Professor and Program Director

D.J. Penslar, MA, Ph D, C Phil (U) (HIS)
Samuel J. Zacks Chair in Jewish History

### Professors

E. Adler, BA, MA, Ph D (POL)
Andrea and Charles Bronfman Chair in Israeli Studies
D. Bergen, MA, Ph D
Chancellor Rose and Ray Wolfe Chair in Holocaust Studies
R.B. Gibbs, BA, MA, Ph D (U) (PHL)
J. Kloppenborg, MA, Ph D (RLG)
R.J. Leprohon, MA, Ph D (NMC)
M.R. Marrus, MA, Ph D, FRSC (T) (HIS)
D. Novak, MHL, Ph D (U) (RLG, PHL)
J. Richard and Dorothy Shiff Chair of Jewish Studies
C. Orwin, MA, Ph D (SM) (POL)

### Associate Professors

Y.M. Bodemann, MA, Ph D (SOC)
J. Bryant, MA, Ph D (SM) (RLG)
H.Fox, BSc, BA, MA, Ph D (NMC, RLG)
W. Goetschel, Lic Phil, Ph D (GER)
K.H. Green, MA, Ph D (RLG)
A. Harrack, MA, Ph D (NMC)
I. Kalmar, MA, Ph D (W,V) (ANT)
J.S. Kopstein, MA Ph D (POL)
T. Meacham, MA, Ph D (NMC)
S. Metso, MA, Th D (NMC)
M.D. Meyerson, MA, Ph D (HIS)
J. Newman, MAR, Ph D
J.A. Reilly, MA, Ph D (NMC)
M.E. Subtelny, MA, Ph D (NMC)
P. Wróbel, MA, Ph D (HIS)

### Assistant Professors

M.Chazan M Phil, Ph D (V)
A.S. Cohen, MA, Ph D (Fine Art)
T.P. Harrison, MA, Ph D (NMC)
R. Holmstedt, MA, Ph D (NMC)
J. Marshall, MA, Ph D (RLG)
A. Most, MA, Ph D (ENG)
A. Shternshis, MA, D Phil (GER)

### 2007/08 Shoshana Shier Distinguished Visiting Professor

Professor K. Stow, Department of Jewish History, University of Haifa

### Special Lecturer

S. Green, MA, Ph D (NMC)

These inter-disciplinary and inter-departmental programs study both traditional and modern Jewry. The courses provide an opportunity to study the religion, languages, literature, history and philosophy of the Jewish people from biblical times to the present.

## Jewish Studies Programs

### Jewish Studies (Arts program):

Jewish Studies Program is divided into three main areas of concentration:

A: Judaism and Jewish Thought;
B: Jewish History and Society;
C: Jewish Language and Literature.

**Specialist program:**
(12 full courses or equivalent, including 4 300+series and 1 400-series courses)

1. One Hebrew course: NMC 136Y or NMC 230Y (or written equivalency examination)
2. Eight courses from one of the areas of concentration listed above
3. Four courses from at least two other Areas

**Major program:**
(6 full courses or equivalent, including two 300-series courses)

1. Four courses from one area of concentration listed above
2. Two further courses from at least one other area
3. Two courses must be at the 300+ level.

**Minor program:**
(4 full courses or equivalent, including one 300-series course)

## Courses Offered by the Jewish Studies Program

The following is a list of courses typically offered by the Jewish Studies Program. For detailed information on courses offered in the current academic year, please check the 2006-2007 Jewish Studies Undergraduate Handbook. If your division does not carry the handbooks, please call 416-978-8118.

### Department of Anthropology

| | |
|---|---|
| ANT 426H1 | Orientalism: Western Views of the Other |

### Department of English (416-978-3190)

| | |
|---|---|
| ENG256Y1 | Twentieth-Century North American Jewish Literature |

### Department of German (416-926-2324)

| | |
|---|---|
| GER260Y1 | Elementary Yiddish |
| GER360H1 | Intermediate Yiddish |
| GER361H1 | Yiddish Literature and Culture in Translation |
| GER362H1 | Soviet and Kosher: Jewish Culture in the Soviet Union, 1917-1941 |
| GER363Y1 | Cultural History of the East European Community, 1800-2000 |
| GER411H1 | Introduction to Critical Theory |
| GER462H1 | Advanced Yiddish |
| GER491Y1 | Individual Studies |

### Department of History (416-978-3363)

| | |
|---|---|
| HIS206Y1 | Medieval History of the Jewish People |
| HIS208Y1 | Modern History of the Jewish People |

| | |
|---|---|
| HIS304Y1 | Medieval Spain: 711-1610 |
| HIS307H1 | Middle East International Relations |
| HIS338Y1 | The Holocaust: Nazi Germany, Occupied Europe, and the Destruction of European Jewry |
| HIS356H1 | Zionism and the State of Israel |
| HIS414H1 | The Third Reich |
| HIS433H1 | Polish Jews Since the Partitions of Poland |
| HIS442Y1 | Antisemitism and Jewish Responses |
| HIS444H1 | Topics in Jewish History: Society and the Sacred: Birth, Marriage, Death in Jewish Culture |
| HIS451H1 | World War II in East Central Europe |

**Department of Near and Middle Eastern Civilizations (416-978-3180)**

| | |
|---|---|
| HUM199H1/Y1 | Mystical Dimensions of Islam and Judaism |
| NMC230Y1 | Introductory Biblical Hebrew |
| NMC256Y1 | Literature and Culture of Modern Israel |
| NMC257Y1 | Literature of Jewish Sages |
| NMC278Y1 | Introduction to the Modern Middle East/ |
| NMC331H1 | Mishnah and Tosefta |
| NMC333Y1 | Intermediate Biblical Hebrew: Pentateuch |
| NMC36Y1 | Intermediate Modern Hebrew |
| NMC352H1 | Faith and Doubt in Modern Hebrew Poetry |
| NMC384H1 | Life Cycle and Personal Status in Judaism: Reproductive Technology and Jewish Law |
| NMC432Y1 | Halakhic Midrashim |

**Department of Philosophy (416-978-3311)**

| | |
|---|---|
| PHL338H1 | Jewish Philosophy |
| PHL410H1 | Seminar in Continental Philosophy: Derrida As Philosophical Reader |

**Department of Political Science (416-978-3343)**

| | |
|---|---|
| POL345H1 | Becoming Israel: War, Peace and the Politics of Israel's identity |
| POL421H1 | Maimonides and his Modern Interpreters |
| POL430Y1 | Comparative Studies in Jewish and Non-Jewish Political Thought |

**Department for the Study of Religion (416-978-2395)**

| | |
|---|---|
| RLG202Y1 | The Jewish Religious Tradition |
| RLG220H1 | Philosophical Responses to the Holocaust |
| RLG221H1 | Religious Ethics: the Jewish Tradition |
| RLG239H1 | Special Topics: Jewish and Christian Polemics |
| RLG280Y1 | Comparative World Religions |
| RLG320H1 | Judaism and Christianity in the Second Century |
| RLG340Y1 | Classical Jewish Theology |
| RLG341H1 | Dreaming of Zion: Exile and Return in Jewish Thought |
| RLG342Y1 | Judaism in the Modern Age |
| RLG343H1 | Kabbala: A History of Mystical Thought in Judaism |
| RLG344Y1 | AntiSemitism |
| RLG345H1 | Ecology and Judaism |
| RLG346H1 | Time and Place in Judaism |
| RLG440H1 | Advance Topics: Natural Law in Judaism and Christianity |
| RLG446H1 | Advanced Topics: Religion West III: Maimonides and his Modern Interpreters |

**Department of Slavic Languages and Literatures**

| | |
|---|---|
| SLA302H1 | The Imaginary Jew |

## Joint Courses

See page 26 for Key to Course Descriptions.

These courses are sponsored by more than one department, college, or program office.

### Note

For Distribution Requirement purposes (see page 32), the following courses are variously classified; check listing at the end of each course.

---

**JAG321H1 Aboriginal People and Environmental Issues in Canada**
See Aboriginal Studies or Geography
This is a Social Science course

**JAL328H1 Writing Systems**
See Anthropology or Linguistics
This is a Social Science course

**JAL355H1 Language and Gender**
See Anthropology or Linguistics
This is a Social Science course

**JAL401H1 Field Linguistics**
See Anthropology or Linguistics
This is a Social Science course

**JB0302Y1 Human Physiology and Biophysics**
See Physics or Physiology
This is a Science course

**JBI428H1 Molecular Immunology**
See Biochemistry or Immunology
This is a Science course

**JDC400H1 Dramatic Text and Theatrical Communication**
See Comparative Literature or Drama
This is a Humanities course

**JDC410H1 New Approaches to Theatre History**
See Drama

**JEF100Y1 The Western Tradition**
See English or French
This is a Humanities course

**JEH 455H1 Current Issues in Environment and Health**
See Human Biology.
This is a Science course

**JFG470H1 Forest Management**
See Geography or Forest Conservation
This is a Science course

**JFG475H1 Emergency Response Systems Planning**
See Geography or Forest Conservation
This is a Science course

**JFI225Y1 Second Language Learning**
See French or Italian
This is a Humanities course

**JFL477H1 Issues in French and Linguistics I**
See French or Linguistics
This is a Humanities course

**JFL478H1 Issues in French and Linguistics II**
See French or Linguistics
This is a Humanities course

**JFP450H1 First Nations Issues in Health and Healing**
See Aboriginal Studies or Faculty of Pharmacy
This is both a Humanities and a Social Science course

**JFV323H1 Semiotics and Literature I**
See French or Victoria College.
This is a Humanities or Social Science course.

**JGE221Y1 Environment and Sustainable Development**
See Geography or Centre for Environment.
This is a Social Science course.

**JGE347H1 Efficient Use of Energy**
See Geography or Centre for Environment.
This is a Science course.

**JGE348H1 Carbon-Free Energy**
See Geography or Centre for Environment.
This is a Science course.

**JGI216H1 Urbanization & Global Change**
See Geography or Innis College
This is a Social Science course

**JGI346H1 The Urban Planning Process in Canada**
See Geography or Innis College
This is a Social Science course

**JGI454H1 The Role of the Planner: Making a Difference**
See Geography or Innis College
This is a Social Science course

**JGP438H1 Shallow Crust Geophysics**
See Geology or Physics
This is a Science course

**JHP304Y1 Ukraine: Politics, Economy and Society (formerly JHP204Y)**
See History or Political Science
This is both a Humanities and a Social Science course

**JHP440Y1 Gender & International Relations**
See History or Political Science
This is both a Humanities and a Social Science course

**JHP454Y1 Twentieth Century Ukraine**
See History and Political Science
This is both a Humanities and a Social Science course

**JIA400H1 Interdisciplinary Practice for the Arts**
See Drama
This is a Humanities course

**JIE307Y1 Urban Sustainability (formerly INI307Y1)**
See Geography, Innis College Urban Studies or Centre for Environment
This is a Social Science course

**JLP315H1 Language Acquisition**
See Linguistics or Psychology
This is a Science course

**JLP374H1 Psychology of Language**
See Linguistics or Psychology
This is a Science course

# Joint Courses

**JLP471H1 Advanced Psycholinguistics**
See Linguistics or Psychology
This is a Science course

**JLS474H1 Disorders of Speech and Language**
See Linguistics
This is a Science course.

**JMB170Y1 Biology, Models, and Mathematics**
See Ecology & Evolutionary Blology or Mathematics
This is a Science course

**JMC301Y1 State and Society in 20th Century China**
See East Asian Studies or Political Science
This is a Humanities and Social Science course

**JNV 300H1 Gender, History and Literature**
See Victoria College or Women & Gender Studies
This is a Humanities course

**JOP210H1 Holography for 3D Visualization**
See Physics
This is a Science course.

**JPA305H1 Introduction to Archaeometry**
See Anthropology or Physics
This is a Science course

**JPA310H1 Physic and Archaeology**
formerly JPA 300Y See Anthropology or Physics
This is a Science course

**JPD439Y1 Post-Modern and Contemporary Thought**
See Political Science or Sociology
This is a Social Science course

**JPF455Y1 Cities**
See Political Science
This is a Social Science course

**JPJ421Y1 Comparative Constitutionalism: Rights and Judicial Review**
See Political Science or Faculty of Law
This is a Social Science course

**JPJ471H1 Constitutional Politics**
See Political Science or Faculty of Law
This is a Social Science course

**JPJ494H1 Innovation and Knowledge Transfer in Regional Industry Clusters**
See Political Science or Faculty of Law
This is a Social Science course

**JPP343Y1 Women in Western Political Thought**
See Philosophy or Political Science
This is a Social Science course

**JSV200H1/ 262H1 Communication and Conflict Resolution**
See St. Michael's College or Victoria College.
This is a Social Science course.

**JUG320H1 The Canadian Wilderness**
See Geography or University College
This is a Social Science course

**JUM202H1 Mathematics as an Interdisciplinary Pursuit**
See Mathematics or University College
Offered every three years
This is a Science course

**JUM203H1 Mathematics as a Recreation**
See Mathematics or University College
Offered every three years
This is a Science course

**JUM205H1 Mathematical Personalities**
See Mathematics or University College
Offered every three years
This is a Science course

**JUP460H1/Y1 Contemporary Issues in Peace and Conflict**
See Political Science or University College
This is a Social Science course

**JWU200H1 Toronto in the Canadian Context**
See University College Canadian Studies
This is a Humanities or Social Science course.

**HAJ453H1 AIDS: A Global Perspective**
See Human Biology
This is a Science or Social Science course.

**MEJ204H1 Mathematics & Poetry**
See English
This is a Humanities course.

**MIJ485H1 Vaccines and Immunity**
See Immunology or Molecular Genetics & Microbiology
This is a Science course.

## Latin: see Classics

## Faculty

Ana María Bejarano (Political Science, UTM, and Political Science, UofT at St. George)
Anne-Emanuelle Birn (Public Health Sciences, Faculty of Medicine, UofT at St. George, and Social Science, UTSC)
Patricia Landolt (Social Science, UTSC and Centre for Urban and Community Studies, UofT at St. George)
Peter Blanchard (History, UofT at St. George)
Laura Colantoni (Spanish and Portuguese, UofT at St. George)
Jock Galloway (Geography, UofT at St. George)
Gustavo Indart (Economics, UofT at St. George)
Kenneth Mills (History, UofT at St. George, and Director)
Lena Mortensen (Social Science, UTSC)
Valentina Napolitano Quayson (Anthropology, UofT at St. George)
Ana T. Pérez-Leroux (Spanish and Portuguese, UofT at St. George)
Victor R. Rivas (Spanish and Portuguese, UofT at St. George)
Néstor Rodríguez (Spanish and Portuguese, UofT at St. George)
David Rojinsky (Spanish and Portuguese, UofT at St. George)
Rosa M. Sarabia (Spanish and Portuguese, UofT at St. George)
Daniel Schugurensky (OISE and Centre for Urban and Community Studies, UofT at St. George)
Ricardo Sternberg (Spanish and Portuguese, UofT at St. George)
Judith Teichman (Social Sciences, UTSC, and Political Science, UofT at St. George )
William O. Walker III (History, UofT at St. George)
Derek Williams (Historical Studies, UTM, and History, UofT at St. George)

Latin American Studies at the University of Toronto (LAS@UofT) is a programme for students in the social sciences, humanities and sciences who seek a deeper understanding of the Latin American regions, their histories, cultures and societies. LAS@UofT seeks to inspire knowledge and experience across the University's three-campus community and beyond. The programme's courses encourage students to complement special interests in fields such as Anthropology, Political Science, Geography, History or Sociology with a broader interdisciplinary framework, while at the same time committing themselves to an emphasis upon the languages and the historical and cultural experiences of Spanish and Portuguese America.

LAS@UofT exists to bring together the energy and insights of a multi-disciplinary collection of individuals and units, to develop innovative courses and to stimulate exchange. The programme's research and pedagogical mission encompasses everything from the ancient American civilizations and the ideas, peoples and commodities that came together and emerged within a wide Iberian world, through the archaeology, geography, history, languages, literatures, politics, societies and cultures of the Latin American regions and countries, to the natural sciences and transnational investigation of Latin Americans and their descendants in Canada and elsewhere.

Contact:

Camille Harrison
Administrator
Latin American Studies at the University of Toronto
Munk Centre for International Studies, 327N
1 Devonshire Place
camille.harrison@utoronto.ca, 416 946-8972

Rosa Sarabia
Professor & Acting Director
Latin American Studies at the University of Toronto
r.sarabia@utoronto.ca

LAS@UofT website: www.utoronto.ca/las

## Latin American Studies Program

### Latin American Studies (Arts program)

**Major program**
(7 full courses or equivalent including at least two courses at the 300+ level)

1. Course work: Students must successfully complete seven full courses or their equivalents sponsored or approved by LAS@UofT, as well as satisfy the requirements of their departmental specialization. The requirement is six full courses for students who begin their language study in PRT220Y1 or SPA220Y1/SPA319Y1, or who demonstrate language proficiency by exam.

Of the required courses:

- One course must be LAS200Y1
- At least one course must be LAS300H1 or LAS301H1. Note that if the subject matter and/or instructor has changed, it will be possible to take, and be credited for, LAS300H1 or LAS301H1 more than once.

**Courses eligible for programme credit**
Courses eligible for programme credit include those appearing below. Please note that some of the courses have pre-requisites; in all cases, and for updates on courses being offered, check individual department websites.

**Latin American Studies**

| | |
|---|---|
| LAS200Y1 | Latin American History, Civilization and Culture |
| LAS300H1 | Topics in the Social Sciences (Latina/o Identity in Canada) |
| LAS301H1 | Topics in the Humanities (Latin America and the Caribbean Through Film) |
| LAS302H1 | Topics in Latin American Studies (The Hispanic Caribbean) |
| LAS400H1 | Topics in Latin American Studies (not offered in 2008-2009) |

**Anthropology**

| | |
|---|---|
| ANT340H1 | Anthropology of Latin America |

**Geography**

| | |
|---|---|
| GGR240Y1 | Historical Geography of the Americas |

**History**

| | |
|---|---|
| HIS291Y1 | Latin America: The Colonial Period |
| HIS292Y1 | Latin America: The National Period |
| HIS301Y1 | Imperial Spain |
| HIS333Y1 | Revolution in 20th Century Latin America |
| HIS390Y1 | Latin America in the Age of Revolution |
| HIS402H1 | Indigenous Colonial Cultures in the Spanish and Portuguese Americas |

| | |
|---|---|
| HIS441H1 | Conversion & Christianities in the Early Modern Spanish World |
| HIS456Y1 | Black Slavery in Latin America |

**Political Science**

| | |
|---|---|
| POL305Y1 | Politics and Society in Latin America |
| POL442H1 | Topics in Latin American Politics |

**Portuguese**

Portuguese

| | |
|---|---|
| PRT100Y1 | Beginners Portuguese |
| PRT110Y1 | Elementary Portuguese |
| PRT220Y1 | Intermediate Portuguese |
| PRT255H1 | The Brazilian Puzzle: Culture and Identity |
| PRT258H1 | Introduction to Luso-Brazilian Studies |
| PRT355H1 | Topics in Brazilian Studies |
| PRT357H1 | Modern and Contemporary Brazilian Literature |
| PRT365H1 | The Rise of Modern Identity |
| PRT454Y1 | The Luso-Brazilian Identity |
| PRT455Y1 | Machado de Assis and Eça de Queiroz |
| PRT458H1 | The Luso-Brazilian Short Story |

**Spanish**

| | |
|---|---|
| SPA100Y1 | Spanish for Beginners |
| SPA220Y1 | Intermediate Spanish |
| SPA259H1 | Introduction to Hispanic Cultural Studies |
| SPA375H1 | Latin American Cinema |
| SPA380H1 | Colonial Literature and Cultures |
| SPA381H1 | Nation, Identity and Literary Modernism in Spanish-America |
| SPA382H1 | Spanish American Women in Art, Film and Literature |
| SPA384H1 | Avant-Garde Movements in Spanish America |
| SPA385H1 | Literature and Social Change in Spanish America |
| SPA467H1 | Topics in Spanish-American Culture |
| SPA468H1 | Topics in Modern Spanish-American Literature |
| SPA471H1 | The Historical Novel in Spanish America |
| SPA480H1 | Theories of Culture in Latin America |
| SPA482H1 | 20th Century Spanish American Narrative |
| SPA486H1 | Contemporary Caribbean Literatures and Identities |
| SPA487H1 | The Culture of Revolution |

**Others**

| | |
|---|---|
| SMC207H1 | Christianity in Latin America |

**UTM Courses**

| | |
|---|---|
| HIS290H5 | Intro to Latin American History |
| HIS345H5 | Popular Culture in Latin America |
| HIS390H5 | Revolutions and Nations in Latin America |
| HIS391H5 | Modern Mexico |
| HIS454H5 | Race, Gender and Nation in Modern Latin America |
| HIS490H5 | Religion and Society in Latin America |
| POL201Y5 | Politics of the Third World |
| POL361H5 | After Regime Change: The Quality of Democracy in Latin America |

**UTSC Courses**

| | |
|---|---|
| POLB90H3 | Comparative Development in International Perspective |
| POLB91H3 | Comparative Development in Political Perspective |
| POLC91H3 | Development Studies: Political and Historical Perspectives |
| POLC99H3 | Latin America: The Politics of the Dispossessed |
| SOCC25H3 | Comparative Ethnic and Race Relations |

2. 2. Language: Students must successfully complete (with a grade of at least 65%) the first two levels of instruction in the Spanish or Portuguese language by the end of the third year of study ( SPA100Y1 then SPA220Y1; or SPA319 [for heritage-speakers, and viewed by the programme as an equivalent of SPA 220Y1]; PRT100Y1/PRT110Y1 then PRT220Y1 ), or demonstrate equivalent proficiency in the given language through examination by LAS@UofT before the end of the second year.

## Latin American Studies Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), LAS courses are classified in different categories; check individual course descriptions.

**LAS200Y1 Latin America: History, Civilization and Culture [52L, 26P]**

An introductory course that studies the development of societies in the Latin American region from its pre-Columbian past to its heterogeneous present. Cultural, geographical, historical, literary, political and social topics will be examined combining traditional historical narratives and supporting documents with art, cinema, music and other texts from popular culture and mass media. This course is open to students in at least their second year of undergraduate study. It provides both a broad foundation, and an invitation to delve deeper in further courses and in different disciplinary concentrations.
Exclusion: IAS200Y1
This is a Humanities or Social Science course.

**LAS300H1 Topics in the Social Sciences (Latina/o Identity in Canada) [26S]**

This issue-oriented seminar explores the construction of Latina/o identity in Canada from an interdisciplinary perspective. We look to generate knowledge and understanding about: 1) the manner in which Latina/o diasporas have been constructed through historical and socio-political processes such as exile, migration, immigration, and the ways in which they are articulated within transnational processes of capital accumulation and the redefinitions of 'authentic' national subjecthood and, 2) the ways in which Latinidad emerges both within Latina/o communities and in relation to the Canadian nation and transnational realities.
Prerequisite: IAS200Y1/LAS200Y1
This is a Social Science Course

**LAS301H1 Topics in the Humanities (Latin America and the Caribbean Through Film) [26S]**

Please see LAS@UofT web site for more details on this course.
Prerequisite: IAS200Y1/LAS200Y1
This is a Humanities course.

**LAS302H1 Topics in Latin American Studies (The Hispanic Caribbean) [26S]**

Note: please see LAS@UofT web site for more details on this course.

**LAS400H1 Topics in Latin American Studies**

Note: please see LAS@UofT web site for more details on this course.

The following Life Science departments and programs are included in this section:

Biochemistry
Biology
Cell & Systems Biology
Ecology & Evolutionary Biology
Human Biology
Immunology
Laboratory Medicine & Pathobiology
Molecular Genetics & Microbiology
Neuroscience (see Human Biology)
Nutritional Sciences
Pharmacology & Toxicology
Pharmaceutical Chemistry
Physiology
Psychology

Many of the Life Science programs listed in this section are collaborative programs given by the Faculty of Arts and Science and departments in the Faculty of Medicine. The Life Sciences all focus on the scientific study of life. The study of biological processes has enormous importance for:

Understanding one's own body and those of other organisms sharing our planet, both in health and sickness;

Analysing the behaviour of humans and other organisms;

Understanding the interdependent web of living organisms on the planet, and their evolutionary relationships;

Preparing for ethical, social and political questions arising from our increasing ability to modify living systems;

Enhancing our ability to protect the delicate and complex ecological balance that sustains this world.

Today, the biological sciences are experiencing a revolution. Important discoveries occur almost weekly as scientists and students around the world develop and use techniques, theories and approaches. Increasingly, we need people with advanced knowledge and training who can contribute to these discoveries and their application. Equally, we need people who know enough about life sciences generally to make informed judgements about critical issues such as global warming, population growth, the emergence of drug resistance and new diseases, and the degradation of the environment.

On the St. George campus, undergraduate education, graduate education and research in the Life Sciences is carried out in departments within the Faculty of Arts and Science and the Faculty of Medicine.

The programs offered in the Life Sciences are listed below. Admission to all programs occurs after completion of 4.0 credits. Admission to some programs is limited. Please see individual program listings for admission criteria and procedures. Also check the *Registration Handbook and Timetable's* "Enrol in a Subject POSt" section for further details about programs.

For students with career goals in the health sciences, please see the "Admission to Other University Faculties/Programs" section under "Admission" in this *Calendar*.

## Specialist Programs

Behaviour (Ecology & Evolutionary Biology), Biochemistry, Biogeography (Geography), Biological Chemistry (Chemistry), Bioinformatics and Computational Biology (Biochemistry), Biology, Biophysics (Physics), Botany (Biology), Cell and Molecular Biology (Cell & Systems Biology), Developmental Biology (Cell & Systems Biology), Ecology (Ecology & Evolutionary Biology), Environment and Health (Centre for Environment), Evolutionary Biology (Ecology & Evolutionary Biology), Genes Genetics and Biotechnology (Human Biology), Global Health (Human Biology), Health and Disease (Human Biology), Immunology, Molecular Genetics & Microbiology, Molecular Biophysics (Biochemistry), Neuroscience (Human Biology), Pathobiology, Pharmaceutical Chemistry, Pharmacology, Physiology, Psychology, Psychology Research, Toxicology, Zoology (Biology).

## Major Programs

Animal Physiology (Cell & Systems Biology), Biochemistry, Biology, Botany (Biology), Cell and Molecular Biology (Cell & Systems Biology), Ecology & Evolutionary Biology, Human Biology, Nutritional Sciences, Pharmacology, Physiology, Psychology, Toxicology, Zoology (Biology).

## Minor Programs

Biology, Botany (Biology), Environmental Biology (Ecology & Evolutionary Biology), Physiology, Psychology, Zoology (Biology).

## Animal Use in Laboratories

Laboratory investigations are part of life science programs at the University of Toronto. Programs in life sciences at the University of Toronto include courses that involve observation, handling, or experimentation on animals or on samples derived from animals. The use of animals in teaching and research is regulated by ethical and procedural guidelines and protocols. These are approved on an ongoing basis by the University Animal Care Committee, and follow provincial and federal government rules. We recognize, however, that some students may have strong reservations about personal exposure to any use of animal material in teaching. Students who want to avoid registration in programs or courses that include such labs are, therefore, encouraged to check in advance with the departments involved.

# Life Sciences: Anatomy

## Given by members of the Faculty of Medicine

## Faculty

### Professor and Chair of the Division

M.J. Wiley, M Sc, Ph D

### Professors

A.M. Agur, M Sc, Ph D
J.A. Saint-Cyr, M Sc, Ph D
I.M. Taylor, MD

### Assistant Professors

S. Karimi, MSc, PhD
P. Koeberle, Ph D
C. Morshead, Ph D

### Lecturer

B. Ballyk, Ph D

Anatomy is the science that explores the relationship between the structure and function of living things. The discipline of anatomy includes Gross Anatomy, Histology, Neuroanatomy, Embryology, and Developmental Biology. Courses offered by the Division give the essentials of these subjects.

Undergraduate Secretary:
Professor M.J. Wiley (416-978-2642)

Enquiries:
Medical Sciences Building, Room 1156 (416-978-2690)

## Anatomy Courses

See page 32 for Key to Course Descriptions.

NOTE: For Distribution Requirement purposes, all ANA courses are classified as SCIENCE courses (see page 26).

**ANA300Y1 Human Anatomy and Histology [86L, 18P]**
Structure of the human body and its relationship to function. Basic Human Cytology, Histology, Gross Anatomy, and Neuroanatomy.
Prerequisite: BIO150Y1

**ANA301H1 Human Embryology [52L]**
Human embryology from fertilization to the end of the fetal period. Current concepts in mammalian morphogenesis applied to the development of the various organ systems; etiologies and pathogenesis of some of the more common human congenital abnormalities.
Prerequisite: BIO150Y1

**ANA498Y1 Project in Anatomy [TBA]**
A research project in Histology, Cellular or Molecular Biology, Developmental Biology, Neuroanatomy or Gross Anatomy.
Prerequisite: Permission of a professor to supervise the project

## Collaborative Program of the Faculty of Arts & Science and the Faculty of Medicine

## Faculty

### University Professor Emeritus

M.A. Packham, BA, Ph D, FRSC

### Professors Emeriti

R.A. Anwar, M Sc, Ph D
A. Bennick, M Sc D, Ph D
N. Camerman, B Sc, Ph D
G.E. Connell, BA, Ph D, FRSC, O.C.
T. Hofmann, Dip Chem, D Sc Tech
V.K. Kalnins, M Sc, Ph D
B.G. Lane, BA, Ph D
H.G. Lawford, B Sc, Ph D
A. Marks, MD, Ph D
M.A. Moscarello, BA, MD, Ph D
R.K. Murray, MB, Ch B, MS, Ph D
R.H. Painter, B Sc, Ph D (T)
B. Sarkar, M Pharm, Ph D
H. Schachter, BA, MD, Ph D, FRSC
D.O. Tinker, B Sc, Ph D
G.R. Williams, B Sc, Ph D, D Sc (S), FRSC

### Professor and Chair of the Department

R. Reithmeier, B Sc, Ph D

### University Professor

D.H. MacLennan, BA, M Sc, Ph D, FRSC, O.C.

### Professors

K. Adeli, B Sc, M Sc, Ph D
R.R. Baker, B Sc, Ph D (V)
D. Bazett-Jones, M Sc, Ph D
C.E. Bear, M Sc, Ph D
H.S. Chan, B Sc, Ph D
D.M. Clarke, B Sc, Ph D
C.M. Deber, B Sc, Ph D, FRSC
J. Forman-Kay, B Sc, Ph D
S. Grinstein, B Sc, Ph D, FRSC
J.W. Gurd, BA, Ph D
L. Howell, B Sc, Ph D
C.J. Ingles, B Sc, Ph D
D.E. Isenman, B Sc, Ph D
A.O. Jorgensen, Ph D
L. Kay, B Sc, Ph D, FRSC
F.W. Keeley, B Sc, Ph D
S. Kelley, BA, Ph D
A. Klip, M Sc, Ph D, FRSC
P.N. Lewis, B Sc, Ph D
C.A. Lingwood, B Sc, Ph D
L.A. Moran, B Sc, Ph D
E.F. Pai, Dipl-Chem, Dr rer nat
G. Privé, B Sc, Ph D
D.E. Pulleyblank, B Sc, Ph D
B.H. Robinson, B Sc, Ph D
D. Rotin, B Sc, Ph D
J.M. Segall, B Sc, Ph D
C.H. Siu, BA, Ph D
W. Trimble, B Sc, Ph D
D.B. Williams, M Sc, Ph D
S. Wodak, L.C. Ph D

### Associate Professors

L. Attisano, B Sc, Ph D
G.W. Brown, B Sc, Ph D
J.W. Callahan, M Sc, Ph D
A. Chakrabartty, B Sc, Ph D
A.R. Davidson, B Sc, Ph D
J.R. Glover, B Sc, Ph D
W. Houry, B Sc, Ph D
R. Pomès, B Eng, Ph D
M.L. Rand, B Sc, Ph D
J. Rini, B Sc, Ph D
C.A. Smibert, B Sc, Ph D
I. Stagljar, B Sc Dipl-Mol Biol, Ph D
B. Steipe, MD, Ph D
C.M. Yip, BA Sc, Ph D

### Assistant Professors

S. Angers, B Sc, Ph D
M.F. Manolson, B Sc, Ph D
A. McQuibban, B Sc, M Sc, Ph D
J. Parkinson, B Sc Ph D
J. Rubinstein, B Sc, Ph D
S. Sharpe, B Sc, Ph D
A. Volchuk, B Sc, Ph D

### Senior Lecturer

S. Andreopoulos, M Sc, Ph D

### Lecturer

A. Khan, B Sc, Ph D

Biochemistry is the study of the chemistry of living organisms. Biochemists seek a molecular explanation of life by attempting to understand its underlying principles. Biochemistry is concerned with the relevance of a molecule to an organism and the correlations between its structure and its function. Modern biochemistry grew out of the application of chemical techniques to biological problems and is the foundation of biological science and medicine. In many ways it combines biology and chemistry but the subject now covers such a broad range of activity that it is difficult to draw a neat border around biochemistry. Some of the most exciting areas of current biochemistry research include:

* structural biology
* enzyme mechanisms
* signal transduction and regulation
* biotechnology
* molecular cell biology
* gene expression and development
* metabolic diseases
* proteomics and bioinformatics
* molecular evolution
* protein folding
* membranes and transport

The Biochemistry Specialist Program is academically oriented

and designed to provide students with a fundamental understanding of the theoretical and practical aspects of the discipline. The program offers training in problem solving specifically using a molecular approach. Biochemistry specialists will gain experience in critical thinking and the skills required to evaluate scientific rationale. The Biochemistry Major Program offers students fundamental training in the science and gives each student in the program the chance to combine Biochemistry with another relevant Major Program. This may be within the Life Sciences or Basic Sciences, or may be within the arts. For example, the combination of Biochemistry with Economics or with English could provide students with training relevant to the fields of investment within biotechnology or scientific journalism. Students who excel within the Biochemistry Major Program may be offered the chance to enter the Specialist Program at the third year. Frequently students who have completed a B.Sc. in the Specialist Program continue their studies in graduate programs in Biochemistry and other Life Sciences. Graduates from either the Specialist or Major Programs may find employment in research and teaching. Employers include universities and colleges, government laboratories, clinical biochemistry laboratories, forensic laboratories, pharmaceutical companies, biotechnology companies, and many other industries. Skills learned in the Biochemistry Specialist and Major Programs are also helpful in other areas such as marketing, finance, and law. Some biochemistry graduates continue their studies in medicine, dentistry or other health related programs.

Undergraduate Coordinator: Dr. R. R. Baker, roy.baker@utoronto.ca

Undergraduate Administrator: Brenda Bradshaw, brenda.bradshaw@utoronto.ca.

Enquiries: Medical Sciences Building, Room 5207 (416-978-2700)

Web site: www.biochemistry.utoronto.ca

## Biochemistry Programs

### Biochemistry (Science Program)

The Biochemistry Specialist Program is a Type 3 program. Enrolment is limited and selection is based on performance in First Year courses. Typically, students considered for entrance into the Specialist Program have a GPA greater than 3.0. Students apply via the Faculty's Subject POSt web site. See the departmental web site at *www.biochemistry.utoronto.ca* for more information.

**Specialist Program:**
(14 full courses or their equivalent, including at least three 400-series courses)

First Year: BIO 150Y1; CHM 151Y1/(CHM 138H1, 139H1); MAT 135Y1/136Y1/137Y1; (PHY131H1, 132H1)/(151H1, 152H1)/110Y1/138Y1/140Y1 [PHY131H1, 132H1 recommended])
Second Year: BCH 242Y1; (BIO240H1,241H1)/ BIO 250Y1; CHM 220H1, 247H1/249H1
NOTE:
BIO260H1 is a recommended preparation for MGY311Y1.
Third Year:
1. BCH 335H1, 340H1, 371H1; MGY 311Y1
2. 1.5 full-course equivalents from the following list: Any 300-level course(s) in BIO/BOT/CHM/HMB/IMM/LMP/MGY/PCL/PSL/ZOO/BIO260H1/CHM217H1/345H1/347H1/BCH304H1(departmental approval required).

Fourth Year:
1. BCH 471Y1
2. Four of: BCH 422H1/425H1/426H1/440H1/441H1/444H1/445H1/CHM 447H1/JBI 428H1/MGY 420H1/425H1

**Major Program**
(8 full courses or their equivalent, including two 400-series half-year courses as noted below)

The Biochemistry Major program is a Type 3 program. Only students with a GPA of 2.5 or higher will be considered for entrance into the Major program. Enrollment is limited and selection is based upon performance in First Year courses. Students may combine this Biochemistry Major with another suitable Major within Science, Humanities, or Social Sciences. In order to be admitted into the program you must have taken a full course load in first year (five full courses) and the enrollment is limited.For more information, refer to the Biochemistry web site at www.biochemistry.utoronto.ca

First Year: BIO 150Y1; CHM 151Y1 (CHM 138H1, 139H1); MAT 135Y1/136Y1/137Y1
Second Year: BCH 210H1;(BIO240H1, 241H1) / BIO 250Y1; CHM 247H1/249H
Third Year:
1. BCH 370H1
2. BCH311H1
3. One full-course equivalent from the following list: Any 300-level course(s) in BIO/BOT/CHM/HMB/IMM/LMP/MGY/PCL/PSL/ZOO/BIO 260H1/CHM 217H1/CHM 220H/BCH 304H1 (depart-mental approval required)

Fourth Year: Two of: BCH 422H1/425H1/426H1/440H1/441H1/444H1/445H1/CHM 447H1/JBI 428H1* (*NOTE JBI 428H1 has IMM 334Y/335Y1 as prerequisite)

### Bioinformatics and Computational Biology

If we were to choose the single most important scientific advance of the last century, it would be iconified in the image of the double helix of DNA and its implied duality: life propagates as pure information, which is encoded in physical molecules. Molecular biology is an information science as much as it is a physical science. Bioinformatics devises methods to make biological information computable - to abstract properties of molecules, cellular systems and biological organisms, to efficiently store and retrieve the very large volumes of data that are being accumulated, to support sensitive comparisons and to mine the data with sophisticated statistical tools. Computational biology is bioinformatics' goal: to advance our understanding of life through computational analysis, modeling, and prediction. However, integrating the two cultures of computer science and life science has been a challenge, and a bottleneck for progress has emerged from a lack of dually qualified researchers. The Bioinformatics and Computational Biology specialist program is designed to provide a balance between its foundational subjects and to cover advanced topics in both the theoretical and the life-sciences. It aims to train the generalist, who will become creative at the intersection of two fields, rather than pursue their subspecialization. The program draws on the University's state-of-the-art facilities across several departments, as well

as being firmly embedded in a comprehensive landscape of graduate and postgraduate research in one of the University's priority areas. Graduates of the program would typically pursue graduate studies in any of the participating departments: Computer Science (from the biocomputing stream, see below), Biochemistry, Botany or Zoology (from the bioanalyst stream). Important advances in the computer sciences have been motivated by these needs and there is virtually no field in the life-sciences and in molecular medicine that does not critically depend on insightful data analysis.

### Bioinformatics and Computational Biology (Science Program)

The Bioinformatics and Computational Biology Program is jointly sponsored by the Departments of Biochemistry, Botany, Computer Science and Zoology. Enrollment is limited and selection is based on performance in the required first year courses.

**Specialist program:**
(16.5 full courses or their equivalent)

First Year: MAT135Y1/MAT137Y1/MAT157Y1; (CSC107H1/CSC108H1, CSC148H1)/CSC150H1; CSC165H1; CHM151Y1 / (CHM138H1, CHM139H1); BIO150Y1; writing requirement (0.5 credit, see Note 2 to Comprehensive Program in Computer Science)

Second Year: MAT223H1/MAT240H1; STA247H1; STA248 H1; CSC207H1; CSC236H1/CSC240H1; BCH242Y1; BIO250Y1

Third Year: CSC263H1 / CSC265H1; CSC321H1 / CSC343H1; CSC373H1 / CSC375H1; BCH441H1 / BIO472H1; MGY311Y1 / (BIO260H1, BIO349H1)

Fourth Year:

Bio Analyst Stream (preparation for life-science graduate programs)
BCB410H1; BCB420H1; CSC411H1; five half credits from (BCB430Y1, BCH335H1, BCH340H1, MGY420H1, MGY425H1, MBY428H1, BCH422H1, BCH426H1, BCH440H1, MGY460H1, BIO460H1, BIO473H1, BOT421H1, BOT450H1, BOT458H1)

Bio Computing Stream (preparation for computer-science graduate programs)
BCB410H1; BCB420H1; CSC411H1; CSC336H1/CSC350H1; one half credit from (MGY420H1, MGY425H1, MBY428H1, BCH422H1, BCH426H1, BCH440H1, MGY460H1, BIO460H1, BIO473H1, BOT421H1, BOT450H1, BOT458H1); three half credits from (BCB430Y1, CSC324H1, CSC363H1, MAT244H1, CSC310H1 CSC321H1,CSC343H1, CSC412H1 CSC456H1)

## Bioinformatics & Computational Biology Courses

See page 32 for Key to Course Descriptions.For Distribution Requirement purposes, all BCB courses are classified as SCIENCE courses (see page 26). For details on BCB courses, see www.biochemistry.utoronto.ca/bcb

**BCB410H1 Applied Bioinformatics [26L, 13P]**
Practical introduction to concepts, standards and tools for the implementation of strategies in bioinformatics and computational biology.
Prerequisite: CSC263H1, CSC373H1, MGY311Y1/ (BIO260H1, BIO349H1) or special permission

**BCB420H1 Computational Systems Biology [26L]**
Current approaches to using the computer for analysing and modeling biology as integrated molecular systems. The course complements an introductory Bioinformatics course such as BCH441H1. (Enrolment limited).
Prerequisite: MGY311Y1 / (BIO260H1, BIO349H1), BCB441H1/CSB472H1 or special permission,

**BCB430Y1 Special Project in Bioinformatics and Computational Biology [TBA]**
An opportunity for specialized individual research in bioinformatics and computational biology by arrangement with the course coordinator and a supervisor.
Prerequisite: GPA 3.0 and written acceptance by coordinator and supervisor.Corequisite: BCB410H1, BCB420H1
Exclusion: Any other 4th year special project course taken at the same time.

### Molecular Biophysics (Science Program): See Physics

## Biochemistry Courses

See page 32 for Key to Course Descriptions. For Distribution Requirement purposes, all BCH courses are classified as SCIENCE courses (see page 26).

**BCH299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**BCH210H1 Biochemistry I: Proteins, Lipids and Metabolism [39L, 26T]**
Proteins, enzymes, membranes and the metabolism of carbohydrates and lipids. This course is intended for students who are NOT taking BCH 242Y1 as part of their program.
Exclusion: BCH242Y1/310H1/320Y1/321Y1/CHM265H5(UTM)/361H5(UTM)/362H5(UTM)
Prerequisite: (CHM138H1, 139H1)/CHM151Y
NOTE: CHM1** WITH COURSE EXCLUSION TO CHM138H AND CHM139H meet the prerequisite requirement for BCH210H. SCI1** DOES NOT COUNT AS A PREREQUISITE. CHM140Y1 (UTM) is equivalent to CMH139H1 ONLY. Students that have an SDF for CHM138/139 are not permitted to take BCH210H1 until a final mark appears on the transcript.

**BCH242Y1 Biochemistry [78L]**
An introduction to biochemistry for students specializing in biochemistry and related specialist programs. The major topics include protein structure, enzyme mechanisms, carbohydrates, metabolism and bioenenergetics, lipids, membranes, structure of DNA and RNA.
Exclusion: BCH210H1/310H1/320Y1/321Y1/CHM265H5(UTM)/361H5(UTM)/362H5(UTM)
Prerequisite: (CHM138H1, 139H1)/CHM151Y

**BCH304H1 Cell Dynamics & Interactions [28L, 11T]**
Principles and concepts of cell biology; structure, molecular organization and dynamic cell-cell and cell-extracellular matrix interactions during cell migration, cell adhesion, cell polarity and tissue organization and the role of cytoskeletal components and cell surface receptors in these processes. Approaches and imaging techniques used; contributions of cell biology

to advances in medicine. cGPA of 2.5 is required for non-Biochemistry Major and Specialists.
Exclusion: ANA304Y1
Prerequisite: BIO250Y1, BCH210H1/242Y1

**BCH311H1 Biochemistry II: Nucleic Acids and Biologic Information Flow [26L, 26T]**
Nucleic acids and flow of information in biological systems. Information storage and transmission by nucleic acids, as well as new molecular technologies will be discussed.
Prerequisite: BCH210H1, CHM247H1/249H1
Exclusion: BIO349H1/CSB349H1, PSL350H1

**BCH335H1 Nucleic Acids and Recombinant DNA Technology [39L]**
Structure of DNA and RNA. Catalytic RNAs (ribozymes). Aspects of DNA topology and chromatin structure. Restriction/modification and fundamentals of recombinant DNA technology.
Exclusion: BCH430H1
Prerequisite: BCH242Y1

**BCH340H1 Proteins: from Structure to Proteomics [39L]**
Proteins are the main functional units of the cell. In this course, a detailed overview of protein structure, stability, folding, and protein-ligand interactions will be given with strong emphasis on discussing the basic principles in the field. Biophysical methods as well as theoretical approaches to studying protein stability and folding will be pre-sented. Finally, proteomics approaches to map protein-protein interactions will be discussed. Priority will be given to students in the specialist programs listed in the Arts & Science Registration Handbook & Timetable.
Exclusion: BCH421H1
Prerequisite: BCH242Y1

**BCH370H1 Laboratory Course in Biochemical Techniques [13L, 39P]**
This course reinforces theoretical principles through experiments that encompass pH and buffers, spectrophotometry, chromatography, electrophoresis and enzyme kinetics. Intended for students who are not proceeding further in biochemistry. It is highly recommended that students take this course in their third year as space is limited and priority will go to third-year students. cGPA of 2.5 is required for non-Biochemistry Major and Specialists.
No enrolment will be permitted five days after the start of class. (Enrolment limited)
Exclusion: BCH371H1, CHM379H1
Prerequisite: BCH210H1

**BCH371H1 A Laboratory Course in Biochemistry [ 75P]**
An introduction to laboratory techniques of modern biochemistry. Experiments illustrate and develop the concepts described in lecture courses, and prepare the student for advanced training in biochemical laboratory techniques. (Enrolment limited)
Exclusion: BCH370H1, CHM379H1
Prerequisite: BCH242Y1

### Note
Students who have completed University of Toronto at Mississauga's CHM361H5 and 362H5 may enroll in 400-series lecture courses if they obtain permission of the Department

**BCH422H1 Membrane Proteins: Structure, and Function [26L]**
Structural features of membrane proteins and methods of analysis. Function of membrane proteins as transporters, channels, pumps and receptors. Molecular aspects of disease processes linked to membrane proteins.
Prerequisite: BCH210H1/242Y1, MGY311Y1/BIO349H1/PSL350H1

**BCH425H1 Structural Biology: Principles and Practice [26L]**
Theory and practice of modern biophysical techniques as applied in the study of structure and function of macromolecules; emphasis on protein X-ray crystallography, NMR, and other spectroscopic methods; discussion of selected examples.
Prerequisite: BCH 210H1/242Y1, CHM220H1. Analytical problem solving skills are highly recommended for this course.

**BCH426H1 Regulation of Signalling Pathways [26L]**
A variety of questions relating to signal transduction are investigated. How is calcium regulated in the cell and how does calcium regulate cell function? How are extracellular signals received and transmitted by intracellular proteins to control cellular prolifera-tion and differentiation? What signaling paths are triggered by insulin?
Prerequisite: BCH210H1/242Y1, MGY311Y1/BIO349H1/PSL350H1

**BCH427H1 Advanced Molecular Biophysics [26L]**
This course provides a focused study of concepts in thermodynamics, statistical mechanics and quantum mechanics through examples dealing with important current problems in molecular biophysics. Concepts in thermodynamics and statistical mechanics will be surveyed through applications to protein folding, while principles of quantum mechanics will be emphasized through a study of nuclear magnetic resonance spectroscopy.
Prerequisite: CHM326H1/PHY355H1, CHM328H1

**JBI428H1 Molecular Immunology [26L]**
Molecular mechanisms involved in innate and adaptive immunity including the structure and function of immunoglobulins, the complement system, antigen processing and presentation and membrane signalling events. Emphasis is on experimental approaches and quantitative aspects. (Given jointly by the Departments of Biochemistry and Immunology)
Prerequisite: BCH210H1/242Y1, IMM334Y1/335Y
Recommended preparation: BIO349H1/MGY311Y1/PSL350H1

**BCH440H1 Protein Biosynthesis [26L]**
Mechanisms of translation initiation and translational control, ribosome assembly and structure. Protein folding and molecular chaperones. Protein targeting and transport. Regulation of protein degradation.
Prerequisite: BCH210H1/242Y1, MGY 311Y1/BIO 349H1/PSL350H1

**BCH441H1 Bioinformatics [26L, 13T]**
This course covers computational methods and internet resources in modern biochemistry and molecular biology. The main topics include: sequence and genome databases, sequence alignment and homology search, use and interpretation of

molecular structure, and phylogenetic analysis. Assignments focus on competence building with essential, web-based bioinformatics tools. Tutorials are optional and will be offered based on needs.
Exclusion: CSB472H1, BIO472H1
Prerequisite: BCH210H1/242Y1, MGY311Y1/(CSB349H1/BIO349H1)/PSL350H1 or special permission

**BCH444H1 Protein Trafficking in the Secretory & Endocytic Pathways [26L]**
This course examines the molecular details of the secretory and endocytic pathways in the cell. Some of the specific topics covered will include protein translocation into the ER, chaperones and protein folding in the ER, retrotranslocation and protein degradation, the Unfolded Protein Response (UPR), vesicle biogenesis and ER-Golgi transport, regulated secretion, basic concepts in endocytosis and protein sorting in polarized cells.
Prerequisite: BCH 242Y1/210H1, MGY311Y1/PSL 350H1/BIO349H1

**BCH445H1 Organelles and Cell Function [26L]**
Principles and concepts of cell biology are covered including structure, biogenesis, and dynamic behaviour of cell organelles. The roles of sub-nuclear structure in DNA replica-tion and of vesicular transport in endocytosis, exocytosis and phagocytosis are empha-sized, as are modern imaging techniques and contributions of cell biology to advances in medicine.
**Please note in the past academic session this course was presented as BCH 305H1
Exclusion: ANA304Y1, BCH305H1
Prerequisite: BIO250Y1, BCH210H1/242Y1, MGY311/BIO349/PSL350

**BCH471Y1 Advanced Biochemistry Laboratory [168P]**
Experiments demonstrating modern concepts of biochemistry and molecular biology. (Enrol-ment limited)
Prerequisite: (BCH335H1 + 340H1 + 371H1)/(CHM361H5 [UTM] + 362H5 [UTM] + 371H5 [UTM]) + MGY311Y1

**BCH473Y1 Advanced Research Project in Biochemistry [154P]**
Research in a particular area of biochemistry, by arrangement with the Department and the instructor concerned. Students must have a minimum GPA of 3.0.
Prerequisite: BCH335H1 + 340H1 + 371H1, and permission of Department
Co-requisite: BCH471Y1

## Biological Chemistry: see Chemistry

## Given by Members of the Departments of Cell & Systems Biology and Ecology & Evolutionary Biology

Students are advised to consult courses listed by these Departments.

Biology is the scientific study of life. At no time in history has biology been more visible and important to human life and the future of our planet. The study of biology has vast applications – in understanding one's own body, in grappling with the ethical questions that face humanity, and in understanding the interdependent web of living organisms on the planet. Today the biological sciences are experiencing a revolution. Important discoveries occur almost weekly as scientists and their students around the world develop and use new techniques, theories, and approaches.

The University of Toronto has many faculty conducting research and teaching courses in the biological sciences. Within the Faculty of Arts and Science, St. George campus, there is no single biology department. Biology courses once taught by the departments of Botany and Zoology are now taught by members of the departments of Cell & Systems Biology and Ecology & Evolutionary Biology. Each of these departments offers its own programs and courses, but also jointly offers the Biology, Botany, and Zoology programs. Courses are available in the subject areas of behaviour, evolution, ecology, cell and molecular biology, genetics, physiology, and developmental biology. In addition, there are courses offering a field experience for students. Students should consult the Cell & Systems Biology and Ecology & Evolutionary Biology entries in this Calendar.

Because many areas of biology draw on mathematics and the physical sciences, background preparation in mathematics and chemistry (and sometimes physics) is recommended for students pursuing programs in biology.

Students entering their first year in the life sciences take BIO150Y1. BIO150Y1 is taken by students who have successfully completed grade 12 Biology (or an equivalent course) and is a prerequisite for almost all further courses in the life sciences.

Note that courses prior to 2007-08 that were listed in Calendars under Botany and Zoology are now listed under Cell & Systems Biology or Ecology & Evolutionary Biology. All students, regardless of campus or Faculty, must abide by the stated course prerequisites and exclusions.

## Biology Programs

### Biology (Science program)

The Biology Specialist, Major, and Minor programs are administered through the Department of Ecology & Evolutionary Biology. After completing 4.0 FCEs (four full courses or their equivalent), students in these programs are encouraged to discuss their course selections each year with the Department. Contact: undergrad@eeb.utoronto.ca

Enrolment in the programs listed below requires completion of 4.0 FCEs; no minimum GPA is required.

**Specialist program:**
(13 full courses or their equivalent, including at least 1.0 400-series FCE)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1; JMB170Y1/MAT135Y1/136Y1/137Y1/157Y1
Higher Years:
1. 2.0 FCEs from: chemistry, CHM 220H1, 247H1/249H1; physics, PHY 131H1, 132H1, 151H1, 152H1; or statistics, EEB 225H1, PSY 201H1, 202H1, STA 220H1, 221H1, 250H1, 255H1, 257H1, 261H1
   NOTE: One of the two courses selected here could also be taken in First Year
2. 3.5 FCEs: BIO (240H1, 241H1)/255Y1; BIO 251Y1; BIO (270H1, 271H1); BIO260H1/HMB265H1
3. 0.5 FCE at the 200+ series from: BCH; BIO; BOT (excluding BOT202Y1); CSB (excluding CSB200Y1); EEB (excluding EEB 202H1, 214H1, 215H1, 216H1); ENV234Y1; HMB321H1; HPS 353H1, 355H1; MGY312H1; PSY397H1, PSY497H1; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)
4. 1.0 300+ series FCE in plant or microbial biology from: BOT; CSB 340H1, 350H1, 351Y1, 353H1, 427H1, 450H1, 452H1, 459H1, 460H1; EEB 304H1, 328H1, 330H1, 331H1, 337H1, 340H1, 341H1, 428H1, 440H1
5. 1.0 300+ series FCE in animal biology from: CSB 325H1, 327H1, 328H1, 329H1, 330H1, 331H1, 332H1, 343H1, 344H1, 346H1, 347H1, 357H1, 425H1, 428H1, 429H1, 430H1, 445H1, 457H1, 482Y1; EEB 309H1, 322H1, 356H1, 360H1, 361H1, 384H1, 386H1, 388H1, 389H1; ZOO
6. 1.0 300+ series FCE from: ANA; ANT436H1; BCH; BIO; BOT; CSB; EEB; HMB321H1; HPS 353H1, 355H1; IMM; MGY; PSL; PSY397H1, PSY497H1; ZOO
7. 1.0 400-series FCE from: BIO; BOT; CSB; EEB; ZOO

**Major program:**
(8 full courses or their equivalent)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1
Higher Years:
1. 3.0 FCEs: BIO (240H1, 241H1)/255Y1; BIO 251Y1; BIO (270H1, 271H1)
2. 1.0 FCE from: BCH; BIO, including BIO260H1/HMB265H1; BOT (excluding BOT202Y1); CSB (excluding CSB200Y1); EEB (excluding EEB 202H1, 214H1, 215H1, 216H1); ENV 234Y1; HMB 321H1; HPS 353H1, 355H1; MGY312H1; PSY397H1, PSY497H1; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)
3. 2.0 300+ series FCEs from: ANA; BCH; BIO; BOT; CSB; EEB; HMB321H1; HPS 353H1, 355H1; IMM; MGY; PSL; PSY 397H1, PSY 497H1; ZOO

**Minor program:**
(4 full courses or their equivalent)

1. BIO150Y1
2. 1.0 FCE from: BIO 240H1, 241H1, 251Y1, 255Y1, 270H1, 271H1
3. 2.0 FCEs (1.0 FCE must be at the 300+ series) from: BIO; BOT (excluding BOT202Y1); CSB (excluding CSB200Y1); EEB (excluding EEB 202H1, 214H1, 215H1, 216H1); ENV 234Y1; HMB 265H1, 321H1; HPS 353H1, 355H1; MGY 312H1; PSY 397H1; PSY 497H1; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)

## Botany (Science program)

The Botany Specialist, Major, and Minor programs are administered through the Department of Ecology & Evolutionary Biology. After completing 4.0 FCEs (four full courses or their equivalent), students in these programs are encouraged to discuss their course selections each year with the Department. Contact: undergrad@eeb.utoronto.ca

Enrolment in programs listed below requires completion of 4.0 FCEs; no minimum GPA is required.

### Specialist program:

(12 full courses or their equivalent, including at least 1.0 400-series FCE)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1

Higher Years

1. 2.0 FCEs from: BCH210H1; CHM 220H1, 247H1/249H1; CSC 108H1, 148H1; JMB 170Y1/MAT 135Y1/136Y1/137Y1; PHY 131H1, 132H1, 151H1, 152H1; or statistics, EEB 225H1, STA 220H1, 221H, 250H1, 255H1, 257H1, 261H1 NOTE: One or more of the two courses selected here could also be taken in First Year
2. 2.5 FCEs: BIO (240H1, 241H1)/255Y1; BIO 251Y1; BIO 260H1/HMB 265H1
3. 1.0 FCE from: ENV 234Y1 or EEB 319H1, 321H1, 323H1, 324H1, 330H1, 337H1
4. 2.0 FCEs from: BCH210H1; BOT (excluding BOT202Y1); CSB 340H1, 350H1, 351Y1, 353H1, 450H1, 452H1, 459H1, 460H1; EEB 304H1, 330H1, 331H1, 337H1, 340H1, 341H1, 428H1, 440H1
5. 2.5 300+ series FCEs (at least 1.0 must be 400-series) from: BOT; CSB 340H1, 349H1, 350H1, 351Y1, 353H1, 427H1, 450H1, 452H1, 459H1, 460H1, 472H1, 473H1, 497H1/498Y1, 499Y1; EEB 301H1, 302H1, 303H1, 304H1, 305H1, 306H1, 307H1, 308H1, 310H1, 311H1, 318H1, 319H1, 321H1, 323H1, 324H1, 328H1, 330H1, 331H1, 337H1, 340H1, 341H1, 353H1, 355H1, 428H1, 440H1, 494Y1, 495Y1, 497H1/498Y1, 499Y1; HPS 353H1, 355H1

### Major program:

(8 full courses or their equivalent)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1; and one course from CSC (108H1, 148H1), JMB170Y1/MAT135Y1/136Y1/137Y1, PHY 131H1, 132H1, 151H1, 152H1

Higher Years:

1. 2.0 FCEs: BIO (240H1, 241H1)/255Y1; BIO251Y1
2. 1.0 FCE from: BCH210H1; BIO260H1/HMB265H1; BOT (excluding BOT202Y1); CSB 340H1, 350H1, 351Y1, 353H1, 372H1, 373H1, 427H1, 450H1, 452H1, 459H1, 460H1; EEB 304H1, 330H1, 331H1, 337H1, 340H1, 341H1, 428H1, 440H1; ENV234Y1
3. 2.0 300+ series FCEs from: BOT; CSB 340H1, 349H1, 350H1, 351Y1, 353H1, 427H1, 450H1, 452H1, 459H1, 460H1, 472H1, 473H1, 497H1/498Y1, 499Y1; EEB 301H1, 302H1, 303H1, 304H1, 305H1, 306H1, 307H1, 308H1, 310H1, 311H1, 318H1, 319H1, 321H1, 323H1, 324H1, 328H1, 330H1, 331H1, 337H1, 340H1, 341H1, 353H1, 355H1, 428H1, 440H1; HPS 353H1, 355H1, 497H1/498Y1, 499Y1

### Minor program:

(4 full courses or their equivalent)

1. BIO150Y1; BIO 251Y1
2. 1.0 FCE from: BIO 240H1/241H1/255Y1; BIO 260H1/HMB 265H1; BOT (excluding BOT 202Y1); CSB 340H1, 349H1, 350H1, 351Y1, 353H1, 427H1, 450H1, 452H1, 459H1, 460H1, 472H1, 473H1; EEB 301H1, 302H1, 303H1, 304H1, 305H1, 306H1, 307H1, 308H1, 310H1, 311H1, 318H1, 319H1, 321H1, 323H1, 324H1, 328H1, 330H1, 331H1, 337H1, 340H1, 341H1, 353H1, 355H1, 428H1, 440H1; ENV 234Y1; HPS 353H1, 355H1
3. 1.0 300+ series FCEs from: BOT (excluding BOT202Y1); CSB 340H1, 350H1, 351Y1, 353H1, 427H1, 450H1, 452H1, 459H1, 460H1, 497H1/498Y1, 499Y1; EEB 304H1, 330H1, 331H1, 337H1, 340H1, 341H1, 428H1, 440H1, 497H1/498Y1, 499Y1

## Zoology (Science program)

The Zoology Specialist, Major, and Minor programs are administered through the Department of Cell & Systems Biology. After completing 4.0 FCEs (four full courses or their equivalent), students in these programs are encouraged to discuss their course selections each year with the Department. Contact: undergrad@csb.utoronto.ca

Enrolment in programs listed below requires completion of 4.0 FCEs; no minimum GPA is required.

### Specialist program:

(13 full courses or their equivalent, including at least 1.0 400-series FCE)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1; JMB170Y1/MAT135Y1/136Y1/137Y1/157Y1 (MAT135Y1 may be required for certain courses)

Higher Years

1. 2.5 FCEs from: BIO (240H1, 241H1)/255Y1; BIO (270H1, 271H1); BIO 260H1/HMB 265H1
2. 1.0 FCE from: CHM 220H1, 247H1/249H1; or statistics, EEB 225H1, PSY 201H1, 202H1, STA 220H1, 221H1, 250H1, 255H1, 257H1, 261H1
3. 1.0 FCE from: CHM 220H1, 247H1/249H1; MAT 235Y1/237Y1; PHY131H1, 132H1, 151H1, 152H1; PSY 100H1; or statistics, EEB 225H1, PSY 201H1, 202H1, STA 220H1, 221H1, 250H1, 255H1, 257H1, 261H1 NOTE: Some of the courses selected here could also be taken in First Year
4. 1.0 300+ series FCE from: BIO; CSB 325H1, 327H1, 328H1, 329H1, 330H1, 331H1, 332H1, 343H1, 344H1, 346H1, 347H1, 357H1, 425H1, 429H1, 430H1, 445H1, 457H1, 482Y1; EEB 309H1, 322H1, 356H1, 360H1, 361H1, 384H1, 386H1, 388H1, 389H1; ZOO
5. 4.5 FCEs (at least 2.0 must be 300+ series and 1.0 400-series) from: ANT436H1; BIO; CSB 325H1, 327H1, 328H1, 329H1, 330H1, 331H1, 332H1, 343H1, 344H1, 346H1, 347H1, 349H1, 351Y1, 357H1, 425H1, 429H1, 430H1, 445H1, 457H1, 472H1, 473H1, 482Y1, 497H1/498Y1, 499Y1; EEB 263Y1, 265Y1, 301H1, 302H1, 303H1, 305H1, 306H1, 307H1, 308H1, 309H1, 310H1, 311H1, 318H1, 319H1, 321H1, 322H1, 323H1, 324H1, 328H1, 353H1, 355H1, 356H1, 360H1, 361H1, 362H1, 365H1, 370H1, 375H1, 384H1, 386H1, 388H1, 389H1, 459H1, 460H1, 461H1, 462H1, 465H1, 468H1, 469H1, 471H1, 494Y1, 495Y1,

496Y1, 497H1/498Y1, 499Y1; ENV 234Y1; HMB321H1; HPS 353H1, 355H1; MGY312H1; PSY 397H1, PSY 497H1; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)
NOTE: The 5.5 FCEs in 4. and 5. above must include at least 78 hours of lab; one field course counts as 52 hours.

**Major program:**
(8 full courses or their equivalent)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1
Higher Years
1. 2.0 FCEs: BIO (240H1, 241H1)/255Y1; BIO (270H1, 271H1)
2. 1.0 FCE from: CHM 220H1, 247H1/249H1; JMB 170Y1/ MAT 135Y1/136Y1/137Y1/157Y1; or statistics, EEB 225H1, PSY 201H1, 202H1, STA 220H1, 221H1, 250H1, 255H1, 257H1, 261H1
   NOTE: One of the courses selected here could also be taken in First Year
3. 2.0 FCEs (at least 1.0 must be 300+ series) from: ANT 436H1; BIO; BIO 260H1/HMB 265H1; CSB 325H1, 327H1, 328H1, 329H1, 330H1, 331H1, 332H1, 343H1, 344H1, 346H1, 347H1, 349H1, 351Y1, 357H1, 425H1, 429H1, 430H1, 445H1, 457H1, 472H1, 473H1, 482Y1; EEB 263Y1, 265Y1, 301H1, 302H1, 303H1, 305H1, 306H1, 307H1, 308H1, 309H1, 310H1, 311H1, 318H1, 319H1, 321H1, 322H1, 323H1, 324H1, 328H1, 353H1, 355H1, 356H1, 360H1, 361H1, 362H1, 365H1, 370H1, 375H1, 384H1, 386H1, 388H1, 389H1, 459H1, 460H1, 461H1, 462H1, 465H1, 468H1, 469H1, 471H1; ENV 234Y1; HMB 321H1; HPS 353H1, 355H1; MGY 312H1; PSY 397H1, PSY 497H1; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)
4. 1.0 300+ series FCE from: BIO; CSB 325H1, 327H1, 328H1, 329H1, 330H1, 331H1, 332H1, 343H1, 344H1, 346H1, 347H1, 357H1, 425H1, 429H1, 430H1, 445H1, 457H1, 482Y1, 497H1/498Y1, 499Y1; EEB 309H1, 322H1, 356H1, 360H1, 361H1, 384H1, 386H1, 388H1, 389H1, 497H1/498Y1, 499Y1; ZOO

**Minor program:**
(4 full courses or their equivalent)

1. BIO150Y
2. 1.0 FCE from: BIO 240H1, 241H1, 255Y1, 270H1, 271H1
3. 1.0 FCE from: BIO; BIO 260H1/HMB 265H1; CSB 325H1, 327H1, 328H1, 329H1, 330H1, 331H1, 332H1, 343H1, 344H1, 346H1, 347H1, 349H1, 351Y1, 357H1, 425H1, 429H1, 430H1, 445H1, 457H1, 472H1, 473H1, 482Y1; EEB 263Y1, 265Y1, 301H1, 302H1, 303H1, 305H1, 306H1, 307H1, 308H1, 309H1, 310H1, 311H1, 318H1, 319H1, 321H1, 322H1, 323H1, 324H1, 328H1, 353H1, 355H1, 356H1, 360H1, 361H1, 362H1, 365H1, 370H1, 375H1, 384H1, 386H1, 388H1, 389H1, 459H1, 460H1, 461H1, 462H1, 465H1, 468H1, 469H1, 471H1; ENV 234Y1; HMB 321H1, HPS 353H1, 355H1; MGY 312H1; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)
4. 1.0 300+ series FCE from: BIO; CSB 325H1, 327H1, 328H1, 329H1, 330H1, 331H1, 332H1, 343H1, 344H1, 346H1, 347H1, 349H1, 357H1, 425H1, 429H1, 430H1, 445H1, 457H1, 482Y1, 497H1/498Y1, 499Y1; EEB 309H1, 322H1, 356H1, 360H1, 361H1, 384H1, 386H1, 388H1, 389H1, 497H1/498Y1, 499Y1; ZOO

## Other Biology Programs:

**Animal Physiology: see Life Sciences: Cell & Systems Biology**

**Behaviour: see Life Sciences: Ecology & Evolutionary Biology**

**Biogeography: see Geography**

**Biology, Human: see Life Sciences: Human Biology**

**Biophysics: see Physics**

**Cell and Molecular Biology: see Life Sciences: Cell & Systems Biology**

**Developmental Biology: see Life Sciences: Cell & Systems Biology**

**Ecology: see Life Sciences: Ecology & Evolutionary Biology**

**Environmental Biology: see Life Sciences: Ecology & Evolutionary Biology**

**Evolutionary Biology: see Life Sciences: Ecology & Evolutionary Biology**

## Biology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all BIO courses are classified as SCIENCE courses.

Biology courses are offered by the Departments of Cell & Systems Biology and Ecology & Evolutionary Biology. The courses below have BIO designators. Other biology courses have either CSB or EEB designators.

**BIO150Y1 Organisms in Their Environment**
See Life Sciences: Ecology & Evolutionary Biology

**BIO240H1 Molecular Biology**
See Life Sciences: Cell & Systems Biology

**BIO241H1 Cell and Developmental Biology**
See Life Sciences: Cell & Systems Biology

**BIO251Y1 Biology of Plants and Micro-organisms (formerly BOT251Y1)**
See Life Sciences: Ecology & Evolutionary Biology

**BIO255Y1 Cell and Molecular Biology with Advanced Laboratory**
See Life Sciences: Cell & Systems Biology

**BIO260H1 Concepts in Genetics**
See Life Sciences: Cell & Systems Biology

**BIO270H1 Animal Physiology I**
See Life Sciences: Cell & Systems Biology

**BIO271H1 Animal Physiology II**
See Life Sciences: Cell & Systems Biology

## Faculty

### Professors Emeriti

D.G. Butler, M Sc, Ph D, D Sc, FRSA (ZOO)
L. Butler, MSA, Ph D (ZOO)
G.M. Clark, M Sc, Ph D (ZOO)
W.R. Cummins, B Sc, Ph D (University of Toronto Mississauga) (BOT)
N.G. Dengler, MS, Ph D (BOT)
S.S. Desser, M Sc, Ph D (ZOO)
W.G. Friend, B Sc, Ph D (W) (ZOO)
M.C. Heath, B Sc, Ph D, FRSC (BOT)
J.A. Hellebust, MA, Ph D (BOT)
V.J. Higgins, MS, Ph D (BOT)
P.A. Horgen, MS, Ph D (University of Toronto Mississauga)
R.L. Jefferies, B Sc, Ph D (BOT)
R.A. Liversage, AM, Ph D (ZOO)
Y. Masui, M Sc, Ph D (ZOO)
N. Mrosovsky, BA, PhD (ZOO)
B.H. Pomeranz, MD, CM, Ph D (ZOO)
T.E. Reed, BA, Ph D (ZOO)
B.I. Roots, B Sc, Ph D, D Sc, FRSC (ZOO)
I. Tallan, B Sc, Ph D (ZOO)
J.P. Williams, B Sc, Ph D (BOT)
† M.P. Winsor, M Phil, Ph D (V) (ZOO)
† J.H. Youson, M Sc, Ph D (University of Toronto Scarborough) (ZOO)
A.M. Zimmerman, MS, Ph D (ZOO)

### Professor and Chair of the Department

D.R. Goring, M Sc, Ph D

### Professors and Associate Chairs

S.L. Varmuza, MS, Ph D
U. Tepass, M Sc, Ph D

### Associate Professor and Associate Chair

M.M. Campbell, B Sc, Ph D

### Professors

M.G. AbouHaidar, M Sc, Ph D
† J.B. Anderson, BA, Ph D (University of Toronto Mississauga)
F.M. Barrett, M Sc, Ph D
T. Berleth, Diplom, Ph D
† R. Boonstra, B Sc, Ph D (University of Toronto Scarborough)
I.R. Brown, B Sc, Ph D (University of Toronto Scarborough)
J.R. Coleman, B Sc, Ph D (U)
† E. Edwards, M A Sc, Ph D
G.S. Espie, B Sc, Ph D (University of Toronto Mississauga)
† J.H. Fullard, M Sc, Ph D (University of Toronto Mississauga)
† R.R. Fulthorpe, M Sc, Ph D (University of Toronto Scarborough)
† L.M. Kohn, B Sc, Ph D (University of Toronto Mississauga)
† H.J. Kronzucker, B Sc, Ph D (University of Toronto Scarborough)
A.B. Lange, BS, Ph D (University of Toronto Mississauga)
E.W. Larsen, M Sc, Ph D
D.A. Lovejoy, B Sc, Ph D
P. McCourt, B Sc, Ph D
D.H. O'Day, M Sc, Ph D (University of Toronto Mississauga)
I. Orchard, B Sc, Ph D (University of Toronto Mississauga)
J.J.B. Smith, MA, Ph D (N)
† M.B. Sokolowski, B Sc, Ph D, FRSC (University of Toronto Mississauga)
S.S. Tobe, M Sc, Ph D, FRSC
G.C. Vanlerberghe, B Sc, Ph D (University of Toronto Scarborough)
R. Winklbauer, Dipl in Bio, Ph D
† J.S. Yeomans, BA, Ph D

### Associate Professors

L.T. Buck, B Sc, Ph D
D. Christendat, B Sc, Ph D
D. Godt, Dipl in Bio, Ph D
D.S. Guttman, B Sc, Ph D
C.A. Hasenkampf, MS, Ph D (University of Toronto Scarborough)
† A.C. Mason, M Sc, Ph D (University of Toronto Scarborough)
† J.-M. Moncalvo, M Sc, Ph D
S. Reid, B Sc, Ph D (University of Toronto Scarborough)
C.D. Riggs, B Sc, Ph D (University of Toronto Scarborough)
M.J. Ringuette, B Sc, Ph D
P.A. Romans, M Sc, Ph D
R. Stephenson, B Sc, Ph D
B.A. Stewart, M Sc, Ph D (University of Toronto Mississauga)
J.T. Westwood, M Sc, Ph D (University of Toronto Mississauga)

### Assistant Professors

M. Aarts, M Sc, Ph D (University of Toronto Scarborough)
A. Bruce, BA, Ph D
B. Chang, AB, Ph D
† A. Cutter, B Sc, Ph D
D. Desveaux, M Sc, Ph D
S. Gazzarrini, M Sc, Ph D (University of Toronto Scarborough)
T.J. Harris, B Sc, Ph D
† R. Harrison, M Sc, Ph D (University of Toronto Scarborough)
† J. Levine, BA, Ph D (University of Toronto Mississauga)
† N.R. Lovejoy, M Sc, Ph D (University of Toronto Scarborough)
† E. Master, B Sc, Ph D
A. Moses, BA, Ph D
E. Nambara, M Sc, Ph D
J.E. Nash, M Res, Ph D (University of Toronto Scarborough)
J. Peever, M Sc, Ph D
N.J. Provart, M Sc, Ph D
† J.R. Stinchcombe, BA, Ph D
M. Terebiznik, Ph D (University of Toronto Scarborough)
V. Tropepe, B Sc, Ph D
M. Woodin, M Sc, Ph D
K. Yoshioka, MS, Ph D

### Lecturer

M. Neumann, M Sc, Ph D

† Cross-appointed

The study of life, biology, has been transformed in recent decades by powerful new ways of asking fundamental questions about how living organisms work. In particular, molecular approaches are

revealing both the incredible complexity of organization at the cellular level, and the underlying principles drawn from chemistry, physics and information science that will eventually enable us to understand that complexity.

The Department of Cell and Systems Biology brings together biologists who study life at the level of molecules to functioning individual organisms. Cell Biology is a vibrant and broad discipline that seeks to understand the underlying molecular processes that control cell behaviour in a developmental and physiological context. In this broad sense, cell biology comprises molecular biology, developmental biology, genetics and physiology and their sub-disciplines. Systems biology is an exciting new discipline that studies dynamic networks in biological systems through the integration of large datasets arising from the genomics revolution. Computer modeling and bioinformatics are integrated with the study of detailed information about genomes (genomics), the temporal and spatial distribution of all gene transcripts (transcriptomics), cellular proteins and their physical interactions (proteomics), and small molecules that cells assimilate or synthesise (metabolomics).

Student Counseling and Enquiries:

Associate Chair (Undergraduate): Professor S. Varmuza (416-978-2759).

Contact the Undergraduate Office, Room 424 in the Ramsay Wright Laboratories (416-978-3477) and consult the departmental web site, www.csb.utoronto.ca.

## Cell and Systems Biology Programs

### Animal Physiology (Science program)

Enrolment in this program requires completion of 4.0 FCEs; no minimum GPA is required.

**Major program:**
(8 full courses or their equivalent)

First Year: BIO 150Y1; CHM (138H1, 139H1)/151Y1; JMB 170Y1/MAT 135Y1/136Y1/137Y1/157Y1/PHY (131H1, 132H1)/(151H1, 152H1)
Higher Years:
1. BIO (240H1, 241H1)/255Y1
2. BIO (270H1, 271H1)
3. 1.5 FCEs from: CSB 325H1, 332H1, 343H1, 346H1, 347H1
4. 1.5 FCEs (at least 0.5 FCE must be at the 300+level) from: BCH 210H1; BIO 260H1/HMB 265H1; CSB 299Y1, 325H1, 327H1, 330H1, 331H1, 332H1, 343H1, 346H1, 347H1, 352H1, 425H1, 430H1, 445H1, 497H1/498Y1, 499Y1; EEB 263Y1; PSY 397H1; STA 220H1

### Bioinformatics and Computational Biology: see Biochemistry

### Biology: see Biology

### Botany: see Biology

### Cell and Molecular Biology (Science program)

Enrolment in the Specialist program is limited, and requires a minimum CGPA of 2.7. Enrolment also requires the completion of four courses, including BIO 150Y1; CHM (138H1, 139H1)/151Y1; JMB 170Y1/MAT 135Y1/136Y1/137Y1/157Y1.

Enrolment in the Major requires the completion of 4.0 FCEs; no minimum GPA is required.

**Specialist program:**
(12.5 full courses or their equivalent, including at least one 400-series course)

First Year:
BIO 150Y1; CHM (138H1, 139H1)/151Y1; JMB 170Y1/MAT 135Y1/136Y1/137Y1/157Y1; PHY (131H1, 132H1)/(151H1, 152H1)
Higher Years:
1. BIO (240H1, 241H1)/255Y1, BIO (270H1, 271H1),BIO 260H1/HMB 265H1; BCH 210H1; CSB 349H1
2. CSB 330H1/350H1, CSB 331H1/BCH 304H1, CSB 428H1
3. 0.5 FCE from the following: BCH 422H1, 426H1, 445H1, CSB 327H1, 347H1
4. 3.0 FCEs from the following: BCH 440H1, BCH 441H1/CSB 472H1, CSB 299Y1, 328H1, 332H1, 340H1, 351Y1, 357H1, 427H1, 429H1, 430H1 450H1, 452H1, 458H1, 459H1, 473H1, 497H1/498Y1, 499Y1

**Major program:**
(8 full courses or their equivalent)

First Year: BIO 150Y1; CHM (138H1, 139H1)/151Y1; JMB 170Y1/MAT 135Y1/136Y1/137Y1/157Y1/PHY (131H1, 132H1)/(151H1, 152H1)
Higher Years:
1. BIO (240H1, 241H1)1/255Y1
2. BIO 260H1/HMB 265H1; BCH 210H1
3. 1.5 FCE from: CSB 327H1, 328H1, 331H1, 340H1, 349H1, 351Y1
4. 1.5 FCE (at least 0.5 FCE must be at the 300+level) from: BCH 422H1, 444H1, 445H1,CSB 299Y1, 327H1, 328H1, 330H1, 331H1, 332H1, 340H1, 347H1, 349H1, 350H1, 351Y1, 352H1, 427H1, 428H1, 429H1, 458H1, 459H1, 460H1, 497H1/498Y1, 499Y1. No more than 0.5 FCE in BCH can be used towards this requirement.

### Developmental Biology (Science program)

Enrolment in this program is limited, and requires a minimum CGPA of 2.5. Enrolment also requires the completion of four courses, including BIO 150Y1; CHM (138H1, 139H1)/151Y1; JMB 170Y1/MAT 135Y1/136Y1/137Y1/157Y1.

**Specialist program:**
(12.5 full courses or their equivalent, including at least one 400-series course)

First Year:
BIO 150Y1; CHM (138H1, 139H1)/151Y1; JMB 170Y1/MAT 135Y1/136Y1/137Y1/157Y1
Higher Years:
1. BCH 210H1; BIO (240H1, 241H1)/255Y1, BIO 251Y1/(270H1, 271H1), BIO 260H1; CHM 220H1/247H1/249H1
2. CSB 349H1
3. CSB 328H1, 340H1

4. 2.5 (or 3.5*) courses from: ANA 300Y1, 301H1; BCH 304H1, 340H1, 370H1, 425H1, 426H1; CSB 327H1, 329H1, 330H1, 331H1, 350H1, 352H1, 425H1, 427H, 450H1, 459H1 460H1, 472H1, 473H1; EEB 340H1, 341H1, 460H1; IMM 334Y1, 429H1; JBI 428H1; MGY 425H1, 428H, 451H1, 452H1, 470H1; PSL 303Y1, 420H1
5. 1.0 (or 2.0*) courses from CSB 429H1, 430H1, 458H, 461H, 482Y1, 497H1/498Y1, 499Y1; MGY 480Y1

* Requirements 4 and 5 must include a total of at least 4.5 full courses

**Neuroscience: see Life Sciences: Human Biology**

**Zoology: see Biology**

## Cell and Systems Biology Courses

For Distribution Requirement purposes, all BIO and CSB courses are classified as SCIENCE courses (see page 26).

**BIO240H1 Molecular Biology [26L, 18P]**
An introduction to the structures and functions of DNA, RNA and proteins, exploring how the molecular information contained within an organism's genome is converted into cellular function. Accompanying laboratories reinforce the concepts introduced in lecture and teach relevant techniques
Exclusion: BIO 250Y1, 255Y1
Prerequisite: BIO150Y1, CHM (138H1, 139H1)/151Y1
Recommended preparation: BCH 210H1 (taken concurrently or previously)

**BIO241H1 Cell and Developmental Biology [26L, 18P]**
An introduction to the structure and function of cells focusing on the molecular bases of cell and developmental biology. Lecture topics include membrane transport, protein sorting and cell communication plus cellular architecture and the formation of tissues. Accompanying laboratories reinforce the concepts introduced in lecture and teach relevant techniques.
Exclusion: BIO 250Y1, 255Y1
Prerequisite: BIO 240H1
Recommended preparation: BCH 210H1 (taken concurrently or previously)

**BIO255Y1 Cell and Molecular Biology with Advanced Laboratory [52L, 36P]**
An introduction to the structure and function of cells at the molecular level: key cellular macromolecules; transfer of genetic information; cell structure and function; cellular movement and division. The Enhanced Laboratory provides the opportunity for greater laboratory skill development in modern investigative techniques and is intended for students interested in conducting their own laboratory research.
Exclusion: BIO 240H1, 241H1, 250Y1
Prerequisite: BIO 150Y1, CHM (138H1, 139H1)/151Y1, cGPA 3.0
Recommended preparation: BCH210H1 (taken concurrently or previously)

**BIO260H1 Concepts in Genetics [39L, 13T]**
This is a problem based course which discusses classical, molecular, developmental, and population genetics and genomics with emphasis on model organisms for genetic analysis.
Exclusion: HMB 265H1
Prerequisite: BIO 240H1
Co-requisite: BIO 241H11/255Y1

**BIO270H1 Animal Physiology I [26L, 9P]**
The main ideas of physiology and the contribution of experimentation to our understanding of life processes. Uses examples from throughout the animal kingdom, and includes the physiology of homeostasis and the endocrine system. Accompanying laboratories reinforce the concepts introduced in lecture and teach relevant techniques.
Exclusion: BIO/ZOO 252Y1
Prerequisite: BIO 150Y1

**BIO271H1 Animal Physiology II [26L, 9P]**
The main ideas of physiology and the contribution of experimentation to our understanding of life processes. Uses examples from throughout the animal kingdom, and includes the physiology of the nervous and cardiorespiratory systems. Accompanying laboratories reinforce the concepts introduced in lecture and teach relevant techniques.
Exclusion: BIO/ZOO 252Y1
Prerequisite: BIO 270H1

**CSB200Y1 Current Topics in Molecular Biology [52L, 26P]**
This course is intended to provide non-science students with an understanding of basic concepts in molecular biology to allow them to explore, and analyze current scientific issues and controversies covered in the media and relevant to society at large.
This course counts as a Science Distribution Requirement for students in all years and disciplines; particularly suitable for Humanities and Social Science students.
Exclusion: BIO (240H1, 241H1)/250Y1/255Y1

**CSB299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**CSB310H1 Crustacean Aquaculture in Thailand: Physiological and Molecular Approaches (formerly BIO 310H1) [TBA]**
Successful farming of tiger shrimp faces a number of biological, environmental and economic challenges. Some of these challenges are being met by gathering information pertaining to nutrition, growth , reproduction and disease resistance. During two weeks of field time in Thailand, students will learn the basic techniques in crustacean aquaculture and undertake individual projects related to these areas by using physiological and molecular biological techniques. Students must attend a one-day orientation in Toronto in May.
Exclusion: BIO 310H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO (270H1, 271H1)

**CSB325H1 Endocrine Physiology (formerly ZOO 325H1) [26L]**
The regulation of physiological processes by hormones and other signalling molecules in chordates. An integrated genes-to-environment approach is used to examine aspects of hormonal evolution, physiological information flow, behaviour and neuroendocrinology, and xenobiotic endocrine disruptors.
Exclusion: ZOO 325H1
Prerequisite: BIO (270H1, 271H1)/PSL 302Y1
Recommended preparation: EEB 265Y1

**CSB327H1 Extracellular Matrix Biology and Pathology (formerly ZOO 327H1) [39L]**
Examines expression, structure and function of the four major classes of ECM macromolecules: collagen, proteoglycans, non-collagenous structural proteins and glycoproteins. In addition

to forming elaborate networks that give tissues and organs their unique architectural design and biophysical properties, ECM molecules act as potent regulators of all cellular activities. Emphasis is placed on the morphoregulatory contribution(s) of ECM molecules to normal and pathological development.
Exclusion: ZOO 327H1
Prerequisite: BIO (240H1, 241H1)/255Y1

**CSB328H1 Developmental Biology (formerly ZOO 328H1) [26L, 26T]**

Basic concepts in developmental biology. Early development of invertebrates and vertebrates will be discussed with emphasis on experimental and molecular analysis of developmental mechanisms. Tutorials demonstrate examples of descriptive and experimental embryology and discuss primary literature of selected topics in developmental biology.
Exclusion: ZOO 328H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO 260H1/HMB 265H1

**CSB329H1 Evolution of Development (formerly ZOO 329H1) [26L, 26T]**

This course begins with a comparison of embryonic development in the major animal taxa. The evolution of developmental mechanisms is then considered with emphasis on the molecular and genetic basis of these mechanisms. Subsequent discussion examines the impact of developmental processes on the evolution of animal diversity. Tutorials feature the study of embryos representing diverse animal taxa.
Exclusion: ZOO 329H1
Prerequisite: CSB 328H1/(BIO (240H1, 241H1)/255Y1, BIO 260H1/HMB 265H1 and permission of instructor)
Recommended preparation: CSB 328H1

**CSB330H1 Techniques in Molecular, Cellular and Developmental Biology (formerly ZOO 330H1) [13L, 39P]**

A laboratory based course in current research techniques, employing animal model organisms (fruit fly and zebrafish) and experimental methods including basic molecular and cell biology techniques.
Exclusion: MGY 432H1, ZOO 330H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO 260H1/HMB 265H1, CSB 328H1

**CSB331H1 Advanced Cell Biology I: Cell Adhesion and Migration (formerly ZOO 331H1) [39L]**

The development of multicellular organisms is dependent on a broad variety of different cell-cell and cell-matrix adhesive mechanisms. The course examines the molecules and mechanisms involved and how they act in concert to regulate distinct developmental and physiological events. Emphasis is placed on the experimental approaches and technology used to study the molecular interactions and dynamics and alter structure-function relationships in cells and organisms.
Exclusion: BCH 304H1, ZOO 331H1
Prerequisite: BIO (240H1, 241H1)/255Y1

**CSB332H1 Neurobiology of the Synapse (formerly ZOO 332H1) [26L]**

Examination of all aspects of the synapse in both the peripheral and central nervous systems of invertebrates and vertebrates. Topics include: synapse formation, synaptic transmission, synaptic plasticity, learning and memory, and neurological disorders.
Exclusion: ZOO 332H1
Prerequisite: BIO (270H1, 271H1)/PSL 201Y1/302Y1

**CSB340H1 Plant Development (formerly BOT 340H1) [26L]**

Plant developmental genetics at the molecular, cellular and organismal level, generation and use of genomic resourses in plant model organisms. Questions address the genetic dissection of plant embryo and meristem development, plant stem cell specification and tissue patterning. Genomic approaches applicable to plant biotechnology are also covered.
Exclusion: BOT 340H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO 260H1/(HMB 265H1 with a minimum grade of 73%)

**CSB343H1 Animal Energetics [13L, 13S, 13T]**

Animal structure and function, at all levels from molecule to whole animal, are dependent on energy. This course describes how the supply, consumption, transformation, exchange and storage of energy can facilitate, constrain and limit animal function. Emphasis is placed on systems level physiological function and whole animal performance.
Prerequisite: BIO (270H1, 271H1)/PSL 201Y1/302Y1
Recommended preparation: BCH 210H1/242Y1

**CSB346H1 Neurobiology of Respiration (formerly ZOO 346H1) [26L, 13T]**

Integrated control of cardio-respiratory physiology and metabolism in mammals. Topics include exercise, diving, sleep and hibernation.
Exclusion: ZOO 346H1
Prerequisite: BIO (270H1, 271H1)/ PSL 302Y1

**CSB347H1 Comparative Cellular Physiology (formerly ZOO 347H1) [26L]**

In-depth survey of unique cellular adaptations of different tissues and organisms to overcome environmental stresses such as hypoxia. Emphasis is placed on cellular strategies, particularly second messenger responses, although systematic and whole organism responses will be investigated. Broad-ranging common strategies among diverse organisms are examined.
Exclusion: ZOO 347H1
Prerequisite: BIO (270H1, 271H1)/PSL 302Y1

**CSB349H1 Eukaryotic Gene Expression (formerly BIO349H1) [22L, 18T]**

Genome structure and the regulation of gene expression in eukaryotic cells. Topics include gene duplication, repetitive DNA, transcription, RNA interference and expression profiling. Tutorials emphasize problem based learning exercises that relate to recent advances in the broad field of eukaryotic gene expression.
Exclusion: BIO 349H1, BCH 311H1, MGY 311Y1, 420H1, PSL 350H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO 260H1/HMB 265H1
Recommended preparation: BCH210H1/320Y1

**CSB350H1 Laboratory in Molecular Plant Biology (formerly BOT 350H1) [26L, 39P]**

Laboratory methods used in plant molecular biology research. Topics include vector construction, plant transformations, PCR, DNA blots, high-throughput screens, genetic mapping, and bioinformatic analyses.
Exclusion: BOT 350H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO 260H1/HMB 265H1
Recommended preparation: BIO 251Y1 or higher level plant biology course; CSB 349H1/MGY 311Y1 concurrently

**CSB351Y1 Introductory Virology (formerly BIO 351Y1) [52L, 104T]**
An introduction to basic and medical virology. Attendance in tutorials is optional.
Exclusion: BIO 351Y1
Prerequisite: BIO (240H1, 241H1)/255Y1

**CSB352H1 Bioinformatic Methods (formerly BIO 352H1) [26L]**
Use of available programs for analyzing biological data. This is an introductory course with a strong emphasis on hands-on methods meant for Biology and Human Biology/GGB specialists/majors. Some theory is introduced, but the main focus is on using extant bioinformatics tools to analyze data and generate biological hypotheses.
Exclusion: BCB Specialist program students, BIO 352H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO 260H1/HMB 265H1

**CSB353H1 Introduction to Plant-Microbe Interactions (formerly BOT 351H1) [26L]**
Plants have co-evolved with microbes ever since their first appearance on land, resulting in sophisticated strategies of pathogenicity, symbiosis, commensalisms and mutualism. This course presents an overview of these strategies with examples of bacteria, fungi, oomycetes and viruses that have evolved intimate associations with plants.
Exclusion: BOT 351H1
Prerequisite: BIO150Y1
Recommended preparation: BIO 251Y1

**CSB357H1 Biology of Vector-Borne Parasitic Diseases (formerly ZOO 357H1) [26L, 24P, 10T]**
The biology of malaria and other medically important vector-borne parasitic diseases. Topics include history of medical parasitology, parasite development in human and invertebrate hosts, epidemiology, adaptations to intra- and extracellular life and switching between hosts, effects on host physiology, immunity and behaviour, implications for vaccine and vector control and lessons regarding zoonoses and emergent infectious diseases. Laboratories and discussions complement formal lectures.
Exclusion: ZOO 357H1
Prerequisite: BIO (240H1, 241H1)/255Y1

**CSB398H0 Independent Experiential Study Project**

**CSB399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting.
See page 48 for details.

### 400-Series Courses

**CSB425H1 Endocrinology of Transformation (formerly ZOO 425H1) [26L, 13T]**
The student will investigate the endocrine and paracrine signalling mechanisms that act to coordinate the reorganization of tissues in animals in special situations. The topics covered will include metamorphosis in agnathans and amphibians, sex change in teleost fishes, limb and regeneration in reptiles and amphibians, and neural regeneration in birds and mammals.
Exclusion: ZOO 425H1
Prerequisite: CSB 325H1/PSL 424H1; CGPA 2.7

**CSB427H1 Plant Cells and Their Uses [26L]**
This course will consider some of the polymers and smaller molecules produced by plants, including their biosynthesis, their involvement in plant growth and survival, and their use by humans. The course will have a strong biochemistry, genetics and molecular biology emphasis, and an applied component, examining human uses of plants.
Prerequisite: BIO (240H1, 241H1)/CHE 354H1
Recommended preparation: BIO 260H1/HMB 265H1, CSB 350H1/459H1

**CSB428H1 Advanced Cell Biology II: Cell Polarity and Cytoskeletal Dynamics [13L, 13S, 13T]**
This advanced course covers cell polarity and cytoskeletal dynamics emphasizing current literature. For each topic, the course examines (1) the proteins involved, (2) their interactions and regulation, and (3) how they organize specific cellular structures. The coordination of these complexes required for orchestrating complex cellular processes are addressed.
Prerequisite: CSB 349H1/MGY 311Y1, BCH 304H1/CSB 328H1/331H1/340H1

**CSB429H1 Germ Cell Biology (formerly ZOO 429H1) [13L, 13S, 13T]**
This course will discuss the genetic and cell biological aspects of the development of gametes, gonads, and sex related traits in animals, including invertebrates and vertebrates. In the accompanying seminar, primary literature is used to discuss selected topics in germ cell biology.
Exclusion: ZOO 429H1
Prerequisite: CSB 328H1/329H1/340H1/349H1/MGY 312H1

**CSB430H1 Developmental Neurobiology (formerly ZOO 430H1) [26L, 13T]**
An examination of the molecular genetic basis of nervous system formation. Experimental evidence from recent studies in selected invertebrate and vertebrate model systems will be discussed. Topics include the evolution of neural development, neural cell fate determination, neurogenesis, pattern formation, and axon guidance.
Exclusion: ZOO 430H1
Prerequisite: CSB 328H1/(NRS 201H1/HMB 204H1/PSY 290H1, NRS 202H1/HMB 320H1)

**CSB445H1 Biology of Sleep (formerly CSB 345H1) [13L, 13S, 13T]**
Covers theories on the biological function of sleep-wake states – why and how animals sleep. Integrates all levels of organization, including molecular biology, homeostasis, bioenergetics, neurophysiology, endocrinology, behaviour and evolution, with comparisons across phyla.
Exlclusion: CSB/ZOO 345H1
Prerequisite: BIO (270H1, 271H1)/PSL 302Y1
Recommended preparation: CSB 332H1

**CSB450H1 Plant Proteomics in Systems Biology (formerly BOT 450H1) [26L]**
This course introduces students to proteomics and metabolomics approaches, such as mass spectrometry, structural biology, 2D gel electrophoresis, in understanding the regulation of metabolic pathways in plants.
Exclusion: BOT 450H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BCH 210H1

**CSB452H1 Plant-Microorganism Interactions (formerly BOT 452H1) [26L]**
This course explores the molecular strategies that microbes and plants have evolved to live with each other. The variety of strategies will be summarized with emphasis on the molecular mechanisms of pathogenic relationships.
Exclusion: BOT 452H1
Prerequisite: CSB 349H1/MGY 311Y1
Recommended preparation: BIO 251Y1

**CSB457H1 Vector Biology [26L, 26T]**
Biology of vectors, primarily hematophagous insects, of human parasitic, microbial and viral diseases. Emphasis is on the cellular and molecular interactions between the vectors and the pathogens they transmit and on vector defense/immunity mechanisms mounted against them.
Prerequisite: CSB 349H1/MGY 311Y1, CSB 357H1
Recommended preparation: A course in entomology

**CSB458H1 Epigenetics (formerly BIO 458H1) [39S]**
A seminar course exploring non-Mendelian phenomena in plants, fungi and animals that reveal aspects of genome organization and regulation that may provide insight into genome function and evolution.
Exclusion: BIO 458H1
Prerequisite: BIO 260H1/HMB 265H1, CSB 349H1/MGY 311Y1
Recommended preparation: HMB 321H1

**CSB459H1 Plant Molecular Biology and Biotechnology (formerly BOT458H1) [26L]**
This course introduces students to major features of gene expression and signal transduction in plants. Topics include strategies for generating transgenic plants and regulating gene expression, as well as the importance of signal transduction in plant growth and survival. How plants sense and respond at the molecular level to environmental stresses such as drought, salinity, cold and disease will be discussed. The application of this basic scientific information in biotechnological strategies for improving agronomic traits will also be addressed.
Exclusion: BOT 458H1
Prerequisite: CSB 349H1/MGY 311Y1

**CSB460H1 Plant Signal Transduction (formerly MGY 460H1) [26L]**
Plant development, ecological adaptation and crop plant productivity depend on the sophisticated potential of plants to sense and compute signals to regulate their responses. An arsenal of genetic and genomic tools is employed to elucidate these plant signal transduction pathways. Examples from the original literature will be used to introduce general concepts of plant signal transduction, molecular biology and genomics and their application in understanding and influencing plant growth and development.
Exclusion: MGY 460H1
Prerequisite: BCH 321Y1/CSB 349H1/MGY 311Y1 or permission of instructor

**CSB461H1 Chromosome Biology (formerly BIO461H1) [26L, 26T]**
Exploration of the relationships between chromosome structure, function and behaviour. This is an upper level genetics course with considerable cell/molecular biology content. Topics include chromatin structure, essential chromosomal elements, control of mitotic and meiotic segregation, chromosome evolution, genomic imprinting. Tutorials emphasize student discussion of recent primary research papers.
Exclusion: BIO 461H1
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO 260H1/HMB 265H1, CSB 349H1/HMB 321H/MGY 311Y1

**CSB472H1 Computational Genomics and Bioinformatics (formerly BIO472H1) [26L, 13T]**
Computational analyses of DNA and RNA expression data. Understanding biological databases, sequence alignment, sequence annotation, gene prediction, computational analysis of function, motif analysis, phylogenetic analysis, and microarray analysis. Applied, theoretical and statistical issues will be addressed.
Exclusion: BCH 441H1, BIO 472H1
Prerequisite: BIO (240H1, 241H1)/255Y1
Recommended preparation: BIO 260H1/HMB 265H1

**CSB473H1 Chemical Genomics (formerly BIO473H1) [26L]**
This course surveys the field of Chemical Genomics, focusing on the analysis of biological problems using chemical approaches. Topics covered include chemical genetics, combinatorial chemistry and combinatorial strategies in molecular biology. Examines both the underlying biological and chemical concepts; however, the focus is primarily biological.
Exclusion: BIO 473H1
Prerequisite: BIO (240H1, 241H1)/255Y1, CHM 247H1
Recommended Preparation: BCH 210H1, BIO 260H1/HMB 265H1

**CSB474H1 Methods in Genomics and Proteomics [60P]**
This hands-on, laboratory based course, offered through the Centre for the Analysis of Genome Evolution and Function (CAGEF), will teach students how to produce and analyze data that are central to the fields of genomics and proteomics. Techniques taught include DNA and RNA extraction, PCR, DNA sequencing, quantitative PCR, transcript profiling using microarrays, 2D-gel proteome analysis, and associated bioinformatics analyses.
Prerequisite: BIO 260H1/HMB 265H1, BIO 255Y1/CSB 330H1/350H1 or by permission of the instructor
Recommended Preparation: CSB 349H1/MGY 311Y1

**CSB482Y1 Developmental Biology Seminar (formerly BIO 482Y1) [52S]**
A class directed seminar analyzing the major problems in developmental biology from cellular, genetic, and molecular perspectives.
Exclusion: BIO 482Y1
Prerequisite: CSB 328H1 and/or CSB 340H1

**CSB497H1/498Y1 Project in Cell and Systems Biology I (formerly ZOO 498Y1) [TBA]**
An original research project (a literature review alone is not sufficient) requiring the prior consent of a member of the Department to supervise the project. The topic is to be one mutually agreed on by the student and supervisor. They must arrange the time, place, and provision of any materials and submit to the Undergraduate Office a signed form of agreement outlining details prior to being enrolled. This course is normally open only to Fourth Year students with adequate background in Cell and Systems Biology. All students are required to make written and, perhaps, oral presentations of the results of their projects and participate in a poster session. A copy of a written report must be submitted to the Undergraduate Office.
Exclusion: BOT 460Y1/461H1/462Y1/463H1/ZOO 498Y1/499Y1

**CSB499Y1 Project in Cell and Systems Biology II (formerly ZOO499Y1) [TBA]**
Allows students to do a second independent project, supervision of which must be different from CSB 497H1/498Y1. Operates in the same manner as CSB 497H1/498Y1.
Exclusion: BOT 462Y1/463H1/ZOO 499Y1
Prerequisites: CSB 497H1/498Y1

## Faculty

### Professors Emeriti

P.W. Ball, B Sc, Ph D (University of Toronto Mississauga, BOT)
D.G. Butler, M Sc, Ph D, D Sc, FRSA (ZOO)
C.S. Churcher, M Sc, Ph D (ZOO)
N.G. Dengler, MS, Ph D (BOT)
S.S. Desser, M Sc, Ph D (ZOO)
D.W. Dunham, BS, Ph D (ZOO)
J.B. Falls, BA, Ph D (ZOO)
R.I.C. Hansell, B Sc, Ph D (ZOO)
H.H. Harvey, M Sc, Ph D (ZOO)
R.L. Jefferies, B Sc, Ph D (BOT)
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N. Mrosovsky, BA, Ph D (ZOO)
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G.M. Telford, B Sc, Ph D (ZOO)

### Professor and Acting Chair of the Department

J.D. Thomson, MS, Ph D

### Professor and Associate Chair (Graduate Studies)

W.G. Sprules, MA, Ph D (University of Toronto Mississauga)

### Senior Lecturer and Associate Chair (Undergraduate Studies)

C.A. Goldman, M Sc

### Professors

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### Assistant Professors

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L.L. Manne, MS, Ph D (University of Toronto Scarborough)
T.L. Sage, MS, Ph D
S. Stefanovic, M Sc, Ph D (University of Toronto Mississauga)
J.R. Stinchcombe, BA, Ph D
H.H. Wagner, M Sc, Ph D (University of Toronto Mississauga)
S.I. Wright, M Sc, Ph D

### Lecturers

I. Stehlik, Ph D

Ecologists and evolutionary biologists recognize that all life has evolved and that an understanding of the central question of the origin and maintenance of diversity − from genomes to ecosystems − underlies all life sciences and is critical to our stewardship of life. Society needs to make informed decisions about sustainable development, global temperature change, control of invasive species, the preservation of genetic diversity and ecosystem integrity, and the control of emerging infectious diseases such as SARS and drug-resistant malaria. These are fundamentally evolutionary and ecological problems.

Research and teaching in the Department covers all life forms (microbes, fungi, plants, animals) and is aimed at an understanding of the diversity of life and all aspects of organismal biology in the natural world. Research faculty use a broad array of approaches in their studies, including molecular studies, laboratory experiments, computer and mathematical modeling, and field studies in many different areas of the world. Instruction provides opportunities for research projects conducted in the laboratory and the field. We offer a very wide range of courses that deal with molecular evolution, population and quantitative genetics, genomics, animal behaviour, population, community, and landscape ecology, evolutionary and ecological theory, biodiversity, conservation biology, and systematics. Students exposed to these subjects come to realize that the ecological and evolutionary underpinnings of life present a host of scientific problems that are both intellectually challenging and critical to our future.

# Life Sciences: Ecology and Evolutionary Biology

The Department of Ecology & Evolutionary Biology offers six programs: Specialist programs in Behaviour, Ecology, and Evolutionary Biology; a Major program in Ecology & Evolutionary Biology; and two Minor programs in Environmental Biology. The Department also jointly offers, with the Department of Cell & Systems Biology, Specialist, Major, and Minor programs in Biology, Botany, and Zoology. The Department of Ecology & Evolutionary Biology (EEB) arose, along with its sister department, the Department of Cell & Systems Biology (CSB), from a reorganization in 2006 of the previous departments of Botany and Zoology.

Students entering their first year in the life sciences take BIO150Y1. BIO150Y1 is taken by students who have successfully completed grade 12 Biology (or an equivalent course) and is a prerequisite for almost all further courses in the life sciences.

Students requiring more information about Ecology & Evolutionary Biology programs and courses please visit the departmental website or contact the Undergraduate Office, Earth Sciences Centre (25 Willcocks St.), Room 3055, undergrad@eeb.utoronto.ca.

Website: www.eeb.utoronto.ca/undergraduate

## Ecology & Evolutionary Biology Programs

After completing 4.0 FCEs (four full courses or their equivalent), students in these programs are encouraged to discuss their course selections each year with the Department. Contact: undergrad@eeb.utoronto.ca

Enrolment in the programs listed below requires completion of 4.0 FCEs; no minimum GPA is required.

### Behaviour (Science program)

**Specialist program:**
(13 full courses or their equivalent, including at least 1.0 400-series FCE)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1; JMB170Y1/ MAT135Y1/136Y1/137Y1/157Y1
Higher Years:
1. 2.5 FCEs: BIO (240H1, 241H1)/255Y1; BIO260H1/HMB265H1; PSY (290H1, 260H1/280H1)/BIO (270H1, 271H1)
2. 1.0 FCE in statistics from: PSY (201H1, 202H1); (STA220H1, EEB225H1) (recommended); STA (220H1, 221H1); STA (250H1, 255H1); STA (257H1, 261H1)
3. 1.5 FCEs: EEB322H1; EEB318H1/323H1; EEB324H1
4. 0.5 FCE field course from: EEB301H1/302H1/303H1/304H1/ 305H1/306H1/307H1/308H1/309H1/310H1/311H1/360H1/ 361H1/469H1/ FOR306H1
5. 1.0 FCE 400-series seminar course: EEB494Y1/495Y1/496Y1 (496Y1 is recommended)
6. 3.5 FCEs (at least 1.5 must be 300+ series) from: ANT436H1; BIO; EEB (excluding EEB 202H1, 214H1, 215H1, 216H1); ENV234Y1; HMB321H1; HPS 353H1, 355H1; JZP; PSY (excluding PSY300H1); ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)

NOTE: EEB 319H1, 321H1, 362H1; PSY397H1/JZP326H1, PSY497H1/JZP428H1; PSY 260H1, 280H1, 362H1, 369H1, 390H1, 392H1, 393H1, 396H1, 399H1, 460H1, 490H1 are recommended for this program. Students wishing to take PSY courses to fulfill the requirements of this program should take PSY100H1. To take additional PSY courses, students must be enrolled in a PSY program or have obtained a minimum of 70% in PSY100H1.

### Biology: see Biology

### Botany: see Biology

### Ecology (Science program)

**Specialist program:**
(13 full courses or their equivalent, including at least 1.0 400-series FCE)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1; JMB170Y1/ MAT135Y1/136Y1/137Y1/157Y1
Higher Years:
1. 3.5 FCEs: BIO (240H1, 241H1)/255Y1; BIO260H1/HMB265H1; BIO251Y1/ BIO (270H1, 271H1); EEB265Y1/ ENV234Y1
2. 1.0 FCE in statistics from: PSY (201H1, 202H1); (STA220H1, EEB225H1) (recommended); STA (220H1, 221H1); STA (250H1, 255H1); STA (257H1, 261H1)
3. 0.5 FCE: EEB318H1/323H1
4. 0.5 FCE field course from: EEB301H1/302H1/303H1/304H1/ 305H1/306H1/307H1/308H1/309H1/310H1/311H1/360H1/ 361H1/469H1/ FOR306H1
5. 2.0 FCEs from: EEB 319H1, 321H1, 322H1, 324H1, 328H1, 365H1, 370H1
6. 1.0 FCE 400-series seminar course: EEB494Y1/495Y1/496Y1 (495Y1 is recommended)
7. 1.5 FCEs (at least 0.5 must be 300+ series) from: ANT436H1, BIO, BOT (excluding BOT202Y1), CHM; EEB (excluding EEB 202H1, 214H1, 215H1, 216H1); ENV (excluding ENV200Y1); GGR (only Science courses); GLG (excluding GLG 100H1, 103H1, 105H1, 110H1); HMB321H1; HPS 353H1, 355H1; MAT; PHY (excluding PHY 100H1, 101H1); STA; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)

NOTE: EEB 375H1, 428H1, 440H1, 465H1, 469H1, 471H1 are recommended for this program.

### Ecology & Evolutionary Biology (Science program)

**Major program:**
(8 full courses or their equivalent)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1
Higher Years:
1. 3.0 FCEs: BIO (240H1, 241H1)/255Y1; BIO260H1/HMB265H1; BIO251Y1/BIO (270H1, 271H1)/EEB265Y1/ENV234Y1; STA220H1
2. 2.0 FCEs from: EEB 318H1, 319H1, 321H1, 322H1, 323H1, 324H1, 328H1, 362H1, 365H1, 370H1
3. 1.0 FCE from: BIO251Y1; BIO 270H1, 271H1; EEB (excluding EEB 202H1, 214H1, 215H1, 216H1); ENV234Y1; HPS 353H1, 355H1; JMB170Y1/MAT135Y1/136Y1/137Y1/157Y1

### Environmental Biology (Science program)

**Minor program:**
(4 full courses or their equivalent)

1. BIO150Y1; ENV234Y
2. 2.0 FCEs from: EEB 318H1, 319H1, 321H1, 322H1, 323H1, 324H1, 328H1, 362H1, 365H1, 370H1 (courses in both ecology and evolution are recommended)

### Environmental Biology (offered jointly with the National University of Singapore) (Science program)

This Type 3 minor program represents a unique opportunity to study environmental biology in a different cultural environment. For more information, contact the Undergraduate Office and the International Student Exchange Office (ISXO, www.utoronto.ca/student.exchange).

**Minor program:**
(4 full courses or their equivalent)

1. 2.0 FCEs (at U of T): BIO150Y1, ENV234Y1
2. 1.5 FCEs (at National University of Singapore) from: NUS341H0, NUS342H0, NUS344H0, NUS345H0, NUS346H0 (see below)
3. 0.5 FCE field course: NUS343H0

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**NUS341H0 Marine Biology [26L, 24T]**
Scientific study of marine life and the marine environment. Physical characteristics of oceans, marine habitats and ecosystems, diversity of marine life and their adaptations to marine environments, impact of human activities and management systems. (Co-listed as LMS 4261 at National University of Singapore)
Prerequisite: BIO150Y1, ENV234Y1/(EEB319H1, 321H1)
Exclusion: EEB/BIO 301H1

**NUS342H0 Conservation Biology [26L, 24T]**
The impact of habitat loss on biodiversity, conservation management strategies, ecological theory of conservation, socio-economic issues, and conservation options and challenges, especially in SE Asia. (Co-listed as LMS 4262 at National University of Singapore)
Prerequisite: BIO150Y1, ENV234Y1/(EEB319H1, 321H1)
Exclusion: EEB/ZOO 215H1; EEB/BIO 365H1

**NUS343H0 Field Studies in Biodiversity [12L, 8P, TBA]**
Introduction to field biology, including sampling design and execution, data management and analysis. Includes a 7-day field experience (currently on Pulau Tioman, Malaysia) with trips to coastal, mangrove and freshwater habitats, and primary and secondary forests. Students will work in small groups to conduct mini-projects. (Co-listed as LMS 4263 at National University of Singapore)
Prerequisite: BIO150Y1, ENV234Y1/(EEB319H1, 321H1)

**NUS344H0 Behavioural Biology [26L, 24T]**
The relationships that organisms have with each other and with the environment. Key concepts and ultimate and proximate explanations of animal interactions and other life history characteristics, with examples from diverse animals and ecological systems. Students also evaluate contemporary literature on relevant current issues. (Co-listed as LMS 4253 at National University of Singapore)
Prerequisite: BIO150Y1, ENV234Y1/(EEB319H1, 321H1)
Exclusion: EEB/ZOO 322H1

**NUS345H0 Forest Ecology [26L, 24T]**
Fundamental principles of forest ecology, primarily focusing on tropical regions. Diversity and distributions of forests, soils and nutrient cycling, animal-plant interactions, disturbance ecology and succession, energy flow and food webs, population biology. Emphasis on how humans are affecting these processes. (Co-listed as LMS 3271 at National University of Singapore)
Prerequisite: BIO150Y1, ENV234Y1/(EEB319H1, 321H1)
Exclusion: FOR305H1

**NUS346H0 Global Change Biology [26L, 24T]**
Aspects of current environmental change and its effects on biological systems, including rising carbon-dioxide concentrations, climate change, loss of biodiversity, and eutrophication. Global warming, land-use changes, invasive species, fire, carbon sequestration, carbon mitigation, and global (macro) ecology. Classroom projects, discussions, and debates. (Co-listed as LMS 3272 at National University of Singapore)
Prerequisite: BIO150Y1, ENV234Y1/(EEB319H1, 321H1)
Exclusion: EEB/BIO 428H1

### Evolutionary Biology (Science program)

**Specialist program:**
(13 full courses or their equivalent, including at least 1.0 400-series FCE)

First Year: BIO150Y1; CHM (138H1, 139H1)/151Y1; JMB170Y1/MAT135Y1/136Y1/137Y1/157Y1
Higher Years:

1. 2.5 FCEs: BIO (240H1, 241H1)/255Y1; BIO260H1/HMB 265H1 (BIO260H1 recommended); BIO251Y1/ BIO (270H1, 271H1)
2. 1.0 FCE in statistics from: PSY (201H1, 202H1); (STA220H1, EEB 225H1) (recommended); STA (220H1, 221H1); STA (250H1, 255H1); STA (257H1, 261H1)
3. 2.0 FCEs: EEB 319H1, 323H1, 324H1, 362H
4. 0.5 FCE field course from: EEB301H1/302H1/303H1/304H1/305H1/306H1/307H1/308H1/309H1/310H1/311H1/360H1/361H1/469H1/ FOR306H1
5. 1.0 FCE 400-series seminar course: EEB494Y1/495Y1/496Y1 (494Y1 is recommended)
6. 3.0 FCEs (at least 1.0 must be 300+ series) from: ANT436H1; BIO; BOT (excluding BOT202Y1); CHM 220H1, 247H1/249H1; CSB 351Y1, 352H1, 357H1, 452H1, 458H1, 460H1, 472H1; EEB (excluding EEB 202H1, 214H1, 215H1, 216H1); ENV234Y1; GLG 110H1, 216H1; HMB321H1; HPS 353H1, 355H1; MAT235Y1/237Y1; PHY 131H1, 132H1, 151H1, 152H1; PSY100H1/100Y1; ZOO (excluding ZOO 200Y1, 214Y1, 215H1, 216H1)

NOTE: EEB 321H1, 365H1, 370H1, 459H1, 460H1, 461H1, 462H1 are recommended for this program.

### Zoology: see Biology

## Ecology and Evolutionary Biology Courses

For Distribution Requirement purposes, all BIO and EEB courses, ENV234Y1, and JMB170Y1 are classified as SCIENCE courses (see page 26). All students, regardless of campus or Faculty, must abide by the stated course prerequisites and exclusions.

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### 100-SERIES COURSES

**BIO150Y1 Organisms in Their Environment [52L, 36P]**
Principles and concepts of evolution and ecology examined through examples at the level of individuals, populations, communities and ecosystems. Includes the application of ecological and evolutionary approaches to behaviour, genomics, evolutionary

medicine, global environmental change, and conservation biology. A prerequisite for advanced work in biological sciences.
Prerequisite: Biology 12 or equivalent. Students without high school Biology must consult the BIO150 Office (bio150@utoronto.ca)

**JMB170Y1 Biology, Models, and Mathematics [78L]**
Applications of mathematics to biological problems in physiology, genetics, evolution, growth, population dynamics, cell biology, ecology, and behaviour. Mathematical topics include: power functions and regression; exponential and logistic functions; binomial theorem and probability; calculus, including derivatives, max/min, integration, areas, integration by parts, substitution; differential equations, including linear constant coefficient systems; dynamic programming; Markov processes; and chaos. This course is intended for students in Life Sciences.
Co-requisite: BIO150Y1

**SCI199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

## 200-SERIES COURSES

**BIO251Y1 Biology of Plants and Micro-organisms (formerly BOT251Y1) [52L, 39P]**
An introduction to the biology of plants, fungi, and algae. Diversity of forms, reproductive patterns, structure, and physiology are emphasized. Labs demonstrate major species groups and the relationship between structure and function of plants.
Prerequisite: BIO150Y1
Exclusion: BOT251Y1

**EEB202H1 Plants and Society (formerly BOT202Y1) [26L]**
The importance of plants to society. Plant biology, domestication of crop plants, plant breeding and genetic engineering, biologicial invasions, conservation, biodiversity and genetic resources. Evaluation of the ecological implications of advances in modern plant science.
Exclusion: BIO150Y/BOT202Y1
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**EEB214H1 Evolution and Adaptation (formerly ZOO214Y1) [26L, 12T]**
Evolution and adaptation through natural selection. Concepts and application based on faunal life goals of habitat survival, food acquisition, predator avoidance, and reproduction. Topics include: speciation, mutation, co-evolution, symbiosis, pollination, cannibalism, parasitism, eusociality, and sexual and parental conflict. Essays, debates, and reading required.
Exclusion: BIO150Y1/323H1/EEB323H1/ZOO214Y1/324Y1
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**EEB215H1 Conservation Biology (formerly ZOO215H1) [39L]**
Introduction to the scientific discipline that deals with endangered wildlife. Topics include: biodiversity, extinction, threats, demography, genetic diversity, nature reserves, and captive breeding. Also, endangered species laws, moral philosophies, and political, economic and social justice issues surrounding biodiversity. Essays and reading required.
Exclusion: EEB/BIO 365H1/ZOO215H1
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**EEB216H1 Marine Mammal Biology and Conservation (formerly ZOO216H1) [26L, 12T]**
Introduction to ecological, evolutionary, physiological, and anatomical adaptations of marine mammals to their aquatic environment. Issues of conservation and environmental biology will also be covered. In tutorials the use of anatomical specimens (skulls, teeth, etc.) will be supplemented with video and other teaching tools.
Prerequisite: Biology 12 or equivalent
Exclusion: Enrolment in a Science program; SCI199Y1: Marine Mammals in Their Environment
This course counts as a Science Distribution Requirement for students in all years and disciplines.

**EEB225H1 Biostatistics for Biological Sciences (formerly BIO225H1) [26L, 26P]**
A statistics course designed especially for life science students, using biological examples where appropriate. Students learn to choose and use statistics that are appropriate to address relevant biological questions and hypotheses. Lectures and computer labs will be used to cover the following methods: sampling and experimental design, data exploration, correlation, regression, ANOVA, Chi-square, and non-parametric tests.
Prerequisite: BIO150Y1, STA220H1
Exclusion: BIO225H1/ECO220Y1/227Y1/GGR270H1/JBS229H1/PSY202H1/SOC300Y1/STA221H1/250H1

**EEB263Y1 Comparative Vertebrate Anatomy (formerly ZOO263Y1) [26L, 78P, 26T]**
The ontogeny and phylogeny of vertebrate structure are considered within the context of evolutionary theory. Functional aspects of the various organ systems are examined. Representative fish and mammals are dissected in detail and other forms are dealt with briefly to illustrate selected anatomical features and to provide practical exposure to vertebrate construction.
Prerequisite: BIO150Y1
Exclusion: ZOO263Y1

**EEB265Y1 Animal Diversity (formerly ZOO265Y1) [52L, 78P]**
Diversity of animals in the world. Focusing on the special attributes and biological requirements of different groups of organisms and what makes each group vulnerable to human-based exploitation. Labs emphasize recognition of major groups, and use living organisms when possible, but involve no invasive procedures.
Prerequisite: BIO150Y1
Exclusion: ZOO265Y1

**EEB299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**ENV234Y1 Environmental Biology [52L, 39P]**
A broad-based science course drawing on elements from geology, systematics, soil science, and ecology to understand past and present environments and how humans are altering the environment. Emphasis is placed on examination of ecological phenomena in relation to population, community, and ecosystem processes with particular reference to the biomes of Ontario. Descriptive and experimental laboratory studies including a weekend field trip (total cost about $15.00). (Offered by the

Department of Ecology & Evolutionary Biology, Department of Geology, and the Faculty of Forestry)
Prerequisite: BIO150Y1 (recommended) or GGR100Y1
This is a Science course.

## 300-SERIES COURSES

**EEB301H1 Marine Biology (formerly BIO301H1) [TBA]**
Offered in the summer at Huntsman Marine Laboratory, St. Andrews, New Brunswick, of about 14 days duration. Informal lectures and seminars with intensive field and laboratory work on different marine habitats and the animals and plants associated with them. Student projects included.
Prerequisite: BIO150Y1 and permission of instructor
Exclusion: BIO301H1
Recommended preparation: EEB265Y1 or any 200+ series organismal biology course with a lab.

**EEB302H1 Arctic Ecosystems (formerly BIO302H1) [TBA]**
Two-week summer field course offered in Churchill, Manitoba. Instruction combines lectures with field trips to local tundra and boreal forest sites. Students are responsible for completing an independent project based on local field work. Dates, instructors, and material covered vary from year to year. (Not offered in summer 2008)
Prerequisite: BIO150Y1 and permission of instructor
Exclusion: BIO302H1
Recommended preparation: At least one course in ecology

**EEB303H1 Tropical Ecology and Evolution (formerly BIO303H1) [TBA]**
A field course during Reading Week introduces students to the diversity of biological communities in the tropics focusing on ecological and evolutionary interactions. Plant and animal communities of the New World tropics are compared and contrasted with temperate communities. Students conduct small-scale research projects in the field. Lectures will be given on Friday afternoons prior to departure.
Prerequisite: BIO150Y1, any other Life Science course with a lab, and permission of instructor
Exclusion: BIO303H1

**EEB304H1 Field Botany (formerly BOT304H1) [TBA]**
A two-week course that aims to introduce students to the diversity of plants that can be found in southern Ontario, not only in the wild but also in botanical gardens or other living collections. The course studies field, herbarium, and laboratory methods used in plant organismic biology research. Topics include: plant collecting, plant identification, preparation of voucher specimens, plant reproductive biology, and plant diversity and phylogeny.
Prerequisite: BIO150Y1 and permission of instructor
Exclusion: BOT304H1
Recommended preparation: EEB 330H1/337H1

**EEB305H1 Experimental Ecology and Evolution in Southern Ontario (formerly BIO305H1) [TBA]**
A field course offered at a Southern Ontario field station for two weeks in August. Students learn the natural history of the region and conduct a research project in the field. Projects focus on terrestrial plant ecology, plant-insect interactions, and other topics in evolutionary ecology selected by the students.
Prerequisite: BIO150Y1 or any other Life Science course with a lab, and permission of instructor
Exclusion: BIO305H1
Recommended preparation: a second- or third-year ecology, evolution or environmental science course

**EEB306H1 Inter-University Field Course (formerly BIO306H1) [TBA]**
Inter-university selections from the offerings of the Ontario Universities Program in Field Biology. Courses, of one or two weeks duration at field sites, are announced each January. Consult the Ecology & Evolutionary Biology Undergraduate Office or website.
Prerequisite: Varies by module
Exclusion: BIO306H1

**EEB307H1 Alpine Ecosystems (formerly BIO307H1) [TBA]**
A field course at a high mountain field station for two weeks in the summer. Students learn the natural history of alpine and subalpine biomes and investigate major abiotic and biotic interactions. Required projects catalogue natural diversity, examine species interactions, or assess abiotic influences and stresses on high-altitude organisms and their environment. (Not offered in summer 2008)
Prerequisite: BIO150Y1, BIO251Y1 or BIO (270H1, 271H1), and permission of instructor
Exclusion: BIO307H1

**EEB308H1 Biodiversity and Ecology in Southeast Asia (formerly BIO308H1) [TBA]**
Offered in early or late summer for approximately two weeks. Students conduct independent research projects and will be introduced to the biodiversity and ecology of southeast Asia. Projects will be tailored to each student's interests and background. (Not offered in summer 2008).
Prerequisite: BIO150Y1 and permission of instructor
Exclusion: BIO308H1
Recommended preparation: EEB 360H1/384H1/386H1/388H1

**EEB309H1 Field Ornithology (formerly ZOO304H1) [TBA]**
Lectures on the biology of birds, and intensive field work emphasizing field identification, census techniques and habitat preferences. Student projects included. Offered for two weeks in the spring or summer at a field station. (Not offered in summer 2008).
Prerequisite: BIO150Y1 and permission of instructor
Exclusion: ZOO304H1

**EEB310H1 Lake Ecosystem Dynamics [TBA]**
Two-week summer field course in Algonquin Park, Ontario. Field and laboratory exercises will demonstrate how interactions between physical, chemical and biological parameters are crucial in understanding lake ecosystems. Students collect, analyse, and interpret data, and complete a class project and independent project. (Offered in alternate years; offered in summer 2008)
Prerequisite: An introductory biology or introductory physical geography course, and permission of instructor
Recommended preparation: 200+ series course in ecology, environmental biology or physical geography

**EEB311H1 Field Biology in Mexico [TBA]**
Two-week field course in Oaxaca, Mexico. Students will learn the natural history of Mexican flora and fauna and apply core concepts of ecology and evolution to observations and experiments in the field. Habitats visited include coastal lagoons, dry scrub forests, and cloud forests. Evaluation includes an independent project. (Offered in summer 2008)

Prerequisite: BIO150Y1Y or equivalent, and permission of instructor
Recommended preparation: One or more courses in ecology and/or evolution

**EEB318H1 Principles of Evolution [26L]**
Principles and practice of evolutionary biology since Darwin. Topics may include: phylogeny, speciation, mutation and neutral evolution, population genetic variation, quantitative genetics, molecular evolution, natural selection and adaptation, evolutionary conflict and cooperation, and levels of selection.
Prerequisite: BIO150Y1
Exclusion: EEB323H1/324H1/362H1

**EEB319H1 Population Ecology (formerly BIO319H1) [26L, 39P]**
Distribution of species; population growth and regulation; interactions within and among species; food webs; harvesting of natural resources; diseases; pest control. Basic ecological principles and applied issues discussed. Labs include experiments and computer simulations.
Prerequisite: BIO150Y1, JMB170Y1/MAT135Y1/136Y1/137Y1/157Y1
Exclusion: BIO319H1/320Y1
Recommended preparation: a course in statistics

**EEB321H1 Community Ecology (formerly BIO321H1) [26L, 39P]**
A comprehensive survey of community and ecosystem ecology emphasizing current developments and controversies. There will be two or three required day field trips held on weekends early in the fall term. Both the field trips and computer exercises provide training in sampling, simulation, and data analysis.
Prerequisite: BIO150Y1 and a course in statistics
Exclusion: BIO320Y1/321H1
Recommended preparation: ENV234Y1

**EEB322H1 Behaviour and Behavioural Ecology (formerly ZOO322H1) [26L, 39P]**
A broad introduction to animal behaviour emphasizing concepts from ethology and behavioural ecology, including foraging, predation, mating systems, parental care and behaviour genetics. Field and laboratory studies are undertaken.
Prerequisite: BIO150Y1, PSY201H1/STA220H1/250H1/257H1/GGR270H1
Exclusion: ZOO322H1

**EEB323H1 Evolutionary Genetics (formerly BIO323H1) [26L, 26T]**
Evolutionary biology rests on a foundation of evolutionary genetics. This course focuses on the core ideas in population genetics and extends to evolutionary genomics. Students are exposed to the mathematical theory underlying evolutionary genetics and are expected to learn the mathematical foundations underlying these ideas. Topics include the population genetics of mutation, migration, drift, and selection, analysis of sequence variation, and the evolution of sexual reproduction.
Prerequisite: BIO150Y, BIO260H1/HMB265H1, JMB170Y1/MAT135Y1/136Y1/137Y1/157Y1
Exclusion: BIO323H1
Recommended preparation: a course in statistics

**EEB324H1 Evolutionary Ecology (formerly BIO324H1) [26L, 13T]**
Empirical and theoretical approaches to key areas of research including natural and sexual selection, and life histories. Other topics may include phenotypic plasticity, speciation, co-evolution, and quantitative genetics.
Prerequisite: EEB323H1; or EEB318H1 and permission of instructor
Exclusion: BIO324H1/ZOO324Y1

**EEB328H1 Physiological Ecology (formerly BIO328H1) [26L, 26T]**
An advanced treatment of the physiological mechanisms controlling plant and animal distribution and ecological success. Topics of focus include photosynthesis and resource balance, water and nutrient relations, temperature effects, and adaptations to abiotic stress.
Prerequisite: BIO251Y1 or BIO (270H1, 271H1) or equivalent
Exclusion: BIO328H1

**EEB330H1 Systematic Botany (formerly BOT300H1) [26L, 39P]**
The theoretical foundations of taxonomy and the types of evidence used in constructing plant classifications. Labs emphasize taxonomic characters and their uses. Includes an independent taxonomic project.
Prerequisite: BIO150Y1
Exclusion: BOT300H1
Recommended preparation: EEB337H1

**EEB331H1 Introduction to the Fungi (formerly BOT301H1) [26L, 39P]**
Topics include fungal systematics, morphology, physiology, and ecology. The roles of fungi in the environment and their importance to man. A field trip explores the natural occurrence of fungi. Labs introduce the techniques used for morphological and molecular identification, and for isolation in pure culture. Students use fungal cultures to conduct an independent experimental research project.
Prerequisite: BIO150Y1
Exclusion: BOT301H1
Recommended preparation: BIO251Y1

**EEB337H1 Families of Vascular Plants (formerly BOT307H1) [26L, 39P]**
Variation in morphology, predominant breeding systems, dispersal syndromes, and other features between families of vascular plants in the Ontario flora are examined. Students learn key characteristics for identification of important families of free-sporing and seed-producing plants.
Prerequisite: BIO150Y1
Exclusion: BOT307H1

**EEB340H1 Comparative Plant Morphology (formerly BOT310H1) [26L, 39P]**
Evolution of vegetative and reproductive morphology of land plants is examined. Lecture topics cover evolution of meristems, shoot architecture and vascular tissue as well as evolution of the land plant life cycle, the ovule habit, fertilization processes, and pollination biology.
Prerequisite: BIO150Y1
Exclusion: BOT310H1

**EEB341H1 Plant Anatomy (formerly BOT341H1) [26L, 39P]**
The microscopic structure of plants with emphasis on the characteristics of cells and tissues, how they are formed from plant meristems and how they function in transport, photosynthesis, transpiration, absorption, and reproduction. (Not offered in 2008-2009)

Prerequisite: BIO251Y1
Exclusion: BOT341H1

**EEB353H1 History of Evolutionary Biology I (formerly ZOO354Y1; also listed as HPS353H1) [26L, 13T]**

An examination of major ideas about biological evolution from the 18th century to the 1930s and of their impact on scientific and social thought. Topics include the diversity of life and its classification, the adaptation of organisms to their environment, Wallace's and Darwin's views on evolution by natural selection, sexual selection, inheritance from Mendel to T.H. Morgan, eugenics, and the implications of evolution for religion, gender roles, and the organization of society.
Prerequisite: 6 full courses or equivalent including BIO150Y1
Exclusion: ZOO354Y1/HPS323H1/353H1
This counts as a Humanities or Science course.

**EEB355H1 History of Evolutionary Biology II (formerly ZOO354Y1; also listed as HPS355H1) [26L, 13T]**

An examination of ideas about biological evolution from the 1930s to the present. Topics include the Modern Synthesis, population genetics, the concept of biological species, ecology, sociobiology, and creationism.
Prerequisite: 6 full courses or equivalent including BIO150Y1
Exclusion: ZOO354Y1/HPS333H1/355H1
Recommended preparation: EEB353H1/HPS353H1
This counts as a Humanities or Science course.

**EEB356H1 Insect Biology (formerly ZOO356H1) [26L, 18P]**

Lectures provide an introduction to the morphology, physiology, development, behaviour, evolutionary history and biological significance of insects. Practicals will include demonstrations, multimedia, and group discussions. (Offered in alternate years; offered in 2008-2009)
Prerequisite: BIO150Y1
Exclusion: EEB/ZOO 360H1, ZOO356H1

**EEB360H1 Entomology (formerly ZOO360H1) [26L, 39P]**

Introduction to the morphology, physiology, development, behaviour, ecology, evolutionary history, and biological significance of insects. Labs include making an insect collection. Mandatory one week of fieldwork in Algonquin Park at the end of August. EEB360H1 can be used to fulfil a program's field course requirement. (Offered in alternate years; not offered in 2008-2009)
Prerequisite: BIO150Y1
Exclusion: EEB/ZOO 356H1, ZOO360H1

**EEB361H1 Field Entomology (formerly ZOO361H1) [TBA]**

A field and laboratory course to provide practical experience in techniques for collecting and studying insects. Students will each prepare an insect collection and/or conduct a small-scale research project.
Prerequisite: EEB356H1/360H1, and permission of instructor
Exclusion: ZOO361H1

**EEB362H1 Introduction to Macroevolution (formerly ZOO362H1) [26L, 26T]**

Explores patterns of large-scale evolutionary change, played out over large geographic expanses and extended periods of time. Integrates patterns with field and experimental studies to clarify evolutionary processes. Topics include: origins of species and their adaptations, historical biogeography, co-evolution, radiations and extinctions, fossils and macroevolutionary patterns, and the role of evolutionary information in conservation and biodiversity initiatives. Tutorials emphasize methods used to reconstruct phylogenetic relationships and the sequence of character evolution.
Prerequisite: BIO150Y1
Exclusion: ZOO362H1

**EEB365H1 The Biology of Conservation (formerly BIO365H1) [26L, 26P]**

Introduction to the study and conservation of biodiversity at all levels − genes, species, populations, habitats and ecosystem functions. Includes threats to biodiversity and approaches to maintaining biodiversity. Practicals include small group discussions of lecture topics and computer labs.
Prerequisite: BIO150Y1 and one of EEB318H1/319H1/321H1/322H1/323H1/324H1/362H1
Exclusion: BIO365H1

**EEB370H1 Theoretical Ecology and Evolution (formerly BIO370H1) [26L, 26P]**

Introduction to mathematical modeling techniques used in ecological and evolutionary theory. Applications include understanding the dynamics of populations and ecological communities and the evolution of ecologically important characteristics within species. Includes applied linear algebra, dynamic systems models, optimization techniques, and game theory. Requires good knowledge of first-year calculus, but not extensive mathematical background. Computer lab once a week.
Prerequisite: BIO150Y1, JMB170Y1/MAT135Y1/137Y1/157Y1
Exclusion: BIO370H1/470H1

**EEB375H1 Environmental Factors (formerly ZOO375H1) [39L]**

A lecture and seminar course dealing with the effects of physical and chemical environments on animals.
Prerequisite: BIO150Y1
Exclusion: ZOO200Y1, ZOO375H1
Recommended preparation: BIO (270H1, 271H1)

**EEB384H1 Biology of Amphibians (formerly ZOO384H1) [13L, 39P]**

Introduction to the natural history, evolution, and diversity of amphibians. (Offered in alternate years; offered in 2008-2009))
Prerequisite: EEB263Y1
Exclusion: ZOO384H1
Recommended preparation: EEB 323H1, 362H1

**EEB386H1 Avian Biology (formerly ZOO386H1) [13L, 39P]**

Avian diversity and evolution; adaptations for flight; physiology; migration and navigation; reproduction and social behaviour; species, speciation, and hybridization; population trends and conservation. Local field trips. An activity fee may be collected.
Prerequisite: BIO150Y1
Exclusion: ZOO386H1
Recommended preparation: an additional course in evolution, ecology or behaviour

**EEB388H1 Biology of Mammals (formerly ZOO388H1) [13L, 39P]**

Natural history of mammals emphasizing ecology, community structure, behaviour, reproduction, and life history strategies; form and function related to different modes of life and physical environments. Labs include a survey of Ontario mammals. (Offered in alternate years; offered in 2008-2009)
Prerequisite: EEB318H1/322H1 or BIO (270H1, 271H1)
Exclusion: ZOO388H1

**EEB389H1 Mammalian Diversity (formerly ZOO389H1) [13L, 39P]**
The origin, evolution, zoogeography, phylogenetic relationships, and diversity of mammals; speciation, extinction, and current issues in conservation biology. Labs survey mammalian orders, their characteristics, identification, and systematic relationships. (Offered in alternate years; not offered in 2008-2009)
Prerequisite: EEB 318H1/362H1
Exclusion: ZOO389H1

**EEB398H0 Independent Experiential Study Project**

**EEB399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

## 400-SERIES COURSES

NOTE: EEB 494Y1, 495Y1, 496Y1 are seminar courses that are advanced in level and broad in scope, emphasizing the integration of related sub-disciplines, critical thinking, and the synthesis of ideas often crossing disciplinary boundaries. Fundamental to these courses are group discussions among peers, facilitated by faculty, and student presentations. Students can normally enrol in only one of these courses, typically in their 4th year; students wishing to take more than one should contact the Ecology & Evolutionary Biology Undergraduate Office.

**EEB428H1 Global Change Ecology (formerly BIO428H1) [39L]**
An examination of organism, population, and ecosystem responses to long-term environmental change occurring at the global scale, with emphasis on human caused perturbation to climate and the carbon, nitrogen, and hydrolic cycles and their ecological effects.
Prerequisite: 1.0 FCE course from EEB/BIO/BOT/CSB/ZOO at the 300+ series
Exclusion: BIO428H1
Recommended preparation: ENV234Y1

**EEB440H1 Ecology and Evolution of Plant-Animal Interactions (formerly BIO440H1) [26L, 13T]**
Major concepts in ecology and evolution from the perspective of plant-animal interactions. The richness of interactions between plants and animals are explored, including antagonistic interactions (e.g., herbivory, carnivorous plants), mutualistic interactions (e.g., seed dispersal and ant-plant associations), and interactions involving two to many species and across trophic levels. (Not offered in 2008-2009).
Prerequisite: EEB 301H1/302H1/303H1/304H1/305H1/306H1/307H1/308H1/309H1/310H1/311H1/318H1/319H1/321H1/323H1/324H1/328H1 or equivalent
Exclusion: BIO440H1

**EEB459H1 Population Genetics (formerly BIO459H1) [26L, 13T]**
A focus on theoretical population genetics, using mathematical models to understand how different evolutionary forces drive allele frequency change. Students learn how to mathematically derive classic results in population genetics. Topics include: drift, coalescence, the relationship between population and quantitative genetics, selection in finite populations, and mutation load. (Offered in alternate years; not offered in 2008-2009)
Prerequisite: BIO260H1/HMB265H1, EEB323H1
Exclusion: BIO459H1
Recommended preparation: a solid understanding of basic algebra and calculus

**EEB460H1 Molecular Evolution (formerly BIO460H1) [26L, 13T]**
Processes of evolution at the molecular level, and the analysis of molecular data. Gene structure, neutrality, nucleotide sequence evolution, sequence evolution, sequence alignment, phylogeny construction, gene families, transposition.
Prerequisite: BIO (240H1, 241H1)/255Y1, BIO260H1/HMB265H1
Exclusion: BIO460H1

**EEB461H1 Advanced Evolutionary Genomics (formerly BIO463H1) [26L, 26T]**
Study of the evolution of genes and genomes. Topics include: gene and genome duplication, molecular phylogenetics, methods of detecting selection, adaptive evolution of proteins, genome size evolution, comparative genomics.
Prerequisite: EEB460H1
Exclusion: BIO463H1

**EEB462H1 Advanced Applications of Phylogenetic Systematics (formerly ZOO462H1) [13L, 39P]**
Computer-assisted methods for constructing and testing phylogenetic hypotheses are introduced through lectures and labs. Molecular data are emphasized although morphological data may also be considered. Character coding, maximum parsimony, maximum likelihood, Bayesian inference, and nested clade analyses are discussed. Students prepare a comprehensive term paper based on analysis of individual data sets. (Offered in alternate years; offered in 2008-2009)
Prerequisite: EEB362H1
Exclusion: ZOO462H1
Recommended preparation: basic computer literacy

**EEB465H1 Conservation Biology in Theory and Practice (formerly BIO465H1) [39L]**
Conservation biology from a Canadian and global perspective, including targets for conservation, methods of assessment, tools for recovery and key philosophical issues and legislation. This course teaches theory and methodology and provides practical in-class training using real-world conservation issues. Opportunities include preparing assessments of species at risk, presenting analyses, and possible publication of reports.
Prerequisite: One of EEB 318H1/319H1/321H1/322H1/323H1/324H1/365H1, plus one other course in behaviour, ecology, evolution or genetics
Exclusion: BIO465H1

**EEB468H1 Lectures in Limnology (formerly BIO468H1) [26L, 6T]**
Interactions between biological, chemical and physical processes in lake/stream ecosystems. Waves, currents; temperature, light, oxygen dynamics; microbes, algae, plants, invertebrates and fish; food web interactions; water-land-air landscapes. Basic ecological principles and lake management issues discussed. Assignments and a major paper are required. (Offered in alternate years; offered in 2008-2009)
Prerequisite: CHM (138H1, 139H1)/151Y1, EEB 319H1/321H1, or ENV234Y1 and permission of instructor
Exclusion: BIO368H1/468H1/469Y1, EEB469H1

**EEB469H1 Limnology (formerly BIO469H1) [26L,TBA]**
Basic ecological principles and applied issues of physical, chemical, and biological (microbes, algae, plants, invertebrates, fish) interactions in lakes and streams. Same lectures as EEB468H1. Mandatory field trip(s) to learn sampling techniques and data analysis and integrate principles learned in class. An activity fee may be collected. (Not offered in 2008-2009)

Prerequisite: CHM (138H1, 139H1)/151Y1, EEB 319H1/321H1 or ENV234Y, or permission of instructor
Exclusion: BIO368H1/468H1/469H1/469Y1/EEB468H1

**EEB471H1 Quantitative Ecology (formerly BIO471H1) [26L, 39P]**

This course examines aspects of quantitative ecology including approaches to ecological sampling, multivariate analysis of ecological communities and environmental conditions, null models, and spatial ecology.
Prerequisite: EEB 319H1/321H1 and a course in statistics
Exclusion: BIO471H1

**EEB494Y1 Seminar in Evolutionary Biology (formerly BIO494Y1) [52S]**

Topics include evolutionary ecology and genetics, biodiversity, and behavioural ecology. Primary literature and research seminars form the basis for class discussion and short seminars. Discussions are led by students.
Prerequisite: EEB323H1, 324H1; one of EEB319H1/321H1/322H1; and permission of instructor (minimum cGPA may be required)
Exclusion: BIO494Y1

**EEB495Y1 Seminar in Ecology (formerly BIO495Y1) [52S]**

Analysis and discussion of current topics in ecology. The topics vary from year to year. The seminar activities include both oral and written analyses of current research articles, and may include group projects. Critical discussion of research methods is an important component of the course.
Prerequisite: EEB 319H1/321H1; one of EEB 319H1/321H1/324H1/365H1/ ENV234Y1; and permission of instructor (minimum cGPA may be required)
Exclusion: BIO495Y1

**EEB496Y1 Seminar in Behaviour and Behavioural Ecology (formerly BIO496Y1) [52S]**

Topics in behavioural ecology including predator-prey interactions, mate choice, and foraging. May include general discussions about animal consciousness, culture and welfare. Evaluation is based on presentations, participation in class discussions and written assignments.
Prerequisite: EEB322H1; one of EEB 323H1/324H1/362H1, PSY397H1/JZP326H1, PSY362H1/369H1, or a biology field course; and permission of instructor (minimum cGPA may be required)
Exclusion: BIO496Y1

**EEB497H1 Project in Ecology and Evolutionary Biology I [TBA]**

**EEB498Y1 Project in Ecology and Evolutionary Biology I [TBA]**

An original research project (a literature review alone is not sufficient) requiring the prior consent of a member of the Department to supervise the project. The topic is to be one mutually agreed on by the student and supervisor. They must arrange the time, place, and provision of any materials and submit to the Undergraduate Office a signed form of agreement outlining details prior to being enrolled. This course is normally open only to Fourth-Year students with adequate background in ecology, evolutionary biology or behaviour. A copy of the final written report is submitted to the Undergraduate Office. Students are also required to give an oral presentation of the results and/or participate in a poster session. Students should contact their potential supervisor no later than April/May for projects that commence in September.
Prerequisite: Permission of Department
Exclusion: If EEB497H1 is taken then EEB498Y1 may not be taken for credit; BOT460Y1/461H1/462Y1, ZOO498Y1/499Y1

**EEB499Y1 Project in Ecology and Evolutionary Biology II [TBA]**

Allows students to do a second independent project, supervision of which must be different from EEB497H1/498Y1. Operates in the same manner as EEB498Y1.
Prerequisites: EEB497H1/498Y1 or BOT460Y1 or ZOO498Y1 and permission of Department
Exclusion: BOT462Y1; ZOO499Y1

# Life Sciences: Human Biology

## Collaborative program of the Faculty of Arts & Science and the Faculty of Medicine

## Faculty

### Associate Professor and Program Director

Valerie M. Watt, Ph D

### Senior Lecturer and Associate Program Director

R.G. Wilson Jr., MSc, Ph D

The Human Biology Programs are available to students entering their second year of study. Our multi-disciplinary programs integrate courses from the medical sciences, biological and social sciences, as well as the humanities. The goal of each program is to provide a broad education focused on an area of biological science relevant to humans. Students will receive a solid foundation in life science courses together with insight from the humanities and social sciences. Graduates will be equipped with a broad range of knowledge and skills to go into the job market or pursue further study in research, health sciences, biotechnology, law, education, and administration (check our web site at http://www.hmb.utoronto.ca for more career paths).

Humans are first and foremost animals, living organisms. As such, they share fundamental characteristics with all life - structure, chemistry, control mechanisms, behaviour, an ecological context, and an evolutionary history. Thus the study of human biology must entail a sound knowledge of basic life science. Humans have also developed unique characteristics, emergent properties, arising from their highly complex brains - their intricate behaviour, communication and conceptual abilities, and social structures. So a fuller appreciation of their biology also needs an understanding drawn from disciplines such as psychology, anthropology, and sociology. The Human Biology Programs are designed to do this.

We offer multiple Specialist programs as well as a Major program. The Genes, Genetics & Biotechnology Specialist program focuses on various aspects of genetics, including options in molecular and population genetics, and how genetics applies to the emerging fields of bioengineering and of biotechnology. The Global Health Specialist program provides worldwide perspectives on health and medicine encompassing social, political, and economic environments. The Health and Disease Specialist program examines the functioning of living organisms and how they respond to environmental conditions (both internal and external) that cause disease. The Neuroscience Specialist program, relevant to all aspects of the nervous system covers topics as diverse as mechanisms of learning and memory, pain, Alzheimer's disease and movement disorders such as Parkinson's disease and Lou Gehrig's disease. The Human Biology Major program provides a broad and flexible course of studying the basic medical sciences as well as other life sciences. The Environment & Health Specialist program provides a basic understanding of the complex relationships between the behaviour of Planet Earth and the working of the human body.

The first year for both Genes, Genetics and Biotechnology and the Health and Disease programs consists of 100-level courses in Biology, Chemistry and either Calculus or Physics, plus an introductory course in one of Anthropology, Philosophy, Psychology, Social Geography, or Sociology. This choice should be influenced by which of these areas students want to pick courses from in the upper years. The first year for Neuroscience is similar in requiring Biology, Chemistry and either Calculus of Physics, but students will need an introductory course in psychology for this program. For these three specialist programs, you are strongly recommended to take both calculus and physics in either first or second year. Both are important for higher-level life science courses and other life science programs. The first year of the Global Health program consists of a biology and physical science core and establishes an environment or resources management stream, complemented by a social science or humanities course.

Each of the specialist programs has core courses in second and third years tailored to meet the specific needs of its students. These courses concentrate on an area important to the program theme, and/or emphasize the interdisciplinary nature of the program theme by showing connections between its different subject areas. Each program requires a laboratory half course in third year; students may take either the appropriate HMB lab course, or one of the others listed. To complete the program, students will be able to choose from a range of options in third and fourth years, depending on their interests and which courses students have already taken, as well as availability. Options include 400-level advanced seminar courses and advanced research "project" courses.

The Human Biology Programs also includes a Human Biology Major, which provides a foundation of study in the life sciences. This program builds on a background in biology, chemistry and a choice of psychology, physics or mathematics. The upper years provide exposure to several disciplines within the life sciences. Students acquire a broad knowledge base which is valuable not only for those intending to pursue a career in science, but also for those with career interests in other areas such as business or education. For further information about the programs, see http://www.hmb.utoronto.ca or contact the Human Biology Programs Office, New College, 300 Huron Street 416-946-7609 or e-mail us at human.biology@utoronto.ca.

## Human Biology Programs

### Genes, Genetics and Biotechnology (Science program)

**Specialist program:**
(14.5 to 15 full courses or their equivalent, including at least two 400-series courses)

Enrolment in this program is limited, and will be based on cGPA. Enrolment requires completion of four courses including the first year prerequisite courses.

First Year:
1. BIO 150Y1
2. CHM 138H1, 139H1
3. 1.0 FCE from: MAT 135Y1/136Y1/137Y1/157Y1; PHY 110Y1/(131H1+132H1)/138Y1/140Y1/(151H1+152H1)

4. 0.5 to 1.0 FCE from: ANT 100Y1; ECO 100Y1; GGR 107H1/124H1; PHL 100Y1/102Y1; PSY 100H1; SOC 101Y1; VIC 170Y1/171Y1

Second Year:
1. HMB 201H1, 265H1/BIO 260H1, BCH 210H1, BIO (240H1+241H1)/250Y1/255Y1, CHM 247H1
2. 1.0 FCE from: ANT 203Y1/204Y1; ENV 236Y1; GGR 220H1/246H1/256H1/270H1; JGE221Y; WGS 261Y1; PHL 240H1/245H1/255H1/273H1/275H1/281Y1; SOC 205Y1/207Y1/210Y1/212Y1/213Y1/214Y1/220Y1/242Y1 /243H1/244H1/246H1/247H1/260Y1/263H1

Higher Years:
1. HMB 301H1, 321H1, CSB 349H1
2. 0.5 FCE science laboratory from: HMB 311H1; BCH 370H1; CSB 330H1/350H1; MGY 376H1; PSL 372H1
3. 2.0 FCE from the sciences: ANA 301H1; BCH 300-series (see Note 1 below); CSB 310H1/325H1/327H1/328H1/ 329H1/331H1 /332H1/340H1/345H1/347H1/351Y1// 352H1/353H1/357H1; EEB 323H1/324H1/341H1; IMM 334Y1; JZP 326H1; LMP 301H1/363H1; MGY 377H1/378H1; NFS 284H1/386H1; PCL 201H1/302H1; PSL 302Y1
4. 1.0 FCE from a Bio-Social or Social perspective: ANT 300-series; GGR 314H1/331H1/333H1/334H1/335H1/338H1/ 393H1; HPS 318H1/319H1/324H1/326H1/350H1/353H1/ 355H1; WGS 365H1/366H1/367H1/368H1/372H1/373H1; PHL 341H1/342/344H1/345H1/347H1/349H1/381H1/ 383H1/384H1; SOC 303H1/306Y1/309Y1/312Y1/317Y1/ 320Y1/327Y1 /339H1/344Y1/347H1/355Y1/356Y1/363H1/ 365Y1/366H1/369Y1/370Y1/373H1/374H1/375Y1/381Y1/ 382Y1/385Y1/386Y1/388H1
5. 1.0 FCE from a 400-level science series (see Note 3. below): HMB 421H1/435H1; BCH 400-series (see Note 1 below); CSB 428H1/429H1/430H1/452H1/458H1/459H1/ 460H1/461H1/472H1/474H1/482Y1; EEB 459H1/460H1/ 463H1; LMP 400-series; MGY 400 Series (see Note 2 below); NFS 400-series; PCL 477H1; PSL 400-series
6. 1.0 FCE from a 400-level Science, Bio-social or Social Perspective (see Note 3 below): ANT 428H1/429H1/ 433H1/448H1/450H1; GGR 415H1/416H1/439H1/450H1; PHL 407H1/440H1/470H1/475H1/482H1/483H1; JFG 475H1; NEW 425Y1/465H1; HMB 400-series; BCH 400-series (see Note 1 below); CSB 428H1/429H1/430H1/ 452H1/458H1/459H1 /460H1/461H1/472H1/474H1/482Y1; EEB 459H1/460H1/463H1; LMP 400-series; MGY 400-series (see Note 2 below); PHC 400-series; PSL 400-series

## Global Health (Science program)

**Specialist program:**
(15.5 to 16 full courses or their equivalent, including at least two 400-series courses)

Enrolment in this program is limited, and will be based on cGPA. Enrolment requires completion of four courses including the first year prerequisite courses.

First Year:
1. BIO 150Y1
2. 1.0 FCE from: CHM 138H1, 139H1; MAT 135Y1/136Y1/ 137Y1/157Y1; PHY 110Y1/(131H1+132H1)/138Y1/140Y1/ (151H1+152H1)
3. 1.0 FCE from: ANT 100Y1; GGR 100H1/107H1/124H1
3. 1.0 FCE from: ANT 100Y1; GGR 100H1/107H1/124H1
4. 0.5 to 1.0 FCE from: PHL 100Y1; PSY 100H1; SOC 101Y1; TRN 150Y/151Y; VIC 170Y1/171Y1; NEW 150Y; POL 105Y/108Y

Second Year:
1. HMB 203H1, BIO (240H1+241H1)/250Y1/255Y1, STA 220H1
2. 1.0 FCE from Environment or Resource Management: EEB 215H1; ENV 236Y1; FOR201H1; GGR 201H1/203H1/ 206H1/233Y1; JGE 221Y1
3. 1.0 FCE from Social, Cultural or Political Science: ANT 204Y1; GGR 220H1/256H1; JGI 216H; WGS 261Y1; PHL 273H1/275H1/281Y1; POL 201Y1/208Y1; PSY 220H1; SOC205Y1/210Y1/214Y1/242Y1/246H1/247H1

Second Year and Higher Years:
1. 1.0 FCE from Biological Sciences: ANT 203Y1; BCH 210H1; BIO 251Y1; BIO 252Y1/(270H1+271H1); EEB225H1/ 263Y1/265Y1; ENV 234Y1/236Y1; HMB 265H1; PSL302Y1; STA221H1
2. HMB303H1
3. 0.5 FCE in Laboratory Sciences: HMB 312H1; BCH 370H1; MGY 376H1; PSL 372H1; CSB 330H1
4. 1.0 FCE from Basic Medical Sciences: LMP 363H1; NFS 284H1; MGY 377H1/378H1; CSB 351Y1
5. 1.0 FCE from Ecology/Evolution: EEB 319H1/321H1/323H1/ 324H1/328H1/362H1/365H1; CSB 349H1/357H1/375H1
6. 1.0 FCE from Environmental Issues: GGR 303H1/305H1/ 307H1/314H1; ENV321Y1; FOR302H1/303H1
7. 1.0 FCE from Social Sciences or Humanities: ANT 348Y1/349H1/364Y1, ENV 350H1; GGR 334H1/338H1/ 393H1; ENV 320Y1/32H1/341H1/35H1; JIE 307Y1; WGS 367H1/72H1; PHL 373H1/380H1/381H/382H1/383H1/ 384H1, POL 301Y1/317Y1/343Y1/ 346H1/350H1/380H1/ 380Y1; PSY 333H1/335H1; SOC 309Y1/312Y1/327Y1/ 381Y1
8. 1.0 FCE from 400-level Science/Env/Eco series: HMB 420H1/433H1/442H1/473H1; CSB 452H1/458H1; EEB 428H1/440H1/459H1/462H1 /465H1/469H1/471H1/495Y1; GGR 403H1/409H1; LMP 402H1/406H1/436H; MGY 434H1/440H1; MIJ 485H1; NFS 486H1/487H1/490H1; PSL 420H1/421H1/470H1/472H1; JEH455H1
9. 1.0 FCE from 400-level Soc/Hum/Proj series: HMB 420H1/433H1/498Y1/499Y1; ANT 427H1/440Y1/ 448H1/450H1/452H1/455Y1; ENV 423H1/441H1; GGR 415H1/418H1/439H1/450H1/451H1; JFG 475H1; INI 422H1/446H1; NEW 425Y1/465H1; POL 401H1/412H1/ 413H1/417Y1/418Y1; PHL 415H1/440H1/447Y1/ 470H1/482H1; TRN 410Y1/411Y1/419Y1/421Y1, UNI 410H1/464H1

## Health and Disease (Science program)

**Specialist program:**
(14.5 to 15 full courses or their equivalent, including at least two 400-series courses)

Enrolment in this program is limited, and will be based on cGPA. Enrolment requires completion of four courses including the first year prerequisite courses.

First Year:
1. BIO 150Y1
2. CHM 138H1, 139H1
3. 1.0 FCE from: MAT 135Y1/136Y1/137Y1/157Y1; PHY 110Y1/(131H1+132H1)/138Y1/140Y1/(151H1+152H1)
4. 0.5 to 1.0 FCE from: ANT 100Y1; GGR107H1; GGR124H1; PHL 100Y1/PHL102Y1; PSY 100H1; SOC 101Y1; VIC 170Y1/171Y1

Second Year:
1. HMB 202H1, 265H1/BIO 260H1; BCH 210H1; BIO (240H1+241H1)/250Y1/255Y1; CHM 247H1
2. 1.0 FCE from: ANT 203Y1/204Y1; ENV 236Y1; GGR 220H1/246H1/256H1/270H1; JGE 221Y; WGS 261Y1; PHL 240H1/245H1/237H1/255H1/275H1/281Y1; SOC 205Y1/207Y1/210Y1/212Y1/213Y1/214Y1 /220Y1/242Y1/246H1/247H1/260Y1/263H1

Higher Years:
1. HMB 302H1; CSB 349H1; MGY 377H1, 378H1; PSL 302Y1
2. 0.5 FCE science laboratory from: HMB 312H1; BCH 370H1; MGY 376H1; PSL 372H1; CSB 330H1
3. 0.5 FCE from the sciences: ANA 300Y1/301H1/304Y1; BIO 251Y1/252Y1/(270H1+271H1); CSB 325H1/327H1/328H1/329H1/331H1/332H1/340H1/345H1/346H1/347H1/351Y1/353H1/357H1; BCH 300-series (see Note 1 below); EEB 331H1/340H1/341H1; IMM 334Y1; JZM 357H1/358H1; PSY 397H1; LMP 301H1/363H1; NFS 284H1/386H1; PCL 201H1/302H1/362H1; PSL 303Y1
4. 1.0 FCE from a Bio-Social or Social perspective: ANT 300-series; GGR 314H1/331H1/333H1/334H1/335H1/338H1/393H1; HPS 318H1/319H1/323H1/324H1/326H1/328H1/333H1/350H1; WGS 365H1/366H1/367H1/368H1/372H1/373H1; PHL 341H1/342H1/345H1/347H1/349H1/381H1/383H1/384H1; SOC 303H1/306Y1/309Y1/312Y1/317Y1/320Y1/327Y1/339H1 /344Y1/347H1/355Y1/356Y1/363H1/365Y1/366H1/369Y1/370Y1/373H1/374H1/375Y1/381Y1/382Y1/385Y1/386Y1/388H1
5. 1.0 FCE from a 400-level science series (see Note 3. below): HMB 422H1/432H1/435H1; BCH 400-series (See Note 1 below); CSB 428H1/429H1/430H1/452H1/458H1/460H1/461H1/472H1/482Y1; EEB 460H1/463H1; IMM 429H1/430H1/435H1; JBI 428H1; PSY 497H1; LMP 400-series; MGY 400-series; NFS 400-series; PCL 470Y1/471Y1/473Y1/475Y1/477H1/481H1; PSL 400-series
6. 1.0 FCE from a 400-level Science, Bio-social or Social Perspective (see Note 3. below): ANT 428H1/429H1/433H1/434H1/440Y1/448H1/449H1/450H1; GGR 415H1/416H1/439H1/450H1; PHL 407H1/440H1/470H1/475H1/482H1/483H1; JFG 475H1; NEW 425Y1/465H1; BCH 400-series (See Note 1 below); CSB 428H1/429H1/430H1/452H1/458H1/460H1/461H1/472H1/482Y1; EEB 460H1/463H1; HMB 400-series; IMM 429H1/430H1/435H1; JBI 428H1; JZP 428H1; MIJ 485H; LMP 400-series; MGY 400-series; NFS 484H1/486H1/488H1/490H1; PCL 470Y1/471Y1/473Y1/475Y1/481H1; PHC 400 Series; PSL 400-series

## Neuroscience (Science program)

### Specialist program:
(13.5 to 14 full courses or their equivalent, including at least two 400-series courses)

Enrolment in this program is limited, and will be based on cGPA. Enrolment requires completion of four courses including the first year prerequisite courses.

First Year:
1. BIO 150Y1
2. CHM 138H1, 139H1
3. 1.0 FCE from: MAT 135Y1/136Y1/137Y1/157Y1; PHY 110Y1/(131H1+132H1)/138Y1
4. PSY 100H1

Second Year:
1. HMB 204H1, HMB 265H1/BIO 260H1, BCH 210H1/CHM 247H1, BIO (240H1+241H1)/250Y1/255Y1; STA 220H1/PSY 201H1
2. 0.5 FCE from: ANT 204Y1/253H1/LIN200H1/PSY 260H1/270H1/280H1
3. PSL 300H1/BIO 252Y1/BIO(270H1+271H1)

Higher Years:
1. HMB 300H1, 310H1, 320H1, CSB 349H1/PSL 350H1
2. 2.0 FCE from: CSB 325H1/328H1/330H1/332H1/345H1/346H1/347H1; EEB 322H1; JAL 355H1; JLP 315H1/374H1; PCL 201H1/302H1; PSL 301H1/ 303Y1/372H1/374H1; PSY 202H1/342H1/371H1/372H1/373H1/375H1/393H1/394H1/396H1/397H1; WGS 372H1
3. 2.0 FCE from 400-level Science Series: HMB 400Y1/420H1/430H1/473H1; CSB 425H1/428H1/430H1; EEB 459H1/496Y1; JLS 474H1; JLP 471H1; PCL 475Y1; PSL 432H1/440Y1/443H1/444Y1/450H1/452H1/454H1/472H1; PSY 440H1/460H1/470H1/471H1/480H1/490H1/497H1

## Human Behavioural Biology (Science program)

****This specialist program is being amalgamated with Neuroscience and will no longer be offered. Students admitted prior to September 2005 may complete their program as described below****

### Specialist program:
(15 full courses or their equivalent, including at least two 400-series courses)

Enrolment in this program is limited, and will be based on cGPA. Enrolment requires completion of four courses including the first year prerequisite courses.

First Year:
1. BIO 150Y1
2. CHM 138H1, 139H1
3. MAT 135Y1/136Y1/137Y1/157Y1
4. PSY 100H1

Second Year:
1. HMB 200H1, BCH 210H1/CHM 247H1, BIO (240H1+241H1)/250Y1/BIO255Y1, STA 220H1/PSY 201H1
2. 1.0 FCE from: ANT 203Y1/204Y1; ENV 222Y1/236Y1; JAL 253H1/254H1; WGS 261Y1; PHL 281Y1
3. 1.5 FCE from: JAL 253H1/254H1; NRS 201H1; PSY 202H1/210H1/220H1/230H1/240H1/260H1/270H1/280H1/290H1; STA 221H1

Higher Years:
1. HMB 300H1
2. 0.5 FCE science laboratory from: HMB 310H1; PSL 372H1; PSY 319H1/369H1/379H1/389H1/399H1
3. 0.5 FCE in Genetics/Evolution from: HMB 265H1; EEB 322H1/323H1/324H1/362H1; PSY 390H1
4. 1.5 FCE in Behavioural Systems from: BIO 252Y1/(270H1+271H1); CSB 332H1/347H1; JZP 326H1; PSL 201Y1/302Y1; PSY 375H1/378H1/392H1/393H1/394H1/396H1
5. 1.5 FCE from a Bio-Social or Social perspective: ANT 300-series; ENV 321Y1; JAL 355Y1/356H1; JLP 315H1/374H1; JPA 305H1; WGS 372H1; PHL 341H1/342H1/351H1/381H1/382H1/383H1; any PSY 300-series course
6. 1.0 FCE from a 400-level science series (see Note 3. below): CSB 472H1/485Y1; EEB 462H1/494Y1/496Y1; HMB 420H1/435H1/433H1; JZP 428H1; LMP 400-series; PCL 475Y1; PSL 400-series; PSY 401H1/402H1/409H1/420H1/490H1

7. 1.0 FCE from a 400-level Science, Bio-social or Social perspective (see Note 3. below): ANT 425H1/427H1/428H1/429H1/433H1/434H1/440Y1/441H1; CSB 485Y1; JLP 471H1; JLS 474H1; PHL 407H1/451H1/475H1/481H1/482H1/483H1; EEB 462H1/494Y1/496Y1; HMB 420H1/435H1/438H1/498Y1/499Y1; JZP 428H1; PSL 420H1/421H1/440Y1/441H1/460H1/472H1; PSY 401H1/402H1/409H1/420H1/490H1

Notes:
1. Students who have completed BCH210H1 with high standing may enrol in 300-series or 400-series lecture courses with permission of the Department of Biochemistry program coordinator.
2. Students who have completed BIO 349H1/CSB 349H1 with high standing may be eligible to enrol in other MGY 400-series courses with permission from the instructor.
3. An independent research or reading course may be used towards the 1.0 FCE 400-series course. Students will need the approval of the program committee to be eligible for a research or reading course.

### Human Biology (Science program)

**Major program:**
(7.5 to 8 full courses or their equivalent)

Enrolment in this program requires completion of four courses; no minimum GPA required.

First Year:
1. BIO 150Y1, CHM 138H1, 139H1
2. 0.5 to 1.0 FCE from: JMB 170Y1; MAT 135Y1/136Y1/137Y1/157Y1; PHY 110Y1/(131H1+132H1)/138Y1/140Y1/(151H1+152H1); PSY 100H1;VIC 170Y1/171Y1

Second Year:
1. HMB 265H1/BIO 260H1, BCH 210H1, BIO (240H1+241H1)/250Y1/255Y1

Third Year:
1. 1.0 FCE from: BIO 251Y1/252Y1/(270H1+271H1); PSL 302Y1
2. 1.0 300+level FCE from: BIO; BOT; EEB; CSB; HMB; PSY; ZOO
3. 1.0 300+level FCE from: ANA; BCH; HMB; IMM; LMP; MGY; NFS; NRS; PCL; PSL (see Note 1 below)

NOTE 1: Courses listed in above may require prerequisites; please check course listings.

NOTE 2: EEB202H/214H/215H/216H; CSB200Y; PSL201Y will not be considered for program requirements.

### Environment and Health: see Environment, Centre for

## Human Biology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all HMB courses are classified as SCIENCE courses, with the following exceptions: HMB303H1, HAJ453H1, and HMB498Y1. Please see course descriptions below for information.

**HMB200H1 Introduction to Neuroscience (formerly NRS201H1/HMB204H1) [26L, 13T]**
A survey of brain systems, including evolution and development of the nervous system, brain stem system for defensive and approach responses, limbic and cortical systems for learning, and higher brain functions. Techniques for study of brain systems including pharmacology, gene targeting and human brain imaging are introduced.
Exclusion: PSY290H1/NRS201H1/HMB204H1
Prerequisite: BIO150Y1; PSY100H1/101Y1
Pre- or co-requisite: PSL300H1/BIO252Y1/BIO(270H1+271H1)/PSY391H1

**HMB201H1 Introduction to Genes, Genetics, and Biotechnology [26L, 13T]**
Interdisciplinary course consisting of three parts: the genetic basis, tools and techniques of biotechnology; medical, environmental and agricultural applications; and ethical, legal and social aspects of biotechnology (including approaches to risk assessment, reduction and acceptance). A prime example used in the third part is the controversy over genetically modified foods.
Prerequisite: BIO150Y1
Co-requisite: BIO250Y1

**HMB202H1 Introduction to Health and Disease [26L, 13P]**
An introductory course in Health and Disease using an interdisciplinary approach that integrates developmental human biology with perspectives from the Social Sciences. An exploration of the key concepts and approaches that is necessary for understanding the dynamic nexus of human health and disease.
Prerequisite: BIO150Y1

**HMB203H1 Introduction to Global Health [26L, 13T]**
An introductory course covering the theories, operational components and strategies of implementing primary health care in developing countries. Topics include education, control of vector borne diseases, essential drug provision, maternal and child health and nutrition and incorporation of alternative and complementary technologies, community participation and deployment of health service providers.
Prerequisite: BIO150Y1

**HMB204H1 Introduction to Human Behavioural Biology (formerly HMB200H1) [26L, 13T]**
An introductory course in Human Behavioural biology covering topics and concepts from behavioural genetics and evolutionary psychology.
Prerequisite: BIO150Y1, PSY100H1
Exclusion: HMB200H1

**HMB210H1 Scientific Controversies and Misconception [10L, 16S]**
Students engage in a variety of current, high profile misconceptions in human biology to change and extend incorrect common beliefs; to become familiar with the process of scientific inquiry; and to develop thinking, analytical and communication skills. Scientific misconceptions will be sourced from current issues.
Prerequisite: BIO150Y1
Pre- or co-requisite: BIO250Y1; BCH210H1

**HMB265H1 General and Human Genetics [26L, 13T]**
An introduction to classical and modern methods of genetic analysis. Topics include Mendelian genetics, the genetics of human population and disease, genomics, and applications of genetics to human society.
Exclusion: BIO260H1, BIO207H5
Prerequisite: BIO150Y1
Co-requisite: BIO250Y1

**HMB300H1 Human Behavioural Biology [26L, 13T]**
Intermediate course for the Specialist program in Neuroscience. Consult web page for more information: http://hmb.utoronto.ca/hmb300h.
Prerequisite: HMB200H1/204H1/NRS201H1

**HMB301H1 Biotechnology [26L, 13T]**
Intermediate course in biotechnology; topics vary but include the use of vectors, and biochemical pathways in biotechnology.
Prerequisite: HMB201H1

**HMB302H1 Vertebrate Histology and Histopathology [26L, 39P]**
Laboratory and lecture course studying the structure of the cell, various tissues and organ systems. Emphasis is on functional morphology and the adaptive response (including the inflammatory reaction) by comparing histological sections of normal tissues and organs with common diseases including neoplasia, respiratory, and liver disease.
Prerequisite: BIO250Y1

**HMB303H Global Health and Human Rights [24L, 15S]**
A multidisciplinary emphasis on the economic, historical, social and cultural determinants of health and human rights, and how structural violence prevents progress towards human rights. Case studies reflecting global aspects of health and human rights will form a framework for approaching these issues.
This is a SCIENCE or SOCIAL SCIENCE course.

**HMB304H1 Biomedical Visualization [13L, 26T]**
This course covers the analysis and development of visual media as it relates to the study of human biology. Lectures include: light/form; proportion/scale; conventions in human biology visualizations; media appropriate for target audience and reproduction. Topics may include: human anatomy and physiology, genetics, and issues in public health. Classes consist of lectures with computer lab explorations.
Exclusion: HSC302H5
Prerequisite: BIO250Y1

**HMB305H1 Personalized Modern Science [26L]**
Learn about the people behind the last century of scientific discovery. Select scientists, chosen in part for the impact of their discovery on human biology, will be used to illustrate the process of scientific research. Source material will range from interviews available from Nature and Science to written biographies.
Prerequisite: BIO250Y1; BCH210H1; HMB265H1

**HMB310H1 Laboratory in Neuroscience (formerly NRS302H1) [13L, 39P]**
A laboratory course based on current research techniques for students in the Specialist program in Neuroscience and Human Behavioural Biology. Lab topics include brain anatomy and imaging, immunocytochemistry, startle reflex analysis, human neuropsychology, and animal behaviour.
Exclusion: PSY399H1, NRS302H1, HMB314H
Co-requisite: HMB300H1

**HMB311H1 Laboratory in Genes, Genetics, and Biotechnology [13L, 39P]**
A laboratory course based on current research techniques for students in the Specialist program in Genes, Genetics, and Biotechnology. Lab topics include basic microbiology techniques, Southern blot, immunocytochemistry, nutrigenomics, and principles of fermentation.
Exclusion: HMB314H
Co-requisite: HMB301H1

**HMB312H1 Laboratory in Health and Disease [13L, 39P]**
A laboratory course based on current research techniques for students in the Specialist program in Health and Disease. Lab topics include basic microbiology techniques, Southern blot, immunocytochemistry, nutrigenomics, and histological techniques.
Exclusion: HMB314H
Prerequisite: HMB202H1, HMB302H1

**HMB314H1 Laboratory in Human Biology [13L, 39P]**
A laboratory course based on current research techniques for students in the Human Biology Major program. Laboratory topics include basic physiological techniques (blood/urine analysis, glucose tolerance), genetic analysis and investigation of biological processes using current molecular biology techniques. Students are engaged in supervised research projects on their research interests.
Exclusion: HMB310H1/311H1/312H1
Prerequisite: BIO250Y1/BIO255Y1, HMB265H1/BIO260H1

**HMB320H1 Neuroanatomy (formerly NRS202H1) [26L, 26P]**
This is a rigorous, introductory course that presents the functional and comparative anatomy of the vertebrate brain. It is designed for students who intend to continue with studies in the Neurosciences and related areas.
Exclusion: NRS202H1
Prerequisite: HMB204H1

**HMB321H1 Topics in Genetics [26L, 13T]**
Lectures and tutorial discussions on three or four selected topics in Genetics. Emphasis is on building in-depth understanding of classical and current problems from their historical roots to recent molecular genetic results. Topics vary yearly. Consult web page for more information: http://hmb.utoronto.ca/hmb321h.
Prerequisite: BIO260H1/HMB265H1

**HMB322H1 Human Diseases in Our Society [26L]**
Explore the scientific basis, interdisciplinary healthcare practices, and social implications of several diseases common in our society (e.g., STD, skin cancer, diabetes, and peridontal disease). Discuss current issues. Shadow a healthcare professional.
Prerequisite: BIO250Y1, HMB200H1/201H1/202H1/203H1/204H1

**HMB397H1 Scientific Communication [4L, 22S]**
Delve into topic(s) of human biology of your choice! Read science as it's published. Listen to scientific talks. Be mentored by your own individual professor, a basic or clinical researcher. Assignments guide you to read, write, and speak effectively about science.
Prerequisite: BIO250Y1, HMB200H1/201H1/202H1/203H1/204H1/HMB Major

**HMB399Y0 Independent Experiential Study Project [TBA]**
An Independent Experiential Study Project for students in Human biology. An instructional-supervised group project in an off-campus setting.
Prerequisite: 10 FCE and permission of the Human Biology Programs Office; enrolled in a Human Biology program.

**HMB400Y1 Project in Neuroscience (formerly NRS400Y1) [TBA]**
Laboratory research project on a neuroscience topic; supervised by a member of the Faculty of Arts and Science or the Faculty of Medicine. Requires approval from the Human Biology Programs office from which application forms may be obtained.
Exclusion: NRS400Y1
Prerequisite: An approved 300+ series science laboratory course and permission of the Human Biology Programs office.

**HMB420H1 Seminar in Human Behavioural Biology [20L, 6S]]**
Interdisciplinary seminar course that integrates the study of biological sciences with a psychological, sociological, anthropological, and philosophical perspective.
Prerequisite: HMB300H1

**HMB421H1 Seminar in Genes, Genetics, and Biotechnology [13L, 13S]**
Theme based lecture and seminar course underlining current medical research in relation to the areas of genes, genetics and biotechnology. Topics vary yearly.
Prerequisite: HMB301H1

**HMB422H1 Seminar in Health and Disease [16L, 10S]**
Lecture and seminar course underlining current medical research related to human disease. Topics vary yearly.
Prerequisite: HMB202H1, 302H1

**HMB430H1 Trends in Neuroscience [20L, 6S]**
Current research covering the breadth of neuroscience will be show cased by members of the Collaborative Program in Neuroscience. These topical reports will cover the spectrum from molecular through genetic, cellular, developmental, systems, behavioural and modelling. As well, approaches to studying neurodegenerative diseases and clinical neurophysiology will be introduced.
Prerequisite: HMB300H1

**HMB431H1 Biotechnology: Interface between Science & Industry [13L, 13S]**
Students will use case studies facilitated by biotechnology experts to explore the integration of biological science with business. The focus will be on vision and strategies of newly established ventures as well as existing companies that promote significant achievement in scientific discovery, commercial application, and public awareness.
Prerequisite: HMB301H1

**HMB432H1 Topics in Histology and Histopathology [13L, 13S]**
Lecture and seminar course emphasizing current research. Topics may include the digestive system, cardiovascular system, respiratory system, and neoplasia. Topics will vary depending on class interest.
Prerequisite: HMB302H1

**HMB433H1 Topics in Global Health [18L, 8S]**
Seminar and theme based course based on topics in health and human rights in a global setting.
Prerequisite: HMB303H1

**HMB434H1 Complementary and Alternative Medicine [20L, 6S]**
Integrative health care is a phenomenon that is developing in health care systems in North America, China, India, and Vietnam, among others. It involves the coordination of multi-disciplinary and culturally-specific health services in the treatment of illness and disease, and an expanded concept of health, illness, and wellness.
Prerequisite: HMB302H1/303H1 or permission from the Human Biology Programs office.

**HMB435H1 Selected Topics in Molecular Cell Biology [16L, 10S]**
Theme based lecture and seminar course underlining current basic science research in the area of molecular biology and cell biology as related to human disease. Topics vary yearly depending on student interest.
Prerequisite: BIO349H1/PSL350H1

**HMB442H1 Epidemiology of Health & Disease [20L, 6S]**
Engages students in the fundamental science of epidemiology applied to health and disease. After an introduction to various measures of health and disease, the scientific methods used to investigate, analyze, prevent and control population health problems will be illustrated using biomedical and public health studies.
Prerequisite: HMB302H1

**HMB443H1 Global Hidden Hunger [20L, 6S]**
Vitamin and mineral deficiencies, termed 'hidden hunger', affect about half the world's population. We explore the global nature, catastrophic consequences, and causes of these deficiencies. We also discuss formulation and implementation of international, national, and local policies to alleviate 'hidden hunger' especially in infants and young children.
Prerequisite: HMB303H1 or NFS382H1

**HMB444H1 Human Biology and Human Destiny: Science, Popular Science, and Science Fiction [26S]**
Seminars explore the interactions of biological sciences, social issues, and literature. Through reading of classic "SF" novels and popular writings by prominent twentieth century biologists in their historical, scientific, and thematic contexts, we will examine how biological concepts and their development affected life, society, and the future of humanity.
Prerequisite: HMB300H1/301H1/302H1/303H1/305H1

**HAJ453H1 AIDS: A Global Perspective [8L, 18S]**
Seminars explore the global AIDS crisis, adopting the medical-anthropological perspective of Paul Farmer's "Infections and Inequalities". Varying epidemiological profiles of AIDS are placed in broader social, cultural, and political-economic frameworks. The impact of globalization and structural inequality on local cultures and lifestyles will provide an essential backdrop to the discussions.
Prerequisite: HMB300H1/301H1/302H1/303H1 or 0.5 FCE 300-series ANT course
This is a SCIENCE or SOCIAL SCIENCE course.

**JEH455H1 Current Issues in Environment & Health [16L, 10S]**
This course introduces students to complex issues at the interface between environment and health where health is broadly defined. Each year a current and controversial case study is explored from scientific, medical, political and policy perspectives. The course takes students from the molecular to individual to population and societal levels.
Prerequisite: ENV341H1/HMB302H1

**HMB470H1 Exercise and Sports Medicine [20L, 6S]**
This course introduces biomechanics and builds on knowledge of the biomechanics of injury and dysfunction to develop a systematic understanding of risk, injury prevention, and initial management of injuries in sports and physical activities. Some additional topics include "doping" in sport, travel issues in competitive sport, and ethical issues in clinical sport medicine.
Prerequisite: HMB300H1/301H1/302H1/303H1

**HMB471H1 Performance Enhancement [20L, 6S]**
This course presents the links between stress and performance. Current research will provide the theoretical and scientific bases for this mind-body link. Various stress management skills will be introduced to maintain focus in the face of distractions such as writing an examination, making a public presentation or being interviewed for a job
Prerequisite: HMB300H1/301H1/302H1/303H1

**HMB472H1 Exercise Physiology [20L, 6S]**
Examine the physiological and biochemical responses of the human body to both acute and chronic bouts of physical activity. The impact of activity on health, and health on physical activity, is explored by examining adaptations from the cellular to the systemic level of bodily function.
Prerequisite: PSL302Y1/CSB252Y

**HMB473H1 Exercise and Mental Health [20L, 6S]**
Mental well being is a critical element of total health. We will explore the evidence underpinning the role of physical activity in the avoidance of mental disorders, recovery from mental disorders, and the well being and quality of life of those with or without mental disorders.
Prerequisite: PSL302Y1/BIO252Y1/BIO(270H1+271H1), PSY100H1, 15 FCE

**HMB498Y Research Project in Global Health [TBA]**
A research project on issues surrounding global health and human rights to be supervised by a member of the Faculty of Arts and Science or the Faculty of Medicine. Requires approval from the Human Biology Programs office from which application forms may be obtained.
Prerequisite: HMB203H1, HMB303H1and permission of the Human Biology Programs office.
This is a SCIENCE or SOCIAL SCIENCE course.

**HMB499Y1 Research Project in Human Biology [TBA]**
A research project supervised by a member of the Faculty of Arts and Science or the Faculty of Medicine. Requires approval from the Human Biology Programs office from which application forms may be obtained.
Prerequisite: An approved 300+ series science laboratory course and permission of the Human Biology Programs office.

## Collaborative Program of the Faculty of Arts & Science and the Faculty of Medicine

## Faculty

### Professors Emeriti

J.B. Hay, M Sc, Ph D
R.H. Painter, B Sc, Ph D

### Professor and Chair of the Department

M.J.H. Ratcliffe, B Sc, Ph D

### University Professor

T.W. Mak, Ph D, D Sc, FRSC

### Professors

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J.C. Zúñiga-Pflücker, B Sc, Ph D

### Associate Professors

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A. Schuh, MD
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J. Wither, B Sc, MD, Ph D

### Assistant Professors

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J.W.D. Booth, B Sc, Ph D
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P.J. Doherty, B Sc, Ph D
J.L. Gommerman, B Sc, Ph D
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C. Lau, M Sc, Ph D (Adjunct)
A. Martin, M Sc, Ph D
M. Ostrowski, MD, FRCP
D.J. Philpott, B Sc, Ph D
R.S. Yeung, B Sc MD, Ph D, FRCP (C)

### Lecturer

L. Clemenza, B Sc, Ph D
R. Razavi

Immunology is an integrative branch of the medical sciences that draws upon the more traditional disciplines of Molecular Biology, Microbiology, Pathology, and Biochemistry. In essence, Immunology is the study of the physiological responses that result when foreign (i.e. non-self) materials are introduced into a vertebrate organism such as man. Traditionally, the discipline has focussed on the body's response to infectious micro-organisms, with the purpose of developing effective vaccines. However, the scope of modern Immunology now encompasses all aspects of self vs. non-self recognition phenomena including organ transplantation, tumour immunology and autoimmune diseases. Recent major advances in our understanding of the cellular and molecular basis of the immune response promise to provide us with a new generation of prophylactic, therapeutic and diagnostic reagents of relevance to human and animal health.

The Department of Immunology in collaboration with Trinity College co-ordinates a specialist program in Immunology. The emphasis of this program is to provide students with a sound theoretical understanding of the cellular and molecular basis of non-self recognition, together with sufficient laboratory experience to enable the students to consider embarking on a career in the discipline. Immunologists may have careers in universities and other centres of learning and research, as well as in the biotechnology industries, diagnostic laboratories and various government agencies.

Courses in this specialist program are drawn from offerings by the Department, together with courses from other Departments, taught in some cases by members of the Department of Immunology. As enrolment in the specialist program is restricted, please consult specific requirements outlined in the program description section.

Undergraduate Coordinator:
Dr. A. Martin

Enquiries:
Department of Immunology, Room 5271, Medical Sciences Building (416-978-8360)

# Life Sciences: Immunology

More information is available on our website:
www.immunology.utoronto.ca

## Immunology Programs

### Immunology (Science program)

Sponsored by the Department of Immunology, Faculty of Medicine, and Trinity College

The Immunology Specialist Program is a Type 3 program. Enrolment is limited and selection is based on performance in First year required courses, only students with a CGPA of equal to or over 3.5 will be considered for acceptance into the program. Students apply via the Faculty's Subject POSt web site.

**Specialist program**
(14 full courses or their equivalent, including at least three 400-series courses)

First Year:
BIO 150Y1; CHM 138H1, 139H1; MAT 135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1) (PHY 131H1, 132H1 recommended)
Second Year:
BCH 242Y1; BIO 250Y1, BIO260H1/HMB265H1; CHM 220H1, 247H1
Third Year:
BCH 371H1; IMM 335Y1; MGY 311Y1, 377H1, 378H1
Fourth Year:
1. IMM 429H1, 430H1, 435H1; JBI 428H1
2. IMM 450Y1 or one full course equivalent at the 400-series level in ANA, BCH, IMM, LMP, MGY, or ZOO

## Immunology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all IMM courses are classified as SCIENCE courses (see page 26).

**IMM250H1 The Immune System and Infectious Disease [39L]**
Students will be introduced to the basic concepts of immunity to infectious disease. We will trace the history of current ideas in immunology and the immune response by examining how bacteria and viruses cause disease and the initial discoveries that led to such developments as vaccination. Current topical and newsworthy infectious diseases (HIV, tuberculosis, SARS, avian flu) will be used as examples of how the immune system copes with microbial infections.
Recommended Preparation: BIO150Y1

**IMM299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**IMM334Y1 Introductory Immunology [52L]**
The basic principles of immunology; tissues and cells of the immune system; cell biology of the humoral and cell-mediated immune responses; immunogenetics; immunoglobulin structure, function and biosynthesis; immunological techniques; immunopathology; infection and immunity; transplantation, autoimmunity and tumour immunology.
Prerequisite: BIO250Y1

**IMM335Y1 Introductory Immunology [52L, 26T]**
The fundamental principles of immunology; tissues and cells of the immune system; humoral and cell-mediated immune responses; immunogenetics; immunoglobulin structure, function and biosynthesis; immunopathology; infection and immunity; transplantation, autoimmunity and tumour immunology. Intended for students specializing in immunology and related programs, and requiring a more intensive background in biochemistry and molecular biology than IMM334Y1.
Prerequisite: BCH 242Y1; BIO 250Y1, 260H1/HMB 265H1
Co-requisite: MGY311Y1

**JBI428H1 Molecular Immunology [26L]**
Molecular mechanisms involved in innate and adaptive immunity including the structure and function of immunoglobulins, the complement system, antigen processing and presentation, and membrane signalling events. Emphasis is on experimental approaches and quantitative aspects. (Given by the Departments of Biochemistry and Immunology)
Prerequisite: BCH210H1/242Y1, IMM334Y1/335Y1
Recommended preparation: BIO349H1/MGY311Y1/PSL350H1

**IMM429H1 Developmental Immunology [26L]**
Hematopoiesis, myelopoiesis, lymphopoiesis, a study of the development of cells involved in the immune system including their ontogeny, physical, molecular, and biochemical characteristics, regulation of differentiation and maturation, positive and negative selection of lymphocytes, DNA rearrangement.
Prerequisite: IMM334Y1/335Y1

**IMM430H1 The Immune Response [26L]**
A study of the cells involved in the immune response, the nature of cellular and molecular interactions that govern immunity and self-tolerance, the nature of the effector cells in immunity and genetic control of immune responses.
Prerequisite: IMM334Y1/335Y1

**IMM435H1 Practical Immunology [72P]**
Application of basic principles acquired from IMM334Y1/335Y1; immunological procedures used in research and diagnostic laboratories; rudiments of etiology, pathogenesis, and laboratory diagnosis of diseases of immune system; principles of immunological diagnostic procedures in some infectious diseases; instruction through lectures, practical exercises, video tapes, student presentations.
Prerequisite: BCH210H1/242Y1, IMM334Y1/335Y1

**IMM450Y1 Research Project in Immunology [154P]**
An opportunity for specialized research in Immunology under the supervision of a member of the Faculty. There are no pre- or co-requisites, although preference is given to Immunology Specialist students.

**MIJ485H1 Vaccines and Immunity [39L]**
Analysis of infectious disease vaccines, and pathogens' strategies to evade specific immune response, with an emphasis on molecular and immunological aspects. Special topics include: molecular basis of pathogenicity and immune-evasion strategies; vaccination strategies; adverse effects of vaccines (given jointly by the Departments of Molecular Genetics and Immunology).
Prerequisite: IMM334Y1/IMM335Y1, MGY377H1, MGY378H1
Exclusion: MBY480H1, MGY485H1

## Given by Members of the Faculty of Medicine

## Faculty

### Professor and Chair of the Department

A.I. Gotlieb, MD, CM

### Professors

K. Adeli, Ph D
S.L. Asa, MD, Ph D
B. Bapat, Ph D
M. Bendeck, Ph D
C. Bergeron MD
J.M. Boggs, Ph D
J. Brunton, MD
J. Butany, Ph D
D.E.C. Cole, MD, Ph D
E. Cutz, MD
M. Cybulsky, MD
E.P. Diamandis, MD, Ph D
M.D. Grynpas, Ph D
J.B. Hay, Ph D
A. Hinek, Ph D
D.M. Irwin, Ph D
M.G. Johnston, Ph D
S. Jothy, MD, Ph D
S. Kamel-Reid, Ph D
R. Kandel, MD
F.W. Keeley, Ph D
B.L. Langille, Ph D
G.A. Levy, MD
C.A. Lingwood, Ph D
D. Low, MD
D. Mahuran, Ph D
P.A. Marsden, MD
T. Mazzuli, MD
A. McGeer, MD
J. McLaurin, PhD
S. Nag, MD
M. Opas, Ph D
K.P.H. Pritzker, MD
J. Prud'homme, MD
D.S.R. Sarma, Ph D
A. Seth, Ph D
P. Shek, Ph D
A.E.M. Simor, MD
J. Squire, Ph D
D.M. Templeton, Ph D, MD
P. Thorner, MD, Ph D
M.S. Tsao, MD
G.A. Wilson, MD
B. Yang, Ph D
H. Yeger, Ph D
L. Zhang, Ph D

### Associate Professors

I. Crandall, PhD
J.C.S. de Azavedo, Ph D
G. Denomme, Ph D
H.P. Elsholtz, Ph D
P. Hamel, Ph D
G. Hannigan, PhD
M. McGavin, Ph D
J.O. Minta, Ph D
J. Mogridge, Ph D
M. Ohh, Ph D
S. Richardson, MD
M. Rozakis, Ph D
B. Strauss, MD, Ph D
R. Vieth, Ph D
M. Zielenska, Ph D

### Assistant Professors

I. Aubert, Ph D
S. Girardin, Ph D
D. Hwang, Ph D, MD
C. McKerlie, DVM, DV Sc
R. Tellier, Ph D

The Department of Laboratory Medicine and Pathobiology provides a bridge between the basic sciences and medicine. Investigating the molecular mechanisms of disease is an important priority of the department. Faculty are concerned with the biochemical changes that may be associated with cell and tissue injury and with the etiology, pathogenesis and behaviour of disease. Research is carried out in such areas as cardiovascular disease, immunopathobiology, neuropathology, endocrinology and metabolism, neoplasia, bone and connective tissue disease, clinical and molecular epidemiology, antiobiotic resistance, and molecular pathogenesis of infectious disease.

The Pathobiology Specialist program gives students a broad understanding of contemporary medical research and basic scientific insights that have revolutionized our understanding of disease in recent years. Aspects of biochemistry, chemistry, cellular and molecular biology, and genetics are brought to bear upon human pathology. Graduates from the program will frequently pursue graduate studies in medical research and eventual research careers in academic, industrial, pharmaceutical, or governmental laboratories. A knowledge of cellular and molecular mechanisms of disease processes is also useful in a wide variety of multidisciplinary careers in government, regulatory agencies, law, and environment.

Undergraduate Office - General inquiries: Kitty Lo Medical Sciences Building, Rm. 6209, Tel. 416-946-7459, e-mail kitty.lo@utoronto.ca

Undergraduate Secretary: Prof. D.M. Templeton, e-mail doug.templeton@utoronto.ca

Web site:
*www.lmp.facmed.utoronto.ca*

**Course Coordinators:**
LMP300Y1: Dr. D.M. Templeton (416-978-3972)
LMP301H1: Dr.L. Fu (416-480-4299)
Dr. P. Yip (416-340-4800)
LMP363H1: Dr. D.S.R. Sarma (416-978-5010)

LMP365H1: Dr. M. Ohh (416- 946-7922)
LMP402H1: Dr. M. McGavin (416-480-5831)
LMP403H1: Dr.L Zhang (416-340-4915)/
Dr. P. Shek (416-635-2127)
LMP404H1: TBA
LMP405Y1: Dr. H. Yeger (416-813-5958)
LMP406H1: Dr. M. Bendeck (416-864-5652)
LMP410H1: Dr. J. McLaurin (416-978-1035)
LMP412H1: Dr. M.G. Johnston (416-480-5706)
LMP436H1: Dr. S. Girardin (416-978-7507)

## Pathobiology Programs

### Pathobiology (Science program)

Enrolment in this program is limited and selection is based on performance in First Year required courses. Students enrol at the end of their first year of studies. Apply via the Arts & Science web site from early April to mid-May. At later times, contact the undergraduate secretary.

**Specialist program:**
(13.5 full courses or their equivalent, including at least two 400-series courses)

First Year:
BIO 150Y1; CHM (138H1, 139H1)/151Y1; MAT 135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1)
Second Year:
BCH 210H1; BIO 250Y1, 260H1/HMB265H1; CHM 220H1, 247H1/249H1; PSL 302Y1
Third Year:
BCH 370H1; IMM 334Y1/MGY (377H1, 378H1); BIO 349H1/ BCH 311H1; LMP 300Y1, 365H1
Fourth Year:
At least 4 of LMP 402H1,403H1, 404H1, 405Y1, 406H1, 410H1, 412H1, 436H1

## Laboratory Medicine and Pathobiology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all LMP courses are classified as SCIENCE courses (see page 26).

**LMP299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**LMP300Y1 Introduction to Pathobiology [52L, 6P]**
Concepts in pathogenesis; cell injury and death; tissue structure, wound healing; repair and fibrosis. Molecular basis of major organ system pathology. The laboratory examines gross anatomical specimens and introduces histopathology. Enrolment is limited to students specializing in pathobiology who have completed the first and second year requirements of the program.
Exclusion: LMP301H1

**LMP301H1 Introduction to the Biochemistry of Human Disease [26L]**
Introduces concepts and mechanisms of disease processes as they arise from disturbances of normal biochemical and physiological functions. The rational use of the clinical biochemistry laboratory in the diagnosis and management of disease is explained. Not intended for students in the Pathobiology Specialist program.
Exclusion: LMP300Y1
Prerequisite: BCH210H1/242Y1
Co-requisite: PSL302Y1/JBO302Y1

**LMP363H1 Principles of Pathobiology [26L]**
Pathological changes brought on by foreign compounds; applications of pathology to the detection of toxic carcinogenic actions.
Prerequisite: BIO250Y1, CHM247H1

**LMP365H1 Neoplasia [20L, 6P]**
A general introduction to the cellular and molecular aspects of cancer and its etiology. The laboratory component presents the range of benign and malignant tumor types at the gross and histological levels. Pathophysiology of cancer, invasion and metastases, role of the immune system.
Co-requisite: LMP300Y1 or permission of department

**LMP402H1 Inflammation and Infection [26L]**
Cellular and molecular components of the inflammatory response. Activation of the inflammatory response by viral and microbial pathogens. Tissue pathology resulting from the inflammatory response. Evolution of pathogens to avoid and exploit the response.
Prerequisite: IMM334Y1/335Y1/MGY(377H1, 378H1)

**LMP403H1 Immunopathology [26L]**
The immune system in disease. Responses of the immune system to host invasion, injurious stimuli, and transplantation. Immunopathology of organ-specific diseases including pancreas, gut, liver, heart, kidney, and blood. Intended for students specializing in pathobiology or related programs.
Prerequisite: IMM334Y1/335Y1

**LMP404H1 Bone and Skeletal Disorders [26L]**
Molecular and cellular architecture of connective tissue in health and in diseases, such as osteoporosis and arthritis. Cellular and endocrine signals necessary for formation and maintenance of the skeleton. Biomechanics and tissue engineering of bone and cartilage. Selected other connective tissue diseases, their genetic variability, and up-to-date treatment strategies.

**LMP405Y1 Project in Laboratory Medicine and Pathobiology [156P]**
A self-contained research project to be completed under the supervision of a faculty member. The main areas of research are as listed in the description of the Department (above). The student will normally have completed three full years of study, and is expected to devote at least one full day per week to the project. Admission is by arrangement with the Department and with a particular supervisor. A list of potential supervisors is available from the Departmental Office and on our web site.
Prerequisite: BCH210H1/242Y1, LMP300Y1/363H1/365H1 and permission of department

**LMP406H1 Pathobiology of the Cardiovascular System [26L]**
Pathobiology of the heart, blood vessels, and lymphatic system. Congenital diseases of the heart, ischemic injury, stroke. Treatments of vascular disease and cardiovascular biomaterials. Major focus on atherosclerosis and hypertension. The emphasis is on the underlying cell biology of these processes.
Prerequisite: PSL302Y1

**LMP410H1 Pathobiology of Neurodegenerative Disease [26L]**

Molecular basis of neurodegenerative diseases of the central and peripheral nervous systems. Relevant neuroanatomy and molecular biology of the CNS. Current research topics in neurodegenerative diseases.
Prerequisite: BIO250Y1/PSL302Y1

**LMP412H1 Pathobiology of the Lymphatic System [26L]**

The lymphatic circulation plays an important role in the maintenance of tissue fluid balance, cancer metastases, and delivery of antigens to lymph nodes where immune responses are generated. This course examines the role of lymphatic vessel in disease and potential new molecular therapies to treat lymphatic pathology.
Prerequisite: PSL302Y1

**LMP436H1 Microbial Pathogenesis [39L]**

Molecular mechanism involved in pathogenesis of infectious disease. Topics include recurrent themes in the establishment of infectious disease, such as adherence and spread of pathogenic bacteria as well as evasion of host defences. Emphasis is placed on genetic characterization and expression of virulence determinants and on interactions between bacterial pathogens and their hosts.
Prerequisite: BCH210H1/242Y1, IMM334Y1/MGY377H1

# Life Sciences: Molecular Genetics and Microbiology

## Collaborative Program of the Faculty of Arts & Science and the Faculty of Medicine

## Faculty

### Professor and Chair of the Department of Molecular Genetics

H. D. Lipshitz, Ph D

### Professors

B. J. Andrews, Ph D
I. Andrulis, Ph D
B.J. Blencowe, Ph D
C. Boone, Ph D
G. L. Boulianne, Ph D
R.A. Collins, Ph D
A. Edwards, Ph D
L. D. Frappier, Ph D
B. E. Funnell, Ph D
J.F. Greenblatt, Ph D
C.C. Hui, Ph D
T. Hughes, Ph D
C.J. Ingles, Ph D
H. M. Krause, Ph D
A. Nagy, Ph D
P.N. Ray, Ph D
J. M. Rommens, Ph D
J.M. Segall, Ph D
F. Sicheri, Ph D
J. Wrana, Ph D

### Associate Professors

A. Bochkarev, Ph D
A.L. Bognar, Ph D
M. Brown, M Sc, Ph D
J. Brumell, Ph D
A.W. Cochrane, Ph D
S. P. Cordes, Ph D
A. R. Davidson, Ph D
D. Durocher, Ph D
S. Egan, Ph D
J. Ellis, Ph D
A. Emili, Ph D
S. D. Gray-Owen, Ph D
C.E. Pearson, Ph D
J. Liu, Ph D
P. J. Roy, Ph D
S. Joshi-Sukhwal, D Sc, Ph D
A. M. Spence, Ph D
A. Wilde, Ph D

### Assistant Professors

J. Brill, Ph D
L. Cowen, Ph D
B. D. Lavoie, Ph D
M. Meneghini, Ph D
W.W. Navarre, Ph D
I. Scott, Ph D
C.S. Tailor, Ph D

Molecular biology has revolutionized the fields of genetics and microbiology. The Department of Molecular Genetics offers a combined Specialist program in Molecular Genetics and Microbiology, which emphasizes the molecular aspects of both disciplines. Genetics, the science of heredity, and microbiology, the study of microorganisms (microbes), have long served as meeting grounds for a variety of biological disciplines. Developments in genetics and microbiology have contributed greatly to our basic understanding of the fundamental processes of life as well as to the treatment of genetic and infectious diseases.

Of particular significance in molecular genetics has been the development of techniques that permit the isolation, through cloning, of the genes responsible for specific traits, and the detailed analysis of their regulation, interactions, and products. Molecular techniques have increased our ability to diagnose and understand viral and bacterial disease, and the complex microbe/host interactions that are involved. The impact of these and other technological advances extend to such diverse fields as plant and animal developmental biology, virology, immunology, cancer biology, and biotechnology. Studies at a molecular level are essential to understanding the consequences to life when fundamental processes are altered by mutation, by infection, or by the environment.

The Molecular Genetics and Microbiology program is a research-intensive program and is designed to provide a strong background in science that is applicable to a variety of careers. Career opportunities for graduates include employment in research institutes, universities and other educational institutions, and industry. The program provides an excellent preparation for post-graduate research and professional programs.

The Molecular Genetics and Microbiology program consists of two streams, called Genetics and Microbiology. Students enter the program at the start of their second year, and choose a stream by the start of the third year. Each stream provides focused training, but there is considerable overlap between the programs, reflective of both the cross-disciplinary requirements of these two rapidly evolving disciplines and the impact of each on areas spanning modern biomedical science.

Undergraduate Coordinator: Dr. B. Funnell, Medical Sciences Building (416-978-1665; email: mgy.info@utoronto.ca)

Undergraduate Office/General Inquiries: Medical Sciences Building Rm 4396 (416-978-8359; email: undergrad.medgen@utoronto.ca)

More information is available on our website: http://www.utoronto.ca/medicalgenetics/

## Molecular Genetics and Microbiology Program

### Molecular Genetics and Microbiology (Science program)

Enrolment in this program is limited and selection is based on performance in First year required courses. Apply at the end of the First year via the Faculty's Subject POSt web site. At later times, contact the Undergraduate Coordinator.

**Specialist program:**
(14 full courses or their equivalent)

First Year:
BIO150Y1; (CHM138H1, CHM139H1)/CHM151Y1; MAT135Y1/MAT137Y1; PHY110Y1/PHY138Y1/PHY140Y1/(PHY131H, PHY132H)/(PHY151H, PHY152H)
Second Year:
BCH242Y1; (BIO240H1, BIO241H1)/BIO250Y1, BIO260H1; CHM220H1, CHM247H1
Third Year:
Genetics Stream:
1. BCH340H1, BCH371H1; MGY311Y1, MGY312H1
2. At least 0.5 full-course equivalents must be taken from BCH335H1, CHM347H1, MGY377H1, MGY378H1

Microbiology Stream
1. IMM335Y1; MGY311Y1, MGY376H1, MGY377H1, MGY378H1

Fourth Year:
Genetics Stream:
1. MGY420H1, MGY432H1

plus 2.5 credits from Genetics Lists 1 and 2, distributed as follows:
2. At least 1.5 full-course equivalents must be taken from list 1:
   CSB460H1, MGY425H1, MGY428H1, MGY451H1, MGY452H1, MGY470H1
3. Up to 1.0 full-course equivalent may be taken from list 2: BCH422H1, 440H1, 441H1; CSB328H1, 461H1, 472H1; MGY434H1, 440H1, 445H1, 480Y1

Microbiology Stream:
1. MGY432H1 plus 2.5 credits from Microbiology Lists 1 and 2, distributed as follows:
2. At least 1.5 full-course equivalents must be taken from list 1:
   LMP436H1; MGY420H1, 428H1, 434H1, 440H1, 445H1; MIJ485H1
3. Up to 1.0 full-course equivalent may be taken from list 2: BCH304H1, BCH335H1, BCH340H1, BCH422H1, BCH426H1, BCH441H1, BCH445H1; CSB357H1, 452H1, 460H1, 457H1; IMM430H1; JBI428H1; LMP403H1; MGY425H1, MGY451H1, MGY452H1, MGY470H1, MGY480Y1

## Molecular Genetics and Microbiology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all MGY courses are classified as SCIENCE courses (see page 26).

**MGY299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**MGY311Y1 Molecular Biology [78L]**
DNA replication, DNA repair and mutation, recombination, transcription, RNA modification and processing, the genetic code and tRNA, translation, regulation of gene expression, development and differentiation, molecular evolution.
Exclusion: BCH311H1, CSB349H1, JBC372H5(UTM), MGB311Y1, PSL350H1
Prerequisite: BIO250Y1, BCH242Y1

**MGY312H1 Principles of Genetic Analysis [78P]**
Laboratory experiments in genetics of selected organisms. Topics studied include Mendelian genetics, linkage and recombination, complementation, analysis of chromosome rearrangements, mutant selection and analysis in plants and bacteria, and genetic crosses with plants, bacteria and bacteriophages.
Exclusion: MGB312H1
Prerequisite: BIO250Y1, BIO260H1
Co-requisite: MGY311Y1

**MGY376H1 Microbiology Laboratory [78P]**
Fundamental laboratory techniques in bacteriology and virology. Valuable not only for students specializing in Microbiology but also for those in related disciplines which make use of bacteria and viruses as research tools. Open to students in related programs.
Exclusion: MBY376H1
Prerequisite: BIO250Y1, BIO 260H1/HMB 265H1
Co-requisite: MGY377H1, MGY378H1

**MGY377H1 Microbiology I: Bacteria [39L]**
Detailed study of bacteria in terms of structure, classification and replication. Basis for advanced study in various aspects of bacteriology including bacterial physiology, bacterial genetics, molecular pathogenesis of disease and environmental studies.
Exclusion: BIO370Y5 (UTM), MBY375Y1, MBY377H1
Prerequisite: BCH210H1/BCH242Y1; BIO250Y1

**MGY378H1 Microbiology II: Viruses [39L]**
Detailed study of viruses in terms of structure, classification, replication and interaction with the host. Basis for advanced study in virology. Requires some familiarity with immunology. A concurrent course in immunology (IMM 334Y1/335Y1) is recommended.
Exclusion: BIO351Y1, CSB351Y1, MBY375Y1, MBY378H1
Prerequisite: BCH210H1/BCH242Y1; BIO250Y1; BIO 260H1/HMB 265H1
Co-requisite: CSB349H1/MGY311Y1
Recommended preparation: MGY377H1

**MGY420H1 Regulation of Gene Expression [26L]**
This course describes regulatory mechanisms controlling gene expression in prokaryotes and eukaryotes. The lectures are designed to promote discussion of various experimental approaches. Topics include: assembly of a transcription complex; initiation of transcription; role of sigma factors and transcription factors; role of regulators of transcription; regulation of SV40 transcription; lambda antitermination; antitermination in HIV-1.
Exclusion: BIO477H5 (UTM), MGB420H1
Prerequisite: BCH242Y1, BCH340H1, MGY311Y1

**MGY425H1 Signal Transduction and Cell Cycle Regulation [26L]**
This course presents and integrates molecular aspects of signal transduction and cell cycle regulation in eukaryotic cells from yeast to humans. Emphasis is on recent advances in growth factor receptor signalling, modular protein domains, and the recurrent role of protein phosphorylation and protein-protein interactions in cell regulation.
Exclusion: MGB425H1
Prerequisite: BCH242Y1, MGY311Y1

**MGY428H1 Functional Genomics [26L]**
A broad ranging course that covers many aspects of genomics, which is the discipline of defining and attributing function to all of the heritable material of an organism on a genome-wide scale, as applied to microbes, invertebrates and vertebrates. The primary and review literature will be the basis of all lectures.
Exclusion: MBY428H1
Prerequisites: BCH210H1/BCH242Y1; BIO260H1/HMB265H1; MGY311Y1/CSB349H1/BCH311H1

**MGY432H1 Laboratory in Molecular Genetics and Microbiology [78P]**
Laboratory experiments demonstrating basic and advanced molecular biological methods applied to molecular genetics and microbiology.
Exclusion: CSB330H1, MGB430H1, MBY450H1
Prerequisite: MGY312H1/MGY376H1

**MGY434H1 Bacterial Signalling and Physiological Regulation [39L]**
How bacteria sense their environment and signal to regulatory systems when to adapt to environmental stimuli. Topics discussed include the bacterial cell cycle, carbon/energy metabolism, catabolite repression, bacterial development, sporulation, stress responses, regulatory two-component systems and quorum sensing.
Exclusion: MBY434H1
Prerequisite: BCH210H1/BCH242Y1, MGY377H1, BCH311H1/ CSB349H1/ MGY311Y1

**MGY440H1 Molecular Virology [39L]**
Analysis of virus/host interactions at the molecular level with a view to understanding how viruses cause disease. Course material is based on recent research publications. Topics may include: virus entry and intracellular trafficking, activation of host cell signalling pathways, viral and host determinants of tissue tropism within the host and transmission between hosts.
Exclusion: MBY440H1
Prerequisite: BCH210H1/BCH242Y1; BCH311H1/CSB349H1/ MGY311Y1; MGY378H1. (Note: BIO351Y1/CSB351Y is not an acceptable equivalent to MGY378H1)
Recommended preparation: IMM334Y1/IMM335Y1

**MGY445H1 Genetic Engineering for Prevention and Treatment of Disease [39L]**
Current approaches to gene therapy including design of virus-based vectors for delivery and expression of effector genes. Emphasis on the use of retrovirus-based strategies for prevention and treatment of HIV infection.
Exclusion: MBY445H1
Prerequisite: MGY378H1/ MGY311Y1

**MGY451H1 Genetic Analysis of Development I [26L]**
Basic and advanced principles of genetic analysis applied to the study of three of the best-understood eukaryotic model organisms: the yeast Saccharomyces cerevisiae, the nematode worm Caenorhabditis elegans, and the vinegar ("fruit") fly Drosophila melanogaster . We emphasize the use of genetic approaches to address problems in cell biology and development, such as the regulation of cell fate. Much of the knowledge gained from these simple organisms has proven broadly applicable, and the same principles of developmental genetic analysis underlie efforts to understand the development of more complex organisms.
Exclusion: MGB451H1
Prerequisite: BIO260H1, MGY311Y1/CSB349H1/BCH311H1

**MGY452H1 Genetic Analysis of Development II [26L]**
This is a companion course to MGY451H1. Advanced genetic principles and approaches used in the study of animal development are introduced. We begin with detailed analysis of fruit fly development and continue by extending these studies and principles to vertebrate and mammalian models, notably zebrafish and mouse. Emphasis is placed on developmental processes that are conserved among these major model organisms.
Exclusion: MGB452H1
Prerequisite: BIO260H1, MGY311Y1/CSB349H1/BCH311H1

**MGY470H1 Human and Molecular Genetics [26L]**
Current aspects of human and molecular genetics including: chromosome structure and function, inheritance of mutations and disease, the human genome and disease gene mapping, cancer genetics, mouse disease models and gene based diagnostics and therapies.
Exclusion: MGB470H1
Prerequisite: MGY311Y1

**MGY480Y1 Special Research Project [TBA]**
An opportunity for specialized individual research in molecular genetics and microbiology by arrangement with the course coordinator.
Prerequisite : BCH371H1/MGY312H1/MGY376H1, MGY311Y1

**MIJ485H1 Vaccines and Immunity (formerly MGY485H1) [39L]**
Analysis of infectious disease vaccines, and pathogens' strategies to evade specific immune response, with an emphasis on molecular and immunological aspects. Special topics include: molecular basis of pathogenicity and immune-evasion strategies; vaccination strategies; adverse effects of vaccines (given jointly by the Departments of Molecular Genetics and Immunology).
Exclusion: MBY480H1, MGY485H1
Prerequisite: IMM334Y1/IMM335Y1, MGY377H1, MGY378H1

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Note: MGY460H1 (Plant Molecular Genetics) is now given as CSB460H1. Consult the Department of Cell and Systems Biology listing starting on page 259.

## Collaborative Program of the Faculty of Arts & Science and the Faculty of Medicine

## Faculty

### Professors Emeriti

G.H. Beaton, Ph D
W.R. Bruce, MD, Ph D
M. Krondl, Ph D
A.V. Rao, M Sc, Ph D
L.U. Thompson, M Sc, Ph D

### E.W. McHenry Professor and Chair

M.C. Archer, MA, Ph D, D Sc

### Professors

G.H. Anderson, M Sc, Ph D
C.E. Greenwood, M Sc, Ph D
D.J.A. Jenkins, MA, DM, D Phil, D Sc
V. Tarasuk, Ph D
V. Vuksan, M Sc, D Sc
T.M. S. Wolever, MA, BM, BCh, M Sc, Ph D

### Associate Professors

A. El-Sohemy, Ph D
W. Ward, M Sc, Ph D

### Assistant Professors

R.P. Bazinet, Ph D
E.M. Comelli, Ph D
A.J. Hanley, Ph D

### Senior Lecturer

A.L, Fox, MHSc, Ph D, RD

### Lecturer

D. Gurfinkel, Ph D
S. Parker, Ph D
K.R. Slater, MHSc

Nutritional Sciences represents an exciting and challenging area of study of a truly interdisciplinary nature. Understanding of the impact of nutrition on health and its role in disease is based upon a knowledge of the metabolic processes involved (nutrient requirements and utilization, food additive metabolism and safety), of the chemistry of foods (food preservation, food production) and of social and behavioural factors integrated in consideration of the national and international goals of achieving optimal health through proper nutrition.

Most career opportunities in Nutritional Sciences require training beyond the undergraduate level. The Major and Specialist Programs provide excellent preparation for entry into postgraduate studies in nutrition research or for a professional faculty such as Medicine and Dentistry.

Please note that this Department does not offer an undergraduate dietetics program. Students interested in this qualification should contact Dietitians of Canada for information (www.dietitians.ca).

Students interested in applying to the M.H.Sc. Comm. Nutr. Program, through the Graduate Department of Community Health, are advised to contact the program director during their second year of undergraduate studies.

Undergraduate Coordinator:
Professor A. El-Sohemy, FitzGerald Building

Enquiries:
FitzGerald Building, 150 College Street, Room 316 (416-978-2747)

## Nutritional Sciences Program

### Nutritional Sciences (Science program)

**Major program:**
Enrolment in the Major Program can begin at the end of first year, and admission is based on maintaining an overall GPA of at least 2.7.

First Year:
BIO 150Y1; CHM (138H1, 139H1)/151Y1
Second Year:
NFS 284H1; BCH210H1; STA (220H1, 221H1/JBS 229H1)
Third Year:
NFS 382H1; NFS 386H1; PSL 302Y1; CSB 349H1/PSL350H1/ BCH311H1
Fourth Year:
Any three of: NFS 484H1, NFS 486H1, NFS 487H1, NFS 488H1, NFS489H1, NFS 490H1, NFS 494Y1

## Nutritional Sciences Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all NFS courses are classified as SCIENCE courses (see page 26).

**NFS284H1 Basic Human Nutrition [39L, 13T]**
An introductory course to provide the fundamentals of human nutrition to enable students to understand and think critically about the complex interrelationships between food, nutrition, health and the environment.
Recommended preparation: BIO150Y1; CHM (138H1,139H1)/ 151Y1; MAT135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1)

**NFS299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**NFS382H1 Vitamin and Mineral Metabolism Throughout the Life Cycle [39L, 13T]**
Micronutrients are essential for health throughout the life cycle. This course examines the role of micronutrients during development and ageing with some emphasis on disease prevention and pathogenesis. Students develop critical appraisal skills, an understanding of the principles of study design and learn to write in a scientific style.
Prerequisite: BIO150Y1; CHM (138H1, 139H1)/151Y1; NFS284H1

**NFS386H1 Food Chemistry [39L]**
Structure, composition and chemical and biochemical reactions in foods during postharvest/postmortem, processing, storage and utilisation. Implications for organoleptic properties, nutritional value, toxicity and human health.
Prerequisite: CHM 138H1
Recommended preparation: NFS284H1

**NFS484H1 Advanced Nutrition [26L, 14T ]**
Physiological and biochemical features of nutrient needs. The roles of nutrients in the development and adaptability of the whole body, organs and cells. Interpretation of current research data.
Prerequisite: BCH210H1, CSB349H1/PSL350H1/BCH311H1, NFS284H1, PSL302Y1, STA(220H1, 221H1/JBS229H1)

**NFS486H1 Nutrition and Human Disease [26L, 13T]**
Role of dietary fat in normal development and in human diseases including cancer, diabetes and cardiovascular disease. Current issues relating to their prevention or treatment with diet will be discussed, illustrated with reference to general pathophysiological and biochemical principles and current literature.
Prerequisite: BCH210H1, CSB349H1/PSL350H1/BCH311H1, NFS284H1, PSL302Y1, STA(220H1, 221H1/JBS229H1)

**NFS487H1 Functional Foods and Nutrigenomics [26L, 14T]**
Scientific principles and experimental approaches in the development and regulation of functional foods and nutraceuticals. The impact of the human genome on nutrition research. Experimental approaches to investigating gene-diet interactions. Understanding how genetic variability affects nutrient response, and how dietary factors regulate gene expression.
Prerequisites: NFS 284H1, CSB349H1/PSL350H1/BCH311H1

**NFS488H1 Nutritional Toxicology [26L, 13T]**
Occurrence, mechanism of action, safety and health implications of chemicals naturally present in or added to foods. Interactions of nutrients and toxicants and the effects on their metabolism and utilization. Food safety evaluation and regulatory control.
Prerequisite: BCH210H1, NFS284H1

**NFS489H1 Nutritional Neurosciences [26L, 14T]**
This course provides an integrated approach to how brain function regulates and in turn is regulated by nutrition from a biochemical perspective.
Prerequisite: BCH210H1, BCH311H1/CSB349H1/PSL350H1, NFS284H1, PSL302Y1

**NFS490H1 International and Community Nutrition [26L, 13T]**
This course focuses on current issues in international and community nutrition including global and domestic food security, micronutrient deficiencies and other forms of undernutrition, maternal and infant/child nutrition, dietary guidance, and food and nutrition policy. The course will consider the environmental, sociopolitical, cultural and biosocial contexts of nutrition.
Prerequisite: NFS284H1
Recommended preparation: GGR107Y1/POL103Y1/SOC101Y1

**NFS494Y1 Research Projects in Nutritional Sciences [156P]**
Research experience under the supervision of a Departmental staff member. The course entails designing and carrying out a small research project and the preparation and presentation of both a research proposal and a final report. Note that the research project NFS 494Y1 requires the prior consent of a staff member who will supervise the project and departmental approval before enrolment. The student is responsible for locating a supervisor and must consult with the course instructor before the beginning of the term.
Prerequisite: Permission of Department and Project Supervisor

## Collaborative Program of the Faculty of Arts & Science and the Leslie Dan Faculty of Pharmacy

Pharmaceutical Chemistry combines knowledge of the biological, medical, and physical sciences in the study of drug therapy. The emphasis is on the chemical nature of the reactions and interactions involved in drug therapy. The students will receive a solid background in the facets of chemistry the most relevant to drugs: physical, organic, and analytical chemistry. They will also learn the fundamental aspects of the synthesis, manufacture, use, and mode of action of drugs.

Undergraduate Office – General Enquiries:
L. Chung, (416-978-2162), l.chung@utoronto.ca

Program Director:
Dr. R. Macgregor, (416-978-7332) rob.macgregor@utoronto.ca

## Pharmaceutical Chemistry Program

### Pharmaceutical Chemistry (Science program)

Enrolment in this program is limited to students with a 2.7 CGPA in the required courses described below. Visit the Pharmaceutical Chemistry Program web site for updated information about requirements, course offerings, and events: http://www.pharmacy.utoronto.ca/pharmchem/.

**Specialist program:**
(15.5 courses or their equivalent, including at least one 400-series course)

NOTE: Some of the courses listed below may have prerequisites.

First Year:
BIO 150Y1; CHM (138H1,139H1)/151Y1; MAT 135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1)
Second Year:
BCH 210H1; BIO 250Y1; (CHM 220H1,221H1)/225Y1; CHM 247H1/249H1
Third Year:
CHM 217H1; PCL 201H1; PHC 300Y1; PHC 320H1; PHC 330Y1; PHC 340Y1
Fourth Year:
1. CHM 317H1; PHC 489Y1
2. Two full course equivalents from:
   CHM 347H1; CHM 379H1; CHM 410H1;CHM 414H1; CHM 417H1; CHM 427H1; CHM 440H1; PCL362H1; PHC401H1; PHC 331H1; PHC 430H1; PHC 431H1; PHC 451H1; PHC452H1; PHC 460H1; PSL 302Y1

Note that not all of the 400-series PHC courses are offered every academic year.

## Pharmaceutical Chemistry Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all PHC courses are classified as SCIENCE courses.

**PHC300Y1 Molecular Pharmacology [78L, 26T]**
The molecular basis for the action of drugs is presented based upon the physicochemical nature of the drug and its target.
Prerequisite: CHM 247H1/249H1; (CHM 220H1,221H1)/225Y1; BCH 210H1

**PHC320H1 Medicinal Chemistry [39L]**
Modern discovery and synthesis of antibiotics, antineoplastics, antiviral and other therapeutic agents.
Prerequisite: CHM 247H1/249H1; BCH 210H1

**PHC330Y1 Pharmaceutics [78L, 24T]**
The study of the science and technology underlying drug delivery are covered. The properties of different dosage forms and delivery routes are studied with an emphasis on oral and parenteral routes.
Prerequisite: CHM 247H/249H; CHM (220H1,221H1)/225Y1; BCH 210H1

**PHC331H1 Establishing the Bioequivalence of Pharmaceutical Products [32L]**
Introduction to human clinical trial design for the demonstration of pharmaceutical bioequivalence of drug products. Students will learn the principles underlying the regulations and methods employed in bioequivalence studies.
Prerequisites: MAT135Y1, BCH210H1, CHM 247H1/249H1,
Pre- or co-requisite : PHC330Y1/PHM224Y

**PHC340Y1 Pharmaceutical Chemistry Laboratory [26L, 78P]**
The scientific basis and practical techniques relevant to modern pharmaceutical development.
Prerequisite: CHM 247H1/249H1; (CHM 220H1,221H1)/225Y1; BCH 210H1

**PHC401H1 Drug Transport across Biological Membranes [26L]**
The goal of this course is to provide students with knowledge of the molecular processes involved in drug transport across biological cell membranes with emphasis on their physiological and clinical significance.
Prerequisite: PHC300Y1, Permission of the Program

**PHC430H1 Recent Developments in Dosage Form Design [26L]**
Introduction to controlled drug delivery: Mechanisms and kinetics of controlled drug release. Fundamental theories and mathematical tools for the design of modern dosage forms. Development and applications of controlled drug delivery dosage forms.
Recommended: (PHC330Y1,PHC340Y1)/PHM224Y1, Permission of the Program

**PHC431H1 Selected Topics in Drug Development [26L]**
In-depth discussion of implementation of pharmaceutical sciences in drug development strategies. Students will apply fundamental principles of pharmaceutics and drug delivery to current problems in the pharmaceutical industry.
Recommended: (PHC330Y1,PHC340Y1)/PHM224Y1, Permission of the Program

**PHC451H1 Radiopharmaceuticals in Diagnosis and Therapy [14L, 14P]**
Presents use of radiopharmaceuticals in diagnosis and therapy, emphasizing those used in nuclear medicine procedures studying neurological, cardiovascular, pulmonary, gastrointestinal, haematologic, endocrine and bone pathology.
Prerequisite: (PHC330Y1,PHC340Y)/PHM 224Y1, Permission of the Department

**PHC452H1 Selected Topics in Radiopharmaceuticals [14L, 12P]**
Introduces nuclear pharmacy through the discussion of problems that explain the design, production, analysis, and the clinical use of radiopharmaceuticals. Topics introduced using group discussions and laboratory exercises.
Prerequisites: (PHC330Y,PHC340Y)/PHM224Y, Permission of the Department

**PHC460H1 Fundamentals of Drug Discovery [26L]**
Lectures by scientists from academia and industry, and student seminars based on journal articles dealing with strategies for discovering new drugs for therapy and diagnosis.
Prerequisites: BIO250Y1, PHC300Y1/PHM222Y1, Permission of the Instructor

**PHC489Y1 Pharmaceutical Chemistry Research [156P]**
This course will provide research experience under the supervision of a Departmental staff member. The goal is to deepen the student's understanding of the scientific basis and practical techniques relevant to modern pharmaceutical development.
Prerequisite: Permission of the Department and the Project Supervisor

## Collaborative Program of the Faculty of Arts & Science and the Faculty of Medicine

## Faculty

### Professors Emeriti

W.M. Burnham, Ph D
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J.N. Heersche, Ph D
T. Inaba, Ph D
D. Kadar, Ph D
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P. Seeman, MD, Ph D
E.M. Sellers, MD, Ph D
F.A. Sunahara, Ph D

### Professor and Chair of the Department

D.M. Grant, Ph D

### Professors

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D. Haas, Ph D, DDS
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G. Koren, MD
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J. Semple, Ph D
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P.G. Wells, Pharm D

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M. Schapira, Ph D
A.H.C. Wong, MD, Ph D

### Assistant Professors

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J. Matthews, Ph D
J.M. Mayer, Ph D
J.P. McPherson, Ph D
N. Mittmann, Ph D
M.G. Neuman, Ph D
G. Rachamin, Ph D
C. Toal, Ph D
D. Tomkins, Ph D
S. Verma, MD, Ph D
M. Zack, Ph D
L. Zawertalio, Ph D

### Senior Lecturer

C. Woodland, Ph D

### Lecturer

M.I. Arnot, Ph D

Pharmacology and Toxicology are broadly based and integrative disciplines of biology dealing with the properties of chemical compounds and their interactions with living systems. They provide the scientific basis for the study of chemical actions in the health sciences, the use of drugs as therapeutic agents or as tools in scientific research, the development and control of pharmaceuticals, the investigation and control of pollutants and poisons in natural and social environments, etc. The Department of Pharmacology and Toxicology offers four specialist and two major undergraduate programs of study:

1. Specialist Program in Pharmacology. Pharmacology is the study of the interactions of chemical substances with living systems, with a view to understanding the properties of drugs and their actions from the molecular level to whole body systems. The objectives of this program are to provide a structured introduction to the scientific aspects of the discipline with exposure to some investigational and research problems in preparation for advanced graduate study and research in pharmacology. Students are provided with opportunities to

learn about pharmacology and related areas through lectures, tutorials, laboratories, and independent research projects. Pharmacology (and its application in clinical therapeutics) plays a prominent role in Medicine, Dentistry and Pharmacy. However, there is no equivalence between the professional Pharmacy degree offered in the Faculty of Pharmacy and this Arts & Science Specialist Program in Pharmacology.

2. Specialist Program in Toxicology. This specialist program deals with the study of the harmful effects of chemicals on the health and behaviour of individuals and society. This program focusses on the application of toxicological knowledge and data and not only serves as preparation for advanced graduate study and research in toxicology, but also for toxicological work in forensic science, nutrition and food science, governmental agencies, consulting agencies, industrial settings, etc. Students are exposed to modern experimental techniques utilized in toxicology and have opportunities for independent research under the supervision of a faculty member. Students interested in environmental toxicology should consider enrolling in the Specialist Program in Environment and Toxicology, jointly sponsored by the Department of Pharmacology and Toxicology and the Centre for Environment.

3. Double Specialist in Pharmacology and Toxicology. This program combines the requirements of the two previous specialist programs. Many students choose to take an extra year to complete this program.

4. Specialist Program in Environment and Toxicology.
This program is jointly sponsored by the Department of Pharmacology and Toxicology and the Centre for Environment. For additional information see "Centre for Environment" or consult the website, www.environment.utoronto.ca.

5. Major Programs in Pharmacology and in Toxicology. These programs are intended for undergraduate students who want to have a solid knowledge in these disciplines, allowing students to combine different and complementary areas of expertise in Life Sciences. This approach contributes to a broader and multidisciplinary undergraduate training that is particularly relevant for students interested in pursuing further studies in professional health science programs.

Enrollment in all programs is limited. Minimum CGPAs are required for application to these programs (see below). For further information consult the A&S Registration Handbook and Timetable and our website: http://www.library.utoronto.ca/pharm_tox/index.htm

Undergraduate Office - General Inquiries:
Medical Sciences Building, Room 4207 (416-978-2728)

Undergraduate Coordinator:
Dr. C. Woodland, Medical Sciences Building, Room 4245 (416-978-3102)

## Pharmacology and Toxicology Programs

Enrollment in these Programs is limited. To apply to these programs, you must have a minimum CGPA of 3.0 for the specialist and major programs in Pharmacology and in Toxicology. A minimum CGPA of 3.5 is required for application to the Double Specialist program. Applicants will only be considered if they have completed all of the first year required courses (as shown below). Please note that having the minimum CGPA for application does not guarantee acceptance into the program.

### Pharmacology (Science program)

**Specialist program:**
(15 full courses or their equivalent, including at least three 400-series courses)

Enrollment in this program is limited. A minimum CGPA of 3.0 is required.

First Year:
BIO150Y1; CHM138H1, CHM139H1/151Y1; MAT135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1) (PHY 131H1, 132H1 recommended)
Second Year:
BCH210H1; BIO240H1; BIO241H1; BIO260H1/HMB265H1; CHM217H1/220H1, CHM247H1/249H1; PCL201H1
Third Year:
BCH370H1; BCH311H1/CSB349H1; PCL302H1, PCL376H1 (see NOTE 1); PSL302Y1*, PSL372H1 (*NOTE: PSL201Y1 is not acceptable)
Fourth Year:
PCL470Y1, PCL471Y1 (see NOTE 2), PCL472Y1 (see NOTE 3); and one full-credit equivalent from: ANA300Y1/ZOO263Y1/BCH304H1/BCH445H1/ANA301H1/ZOO325H1/ZOO328H1/PCL477H1

**NOTES**
1. PCL376H1 may be taken either as a pre-requisite or a co-requisite to the research project course, PCL472Y1.
2. Enrollment in the Pharmacology Laboratory course (PCL471Y1) is restricted to students enrolled in the Pharmacology or Double Specialist programs.
3. Enrollment in the research project course (PCL472Y1) is limited and requires permission from the Department of Pharmacology and Toxicology. Students must receive prior consent of an approved supervisor according to departmental guidelines before the Department of Pharmacology and Toxicology will register them in the course. It is the student's responsibility to initiate all necessary preparations before the session starts (see course description).

**Major program in Pharmacology:**
(8 full courses or their equivalent, including two 300-series courses and one 400-series course)

Enrollment in this program is limited. Students may apply after completing 4 courses including all the First Year requirements with a minimum CGPA of 3.0.

First Year:
BIO150Y1; CHM138H1, CHM139H1/151Y1
Second Year:
BCH210H1; BIO240H1; BIO241H1; PCL201H1; CHM217H1/220H1 (see NOTE 1); CHM247H1/249H1
Third Year:
PCL302H1; PSL302Y1; BCH311H1/370H1/CSB349H1 (see NOTE 2)
Fourth Year:
PCL470Y1

**NOTES**
1. CHM220H1 requires MAT135Y1/137Y1/151Y1 as a prerequisite.
2. CSB349H1 requires BIO260H1/HMB265H1 as a prerequisite.
3. Students are not allowed to enroll concurrently in the Major Program in Pharmacology and the Major Program in Toxicology.
4. Students are not allowed to enroll concurrently in the Major Program in Pharmacology and a Specialist Program in Toxicology.

### Toxicology (Science program)

**Specialist program:**
(15.5 full courses or their equivalent, including at least 2.5 400-series courses)

Enrollment in this program is limited. A minimum CGPA of 3.0 is required.

First Year:
BIO150Y1; CHM138H1, CHM139H1/151Y1; MAT135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1) (PHY131H1, 132H1 recommended)
Second Year:
BCH210H1; BIO240H1; BIO241H1; BIO260H1/HMB265H1; CHM217H1/220H1, CHM247H1/249H1; PCL201H1
Third Year:
BCH370H1; LMP363H1; PCL302H1, PCL362H1, PCL365Y1, PCL376H1 (see NOTE 1); PSL302Y1* (*NOTE: PSL201Y1 is not acceptable)
Fourth Year:
LMP301H1; PCL473Y1, PCL474Y1 (see NOTE 2), PCL481H1; and one half-credit equivalent from: ANA301H1/CHM310H1/GGR409H1/NFS488H1/PCL477H1

**NOTES**
1. PCL376H1 may be taken either as a pre-requisite or a co-requisite to the research project course, PCL474Y1.
2. Enrollment in the research project course (PCL474Y1) is limited and requires permission from the Department of Pharmacology. Students must receive prior consent of an approved supervisor according to departmental guidelines before the Department of Pharmacology and Toxicology will register them in the course. It is the student's responsibility to initiate all necessary preparations before the session starts (see course description).
3. Enrollment in the Toxicology Laboratory course (PCL365Y1) is restricted to students enrolled in the Toxicology Specialist or Double Specialist programs.

**Major program:**
(8 full courses or their equivalent, including two 300-series courses and one 400-series course).

Enrollment in this program is limited. Students may apply after completing 4 courses including all the First Year requirements with a minimum CGPA of 3.0.

First Year:
BIO150Y1; CHM138H1, CHM139H1/151Y1
Second Year:
BCH210H1; BIO240H1; BIO241H1; PCL201H1; CHM217H1/220H1 (see NOTE 1); CHM247H1/249H1
Third Year:
PCL302H1; PSL302Y1; PCL362H1 (see NOTE 2)
Fourth Year:
PCL473Y1

**NOTES**
1. CHM220H1 requires MAT135Y1/137Y1/151Y1 as a pre-requisite.
2. Although LMP301H1 (Introduction to the Biochemistry of Human Disease) and LMP363H1 (Principles of Pathobiology) are not pre-requisites to enroll in PCL473Y1, students are strongly recommended to enroll in at least one of these courses.
3. Students are not allowed to enroll concurrently in the Major Program in Toxicology and the Major Program in Pharmacology.
4. Students are not allowed to enroll concurrently in the Major Program in Toxicology and a Specialist Program in Pharmacology.

### Double Specialist in Pharmacology and Toxicology (Science program)

This program requires completion of both the Pharmacology and Toxicology Specialist courses and may require an extra year for completion. Enrollment in this program is limited and a minimum CGPA of 3.5 is required. Students are allowed to enroll in only one of the two project course (PCL472Y/PCL474Y) offered by the Department of Pharmacology and Toxicology.

### Specialist program in Environment and Toxicology (Science program)

This program is jointly sponsored by the Department of Pharmacology and Toxicology and the Centre for Environment. For additional information see "Centre for Environment" or consult the website, www.environment.utoronto.ca.

## Pharmacology and Toxicology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all PCL courses are classified as SCIENCE courses (see page 26).

**PCL299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**PCL201H1 Introduction to Pharmacology: Pharmacokinetic Principles [39L, 13T]**
A general introduction to pharmacology. Topics include absorption, distribution, biotransformation, elimination, calculation of dosages, variability in drug response, adverse drug reactions and special interest topics.
Recommended co-requisites: BIO240H1, BIO241H1, CHM217H1/220H1, CHM247H1/249H1

**PCL302H1 Introduction to Pharmacology: Pharmacodynamic Principles [39L, 13T]**
Topics include biological action of drugs on membranes, enzymes, receptors, neural and hormonal systems, transmission and modulation.
Prerequisites: BIO240H1, BIO241H1, CHM217H1/220H1, CHM247H1/249H1, PCL201H1

**PCL362H1 Introductory Toxicology [26L]**
Toxicological problems encountered in animals and humans; biochemical mechanisms and clinical factors of toxicological significance; models of drug-related diseases.
Prerequisites: BCH210H1, BIO240H1, BIO241H1, CHM217H1/220H1, CHM247H1/249H1, PCL201H1
Recommended Co-requisite: CSB349H1, PCL302H1

**PCL365Y1 Toxicology Laboratory [20L, 72P]**
A hands-on laboratory course exploring a wide variety of modern experimental techniques currently utilized in toxicology. This course will provide the experimental theory of how the techniques work and their advantages and disadvantages, while additionally allowing students to perform these techniques in the process of addressing toxicological problems. Enrollment in this course is restricted to students enrolled in the Toxicology Specialist and Double Specialist programs.
Prerequisites: PCL201H1
Co-requisites: PCL302H1, BCH370H1, PSL302Y1

**PCL376H1 Experimental Design and Data Analysis for Pharmacology and Toxicology [26L]**
A practically oriented course, focussed on experimental design and the analysis of pharmacological and toxicological data. Topics include: principles of experimental design, data analysis and statistical tests appropriate for each type, use of computing statistical packages, analysis of dose-response and time-response curves and analysis of receptor binding assays. PCL376H1 can be taken either as a prerequisite or a co-requisite to the research project course PCL472Y1/474Y1.
Prerequisite: PCL201H1
Co-requisite: PCL302H1
Exclusion: PCL476H1

**PCL470Y1 Systems Pharmacology [78L]**
Concepts of the properties of drugs and chemicals and their interaction with living systems and their constituent parts. Mechanism of action and pharmacological properties of drugs acting on the autonomic and central nervous systems, cardiovascular, renal, respiratory, gastrointestinal, immunological and endocrine systems; endogenous compounds; antimicrobial and anti-inflammatory drugs, chemotherapy and special topics in pharmacology.
Prerequisites: BCH210H1, PCL201H1, PCL302H1, PSL302Y1

**PCL471Y1 Pharmacology Laboratory [104P]**
Demonstrations, seminars, and laboratory exercises in selected areas of Pharmacology. Enrollment in this course is restricted to students enrolled in the Pharmacology Specialist and Double Specialist programs.
Prerequisites: BCH370H1, PSL372H1, PCL201H1, PCL302H1 and permission of Department
Co-requisite: PCL470Y1

**PCL472Y1 Project in Pharmacology**
This course affords students an opportunity for hands-on research experience in a laboratory or applied pharmacology setting. Students will work under the supervision of a staff member and will submit a final written report. Enrollment is limited and requires permission from the Department of Pharmacology and Toxicology. It is the student's responsibility to secure a placement with an approved supervisor before the course begins (a list of potential supervisors can be obtained from the Department of Pharmacology and Toxicology). Students will be registered in the course once their ballot form (obtained from the Department of Pharmacology) is signed by an approved supervisor and approved by the Department of Pharmacology and Toxicology.
Prerequisites: PCL201H1, PCL302H1, PCL376H1 (see NOTES above) and permission of Department
Co-requisite: PCL376H1 (see NOTES above)
Exclusion: PCL474Y1

**PCL473Y1 Interdisciplinary Toxicology [52L]**
A survey course examining traditional and contemporary problems in toxicology. The toxicities associated with a variety of toxins and toxicants are examined. General principles and the application of toxicological knowledge are discussed including clinical toxicology, forensic toxicology, and risk assessment.
Prerequisites: BCH210H1, PCL201H1, PCL302H1, PCL362H1
Recommended preparation: CBS349H1

**PCL474Y1 Project in Toxicology**
This course affords students an opportunity for hands-on research experience in a laboratory or applied toxicology setting. Students will work under the supervision of a staff member and will submit a final written report. Enrollment is limited and requires permission from the Department of Pharmacology. It is the student's responsibility to secure a placement with an approved supervisor before the course begins (a list of potential supervisors can be obtained from the Department of Pharmacology and Toxicology). Students will be registered in the course once their ballot form (obtained from the Department of Pharmacology) is signed by an approved supervisor and approved by the Department of Pharmacology and Toxicology.
Prerequisites: PCL201H1, PCL302H1, PCL376H1 (see NOTES above) and permission of Department
Co-requisite: PCL376H1 (see NOTES above)
Exclusion: PCL472Y1

**PCL475Y1 Neuropsychopharmacology [78L, 26T]**
Major neuro-psychiatric disease syndromes: clinical pathology and neuronal abnormalities; CNS drugs: theories and mechanisms of action.
Prerequisite: Enrollment is limited to students with a minimum CGPA of 3.0.

**PCL477H1 The DNA Damage Response in Pharmacology and Toxicology [26L]**
Many anticancer drugs and environmental agents exert their cytotoxic effects through DNA damage. This course explores specific pharmacological and toxicological agents that damage DNA and discusses how mammalian cells respond to this DNA damage.
Prerequisite: BCH210H1/242Y1
Recommended Preparation: PCL201H1, PCL302H1, CSB349H1/JLM349H1/MGY311Y1/PSL350H1

**PCL481H1 The Molecular and Biochemical Basis of Toxicology [26L]**
The biochemical principles and molecular mechanisms underlying the toxicity of drugs and foreign agents. The sequence of events at the molecular level leading to impairment of cell function and the factors which determine and affect toxicity.
Prerequisites: PCL201H1, PCL302H1, PCL362H1, BCH210H1, LMP363H1

## Collaborative Program of the Faculty of Arts & Science and the Faculty of Medicine

## Faculty

### Professors Emeriti

U. Ackermann, M Sc, Ph D
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P.E. Hallett, MA, MD
A.A. Horner, BA, Ph D
D.R. McLachlan, MD, FRCP (C)
K. Norwich, M Sc, MD, Ph D
D.H. Osmond, MSA, Ph D
M. Radomski, MA, Ph D
A. Sirek, MA, MD, Ph D
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S. Sugita, MA, Ph D
H. Suzuki, MD, Ph D
A. Velumian, Ph D
A. Volchuk, Ph D
M. Zhen, Ph D

### Senior Lecturer

C. Perumalla, M Sc, D Phil

Physiology is the study of living matter in action. It explains body organ function in terms of physical and chemical principles. It is an integrating discipline dealing with controls, compensations, and interrelationships. Interaction with the environment is a major factor in Physiology. In addition, Physiology serves as a bridge between cellular biology, systems analysis, and behaviour.

Physiology provides a necessary background for the study of Pharmacology; a preparation for graduate work in Physiology and related areas; for the teaching of Biological Science in secondary schools; or for subsequent training in Medicine, Dentistry, Pharmacy, Nursing, Physical and Occupational Therapy, and other health-related professions. Physiologists are needed also in hospitals and departments of medicine as teachers and research personnel. Other outlets would be in agriculture and veterinary schools, in military research establishments and in life science-based industry. The development of air and space travel, the exploration of the continental shelf, the development of Northern regions, and increased emphasis on exercise and fitness, all provide business and research opportunities for the person trained in Physiology.

Physiology at the research level covers a variety of specialties (e.g. Endocrinology, Cardiovascular Physiology, Neurophysiology, Respiratory Physiology, Reproductive Physiology, Sensory Physiology), each with very different technical and analytical methods. More information is available on the departmental web-site (www.uoftphysiology.com). Students in the Major program are encouraged to combine Physiology with a non-Life Science major, e.g. Computer Science, Chemistry, Physics or Mathematics.

Undergraduate Secretary: Professor W.A. MacKay, Medical Sciences Building, Room 3368 (416-978-2675)

Enquiries and Counseling: Medical Sciences Building, Room 3209 (416-978- 5077)

## Physiology Programs

**Biophysics: see Physics**

**Neuroscience: see Life Sciences: Human Biology**

**Physiology (Science program)**

Enrolment in this Program is limited. Selection is based on GPA in first year required courses.

### Specialist program:

(14 full courses or their equivalent, including at least two 400-series course)

First Year:
BIO 150Y1; CHM 138H1, 139H1; MAT 135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1)
Second Year:
BCH 210H1; BIO 240H1, 241H1; CHM 247H1/ CHM 220H1; MAT 235Y1/PHY 238Y1; PSL 302Y1
Third Year:
1. BCH 370H1; BCH 311H1/PSL 350H1; PSL 303Y1, 372H1, 374H1
2. One full-course equivalent from: ANA 300Y1; BCH 304H1, 305H1; IMM 334Y1; PCL 201H1, 302H1; PSY 397H1; STA 250H1; CSB 325H1, 332H1, 343H1, 345H1/445H1, 346H1, 347H1

Fourth Year:
Two full-course equivalents from: PSL 400-series; HMB 472H1

### Major program:

(8 full courses or their equivalent)

Enrolment in this Program is limited. Students may apply after completing 4 courses including all the First Year requirements.

First Year:
BIO 150Y1; CHM 138H1, 139H1; MAT 135Y1/PHY (131H1, 132H1)/(151H1, 152H1)
Second Year:
BCH 210H1; BIO 240H1, 241H1; PSL 302Y1
Higher Years:
1. PSL 372H1
2. One full-course equivalent from: ANA 300Y1; BCH 304H1, 305H1, 311H1; IMM 334Y1; PCL 201H1, 302H1; PSY 397H1; CSB 330H1, 325H1, 332H1, 343H1, 345H1/445H1, 346H1, 347H1, 349H1
3. One full-course equivalent from: HMB 430H1, 472H1; PSL 303Y1, 374H1, 350H1, 378H1, 380H1, 400-level courses

### Minor program:

(4 full courses or their equivalent)

Enrolment in this Program requires the completion of 4 courses; no minimum GPA required. One 300-series course must be included in the program.

1. BIO 150Y1; PSL 201Y1/302Y1
2. Two full-course equivalents from: BIO 251Y1, 270H1, 271H1; EEB 328H1; HMB 204H1, 430H1, 470H1, 472H1; PSL 303Y1, 350H1, 378H1, 380H1, 400-series; PSY 290H1, 391H1; 394H1, 396H1, 397H1, 399H1; CSB, 325H1, 332H1, 343H1, 344H1, 345H1/445H1, 346H1, 347H1

## Physiology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all PSL courses are classified as SCIENCE courses.

**PSL201Y1 Basic Human Physiology [52L]**
A survey course intended for students who are not proceeding further in Physiology.
Exclusion: Any PSL course taken previously or concurrently
Prerequisite: 100-level course in BIO or equivalent

**PSL299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**PSL300H1 Human Physiology I [39L, 5T]**
Principles of neurophysiology and endocrinology for students enroled in the Neuroscience program.
Exclusion: PSL201Y1, PSY391H1
Prerequisite: BIO150Y1; CHM138H1; PHY100-series

**PSL301H1 Human Physiology II [39L, 4T]**
Principles of respiratory, cardiovascular, gastrointestinal, renal and reproductive physiology for students enroled in the Neuroscience program.
Exclusion: PSL201Y1
Prerequisite: BIO150Y1; CHM138H1; PSL 300H1

**JBO302Y1 Human Physiology and Biophysics [78L, 12T]**
Principles of Human Physiology with tutorials on the biophysical concepts applied to physiological processes. Restricted to students enroled in the Biophysics program.
Exclusion: PSL201Y1, 302Y1
Prerequisite: BIO150Y1; CHM138H1; MAT135Y1/137Y1; PHY138Y1/140Y1

**PSL302Y1 Human Physiology [78L, 9T]**
Principles of Human Physiology for students enroled in Basic Medical Science programs.
Exclusion: PSL201Y1
Prerequisite: BIO150Y1, CHM138H1; MAT100-series/PHY100-series

**PSL303Y1 Topics in Cellular, Molecular and Organismic Physiology [78L, 26T]**
Using homeostasis and feedback as a unifying theme, topics in control systems, cell signaling, rhythms, environmental adaptations and body weight regulations are examined. Tutorials use computer simulations and problem sets.
Prerequisite: JBO302Y1/PSL302Y1, MAT 100-series, PHY 100-series
Co-requisite: PSL372H1, 374H1 or permission of Department

**PSL350H1 Mammalian Molecular Biology [20L, 6S]**
Molecular biology is essential for understanding mammalian function. The knowledge from BIO250Y of DNA, RNA, and protein is extended to current, primary literature on mammalian molecular biology. Application of molecular biology to disease and to complex behaviors is followed by small group sessions on topics with a bioethics component.
Prerequisite: BIO250Y1
Exclusion: BIO349H1/CSB349H1/MGY311Y1
Pre- or Co-requisite: PSL300H1/301H1/302Y1/ JBO302Y1/ BCH210H1

**PSL372H1 Mammalian Physiology Laboratory [13L, 39P]**
A laboratory course covering selected topics in physiology.
Prerequisite: BIO250Y1, BCH210H1, MAT 100-series/PHY 100-series
Pre- or Co-requisite: PSL302Y1, BCH370H1 (recommended)

**PSL374H1 Advanced Physiology Laboratory [13L, 13S, 39P]**
A problem-based laboratory course focused on the integration of organ systems to understand the control mechanisms of body function.
Prerequisite: BIO250Y1, PSL302Y1, PSL372H1
Co-requisite: BCH370H1

**PSL378H1 Field Physiology: Marine Mammal [13L, 39P, 26T]**
An opportunity to go outside of the traditional university classroom and get some hands on experience of the diversity and adaptive nature of marine mammalian physiology/anatomy as it compares to human. The course is 2 weeks (in May or June), one week in the field hands on, and one week of group discussions of the findings and draft report preparation.
Prerequisite: EEB216H1/BIO252Y1/PSL201Y1/302Y1

**PSL380H1 Physiologic Adaptations to a Marine Environment [26L, 6T]**
This course will compare and contrast the physiologic and anatomical adaptations exhibited by the different species of marine mammals in relationship to humans, with a focus on relevant aspects of diving.
Prerequisite: BIO252Y1/PSL201Y1/302Y1

**PSL420H1 Reproduction I: Development and Function [26L]**
This course provides an in-depth review of the development and function of the male and female reproductive systems. Topics include sex determination and differentiation, gametogenesis, hormonal control of the reproductive systems, the female ovulatory cycle, seasonal breeding, sexual behaviour, fertilization and implantation.
Prerequisite: PSL302Y1

**PSL421H1 Reproduction II: Pregnancy and Birth [26L]**
General overview of the integrated physiologic events associated with pregnancy and birth. The approach emphasizes physiologic processes using insights gained from studies of humans, animals, cells and genes. Where appropriate the clinical consequences of aberrant development are reviewed.
Prerequisite: PSL302Y1
Recommended Preparation: PSL420H1

**PSL425H1 Integrative Metabolism and its Endocrine Regulation [26L]**
This course integrates the newest findings and experimental approaches from cellular and molecular biology into metabolic function at the tissue, organ and whole body level.
Prerequisite: BCH210H1, PSL302Y1
Recommended Preparation: PSL303Y1

**PSL432H1 Theoretical Physiology [26L]**
Theoretical treatment of neurophysiology. Mathematical modeling and analysis of neurophysiological systems.
Prerequisite: MAT235Y1/237Y1; APM346H1/MAT244H1
Recommended Preparation: PHY200-series; PSL201Y1/302Y1/ BIO252Y1

**PSL440Y1 Neuroscience I: Systems and Behaviour [78L]**
Introduction to systems neuroscience. A review of basic neuroanatomy and physiology followed by in-depth study of selected sensory and motor systems. Students with an elementary neuroscience background progress to reading neuroscience literature on their own.
Prerequisite: PSL300H1/302Y1/PSY290H1/CSB332H1 or equivalent

**PSL443H1 Motor Control Systems [26L]**
Control of body movement and posture by the nervous system in normal and pathological conditions. Topics include nonlinear dynamical systems, central pattern generators in the cerebral cortex, brainstem and spinal cord, reflexes, and basal ganglia-cerebellar function.
Prerequisite: PSL300H1/302Y1

**PSL444Y1 Neuroscience II: Cellular and Molecular [78L]**
Overview of the fundamentals of cellular and molecular aspects of brain function. Course material is updated yearly to reflect the rapid evolution of ideas in Neuroscience.
Prerequisite: PSL300H1/302Y1/CSB332H1

**PSL 450H1 Mechanisms of Neural and Endocrinal Secretion [26L]**
Exocytosis and other aspects of secretion mainly in neurons and neuroendocrine cells, but also in pancreatic cells. Topics include synapse anatomy and physiology, synaptic plasma membrane and vesicle proteins, membrane fusion, genetic tools, endocrine secretion, plasticity in neurotransmitter release, diseases arising from secretion defects.
Prerequisite: BCH 210H1, PSL 302Y1/BIO 252Y1, PSL 350H1/ CSB 349H1

**PSL452H1 Membrane Physiology [26L]**
Biophysics and molecular biology of ion channels. Topics include equivalent circuits for cells, molecular structure of voltage-gated channels, distribution of channels, relationship between single-channel and whole-cell recording and regulation of channel function by voltage, phosphorylation, G-proteins and metabolites.
Prerequisite: PSL302Y1
Recommended Preparation: PSL432H1

**PSL454H1 Physiological Instrumentation and Electronics [13L, 39P]**
A practical approach to instrumentation as a preparation for using sophisticated measurement systems.
Prerequisite: PHY138Y1 or equivalent

**PSL460H1 Molecular Physiology [26L, 4S]**
An overview of the ways in which techniques in molecular biology are being used to resolve current issues in physiology. The systems to be studied include individual cells, organ systems, integrated systems, and whole animal physiology and pathophysiology.
Prerequisite: BCH210H1, BIO250Y1, CSB349H1/PSL350H1, PSL302Y1

**PSL462H1 Molecular Aspects of Cardiovascular Function [26L]**
Heart anatomy and development, ion channels and contractile proteins involved in cardiac and smooth muscle contraction are studied. Emphasis is on regulation of electrical and contractile function of kinases, metabolism, volume and ions.
Prerequisite: PSL302Y1/303Y1

**PSL470H1 Cardiovascular Physiology [26L, 13T]**
Development of the cardiovascular system from conception to adulthood with particular emphasis on maturational changes, age-related differences and developmental problems from cellular/molecular to whole organ/system.
Prerequisite: PSL302Y1

**PSL472H1 Sleep Physiology and Chronobiology [26L]**
An in-depth analysis of the basic physiology underlying sleep and circadian rhythms, and of their impact on important physiological processes, of which effects on cardio-respiratory systems are emphasized.
Prerequisite: PSL302Y1

**PSL498Y1 Project in Physiology [156P]**

**PSL499H1 Project in Physiology [78P]**
Laboratory research project with reading assignments leading to a final report. By special arrangement with a Physiology staff member after admission to course. PSL498Y1 is recommended for students applying to the Physiology graduate program.
Prerequisite: PSL303Y1, 372H1, 374H1, permission of Department

## Faculty

### University Professors Emeriti
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F.I.M. Craik, B Sc, Ph D, FRSC

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M. Gemar, B Sc, Ph D
R. Hetherington, MA, Ph D
N. Rector, BA, Ph D
N. Stuckless, Ph D
F. Taverna, Ph D
D. Urbszat, Ph D
J. Vervaeke, Ph D

### Lecturer
D. Dolderman, Ph D

Psychology is that branch of science which focuses on the behaviour of human beings and animals, with particular emphasis on the individual rather than the group. Our courses span the various areas of psychology and introduce students to the methods used in psychological research. The basic tools of the research psychologist include experimentation in the laboratory and field, naturalistic observation, and the use of statistical methods in interpreting data.

Our faculty have highly diversified interests which are reflected in the number and variety of our undergraduate course offerings. These include courses in developmental psychology, social psychology, personality, abnormal psychology, human and animal learning, cognitive psychology, perception, and physiological psychology. We encourage students at all levels, and particularly those who are beginning a Major or Specialist program in Psychology, to consult the undergraduate section of the Psychology web site before selecting courses and to discuss their proposed programs with the Undergraduate Advisor.

Courses in the various areas within Psychology and the numbering system associated with these courses follow a definite pattern: PSY XXX. The first digit represents the year, and the second digit represents the area in which the course belongs. Social Psychology, for example, is identified by "2." Therefore, PSY 220 at the second year, PSY 320, 321, 322, and 323, etc. at the third year, and PSY 420 at the fourth year represent all the Social Psychology courses. Other areas within Psychology follow a similar pattern.

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General Enquiries: Sidney Smith Hall, Room 4020 (416-978-7617)

Web site: www.psych.utoronto.ca

Undergraduate E-mail Listserv: If you would like the latest news and updates on course additions and cancellations, instructor changes, scholarships, program applications, volunteer or paid job postings, important deadlines, events/information seminars, and other undergraduate announcements, please send an email to undergrad@psych.utoronto.ca and type in the subject line "Add to Undergraduate Listserv".

Please note that e-mail addresses other than your UTORid (@ utoronto.ca) will not be accepted (ie. no Hotmail, Yahoo, Gmail, or other accounts).

## Psychology Programs

(See web site for further details)

Entry into all Psychology programs requires a senior-level high school Calculus course (a community college or university Calculus course is also acceptable). Please note that this requirement will not be waived, nor can it be substituted with another math course. There is, however, no Calculus prerequisite for PSY100H1. Students who completed PSY100Y1 in 1997 or earlier at the University of Toronto are exempt from the Calculus requirement.

### Psychology Research (Science program)

**Specialist program:**
(9.0 full courses or their equivalent, including at least 1.5 400-series full courses or equivalent, and no more than 10.0 full courses with a PSY-indicator)

This program is designed for students who have demonstrated particular interest and aptitude in research. Enrolment in the Research Specialist program is limited. Students apply in the spring term of their second year and begin the program in their third year. ***All students enrolling in or considering the Research Specialist program should enroll in a PSY lab course in the fall of their third year.*** Admission to the program is based on academic performance and expressed interest in research. To be admitted students must have completed a) a senior-level high school Calculus course; b) PSY 100H1/100Y1; c) PSY 201H1 and 202H1 (or their equivalent); d) four 200-level PSY courses, with an average of at least 73% across all PSY courses. (Note that this does not mean 73% in each PSY course); and e) have a CGPA of at least 3.0. This is a highly competitive program and meeting the minimum requirements does not guarantee admission.

NOTE: The courses include 1.0 full course equivalent in Statistics and 8.0 full courses or equivalent in Psychology.

First Year:
PSY 100H1/100Y1
After PSY100:
1. Statistics: PSY (201H1, 202H1)/ECO 220Y1/227Y1/GGR 270Y1/SOC (202H1, 300H1)/STA (220H1, 221H1)/250H1
2. Two of PSY 210H1, 220H1, 230H1, 240H1 (Cluster A), and two of 260H1, 270H1, 280H1, 290H1 (Cluster B)
3. Four half-courses at the 300-level from Group 1 below, with at least one half-course from each of Clusters A and B
4. One of PSY 319H1/329H1/339H1/379H1/ 389H1/399H1
5. PSY 309H1
6. PSY 400Y1, 409H1
7. Two distinct courses (H or Y) at any level, taken from Groups 1 and/or 2 below

### Psychology (Science program)

**Specialist program:**
(9.0 full courses or their equivalent, including at least one 400-series full course or equivalent, and no more than 10.0 full courses with a PSY-indicator)

Enrolment in the Specialist program is limited. Students may enrol in their second or later years. To enrol in second year, students must have a) a senior-level high school Calculus course ; b) completed 4 full university courses; c) obtained at least 80% in PSY 100H1/100Y1; d) a CGPA of at least 3.0. To enrol in third or fourth year, students must have completed a) the Calculus requirement; b) a 70% in PSY 100H1/100Y1; c) PSY 201H1 and 202H1 (or their equivalent); d) four 200-level PSY courses, with an average of at least 73% across all PSY courses (Note that this does not mean 73% in each PSY course); and e) have a CGPA of at least 3.0.

NOTE: The courses include 1.0 courses in Statistics and 8.0 full courses or equivalent in Psychology.

First Year:
PSY 100H1/100Y1
After PSY 100:
1. Statistics: PSY (201H1, 202H1)/ECO 220Y1/227Y1/GGR 270Y1/SOC (202H1, 300H1)/STA (220H1, 221H1)/250H1
2. Two of PSY 210H1, 220H1, 230H1, 240H1 (Cluster A), and two of 260H1, 270H1, 280H1, 290H1 (Cluster B)
3. Five half-courses at the 300-level from Group 1 below, with at least one from each of Clusters A and B
4. One lab course taken from: PSY 319H1/329H1/339H1/379H1/389H1/399H1
5. Two 400-level seminars
6. Three distinct courses (H or Y) at any level taken from Groups 1 and/or 2 below

**Major program:**
(6.5 full courses or their equivalent, and no more than 7.5 full courses with a PSY-indicator)

Enrolment in the Major program is limited. To enrol, students must have a) a senior-level high school Calculus course ; b) completed 4 full university courses; c) at least 70% in PSY 100H1/100Y1; and d) a CGPA of 2.5.

NOTE: The courses include 0.5 courses in Statistics and 6.0 full courses or equivalent in Psychology.

First Year:
PSY 100H1/100Y1
After PSY 100:
1. Statistics: PSY 201H1/ECO 220Y1/227Y1/GGR 270H1/SOC 202H1/STA 220H1/250H1
2. Two of PSY 210H1, 220H1, 230H1, 240H1 (Cluster A), and two of 260H1, 270H1, 280H1, 290H1 (Cluster B)
3. Four half-courses at the 300-level from Group 1 below, with at least one from each of Clusters A and B
4. Three distinct courses (H or Y) at any level taken from Groups 1 and/or 2 below

**Minor program:**
(4 full courses or their equivalent, and no more than 5.0 full courses with a PSY-indicator)

Enrolment in the Minor program is limited. To enrol, students must have a) a senior-level high school Calculus course ; b) completed 4 full university courses; c) at least 70% in PSY 100H1/100Y1; and d) a CGPA of 2.0.

NOTE: The courses include 0.5 courses in Statistics and 3.5 full courses or equivalent in Psychology.

First Year:
PSY 100H1/100Y1
After PSY 100:
1. Statistics: PSY 201H1/ECO 220Y1/227Y1/GGR 270H1/SOC 202H1/STA 220H1/250H1
2. At least two of: PSY 210H1/220H1/230H1/240H1/260H1/270H1/280H1/290H1

3. At least two half-courses at the 300-level taken from Group 1 below, in any of Clusters A and B
4. At least two distinct courses (H or Y) at any level, taken from Groups 1 and/or 2 below

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**Group 1:**

**Cluster A:**
JLP 315H1/PSY 210H1/220H1/230H1/240H1/300H1/303H1/304H1/311H1/312H1/313H1/314H1/316H1/ 317H1/319H1/320H1/321H1/322H1/323H1/324H1/325H1/326H1/327H1/328H1/329H1/330H1/331H1/332H1/333H1/334H1/335H1/336H1/339H1/341H1/342H1/343H1/402H1/403H1/404H1/410H1/420H1/430H1/440H1

**Cluster B:**
JLP 374H1/471H1/PSY 260H1/270H1/280H1/290H1/300H1/303H1/304H1/312H1/316H1/362H1/370H1/371H1/372H1/373H1/375H1/378H1/379H1/380H1/389H1/390H1/392H1/393H1/394H1/ 396H1/397H1 (formerly JZP 326H1)/399H1/402H1/403H1/404H1/460H1/470H1/471H1/480H1/490H1/497H1 (formerly JZP 428H1)

**Note1:**
Some PSY courses are included in both of Clusters A and B and may count in either cluster, but not both, for program requirements. If either PSY303H1 or 304H1 (Individual Projects) is being used to fulfil a Cluster, the topic of the project must be in that Cluster's area of psychology.

**Group 2:**
BIO 150Y1/252Y1 (formerly ZOO 252Y1)/CSB 332H1 (formerly ZOO 332H1)/ENG 290Y1/HIS 498H1/HMB 200H1/202H1 (formerly NRS 201H1)/204H1/300H1/310H1 (formerly NRS 302H1)/320H1 (formerly NRS 202H1)/400Y1/420H1/JLS 474H1/LIN 100Y1/200H1/MGT 262H1/NEW 302Y1/303H1/333H1/432Y1/433H1/PCL 475Y1/PHL 240H1/243H1/340H1/POL 313Y1/PSL 300H1/301H1/302Y1/440Y1/444Y1/RLG 211Y1/301H1/302H1/421H1/TRN 320Y1/UNI 250Y1 (formerly JUP 250Y1/ 370H1/401H1 (formerly JUP 450H1/402H1/470H1/WDW 260H1/360H1/365H1/WGS 372H1

*Please note that the courses in Group 2 are optional and that enrolment priority is not given to PSY program students.

## Psychology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all PSY courses are classified as SCIENCE courses (see page 26).

### NOTE:

Students in St. George campus PSY programs will be given first priority to admission for all PSY courses above the 100-level.

Please see the Arts and Science Registration Handbook and Timetable for details.

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**SCI199H1 First Year Seminar [26S]**

**SCI199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**PSY100H1 Introductory Psychology [39L]**
A brief introductory survey of psychology as both a biological and social science. Topics will include learning, perception, motivation, cognition, developmental, and social psychology.
Exclusion: PSY100Y1
Prerequisite: There is no prerequisite for PSY100H1, however a senior-level high school Calculus course is required to enrol in any Psychology program subsequent to taking PSY100H1.

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### 200-SERIES COURSES

### Note on Prerequisites:

For non-degree, visiting, and transfer students who have taken psychology courses at a university other than the University of Toronto, you must bring a photocopy of your transcript(s) to the Undergraduate Advisor to provide proof that you meet all of the prerequisites of the course(s) in which you are enrolled. We will not allow you to take any of our courses without the proper prerequisites. Furthermore, UTSC and UTM students must also have the proper prerequisites for St. George PSY courses, regardless if they are a Psychology program student at their own campus.

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**PSY201H1 Statistics I [39L, 26T]**
Fundamentals of descriptive and inferential statistics, including population and sampling distributions, simple association, probability, estimation, and hypothesis testing.
Exclusion: ECO220Y1/227Y1/GGR270H1/SOC202H1/300Y1/STA220H1/248H1/250H1
Prerequisite: PSY 100H1/100Y1/UNI 250Y1
Recommended Preparation: Grade 12 Calculus

**PSY202H1 Statistics II [39L, 26T]**
Fundamentals of statistical analysis of experimental and observational data including linear models, the analysis of variance, a priori contrasts, post-hoc tests, power analysis and effect size calculations. Students are introduced to Minitab, a statistical computer program, with which they complete much of their course work.
Exclusion: ECO220Y1/227Y1/GGR270Y1/SOC300Y1/STA221H1/250H1/JBS229H1/SOC300H1
Prerequisite: PSY201H1 or equivalent

**PSY210H1 Introduction to Development [39L]**
The developmental approach to the study of behaviour with reference to sensorimotor skills, cognition, socialization, personality, and emotional behaviour.
Prerequisite: PSY 100H1/100Y1/UNI 250Y1

**PSY220H1 Introduction to Social Psychology [39L]**
Contemporary areas of research in social psychology: social perception, attitudes, inter-personal relations, and group processes.
Prerequisite: PSY 100H1/100Y1/UNI 250Y1

**PSY230H1 Personality and Its Transformations [39L]**
Theory and research in personality structure and dynamics: the interaction of cultural and biological factors in the development and expression of individual differences.
Prerequisite: PSY 100H1/100Y1/UNI 250Y1

**PSY240H1 Introduction to Abnormal Psychology [39L]**
A critical survey of concepts, theories, and the state of research in the area of emotionally disturbed persons and therapeutic methods.
Prerequisite: PSY 100H1/100Y1/UNI 250Y1

**PSY260H1 Learning and Plasticity [39L]**
Concepts, theories, and applications of classical and contemporary learning theories, including classical and operant conditioning. Current theories of the physiological and anatomical basis of learning and memory, including synaptic plasticity, the role of the hippocampus, amygdala, frontal cortex and other brain regions. Theories will be related to a practical understanding and applications such as drug addiction, phobias and other disorders.
Prerequisite: PSY 100H1/100Y1/UNI 250Y1

**PSY270H1 Introduction to Cognitive Psychology [39L]**
An introduction to research and theory on the neural and cognitive architecture of attention, memory, language, thinking and reasoning.
Prerequisite: PSY 100H1/100Y1/UNI 250Y1 or registered in the Cognitive Science program

**PSY280H1 Introduction to Perception [39L]**
An introduction to the physiological and psychological bases of vision and audition in humans and lower animals. Visual perception of shape and objects, colour, space, and motion. Auditory perception of simple and complex sounds, and location. Demonstrations supplement the lectures.
Prerequisite: PSY 100H1/100Y1/UNI 250Y1 or registered in the Cognitive Science program

**PSY290H1 Physiological Psychology I [39L]**
Provides students with a solid background into the biological basis of behaviour. Animal and human research topics including: functional neuroanatomy, neural signalling, sensory and motor control, motivational systems, and hormones, and emotions..
Exclusion: HMB204H1/210H1/NRS201H1
Prerequisite: PSY 100H1/100Y1/UNI 250Y1 or enrolled in the Cognitive Science program

**PSY299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

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## 300-SERIES COURSES

### Note about Statistics
Where a stated prerequisite is PSY201H1 or 202H1, its equivalent/exclusion is also accepted.

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**PSY300H1 History of Psychology [39L]**
Philosophical predecessors and early development of modern psychology; schools of thought and shifting areas of theory and research. History and philosophy of science, in general. Current systems and theories.
Prerequisite: One full course or equivalent in the PSY200- or 300-series

**PSY303H1/304H1Individual Projects [TBA]**
An intensive laboratory or applied research project under the supervision of a staff member. Will be approved by the Department only when the student and staff member can show that the project is academically demanding and uniquely suitable for the individual student in terms of the rest of the student's program. Note: Projects spread out over the full academic year are still only worth a half credit.
Prerequisite: PSY202H1 and appropriate background for the proposed work

**PSY305H1 The Treatment of Psychological Data [39L]**
This course emphasizes advanced use of the SAS statistical computer program package for the treatment of psychological data collected in laboratory and field studies. Students analyze sets of data and interpret results. Various methods of ensuring the trustworthiness and accuracy of analysis are discussed.
Prerequisite: PSY202H1

**PSY309H1 Research Specialization: Practicum [39L]**
Research specialists learn about the research opportunities within our department, and develop their skills in the areas of critical thinking, writing and oral presentation. Students also conduct a pre-thesis research project under the supervision of a faculty member. Restricted to Research Specialists.
Prerequisite: PSY 202H1, PSY 3*9H1 (PSY lab course)

**PSY311H1 Social Development [39L]**
Theory and research in social attachment, aggression, morality, imitation and identification, altruism, and parental discipline, with discussion of methodological issues.
Prerequisite: PSY201H1, 210H1/220H1

**PSY312H1 Cognitive Development [39L]**
Examines the developmental of knowledge in fundamental domains such as spatial perception, navigation, object perception, number, language, and theory of mind. Emphasis is placed on current experimental findings, and on how they address centuries-old debates surrounding the origin and nature of human knowledge.
Prerequisite: PSY201H1, 210H1/270H1/UNI 250Y1

**PSY313H1 Psychology of Aging [39L]**
Age changes in sensory and perceptual processes, motor skill, learning, memory, and personality. Theory, methodological problems, social, cultural, and environmental influences which shape behaviour and attitudes to and by the elderly.
Prerequisite: PSY201H1, 210H1

**PSY314H1 Moral Development [39L]**
Examination of cognitive-developmental, psychoanalytic, sociobiological, behaviouristic and cultural-anthropological approaches to moral development. Issues covered include definitions of morality, the relationship between moral judgement and action, gender differences and commonalities, and the role of culture in moral development.
Prerequisite: PSY201H1, 210H1

**JLP315H1 Language Acquisition [39L]**
Infants' abilities at birth, prelinguistic development, the first words, phonological, syntactic and semantic development. Social variables influencing development of language, bilingualism, models of development, language play. (Given by the Departments of Linguistics and Psychology)
Prerequisite: One full course equivalent at the 200-level in JAL/JUP/LIN/PSL/PSY/UNI Cognitive Science

**PSY316H1 Perceptual Development [39L]**
The course examines human perceptual development during the first 2-3 years of life. Vision and audition are emphasized.

Some topics are: pattern and colour vision, depth perception, infant speech perception.
Prerequisite: PSY201H1, 280H1
Recommended preparation: PSY210H1

**PSY317H1 Aging and Social Cognition [39L]**
Examines theory and research in the social cognitive aspect of aging. Topics range from impression formation and causal attributions to perceptions of control and emotions.
Prerequisite: PSY201H1, 220H1

**PSY319H1 Developmental Laboratory [39L]**
Provides an overview of developmental psychology methods. The class conducts an original research project, including design, data collection and analysis, and a written report.
Prerequisite: PSY202H1, 210H1; PSY Specialist or departmental approval

**PSY320H1 Social Psychology: Attitudes [39L]**
Intensive study of social attitudes and opinions development, description, measurement, modification, and organization.
Prerequisite: PSY201H1, 220H1

**PSY321H1 Cross-Cultural Psychology [39L]**
Human beings develop within local systems of meaning that define what is good and bad, true and false, sacred and profane, beautiful and ugly, significant and insignificant. These inherited systems of meaning - or cultures - define where we stand as persons in relation to others and provide the grounding for what we come to feel, think, and desire as individuals. This course examines the cultural determination of mindful behaviour.
Prerequisite: PSY201H1, 220H1, 230H1/240H1

**PSY322H1 Intergroup Relations [39L]**
An in-depth examination of theories and research in intergroup relations; includes topics like stereotyping, prejudice, and discrimination.
Prerequisite: PSY201H1, 220H1

**PSY323H1 Sex Roles and Behaviour [39L]**
The effect of sex-role expectations on how men and women behave and perceive the world: theories of sex-role development, physiological and cultural determinants of sex differences, power relationships between men and women.
Prerequisite: PSY201H1, 210H1/220H1/230H1

**PSY324H1 Social Psychology of Interpersonal Relationships [39L]**
This course focuses on the social psychology of interpersonal relationships between and among individuals, especially romantic or close relationships and friendships. It surveys what social psychologists have learned about the development, maintenance, disruption or dissolution of personal relationships, as well as current social psychological theories of interpersonal relationships.
Exclusion: PSY420H1 taken in 2002-2003 ONLY
Prerequisite: PSY201H1, 220H1

**PSY325H1 Self-Consciousness [39L]**
The distinguishing feature of our species is the reflexivity of our consciousness - the ability to conceive of and interpret ourselves and our experiences. All our higher symbolic capabilities rest upon this foundation. The aim of this multidisciplinary course is to trace out a variety of interpretive frames through which we may look at and better understand self-awareness.
Prerequisite: PSY201H1, 220H1, 230H1/240H1

**PSY326H1 Social Cognition [39L]**
An examination of theory and research on how we make sense of ourselves and our social world. Topics covered include goals, mood, memory, hypothesis testing, counterfactual thinking, stereotypes, and culture.
Prerequisite: PSY201H1, 220H1

**PSY327H1 Psychology of the Mass Media [39L]**
This multidisciplinary course examines how we come to know ourselves and our world, and to feel, judge, and act, through the simulative "mediation" of mass communication. The intent is to provide students with greater understanding of the highly commodified symbolic environment that surrounds them and to which they continually respond and react as audience.
Prerequisite: PSY 201H1, 220H1, 230H1/240H1

**PSY328H1 Psychology and the Law [39L]**
This course deals with psychological issues in the law, with particular reference to criminal law. It focuses mainly on research that has been done on pretrial publicity, eyewitness testimony, rules of evidence, and other factors that might affect jury decisions.
Prerequisite: PSY201H1, 220H1

**PSY329H1 Social Psychology Laboratory [39L]**
Illustrates major methodologies within social psychology, such as attitude measurement, observation of small groups, and experiments.
Prerequisite: PSY202H1, 220H1; PSY Specialist or departmental approval

**PSY330H1 Psychometrics [39L]**
Concepts and methods for the measurement of abilities, interests and personality: reliability, validity, interpretation of test scores, norms, observational methods, structured tests, interview, projective techniques. Ethical problems in assessment. Not a course in test administration.
Prerequisite: PSY201H1, 230H1/240H1 Recommended preparation: PSY202H1

**PSY331H1 Social Psychology of Emotion [39L]**
An in-depth review of the role of emotion in human psychology, with an emphasis on the links between emotion and cognition. Topics include theories of emotion, emotional regulation, expression and experience, the role of emotion in decision-making, and the relationship between emotion, motivation and behaviour.
Prerequisite: PSY201H1, 230H1

**PSY332H1 Organizational Behaviour [39L]**
An analysis of the individual, group, and institutional structures and processes that influence behaviour within organizations. Topics include motivation, leadership, communication, school of management theories, group processes and team work, supervision, and organizational culture.
Prerequisite: PSY201H1, 220H1
Exclusion: MGT262H1, WDW260H1

**PSY333H1 Health Psychology [39L]**
Examines research evidence concerning the impact of psychological factors on physical health and illness.
Prerequisite: PSY201H1, 230H1/240H1

**PSY334H1 Maps of Meaning: The Architecture of Belief [39L]**
Culture appears to have a narrative structure. Animal learning and neuropsychological theory helps us understand how narratives might regulate emotion. Threat of broadscale

emotional dysregulation motivates individuals to protect their cultures.
Prerequisite: PSY201H1, 230H1/240H1

**PSY335H1 Environmental Psychology [39L]**
An examination of the interrelationship of humans and their natural and built environments, focusing on psychological and sociocultural factors. Topics include: the self in relation to nature; the perception of environmental change; the effects of natural and built environments on stress and psychological health; understanding consumerism and environmentalism; and the relationship between individuals' experience (i.e., cognitions, emotions, and values) and action relating to environmental issues.
Prerequisite: PSY201H1, 220H1, or enrolled in the Environment and Behaviour Minor Program

**PSY336H1 Positive Psychology [39L]**
A review of the field of positive psychology, which is the study of fulfillment and personal growth. The focus is on empirical research regarding the development of healthy, productive, and resilient individuals. Topics include: subjective well-being, optimism, flow experiences, self-control and emotional intelligence, social support and empathy.
Prerequisite: PSY201H1, 220H1/230H1/240H1

**PSY337H1 Advanced Personality Psychology [39L]**
This course covers major topics in personality psychology including prominent theories and current research in the area. Theoretical frameworks will be integrated with specific applications in primary sources. Specific topics may include personality structure, personality development, psychodynamic approaches, genetic methodology, and emotion regulation.
Prerequisite: PSY 201H1, PSY230H1

**PSY339H1 Individual Differences Laboratory [39P]**
Introduction to methods involved in individual differences or personality research. Group and individual projects focus on assessment of individual difference characteristics and on experimentation including such characteristics.
Prerequisite: PSY202H1, 230H1/240H1; PSY Specialist or departmental approval

**PSY341H1 Psychopathologies of Childhood [39L]**
This course focuses on cognitive and neuropsychological aspects of neurodevelopmental and psychiatric disorders in children from clinical and theoretical perspectives.
Prerequisite: PSY201H1, 210H1/240H1, one further PSY200/300-series full course or equivalent

**PSY342H1 Cognition and Psychopathology [26S, 13T]**
Work in psychological disorders has increasingly used the theories and methodologies of cognitive psychology to guide research. This course will examine accounts of clinical disorders informed by cognitive experimental psychology, with emphasis on recent work in affective disorders.
Prerequisite: PSY201H1, 240H1/270H1

**PSY343H1 Theories of Psychopathology and Psychotherapy [39L]**
Examines various theories of how personality functioning may become impaired and corresponding psychotherapeutic interventions. Emphasis on empirical assessment of personality dysfunction and therapy effectiveness.
Prerequisite: PSY201H1, 230H1/240H1

**PSY362H1 Animal Cognition [39L]**
The study of memory, representation, concept learning, and other cognitive processes in non-human animals.
Prerequisite: PSY201H1, 260H1

**PSY370H1 Thinking and Reasoning [39L]**
Problem-solving as a model of directed thinking; conceptual behaviour and mental representation; induction, deduction and learning; probabilistic reasoning; creative thinking and complex problem solving.
Prerequisite: PSY 270H1/UNI 250Y1

**PSY371H1 Higher Cognitive Processes [39L]**
This course covers selected topics pertaining to higher cognitive processes including expertise, consciousness, creativity, and human and artificial intelligence.
Prerequisite: PSY270H1/370H1/UNI 250Y1

**PSY372H1 Human Memory [39L]**
Current theories and data on human memory: processes involved in encoding, storage, and retrieval.
Prerequisite: PSY201H1, 270H1/UNI 250Y1

**PSY373H1 Social Cognitive Neuroscience [39L]**
Social cognitive neuroscience is an emerging interdisciplinary field that seeks to integrate theories of social psychology and cognitive neuroscience to understand behavior at three fundamentally interrelated levels of analysis (social, cognitive, and neural). Topics such as self-regulation, cooperation, attitudes, and prejudice will be examined.
Prerequisite: PSY 201H1, 220H1, 270H1/290H1
Recommended Preparation: PSY 326H1

**JLP374H1 Psychology of Language [39L]**
Human and other animal communication, structure of human language, word meaning and semantic memory, psychological studies of syntax, bilingualism, language and thought, language errors and disorders. (Given by the Departments of Linguistics and Psychology)
Prerequisite: One 200-series full course or equivalent in JAL/JUP/LIN/PSY/PSL/UNI Cognitive Science

**PSY375H1 Attention and Performance [39L]**
Visual attention; attentional selection for object recognition, feature integration, and action; movements of attention; eye-hand coordination, eye movements, limb movements. Models of attention and motor control.
Prerequisite: PSY201H1, 270H1/280H1/UNI 250Y1

**PSY378H1 Engineering Psychology [39L]**
The application of our knowledge of human information processing capabilities to improve human-machine systems design in a number of engineering environments including aviation, computer software, human-computer interaction, and nuclear power plants.
Prerequisite: PSY201H1, 270H1/280H1/UNI 250Y1
Recommended preparation: PSY202H1

**PSY379H1 Memory and Learning Laboratory [39P]**
Exercises and demonstrations, followed by experiments done jointly with other members of the class, and a final individual research project, in the broad area of human learning and memory.
Prerequisite: PSY202H1, 270H1/UNI 250Y1; PSY specialist or departmental approval

**PSY380H1 Vision Science [39L]**
Integrates psychology, neuroscience, and computer science approaches to the study of vision science. Topics include:

spatial vision; perception of objects, function, and category; motion perception; visual attention, memory, and imagery; and consciousness. Demonstrations/in-class experiments supplement lectures and readings. Important class for psychology, cognitive science, and neuroscience students.
Prerequisite: PSY201H1/MAT135Y1, PSY 280H1

**PSY389H1 Perception Laboratory [39L]**
Examination of issues and methods in perception research. Students conduct supervised research projects, and read, critique, and write research articles.
Prerequisite: PSY202H1, 280H1; PSY Specialist or departmental approval

**PSY390H1 Behavioural Genetics [39L]**
An examination of how genes contribute to the production of behaviour, either as structural elements or direct participants in behavioural regulation. Covers molecular genetics, natural selection and genetic methods followed by specific examples of congenic disorders that affect behaviour and studies of "normal" behaviours in human and animal models.
Prerequisite: PSY201H1, 290H1/NRS201H1

**PSY392H1 Neurobiology of Learning and Memory [39L]**
Understanding the complexities of how the mammalian nervous system acquires and stores information and how it transforms this information into appropriate behavior is fundamentally important to our understanding of both animal and human behavior. This course explores empirical and theoretical contributions to our understanding of the neural basis of learning and memory.
Prerequisite: PSY201H1, 290H1/NRS201H1

**PSY393H1 Cognitive Neuroscience [39L]**
The use of higher cortical functions to study cognitive processes in humans and other primates. Some topics to be covered: hemispheric specialization, emotion and the cerebral hemispheres, organization of language after brain damage, amnesia, aging.
Prerequisite: PSY201H1, 270H1/290H1/NRS201H1

**PSY394H1 Physiology and Psychology of Emotion [39L]**
The role of brain and body in expression and experience of emotion in humans, considered theoretically and through the experimental, physiological and clinical literatures.
Prerequisite: PSY201H1, 270H1/290H1/NRS201H1

**PSY396H1 Neurochemical Basis of Behaviour [39L]**
The functional relevance of neurotransmitters, with particular emphasis on their role in mediating behaviour.
Prerequisite: PSY201H1, 290H1/NRS201H1
Exclusion: PCL 475Y1

**PSY397H1 Biological Rhythms (formerly JZP326H1) [26L, 13T]**
Daily, monthly, annual and other rhythms and methods of measuring them. Behavioural and physiological aspects of biological clocks. The importance of rhythms in experimental design, in research on brain function, in affective disorders, and the use animals make of rhythms in migration and other behaviours.
Prerequisite: BIO150Y1/PSY100H1Y1, one full or two 200-series half-courses in the Sciences
Exclusion: JZP326H1

**PSY399H1 Psychobiology Laboratory [39L]**
An introduction to surgical and experimental methods and research issues in physiological psychology, including anatomical and neurobiological methods and behavioural and genetic analysis. Concentration on innate and learned mechanisms that influence the display of specific behaviours.
Exclusion: HMB310H1/NRS302H1
Prerequisite: PSY202H1,290H1; PSY specialist or departmental approval

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### 400-Series Courses

**PSY400Y1 Research Specialization: Thesis [TBA]**
An individual project done under the direction of a staff member. Lecture and seminar presentations of proposals in the Fall Session.
Prerequisite: Enrolment in PSY Research Specialist program, PSY309H1, PSY3*9H1 (PSY lab course)

**PSY402H1 Psychology Seminar [26S]**

**PSY403H1 Psychology Seminar [26S]**

**PSY404H1 Psychology Seminar [26S]**
Examination in depth of specific topics in psychology at the graduate level. These seminars vary from year to year in terms of the number given, the topics, and the restrictions on enrollment. Students must get prior consent from the instructor of the graduate seminar they are interested in taking and submit this consent in writing to the department at which time you will be enrolled for ***undergraduate*** credit. Consult the Undergaduate Advisor for more details.

**PSY409H1 Research Specialization: Theoretical Foundations [26S]**
This seminar addresses the central theoretical issues that structure contemporary research in each of the major areas of psychology. The aim is to provide an informal overview of the field as a whole.
Prerequisite: Enrolment in the PSY Research Specialist program, PSY 309H1

**PSY410H1 Developmental Psychology Seminar [26S]**
Examination in depth of a limited topic within developmental psychology. Content in any given year depends on instructor.
Prerequisite: PSY202H1, 210H1; PSY Specialist or permission of department

**PSY420H1 Social Psychology Seminar [26S]**
Examination in depth of a limited topic within social psychology. Content in any given year depends on instructor.
Prerequisite: PSY202H1, 220H1; PSY Specialist or permission of department

**PSY430H1 Personality Seminar [26S]**
Examination in depth of a limited topic within the area of personality. Content in any given year depends on instructor.
Prerequisite: PSY202H1, 230H1/240H1, PSY Specialist or permission of department

**PSY440H1 Abnormal Psychology Seminar [26S]**
Examination in depth of a limited topic within abnormal psychology. Content in any given year depends on instructor.

Prerequisite: PSY202H1, 230H1/240H1, PSY Specialist or permission of department

**PSY460H1 Learning Seminar [26S]**
Examination in depth of a limited topic in learning. Content in any given year depends on instructor.
Prerequisite: PSY260H1; an additional 300-level half-course in the 350-, 360-, or 370-series or permission of instructor; PSY Specialist or permission of department

**PSY470H1 Memory Seminar [26S]**
Examination in depth of limited topics within the area of memory. Content in any given year depends on instructor.
Prerequisite: PSY270H1/UNI 250Y1, PSY Specialist or permission of department

**JLP471H1 Advanced Psycholinguistics [26S]**
Seminar in advanced topics in psycholinguistics. Content varies from year to year. (Given by the Departments of Linguistics and Psychology)
Prerequisite: JLP374H1, LIN322H1/331H1

**PSY471H1 Cognition Seminar [26S]**
Examination in depth of a limited topic in cognition. Content in any given year depends on instructor.
Prerequisite: (PSY270H1/280H1), (PSY371H1/375H1/380H1), PSY Specialist or permission of department

**PSY480H1 Seminar in Vision Science [26S]**
An in-depth examination of current issues in vision science (e.g. perceptual organization, object and face recognition, motion perception). Emphasis is on the psychological perspective, but integrates physiological and computational perspectives as well. Content in any given year depends on instructor.
Prerequisite: PSY270H1, PSY280H1, 37*H/38*H, PSY393H1, PSY Specialist or permission of department

**PSY490H1 Brain Activity & Behaviour Seminar [39S]**
The relationship between behaviour and the activity of neurons; examples from sensory, motor, motivational, and higher cortical systems. Electrical stimulation and recording techniques.
Prerequisite: PSY202H1, 290H1/NRS201H1

**PSY497H1 Advanced Topics in Biological Rhythms (formerly JZP428H1) [26S]**
Circadian rhythms with emphasis on non-photic entrainment and phase shifting of rhythms by behaviour (e.g., social interactions, or becoming active). Properties and physiological mechanisms for non-photic effects and comparisons with those for photic effects. Seminars and readings of original papers. Emphasis on basic principles, but possible applications will also be discussed.
Prerequisite: JZP326H1/PSY397H1
Exclusion: JZP428H1

## Faculty

### Professors Emeriti

B. Brainerd, MS, PhD
J.K. Chambers, MA, PhD
H.E. Rogers, M Ed, MA, PhD
P.A. Reich, MS, PhD
T. Venkatacharya, MA, Vyakarana Siromani
R. Wardhaugh, MA, PhD

### Professor and Chair of the Department

B.E. Dresher, BA, PhD

### Professor, Graduate Coordinator and Associate Chair

S.A. Tagliamonte, MA, PhD

### Undergraduate Coordinator

E.M. Gold, MA, Ph D

### Professors

E.A. Cowper, AM, PhD
D. Massam, MA, PhD
K.D. Rice, MA, PhD

### Associate Professors

A. Johns, MA, PhD
A.T. Pérez-Leroux, MA, PhD
R. Smyth, M Sc, Ph D

### Assistant Professors

M.C. Cuervo, MA, PhD
M. Ippolito, MA, PhD
Y. Kang, PhD
A. Kochetov, MA, PhD

### Adjunct Professor

M.L. Chasin, M Sc, AuD

Linguistics can trace its roots back to the ancient Sanskrit grammarians, and the study of language is probably as old as language itself. However, the twentieth century has produced an explosion in the scientific study of language. As our understanding of the nature and structure of human language develops, linguistics is becoming relevant to many other areas of research such as Cognitive Science, Artificial Intelligence, Speech-Language Pathology, Audiology, Psychology, and Philosophy.

On its own, linguistics represents an invaluable key to the nature of the mind and the diverse elements of human culture; as a tool, linguistics is unmatched in preparing one for the learning and teaching of languages and for integrating language with technology.

The Department offers programs in Linguistics, as well as combined programs with language departments and with Philosophy, as shown in the Programs of Study.

Part-time students should note that most of the summer and evening courses available to them are offered on a rotating basis only. Consequently, students wishing to take such courses should enroll in them at the earliest opportunity after completing the necessary prerequisites.

In addition to the undergraduate curriculum within the Department of Linguistics, there are courses relating to linguistics offered in other departments such as the language departments, Anthropology, Computer Science, and Philosophy, and in the Cognitive Science and Artificial Intelligence program.

Students seeking counselling and information should contact the Undergraduate Coordinator, TBA, (416-978-1760).

## Linguistics Programs

Enrolment in the Linguistics programs requires the completion of four courses; no minimum GPA required.

### Linguistics (Arts program)

**Specialist program:**
(12 full courses or their equivalent)

First Year:
LIN 100Y1
Second Year:
LIN 228H1, 229H1,241H1, 232H1
Second, Third and Fourth Years:

1. Two years of study or its equivalent of one non-Germanic, non-Romance language in courses using the spoken language (courses must be approved by the Undergraduate Co-ordinator)
2. LIN 322H1, 331H1, JAL 401H1
3. Further courses (excluding LIN 200H1, 265Y1, and 365Y1) to bring the total number of courses up to 12 FCE. These courses must be LIN/JAL/JFL/JLP/JLS courses except that up to one full course may be chosen from the following list (please consult the Department of Linguistics): ANT 329Y1, 425H1, 427H1; CSC 384H1, 485H1; FIN 220H1; FRE 272Y1, 273Y1, 376H1, 378H1, 384H1, 386H1, 387H1, 389H1, 471H1, 479H1, 489H1; GER 400H1, 426H1; GGR368H1; HPS 250H1; ITA 360H1, 361H1, 363H1, 364H1, 430H1; UNI 250Y1; PHL 210Y1, 245H1, 325H1, 326H1, 340H1; 342H1, 345H1, 351H1, 355H1, 451H1; SLA 430Y1, 438H1, 439H1, 452Y1, 456H1; SPA322H1, 421H1, 422H1, 425H1
4. Of the courses chosen in 3 above, at least 2.5 FCE must be at the 300+ level and 0.5 at the 400-level

**Major program:**
(7 full courses or their equivalent)

First Year:
LIN 100Y1
Second Year:
LIN 228H1, 229H1,241H1, 232H1
Third and Fourth Years:
Four FCE's in LIN/JAL/JFL/JLP/JLS (excluding LIN 200H1) at least two of which must be at the 300+ level

**Minor program:**
(4 full courses or their equivalent)

1. LIN 100Y1
2. Three FCE's in LIN/JAL/JFL/JLP/JLS (excluding LIN 200H1) at least one of which must be at the 300+ level

## Linguistics and Languages (Arts program)

Consult the Department of Linguistics and of the Language chosen.

### Combined Specialist program:
(13 or 14 courses or their equivalent)

**Linguistics**
The Linguistics component of all these Programs is as follows:

First Year:
LIN 100Y1
Second Year:
LIN 228H1, 229H1, 241H1, 232H1
Third and Fourth Years:
Four FCE's in LIN/JAL/JFL/JLP/JLS (excluding LIN 200H1), at least 1 of which must be at the 400-level, and 2 at the 300+ level (LIN 362H1 specially recommended)

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The Language component is six or seven courses or their equivalent in the language chosen as follows:

**English**
(7 courses)

For details, please see the Department of English program listings.

**French**
(7 courses or their equivalent)

Same as the Major program in French Language and French Linguistics. For details, please see the Department of French program listings.

**German**
(6 full courses or their equivalent)

First Year:
GER 100Y1/200Y1/(200H1, 201H1)
Second Year:
GER 200Y1/(200H1, 201H1); 300Y1/(300H1, 301H1)
Third and Fourth Years:
1. GER 300Y1/(300H1, 301H1, 400H1)
2. The reminder of the six courses or equivalent must have a GER designator.

**Italian**
(7 courses or their equivalent)

First Year:
ITA 100Y1/101Y1/102Y1/(133H1, 134H1)/152Y
Second Year:
ITA 250Y1/251Y1/252Y1/253Y1
Third and Fourth Years:
1. ITA 360H1, 430H1
2. 4.0 additional FCE ITA language and linguistics courses at the 300/400-levels

**Spanish**
(6.5 courses or their equivalent)

First Year:
SPA 100Y1/220Y1; SPA 319Y1 (for native/bilingual speakers of Spanish)
Second Year:
SPA 220Y1/320Y1; SPA 420H1 (for speakers who have taken SPA 319Y1 in first year)
Third and Fourth Years:
1. SPA 320Y1, 420H1
2. One half-course selected from SPA 450H1, SPA 452H1 or SPA 454H1
3. One 300/400-series half-course in literature
4. Two courses in Hispanic Linguistics from the 300/400-series from SPA321H1, SPA322H1, SPA324H1, SPA421H1S, SPA422H1, SPA423H1, SPA425H1, or SPA325H
5. Plus additional SPA courses to make the equivalent of 6.5 courses.

**Slavic Languages**
Slavic Languages may also be taken in this Program. Interested students should consult the Department.

## Linguistics and Computing (Science program)

### Specialist program:
(15.5 full courses or their equivalent with at least one full course at the 400-level)

**Linguistics Component (7 FCE's)**
First Year
LIN100Y1
Second Year
LIN 228H1, 229H1, 241H1, 232H1
Higher Years
1. 2.5 FCE's chosen from LIN322H1, 323H1, 331H1, 341H1, 481H1; JLP315H1, 374H1
2. 1.5 additional FCE's in LIN/JAL/JFL/JLP/JLS (excluding LIN200H1) at least 1.0 of which must be at the 300+ level

Recommended preparation: At least one year's study (or equivalent) at university level of a non-English language

**Computing Component (7.5 FCE's)**
First Year
CSC 165H1/240H1 (108H1, 148H1)/150H1; MAT 137Y1/157Y1
Second Year
CSC 207H1, 236H1/240H1, 263H1/265H1; MAT 223H1; STA 247H1/257H1
Higher Years
1. CSC 258H1, 324H1, 401H1, 485H1
2. 1.0 additional FCE's in CSC, chosen from: CSC 343H1, 363H1/365H1, 373H1/375H1, 384H1, 428H1, 486H1

**NOTE: Students in this program must also qualify for, and be registered in the Major program in Computer Science**

## Linguistics and Philosophy (Arts program)

Consult Departments of Philosophy and Linguistics.

### Specialist program:
(14 full courses or their equivalent with one full course at the 400-level)

**Linguistics**
(7 courses)
First Year:
LIN 100Y1
Second Year:
LIN 228H1, 229H1, 241H1, 232H1
Third and Fourth Years:
Four FCE's in LIN/JA/JFLL/JLP/JLS (excluding LIN 200H1); at least 1 must be at the 400 level and 2 must be at the 300+ level (LIN 331H1, 481H1 specially recommended)

**Philosophy**
(7 courses)

1. PHL 210Y1, 245H1, 351H1
2. Five additional PHL courses, at least three at the 300-level. The following courses are particularly recommended: HPS 250H1; UNI 250Y1; PHL 325H1, 326H1, 340H1, 342H1, 345H1, 347H1, 351H1, 355H1, 451H1

## Linguistics Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), LIN courses are classified as HUMANITIES or SOCIAL SCIENCE or SCIENCE courses; check individual course listings below.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a Humanities course; see page 48..

**LIN100Y1 Introduction to General Linguistics [52L, 26T]**
Lectures on fundamental principles with illustrations from English and from a broad spectrum of other languages. Practice in elementary analytic techniques.
This is a Humanities course

**LIN200H1 Introduction to Language [26L, 13T]**
A general-interest course on language. Possible topics include: the structure of language; how language changes over time, the social and psychological aspects of language, language and culture, the origin of language, writing systems, and language acquisition. (This course cannot be used as an entrance to programs in linguistics, and cannot be used be used as a prerequisite to any linguistics courses unless otherwise indicated.)
Exclusion: LIN100Y1
This is a Humanities course

**LIN201H1 Canadian English [26L]**
A study of English spoken in Canada. Topics include: vocabulary items, usage surveys, non-standard dialect enclaves, regional variation and historical development. Students will develop original research projects. (Not offered every year)
Prerequisite: LIN 100Y1/200H1
This is a Humanities course

**LIN203H1 English Words [26L]**
English has a rich vocabulary. We will learn how it has developed over time, and investigate aspects of the meaning and pronunciation of words. Most of all, we will study how words are put together, so that students will be able to recognize and analyze unfamiliar words.
Exclusion: LIN202Y1
This is a Humanities course

**LIN204H1 English Grammar [26L]**
How the English language works: students analyze a wide variety of English grammatical structures and learn how they vary across dialects and change through time.
Exclusion: LIN202Y1
This is a Humanities course

**LIN205H1 East Asian Languages and English [26L]**
The course is a linguistic exploration of issues that arise as English comes into contact with three major East Asian Languages (Chinese, Japanese, and Korean). Topics include a comparative introduction to the basic structures of the languages, writing systems, transformations English words undergo when borrowed into these Asian languages, and typical mistakes made by ESL speakers of East Asian linguistic background.
Exclusion: HUM199H1/Y1Y, L0241 (2005-2006)
This is a Humanities course

**LIN228H1 Phonetics [26L, 13T]**
Investigation of the sounds most commonly used in languages from an articulatory and acoustic point of view, with practice in their recognition and production.
Recommended preparation: LIN100Y1/200H1
This is a Humanities course

**LIN229H1 Sound Patterns in Language [26L, 13T]**
The nature and organization of phonological systems, with practical work in analysis.
Prerequisite: LIN100Y1, 228H1
This is a Humanities course

**LIN232H1 Syntactic Patterns in Language [26L, 13T]**
The nature and organization of syntactic systems; their relation to semantic systems and the linguistic organization of discourse; practical work in analysis.
Prerequisite: LIN100Y1
This is a Humanities course

**LIN241H1 Introduction to Semantics [26L, 13T]**
An introduction to meaning within linguistics and the interpretation of language in context. Topics include logical and semantic relations, pragmatic concepts such as presupposition and implicature, the nature of thematic roles, quantifiers and scope relations, the expressions of temporal and modal relations in natural language.
Prerequisite: LIN100Y1
This is a Humanities course

**LIN299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**LIN305H1 Quantitative Methods in Linguistics [39L]**
Principles of research design, data collection, and a wide variety of statistical techniques for research in various subfields of linguistics.
Prerequisite: LIN100Y1 and one full course in LIN/JAL/JFL/JLP
This is a Social Science course

**LIN306H1 Language Diversity and Language Universals [26L]**
This course examines cross-linguistic typological features found in the languages of the world. Special attention is given to describing morphological and syntactic patterns found cross-linguistically. The goal of the course is to draw on the range of variation in order to uncover language universals. (Not offered every year)
Prerequisite: 232H1
This is a Humanities course

**JLP315H1 Language Acquisition [39L]**
Infants' abilities at birth, prelinguistic development, the first words, phonological, syntactic and semantic development. Social variables influencing development of language, bilingualism,

models of development, language play. (Given by the Departments of Linguistics and Psychology)
Prerequisite: One full course equivalent at the 200-level in LIN/JAL/JUP/PSL/PSY/UNI Cognitive Science
This is a Science course

**LIN322H1 Phonological Theory [39L]**
Basic issues in current phonological theory. Problems focusing on analysis and theory. (Students who want to pursue graduate studies in linguistics are strongly advised to include this course in their program.)
Prerequisite: LIN229H1
This is a Humanities course

**LIN323H1 Acoustic Phonetics [26L]**
Introduction to acoustics, with particular reference to the vocal tract; acoustic properties of speech; instrumental techniques for speech analysis.
Prerequisite: LIN228H1
This is a Science course

**JAL328H1 Writing Systems [26L]**
Introduction to writing systems: their historical development, their relationship to language, and their role in culture and society. (Given by the Departments of Anthropology and Linguistics)
Prerequisite: ANT100Y1/LIN100Y1/200H1
This is a Social Science course

**LIN331H1 Syntactic Theory [39L]**
An introduction to the foundations and formal framework of current generative grammar, concentrating on Chomsky's Minimalist theory. (Students who want to pursue graduate studies in linguistics are strongly advised to include this course in their program.)
Prerequisite: LIN232H1
This is a Humanities course

**LIN333H1 Morphological Patterns in Language (formerly LIN231H1) [26L, 13T]**
The nature and organization of morphological systems, with practical work in analysis.
Prerequisite:LIN229H1, 232H1
Exclusion: LIN231H1
This is a Humanities course

**LIN341H1 Semantic Theory [39L]**
The study of natural language semantics and the relation between interpretation and syntactic structure. Topics include predication and quantification, scope and anaphora, problems of discourse analysis, the interpretation of different types of pronouns, and ellipsis.
Prerequisite:LIN241H1
This is a Humanities course

**LIN351H1 Sociolinguistic Patterns in Language (formerly LIN256H1) [26L, 13T]**
An introduction to linguistic variation and its social implications, especially the quantitative study of phonological and grammatical features and their correlations with age, sex, ethnicity, and other social variables.
Prerequisite: LIN100Y1
Exclusion: LIN256H1
This is a Humanities or Social Science course.

**JAL355H1 Language and Gender [26L]**
Ways in which women and men differ in their use of language and in their behaviour in conversational interaction; ways in which language reflects cultural beliefs about women and men. (Given by the Departments of Anthropology and Linguistics)
Prerequisite: Two full course equivalents at the 200-level in LIN/ANT/JAL/SOC
Recommended preparation: ANT204Y1/JAL253H1/254H1/NEW261Y1/SOC200Y1/ 202Y1/214Y1/215Y1
This is a Social Science course

**LIN362H1 Historical Linguistics [39L]**
An introduction to diachronic linguistics. Theories of language change; the comparative method, internal reconstruction, linguistic geography, the origin of languages; language death. (Not offered every year)
Prerequisite: LIN229H1
This is a Humanities course

**JLP374H1 Psychology of Language [39L]**
Experimental approaches to the comprehension and production of languages. Topics include perception of speech sounds, storage and retrieval of words from the mental lexicon, processing of grammatical information, discourse comprehension and memory, models of language production, and the role of cognitive and perceptual systems. (Given by the Departments of Linguistics and Psychology)
Prerequisite: One full course equivalent at the 200-level in LIN/JAL/JUP/PSY/PSL/UNI Cognitive Science
This is a Science course

**LIN398H0 Independent Experiential Study Project**

**LIN399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**JAL401H1 Field Linguistics [52P]**
Practice in language analysis based on elicited data from a native speaker of a foreign language, emphasizing procedures and techniques. (Given by the Departments of Anthropology and Linguistics) (Students who want to pursue graduate studies in linguistics are strongly advised to include this course in their program.)
Prerequisite: Completion of 322H1, 331H1, except for students in their final year where LIN331H/332H1 is a corequisite.
This is a Social Science course

**LIN409H1 Structure of a Specific Language [26L]**
Topics may include: the phonological, morphological, syntactic, and semantic systems; the writing system; a brief diachronic sketch; variation and sociolinguistic aspects. (Not offered every year).
Prerequisite: LIN228H1, 229H1, 232H1 + 1 FCE at the 300+ level in LIN/JAL/JFL/JLP/JLS

**LIN423H1 Phonetic Analysis [26L]**
Theoretical discussion of the acoustic correlates of various types of sounds found in language. Practical experience in the acoustic analysis of speech. (Not offered every year)
Prerequisite: LIN323H1
This is a Humanities course

**LIN432H1 Advanced Morphology [39L]**
Current research involving morphology, including the role of morphology in the grammar, the nature of inflectional paradigms, affixes affecting grammatical relations. Each year one topic will be a special focus and will be dealt with at length. (Not offered every year)
Prerequisite: LIN333H1/231H1
Co-requisite: LIN331H1

This is a Humanities course

**LIN451H1 Urban Dialectology [26L]**
Ways in which urban sub-cultures differ in their use of language. How speakers' dialects reflect their ethnicity, group affiliation, and other social categories. Practice in dialect analysis based on data from the speech community, emphasizing procedures and techniques.
Prerequisite: LIN351H1/256H1 plus 2 FCE at the 200+ level in LIN/JAL/JLP
This is a Humanities or Social Science course.

**LIN456H1 Language Variation and Change: Theory and Analysis (formerly LIN356H1) [39L]**
The theory and practice of sociolinguistics. The inter-relationship between language and society from the perspective of collecting, organizing, and analyzing patterns in natural speech data, including field methods and quantitative methods for correlating linguistic and social variables.
Prerequisite: LIN351H1/ LIN256H1
Exclusion: LIN356H1
This is a Humanities or Social Science course

**LIN458H1 Revitalizing Languages [26L]**
A study of language endangerment and language revitalization efforts, focusing on Aboriginal languages of Canada. Topics include language classification and a survey of major features of the languages, what it means for a language to be endangered, the factors that contribute to language shift, and efforts to reverse language shift, including discussion of literacy and dictionaries.
Prerequisites: LIN100Y1Y plus 2 FCE at the 200+ level in LIN/JAL
This is a Humanities or Social Science course.

**JLP471H1 Advanced Psycholinguistics [39L]**
Seminar in advanced topics in psycholinguistics. Content will vary from year to year. (Given by the Departments of Linguistics and Psychology) (Not offered every year)
Prerequisite:JLP374H1, LIN322H1/331H1/333H1/341H1
This is a Science course

**JLS474H1 Disorders of Speech and Language [39L]**
Normal and deviant development of speech and language; a survey of the disorders of human communication; an overview of intervention for disorders of speech, voice, language, swallowing and hearing; the effects of human communication handicaps on the individual, family, and community; theoretical and philosophical aspects of disordered communication. (Given by the Departments of Linguistics and Speech Pathology)
Prerequisite: JLP315H1/374H1
This is a Science course

**JFL477H1 Issues in French and Linguistics I [26S]**
An advanced seminar on issues of current theoretical relevance in linguistics with special reference to French. This course is taught in English. (Not offered every year).
Prerequisite: Any 300+series FRE or LIN course

**JFL478H1 Issues in French and Linguistics II [26S]**
An advanced seminar on issues of current theoretical relevance in linguistics with special reference to French. This course is taught in English. (Not offered every year).
Prerequisite: Any 300+series FRE or LIN course

**LIN479H1 Current Issues in Linguistics [26S]**
An advanced seminar in current issues of theoretical relevance.
Prerequisite: LIN228H1, 229H1, 241H1, 232H1 + 1 FCE at the 300+ level in LIN/JAL/JFL/JLP/JLS
This is a Humanities course

**LIN481H1 Introduction to Analysis and Argumentation [39L]**
Argumentation, practice in constructing and evaluating hypotheses, and critical evaluation of representative articles. Emphasis on the structure of arguments rather than on the analysis of a particular language.
Prerequisite: LIN322H1/331H1
This is a Humanities course

**LIN495Y1 Individual Project [TBA]**

**LIN497Y1 Individual Project [TBA]**
A research or reading project undertaken by the student under the supervision of a staff member. Open only when a faculty member is willing and available to supervise.
Prerequisite: Permission of the Department

**LIN496H1 Individual Project [TBA]**

**LIN498H1 Individual Project [TBA]**

**LIN499H1 Individual Project [TBA]**
A research or reading project undertaken by the student under the supervision of a staff member. Open only when a faculty member is willing and available to supervise.
Prerequisite: Permission of the Department

## Literary Studies: see Victoria College

## Macedonian: See Slavic Languages and Literatures

# Materials Science

## A Collaborative Program of the Faculty of Arts & Science and the Faculty of Applied Science & Engineering

Materials science is the study of the structure, properties and applications of all types of materials including metals, ceramics, glasses and polymers. Currently many exciting scientific developments are in the materials field. Notable advances have been made recently in studies of amorphous metals, the quasicrystalline state, liquid crystals, semiconductors, nanostructured materials, high critical temperature superconductors, biomaterials, high strength polymers, materials processing techniques such as ion implantation and laser melting, and in new categories of engineered materials such as advanced industrial ceramics or composite materials.

Materials science is interdisciplinary, drawing on the basic sciences of chemistry and physics and on more applied subjects such as metallurgy, ceramics and polymer science. Its tools and techniques include electron microscopy, x-ray diffraction, surface analysis using Auger emission spectroscopy, x-ray photoelectron spectroscopy, etc.

Applied Science: Materials, MSE 101H1, is designed to appeal to a wide variety of student interests. Other materials science courses are available to students having the prescribed prerequisites and the approval of the Undergraduate Student Counsellor. The specialist program in Materials Science is coordinated jointly by the Departments of Chemistry and Materials Science and Engineering. For further information on the program, consult the coordinators listed in the Materials Science Program section below. For further information on materials courses from the Faculty of Applied Science and Engineering, consult the Undergraduate Student Counsellor.

Undergraduate Counsellor: Professor U. Erb, Department of Materials Science and Engineering Science, Wallberg Building, Room 140 (416-978-7308)

## Materials Science Programs

### Materials Science (Science program)

Consult Professor Eugenia Kumacheva, Department of Chemistry and Professor U. Erb, Department of Metallurgy and Materials Science.

Enrolment in this program requires completion of four courses; no minimum GPA required.

This program draws both on the basic sciences of chemistry and physics, and on the more applied areas such as metallurgy or ceramics. Courses dealing with these latter fields are offered through the Department of Materials Science in the Faculty of Applied Science and Engineering. This would be an appropriate program for students with career interests in solid state, polymer or composite materials industries, or for graduate work in either chemistry or materials science, with an appropriate choice of options. Students may follow the Materials Chemistry stream by taking research course CHM 499Y1 or the Materials Science and Engineering stream by taking research course MSE 498Y1.

**Specialist program:**
(14 full courses or their equivalent, including at least one 400-series course)

First Year:
BIO 150Y1, CHM 151Y1/(138H1, 139H1); MAT 135Y1/137Y1; PHY 138Y1/140Y1/(131H1, 132H1)/(151H1, 152H1)
Second Year:
1. MSE 101H1
2. CHM (220H1, 221H1)/225Y1, 238Y1, 247H1/249H1
3. MSE 219H1, 235H1

Third and Fourth Years:
1. CHM 325H1, 327H1, 338H1, 343H1/348H1, 426H1, 434H1
2. At least two of the following: MSE 316H1, 318H1, (342H1, 343H1), 351H1
3. At least two of the following: MSE 430H1, 440H1, 459H1, 461H1, 550H1
4. Materials Chemistry Stream:
   CHM 499Y1: Introduction to Chemistry Research. Students wishing to enrol in CHM 499Y1 in the fields of inorganic or inorganic materials chemistry must enrol in CHM 438H1 as a co-requisite
   Materials Science and Engineering Stream:
   MSE 498Y1: Design & Research Project

## Materials Science Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all MSE courses are classified as Science courses.

Notes

1. The MSE courses below are administered by the Faculty of Applied Science and Engineering, and are subject to the rules and regulations of that Faculty, including those for term dates and examination periods.

2. The CHM courses listed for the Materials Science program are described in the Chemistry section of this Calendar.

**MSE101H1 Introduction to Materials Science [39L, 13P, 13T]**
This is an introductory course in materials science examining the fundamentals of atomic structure, the nature of bonding in materials, crystal structure and defects, and phase equilibria. These basic principles provide the foundation for an exploration of structure-property relationships in metals, ceramics, and polymers, with emphasis on mechanical properties. The properties of materials then form the basis for an introduction to materials selection in design.
Prerequisite: OAC/Grade 12 U Chemistry, Physics, and Calculus

**MSE219H1 Structure and Characterization of Materials [39L, 20P, 13T]**
Both the theoretical and experimental interpretation of the structure and chemistry of inorganic materials on various length scales will be examined. Crystalline and amorphous structure is discussed in terms of electronic structure of atoms, atomic bonding, atomic coordination and packing. Extended defects in crystalline solids will be covered. Experimental techniques for characterizing materials structure and chemistry will be described including: optical and electron microscopy, x-ray diffraction, scanning probe microscopy, Auger electron spectroscopy, x-ray photoelectron spectroscopy and secondary ion mass spectrometry.

**MSE235H1 Materials Physics [39L, 13T]**
Application of solid state physics to describe properties of materials. Thermal properties of solids: lattice vibrations (phonons), heat capacity, thermal conductivity. Electrical properties of metals: simple circuits, resistivity of metals (classical and quantum descriptions), Seebeck, Peltier, and Thomson effects. Electrical properties of semiconductors: band structure and occupancy, conductivity, Hall effect, simple devices. Electrical properties of insulators: polarization, capacitance, optical properties, ferroelectric and piezoelectric materials. Magnetic properties: diamagnetism and paramagnetism, ferromagnetic and ferrimagnetic materials, magnetic domains, B-H curves.

**MSE316H1 Mechanical Behaviour of Materials [39L, 20P, 13T]**
The mechanical behaviour of engineering materials including metals, alloys, ceramics and polymeric materials. The following topics will be discussed: macro- and micro-structural response of materials to external loads; load-displacement and stress-strain relationships, processes and mechanisms of elastic, visco-elastic, plastic and creep deformation, crystallographic aspects of plastic flow, effect of defects on mechanical behaviour, strain hardening theory, strengthening mechanisms and mechanical testing.

**MSE318H1 Phase Transformations [39L, 20P, 13T]**
Thermodynamics and phase stability. Free energy diagrams. Phase transformations in unary systems: primary crystallization, amorphization, crystallization of amorphous materials, recrystallization. Phase transformations in binary systems: solidification, precipitation from solid solution, binary invariant reactions. Diffusional transformations, nucleation and growth, diffusionless or martensitic transformations. Second order transformations. Spinodal, massive and order-disorder transformations. Influence of phase transformations on microstructure and properties.

**MSE342H1 Nanomaterials [19L, 12T]**
An introduction to nanostructured materials. Topics include: the different classes of nanomaterials, synthesis and characterization methods, changes in physical properties on the nanometer scale, areas of application of nanostructured materials and materials issues in nanotechnology. (Half term course taught during last 6 weeks of term, worth 0.25 credits).

**MSE343H1 Biomaterials [19L, 12T]**
The course will provide an overview of the applications of materials (metals, polymers, ceramics, composites and modified tissue-based materials) for surgical implant fabrication. The important considerations in selection of materials for fabrication of these devices with an introduction to the biological responses expected with implantation will also be discussed. The concept of biocompatibility will be introduced as well as the essential elements of biology related to an understanding of this criterion for biomaterial selection and implant design. (Half term course taught during first 6 weeks of term, worth 0.25 credits).

**MSE351H1 Design and Simulation of Materials Processes [26L, 26P, 13T]**
Various phenomena involved in materials processing and design will be modeled using a software package based on the finite element method. Examples will include aspects of solid state diffusion, structural stress, heat transfer, fluid flow and chemical reactions. The problems will involve unsteady state as well as 3 dimensional systems. Multi-physics phenomena such as heating of an electric component by an electric current, resulting in a change in physical properties affecting thermal properties will also be introduced. The main objective of this course is to introduce students to the use of a commercial software package to solve fairly common but complex physical and chemical phenomena related to the materials industry.

**MSE430H1 Electronic Materials [26L, 13T]**
Materials parameters and electronic properties of semiconductors are discussed as basic factors in the engineering of semiconductor devices. Materials parameters are related to preparation and processing methods, and thus to the electronic properties. The implications of materials parameters and properties on selected simple devices are discussed.

**MSE440H1 Biomaterial Processing and Properties [39L, 13T]**
Currently used biomaterials for formation of surgical implants and dental restorations include selected metals, polymers, ceramics, and composites. The selection and processing of these materials to satisfy biocompatibility and functional requirements for applications in selected areas will be presented. Materials used for forming scaffolds for tissue engineering, and strategies for repair, regeneration and augmentation of degenerated or traumatized tissues will be reviewed with a focus on biocompatibility issues and required functionality for the intended applications.

**MSE459H1 Synthesis of Nanostructured Materials [39L, 26P]**
Various synthesis techniques to produce nanostructured materials will be introduced. These include methods involving the vapor phase (physical and chemical vapor deposition, organometallic chemical vapor deposition), the liquid phase (rapid solidification, spark erosion), the solid phase, (mechanical attrition, equal channel deformation) as well techniques producing these structures from solution (electrodeposition, electroless processing, precipitation). Secondary processing techniques to produce final products or devices will also be discussed.

**MSE461H1 Engineered Ceramics [39L, 26P]**
A new class of engineering materials has been developed within the last twenty years - advanced structural ceramics. Due to the unique combinations of physical and thermomechanical properties exhibited by these materials, they are being increasingly employed for applications ranging from heat engine components to high speed machining tools to surgical implants. This course will cover the processes used in the fabrication of advanced ceramics and their low and high temperature mechanical performance. Emphasis will be placed on the relationships between processing microstructure, and the mechanical properties. The materials covered will include Al203, Si3N4, SiC, transformation toughened ZrO2, and whisker and fiber reinforced ceramic matrix composites.

**MSE498Y1 Design and Research Project [156P]**
An experimental research topic in materials science and engineering involving original work normally related closely to the current research of a departmental staff member. The final grade is based on two oral presentations, a progress report on the Fall Term work, a poster presentation and a written dissertation.
Exclusion: CHM499Y1/MSE490H1
Prerequisite: permission of the Department

**MSE550H1 Advanced Physical Properties of Structural Nanomaterials [39L, 26P, 13T]**

This course deals with the physical properties of bulk nanostructured materials. Included are mechanical properties (elastic behavior, tensile and compressive strength, creep, wear and fatigue properties) electrical properties (electrical transport phenomena, electrical resistivity) magnetic properties (paramagnetic, diamagnetic, soft and hard ferromagnetic, superparamagnetic and antiferromagnetic properties), thermodynamic properties (interfacial enthalpy, thermal stability, phase transformations, heat capacity). The considerable differences observed for nanocrystalline solids compared to conventional polycrystalline and amorphous solids will be discussed in terms of the microstructural differences for these materials (pre-requisite: MSE459H1F).

## Faculty

### Professors Emeriti

M.A. Akcoglu, M Sc, Ph D, FRSC
E.J. Barbeau, MA, Ph D (U)
B. Brainerd, MS, Ph D
H.C. Davis, MA, Ph D (N)
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L.T. Gardner, MA, Ph D (U)
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F.A. Sherk, M Sc, Ph D (U)
S.H. Smith, B Sc, Ph D

### Professor and Chair of the Department

J. Bland, M Sc, Ph D

### Professor and Associate Chair

R, McCann, B Sc, Ph D

### Professor and Associate Chair

R. Jerrard, M Sc, Ph D (U)

### University Professors

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J. Friedlander, MA, Ph D, FRSC (UTSC)
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### Professors

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### Associate Professors

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K. Hori, B Sc, Ph D
K. Kaveh, B Sc, Ph D
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B. Szegedy, B Sc, Ph D
B. Virag, BA, Ph D (UTSC)

### Senior Lecturers

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D. Burbulla, B Sc, B Ed, MA
A. Igelfeld, M Sc (W)
A. Lam, M Sc
F. Recio, M Sc, Ph D

### Lecturers

S. Homayouni, B Sc, Ph D
E.A.P. LeBlanc, MA, Ph D
S. Uppal, M Sc

### Tutors

P. Kergin, M Sc, Ph D
J. Tate, B Sc, B Ed

Mathematics teaches you to think, analytically and creatively. It is a foundation for advanced careers in a knowledge-based economy. Students who develop strong backgrounds in

mathematics often have distinct advantages in other fields such as physics, computer science, economics, and finance.

The past century has been remarkable for discovery in mathematics. From space and number to stability and chaos, mathematical ideas evolve in the domain of pure thought. But the relationship between abstract thought and the real world is itself a source of mathematical inspiration. Problems in computer science, economics and physics have opened new fields of mathematical inquiry. And discoveries at the most abstract level lead to breakthroughs in applied areas, sometimes long afterwards.

The University of Toronto has the top mathematics department in Canada, and hosts the nearby Fields Institute (an international centre for research in mathematics. The Department offers students excellent opportunities to study the subject and glimpse current research frontiers. The Department offers three mathematical Specialist programs - Mathematics, Applied Mathematics, Mathematics and its Applications - as well as Major and Minor programs and several joint Specialist programs with other disciplines (for example, with Computer Science, Economics, Philosophy, Physics and Statistics.

The Specialist program in Mathematics is for students who want a deep knowledge of the subject. This program has been the main training-ground for Canadian mathematicians. A large proportion of our Mathematics Specialist graduates gain admission to the world's best graduate schools.

The Specialist program in Applied Mathematics is for students interested in the fundamental ideas in areas of mathematics that are directed towards applications. The mathematics course requirements in the first two years are the same as in the Mathematics Specialist program; a strong student can take the courses needed to get a degree in both Specialist programs.

These programs are challenging, but small classes with excellent professors and highly-motivated students provide a stimulating and friendly learning environment.

The Specialist program in Mathematics and its Applications is recommended to students with strong interests in mathematics and with career goals in areas such as teaching, computer science, the physical sciences and finance. The program is flexible; there is a core of courses in mathematics and related disciplines, but you can choose among several areas of concentration. The mathematics courses required for the program are essentially the same as those required for a Major in Mathematics. (They are less intense than the courses required for the Specialist programs above.) If you are interested in mathematics and are contemplating a double Major in Mathematics and in another discipline (let us take Computer Science, as an example), you should consider the advantages of fulfilling the requirements for a Specialist degree in Mathematics and its Applications with a computer science concentration. In this way, you can also get a Major in Computer Science; the difference in course requirements with a double major is that, among the courses you can choose for a Computer Science Major, you will be required to take some of a more mathematical nature. You might even consider choosing your options to fulfil the requirements for a double Specialist degree, in both Mathematics and its Applications and in the other discipline.

The Professional Experience Year program ("PEY": see index) is available to eligible, full-time Specialist students after their second year of study. The PEY program is an optional 16 month work term providing industrial experience; its length often allows students to have the rewarding experience of initiating and completing a major project.

The Department operates a non-credit summer course, PUMP, limited to students admitted to the University. It is designed for students who require additional pre-university mathematics background. Details can be found at www.math.utoronto.ca/pump

Associate Chair for Undergraduate Studies: Professor R. Jerrard, Bahen Building, 40 George Street, Room 6236

Student Counselling: Bahen Building, Room 6166

Mathematics Aid Centres: Sidney Smith Hall, Room 1071; University College, Room UC48

Departmental Office: Bahen Building, Room 6290 (416-978-3323)

## Mathematics Programs

Enrolment in the Mathematics programs requires completion of four courses; no minimum GPA is required.

### Applied Mathematics (Science program)

Consult Professor R. Jerrard, Associate Chair, Department of Mathematics

**Specialist program:**
(13 full courses or their equivalent, including at least one 400-series course)

First Year:
MAT 157Y1, 240H1, 247H1, CSC148H1/150H1
Second Year:
MAT257Y1, 267H1; CSC260H1; STA 257H1
Third and Fourth Years:

1. APM 351Y1; MAT 327H1, 354H1, 347Y1, 357H1, 363H1; STA347H1
2. At least 2 full courses chosen from: MAT344H1, 454H1, 457Y1, 464H1, 477H1; STA302H1, 352Y1, 438H1, 457H1; CSC350H1, 351H1, 446H1, 456H1
3. Three courses from: APM421H1, 426H1, 461H1, 462H1,466H1
   NOTE: The Department recommends that PHY 140Y1 be taken in First Year. If you do not have a year course in programming from high school, the Department strongly recommends that you take CSC107H1/108H1 before attempting CSC148H1/150H1.

### Mathematics (Science program)

Consult Professor R. Jerrard, Associate Chair, Department of Mathematics

**Specialist program:**
(11.5 full courses or their equivalent, including at least one 400-series course)

First Year:
MAT 157Y1, 240H1, 247H1
Second Year:
MAT 257Y1, 267H1
Third and Fourth Years:
1. MAT 327H1, 347Y1, 354H1, 357H1, 477H1
2. One of: APM 351Y1, MAT 457Y1
3. Three of: APM 461H1, MAT 309H1, 363H1 415H1/417H1, 454H1
4. At least 2.5 APM/MAT including at least 1.5 at the 400-level (these may include options above not already chosen)

NOTE: The Department recommends that PHY 140Y1 be taken in First Year, that CSC 148H1/150H1/260H1 and STA 257H1 be taken during the program. If you do not have a year course in programming from high school, the Department strongly recommends that you take CSC107H1/108H1 before attempting CSC148H1/150H1.

### Major program:
(7 full courses or their equivalent)

First Year:
MAT 135Y1/136Y1/137Y1, 223H1
Second Year:
MAT 224H1/247H1, 235Y1/237Y1, 246H1/(CSC 236H1/240H1, PHL 245H1), MAT 244H1
NOTE:
MAT 224H1 may be taken in first year
Higher Years:
1. MAT 301H1, 334H1, PHL245H1
2. One half course or equivalent at the 200+level from: ACT, APM, MAT, STA
3. MAT401H1/402H1; one half course at 300+level from: at least APM, MAT, HPS390H1, 391H1, PSL431H1, 432H1, 433H1; PHL346H1, 349H1

### Minor program:
(4 full courses or their equivalent)

1. MAT 135Y1/136Y1/137Y1, 235Y1/237Y1, 223H1,224H1/244H1/APM236H1
2. One 300+-level full course or combination from: APM, MAT, including HPS 390H1, 391H1, PSL 431H1, 432H1, 433H1

**Note: in all programs, higher kevels courses within the same topic are acceptable substitutions.**

### Mathematics and Its Applications (Science program)

### Specialist program:
(10.5 - 11.5 full courses or their equivalent, including one full course at 400-level)

The program requirements are the core courses below, together with the courses in one of the following areas of concentration. If you get a specialist degree in Mathematics and its Applications, your transcript and degree will indicate also your area of concentration. Please be careful to check course prerequisites in choosing your program.

**Core Courses:**
First Year:
CSC 107H1/108H1, MAT 135Y1/136Y1/137Y1/157Y1 (MAT 137Y1 strongly recommended), 223H1/240H1
Second Year:
MAT 224H1/247H1, 235Y1/237Y1/257Y1 (MAT 237Y1 strongly recommended), MAT 246H1(waived for students taking MAT 257Y1), MAT244H1/267H1, STA257H1
Higher Years:
MAT 301H1, 334H1

### Areas of Concentration

**Teaching Concentration:**
It may be to students' advantage to keep in mind that OISE requires students to have a second teachable subject.
1. MAT329Y1, HPS/MAT390H1, HPS/MAT391H1, MAT401H1/402H1
2. Two of :MAT 309H1, 315H1, 335H1, 337H1, 344H1, 363H1
3. Two half courses at 300+ level from APM, STA

This program addresses an increasing need for highly qualified mathematics teachers. Students planning to apply for admission to a B.Ed. program are encouraged also to get practical teaching experience at a level of their interests. Students successfully completing the Teaching Concentration and having practical experience will be highly competitive for admission to initial teaching programs at OISE/UT.

**Computer Science Concentration:**
1. CSC207H1,165H1, 258H1, 209H1;MAT344H1
2. Three of :APM 461H1; CSC 350H1, 351H1, 354H1, 363H1, 378H1, 438H1, 446H1, 456H1, 465H1, 487H1
3. Two CSC half courses at 300+level.

NOTE: In order to take the Computer Science concentration, you will be required to register also for a Computer Science Major. (The latter is a restricted enrolment program and has certain admission requirements; please see the Computer Science program description.)

**Physical Sciences Concentration:**
1. PHY 140Y1 (in first year); APM 346H1/351Y1; AST 221H1, 222H1
2. Two of PHY 251H1, 252H1, 255H1, 256H1
3. Two of APM 421H1, 436H1, 441H1, 446H1; AST 320H1, 325H1; MAT 337H1; PHY 307H1, 309H1, 315H1, 351H1, 352H1, 353H1, 355H1, 357H1, 358H1

**Probability/Statistics Concentration:**
1. CSC 260H1/207H1, 350H1; APM 346H1/351Y1/462H1; MAT 337H1; STA 302H1, 347H1, 352Y1
2. Two of: STA 422H1, 437H1, 438H1, 442H1, 447H1, 457H1

**Design-Your-Own Concentration:**
Nine half-courses of which at least six must be at the 300+level, to be approved by the Department no later than the beginning of your third year.

### Mathematical Applications in Economics and Finance (Science Program)

Consult Professor R. Jerrard, Associate Chair, Department of Mathematics

**Specialist program:**
(11.5-12 full courses or their equivalent including one full course at the 400-level)

Firtst Year:
ECO100Y1, MAT137Y1, 223H1, 224H1

Second Year:

ECO206Y1, MAT237Y, 244H1, STA257H1, 261H1

Higher Years:

APM346H1, APM462H1, 466H1, ECO358H1, MAT337H1, STA302H1/ECO327Y1, STA347H1, STA457H1

Two of: ECO359H1, MAT315H1, 334H1

### Mathematics and Computer Science: see Computer Science

### Mathematics and Economics: see Economics

### Mathematics and Philosophy (Science program)

Consult the Undergraduate Coordinators of the Departments of Mathematics and Philosophy.

**Specialist program:**
(13 full courses or their equivalent including one full course at the 400-level)

First Year:
MAT 157Y1, 240H1, 247H1; PHL245H1
Higher Years:
1. PHL245H1 (if not taken in First Year)
2. MAT 257Y1, 327H1, 347Y1, 354H1/357H1
3. PHL346H1/349H1, MAT309H1/PHL344H1/345H1
4. Four of: PHL 246H1, 346H1, 347H1, 349H1, 480H1
5. One course in epistemology and/or philosophy of science
6. 3.5 additional PHL courses, preferably including two in the history of philosophy and one in ethics or social/political philosophy

### Mathematics and Physics(Science program)

Consult Professor R. Jerrard, Associate Chair, Department of Mathematics, and the Associate Chair, Department of Physics.

**Specialist program:**
(13.5 full courses or their equivalent, including at least one 400-series course)

First Year:
MAT 157Y1, 240H1, 247H1; PHY 140Y1
Second Year:
MAT 257Y1, 267H1; PHY 225H1, 251H1, 252H1, 255H1, 256H1
Third Year:
APM 351Y1, MAT 327H1, 354H1, 357H1, 363H1; PHY 351H1, 352H1, 355H1
Fourth Year:
APM 421H1, 426H1; PHY 457H1; APM 446H1/PHY 459H1/460H1

### Mathematics and Statistics: see Statistics

## Applied Mathematics Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all APM courses are classified as Science courses (see page 26).

**APM236H1 Applications of Linear Programming [39L]**
Introduction to linear programming including a rapid review of linear algebra (row reduction, linear independence), the simplex method, the duality theorem, complementary slackness, and the dual simplex method. A selection of the following topics are covered: the revised simplex method, sensitivity analysis, integer programming, the transportation algorithm.
Prerequisite: MAT223H1/240H1 (Note: no waivers of prerequisites will be granted)

**APM346H1 Partial Differential Equations [39L]**
Sturm-Liouville problems, Green's functions, special functions (Bessel, Legendre), partial differential equations of second order, separation of variables, integral equations, Fourier transform, stationary phase method.
Prerequisite: MAT235Y1/237Y1/257Y1, 244H1

**APM351Y1 Partial Differential Equations [78L]**
Diffusion and wave equations. Separation of variables. Fourier series. Laplace's equation; Green's function. Schrödinger equations. Boundary problems in plane and space. General eigenvalue problems; minimum principle for eigenvalues. Distributions and Fourier transforms. Laplace transforms. Differential equations of physics (electromagnetism, fluids, acoustic waves, scattering). Introduction to nonlinear equations (shock waves, solitary waves).
Prerequisite: MAT267H1
Co-requisite: MAT334H1/354H1

### 400-SERIES COURSES

**Note:**
Some courses at the 400-level are cross-listed as graduate courses and may not be offered every year. Please see the Department's undergraduate brochure for more details.

**APM421H1 Mathematical Foundations of Quantum [39L]**
The general formulation of non-relativistic quantum mechanics based on the theory of linear operators in a Hilbert space, self-adjoint operators, spectral measures and the statistical interpretation of quantum mechanics; functions of compatible observables. Schrödinger and Heisenberg pictures, complete sets of observables, representations of the canonical commutative relations; essential self-adjointedness of Schrödinger operators, density operators, elements of scattering theory.
Prerequisite: (MAT224H1, 337H1)/357H1

**APM426H1 General Relativity [39L]**
Einstein's theory of gravity. Special relativity and the geometry of Lorentz manifolds. Gravity as a manifestation of spacetime curvature. Einstein's equations. Cosmological implications: big bang and inflationary universe. Schwarzschild stars: bending of light and perihelion precession of Mercury. Topics from black hole dynamics and gravity waves.
Prerequisite: MAT363H1

**APM436H1 Fluid Mechanics [39L]**
Boltzmann, Euler and Navier-Stokes equations. Viscous and non-viscous flow. Vorticity. Exact solutions. Boundary layers. Wave propagation. Analysis of one dimensional gas flow.
Prerequisite: APM351Y1

**APM441H1 Asymptotic and Perturbation Methods [39L]**
Asymptotic series. Asymptotic methods for integrals: stationary phase and steepest descent. Regular perturbations for algebraic and differential equations. Singular perturbation methods for ordinary differential equations: W.K.B., strained co-ordinates, matched asymptotics, multiple scales. (Emphasizes techniques; problems drawn from physics and engineering)
Prerequisite: APM346H1/351Y1, MAT334H1

**APM446H1 Applied Nonlinear Equations [39L]**
Nonlinear partial differential equations and their physical origin. Fourier transform; Green's function; variational methods; symmetries and conservation laws. Special solutions (steady states, solitary waves, travelling waves, self-similar solutions). Calculus of maps; bifurcations; stability, dynamics near equilibrium. Propagation of nonlinear waves; dispersion, modulation, optical bistability. Global behaviour solutions; asymptotics and blow-up.
Prerequisite: APM346H1/351Y1

**APM461H1 Combinatorial Methods [39L]**
A selection of topics from such areas as graph theory, combinatorial algorithms, enumeration, construction of combinatorial identities.
Prerequisite: MAT224H1
Recommended preparation: MAT344H1

**APM462H1 Nonlinear Optimization [39L] (formerly APM362H1)**
An introduction to first and second order conditions for finite and infinite dimensional optimization problems with mention of available software. Topics include Lagrange multipliers, Kuhn-Tucker conditions, convexity and calculus variations. Basic numerical search methods and software packages which implement them will be discussed.
Prerequisite: MAT223H1, 235Y1

**APM466H1 Mathematical Theory of Finance [39L]**
Introduction to the basic mathematical techniques in pricing theory and risk management: Stochastic calculus, single-period finance, financial derivatives (tree-approximation and Black-Scholes model for equity derivatives, American derivatives, numerical methods, lattice models for interest-rate derivatives), value at risk, credit risk, portfolio theory.
Prerequisite: APM346H1, STA347H1
Co-requisite: STA457H1

**APM496H1/ 497H1/498Y1/499Y1 Readings in Applied Mathematics TBA**
Independent study under the direction of a faculty member. Topic must be outside undergraduate offerings.
Prerequisite: minimum GPA 3.5 for math courses. Permission of the Associate Chair for Undergraduate Studies and prospective supervisor

## Mathematics Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all MAT courses except MAT 123H1, 124H1 and 133Y1 are classified as SCIENCE courses (see page 26).

High school prerequisites for students coming from outside the Ontario high school system:

MAT133Y1: high school level calculus and (algebra-geometry or finite math or discrete math)

MAT135Y1: high school level calculus

MAT137Y1: high school level calculus and algebra-geometry

MAT157Y1: high school level calculus and algebra-geometry

MAT223H1: high school level calculus and algebra-geometry

**SCI199H1 First Year Seminar 26S**

**SCI199Y1 First Year Seminar 52S**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**NOTE: Transfer students who have received MAT1**H1 – Calculus with course exclusion to MAT133Y1/135Y1/136Y1 may take MAT137Y1/157Y1 without forfeiting the half credit in Calculus.**

**MAT123H1,124H1**
See below MAT 133Y1

**MAT125H1,126H1**
See below MAT 135Y1

**MAT133Y1 Calculus and Linear Algebra for Commerce [78L, 24T]**
Mathematics of finance. Matrices and linear equations. Review of differential calculus; applications. Integration and fundamental theorem; applications. Introduction to partial differentiation; applications.
NOTE: please note prerequisites listed below. Students without the proper prerequisites for MAT133Y1 may be deregistered from this course.
Exclusion: MAT123H1, 124H1, 125H1, 126H1, 135Y1, 136Y1, 137Y1, 157Y1
Prerequisite: MCB4U,MGA4U/MDM4U
MAT133Y1 counts as a Social Science course

**MAT123H1 Calculus and Linear Algebra for Commerce (A) [39L]**
First term of MAT133Y1. Students in academic difficulty in MAT133Y1 who have written two midterm examinations with a mark of at least 20% in the second may withdraw from MAT133Y1 and enrol in MAT123H1 in the Spring Term. These students are informed of this option by the beginning of the Spring Term. Classes begin in the second week of the Spring Term; late enrolment is not permitted. Students not enrolled in MAT133Y1 in the Fall Term are not allowed to enrol in MAT123H1. MAT123H1 together with MAT124H1 is equivalent for program and prerequisite purposes to MAT133Y1.
Exclusion: MAT125H1, 126H1, 133Y1, 135Y1, 136Y1, 137Y1, 157Y1

NOTE: students who enrol in MAT133Y1 after completing MAT123H1 but not MAT124H1 do not receive degree credit for MAT133Y1; it is counted ONLY as an "Extra Course."
Prerequisite: Enrolment in MAT133Y1, and withdrawal from MAT133Y1 after two midterms, with a mark of at least 20% in the second midterm.
MAT123H1 is a Social Science course

**MAT124H1 Calculus and Linear Algebra for Commerce (B) [39L, 13T]**
Second Term content of MAT133Y1; the final examination includes topics covered in MAT123H1. Offered in the Summer Session only; students not enrolled in MAT123H1 in the preceding Spring Term will NOT be allowed to enrol in MAT124H1. MAT123H1 together with MAT124H1 is equivalent for program and prerequisite purposes to MAT133Y1.
Exclusion: MAT125H1, 126H1, 133Y1, 135Y1, 136Y1, 137Y1, 157Y1
Prerequisite: MAT123H1 successfully completed in the preceding Spring Term
MAT124H1 is a Social Science course

**MAT135Y1 Calculus I [78L, 24T]**
Review of trigonometric functions; trigonometric identities and trigonometric limits. Review of differential calculus; applications. Integration and fundamental theorem; applications. Series. Introduction to differential equations.
Exclusion: MAT123H1, 124H1, 125H1, 126H1, 133Y1, 136Y1, 137Y1, 157Y1
Prerequisite: MCB4U

**MAT125H1 Calculus I (A) [39L]**
First term of MAT135Y1. Students in academic difficulty in MAT135Y1 who have written two midterm examinations with a mark of at least 20% in the second may withdraw from MAT135Y1 and enrol in MAT125H1 in the Spring Term. These students are informed of this option by the beginning of the Spring Term. Classes begin in the second week of the Spring Term; late enrolment is not permitted. Students not enrolled in MAT135Y1 in the Fall Term will not be allowed to enrol in MAT125H1. MAT125H1 together with MAT126H1 is equivalent for program and prerequisite purposes to MAT135Y1.
Exclusion: MAT123H1, 124H1, 133Y1, 135Y1, 136Y1, 137Y1, 157Y1
NOTE: students who enrol in MAT135Y1 after completing MAT125H1 but not MAT126H1 do not receive degree credit for MAT135Y1; it is counted ONLY as an "Extra Course."
Prerequisite: Enrolment in MAT135Y1, and withdrawal from MAT135Y1 after two midterms, with a mark of at least 20% in the second midterm.

**MAT126H1 Calculus I (B) [39L, 13T]**
Second Term content of MAT135Y1; the final examination includes topics covered in MAT125H1. Offered in the Summer Session only; students not enrolled in MAT125H1 in the preceding Spring Term will NOT be allowed to enrol in MAT126H1. MAT125H1 together with MAT126H1 is equivalent for program and prerequisite purposes to MAT135Y1.
Exclusion: MAT123H1, 124H1, 133Y1, 135Y1, 136Y1, 137Y1
Prerequisite: MAT125H1 successfully completed in the preceding Spring Term

**MAT136Y1 Calculus and its Foundations [104L, 52T]**
Limited to out-of-province students interested in the biological, physical, or computer sciences, whose high school mathematics preparation is strong but does not include calculus. Develops the concepts of calculus at the level of MAT135Y1. May include background material on functions, analytic geometry, and trigonometry, as well as on calculus.
Exclusion: MAT123H1, 124H1, 125H1, 126H1, 133Y1, 135Y1, 137Y1, 157Y1
Prerequisite: Solid background in high school mathematics, up to and including Grade 11

**MAT137Y1 Calculus! [78L, 26T]**
A conceptual approach for students with a serious interest in mathematics. Geometric and physical intuition are emphasized but some attention is also given to the theoretical foundations of calculus. Material covers first a review of trigonometric functions followed by discussion of trigonometric identities. The basic concepts of calculus: limits and continuity, the mean value and inverse function theorems, the integral, the fundamental theorem, elementary transcendental functions, Taylor's theorem, sequence and series, uniform convergence and power series.
Exclusions: MAT126H1, 135Y1, 136Y1, 157Y1
Prerequisite: MCB4U,MGA4U

**MAT157Y1 Analysis I [78L, 52T]**
A theoretical course in calculus; emphasizing proofs and techniques, as well as geometric and physical understanding. Trigonometric identities. Limits and continuity; least upper bounds, intermediate and extreme value theorems. Derivatives, mean value and inverse function theorems. Integrals; fundamental theorem; elementary transcendental functions. Taylor's theorem; sequences and series; uniform convergence and power series.
Exclusion: MAT137Y1
Prerequisite: MCB4U, MGA4U

**JMB170Y1 Biology, Models, and Mathematics [52L, 26T]**
Applications of mathematics to biological problems in physiology, biomechanics, genetics, evolution, growth, population dynamics, cell biology, ecology and behaviour.
Co-requisite: BIO150Y1

**JUM202H1 Mathematics as an Interdisciplinary Pursuit (formerly JUM102H1) [26L, 13T]**
A study of the interaction of mathematics with other fields of inquiry: how mathematics influences, and is influenced by, the evolution of science and culture. Art, music, and literature, as well as the more traditionally related areas of the natural and social sciences may be considered. (Offered every three years)
Exclusion: JUM102H1
JUM202H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**JUM203H1 Mathematics as a Recreation (formerly JUM103H1) [26L, 13T]**
A study of games, puzzles and problems focusing on the deeper principles they illustrate. Concentration is on problems arising out of number theory and geometry, with emphasis on the process of mathematical reasoning. Technical requirements are kept to a minimum. A foundation is provided for a continuing lay interest in mathematics. (Offered every three years)
Exclusion: JUM103H1

JUM203H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**JUM205H1 Mathematical Personalities (formerly JUM105H1) [26L, 13T]**
An in-depth study of the life, times and work of several mathematicians who have been particularly influential. Examples may include Newton, Euler, Gauss, Kowalewski, Hilbert, Hardy, Ramanujan, Gödel, Erdös, Coxeter, Grothendieck. (Offered every three years)
Exclusion: JUM105H1
JUM205H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**MAT223H1 Linear Algebra I [39L, 13T]**
Matrix arithmetic and linear systems. $R^n$ subspaces, linear independence, bases, dimension; column spaces, null spaces, rank and dimension formula. Orthogonality orthonormal sets, Gram-Schmidt orthogonalization process; least square approximation. Linear transformations $R^n$—>$R^m$. The determinant, classical adjoint, Cramer's Rule. Eigenvalues, eigenvectors, eigenspaces, diagonalization. Function spaces and application to a system of linear differential equations.
Exclusion: MAT240H1
Prerequisite:MCB4U, MGA4U

**MAT224H1 Linear Algebra II [39L, 13T]**
Abstract vector spaces: subspaces, dimension theory. Linear mappings: kernel, image, dimension theorem, isomorphisms, matrix of linear transformation. Changes of basis, invariant spaces, direct sums, cyclic subspaces, Cayley-Hamilton theorem. Inner product spaces, orthogonal transformations, orthogonal diagonalization, quadratic forms, positive definite matrices. Complex operators: Hermitian, unitary and normal. Spectral theorem. Isometries of $R^2$ and $R^3$.
Exclusion: MAT247H1
Prerequisite: MAT223H1/240H1

**MAT235Y1 Calculus II [78L]**
Differential and integral calculus of functions of several variables. Line and surface integrals, the divergence theorem, Stokes' theorem. Sequences and series, including an introduction to Fourier series. Some partial differential equations of Physics.
Exclusion: MAT237Y1, 257Y1
Prerequisite: MAT135Y1/136Y1/137Y1/157Y1

**MAT237Y1 Multivariable Calculus [78L]**
Sequences and series. Uniform convergence. Convergence of integrals. Elements of topology in $R^2$ and $R^3$. Differential and integral calculus of vector valued functions of a vector variable, with emphasis on vectors in two and three dimensional euclidean space. Extremal problems, Lagrange multipliers, line and surface integrals, vector analysis, Stokes' theorem, Fourier series, calculus of variations.
Exclusion: MAT235Y1, 257Y1
Prerequisite: MAT137Y1/157Y1/135Y1(90%),223H1/240H1

**MAT240H1 Algebra I [39L, 26T]**
A theoretical approach to: vector spaces over arbitrary fields including C,$Z_p$. Subspaces, bases and dimension. Linear transformations, matrices, change of basis, similarity, determinants. Polynomials over a field (including unique factorization, resultants). Eigenvalues, eigenvectors, characteristic polynomial, diagonalization. Minimal polynomial, Cayley-Hamilton theorem.
Prerequisite: MCB4U, MGA4U
Co-requisite: MAT157Y1

**MAT244H1 Introduction to Ordinary Differential Equations [39L]**
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. Applications in life and physical sciences and economics.
Exclusion: MAT267H1
Prerequisite: MAT135Y1/136Y1/137Y1/157Y1, 223H1/240H1
Co-requisite: MAT235Y1/237Y1

**MAT246H1 Concepts in Abstract Mathematics (formerly MAT246Y1) [39L]**
Designed to introduce students to mathematical proofs and abstract mathematical concepts. Topics may include modular arithmetic, sizes of infinite sets, and a proof that some angles cannot be trisected with straightedge and compass.
Exclusion: MAT 157Y1, 246Y1
Prerequisite: MAT133Y1/135Y1/136Y1/137Y1,223H

**MAT247H1 Algebra II [39L, 13T]**
A theoretical approach to real and complex inner product spaces, isometries, orthogonal and unitary matrices and transformations. The adjoint. Hermitian and symmetric transformations. Spectral theorem for symmetric and normal transformations. Polar representation theorem. Primary decomposition theorem. Rational and Jordan canonical forms. Additional topics including dual spaces, quotient spaces, bilinear forms, quadratic surfaces, multilinear algebra. Examples of symmetry groups and linear groups, stochastic matrices, matrix functions.
Prerequisite: MAT240H1
Co-requisite: MAT157Y1

**MAT257Y1 Analysis II [78L, 52T]**
Topology of $R^n$; compactness, functions and continuity, extreme value theorem. Derivatives; inverse and implicit function theorems, maxima and minima, Lagrange multipliers. Integrals; Fubini's theorem, partitions of unity, change of variables. Differential forms. Manifolds in $R^n$; integration on manifolds; Stokes' theorem for differential forms and classical versions.
Prerequisite: MAT157Y1, 240H1, 247H1

**MAT267H1 Advanced Ordinary Differential Equations I [39L, 13T]**
First-order equations. Linear equations and first-order systems. Non-linear first-order systems. Existence and uniqueness theorems for the Cauchy problem. Method of power series. Elementary qualitative theory; stability, phase plane, stationary points. Examples of applications in mechanics, physics, chemistry, biology and economics.
Exclusion: MAT244H1
Prerequisite: MAT157Y1, 247H1
Co-requisite: MAT257Y1

**MAT299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

### 300-Series Courses

**MAT301H1 Groups and Symmetries [39L]**
Congruences and fields. Permutations and permutation groups. Linear groups. Abstract groups, homomorphisms, subgroups. Symmetry groups of regular polygons and Platonic solids, wallpaper groups. Group actions, class formula. Cosets, Lagrange's theorem. Normal subgroups, quotient groups. Classification of finitely generated abelian groups. Emphasis on examples and calculations.
Exclusion: MAT347Y1
Prerequisite: MAT224H1, 235Y1/237Y1

**MAT309H1 Introduction to Mathematical Logic [39L]**
Predicate calculus. Relationship between truth and provability; Gödel's completeness theorem. First order arithmetic as an example of a first-order system. Gödel's incompleteness theorem; outline of its proof. Introduction to recursive functions.
Exclusion: CSC438H1
Prerequisite: MAT223H1/240H1, 235Y1/237Y1/257Y1

**MAT315H1 Introduction to Number Theory [39L]**
Elementary topics in number theory: arithmetic functions; polynomials over the residue classes modulo m, characters on the residue classes modulo m; quadratic reciprocity law, representation of numbers as sums of squares.
Prerequisite: MAT(235Y1/237Y1, 223H1/240H1)/257Y1

**MAT327H1 Introduction to Topology [39L]**
Metric spaces, topological spaces and continuous mappings; separation, compactness, connectedness. Topology of function spaces. Fundamental group and covering spaces. Cell complexes, topological and smooth manifolds, Brouwer fixed-point theorem.
Prerequisite: MAT257Y1/(224H1, 237Y1, 246H1 and permission of the instructor)

**MAT329Y1 Concepts in Elementary Mathematics [78L]**
The formation of mathematical concepts and techniques, and their application to the everyday world. Nature of mathematics and mathematical understanding. Role of observation, conjecture, analysis, structure, critical thinking and logical argument. Numeration, arithmetic, geometry, counting techniques, recursion, algorithms. This course is specifically addressed to students intending to become elementary school teachers and is strongly recommended by the Faculty of Education. Previous experience working with children is useful. The course content is considered in the context of elementary school teaching. In particular, the course may include a practicum in school classrooms. The course has an enrolment limit of 40, and students are required to ballot.
Prerequisite: Any 7 full courses with a CGPA of at least 2.5

**MAT334H1 Complex Variables [39L]**
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.
Exclusion: MAT354H1
Prerequisite: MAT223H1, 235Y1/237Y1

**MAT335H1 Chaos, Fractals and Dynamics [39L]**
An elementary introduction to a modern and fast-developing area of mathematics. One-dimensional dynamics: iterations of quadratic polynomials. Dynamics of linear mappings, attractors. Bifurcation, Henon map, Mandelbrot and Julia sets. History and applications.
Prerequisite: MAT137Y1/200-level calculus, 223H1

**MAT337H1 Introduction to Real Analysis [39L]**
Metric spaces; compactness and connectedness. Sequences and series of functions, power series; modes of convergence. Interchange of limiting processes; differentiation of integrals. Function spaces; Weierstrass approximation; Fourier series. Contraction mappings; existence and uniqueness of solutions of ordinary differential equations. Countability; Cantor set; Hausdorff dimension.
Exclusion: MAT357H1
Prerequisite: MAT224H1, 235Y1/237Y1,246H1

**MAT344H1 Introduction to Combinatorics [39L]**
Basic counting principles, generating functions, permutations with restrictions. Fundamentals of graph theory with algorithms; applications (including network flows). Combinatorial structures including block designs and finite geometries.
Prerequisite: MAT223H1/240H1

**MAT347Y1 Groups, Rings and Fields [78L, 26T]**
Groups, subgroups, quotient groups, Sylow theorems, Jordan-Hölder theorem, finitely generated abelian groups, solvable groups. Rings, ideals, Chinese remainder theorem; Euclidean domains and principal ideal domains: unique factorization. Noetherian rings, Hilbert basis theorem. Finitely generated modules. Field extensions, algebraic closure, straight-edge and compass constructions. Galois theory, including insolvability of the quintic.
Prerequisite: MAT257Y1

**MAT354H1 Complex Analysis I [39L]**
Complex numbers, the complex plane and Riemann sphere, Mobius transformations, elementary functions and their mapping properties, conformal mapping, holomorphic functions, Cauchy's theorem and integral formula. Taylor and Laurent series, maximum modulus principle, Schwarz's lemma, residue theorem and residue calculus.
Prerequisite: MAT257Y1

**MAT357H1 Real Analysis I [39L]**
Function spaces; Arzela-Ascoli theorem, Weierstrass approximation theorem, Fourier series. Introduction to Banach and Hilbert spaces; contraction mapping principle, fundamental existence and uniqueness theorem for ordinary differential equations. Lebesgue integral; convergence theorems, comparison with Riemann integral, Lp spaces. Applications to probability.
Prerequisite: MAT257Y1/(327H1 and permission of instructor)

**MAT363H1 Introduction to Differential Geometry [39L]**
Geometry of curves and surfaces in 3-spaces. Curvature and geodesics. Minimal surfaces. Gauss-Bonnet theorem for surfaces. Surfaces of constant curvature.
Prerequisite: MAT224H1, 237Y1/257Y1

**MAT390H1 History of Mathematics up to 1700 [39L]**
A survey of ancient, medieval, and early modern mathematics with emphasis on historical issues. (Offered in alternate years)
Exclusion: HPS309H1, 310Y1, 390H1
Prerequisite: at least one full MAT 200-level course

**MAT391H1 History of Mathematics after 1700 [26L, 13T]**
A survey of the development of mathematics from 1700 to the present with emphasis on technical development. (Offered in alternate years)
Exclusion: HPS309H1, 310H1, 391H1
Prerequisite: At least one full 200-level MAT course

**MAT393Y1 Independent Work in Mathematics [TBA]**

**MAT394Y1 Independent Work in Mathematics [TBA]**
Independent study under the direction of a faculty member. Topic must be outside undergraduate offerings.
Prerequisite: Minimum GPA of 3.5 in math courses. Permission of the Associate Chair for Undergraduate Studies and prospective supervisor

**MAT395H1 Independent Work in Mathematics [TBA]**

**MAT396H1 Independent Work in Mathematics [TBA]**

**MAT397H1 Independent Work in Mathematics [TBA]**
Independent study under the direction of a faculty member. Topic must be outside undergraduate offerings.
Prerequisite: Minimum GPA of 3.5 in math courses. Permission of the Associate Chair for Undergraduate Studies and prospective supervisor

**MAT398H0 Independent Experiential Study Project**

**MAT399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

## 400-Series Courses

### Note
Some courses at the 400-level are cross-listed as graduate courses and may not be offered every year. Please see the Department's undergraduate brochure for more details.

**MAT401H1 Polynomial Equations and Fields (formerly MAT302H1) [39L]**
Commutative rings; quotient rings. Construction of the rationals. Polynomial algebra. Fields and Galois theory: Field extensions, adjunction of roots of a polynomial. Constructibility, trisection of angles, construction of regular polygons. Galois groups of polynomials, in particular cubics, quartics. Insolvability of quintics by radicals.
Exclusion: MAT347Y1
Prerequisite: MAT224H1, 235Y1/237Y1,246H1/257Y1

**MAT402H1 Classical Geometries (formerly MAT365H1) [39L]**
Euclidean and non-euclidean plane and space geometries. Real and complex projective space. Models of the hyperbolic plane. Connections with the geometry of surfaces.
Prerequisite: MAT301H1

**MAT409H1 Set Theory [39L]**
Set theory and its relations with other branches of mathematics. ZFC axioms. Ordinal and cardinal numbers. Reflection principle. Constructible sets and the continuum hypothesis. Introduction to independence proofs. Topics from large cardinals, infinitary combinatorics and descriptive set theory.
Prerequisite: MAT357H1

**MAT415H1 Topics in Algebraic Number Theory [39L]**
A selection from the following: finite fields; global and local fields; valuation theory; ideals and divisors; differents and discriminants; ramification and inertia; class numbers and units; cyclotomic fields; diophantine equations.
Prerequisite: MAT347Y1 or permission of instructor

**MAT417H1 Topics in Analytic Number Theory [39L]**
A selection from the following: distribution of primes, especially in arithmetic progressions and short intervals; exponential sums; Hardy-Littlewood and dispersion methods; character sums and L-functions; the Riemann zeta-function; sieve methods, large and small; diophantine approximation, modular forms.
Prerequisite: MAT334H1/354H1/permission of instructor

**MAT425H1 Differential Topology [39L]**
Smooth manifolds, Sard's theorem and transversality. Morse theory. Immersion and embedding theorems. Intersection theory. Borsuk-Ulam theorem. Vector fields and Euler characteristic. Hopf degree theorem. Additional topics may vary.
Prerequisite: MAT257Y1, 327H1

**MAT427H1 Algebraic Topology [39L]**
Introduction to homology theory: singular and simplicial homology; homotopy invariance, long exact sequence, excision, Mayer-Vietoris sequence; applications. Homology of CW complexes; Euler characteristic; examples. Singular cohomology; products; cohomology ring. Topological manifolds; orientation; Poincare duality.
Prerequisite: MAT327H1, 347Y1

**MAT443H1 Computer Algebra [39L]**
Introduction to algebraic algorithms used in computer science and computational mathematics. Topics may include: generating sequences of random numbers, fast arithmetic, Euclidean algorithm, factorization of integers and polynomials, primality tests, computation of Galois groups, Gröbner bases. Symbolic manipulators such as Maple and Mathematica are used.
Prerequisite: MAT347Y1

**MAT445H1 Representation Theory [39L]**
A selection of topics from: Representation theory of finite groups, topological groups and compact groups. Group algebras. Character theory and orthogonality relations. Weyl's character formula for compact semisimple Lie groups. Induced representations. Structure theory and representations of semisimple Lie algebras. Determination of the complex Lie algebras.
Prerequisite: MAT347Y1

**MAT448H1 Introduction to Commutative Algebra and Algebraic Geometry [39L]**
Basic notions of algebraic geometry, with emphasis on commutative algebra or geometry according to the interests of the instructor. Algebraic topics: localization, integral dependence and Hilbert's Nullstellensatz, valuation theory, power series rings and completion, dimension theory. Geometric topics: affine and projective varieties, dimension and intersection theory, curves and surfaces, varieties over the complex numbers.
Prerequisite: MAT347Y1

**MAT449H1 Algebraic Curves [39L]**
Projective geometry. Curves and Riemann surfaces. Algebraic methods. Intersection of curves; linear systems; Bezout's theorem. Cubics and elliptic curves. Riemann-Roch theorem. Newton polygon and Puiseux expansion; resolution of singularities.
Prerequisite: MAT347Y1, 354H1

**MAT454H1 Complex Analysis II [39L]**
Harmonic functions, Harnack's principle, Poisson's integral formula and Dirichlet's problem. Infinite products and the gamma function. Normal families and the Riemann mapping theorem. Analytic continuation, monodromy theorem and elementary Riemann surfaces. Elliptic functions, the modular function and the little Picard theorem.
Prerequisite: MAT354H1

**MAT457Y1 Real Analysis II [78L]**
Measure theory and Lebesgue integration; convergence theorems. Riesz representation theorem, Fubini's theorem, complex measures. Banach spaces; Lp spaces, density of continuous functions. Hilbert spaces; weak and strong topologies; self-adjoint, compact and projection operators. Hahn-Banach theorem, open mapping and closed graph theorems. Inequalities. Schwartz space; introduction to distributions; Fourier transforms on Rn (Schwartz space and L2). Spectral theorem for bounded normal operators.
Prerequisite: MAT357H1

**MAT464H1 Differential Geometry [39L]**
Riemannian metrics and connections. Geodesics. Exponential map. Complete manifolds. Hopf-Rinow theorem. Riemannian curvature. Ricci and scalar curvature. Tensors. Spaces of constant curvature. Isometric immersions. Second fundamental form. Topics from: Cut and conjugate loci. Variation energy. Cartan-Hadamard theorem. Vector bundles.
Prerequisite: MAT363H1

**MAT468H1 Ordinary Differential Equations II [39L]**
Sturm-Liouville problem and oscillation theorems for second-order linear equations. Qualitative theory; integral invariants, limit cycles. Dynamical systems; invariant measures; bifurcations, chaos. Elements of the calculus of variations. Hamiltonian systems. Analytic theory; singular points and series solution. Laplace transform.
Prerequisite: MAT267H1, 354H1, 357H1

**MAT477Y1 Seminar in Mathematics (formerly MAT477H1) [TBA]**
Seminar in an advanced topic. Content will generally vary from year to year. (Student presentations will be required)
Exclusion: MAT477H1
Prerequisite: MAT347Y1, 354H1, 357H1; or permission of instructor.

**MAT495H1 Readings in Mathematics [TBA]**

**MAT496H1 Readings in Mathematics [TBA]**

**MAT497H1 Readings in Mathematics [TBA]**

**MAT498Y1 Readings in Mathematics [TBA]**

**MAT499Y1 Readings in Mathematics [TBA]**
Independent study under the direction of a faculty member. Topic must be outside undergraduate offerings.
Prerequisite: Minimum GPA of 3.5 in math courses. Permission of the Associate Chair for Undergraduate Studies and prospective supervisor

## Mediaeval Studies: see St. Michael's College

## Microbiology: see Life Sciences: Microbiology

## Molecular Genetics & Microbiology: see Life Sciences: Molecular Genetics & Microbiology

The Modern Languages and Literatures program is a number of sub-programs given by Faculty Language Departments. Upon graduation a student is certified as having completed a combined Specialist Program in the two languages chosen. Enrolment in this program requires the completion of four courses; no minimum GPA required. The normal combinations are listed below; for combinations NOT listed students should consult the departments concerned.

See also the Language Citation Program, page 20.

## Modern Languages and Literatures

### Specialist program:

(14-15 full courses or their equivalent)

Fourteen courses are required, seven in each subject with the following requirements:

**French (with German/Italian/ Portuguese/ Russian/ Spanish)**
(8 courses)
Same as the Major Program in French Language and Literature

**German (with French/Italian/Russian/Spanish)**
Same as the Major Program in German Studies

**Italian (with French/German/Portuguese/Russian/ Spanish)**
Same as the Major Program in Italian

**Polish (with French/German//Russian)**
First Year:
SLA 106Y1
Higher Years:
1. SLA 206Y1, 216Y1, 306H1, 336H11
2. Two courses from: SLA 226H1, 346H1, 356H1, 406Y1/406H1, 416Y1, 424H1, 436H1, 446H1, 476H1

**Portuguese (with French1/Italian/Spanish)**
(7 courses)
Same as the Major Program in Portuguese

**Russian (with French/German/Italian)**
See Slavic Languages & Literatures for details.

**Spanish (with French/German/Italian/Portuguese)**
(7 courses)
First Year:
SPA 100Y1/220Y1; SPA 319Y1 (for native/bilingual speakers of Spanish)
Second Year:
SPA 220Y1/320Y1; SPA 420H1 (for speakers who have taken SPA 319Y1 in first year)
Third and Fourth Years:
1. SPA 320Y1, 454H1
2. SPA 450H1 or 452H1
3. SPA 420H1 is recommended for students who start in SPA 100Y1
4. SPA 420H1 is required for students who start in SPA 220Y1 or higher language course; plus a 300/400-series half-course in language or linguistics
5. Plus additional SPA courses, including a half-course in Spanish American literature, to make seven courses. Up to one full-course equivalent may be taken from cognate departmental or college offerings: GGR, HIS, LAS, LIN, POL, PRT. A complete list of eligible courses is available from the Undergraduate Coordinator. Students interested in Latin America are encouraged to take an introductory course in Portuguese (PRT 100Y1/110Y1).

**Ukrainian (with French/German)**
First Year:
SLA 108Y1
Higher Years:
1. SLA 208Y1, 218Y1
2. Three courses, including at least one at the 300+level., from: SLA 228H1, 238H1, 248H1, 253H1, 308Y1, 318H1, 328H1, 408H1, 418H1, 419Y1, 428Y1, 429H1, 438H1, 448H1, 458H1, 468H1. Courses in Ukrainian history may also be counted toward this programme.

## Given by Members of the Faculty of Music

## Faculty

### Professor
J. Kippen, Ph D (T)

### Associate Professors
W. Bowen, MA, Ph D (S)
C.Clark, M.A, Ph D (T)
R. Elliott, MA, Ph D
J. Haines, MA, Ph D (T)
G.S. Johnston, MA, Ph D
M.A. Parker, MM, Ph D (M)

### Assistant Professors
Celia Cain, AM, Ph D

## Faculty: Musical Theory and Composition

### Professors
K.N. Chan, Mus M, D Mus
C. Hatzis, M Mus, Ph D

### Assistant Professor
R. McClelland, Ph D

### Senior Lecturers
J. Kruspe, Mus Bac
G. Kulesha
D. Patrick, Mus M
M. Sallmen, MA, Ph D
W.Wright, M Div

### Lecturers
A. Rapoport, MA, Ph D
L. Kuzmenko, Mus Bac

## Faculty: Peformance

### Associate Professors
G. MacKay, M.Mus,D.M.

### Senior Lecturer
J. Reynolds, M Mus, Ph D

In the Faculty of Arts and Science, Music is approached as one of the liberal arts and taught as cultural history. This humanistic emphasis aims at a high degree of correlation with other disciplines such as Fine Art, Cultural Anthropology, Languages and Literatures, History, and Philosophy.

The courses with the prefix MUS are open to any student of the University. Even students with a strong music background should find them stimulating explorations of the world of music.

Students wishing to enter the Specialist /Major Program should examine the courses listed under HMU History of Music and TMU Theory of Music. First-year specialist/major courses are available to a small number of students, who are admitted to them by audition and interview during Registration week. Those interested in ethnomusicology and the study of world music may audition on the basis of their comparable accomplishments in a non-Western instrumental or vocal performing tradition. All students are required to have completed Grade 2 Rudiments and Grade 3 Harmony from the RCM or acceptable equivalents as prerequisites, prior to the audition-interview. Knowledge of Western music history and theory ensures that students are not disadvantaged when facing the curricular requirements of the program. In this program the humanistic and historical approach is supported by courses in music theory which provide craft and analytical tools. The Specialist Program provides excellent preparation for a variety of professional activities including music criticism, library science, positions in the publishing, broadcasting, and recording industries, as well as for graduate studies in musicology and ethnomusicology leading to careers in university teaching. The program leads to the degree of Bachelor of Arts (honours). For programs leading to the degree of Bachelor of Music, the student should consult the Calendar of the Faculty of Music.

Students are encouraged to attend events sponsored by the Faculty of Music such as the Thursday Noon and Faculty Artists' Series, opera productions and numerous concerts. For information refer to www.music.utoronto.ca or telephone 416-978-3744.

Faculty of Music Representative: Professor J. Kippen, Co-ordinator (416-978-3750)

Enquiries: Admissions Officer, Edward Johnson Building, Room 145 (416-978-3741); e-mail:.undergrad.music@utoronto.ca

## Music Programs

Enrolment in HMU and TMU courses, and, therefore, in the Specialist and Major programs, is limited to students who pass the audition-interview, held on Tuesday, September 2, 2008. Students are required to complete and submit the Student Profile available on-line at www.music.utoronto.ca prior to August 23, 2008. Hardcopies are available from the Faculty of Music Registrar's Office. You will then be assigned an audition time. Prospective candidates must perform at the Royal Conservatory of Music Grade Eight level, and demonstrate that they have Grade Two Rudiments and Grade Three Harmony or equivalents. Students interested in pursuing the major or specialist with the Ensemble option are required to pass an additional audition-interview for ensemble placement. Please refer to MUS 120Y. An information sheet is available at the Faculty of Music. (This is not required for the Music Minor program, see below.)

### Music (Arts program)

**Specialist program:**
(10 full courses or equivalent, including three 300+ level courses and one 400+ level course)

First Year:
HMU 111H1, TMU 140Y1, one 100- level course in a language other than English
Higher Years:
1. HMU 225H1, 226H1
2. HMU 330H1, 331H1, 333H1, 430H1, 431H1, 432H1, 433H1
3. TMU 240Y1 and a half-course in advanced theory (TMU)
4. Three half-courses in history electives (HMU)

NOTE: Part-time students will satisfy co-requisites by taking courses in the following order: TMU 140Y1, HMU 111H1, TMU 240Y1, HMU 225H1, 226H1

**Specialist with Ensemble Option program:**
(10.5 full courses or equivalent, including three 300+ level courses and one 400+ level course)

First Year:
HMU 111H1, MUS 120Y1, TMU 140Y1, one 100-level course in a language other than English
Higher Years:
1. HMU 225H1, 226H1
2. Three-and-a-half full courses in history electives (HMU), including two full credits of topic courses from the list HMU 330H1, 331H1, 333H1, 430H1, 431H1, 432H1, 433H1
3. TMU 240Y1 and a half-course in 300+ level theory (TMU)
4. MUS 220Y1

NOTE: Part-time students will satisfy co-requisites by taking courses in the following order: TMU 140Y1, HMU 111H1, TMU 240Y1, HMU 225H1, 226H1

**Major program:**
(7 full courses or equivalent, including at least two 300+ level courses)

First Year:
HMU 111H1, TMU 140Y1
Higher Years:
1. HMU 225H1, 226H1 and three further half-courses in history electives (HMU)
2. TMU 240Y1 and a half-course in advanced theory (TMU)
3. 1.5 additional HMU/TMU courses

**Major with Ensemble Option program:**
(7.5 full courses or equivalent, including at least two 300+ level courses)
First Year:
HMU 111H1, MUS 120Y1, TMU 140Y1
Higher Years:
1. HMU 225H1, 226H1
2. TMU 240Y1
3. 2.0 additional HMU/TMU electives
4. MUS 220Y1

**Music History and Culture (Arts program)**

**Minor program:**
(4 full courses or equivalent)

1. MUS 110H1, 111H1
2. MUS 200H1 or an alternative 200-level course in world music (MUS 209H1 or MUS 211H1)
3. 2.5 MUS courses from the list below, including one full course at the 300+ level. Either MUS 120Y1 or MUS 220Y1 can be counted towards the 2.5 MUS courses

## Music Courses

See page 32 for Key to Course Descriptions.)

For Distribution Requirement purposes (see page 26), HMU, MUS, TMU courses are classified as HUMANITIES courses.

**MUS110H1 Introduction to Music History and Culture [26L]**
Introduction to form, style and the interrelationships of music and culture. A basic ability to read music is required.
Exclusion: HMU111H1, VPMA80H3

**MUS120Y1 Vocal and Instrumental Ensembles I [156P]**
Students rehearse and perform in concerts and reading sessions as assigned by the Faculty of Music. Provides experience in choral groups, orchestra, or in concert band and large wind groups of diverse instrumentation. Development of musicianship skills through performance of large ensemble works; emphasis on sight-reading, ear-training, and musical knowledge.
Attendance at all sessions is required. Placement audition and permission of the Department required.
Download the excerpt that is relevant to the instrument you would like to audition on; excerpts will be available at www.music.utoronto.ca beginning early July. Complete and return the MUS120Y1 & MUS220Y1 Audition Request Form before August 23. Once your request form is received, you will be notified of your audition time. Placement audition will be held on Thursday, September 4, 2008 from 6-10 p.m. in the Edward Johnson Building. The audition will be 10 minutes in length.
Exclusion: MUS291Y1

**MUS204H1 The Age of Bach & Handel [26L]**
A study of the representative major works in their social and cultural setting with emphasis on the high baroque style of Bach and Handel. No prior background in music or the ability to read music is not required. Exclusion: HMU111H1

**MUS206H1 The World of Opera [26L]**
Examination of selected operas from the eighteenth to the early twentieth century. Musical and dramatic styles will be considered in their cultural context. The ability to read music is not required.
Exclusion: HMU111H1

**MUS211H1 The World of Popular Music [26L]**
A survey of popular music traditions from various regions of the world with particular emphasis on the sociocultural contexts in which those musics are created and appreciated. Explores the role of the recording industry, media, festivals, and local institutions in shaping these music cultures both at home and in the international arena. No prior background in music or ability to read music is required.
Exclusion: HMU111H1

**MUS220Y1 Vocal and Instrumental Ensembles II [156P]**
Students rehearse and perform in concerts and reading sessions as assigned by the Faculty of Music. Provides experience in choral groups, orchestra, or in concert band and large wind groups of diverse instrumentation. Development of musicianship skills through performance of large ensemble works; emphasis on sight-reading, ear-training, and musical knowledge.
Attendance at all sessions is required. Placement audition and permission of the Department required.
Download the excerpt that is relevant to the instrument you would like to audition on; excerpts will be available at www.music.utoronto.ca beginning early July. Complete and return the MUS120Y1 & MUS220Y1 Audition Request Form before August 23. Once your request form is received, you will be notified of your audition time. Placement audition will be held on Thursday, September 4, 2008 from 6-10 p.m. in the Edward Johnson Building. The audition will be 10 minutes in length.
Prerequisite: MUS 120Y1. Placement audition and permission of the Department required.

**MUS300H1 Music, Media and Technology [26L]**
This course explores some of the ways in which music has been shaped through history, and particularly during the last 100 years, by technology and the media. Special attention will be paid to the record industry, broadcasting, and cinema. Examples from popular and art music traditions of the world will be used to illustrate the symbolic relationship between music and media. No prior background in music or ability to read music is required. Exclusion: HMU111H1.

**MUS321H1 The Beatles [26L]**
In The Ultimate Encyclopedia Of Rock, it was written of the The Beatles that "From three-minute pop classics to the psychedelic extravaganza of 'Sgt. Pepper', their songs soundtracked the Sixties. They were the greatest group in history. They probably always will be". In addition to a survey of the group's history, their recordings, and their films, this course aims to answer two basic questions: (1) what made the songs of The Beatles so successful? (2) in what ways did the band's artistic output "soundtrack" the 1960s? No prior background in music or ability to read music is required.
Exclusion: HMU111H1

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**Future Offerings:**

**MUS202H1 Beethoven**

**MUS205H1 Mozart**

**MUS207H1 Music for the Orchestra**

**MUS208H1 Medieval and Renaissance Masterpieces**

**MUS209H1 Performing Arts of South Asia**

**MUS211H1 The World of Popular Music**

**MUS225H1 Music: Islamic World**

**MUS302H1 Symphony**

**MUS303H1 Music in the Contemporary World**

**MUS306H1 Popular Music in North America**

**MUS308H1 Handel**

**MUS325H1 The Age of Haydn & Mozart**

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## HMU, TMU Faculty of Music Courses

**HMU111H1 Introduction to Music and Society 26L, 13T**
An examination of musical thought and practice in Western and non-Western traditions.
Prerequisite: Permission of Department
Co-requisite: TMU140Y1

**TMU140Y1 Materials of Music 152L, 78P**
Harmony: triads, non-harmonic materials, dominant seventh and derivatives, secondary dominants, simple modulation. Elementary forms and analysis of eighteenth- and nineteenth-century literature. Sight singing: melodic, rhythmic and harmonic dictation. Keyboard harmony: chords and scales in all major and minor keys; playing of cadence types, modulation to closely related keys, realization of elementary figured bass, two-part transposition, score reading in five clefs, and sight harmonization of simple melodies.
Prerequisite: Grade 2 Rudiments, Grade 3 Harmony (RCMT), Grade 8 level performing audition, permission of Department
Co-requisite: HMU111H1

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**Note**
HMU 111H1 and TMU 140Y1 are prerequisites for all other HMU/TMU courses which are offered annually. Full details on these and other courses may be found in the *Calendar* of the Faculty of Music.

Programs offered in conjunction with the National University of Singapore are part of official student exchange programs administered by the University of Toronto International Student Exchange Office (ISXO).

## National University of Singapore Programs

**Environmental Biology Minor - see Life Sciences: Ecology & Evolutionary Biology**

**Nanoscience Minor - see Chemistry**

For information and advising on the academic content of these programs, check for contact information in the sponsoring department's entry in this Calendar.

For information and advising on international exchange programs, contact:

International Student Exchange Office
Koffler Student Services Centre
214 College Street, Room 202
www.utoronto.ca/student.exchange
student.exchange@utoronto.ca
Telephone: 416-946-3138

# Near and Middle Eastern Civilizations

## Faculty

### Professors Emeriti

E. Birnbaum, BA, Dipl OAS
J.R. Blackburn, MA, Ph D
P.E. Dion, L Th, L SS, Ph D
L.R. Garshowitz, MA, PhD
L.V. Golombek, MA, Ph D, FRSC
A.K. Grayson, MA, Ph D, FRSC
J.S. Holladay, BS, BD, Th D
A. Jwaideh, MA, B Litt, D Phil
E.J. Keall, BA, Ph D
L.M. Kenny, MA
R.T. Lutz, MA
M.E. Marmura, MA, Ph D, FRSC
G.M. Meredith-Owens, MA
A. Pietersma, BA, BD, Ph D
D.B. Redford, MA, Ph D, FRSC
E.J. Revell, MA, Ph D, FRSC (V)
R. Sandler, MA, Ph D
R.M. Savory, MA, Ph D, FRSC (T)
R.F.G. Sweet, MA, Ph D
J.W. Wevers, BA, Th D, DD, DHC, FRSC

### Associate Professor and Chair

L.S. Northrup, MA, Ph D

### Professors

A. Harrak, MA, Ph D
T.P. Harrison, MA, Ph D
R.J. Leprohon, MA, Ph D
J.A. Reilly, MA, Ph D (U)
M.E. Subtelny, BA, Ph D
M. Tavakoli-Targhi, MA, Ph D

### Associate Professors

P-A. Beaulieu, MA, Ph D
H. Fox, MS, Ph D
K. Goebs, MA, Ph D
S. Green, MA, Ph D
K.A. Grzymski, MA, Ph D
S.E. Günther, MA, Ph D
A. Hassanpour, MA, Ph D
B.T. Lawson, MA, Ph D
T. Meacham, MA, Ph D
S. Metso, MA, Ph D
V. Ostapchuk, BA, Ph D
W. Saleh, MA, Ph D (U)

### Assistant Professors

J.P. Hanssen, BA, D. Phil
R.D. Holmstedt, MA, Ph D
A. Mittermaier, MA, PhD
E. Raffaelli, MA, Ph D
M.A. Wegner, BA, Ph D

### Lecturers

A.K. Ali, MA, Ph D
A. Taleghani, MA, Ph D

The Department of Near and Middle Eastern Civilizations is concerned with the interdisciplinary study of the civilizations and cultures of the Near and Middle East from neolithic times until the present, including their languages and literatures Akkadian (Assyro-Babylonian), Arabic, Aramaic and its closely related dialect Syriac, ancient Egyptian, (biblical, rabbinic, mediaeval and modern) Hebrew, (Hellenistic) Greek, Persian and Turkish, archaeology, history, art and architecture. Near East is generally understood to refer to the region at the eastern end of the Mediterranean and beyond, from ancient times up to the advent of Islam in the seventh century C.E. Middle East refers to a much broader geographical area whose predominant Islamic culture in mediaeval and modern times has stretched to North Africa and Spain in the west and to Central Asia, India and South Asia in the east. The Department's programs are conceived in the broad tradition of the humanities and provide an opportunity to study non-western complex societies and civilizations, an understanding of which will reveal the ultimate roots, and help to appreciate the historical development, of western civilization.

As it happens, three world religions originated in this geographical region. The Department offers courses on the origins and earliest phases of Judaism and, as a contributor to the Jewish Studies Program, on mediaeval and modern Jewish history, culture and thought, even though such pursuits sometimes lead to Europe and other places beyond the Middle East. Although the Department deals with eastern (Syriac) Christianity, the study of Christianity as a religion falls within the purview of the Department for the Study of Religion. The study of Islam as a religion and the development of Islamic thought, and their role in the creation of Islamic civilization, are major concerns of the Department.

NMC 101Y1 introduces students to the ancient Near East. NMC 201Y1 presents an historical and thematic survey of the civilizations and cultures of the mediaeval and modern Middle East and provides background necessary for comprehending the complex issues facing that region today. Students particularly interested in the world and/or religion of Islam should start with NMC 185H1.

Students wishing to follow a Specialist program should choose their courses with the advice of the Undergraduate Coordinator. Those intending to proceed to a graduate degree in a particular area will obviously want to concentrate their course choices in that area and would do well to acquire a reading knowledge of German and French as early as possible. Some knowledge of anthropology and a course or two in linguistics would be useful. The Department, however, welcomes students of all academic backgrounds who wish to learn about the Middle East, including those who do not intend to specialize or major. Many courses offered in the Department do not require any knowledge of the languages of the region. Students should consult the Department's website www.utoronto.ca/nmc for more detailed information about courses and programs.

Undergraduate Enquiries: 4 Bancroft Avenue, Room 200, (416-978-3306)

## Near and Middle Eastern Civilizations Programs

Enrolment in NMC programs is open to anyone who has completed four courses; no minimum GPA required. Specialized streams of study within the general programs can be recommended in consultation with the Undergraduate Coordinator.

### Near and Middle Eastern Civilizations (Arts program)

**Specialist Program:**
11 full courses or their equivalent, including at least four 300+ series courses, one of which must be a 400-series course. At least 9 must be NMC and/or NML courses. Others may be taken only from a list of pre-approved courses offered by other departments. See departmental web site for details.

First Year:
NMC 101Y1/185H1 (formerly NMC185Y1)/201Y1. It is recommended that language instruction begin in first year, if possible.
Higher Years:
1. Four courses in Language (original language; not literature in translation – NML designator only)
2. Three courses in History and/or Religion and Philosophy
3. Two courses in Archaeology and/or Art and Material Culture
4. One additional course

**Major program:**
6 full courses or their equivalent, including at least two 300+ series courses. At least 5 must be NMC and/or NML courses. Others may be taken only from a list of pre-approved courses offered by other departments. See departmental web site for details.

N.B. Admission to a Graduate Program in NMC requires the applicant to have acquired a background in languages.

**Minor program:**
4 full courses or their equivalent, including at least one 300+ series course. All 4 must be NMC and/or NML courses.

### Faculty of Arts & Science Language Citation

The Department of Near & Middle Eastern Civilizations participates in the Faculty of Arts and Science's Language Citation initiative for Arabic, Persian, Ancient Egyptian, Ancient/Biblical Hebrew, and Modern Hebrew. The study of Ancient languages is a demanding and intellectually rewarding educational experience that makes available to the modern student the rich resources of classical texts in the original languages. The "living" languages offered by NMC provide invaluable insights into the varieties of human culture and expression and offer myriad directions in which to take the study of a foreign language.

Successful study of these languages demonstrates intelligence, discipline, analytical sophistication, and an excellent memory. In each language the Language Citation recognizes a significant level of achievement in language study with a high level of academic success.

The Citation in Ancient/Biblical Hebrew is available to students who complete NML150Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in NML250Y1 and any 2 FCEs of the following additional Biblical Hebrew courses: NML251Y1, NML350Y1, NML351H1, NML352H1, NML353H1, NML354H1, NML359H1, NML450Y1.

The Citation in Ancient Egyptian is available to students who complete NML240Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in NML340Y1 and any 2 FCEs of the following additional Ancient Egyptian courses: NML241Y1, NML440Y1, NML441Y1.

The Citation in Arabic is available to students who complete NML210Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in NML310Y1 and any 2 FCEs of the following additional Arabic courses: NML410Y1, NML411H1, NML412Y1, NML413H1, NML414H1.

The Citation in Persian is available to students who complete NML260Y1 (or the equivalent prerequisite training) and earn a grade of at least B- in NML360Y1 and any 2 FCEs of the following additional Persian courses: NML460Y1, NML461H,1 NML462H1. With the appointment of a Persian language and literature Lecturer commencing in July 2007, the departmental offerings will increase, adding a variety of electives.

The Citation in Modern Hebrew is available to students who complete NML155H1 and NML156H1 (or the equivalent prerequisite training) and earn a grade of at least B- in NML255Y1 and any 2 FCEs of the following additional Hebrew courses: NML355Y1, NML356Y1, NML357H1, NML358H1, NML451H1, NML452H1, NML455H1, NML465H1.

Students should note that, as explained on page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

## Near and Middle Eastern Civilizations Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all NMC courses except NMC 465H1 and 462Y1 are classified as HUMANITIES courses.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course but not a program requirement; see page 48.

### Introductory Courses

**NMC101Y1 The Ancient Near East [78L]**
Introduction to the archaeology, history and literature of the ancient Near East. The contributions made by the Egyptians, Babylonians and Assyrians to the development of civilization.
Exclusion: NMC370Y1/343H1/344H1/346H1/347H1 may not be taken in the same year,

**NMC201Y1 Islamic Culture and Civilization [52L]**
This course acquaints students with the main features and legacies of the civilization that was formed in the Middle East in the 8th-10th centuries C.E. under the impetus of Islam, and marked by several highpoints before the early modern period. Continuity with the earlier civilizations of the ancient Near East are highlighted, and the diverse cultural traditions that contributed to the formation of Islamic civilization are described.

**NMC202H1 Introduction to Coptic Studies [26L]**
Overview of the history of the Copts from political, religious, social and economic perspectives. Literary and documentary sources will illustrate these different aspects of Coptic Civilization. The focus on Coptic Monasticism will underline the role of monasteries as conservers of the Coptic Orthodox Church tradition.

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## Language Courses

### Note

The Department reserves the right to place students in the language course best suited to their linguistic preparation.

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### Akkadian

**NML305Y1 Introductory Akkadian (formerly NMC305Y1) [78S]**
Introduction to Old Babylonian. Grammar and the reading of selected texts. (Offered in alternate years)
Prerequisite: Arabic or Hebrew, normally NMC136Y1/210Y1/230Y1/NML155H1/156H1/210Y1/150Y1
Exclusion: NMC305Y1

**NML405Y1 Intermediate Akkadian (formerly NMC405Y1) [78S]**
(Offered in alternate years)
Prerequisite: NML305Y1/NMC305Y1
Exclusion: NMC405Y1

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### Arabic

**NML210Y1 Introductory Standard Arabic (formerly NMC210Y1) [78L, 26P]**
Introduction to the grammar and basic vocabulary of standard or literary Arabic, the one language written and read, and also spoken by those educated to speak it, throughout the Arab world.
Exclusion: Native users/NMC210Y1. Priority enrollment will be given to declared NMC majors/specialists.

**NML310Y1 Intermediate Standard Arabic (formerly NMC310Y1) [78L,26P]**
Begins with a review of basic grammar and proceeds with the reading of simple, connected prose passages that typify normal patterns of Arabic syntax. More literary and idiomatic passages are introduced gradually.
Exclusion: Native users/NMC310Y1. Priority enrollment will be given to declared NMC majors/specialists.
Prerequisite: NML210Y1/NMC210Y1

**NML410Y1 Advanced Standard Arabic (formerly NMC410Y1) [78S]**
Connected passages of Arabic texts drawn from both classical and modern times are studied in detail.
Exclusion: NMC410Y1; Native users of Arabic must obtain permission of instructor.
Prerequisite: Two years of Arabic

**NML411H1 Readings in Arabic Newspapers (formerly NMC411H1) [26S]**
Directed readings of passages drawn from well-known Arabic newspapers such as: al-Ahram (Egypt), al-Ra'y (Jordan), al-Safir (Lebanon), al-Khalij (UAE), and al-Haya (UK). The course is designed to make advanced students of Arabic familiar with the language, style and topics of the Arabic Press.
Exclusion: NMC411H1; Native users of Arabic must obtain permission of instructor.
Prerequisite: NML310Y1/NMC310Y1 or adequate reading knowledge of Arabic

**NML412Y1 Survey of Classical Arabic Literature (formerly NMC412Y1) [52S]**
Systematic outline of the development, characteristics, and peculiarities of selected genres of classical Arabic literature such as historiography, belles-lettres (adab), philosophy, ethics - Qur'an, exegesis, Literature of Tradition - poetry. Complementary readings, analysis and translation of original text passages are given emphasis.
Prerequisite: Two years of Arabic or adequate reading knowledge
Exclusion: NMC412Y1

**NML413H1 Islamic Thought in Mediaeval Arabic Sources (formerly NMC413H1) [26S]**
Insights into the history of ideas in Islam. Original texts by Jurjani (d. 1078, literary criticism), Ghazali (d. 1111, philosophy), Ibn Rushd (d. 1196, law), Shahrastani (d. 1153, heresiography), Ibn Taymiyah (d. 1328, dogmatics), and Ibn Khaldun (d. 1406, social history). (Offered in alternate years)
Prerequisite: Adequate reading knowledge of Arabic
Exclusion: NMC413H1

**NML414H1 Qu'ranic Arabic [26L]**
This course offers students of Arabic the opportunity to study more closely the text of the Qur'an. The course will focus on the Arabic language of the Qur'an and its function both semantically and aesthetically. Selected Qur'anic passages will be examined in detail.
Prerequisite: Completion of Advanced Arabic, or equivalent qualification determined by the Department. Permission of the instructor is required.

**NML 415H1 The Structure of Arabic Language [26L]**
This course is an investigation of the formal properties of Modern Standard Arabic. Its primary goal is to provide the student with an in depth knowledge of the grammar of the language. To this end, the course makes use of concepts and tools of analysis common to contemporary generative linguistics.
Prerequisite: NML310Y1 or permission of instructor.

## Aramaic/Syriac

**NML220Y1 Introductory Aramaic (formerly NMC315Y1) [78S]**
Introduction to Aramaic grammar. Readings from biblical Aramaic. (Offered in alternate years)
Prerequisite: Introductory Biblical Hebrew (NMC230Y1/ NML150Y1)
Exclusion: NMC315Y1

**NML320H1 Intermediate Aramaic: Targum (formerly NMC415H1) [39S]**
An intensive study of various Targumim to the Pentateuch: Onkelos, Pseudo-Jonathan, Neophyti, Samaritan and Fragment Targumim. Differences among them in vocabulary, syntax and verb usage are discussed, as well as their relationship to the Palestinian midrashim. (Offered in alternate years)
Prerequisite: NML220Y1/NMC315Y1
Exclusion: NMC415Y1/NMC415H1

**NML420Y1 The Jerusalem Talmud: Jewish Western Aramaic (formerly NMC416Y1) [52S]**
The Talmud of the Land of Israel, also called Talmud Yerushalmi or Palestinian Talmud, is written in a mixture of Jewish Western Aramaic and Mishnaic Hebrew. It is the principal document of the Land of Israel in Late Antiquity. The course examines the legal argumentation, terminology and language which differ from those of the Babylonian Talmud. (Offered in alternate years)
Prerequisite: Permission of instructor
Recommended preparation: NMC315Y1/334Y1/NML220Y1/ 320H
Exclusion: NMC416Y1

**NML421Y1 Classical Syriac (formerly NMC418Y1) [78S]**
(Offered in alternate years)
Prerequisite: NMC315Y1/NML220Y1
Exclusion: NMC418Y1

## Armenian

**NML180Y1 Elementary Modern Armenian [72L]**
An introduction to Modern Armenian (Eastern standard), the official and spoken language of the Republic of Armenia. Eastern Armenian is also the language of the Armenian communities in Iran, Georgia, Russia, Ukraine and several other countries. The course is designed for students with no previous knowledge of Armenian.
Exclusion: Any exposure, however passive, to Armenian language.

## Coptic

**NML230H1 Elementary Coptic I (formerly NMC220H) [26L]**
Introduces the student to the last stage of the Egyptian language, written mostly in Greek characters. The course will first concentrate on the grammar of the language and go on to read short texts.
Exclusion: NMC220H

**NML231H1 Elementary Coptic II [26L]**
A continuation of NML230H1, Elementary Coptic I.

## (Ancient) Egyptian

**NML240Y1 Introduction to Middle Egyptian (formerly NMC320Y1) [78S]**
Grammar and reading of selected hieroglyphic texts.
Exclusion: NMC320Y1

**NML241Y1 Ancient Egyptian Iconography (formerly NMC321H1) [52S]**
This course deals with the recognition and interpretation of ancient Egyptian symbols and the representations of divine and royal figures as preserved in the epigraphic record.
Prerequisite: NMC320Y1/NML240Y1
Exclusion: NMC321H

**NML340Y1 Intermediate Egyptian(formerly NMC420Y1) [78S]**
Middle Egyptian texts.
Prerequisite: NMC320Y1/NML240Y1
Exclusion: NMC420Y1Y

**NML440Y Ancient Egyptian Historical Texts [26L]**
Texts of significance for the reconstruction and understanding of Egyptian History will be read in the original, and analyzed for content, style, and grammar. The social and archaeological context of these texts will also receive attention.
Prerequisite: NML340Y1 (formerly NMC420Y1)

**NML441Y Ancient Egyptian Religious and Funerary Texts [26L]**
Readings, analysis, and comparisons of selections from the Pyramid Texts, the Coffin Texts, and the New Kingdom mortuary literature; study of cultic, magical, and mythological texts relating to funerary and cultic beliefs and practices. All texts to be read in the original.
Prerequisite: NMC340Y1 (formerly NMC420Y1)

## Hebrew

**NML150Y1 Introductory Biblical Hebrew (formerly NMC230Y1) [78S]**
An introduction to biblical Hebrew prose. Grammar and selected texts. For students with no previous knowledge of Hebrew.
Exclusion: Those who have completed Grade 8 Hebrew (or Grade 6 in Israel)/NMC230Y1

**NML155H1 Elementary Modern Hebrew I (formerly NMC236H1) [39L, 26P]**
Introduction to the fundamentals of Hebrew grammar and syntax through classroom and language laboratory practice. Emphasis on the development of oral and writing skills. (Offered in alternate years)
Exclusion: Those who have completed Grade 4 Hebrew (or Grade 2 in Israel), NMC136Y/NMC236H1

**NML156H1 Elementary Modern Hebrew II (formerly NMC237H1) [39L, 26P]**
Introduction to the fundamentals of Hebrew grammar and syntax through classroom and language laboratory practice. Emphasis on the development of oral and writing skills. (Offered in alternate years)
Prerequisite: NML155H/NMC236H1 or permission of instructor
Exclusion: Those who have completed Grade 4 Hebrew (or Grade 2 in Israel), NMC136Y/NMC237H1

**NML250Y1 Intermediate Biblical Hebrew (formerly NMC330Y1) [78S]**
Study of Hebrew grammar, providing a continuation of NMC230Y/NML150Y1. Through extensive reading of Hebrew in the books of Joshua-2 Kings, grammar is reviewed and consolidated, and vocabulary expanded. (Offered in alternate years)
Prerequisite: OAC Hebrew/NMC230Y1/NML150Y1
Exclusion: NMC330Y1

**NML251Y1 Intermediate Biblical Hebrew: Pentateuch (formerly NMC333Y1) [78S]**
Study of Hebrew grammar, providing a continuation of NMC230Y1/NML150Y1. Through extensive reading of Hebrew in the books of Genesis-Deuteronomy, grammar is reviewed and consolidated, and vocabulary expanded. (Offered in alternate years)
Prerequisite: OAC Hebrew/NMC230Y1/NML150Y1
Exclusion: NMC333Y1

**NML255Y1 Intermediate Modern Hebrew (formerly NMC236H1, NMC237H1/NMC336Y1) [78S]**
Intensive study of written and spoken Hebrew. (Offered in alternate years)
Exclusion: Those who have completed Grade 8 Hebrew (or Ulpan level 2 in Israel), NMC236Y1 (up to 2000), NMC236H1/237H1 (2000-2004), NMC336Y1 (2004-2006)
Prerequisite: NMC136Y1/NML156H1

**NML350H1 Wisdom Literature (formerly NML350Y1) [26L]**
An examination of wisdom literature and themes in the Hebrew Bible and later Second Temple writing; primary emphasis on Hebrew texts but including comparison with themes from non-Hebrew texts such as the Greek Ecclesiasticus, the Wisdom of Solomon, and some early Christian writings.
Prerequisite: NML150Y1/NMC230Y1
Exclusion: NML350Y1

**NML351H History Writings [26L]**
This course examines ancient Israel's history writers, focusing on the Deuteronomistic History and the Chronicler's History. Attention will be given to linguistic forms, rhetorical style and goals, and comparison of national or ethnic self-perceptions.
Prerequisite: NMC230Y1/NML150Y1

**NML352H1 Myth and Story [26L]**
An investigation of two closely related types of ancient Hebrew narrative: myth and story. Focus will be equally on Hebrew language, rhetorical style and goals, and when appropriate, the comparative ancient near eastern backdrop for the Hebrew texts.
Prerequisite: NMC230Y1/NML150Y1

**NML353H1 Jewish Apocalyptic Literature [26L]**
This course provides an introduction to the study of the origin, form and function of ancient Jewish and related apocalyptic literature which flourished between 200 BCE and 200 CE, understood in its cultural and literary contexts.
Exclusion: RLG325H1
Prerequisite: NMC150H1/151H1/280H1/280Y1

**NML354H1 Law and Ritual [26S]**
Law reflects the way in which society understands and organizes itself through common agreements and forms of restraint. This course examines the different ways religious and ritual legislation was generated in ancient Jewish communities and the different functions such legislation served in these communities. All texts to be read in the original.
Prerequisite: NML 250Y1

**NML355Y1 Advanced Modern Hebrew (formerly NMC336H1/337H1/434Y1) [52S]**
Advanced intensive study of written and spoken Hebrew. (Offered in alternate years)
Prerequisite: NMC336Y1
Exclusion: OAC Hebrew, old numberings NMC336H1/337H1/434Y1

**NML356Y1 Babylonian Talmud (formerly NMC334Y1) [52S]**
Selections from a tractate in Babylonian Talmud in order to gain facility in the understanding of the dialogic structure of the legal discussions. Practice in the use of classical commentaries and critical aids to allow independent study of the text. (Conducted in Hebrew) (Offered in alternate years)
Prerequisite: OAC Hebrew/NMC237H1/230Y1/NML150Y/156H

**NML357H1 Midrash Aggadah [26L]**
The themes of Eros and Thanatos will be explored in Aggadic texts from Song of Songs Rabbah. This Midrashic text stands halfway in the tradition, both making use of earlier texts and being used by editors of later compilations. These interrelations will be the focus of our study as well as the relationship of work to Scripture.
Prerequisite: Intermediate Hebrew (Modern or Biblical)

**NML358H1 Mishnah and Tosefta (formerly NMC331H1) [26L]**
Introduction to Mishnah and Tosefta, two of the three foundational documents of Middle Hebrew. In addition to studying specific features of this level of Hebrew, examining these compositions independently, and analyzing their interaction, students will examine current scholarly literature on these documents and their relationship to each other. (Offered in alternate years)
Prerequisite: Intermediate Hebrew (Modern or Biblical)
Exclusion: NMC331H1

**NML359H1 Prophecy (formerly NML453H1) [13S]**
An examination of different concepts of prophecy in the Hebrew Bible and in later Second Temple traditions, such as Dead Sea Scrolls, Hellenistic Jewish writings, and early Christian writings.
Exclusion: NML453H1
Prerequisite: Advanced reading knowledge of Hebrew/Aramaic.

**NML450H1 Advanced Biblical Hebrew Grammar (formerly NML450Y1) [13S]**
Advanced survey of phonology, morphology, syntax, semantics, and pragmatics of ancient Hebrew. Introduction to the various methods used to investigate ancient Hebrew.
Prerequisite: NML350Y1
Exclusion: NML450Y1

**NML451H1 Advanced Babylonian Talmud [13S]**
Students will be introduced to the problems of text criticism involving variant readings and the redaction of Talmudic texts. Problems of transmission of the text, its relationship to the Palestinian Talmud, Tosefta and other texts will be explored. Use of Medieval Talmudic commentaries will be addressed.
Prerequisite: Intermediate Hebrew (Modern or Biblical)

**NML452H1 Halakhic Midrashim (formerly NMC432H1) [26S]**
This course familiarizes students with the methodology and terminology of the two midrashic systems: Devei R. Akiba and Devei R. Ishmael. Sections of all the midrashic halakha (Mekhiltot, Sifra and Sifre) are studied and compared to other Tannaitic materials. (Conducted in Hebrew) (Offered in alternate years)
Prerequisite: Intermediate Hebrew (Modern or Biblical)/ Permission of instructor
Exclusion: NMC432Y1/NMC432H1

**NML454H1 Midrash Before the Rabbis [26L]**
An examination of how the Bible was interpreted in the closing centuries BCE and the first century CE, beginning with the Book of Jubilees. This text will be read in combination with related material from the Dead Sea Scrolls and the Biblical Apocrypha and Pseudepigrapha.
Prerequisite: Two years of Biblical Hebrew or Aramaic or Greek; or permission of instructor

**NML455H1 Modern Hebrew Poetry [13S]**
A study of the poetic works of a major modern Hebrew poet. (Conducted in Hebrew) (Offered in alternate years)
Prerequisite: Permission of instructor

**NML456H1 Modern Hebrew Prose [13S]**
A study of an important modern writer of Hebrew fiction. (Conducted in Hebrew) (Offered in alternate years)
Prerequisite: Permission of instructor

**NML457H1 Introduction to Comparative Semitics [26S]**
Advanced language course placing ancient Hebrew within its geographic and typological context. Priority will be given to 1) methods used to reconstruct "proto-Semitic" and ancient Hebrew (versus the Tiberian Hebrew of the Hebrew Bible); 2) classifications of Semitic languages; 3) comparison of phoneme and lexical inventories, morphology and syntax; and 4) dialectal variation and dialect geography.
Prerequisite: permission of instructor.
Recommended Preparation: NML150Y1, 250Y1, and one NML 300-series course

## Persian

**NML260Y1 Introductory Persian (formerly NMC240Y1) [78S]**
The fundamentals of modern standard Persian grammar, with emphasis on attaining fluency in reading and writing simple texts. Also serves as a basis for classical Persian. (Offered in alternate years)
Exclusion: Native users/NMC240Y1. Priority enrollment will be given to declared NMC majors/specialists

**NML360Y1 Intermediate Persian (formerly NMC340Y1) [78S]**
Reading of a variety of modern prose texts on the intermediate level, with an emphasis on grammatical analysis and translation. Introduction to the classical language in the second term, with readings from selected authors. (Offered in alternate years)
Exclusion: NMC340Y/Native users. Priority enrollment will be given to declared NMC majors/specialists
Prerequisite: NMC240Y1/NML260Y1

**NML460Y1 Classical Persian Literature (formerly NMC441Y1) [52S]**
Introduction to classical Persian poetry, including the Persian national epic and the mystical tradition, and survey of the development of classical Persian prose, based on readings from selected authors. (Offered in alternate years)
Prerequisite: NMC340Y1/NML360Y1 or adequate knowledge of Persian
Exclusion: NMC441Y1

**NML461H1 Modern Persian Poetry (formerly NMC442H1) [13L]**
A survey of modern Persian poetry using connected passages of Persian texts.
Prerequisite: NML360Y1/NMC340Y1 or adequate reading knowledge

**NML462H1 Modern Persian Prose (formerly NMC443H1) [13L]**
A survey of modern Persian prose using connected passages of Persian texts.
Prerequisite: NML360Y1/NMC340Y1 or adequate reading knowledge

**NML463H1 Structural Development of Persian Language (formerly NML361H1) [13L]**
Development of Old Persian (551 BC) to Middle Persian (331 BC) to Modern Persian (7th century) with emphasis on word formation and grammar. Discussion is based on texts written by historians, linguists and grammarians who see language as a system which is changed by internal and external factors like politics, religion, immigration, business, etc.
Prerequisite: NML360Y1/NMC340Y1 or permission of instructor
Exclusion: NML361H1

## Turkish

**NML270Y1 Introductory Turkish (formerly NMC245Y1) [78S]**
The basic features of modern Turkish grammar. In the second term, Turkish prose and newspapers are studied, with some practice in writing simple Turkish. This course serves as a basis for the study of Ottoman Turkish. (Offered in alternate years)
Exclusion: Native speakers/NMC245Y1

**NMC370Y1 Intermediate Turkish (formerly NMC345Y1) [78S]**
Modern texts literary, scholarly and journalistic. Turkish grammar and syntax; the nature of Turkish culture. (Offered in alternate years)

Prerequisite: NMC245Y1/NML270Y or adequate reading knowledge of Turkish
Exclusion: NMC345Y1

**NML470Y1 Advanced Turkish (formerly NMC445Y1) [26L]**
Advanced Turkish language practice designed to enable students to pursue independent work in Turkish and Ottoman studies. Differences between modern Turkish and Ottoman grammar will be pointed out. Elements of Arabic and Persian grammar that occur in Ottoman will be presented.
Prerequisite: NML370Y or adequate knowledge of Turkish
Exclusion: NMC445Y1

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### Literature in Translation Courses

**NMC150H1 Hebrew Bible and Ancient Jewish Literature in Translation (formerly (NMC280Y/280H1) [26L]**
An introduction to the critical study of the Hebrew Bible/Old Testament and related literature of ancient Jewish communities (Apocrypha, Pseudepigrapha, Dead Sea Scrolls). No prior work in biblical studies or knowledge of Hebrew is required.
Exclusion: NMC280H1/280Y1

**NMC151H1 The Bible and Its Interpreters [26L]**
Acquainting students with the principal parts of the Hebrew Bible and studying some of the different ways in which it has been read and interpreted in various periods, from antiquity to modern times, the course will concentrate on the central biblical figures whose stories will be examined in the ancient Israelite context, then compared with later elaborations by Jewish and Christian interpreters.

**NMC251H1 Ancient Egyptian Literary Texts [26L]**
Explores a variety of different genres of ancient Egyptian literature, including wisdom literature, funerary texts, poetry, stories and other literary texts. Prior attendance of an introductory history and culture course such as NMC101Y1 may be helpful, but is not required.
Exclusion: NMC251Y1

**NMC252H1 Ancient West Semitic Literature [26L]**
Introduction to the epic, religious, and historical texts that provide the immediate religious, social, and political backdrop for ancient Israel and its most prominent textual product, the Bible. Texts will be studied in translation.
Recommended preparation: NMC 150Y.

**NMC253H1 Ancient Egyptian Cultural Texts [26L]**
Introduction to various genres of Egyptian texts, with a focus on those writings that provide information about aspects of funerary/religious beliefs and ritual, of history, politics and institutions, and of the Egyptian quest for knowledge of the world, as evinced in astronomical, medical, and mathematical sources. Literary texts will be treated in so far as they relate to the listed topics. No knowledge of the ancient Egyptian language(s) is required; all texts to be read in translation. Prior attendance in an introductory history and culture course such as NMC101Y may be helpful, but is not required.
Exclusion: NMC251Y1

**NMC254H1 Modern Hebrew Literature in Translation [26L]**
This course will survey Hebrew literature, primarily of the 19th and 20th centuries. After a brief overview of ancient and medieval Hebrew literature, the course will concentrate on the classics of the modern Hebrew revival, studying selected works by Bialik, Tchernikhovsky, Agnon, and Brenner. Students will also be introduced to contemporary Hebrew writers and poets such as Aharon Appelfeld, Yehuda Amichai, Amos Oz, and A.B. Yehoshua. All works will be studied in translation.

**NMC255H1 Arabic Literature in Translation [26L]**
Representative Arabic poems of the pre-Islamic period, followed by certain aspects of the Qur'an. Development of lyric poetry in the Islamic period and of prose, with emphasis on narrative prose. (Offered in alternate years)

**NMC256Y1 Literature and Culture of Modern Israel [52L]**
Introduces students to the culture of modern Israel through Israeli literature produced from 1948 - present. Focus will be primarily on selected short fiction, poems, plays, songs and films. Some themes explored are: tradition and modernity; traumas of war; the call of history; religion and secularism; and challenges of independence. In English translation. (Offered in alternate years)

**NMC257H1 Introduction to the Literature of the Jewish Sages (formerly NMC257Y1) [26L]**
A gateway course designed to introduce students to the variety of literary works produced by the Jewish sages who became known as the rabbis. These works are the classical texts of Judaism which, after the Bible, created normative Judaism. Sample reading in translation will acquaint students with these works. (Offered in alternate years)
Exclusion: NMC257Y1

**NMC258H1 Tales from the Masnavi of Rumi (formerly NMC258Y1) [26L]**
Introduces students to the greatest mystical poet of the Perso-Islamic tradition, Maulana Jalal al-Din Rumi (d. 1273). Topics include divine love and mystical union, imagination, and esoteric interpretation of the Qur'an. Also introduces the main ideas of Sufism and the figurative language of Persian mystical poetry. In English translation. (Offered in alternate years)
Exclusion: NMC258Y1

**NMC259H1 Armenian Literature in Translation [26L]**
This course offers selected texts written between the 5th and the 19th centuries CE, including pre-Christian epic stories, the Armenian version of the Bible, hagiography, chronicles, translations from Syriac and Greek; poetry and secular literature of the early modern period. All works studied are in English translation.

**NMC350H1 Syriac Literature in Translation [26L]**
Selected texts from Syriac literature written between the 3rd and 13th centuries C.E., including versions of the Bible and prominent authors of biblical commentaries, hymns, acts of martyrs, liturgical texts, historiography, grammatical and lexicographical works, as well as translations from Greek. (Offered in alternate years)
Recommended preparation: NMC101Y1

**NMC352H1 Faith and Doubt in Modern Hebrew Poetry [26L]**
An exploration of the relationship of modern Heberw poetry to the Jewish religious tradition. The focus of the course will be to discern whether modern Hebrew poetry constitutes a rebellion against that tradition, or whether it is a source of continuity and revitalization. (Offered in alternate years)

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### Archaeology Courses

**NMC260Y1 The Archaeology of the Ancient Near East [78L]**
A general introduction to the archaeology of the ancient Near East including prehistory, Syria-Palestine, and the high civilizations of Mesopotamia and Egypt. Organized chronologically to trace the historical development of agriculture, urbanism, and complex state-ordered societies in the region.

**NMC261Y0 Field Archaeology (formerly NMC261H1) [TBA]**
Participation for 4 - 7 weeks during the summer in an approved archaeological excavation in the eastern Mediterranean/Middle East. This experience is then critiqued in a previously assigned essay researched and written under guidance upon return. Departmental permission is required in December-February prior to the fieldwork.
Exclusion: NMC261H1

**NMC360H1 Archaeology of the Biblical World I: The Bronze Age (formerly NMC361Y1) [26L]**
The archaeology of Syria-Palestine from prehistoric times until the end of the Late Bronze Age (ca. 1200 BCE), with a special emphasis on the development of complex society, and inter-relations with the neighboring regions of Egypt and Syro-Mesopotamia. Attention will also be given to the history of archaeological research in the region, current field techniques and methods of archaeological analysis, and the relationship between archaeological evidence and contemporary written records, including the Hebrew Bible. (Offered in alternate years)
Prerequisite: NMC260Y1
Exclusion: NMC361Y1

**NMC361H1 The Archaeology of the Biblical World II: The Iron Age (formerly NMC361Y1) [26L]**
The archaeology of Syria-Palestine from the collapse of the Late Bronze Age until the Persian Period, with a special emphasis on the emergence of Israel and the small territorial nation-states of the eastern Mediterranean seaboard. Particular attention will be given to the relationship between the archaeological evidence and contemporary written records, including the Hebrew Bible. (Offered in alternate years)
Prerequisite: NMC260Y1
Exclusion: NMC361Y1

**NMC362Y1 The Art and Archaeology of Ancient Egypt [26L]**
Architecture, formal arts, and decorative arts to the end of the Pharaonic period. Cultural evolution rather than art history. (Offered in alternate years)
Prerequisite: NMC260Y1

**NMC363H1 The Archaeology of Historical Mesopotamia I 3000-1600 BCE (formerly NMC363Y1) [52L]**
The archaeology, art and architecture of Iraq, North Syria and western Iran from ca. 3000 - 1600 BCE. The civilizations of Sumer, Akkad, Babylonia and Assyria, as well as their relationship to those of the surrounding areas. (Offered in alternate years)
Exclusion: NMC363Y1
Prerequisite: NMC260Y1

**NMC364H1 The Archaeology of Historical Mesopotamia II 1600-330 BCE (formerly NMC363Y1) [52L]**
The archaeology, art and architecture of Iraq, North Syria and western Iran from ca. 1600 B.C.E. to the Persian period. The civilizations of Sumer, Akkad, Babylonia and Assyria, as well as their relationship to those of the surrounding areas. (Offered in alternate years)
Exclusion: NMC363Y1
Prerequisite: NMC260Y1

**NMC365Y1 Islamic Archaeology [52L]**
A survey of Islamic archaeology, covering the rise of Islam from 7th century to the end of the Fatimid period in 1171, examining sites in the Middle East, North Africa and Andalusia through the archaeological record, artifacts evidencing history, art history, urbanism and socio-ecology of early Muslim communities.
Recommended preparation: NMC201Y1/260Y1

**NMC366Y1 The Islamic City [26L]**
Architectural studies, historical sources and archaeological research are used to examine the physical and social morphology of the pre-industrial Islamic city from Central Asia to North Africa and Spain, from the 7th to the 17th centuries.

**NMC368H1 Coptic Art & Archaeology [26L]**
A survey of Coptic art, archaeology and architecture. The course will cover aspects of the religious, civil and daily life of the Copts: their houses, religious architecture, funerary monuments, art and artefacts
Recommended preparation: NMC260Y1 and/or an introductory course in archaeology

**NMC369Y1 Archaeological Materials and Industries [26L]**
Materials and technology help define the cultures and civilizations that use them, especially for archaeologists. Focusing on the Near and Middle East, this course is aimed at promoting understanding of the nature of materials used by the peoples of the region from the earliest prehistory until recent times. This course has a hands-on emphasis. (Offered in alternate years)
Recommended preparation: NMC260Y1
Exclusion: NMC369H1

**NMC394H1 Later Islamic Art & Architecture [39L]**
A continuation of NMC393H1, covering Islamic art and material culture in the years from the 13th century CE to the modern period. Workshop sessions with the Royal Ontario Museum collection.
Prerequisite: One course in either an Islamic field or Fine Art History.
Recommended Preparation: NMC393H1

**NMC461Y1 Problems in the Archaeology of the Ancient Near East [52S]**
Prerequisite: 1.5 courses from NMC361Y1/362Y1/363H1/364H/363Y/465H1/466H1; two courses from NMC370Y1/371Y1/372Y1/343H/344H/346H/347H

**NMC462Y1 Polarized-light Microscopy in Archaeology (formerly NMC462H1) [13L, 39P]**
The use of polarized-light microscopy in the examination of ceramics, stone, other materials, and microstratigraphy. Lectures in elementary optical mineralogy and case-studies are followed by lab sessions in which typical thin-sections of pottery, rocks, soils and other materials are studied. (Offered in alternate years)
Exclusion: NMC462H1
Prerequisite: NMC369H1/NMC369Y1

**NMC463Y1 Landscapes of the Ancient Near East [26L/ plus lab TBA]**
Providing students with a solid understanding of the concepts and techniques used in landscape studies as applied to the Near East. The course uses a thematic approach, studying the theories and methodologies of landscape archaeology and case studies, and introduces students GIS and the use of remote sensing data. (One-time only)
Prerequisite: NMC260Y and an upper-level course in Near Eastern archaeology

**NMC464H1 Mediaeval Middle Eastern Ceramics [13L, 26P]**
An intense view of the basic corpus of pottery from the Middle East, ca. 700-1800 C.E. The identification of technology, form, and style of the main ceramic groups, enabling identification, dating and attribution of original provenance. (Offered in alternate years)
Prerequisite: NMC260Y1

**NMC465H1 Ceramic Analysis (formerly NMC364H1) [26S]**
A survey of methods of classification and analysis (form, fabric and style) involved in the study of archaeological ceramics, and the use of ceramics to infer patterns of production, distribution, and social organization; linking research questions with appropriate analytical techniques.
Exclusion: NMC364H1
Prerequisite: ARH312Y1/NMC361Y1/369H1/369Y1

**NMC466H1 Near Eastern Ceramics (formerly NMC367H1) [26S]**
An introduction to the basic corpus of Near Eastern ceramics, from the invention of pottery production in the Neolithic until the Persian period, utilizing existing collections at the University and in the Royal Ontario Museum.
Prerequisite: NMC260Y1, 465H1

**NMC467H1 Archaeology of Ancient Egypt I: Predynastic Period to Middle Kingdom [26S]**
The archaeology and material culture of ancient Egypt, with emphasis on the theoretical and methodological issues inherent in interpreting the archaeological record. Students will also work directly with artifactual material from the Egyptian collection of the ROM.
Prerequisite: NMC371Y1/NMC343H and NMC344H

**NMC468H1 Archaeology of Ancient Egypt II: Second Intermediate Period to Greco-Roman Period [26S]**
The archaeology and material culture of ancient Egypt, with emphasis on the theoretical and methodological issues inherent in interpreting the archaeological record. Students will also work directly with artifactual material from the Egyptian collection of the ROM.
Prerequisite: NMC371Y1/NMC343H and NMC344H

**NMC 469Y1 Contextualizing Medieval Middle Eastern and Islamic Pottery [26L]**
This course will use ceramics as the central core to study the material culture of the medieval Middle East and the central Islamic lands. As such they will be the running narrative, to which other materials will be referred, or in turn used to refer to other materials. The same motifs found on ceramics may be found in the contemporary buildings, textiles or woodwork; the same forms are found in metalwork and glass; illustrations on ceramics will survive better than contemporary manuscript paintings, and there are more illustrations of, for instance, medieval swords to be found on pottery than there are actual swords. The course will rely heavily on the collections of the ROM, and provide a thorough grounding on the technical production and typological variability of the various types of materials attested within their archaeological and cultural context.
Prerequisite: NMC260Y1, one other 300+ level course in archaeological materials

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### History Courses

**NMC250H1 Dead Sea Scrolls (formerly NMC329H1) [26L]**
An examination of the political context in which these scrolls were produced and preserved.; different theories of who produced these texts, e.g., Sadduccees, Zadokite Priests or Essenes; the way the scrolls use earlier biblical traditions. No Hebrew/Aramaic required; students with background in these languages will have opportunities to use them.
Exclusion: NMC329H1, 331H, last offered in 2001-02 in Hebrew language

**NMC270H1 History of Syriac Christianity [26L]**
The birth of Christianity in Syria and Mesopotamia and the rise of the Monophysite and Nestorian Churches; their life under the Byzantines, Sassanians, Arabs, Mongols and Ottomans. The role of Syrian Christians in diplomacy, science, missions, and relations with other churches. (Offered in alternate years)
Recommended preparation: NMC101Y1

**NMC271H1 Arabia Before Islam [26L]**
Surveying conditions present in the region dominated by the Byzantine and Sasanian empires prior to the rise of Islam (6th-7th C.E.) in order to better understand the environment in which Islam was born, and the features which allowed for the birth of a new religion and a new civilization.

**NMC272H Byzantines to Seljuks [26L]**
Rather than being a survey of political history of the Byzantine Empire this course covers selected topics relating to institutions, society, economy, and culture of the era.

**NMC273Y1 Islamic History to the Fall of Baghdad (1258) [52L]**
Features of the pre-Islamic Middle East inherited by Islamic civilization, birth of Islam, life and times of Muhammad, formation of Islamic empire and civilization, political disintegration of the caliphate, emergence of autonomous dynasties, the fall of Baghdad to Mongols in 1258 and the rise of the Mamluks.

**NMC274Y1 The Steppe Frontier in Islamic History (formerly NMC274H1) [26L]**
Eurasian steppe nomads as slave-soldiers, conquerors, world-empire builders throughout pre-modern Islamic Middle East

and Central Asia. Topics include pastoral nomadism, steppe politics and warfare, conversion, jihad. Provides basis for understanding past and present issues of lands, such as Iran, Afghanistan, India, Syria, Egypt and Turkey, where Turks and Mongols played decisive historical roles. (Offered in alternate years)
Exclusion: NMC274H1

**NMC275H1 Muslims & Jews: The Medieval Encounter [26L]**
An introduction to the encounter between Jews and Muslims in medieval times, when a majority of Jewish people subsisted under Muslim rule. An overview of religious/political/intellectual settings of the Judeo-Muslim experience is followed by exploring cultural cross-pollination, the Jews' legal status under Islam, and interfaith politics. Source materials in translation.
Exclusion: NMC275Y1

**NMC276Y1 Social Movements and Civil Society in the Middle East [52L]**
This course examines the transformation of Middle Eastern societies form the perspective of non-state actors, especially the social and political movements of peasants, women, labour, students, and other social groups.

**NMC277H1 Special Topics in Near & Middle Eastern History**
Topics vary from year to year, depending on instructor.

**NMC278H1 Introduction to the Modern Middle East (formerly NMC 278Y1) [26L]**
Historical survey of the principal countries of the Middle East in the 19th and 20th centuries. Themes include the interplay of imperial and local interests, the emergence of national movements, and the formation of modern states.
Exclusion: NMC278Y1

**NMC279H1 History of Armenian Christianity [26L]**
A survey covering early Christianity in Greater Armenia – the role of Gregory the Illuminator; Christological controversies of the 5th century and Armenian Christianity; early Christian art and architecture; the life of the Armenians under the Sassanians and the Byzantines; and subsequently under the Abbasids, Saljuks, Mongols, Safavids and Ottomans.

**NMC324H1 Greek Speaking Judaism of the Second Temple Period [26L]**
A study of the Jewish community that produced the Greek Bible (Septuagint). Philosophical texts (Philo of Alexandria), historical narratives (Pseudo-Aristeas, Josephus), liturgical (Synagogue Prayers) and interpretive texts (Testaments of the Twelve Patriarchs, Joseph and Asenath). No Greek/Hebrew required; students with background in these languages will have opportunities to use them.

**NMC343H1 History of Ancient Egypt I: Predynastic Period to Middle Kingdom (formerly NMC371Y1) [26L]**
The political and cultural history of Egypt from the later predynastic period through the Middle Kingdom; the use of both archaeological and literary evidence.
Exclusion: NMC101Y1 may not be taken in the same year, NMC371Y1
Recommended preparation: NMC101Y1

**NMC344H1 History of Ancient Egypt II: Second Intermediate Period to Greco-Roman Period (formerly NMC371Y1) [26L]**
The political and cultural history of Egypt from the Second Intermediate Period through the Middle Greco-Roman Period; the use of both archaeological and literary evidence.
Exclusion: NMC101Y1 may not be taken in the same year, NMC371Y1
Recommended preparation: NMC101Y1

**NMC346H1 Ancient Mesopotamia I: Sumerians and Akkadians (formerly (NMC372Y1) [26L]**
The political and cultural history of the peoples of ancient South-Western Asia from 3000BCE to the destruction of Babylon by the Hittites ca. 1600 BCE. (Offered in alternate years)
Exclusion: NMC101Y1 may not be taken in the same year, NMC372Y
Recommended preparation: NMC101Y1

**NMC347H1 Ancient Mesopotamia II: Assyrians and Babylonians (formerly (NMC372Y1) [26L]**
The political and cultural history of the peoples of ancient South-Western Asia from ca. 1600 BCE to the conquest of Babylon by Alexander the Great in 331 BCE (Offered in alternate years)
Exclusion: NMC101Y1 may not be taken in the same year, NMC372Y
Recommended preparation: NMC101Y1

**NMC348Y1 History of Iran from the Sasanians to the Safavids (formerly NMC375Y1, 348H1, 349H1) [52L]**
The political history and cultural legacy of the Sasanian empire before the Arab conquests of Iran in the 7th-8th centuries, with a focus on the transmission of Persian concepts of kingship, administration, and social organization into Islamic civilization. The rise of native Iranian dynasties in the eastern Islamic world and the creation of the Perso-Islamic cultural synthesis under the Samanids in the 10th century. The history of greater Iran (including Central Asia and Afghanistan) under the rule of Turkic and Turko-Mongolian dynasties, such as the Ghaznavids, Seljuqs, Ilkhanids, and Timurids, with special attention to the interaction between nomadic and sedentary cultures. The emergence of the Safavid state in the 16th century, a watershed in the political and religious history of Iran, to the early modern period in the 18th century.
Recommended Preparation: NMC273Y1/274H1/274Y1
Exclusion: NMC375Y1/348H1/349H1

**NMC355H1 The Ottoman Empire in the Age of Reform, 1808-1918 [26L]**
The last phase of the Ottoman empire has long been viewed by Orientalists and Middle East nationalists as a period of inevitable decline. More recently, cultural historians of the Middle East have framed the long 19th. century as a period of grand reforms - or Tanzimat. This course seeks to critically examine the notions of 'reform of the state' and 'reform of the individual' between Sultan Mahmud II's accession and the defeat of the Ottoman empire in World War I. Focusing largely on Istanbul and the Ottoman capital's political relations with the Arab provinces, we will relate economic, social and intellectual transformations to state laws and policies, Mediterranean capitalism and the rise of sectarianism and nationalism in the Middle East.
Recommended preparation: NMC276Y1/278H1/278Y1/353H1/377H1/377Y1/378H1/378H1

**NMC357H1 Communications Media of the Middle East (formerly NMC357Y1) [26L]**
The Middle East and Far East are the birthplace of the world's most important communication revolutions, writing and its mechanization, i.e., printing. However, the modern mass media including journalism, film, radio, and television as well as communication technologies such as telegraphy, telephony, photography, sound recording, photocopying, computers, satellites, facsimile and Internet originated in the West. These media are important actors in the social, cultural, and political life of the Middle East, and its diasporas in the West. This course deals with, among other topics, media, state and empire formation; the social and historical contexts of the rise of modern mass media; the formation of reading, listening and viewing publics; civil society, public spheres and democratisation; media and social movements; media, language and nation; satellite broadcasting; "high" and "popular" cultures; radio wars; the Internet; communication rights. Evaluation will be based on participation, weekly writing assignments, one major research paper or a final exam.
Exclusion: NMC357Y1
Prerequisite: NMC 278H/278Y or permission of the instructor.

**NMC 358H1 Mass Media, the Middle East, and the West (formerly NMC357Y1) [26L]**
Mass media and popular culture play a prominent role in the ways in which Western societies understand the Middle East. This course examines a variety of academic approaches to the study of the world's changing media environments in the context of relations between the West and the Middle East.
Exclusion: NMC357Y1
Prerequisite: NMC 278H1/278Y1 or permission of the instructor

**NMC359H1 Iranian Constitutional Revolution (formerlyNMC359Y1) [26L]**
Explores competing narratives of the Constitutional Revolution (1906–1911), particularly the transformation of public and private spheres and their corresponding modes of collective and personal self-presentation. Students explore revolutionary legacies, and the ways in which competing political, religious and ideological forces have attempted to shape the Revolution's memory. (Offered in alternate years
Exclusion: NMC373H1 may not be taken in the same year; NMC359Y1
Recommended preparation: NMC278H1/278Y1

**NMC370H1 Ancient Israel (formerly NMC370Y1) [52L]**
The political and cultural history of ancient Israel from the origin of the Hebrews to the exile and restoration in the Persian period. (Offered in alternate years)
Exclusion: NMC101Y1 may not be taken in the same year, NMC370Y1
Recommended preparation: NMC101Y1

**NMC373H1 Turkey and Iran in the 20th Century (formerly NMC373Y1) [26L]**
A survey of the social, cultural, and political transformations of Turkey and Iran in the context of Eurasian and international relations. (Offered in alternate years)
Recommended preparation: NMC278H1/278Y1
Exclusion: NMC359H1 may not be taken in the same year, NMC373Y1

**NMC374H1 History of Islamic Egypt (formerly NMC374Y1) [26L]**
A survey of the history of Egypt under Islamic rule from the Arab to the Ottoman conquest (1517 C.E.), including the Fatimid, Ayyubid and Mamluk dynasties. Issues treated thematically include conversion and inter-communal relations, relations with Syria, militarization of the political structure, including the military slave (mamluk) institution, religious currents, the impact of the Crusades and Mongol invasions, commercial and diplomatic relations, the emergence of Cairo as the centre of the later mediaeval western Islamic world. (Offered in alternate years)
Recommended preparation: NMC273Y1
Exclusion: NMC374Y1

**NMC376H1 History of Islamic Spain and North Africa (640-1492) [26L]**
Muslim conquest of North Africa and Spain, history of Spain under Muslim rule to 1492. Attention given to institutional and cultural development, Islamic Spain's relations with the Islamic east and neighbours in Europe. (Offered in alternate years)
Recommended preparation: NMC273Y1

**NMC377Y1 The Ottoman Empire to 1800 (formerly NMC377H1, 353H1) [26L]**
History of the emergence of the Ottoman state and its evolution from a border principality in Asia Minor into an empire. Ottoman expansion into Europe, Asia and Africa. The empire at its height under Süleyman the Lawgiver. The development of important administrative and military institutions. First military and diplomatic setbacks.
Recommended preparation: NMC273Y
Exclusion: NMC377H1

**NMC378H1 Themes In Modern Arab History (formerly NMC378Y1) [26L]**
A thematic treatment of the Arab lands of the Middle East and North Africa from 1700 onward, focusing on the Ottoman and colonial periods.
Recommended preparation: NMC278H1/278Y1
Exclusion: NMC378Y1

**NMC471H1 Topics in Early & Medieval Islamic History [13S]**
A seminar organized around readings on a topic selected by the instructor. Possible topics might include authority and power in medieval Islamic society in the Middle East, slavery, women, taxation, landholding, iqta' and payment of the military, waqf, etc. (Offered in alternate years)
Prerequisite: Permission of the instructor

**NMC472H1 Theory & Method in Middle East Studies [13S]**
Examines current theoretical and methodological trends in the study of the Near/Middle East. A seminar course, it consists of presentations, discussions, lectures, guest speakers, and documentaries. No previous knowledge of methodology required. Special attention will be paid to the politics, culture, political economy, gender, and ethics of various research practices.
Prerequisite: Permission of the instructor

**NMC473H1 Intellectuals of the Modern Arab World (formerly NMC385Y1/NMC355H1) [13S]**
The course is designed to re-examine the role of intellectuals in the Arab world and political events that shaped their thinking. It introduces the life and thought of some leading thinkers of the Arab world and relates their thought to the lived experience of

political, social, economic and cultural change in the Middle East. (Offered in alternate years)
Recommended preparation: NMC276Y1/278H1/278Y1/377H1/377Y1/378H1/378Y1
Exclusion: NMC385Y1/NMC355H1 from 2005-06

**NMC474H1 Contemporary Iraq [13S]**
Although Iraq is the site of the earliest major revolutions in history (communication, agrarian and urban revolutions), this course is a survey of more recent history, i.e., the creation of the Iraqi state under British rule, its role in post-WWI colonial projects, the Cold War, and regional and international conflicts. Focus will be on the emergence of Iraqi nationalism, Kurdish nationalism, political Islam, social movements, as well as the Iraq-Iran war of 1980-88, the U.S. wars of 1991 and 2003, and the outcomes of these wars. Evaluation will be based on participation, weekly writing assignments, and one major research paper.
Prerequisites: NMC278H/278Y or NMC276Y or permission of the instructor.

**NMC475H1 Orientalism & Occidentalism [13S]**
This course probes the contemporaneous formation of modern Oriental Studies in Europe and the emergence of discourses on Europe (Ifranj/Farang) in the Middle East from the eighteenth century to the present. Special emphasis will be devoted to encounters between scholars in Western Europe, Iran, India, and the Ottoman Empire. This seminar-style course explains that Orientals gazed and returned the gaze, and in the process of "cultural looking," they, like their Occidental counterparts, exoticized and eroticized the Farangi-Other. In the interplay of looks between Orientals and Occidentals, there was no steady position of spectatorship, no objective observer, and no "aperspectival" position.
Prerequisites: permission of the instructor.

**NMC476H1 Violence and Civil Society in the Middle East (formerly NMC477Y1) [13S]**
While the ideas and practices of civil society in the Middle East date back to the late nineteenth century, the region has emerged as an enduring war zone of the world. This course examines the dynamics of conflict and coexistence in the heterogenous societies of the region. Focus will be on Middle Eastern politics and practice of civil society, the nation-state system, and modernist forms of state and non-state violence such as massacre, genocide, crimes against humanity, ethnocide, ethnic cleansing, linguicide, racism, ethnocentrism, and xenophobia. Evaluation will be based on participation, weekly writing assignments, and one major research paper.
Exclusion: NMC477Y1
Prerequisite: NMC278H/278Y or permission of the instructor.

**NMC477H1 Nationalist Movements in the Middle East (formerly NMC477Y1) [13S]**
Although the Middle East is often viewed, in the West, as an ethnically and religiously homogeneous region (Arab, Islamic), it is one of the world's diverse regions in language, culture, ethnicity, nationality, and religion. Nationalist movements, which emerged in the late nineteenth century, re-shaped the political, economic, linguistic and cultural make-up of the region. The course will focus on four state-nationalisms (Arab, Jewish, Persian, Turkish) and one non-state nationalism (Kurdish). Students are encouraged, in this seminar course, to study other nationalist movements. While course content is diverse, the approach to nationalism will be informed by the growing body of critical theories. Evaluation will be based on participation, weekly writing assignments, and one major research paper.
Exclusion: NMC477Y1
Prerequisite: NMC278H/278Y or permission of the instructor.

**NMC 478H1 Readings in the Modern History of Arab Societies [13S]**
A seminar built around thematic readings of social and economic history of the modern Arab world. Offered every other year.
Prerequisite: NMC 378H1/378Y1

**NMC479H1 Histories of Nationalism in the Arab World (formerly NMC479Y1) [52S]**
A seminar organized around readings in selected topics. The topics are related to the instructor's research interests. (Offered in alternate years)
Prerequisite: NMC378H1/NMC378Y1 or permission of instructor
Exclusion: NMC479Y1

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### Religion and Philosophy Courses

**NMC185H1 Introduction to the Religion of Islam (formerly NMC185Y1) [26L]**
The place of Islam in world history, its central beliefs and practices. The Islamic contribution to world civilization; the pluralistic community, learning and the arts. Islam and modernity.
Exclusion: RLG204Y1, NMC185Y1

**NMC281H1 Prophets: Ancient Jewish Prophecy and Inspired Exegesis (formerly NMC252H1) [26L]**
Practices and concepts of prophecy in the Hebrew Bible and Second Temple traditions such as Dead Sea Scrolls, Hellenistic Jewish writings, and early Christian writings. How did prophets, priests and scribes claim divine inspiration? How did they connect revelation and heavenly journey to textual authority and the production of Scripture?
Exclusion: NMC252H1

**NMC282H1 The Politics of Prophecy in Biblical Narrative [26L]**
A study of selected biblical narratives concerned with the early prophets and their relationship with the monarchs of ancient Israel: Samuel and Saul, Nathan and David, Elijah and Ahab, Isaiah and Hezekiah, etc. We will explore the historiography of the Bible and read several modern literary critics. In English.

**NMC284H1 Judaism and Feminism [26S]**
Explores the interaction between Jewish religious and secular movements and feminism. Investigates Jewish law (halakha) and the Jewish legal (halakhic) process in terms of feminist critique. Marriage, divorce, Torah study, bat mitzvah, other ceremonies, female rabbinic ordination and women's prayer groups are some of the topics considered. (Offered in alternate years)

**NMC285H1 The Qur'an: Spirit and Form (formerly NMC285Y1) [26L]**
Concern is mainly with the sacred character of the Qur'an (koran), its preeminence in Islam. Topics include: the idea of the sacred book, the Qur'an and the Bible, the influence of the Qur'an on Islamic spirituality, literature, theology, law, philosophy, and the various apporaches taken in interpreting the Qur'an. Knowledge of Arabic is not required. (Offered in alternate years)
Recommended preparation: NMC185H1/185Y1/RLG204Y1
Exclusion: NMC285Y1/RLG351H1

**NMC286H1 The Qur'an: Reading and Transformation [26L]**
This course is a continuation of NMC285H1F. Students will be required to engage directly with the text in English or French translation, to discuss and write on major and minor quranic topics and themes and to study the works of other astute readers of the text. Arabic is not required or expected.
Recommended preparation: NMC285H1
Exclusion: NMC285Y1/RLG351H1

**NMC 287H1 Mystical Dimensions of Islam and Judaism [26L]**
The phenomenon of mysticism and the forms it took in the religions of Judaism and Islam. A survey of the main trends in each mystical tradition, with a focus on Sufism (Islamic mysticism) and Kabbalah (Jewish mysticism), both of which flourished during the mediaeval period. Parallel developments will be identified and possible mutual influences suggested. Readings in English translation include Attar's Conference of the Birds, Ruzbihan Baqli's Unveiling of Secrets, the Book Bahir, and the Zohar.
Exclusion: HUM199H1/Y1Y L0302 (2003-2006)

**NMC380Y1 Religion and Myth in the Ancient Near East (formerly NMC380H1) [52L]**
Religious belief and practice in Mesopotamia and Syria (Ugarit). (Offered in alternate years)
Exclusion: NMC380H1
Recommended preparation: NMC101Y1

**NMC381H1 Modern Islamic Thought (formerly NMC381Y1) [26L]**
A survey of major intellectual trends in the Islamic religious tradition, particularly those identified with Middle Eastern Muslim thinkers, from the eighteenth century until the present.
Prerequisite: NMC185H1/201Y1 or RLG204Y1
Exclusion: NMC381Y1, RLG250H1

**NMC382Y1 Ancient Egyptian Religion (formerly NMC382H1 and 383H1) [52L]**
Religious belief and practice in ancient Egypt. The course will focus on gods and mythology, which will be studied through primary sources in translation. (Offered in alternate years)
Recommended preparation: NMC101Y1
Exclusion: NMC382H1/NMC383H1

**NMC384H1 Life Cycle and Personal Status in Judaism [26L]**
Jewish attitudes to various personal status issues, such as the foetus, the minor, the pubescent child, and the mentally and physically challenged adult from biblical and rabbinic sources to modern Jewish positions. (Offered in alternate years)

**NMC387H1 Islamic Mystical Tradition [26L]**
Mysticism and spirituality in Islam: the Qur'an; doctrine; prayer; Sufism; Irfan (Shi'i mysticism). Themes include love, knowledge, authority, being, interpretation.
Prerequisite: NMC185H1/185Y/RLG204Y

**NMC388H1 Shi'i Islam I (formerly NMC386H1) [26L]**
Subjects covered include: the rise and development of the Shi'i version of Islamic "orthodoxy" from the mid-7th to the mid-13th centuries CE. Distinctive Shi'i interpretations of the Qur'an will be examined.
Prerequisite: NMC185H1/185Y1/RLG204Y1
Exclusion: NMC386H1

**NMC389H1 Shi'i Islam II (formerly NMC386H1) [26L]**
This course continues the study of Shi'ism from 1258 to the present day and will include the history and teachings of the various members of the Shi'i family of Islamic religion.
Prerequisite: NMC185H/185Y/RLG204Y
Exclusion: NMC386H1

**NMC481H1 Muslim Gnostics and Mystics [26L]**
This course will present for study a different prominent figure each year: Hallaj, Ghazali, Suhrawardi, Ibn Arabi, Rumi, Mulla Sadra, and so on. Attention will be given to their respective social and historical milieux, their modes of expression and experience, an the nature of their literary productions.
There is no prerequisite, but students must be advanced undergraduates in the Humanities.
Recommended preparation: NMC285H1/286H1/RLG351H1

**NMC482H1 All About Eve: The Image of the First Woman in Rabbinic, Christian, and Gnostic Sources [13S]**
An examination of the biblical account of Eve's creation and the sin in the Garden of Eden (Genesis 2 and 3), and its afterlife in the Pseudepigrapha of the Second Temple, the Church Fathers, Gnostic sources, and rabbinic midrashim. We will focus on the role of woman in 'the Fall', and discuss the dialectical relationship between body and spirit, seduction and free will, sin and return, and how these dynamics are cast in terms of gender in the different sources. Texts will be read in translation, as well as the original language (where feasible). No language requirement.

**NMC484H1 Gender-related Topics in Law and Religion (formerly NMC484Y1) [26L]**
Abortion, rape, family violence and similar topics from the perspective of historical and legal development, scientific theory, socio-ethical attitudes and anthropological comparison in the Bible and other ancient Near Eastern sources, through Jewish legal texts to modern responses. (Offered in alternate years)
Prerequisite: Permission of instructor
Exclusion: NMC484Y1

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### Art and Material Culture Courses

**NMC392H1 The Taj Mahal and Its Origins [26L]**
Monumental architecture, whether for secular or religious purposes, played a special role in Muslim societies, particularly in major centres such as Isfahan, Samarkand and Delhi. Beginning with the Taj Mahal (1632) the best-known elements of Islamic architecture the double dome, the pointed arch, glazed tiles are traced retroactively in Iran, Central Asia, and India, and their social context is studied. (Offered every three years)
Prerequisite: NMC391H1, 394H1 or 2 courses in FAH

**NMC393H1 Early Islamic Art & Architectures [26L]**
A survey of the arts of the Islamic world from the 7th century to the Mongol conquest in the mid-13th century. Workshop sessions with the Royal Ontario Museum collection.
Prerequisite: One full course in Near Eastern/Islamic art & material culture

**NMC394H1 Later Islamic Art & Architecture [26L]**
A continuation of NMC393H1, covering Islamic art and material culture in the years from the 13th century CE to the modern period. Workshop sessions with the Royal Ontario Museum collection.
Prerequisite: One course in either an Islamic field or Fine Art History.
Recommended Preparation: NMC393H1

**NMC396Y1 From Alexander to Muhammad [52L]**
An overview of late antique Greek, Arab and Persian material culture, as seen through the archaeological record of Syria, Iraq, and Iran.

### Research Courses

**NMC299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**NMC398H0 Independent Experiential Study Project**

**NMC399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**NMC495Y1 Independent Studies**
Prerequisite: Permission of Department

**NMC496H1 Independent Studies**
Prerequisite: Permission of Department

**NMC497H1 Independent Studies**
Prerequisite: Permission of Department

**NMC499Y1 Directed Reading**
A course of study tailored to the individual needs or interests of advanced undergraduate students. A selection of readings chosen by the student, under the supervision of a faculty member on which the student may be examined serves as background preparation for the writing of a research paper.
Prerequisite: Permission of Department

## Neuroscience: see Life Sciences: Human Biology

# New College

## Faculty

### Associate Professors

D.L. Eyoh, MA, Ph D (African Studies/Political Science)

### Senior Lecturers

A. Itwaru, Ph D (Caribbean Studies)

J. Larkin, BA, M Ed, Ph D (Women and Gender Studies/ Equity Studies)

### Lecturers

D. Knott, MA, MTS (Paradigms and Archetypes/Writing Centre)

R. Michalko, Ph D (Equity Studies)

New College courses have in common a commitment to be explorative and inventive and to widen students' experience by critically examining relationships among academic disciplines. These courses take their place within our various Specialist, Major and Minor programs. These programs are open to all students in the University.

Integration of student experience is a major concern in a college with students from all faculties in the University. The Independent Studies courses provide an opportunity for students to design their own programs and to test their analytic, synthetic, and creative skills by writing a thesis.

**The African Studies Program**

(Specialist, Major, Minor) offers opportunities to study Africa through a selection of courses devoted to African history, society and culture. The core courses are drawn from anthropology, history, literature and political science.

**The Buddhism, Psychology and Mental Health Program**

(Minor) allows students to choose from a wide range of courses on mind, consciousness, cognitive science, psychology of religion, health psychology, and sociological analyses of physical and mental health to acquire an understanding of the contributions of Buddhism to the modern understanding of consciousness, mental health and illness, and determinants of physical health.

**The Caribbean Studies Program**

(Specialist, Major, Minor) consists of courses in Caribbean history, literature and thought that deal with issues including gender, religion, politics, culture, ethnicity, race, development, language, colonialism and regional common markets.

**The Equity Studies Program**

(Major) is an interdisciplinary program that examines various models - historically and culturally specific - for conceptualizing social inequities and for bringing about equity. It draws together discourses on equity from the humanities, social sciences and sciences.

**The Human Biology Programs***

offer a broad education in life sciences with courses offered by departments in both the Faculties of Arts and Science, and Medicine.

*Specialist: (1) Genes, Genetics and Biotechnology; (2) Global Health; (3) Health and Disease; (4) Human Behavioural Biology; (5) Neuroscience; Major: Human Biology (See Life Sciences section of the Calendar.)

**The Paradigms and Archetypes Program**

(Minor) provides opportunities for undergraduates in discipline-based programs to access, through a comparative analysis of primary sources, the structure and dynamics of "paradigms": archetypal narratives, assumptions, myths, fantasies, analytical protocols and methodologies which govern the conduct of disciplines in every field and all cultures.

**The South Asian Studies Program**

(Specialist, Major, Minor) provides the opportunity for students to study traditional and modern South Asia. The history and culture of India, Pakistan, Bangladesh, and Sri Lanka are presented in courses offered by a number of departments.

**The Women and Gender Studies Program**

(Specialist, Major, Minor) provides an interdisciplinary and culturally inclusive approach to understanding gender. The curriculum addresses the meaning and importance of gender in a variety of individual, institutional and transnational contexts. It provides opportunities to learn about feminist activism and resistance in areas such as citizenship, globalization, religious fundamentalism, war, technoscience, environmentalism and women's health. The program fosters a strong student community through a wide range of workshops and events as well as academic and practical links to local, national and international organizations. Women and Gender Studies scholarship and organizational initiatives thus address the location of UofT within a culturally diverse, economically disparate and socially complex city and nation.

Contact:

Program Secretary's Office:
New College, Room 133 (416-978-5404 or nc.programs@utoronto.ca)

Registrar's Office:
New College, Room 107 (416-978-2460)

## New College Programs

### African Studies (Arts program)

Consult Program Co-ordinator, Dr. T. Tieku, New College, 416-946-0283. For general enquiries call 416-978-5404.

Enrolment in the Specialist, Major, and Minor programs in African Studies is open to students who have completed four courses; no minimum GPA required.

#### Specialist program:

(11 full courses or their equivalent, including at least four 300+ series courses with at least one full course at the 400-level)

**Core course requirements:**

NEW 150Y1 (recommended in first year), NEW 450H1 (to be taken in the final year)

**Other requirements:**

1. Four full course equivalents from Group A, to be chosen from at least two different departments/programs, one of which must be NEW 450H1
2. Two full course equivalents from Group B
3. Two full course equivalents from Groups A or B
4. A combination of two language full course equivalents as outlined in Group C

5. Four full course equivalents of the eleven courses must be 300/400 series (including at least one 400-series course) of which at least one must be from Group A and another from Group B

**Major program:**
(6 full courses or their equivalent, including two at the 300+level)

**Core course requirements:**
NEW 150Y1 (recommended in first year), NEW 450H1 (to be taken in the final year)

**Other requirements:**
1. Three full course equivalents from Group A, one of which must be NEW 450H1
2. Two full course equivalents from Groups B, or NEW 280Y1 and 380Y1
3. At least two 300/400-series full course equivalents from Groups A and/or B

**Minor program:**
(4 full courses or their equivalent, including one at the 300+level)

**Core requirement:**
NEW 150Y1 (recommended in first year)

**Other requirements:**
1. One full course equivalent from Group A
2. One full course equivalent from Group B, or another one from Group A
3. One full course equivalent from Group B or NEW 280Y1, NEW 281Y1 or NEW 380Y1
4. At least one full course equivalent must be a 300+series course from Groups A and/or B

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**Group A (Courses that deal exclusively with Africa. These include but are not limited to the following):**
HIS 383H1, 396Y1, 481H1, 486H1; NEW250Y1, 296Y1, 322Y1, 350H1, 351Y1, 352Y1, 450H1; POL301Y1, 488Y1, 489H1; SMC209H1; an independent studies course approved by the Program Committee

**Group B (Courses that deal with Africa and/or one or more of its diaspora. These include but are not limited to the following):**
ANT363Y1, 367Y1, 426H1, 454H1; ENG270Y1, 277Y1, 278Y1; FCS291H1, 392H1; FRE332H1; HIS 106Y1, 294Y1, 296Y1, 305H1, 360Y1, 366Y1, 370H1, 393H1, 408Y1, 446Y1, 456Y1, 475H1, 476Y1, 487H1; INI327Y1; NMC366Y1, 376H1, 377Y1, 378H1; NEW223Y1, 224Y1, 324Y1, 325H1, 326Y1; POL201Y1, 321H1, 358H1, 403H1, 479H1; SOC210Y1; WGS 435H1, 440H1

**Group C:**
(NEW280Y1, 281Y1, 380Y1)/(FSL221Y1, 331Y1/341Y1/ 431Y1/ 362Y1)/(NML210Y1, 310Y1)/(PRT100Y1/ 110Y1, 220Y1); or two courses in a major African language approved by the Program Committee

## Buddhism, Psychology and Mental Health (Arts program)

Consult Program Director, Prof. A. Toneatto, Centre for Addiction and Mental Health (CAMH), (416) 535-8501, ext. 6828 or tony_toneatto@camh.net. For general enquiries call 416-978-5404 or email nc.programs@utoronto.ca.

Enrolment in the Minor program in Buddhism, Psychology and Mental Health is open to students who have completed four courses; no minimum GPA required.

**Minor Program:**
(4 full courses or their equivalent, including one at the 300+level)

1. NEW 232Y1 (Buddhist Psychology: Theories and Applications) or RLG 206Y1 (The Buddhist Religious Tradition)
2. NEW 331H1 (Buddhism and the Science of Mindfulness Meditation) and NEW 333H1 (Buddhism and Cognitive Science)
3. NEW 433H1 (Advanced Topics) or NEW 332H1 (Buddhism and Psychotherapy)
4. 1.5 full course equivalent from :
   ANT 100Y1, 204Y1, 253H1, 348Y1; EAS 361Y1, 368Y1, 369Y1; HPS 100H1, 250H1; NEW 214Y, 232Y1, 303H1 (The Hypothesis of the Unconscious), NEW 332H1, 339H1 (Special Topics), 433H1; PHL 100Y1, 201H1, 232H1, 240H1, 244H1, 320H1, 331H1, 332H1, 342H1, 375H1; RLG 206Y1, 211Y1, 301H1, 302H1, 373H1, 375H1, 376H1, 421H1, 463H1, 465H1, 466H1, 467H1; SOC 243H1, 363H1; UNI 250Y1, 302H1, 446H1; VIC106H1

## Caribbean Studies (Arts program)

Consult Program Director, Prof. D. A. Trotz, New College, 416-978-8286. For general enquiries call 416-978-5404 or email nc.programs@utoronto.ca.

Enrolment in the Specialist, Major and Minor programs in Caribbean Studies is open to students who have completed four courses; no minimum GPA required.

**Specialist Program:**
(10 full courses or their equivalent, including at least four 300+ series courses with at least one full course at the 400-level)

1. NEW 224Y1, NEW 324Y1
2. Eight full courses or their equivalent, with at least six from Group A, the remaining two from Group A or Group B.

**Major program:**
(6 full courses or their equivalent including two at the 300+level)

1. NEW 224Y1, 324Y1
2. Four full courses or their equivalent from Group A or Group B, including at least one at the 300+level

**Minor program:**
(4 full courses or their equivalent including one at the 300+level)

1. NEW 224Y1, 324Y1
2. Two courses from Group A or Group B

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**Group A:**
ANT 426H1; ENG270Y1; HIS 106Y1, 294Y1, 295H1, 333Y1, 359H1, 370H1, 394H1, 456Y1, 494Y1; NEW 150Y1, 223Y1, 240Y1, 325H1, 326Y1, 327Y1, 422Y1, 423H1, 424Y1, 426Y1; POL 201Y1, 301Y1, 305Y1, 347Y1, 357Y1, 358Y1; SPA 486H1; WGS 330H1, 369Y1, 425Y1

**Group B:**
GGR 240Y1, 249H1; HIS 232Y1, 295H1, 390Y1, 408Y1, 446Y1, 476Y1; NEW 296Y1, 322Y1; POL 417Y1, 418Y1, 442H1, 488Y1; RLG 204Y1, 205Y1; SOC 330Y1, 336H1; SPA 380H1, 381H1, 382H1,WGS 435H1

## Equity Studies (Arts program)

Consult Program Co-ordinator, Dr. J. Larkin, 416-978-8282. For general inquiries call 416-978-5404 or email nc.programs@utoronto.ca.

Enrolment in this program is open to students who have completed four courses; no minimum GPA required.

### Major program:

(7 full courses or their equivalent, including two at the 300+level)

1. NEW 240Y1
2. One full course equivalent from the core group below
3. Five full course equivalents from: Groups A, B, C, D, E (including one or more full-course equivalents from at least three of the five groups)

**Core Group**
NEW 214Y1, 241Y1, 341H1, 342H1, 343H1, 344Y1, 349H1, 441H1, 442H1, 444H1, 449H1

**Group A: Gender**
ANT 460H1; CLA 219H1, 220H1; EAS 303H1, 452H1, 453H1; ENG 233Y1, 307H1, 309H1, 355H1, 383H1; FCS497H1; FRE 304H1, 305H1; GER 421H1; GGR 327H1; HIS 202H1, 245Y1, 306H1, 348H1, 354Y1, 363H1, 366Y1, 395Y1, 406H1, 418H1, 446Y1, 448H1, 481H1, 483H1; ITA 455H1; JAL 355H1; JHP 440Y1; JNV300H1; JPP 343Y1; NEW 325H1; NMC 284H1, 484H1; PHL 267H1; POL 351Y1, 432H1, 440Y1, 450Y1; PSY 323H1; RLG 236H1, 237H1, 251H1, 313H1, 314H1; SLA 248H1; SOC 214Y1, 365Y1, 366H1, 383H1; SPA 382H1,VIC 341H1, 343Y1;VIS 209H1;WGS 160Y1, 261Y1, 262Y1, 330H1, 334H1, 335H1, 336H1, 362H1, 363H1, 365H1, 366H1, 367H1, 368H1, 369H1, 372H1, 373H1, 374H1, 375H1, 380H1, 425Y1, 460Y1, 465H1, 470Y1

**Group B: Race, Creed, Ethnicity**
ANT 204Y1, 343Y1, 344Y1, 349H1, 367Y1, 426H1, 446Y1, 448H1, 453H1;ARC 234H1; ENG 268H1, 270Y1, 275Y1, 277Y1, 278Y1, 355H1, 368H1, 370H1; FIN 320H; HIS 107Y1, 208Y1, 282Y1, 294Y1, 295Y1, 296Y1 303Y1, 312H1, 338Y1, 341Y1, 355H1, 359H1, 360Y1 370H1, 383H1, 384H1, 393H1, 394H1, 396Y1, 402H1, 408Y1, 412Y1, 416Y1, 429Y1, 442Y1, 456Y1, 470H1, 475H1, 476H1, 486H1; INI 327Y1; ITA 493H1; JAP 256H1; LAS 301H1, 302H1; NEW 150Y1, 223Y1, 224Y1, 296Y1, 322Y1, 324Y1, 326Y1, 424Y1; NMC 276Y1, 384Y1, 477Y1, 484H1; POL 301Y, 304H1, 321H1, 342H1, 403H1 425Y1; PRT 255H1; RLG 201Y1, 220H1, 236H1, 237H1, 243H1, 315H1, 344Y1; SOC 210Y1, 330Y1, 336H1, 339H1; SPA 486H1; UNI 304H1, 307H1

**Group C: Sexual Diversities**
ANT 456H1; ENG 273Y1, 290Y1; POL 315H1; PHL 243H1; SOC 410H1; UNI 255H1, 256H1, 335H1, 354H1, 355H1, 365H1, 375H1, 455H1, 475H1;WGS 374H1

**Group D: General Equity**
ABS 201Y1, 250H1, 300Y1, 301Y1, 302H1, 320Y1, 350Y1, 351Y1, 352H1, 353H1, 354H1, 402H1, 405Y1;ANT 329Y1, 342H1, 348Y1, 362Y1, 364Y1, 366Y1, 368Y1, 425H1, 447H1, 452H1; ARC 233H1; DTS200Y1, 401H1, 402H1; EAS 462H1; ECO 239Y1, 332H1, 339Y1, 340H1, 369Y1, 425H1; ENG 254Y1; FAH 390H/Y; GGR 216H1, 320H1, 328H1 339H1, 362H1, 363H1, 375H1, 451H1; HIS 106Y1, 313H1, 323H1, 367H1; 369Y1, 395Y1, 424H1, 459Y1, 468H1, 472H1, 480H1; HPS 324H1; INI 429H1; JAG 321H1; JGI 216H1; JFP 450H1; NMC 358H1; PHL 281Y1, 380H1, 384H1; POL 201Y1, 342H, 344H1, 350H1, 358Y1, 403H1, 405Y1, 412Y1, 439H1, 480H1; PRT 351H1; RLG 201Y1, 225H1, 317H1; SOC 220Y1, 270H1, 301Y1, 309Y1, 344Y1, 354H1, 355Y1, 360Y1, 364H1, 367H1, 370Y1, 373H1, 374H1; SPA 380H1; UNI 220Y1, 317Y1, 371H1;VIC 185H1, 261H1, 351H1;VIS 310H1

**Group E: Disability**
NEW241Y1, 344Y1, 349H1, 449H1; PHL 383H1; SOC 360Y1, 363H1, 373H1, 374H1;WGS 366H1

Note: students are responsible for checking the co- and prerequisites for all courses in Groups A,B,C, D and E

## Human Biology: see Life Sciences, Human Biology

## Paradigms and Archetypes (Arts program)

For general enquiries call 416-978-5404 or email nc.programs@utoronto.ca.

Enrolment in this program is open to students who have completed four courses; no minimum GPA is required.

### Minor program:

(4 full courses or their equivalent, including one at the 300+level)

1. NEW 209Y1
2. NEW 301Y1/304Y1
3. One full course equivalent from NEW232Y1, NEW 301Y1 (if not chosen in 2 above), NEW 302Y1, NEW 303H1, NEW 304Y1 (if not chosen in 2 above), NEW 306H1, NEW 308H1, NEW 402Y1, NEW 403H1, NEW 404H1
4. One full course equivalent from HPS 201H1, HPS 202H1, HPS 210H1, HPS 211H1, HPS 250H1; NEW 333H1; NMC 101Y1, 185Y1, 201Y1; RLG 200Y1, RLG 204Y1, RLG 205Y1, RLG 206Y1, RLG 211Y1, RLG 231H1; any NEW courses listed in 3 above.

## South Asian Studies (Arts program)

Consult Program Co-ordinator, I. Hasnu, New College, 416-978-8277 or the Program Office, 416-978-5404 or email nc.programs@utoronto.ca.

Enrolment in the South Asian Studies programs is open to students who have completed four courses; no minimum GPA required.

### Specialist program:

(10 full courses or their equivalent, including at least four 300+ series courses with at least one full course at the 400-level)

1. Two language courses from NEW 211Y1, 212Y1, 213Y1, 311Y1, 312Y1, 315Y1; EAS282Y1, 382H1/Y1; RLG260Y1 or demonstrate intermediate (2nd Year level) proficiency in another South Asian language by examination administered by the South Asian Studies Program
2. NEW114Y1
3. HIS282Y1
4. One full course equivalent from NEW413H1, 414H1; HIS470H1, 480H1
5. One full course equivalent from: ANT352Y1, POL201Y1, POL208Y1, POL417Y1, POL447Y1, or other social science course approved by the Co-ordinator
6. One full course equivalent from: EAS 368Y1, 468Y1; FAH364H1, FAH365H1; NEW 214Y1, 306H1, 308H1; RLG 100Y1, 205Y1, 206Y1, 280Y1, 361H1, 363H1, 365H1, 366H1, or other course in religion or philosophy approved by the Co-ordinator
7. Two full course equivalents from Group A (below)
8. One full course equivalent from Groups A or B; or three full course equivalents from Groups A or B, in the case of a student satisfying the language requirement (see 1. above) by examination rather than by A&S courses

### Major program:

(6 full courses or their equivalent, including two 300+ series courses)

1. NEW114Y1
2. HIS 282Y1
3. Two full course equivalents from Group A (below)
4. Two full course equivalents from Groups A or B

### Minor program:

(4 full courses or their equivalent, including at least one at the 300+ level; 2 courses must have full South Asian content)

1. NEW114Y1
2. One full course equivalents from Group A (below)
3. Two full course equivalents from Groups A or B

Note: Some courses may be offered in alternate years.

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**Group A (courses with a major focus on South Asia):**
ANT 352Y1; EAS 282Y1, 368Y1, 379H1, 382H1/Y1, 480H1/Y1, 482H1, 488H1/Y1; FAH 364H1, 365H1; HIS 282Y1, 364H1, 386Y1, 394H1, 470H1, 480H1; MUS 209H1; NEW 211Y1, 212Y1, 213Y1, 214Y1, 215H1, 216H1, 217H1, 306H1, 308H1, 311Y1, 312Y1, 315Y1, 413H1, 414H1; POL 201Y1, 357Y1, 403H1; RLG 205Y1, 206Y1, 260Y1, 361H1, 363H1, 365H1, 366H1, 367H1, 460H1, 471H1, 472H1; WGS 368H1, 425Y1; or other courses with the approval of the Co-ordinator of the SAS program

**Group B (courses with a minor focus on South Asia):**
EAS 468Y1; ECO 459H1; ENG 270Y1, 370H1, 382Y1; GGR 338H1; HIS 389H1; MUS 200H1; NEW 224Y1, 324Y1, 326Y1; NMC 185Y1; PHL 323H1; POL 208Y1, 417Y1, 447Y1; RLG 100Y1, 236H1, 280Y1, 353H1, 375H1, 465H1; UNI 307Y1; WGS 369H1; or other courses with the approval of the Co-ordinator of the SAS program

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## Women's Studies: see Women and Gender Studies

# New College Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), most NEW courses are classified as HUMANITIES courses. NEW 240Y1, 241Y1 and NEW250Y1 count as SOCIAL SCIENCE or HUMANITIES courses, and NEW350Y1 counts as a SOCIAL SCIENCE course.

**NEW471H1 Interdisciplinary Special Topics [26S]**
Topics vary from year to hear depending on the instructor. This is a Humanities course

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### African Studies Courses

**NEW150Y1 Introduction to African Studies [52L]**
A multi-disciplinary study of Africa, emphasizing inquiry and critical analysis. Pre-colonial, colonial and contemporary African history, anthropology, politics, African humanism and society, religion, art, music, race, resistance, gender and Pan-Africanism.

**NEW250Y1 Africa in the 21st Century: Challenges and Opportunities [52L], 26T**
An introduction to the study of Africa as a living place rather than merely a site for intellectual speculation and study. This course explores the issues that engage the attention of ordinary Africans, ranging from the dramatic to the seemingly trivial but quotidian concerns that occupy our lives. Topics covered will include urban life, family networks, kinship and social capital, religion and belief systems, indigenous government, courts and judicial processes, migration, and land tenure. Materials studied will include the various African media in Toronto – radio, television, newspapers, literature, religion, politics, sports, music, film and food – as well as BBC World Service, allAfrica and Panapress and several African socio-cultural journals and texts. This is a Humanities or Social Science course.

**NEW280Y1 Introductory Swahili [26L, 78T]**
Introduction to grammar and basic vocabulary of Swahili. Emphasis on comprehension and oral practice. Reading of selected texts. Relation of the language to its East African cultural context. (Offered in alternate years)

**NEW281Y1 Introductory Somali [104L]**
Introduction to grammar and basic vocabulary of Somali. Emphasis on comprehension and oral practice. Reading of selected texts. Relation of the language to its cultural context in the Horn of Africa.

**NEW296Y1 Black Freedom [52L, 26T]**
People of African descent – from Olaudah Equiano to Angela Davis – have made profound contributions to the intellectual history and political practice of freedom in the Atlantic world.

Black writers and historical actors have been at the vanguard of re-conceiving, implementing, and realizing the Enlightenment project of freedom.
Exclusion: HIS296Y1

**NEW322Y1 The Contemporary African Novel [52S]**
Novels written in the last forty years by English, French and Portuguese-speaking Africans. Ideological views concerning colonialism and neo-colonialism. Tradition, religious and secular; the use of African symbolism. A small number of historical and sociological texts are recommended as essential background reading. Works not written in English are read in translation. (Offered in alternate years)

**NEW350H1 Special Topics: AIDS in Africa: Challenges and Successes [26L]**
Explores the pandemic of AIDS in Africa through a social science lens.
Recommended preparation: NEW150Y1

**NEW351Y1 African Systems of Thought (formerly NEW252Y1) [52L]**
The exploration of a range of African cosmologies, epistemologies, and theologies, as well as specific case studies on justice, the moral order, and gender relations. The influence of these richly diverse traditions is traced as well in the writings of African thinkers in the Diaspora.
Recommended preparation: NEW150Y1
Exclusion: NEW252Y1, JAP256H1/JAP356H1

**NEW352Y1 Cinemas and African Expressive Culture (formerly JNI388Y1) [26L, 78P]**
A study of African cultures through films and production contexts. (Offered in alternate years)
Recommended preparation: INI115Y1/NEW150Y1
Exclusions: JNI388Y1/INI483H1

**NEW380Y1 Intermediate Swahili [26L, 78T]**
Grammar and syntax. Conversation and written composition. Reading of texts: literary, journalistic. Relation of the language to its East African context. (Offered in alternate years)
Prerequisite: NEW280Y1

**NEW450H1 Advanced Topics in African Studies [26S]**
A required course for all Specialists and Majors in the African Studies Program, enrolment is restricted to students enrolled in the program in their final year of study. The seminar is taught by the core faculty in the African Studies Program and is designed to build upon the accumulated knowledge of students and the interdisciplinary nature of the program. Topics vary from year to year.

## Buddhism, Psychology and Mental Health Courses

**NEW214Y1 Socially Engaged Buddhism [52L]**
A comprehensive survey of socially engaged Buddhism. Particular focus on contemporary movements in Vietnam, Tibet, China & Taiwan, Sri Lanka, Thailand, and India. The role of women in Buddhism.

**NEW232Y1 Buddhist Psychology: Theories & Applications (formerly NEW402Y1, NEW432Y1) [78S]**
Explores the contributions of Buddhism to the study of human consciousness and behaviour. Focus is on the expanding academic discourse on the intersection of Buddhist and Western theories of psychology, phenomenology and psychotherapy. Includes analyses of the application of Buddhist mindfulness meditation in clinical interventions for mental and physical disorders.
Exclusion: NEW402Y1, NEW432Y1

**NEW331H1 Buddhism and the Science of Mindfulness Meditation [26S]**
This course will examine the modern mindfulness movement from a scientific and Buddhist perspective. Emphasis will be placed on the key Buddhist sutras and commentaries related to the practice of mindfulness and their relation the mindfulness meditation practices increasingly popular in the West.
Recommended preparation: NEW232Y1

**NEW332H1 Buddhism and Psychotherapy [26S]**
This course will evaluate the relationship between Buddhist psychology and the practice of Western psychotherapy. Areas that will be studied include positive psychology, psychoanalysis, cognitive-behaviour therapy, mindfulness meditation and Jungian psychology. Comparisons with original Buddhist teachings and commentaries will be made.
Recommended preparation: NEW232Y1

**NEW333H1 Buddhism and Cognitive Science [39L]**
This course will explore some important connections between Cognitive Science and Buddhism. In particular it will examine the insights of cognitive science into central Buddhist concepts such as wisdom, mindfulness, meditation, insight and self-control, as well as related concepts such as flow and mystical experience.
Recommended preparation: NEW232Y1/RLG206Y1

**NEW339H1 Special Topics in Buddhism, Psychology and Mental Health [26L]**
Topics vary from year to year, depending on the instructor.
Recommended preparation: NEW232Y1

**NEW433H1 Advanced Special Topics in Buddhism, Psychology and Mental Health [26S]**
An upper-level seminar. Topics vary from year to year, depending on the instructor.
Recommended preparation: NEW232Y1/RLG206Y1

## Caribbean Studies Courses

**NEW223Y1 Caribbean Literature and Society [52S]**
A study of Caribbean writers of fiction, poetry and drama, drawn from the major linguistic and racial/cultural groups in the region. Works are analyzed as literary texts and within the contexts of social and political life in which the writing is situated.

**NEW224Y1 Caribbean Thought I [52L, 26T]**
A multi-disciplinary exploration of writing pertaining to culture and consciousness particularly Afro- and Indo-Caribbean thought: theoretical perspectives on the implications and consequences of slavery and indenture, the struggle for freedom from the legacy of the plantation and colonial dependence, responses to domination and exploitation, race, gender, religion and music.
Recommended preparation: HIS106Y1

**NEW324Y1 Caribbean Thought II [52L]**
Critical enquiry at an advanced level into the construction of society, race, language, religion, culture and gender; theories of economy, resistance, self-affirmation, continuing colonization

and place of the Caribbean within the global context; internal and external theoretical perspectives on "the Caribbean personality."
Prerequisite: NEW224Y1

**NEW325H1 Caribbean Women Thinkers [26L]**
An examination of the historical and political significance of writings (literary, political, scholarly) by Caribbean women who engage problems within Caribbean culture and provide insights into the endeavours of the peoples of the region.

**NEW326Y1 Indenture, Survival, Change [52L]**
Indian survival in the Caribbean despite hardships of indentured labour; social and cultural change; role of Hinduism and Islam; resistance to Colonial domination; contribution of Indo-Caribbean intellectuals to literature, politics, and education. (Offered in alternate years)

**NEW327Y1 The Hispanic Caribbean: Race, Religion and Revolution in Cuban History and Culture [52L]**
Examines Cuba's relevance and legacy from the mid-nineteenth century to the present. Explores the tensions of Cuban life in counterpoint with its creative rendering in the arts and literature, through a variety of fresh approaches in fields such as cultural studies, historical sociology, anthropology, and sociology of religion.
Recommended preparation: LAS200Y1/NEW224Y

**NEW422Y1 Performing and Transforming the Caribbean [52S, 78P]**
Addresses ways in which performance can be a force for cultural resistance and social change. Examines Caribbean performances such as jonkonnu, theatre, dance hall and carnival, looking at how these forms engage questions of neo-colonialism, transculturation, gender, race and nation, community and identity and diasporic memory.
Prerequisite: NEW324Y1 or permission of instructor

**NEW423H1 Special Topics in Caribbean Studies [26S]**
An upper-level seminar. Topics vary from year to year, depending on the instructor.
Prerequisite: NEW324Y1

**NEW424Y1 The Capitalist Press and the New Imperialism [78S]**
Social analysis of the state-corporate mainstream capitalist press (print/electronic) problematically named "The Free Press"; its racist-sexist globalizing EuroAmerican cultural imperialism; the production of the commoditized consumer-subject and other re-conquest narratives and their implications for Caribbean and other World Majority peoples.
Prerequisite: NEW324Y1

**NEW426H1 Special Topics in Caribbean Studies [39S]**

**NEW426Y1 Special Topics in Caribbean Studies [78S]**
An upper level seminar. Topics vary from year to year, depending on the instructor.
Prerequisite: NEW 324Y1

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### Equity Studies Courses

**NEW214Y1 Socially Engaged Buddhism [52L]**
See Buddhism, Psychology and Mental Health Courses above

**NEW240Y1 Introduction to Equity Studies [52L]**
An interdisciplinary study of issues of social diversity exploring debates about the origins of inequity and the various means of addressing it. Course readings draw from a broad range of relevant literature in the Humanities, Social Sciences, and Natural and Medical Sciences.

**NEW241Y1 Introduction to Disability Studies [52L]**
Introduces students to the theory and practice of Disability Studies. Explores the history of the development of disability studies. Examines cultural representations of disability and critically assesses the ways disability is conceptualized in societal institutions. Forms of disability activism are also discussed.

**NEW341H1 Special Topics in Equity Studies [26S]**

**NEW342H1 Special Topics in Equity Studies [26S]**
An upper level seminar dealing with topics related to Equity Studies.
Prerequisite: NEW240Y1 or permission of instructor

**NEW343H1 The Romani Diaspora in Canada [26L]**
Romani history and culture through theories on the origins and diaspora of the Roma (often misnamed "gypsies"). Historic and current equity issues facing the Roma people (particularly newcomers) in Canada from c1890 to the present.
Recommended preparation: NEW 240Y1 or a course in East European History

**NEW344Y1 Selected Topics in Equity Studies [52L]**
An upper level course. Topics vary from year to year.
Prerequisite: NEW240Y1 or permission of instructor

**NEW349H1 Selected Topics in Disability Studies [26S]**
An upper level course. Topics vary from year to year.
Prerequisite: NEW240Y1/366H1/SOC373H1/374H1

**NEW441H1 Advanced Topics in Equity Studies [26S]**

**NEW442H1 Advanced Topics in Equity Studies [26S]**
An advanced level seminar course. Topics vary from year to year.
Prerequisite: NEW240Y1 or permission of instructor

**NEW444H1 Social Change and Non-Violence [26S]**
Examines theories and practices that promote the building of cooperative, non-violent communities. Grounded in a series of historical cases studies, the course critically considers Gandhian principles and the ways in which these have been translated into collective action.
Prerequisite: NEW 240Y or permission of the instructor

**NEW449H1 Advanced Topics in Disability Studies [26S]**
An advanced level seminar course. Topics vary from year to year.
Prerequisite: NEW240Y1/366H1/SOC373H1/374H1

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### Paradigms and Archetypes Courses

**NEW209Y1 Stories: Constructs of Knowledge [52L, 26T]**
Examines cross-disciplinary issues raised by the telling and retelling of stories: sequence and consequence; narrative as argument and proof by scenario; construction and deconstruction of identities; instabilities amongst "history," "fact," "fiction," "myth," "law" and "science". Works by Darwin, Davis, Gould, Kincaid, Kuhn, Ondaatje, Plato, etc.

**NEW301Y1 Analogy and Its Rituals [52L, 26T]**
Issues of rhetorical proof, analysis and interpretation in open (alogical) systems; mediation and the media; the scandal of chaos; motives for metaphor, custom and culture, anatomies of reason, idea and ideology. (Offered in alternate years)
Recommended preparation: NEW 209Y

**NEW302Y1 C.G. Jung: Stories, Dilemmas, Rituals [52L]**
Impact of Jung's analytical psychology, critical methodology and interpretative practice on issues in religion, anthropology, art and literature, popular culture, gender studies and postmodernist critique. Theoretical studies include traditional Jungian and contemporary post-Jungian texts together with anti-Jungian, feminist, and non-Jungian sources.
Prerequisite: At least one course in the humanities

**NEW303H1 The Hypothesis of the Unconscious [26L]**
Current discussions of the hypothesis, especially Jung's collective unconscious; critical examination through retrospective analysis of the evolution and development of the concept in works from philosophy, psychology, poetry, ethnology, science and popular culture that anticipated, influenced or were influenced by the work of Freud and Jung, post-Freudians and post-Jungians.
Recommended preparation: NEW 302Y1

**NEW 304Y1 Dilemmas [52L, 26T]**
Issues raised by the problem/solution paradigm and the construction of truth as binary; strategies of paradox, aporia, paradigm anomaly, enigma, puzzlement; mystery and mystification; crisis, crux and apocalypse. Authors studied include Ryle, Mill, Carroll, Tolstoy. (Offered in alternate years)
Recommended preparation: NEW 209Y1

**NEW306H1 Rabindranath Tagore: Paradigms of Culture**
See South Asian Studies Courses below

**NEW308H1 Satyajit Ray: Paradigms of Vision**
See South Asian Studies Courses below

**NEW402Y1 Advanced Special Topics in Paradigms and Archetypes [52S]**
Topics vary from year to year, depending on the needs of the program and the interests of students and instructors.
Prerequisite: Permission of instructor

**NEW403H1 Advanced Special Topics in Paradigms and Archetypes [26S]**

**NEW404H1 Advanced Special Topics in Paradigms and Archetypes [26S]**
Topics vary from year to year depending on the needs of the program and the interests of students and instructors. Topic for 2007-2008: Psyche Stories.
Prerequisite: Permission of instructor

## Independent Studies Courses

New College Independent Study courses are designed both to complement regular offerings in New College programs and to provide an opportunity for New College students in any program to enrich their studies. The normal expectation of a project course is that the student, aided and advised by the supervisor, will read relevant literature, and plan, execute, analyze and report on an original and independent investigation of an appropriate topic. Written applications (detailed proposal, reading list and a letter of support from a faculty member who is prepared to supervise) should be made through the Program Office for approval by the College's Committee for Academic Affairs by May 1 for the Summer Session or by the last Friday in August for the Winter Session. Students will be notified of the acceptance or rejection of an application. For more information and application forms, please see the Independent Studies website: http://www.newcollege.utoronto.ca/academic-programs/independent-studies/

Enquiries: New College, Room 132 (978-5404)

**NEW299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**NEW390Y1 New College Independent Studies [TBA]**

**NEW490Y1 New College Independent Studies [TBA]**
Prerequisite: Permission of College

**NEW391H1 New College Independent Studies [TBA]**

**NEW491H1 New College Independent Studies [TBA]**
Prerequisite: Permission of College

## South Asian Studies Courses

**NEW114Y1 Introduction to South Asian Studies [78L]**
An interdisciplinary introduction to South Asian Studies emphasizing inquiry and critical analysis, drawing attention to the specificities of individual nations as well as the factors (historical, political, economic and cultural) that define it as a region. Some attention will be paid to the South Asian diaspora.

**NEW210Y1 Introduction to Sanskrit [104L]**
Intended for students with little or no knowledge of written Sanskrit. Intensive introduction to phonology and grammar; syntax of Sanskrit; emphasis on basic writing and reading. Enrolment may be subject to placement evaluation
Exclusion: RLG260Y1 and EAS282Y1

**NEW211Y1 Introduction to Bengali [104L]**
Intensive introduction to phonology, grammar, syntax of the modern Bengali language; emphasis on basic writing and reading.
Exclusion: SAS 201Y1; enrolment subject to placement evaluation

**NEW212Y1 Introduction to Hindi [104L]**
Intensive introduction to phonology, grammar, syntax of the modern Hindi language; emphasis on basic writing and reading.
Exclusion: SAS 202Y1; enrolment subject to placement evaluation

**NEW213Y1Y Introduction to Tamil [104L]**
Intended for students with little or no knowledge of written Tamil. Intensive introduction to phonology and grammar; syntax of the modern Tamil language; emphasis on basic writing and reading.
Exclusion: High school Tamil

**NEW214Y1 Socially Engaged Buddhism [52L]**
See Buddhism, Psychology and Mental Health Courses above

**NEW215H1 Colonial Thought and Postcolonial Practice in Bengal [26L]**
An interdisciplinary history, beginning with colonialism as a moment of transition, of the ways in which colonial ideology and indigenous resistance shaped the contours of culture and politics in Bengal until Independence; consideration of factors that provide a sense of unity to Bengali culture while accommodating changes and transformations. (Taught in the summer program only).

**NEW216H1 South Asia: Perspectives on Politics and Society [26L]**
A critical overview of South Asia, considering historical and social factors that account for both distinctiveness and connections

among nations and communities. Special attention to the major role played by postcolonial histories in establishing the separate trajectories of each nation while preserving the significance of the region as a whole.

**NEW217H1 Tamil Studies in South Asia and the Diaspora [26L]**
An interdisciplinary approach that explains the complexity and multiplicity of Tamil culture. An historical approach to the evolution of Tamil culture over the last twenty centuries. Issues of region, space, politics, and religion will aid in an understanding of contemporary Tamil culture, both in South Asia and the diaspora.

**NEW306H1 Rabindranath Tagore: Paradigms of Culture [26L]**
Examines Tagore's concepts of humanity, art, personality, freedom, nationalism, ashram, science, education. Evaluates Tagore's literary contribution, his work in rural reconstruction, and Tagore-Gandhi tensions over education and the non-cooperation movement. Reading knowledge of Bengali not presumed; however students with knowledge of language encouraged to read materials in Bengali.

**NEW308H1 Satyajit Ray: Paradigms of Vision [26L]**
Examines the artistic vision of Satyajit Ray as chronicler of Bengali culture and one of the greatest filmmakers of our time: his life and work; his films as expressions of his humane vision; cultural orientation and values; fictional compositions, visual and musical artistry; affinities and continuity with Rabindranath Tagore. Reading knowledge of Bengali not presumed; however students with knowledge of language encouraged to read materials in Bengali.

**NEW311Y1 Readings in Bengali Literature [104L]**
Readings from selected authors of modern Bengali prose and poetry; introduction to samples of pre-modern Bengali texts.:
Exclusion: SAS 301Y1; enrolment subject to placement evaluation.
Prerequisite: NEW 211Y1/SAS 201Y1/ permission of instructor

**NEW312Y1 Readings in Hindi Literature [104L]**
Readings from selected authors of modern Hindi prose and poetry; introduction to samples of pre-modern Hindi texts.
Exclusion: SAS 302Y1; enrolment subject to placement evaluation
Prerequisite: NEW 212Y1/SAS 202Y1/permission of instructor

**NEW315Y1 Intermediate Bengali [104L]**
Enables students to achieve an elevated level in Bengali in order to read on their own and compose short paragraphs. Provides the required skills to appreciate Bengali literature with comfort. Topics covered: Grammar – Euphonic combination; Onomatopoetic & Compound words; Phrases & Idioms. Distinction between Chaste and Standard Colloquial styles of the language.
Prerequisite: NEW 211Y1/SAS 201Y1/ permission of instructor

**NEW413H1 Advanced Special Topics in South Asian Studies [26S]**

**NEW414H1 Advanced Special Topics in South Asian Studies [26S]**
An upper-level seminar. Topics vary from year to year, depending on the instructor

# Philosophy

## Faculty

### University Professors Emeriti

I. Hacking, OC, MA, Ph D, FRSC (V)
F.E. Sparshott, MA, FRSC (V)
L.W. Sumner, MA, Ph D, FRSC

### Professors Emeriti

J.V. Canfield, AM, Ph D (UTM)
D.P. Dryer, AM, Ph D, FRSC
D.D. Evans, BA, BD, D Phil (V)
R.B. DeSousa, BA, Ph D
L.W. Forguson, MA, Ph D (U) (obit)
D. Goldstick, BA, D Phil
A. Gombay, MA, B Phil (UTM)
W.C. Graham, MA, Ph D (University of Toronto Scarborough)
C.M.T. Hanly, BA, MÈS L, D Phil
W.R.C. Harvey, MA, LL B, Ph D (V)
H.G. Herzberger, AM, Ph D
W.J. Huggett, MA, Ph D (UTM)
R.A. Imlay, MA, Ph D (U)
E.J. Kremer, AB, Ph D (SM)
T.D. Langan, AM, Ph D (SM)
A.A. Maurer, MA, MSL, Ph D (SM)
R.F. McRae, MA, Ph D (obit)
J.C. Morrison, MA, Ph D (SM)
G.A. Nicholson, MA, BD, Ph D (T)
H. Pietersma, MA, Ph D (V)
T.M. Robinson, BA, BLitt, DLitt
K.L. Schmitz, MA, MSL, Ph D (T)
J.G. Slater, MA, Ph D (W)
J.H. Sobel, MA, Ph D (University of Toronto Scarborough)
J.T. Stevenson, MA (U)
M.T. Thornton, B Phil, MA, Ph D (V)
A.I.F. Urquhart, MA, Ph D
J.M. Vertin, MA, STL, Ph D (SM)
F.F. Wilson, B Sc, MA, Ph D, FRSC (U)

### Associate Professor and Chair of the Department

TBA

### Associate Professor and Associate Chair (Undergraduate)

J.M. Heath, MA, Ph D (U)

### Associate Professor and Associate Chair (Graduate)

P. Kremer, BSc, Ph D (University of Toronto Scarborough)

### University Professors

B.C. Inwood, MA, PhD, FRSC

### Professors

D.P.H. Allen, MA, B Phil, D Phil (T)
D.L. Black, MA, Ph D (SM)
J. Boyle, BA, Ph D (SM)
J.R. Brown, MA, Ph D, FRSC
P. Clark, BA, Ph D (UTM)
R. Comay, MA, Ph D (V)
F.A. Cunningham, MA, Ph D, FRSC
D. Dyzenhaus, D Phil, FRSC
P. Franks, MA Ph D (UTM)
L. Gerson, AM, Ph D (SM)
R.B. Gibbs, MA, Ph D (U)
W. Goetschel, Lic Phil, Ph D
P.W. Gooch, MA, Ph D (V)
C. Howson, BSc, Ph D
T.M. Hurka, BA, B Phil, D Phil, FRSC
D.S. Hutchinson, BA, B Phil, D Phil (T)
B.D. Katz, MA, Ph D (UTM)
P. King, BA, Ph D
M. Kingwell, M Litt, Ph D (T)
P. Ludlow, BA, Ph D (UTM)
M. Matthen, B Sc, MA, Ph D (UTM)
C. Misak, MA, D Phil, FRSC
K.P. Morgan, MA, M Ed, Ph D (N)
M. Morrison, MA, Ph D (T)
A. Mullin, Ph D (UTM)
D. Raffman, BA, Ph D (UTM)
A. Ripstein, MA, Ph D
W.E. Seager, MA, Ph D (University of Toronto Scarborough)
V. Shen, MA, MA, Ph D
G. Sreenivasan, BA, B Phil, Ph D
I. Leman Stefanovic, MA, Ph D (SM)
E. Thompson, MA, Ph D (U)
J.E. Whiting, BA, MA, Ph D

### Associate Professors

D.C. Ainslie, B Sc, MA, Ph D (U)
R. Barney, BA, Ph D
L. Lange, MA, Ph D (University of Toronto Scarborough)
M.T. Lin, BA, Ph D (University of Toronto Scarborough)
M. Rozemond, Kand., Ph D (UTM)
J. Nagel, MA, Ph D (UTM)
S.A. Sedivy, BA, Ph D (University of Toronto Scarborough)
S. Tenenbaum, BA, Ph D (UTM)
D. Walsh, BSc, Ph D, BA, M Phil, Ph D
B. Yi, MA, Ph D (UTM)

### Assistant Professors

T.J. Berry, MA, Ph D
I. Dickie, B Phil, Ph D
J.S. Hawkins, MA, Ph D (University of Toronto Scarborough)
B. Hellie, BA, Ph D (University of Toronto Scarborough)
J. John, BA, Ph D
S.R. Moreau, B Phil, Ph D, JD
M. Pickavé, MA, Ph D
G.S. Rattan, B Sc, Ph D (UTM)
J. Weisberg, BA, Ph D (UTM)
J. Wilson, BA, Ph D (University of Toronto Scarborough)

### Lecturer

N. Scharer, MA, Ph D

The Greek words from which "Philosophy" is formed mean "love of wisdom" and all great philosophers have been moved by an intense devotion to the search for wisdom. Philosophy takes no belief for granted, but examines the grounds for those beliefs which make up people's fundamental views of the

world. Philosophers think about these beliefs as thoroughly and systematically as possible, using methods of conceptual analysis, reasoning, and detailed description.

What distinguishes Philosophy from the physical and social sciences is its concern not only with the truths which are discovered by means of specialized methods of investigation, but with the implications that such discoveries have for human beings in their relations with one another and the world. Moreover, Philosophy has an abiding interest in those basic assumptions about the nature of the physical and social world, and about the nature of enquiry itself, which underlie our scientific and practical endeavours.

The Philosophy Department at the University of Toronto offers courses in the main periods and areas of Philosophy, which are listed here with a typical question or the name of one or two central figures: Ancient Philosophy (Plato, Aristotle); Mediaeval Philosophy (Augustine, Aquinas); Early Modern Philosophy (Descartes, Hume, Kant); Nineteenth-Century Philosophy and Marxism (Hegel, Mill, Marx); Continental Philosophy and Phenomenology (Husserl, Heidegger, Sartre); Analytic Philosophy (Quine, Russell, Wittgenstein); Epistemology and Metaphysics (What can be known? What is the ultimate nature of reality?); Philosophy of Religion (Does God exist? How could one prove it?); Philosophy of Mind (What is mind? Is there free will?); Logic and Philosophy of Mathematics (What is sound reasoning? Do numbers exist?); Philosophy of Language (What is the meaning of "meaning"?); Philosophy of Natural Science (What is scientific method?); Philosophy of Social Science and History (Can there be a science of humans?); Social and Political Philosophy (What justifies the state?); Moral Philosophy (How should we argue rationally about right and wrong?); Aesthetics (What is art? Must it be beautiful?). In addition, the Department offers Seminars (numbered PHL 400H1-489H1) and Individual Studies courses (numbered PHL 490Y1, PHL 495H1-499H1).

Counselling is available in the main departmental office, 170 St. George St., 4th floor. In addition, the Department publishes an annual Bulletin. It contains full and up-to-date information on programs and courses, including names of instructors and descriptions of particular course sections. The Bulletin is published in the spring (for the succeeding year) and is available on the Department's website and at 170 St. George Street, and from all College registrars.

Undergraduate Coordinator:
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Website:
http://philosophy.utoronto.ca

## Philosophy Programs

Enrolment in Philosophy programs is open to students who have completed four courses; no minimum GPA required.

NOTE: No more than one individual studies full course can be counted towards any philosophy program. Normally, no more than one-half individual studies course can be counted towards the 400-level course requirement for any Specialist or Combined Specialist.

**Bioethics: see end of Philosophy program listing**

**Philosophy (Arts program)**

**Specialist program:**
(10 full courses or their equivalent)

First year (recommended):
PHL 100Y1
Higher years (required):
1. Two full courses from the following: PHL200Y1 / PHL205H1 / PHL206H1 / PHL 210Y1.
2. One full course from the following: PHL217H1 / PHL232H1 / PHL240H1.
3. PHL265H1 / PHL275H1.
4. PHL245H1 / PHL246H1.
5. Additional philosophy courses, to a total of 10, including four full courses at the 300+ level, of which one full course must be at the 400 level.

**Major program:**
(7 full courses or their equivalent)

First year (recommended):
PHL100Y1
Higher years (required):
1. One full course from the following: PHL200Y1 / PHL205H1 / PHL206H1 / PHL210Y1
2. One full course from the following: PHL217H1 / PHL232H1 / PHL240H1
3. PHL265H1 / PHL275H1
4. PHL245H1 / PHL246H1
5. Additional philosophy courses, to a total of 7, including two full courses at the 300+ level, of which one half-course must be at the 400 level.

**Minor program:**
(4 full courses or their equivalent)

1. One full course from the following: PHL200Y1 / PHL 205H1 / PHL206H1 / PHL210Y1
2. Additional philosophy courses, to a total of 4, including one full course at the 300+ level.

**Philosophy and Economics: see Economics**

**Philosophy and English: see English**

**Philosophy and Linguistics: see Linguistics**

**Philosophy and Literary Studies: see Literary Studies**

**Philosophy and Mathematics: see Mathematics**

**Philosophy and Physics: see Physics**

# Philosophy

## Philosophy and Political Science (Arts program)

Limited Enrolment program: see details under Political Science.

### Specialist program:

14 full courses or their equivalent, including at least four full courses at the 300+ level, of which one full course must be at the 400 level.

**Philosophy (7 courses):**

1. One full course from the following: PHL200Y1 / PHL205H1 / PHL206H1 / PHL210Y1
2. One full course from the following: PHL 217H1 / PHL232H1 / PHL240H1
3. PHL265H1 / PHL275H1
4. PHL245H1 / PHL246H1
5. Additional courses to a total of seven

**Political Science (7 courses):**

NB: At least one course in Canadian politics must be completed. The Canadian politics requirement will only be satisfied by POL103Y1 / 214Y1.

First Year:
POL 103Y1/105Y1/108Y1
Higher Years:

1. POL 200Y1
2. Two full courses from the following: POL 201Y1/(203Y1/207Y1)/208Y1/214Y1/215Y1
3. Three additional POL courses

## Philosophy and Religion (Arts program)

### Specialist program:

(14 full courses or their equivalent, including at least one 400-series course: 7 in each subject)

**Philosophy (7 courses):**

Including at least two full 300+ series PHL courses, with five chosen according to the following profile:

| | |
|---|---|
| 2.0 | History of Philosophy |
| 0.5 | Logic |
| 1.0 | Epistemology/Metaphysics/Philosophy of Mind/ Philosophy of Language/Philosophy of Science |
| 0.5 | Ethics/Social and Political |
| 1.0 | Philosophy of Religion |

**Religion (7 courses):**

Including at least two full 300+ series RLG courses, with five chosen according to the following profile:

| | |
|---|---|
| 1.0 | RLG 100Y1/280Y1 |
| 1.0 | in a specific religious tradition |
| 1.0 | employing historical method |
| 1.0 | employing philosophical method |
| 1.0 | employing social-scientific method |

## Philosophy of Science (Arts Program)

### Specialist program:

(10 full courses or their equivalent, at least four of which must be at the 300-level or above, including at least one full 400-series PHL course)

First Year:

Required: One full science course, normally at the 100-level, from, CHM, CSC, GLG, BIO, JMB, PSY, MAT, PHY, STA
Note: Courses listed under "Science Courses for Humanities and Social Science Students" (see pp.24-25) cannot be counted towards this requirement.
Recommended: PHL 100Y1, HPS 100H1

Higher Years:

1. HPS 250H1, PHL 232H1, PHL 245H1, HPS, 350H1, PHL 355H1
2. One of HPS 322H1/PHL 346H1/356H1/PHL 357H1
3. One of PHL 331H1/PHL 332H1
4. 4 to 5.5 additional full courses in Philosophy (depending on whether PHL 100Y1 and HPS 100H1 are taken in first year). It is highly recommended that these courses include the following: HPS210H1, HPS211H1, PHL 210Y1, PHL 246H1, one of PHL 415H1 or 482H1. (For the purposes of this requirement, HPS 210H1 and HPS 211H1 are counted as Philosophy courses).

## Philosophy and Sociology (Arts program)

### Specialist program:

(14.5 full courses or their equivalent, including at least one full 400-level course equivalent)

**Philosophy (7 courses):**

1. One full course from the following: PHL200Y1 / PHL205H1 / PHL206H1 / PHL210Y1
2. One full course from the following: PHL217H1 / PHL232H1 / PHL240H1
3. PHL265H1 / PHL275H1 / PHL323H1
4. PHL245H1 / PHL246H1
5. Additional philosophy courses, to a total of 7, including two full courses at the 300+ level.

**Sociology (7.5 courses):**

NOTE: Enrolment in this Program is limited to students with 65% in SOC101Y1, and 70% in each of SOC200H1,203Y1 and 202H1/204H1. Students need to have completed 7.5 full courses and be enrolled in the Sociology Major program.

First Year:
SOC101Y1
Higher Years:

1. SOC200H1, 203Y1, 376H1, 377H1,
2. Either SOC202H1, 300H1, or SOC204H1, 387H1
3. Additional SOC courses to a total of 7.5

## Bioethics (Arts program)

### Specialist program:

(10 full courses or their equivalent, at least four of which must be 300+ series PHL courses, including one full 400-series course)

First Year (recommended):
PHL100Y1
BIO150Y1
Higher Years (required):

1. PHL281H1, PHL271H1, PHL275H1
2. 1.5 full courses from Group 1 (Advanced Bioethics)
3. One full course from Group 2 (Value Theory)
4. One full course from Group 3 (Analytic).
5. Additional philosophy courses to a total of 10, or else additional philosophy courses to a total of nine, plus one full course from Group 4 (Interdisciplinary).

**Major program:**
(7 full courses or their equivalent, at least two of which must be 300+ series PHL full courses)

First Year (recommended):
PHL 100Y1
BIO 150Y1
Higher Years (required):
1. PHL281H1
2. One full course from Group 1 (Advanced Bioethics)
3. 1.5 full courses from PHL271H1/275H1/Group 2 (Value Theory)
4. One half course from Group 3 (Analytic).
5. Additional philosophy courses to a total of seven, or else additional philosophy courses to a total of 6.5, plus one half course from Group 4 (Interdisciplinary).

**Minor program:**
(4 full courses or their equivalent including at least one full 300+ series PHL course)

1. PHL 281H1
2. One half course from Group 1 (Advanced Bioethics)
3. One full course from PHL271H1/PHL275H1/Group 2 (Value Theory)
4. Additional philosophy courses to a total of four.

**Group 1 Advanced Bioethics:**
PHL380H1, 381H1, 382H1, 383H1, 384H1, 440H1, 470H1

**Group 2 Value Theory:**
PHL265H1, 295H1, 365H1, 370H1, 375H1, 407H1, 412H1, 413H1, 483H1

**Group 3 Analytic Philosophy:**
PHL232H1, 240H1, 245H1, 246H1, 331H1, 332H1, 340H1, 341H1, 342H1, 355H1, 357H1, HPS250H1, HPS350H1.

**Group 4 Interdisciplinary**
NOTE: Many of these courses have prerequisites; students who wish to use these courses for their Bioethics programs must fulfill all those prerequisites as required by the departments concerned:

ANT 348Y1, ECO 369Y1, GGR 450H1, GGR 451H1, HIS 423H1, HIS 459H1, HIS 463H1, HIS 489H1, HPS 318H1, HPS 319H1, HPS 323H1, INI 341H1, HMB 201H1, JFP 450H1, HMB 201H1, HMB 202H1, NEW 261Y1, NEW 366H1, NEW 367H1, POL350H1, SMC 370H1, SOC 242Y1, SOC 309Y1, SOC 327Y1, SOC 351Y1, SOC 363H1

**Environmental Ethics (Arts Program): see Centre for Environment**

## Philosophy Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all PHL courses are classified as HUMANITIES COURSES.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**Note**
Some of the courses listed here bear prefixes other than PHL. These courses may be credited toward any of the Programs in Philosophy. They are cross-listed here for convenience but students should consult the primary listings for course descriptions.

**PHL100Y1 Introduction to Philosophy [52L, 26T]**
An introduction to the central branches of philosophy, such as logic, theory of knowledge, metaphysics, ethics, and political philosophy. Writings from the central figures in the history of Western and non-Western philosophy, as well as contemporary philosophers, may be considered. The course is concerned with such questions as: What is sound reasoning? What can we know? What is ultimately real? Is morality rational? Do humans have free will? Is there a God?
Exclusion: PHL102Y1, 201H1

### 200-SERIES COURSES
Note: No 200-series course has a 100-series PHL course as prerequisite.

**PHL200Y1 Ancient Philosophy [78L]**
Central texts of the pre-socratics, Plato, Aristotle, and post-Aristotelian philosophy.

**TRN200Y1 Modes of Reasoning**
See "Trinity College Courses"

**PHL201H1 Introductory Philosophy [39L]**
An introduction to philosophy focusing on the connections among its main branches: logic, theory of knowledge, metaphysics, and ethics. This course is intended for those with little or no philosophy background but who have completed four FCEs in any subject.
Exclusion: PHL100Y1, 102Y1, or more than 1.0 PHL course
Prerequisite: Four FCEs in any subject

**PHL205H1 Early Medieval Philosophy [39L]**
A study of issues such as the relations of reason and faith, the being and the nature of God, and the problem of universals, in the writings of such philosophers as Augustine, Boethius, Anselm and Abelard.

**PHL206H1 Later Medieval Philosophy [39L]**
A study of issues such as the relations of reason and faith, the being and the nature of God, and the structure of the universe, in the writings of such philosophers as Aquinas and Ockham.

**PHL210Y1 17th-and 18th-Century Philosophy [78L]**
Central texts of such philosophers as Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

**PHL217H1 Introduction to Continental Philosophy [39L]**
An introduction to some of the post-Hegelian thinkers who inspired the various philosophical movements broadly referred to as "continental," such as phenomenology, existentialism, deconstruction, and post-modernism. Questions include the will, faith, death, existence, history and politics, rationality and its limits, encountering an other. Authors studied may include:

Kierkegaard, Schopenhauer, Nietzsche, Marx, Freud, Heidegger, Sartre.
Exclusion: PHL215H1, PHL220H1

**PHL232H1 Knowledge and Reality [39L]**
An introduction to issues in the fundamental branches of philosophy: metaphysics, which considers the overall framework of reality; epistemology, or the theory of knowledge; and related problems in the philosophy of science. Topics in metaphysics may include: mind and body, causality, space and time, God, freedom and determinism; topics in epistemology may include perception, evidence, belief, truth, skepticism.
Exclusion: PHL 230H1, PHL231H1

**PHL235H1 Philosophy of Religion [39L]**
Some central issues in the philosophy of religion such as the nature of religion and religious faith, arguments for the existence of God, the problem of evil, varieties of religious experience, religion and human autonomy. (Offered in alternate years)
Exclusion: PHL236Y1

**PHL237H1 History of Chinese Philosophy [39L]**
An historical and systematic introduction to the main phases of Chinese philosophical development, including Confucianism, Taoism, Buddhism, and Neo-Confucianism; the challenge of Western thought and the development of modern Chinese Philosophy.
Exclusion: EAS241H1, RLG274H1

**PHL240H1 Persons, Minds and Bodies [39L]**
Consciousness and its relation to the body; personal identity and survival; knowledge of other minds; psychological events and behaviour.

**PHL243H1 Philosophy of Human Sexuality [39L]**
Philosophical issues about sex and sexual identity in the light of biological, psychological and ethical theories of sex and gender; the concept of gender; male and female sex roles; "perverse" sex; sexual liberation; love and sexuality.

**PHL244H1 Human Nature [39L]**
Aspects of human nature, e.g., emotion, instincts, motivation. Theories of human nature, e.g., behaviourism, psychoanalysis.

**PHL245H1 Modern Symbolic Logic [39L]**
The application of symbolic techniques to the assessment of arguments. Propositional calculus and quantification theory. Logical concepts, techniques of natural deduction.
Exclusion: CSC330H1
PHL245H1 does not count as a Distribution Requirement course.

**PHL246H1 Probability and Inductive Logic [39L]**
The elements of axiomatic probability theory and its main interpretations (frequency, logical, and subjective). Reasoning with probabilities in decision-making and science.
Recommended preparation: PHL245H1

**PHL247H1 Critical Reasoning [39L]**
The area of informal logic - the logic of ordinary language, usually non-deductive. Criteria for the critical assessment of arguments as strong or merely persuasive. Different types of arguments and techniques of refutation; their use and abuse.
Exclusion: TRN200Y1

**HPS250H1 Introductory Philosophy of Science**
See "History & Philosophy of Science & Technology"

**UNI250Y1 Introduction to Cognitive Science [78L]**
An introduction to the problems, theories and research strategies central to an interdisciplinary field focussing on the nature and organization of the human mind and other cognitive systems. Interrelations among the philosophical, psychological, linguistic and computer science aspects of the field are emphasized.

**PHL265H1 Introduction to Political Philosophy [39L]**
An introduction to central issues in political philosophy, e.g., political and social justice, liberty and the criteria of good government. The writings of contemporary political philosophers, as well as major figures in the history of philosophy may be considered.

**PHL267H1 Philosophy of Feminism [39L]**
Main types of feminist theory: liberal, Marxist, Existential and "Radical". A number of ethical, political and psychological issues are considered.

**PHL271H1 Law and Morality [39L]**
Justifications for the legal enforcement of morality; particular ethical issues arising out of the intersection of law and morality, such as punishment, freedom of expression and censorship, autonomy and paternalism, constitutional protection of human rights.

**PHL273H1 Environmental Ethics [39L]**
A study of environmental issues raising questions of concern to moral and political philosophers, such as property rights, responsibility for future generations, and the interaction of human beings with the rest of nature. Typical issues: sustainable development, alternative energy, the preservation of wilderness areas, animal rights.

**PHL275H1 Introduction to Ethics [39L]**
An introduction to central issues in ethics or moral philosophy, such as the objectivity of values, the nature of moral judgements, rights and duties, the virtues, and consequentialism. Readings may be drawn from a variety of contemporary and historical sources.

**PHL281H1 Bioethics (formerly PHL281Y1) [39L]**
An introduction to the study of moral and legal problems in medical practice and in biomedical research; the development of health policy. Topics include: concepts of health and disease, patient rights, informed consent, allocation of scarce resources, euthanasia, abortion, genetic and reproductive technologies, human research, and mental health.
Exclusion: PHL281Y1

**PHL285H1 Aesthetics [39L]**
An historical and systematic introduction to the main questions in the philosophy of art and beauty from Plato to the present. These include the relation between art and beauty, the nature of aesthetic experience, definitions and theories of art, the criteria of excellence in the arts, and the function of art criticism.

**PHL295H1 Business Ethics [39L]**
Philosophical issues in ethics, social theory, and theories of human nature insofar as they bear on contemporary conduct of business. Issues include: Does business have moral responsibilities? Can social costs and benefits be calculated? Does modern business life determine human nature or the other way around? Do political ideas and institutions such as democracy have a role within business?

**PHL299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

## 300-SERIES COURSES

### Note

All 300-series courses have a prerequisite of three half courses (or equivalent) in philosophy, with the exception of PHL 345-349. There is also a general prerequisite of 7.5 courses (in any field). Only specific courses required or recommended are listed below. Students who do not meet the prerequisite for a particular course but believe that they have adequate preparation must obtain the permission of the instructor to gain entry to the course.

**PHL301H1 Early Greek Philosophy [39L]**
A study of selected Greek philosophers before Plato. Topics may include the Presocratic natural philosophers, Parmenides and the Eleatics, and the so-called sophistic movement.
Prerequisite: PHL200Y1

**PHL302H1 Ancient Philosophy After Aristotle [39L]**
A study of selected themes in post-Aristotelian philosophy. Topics may include Stoicism, Epicureanism, Neoplatonism, and various forms of scepticism.
Prerequisite: PHL200Y1

**UNI302H1 Bases of Cognition [39L]**
See "University College Courses

**PHL303H1 Plato [39L]**
Selected metaphysical, epistemological, and ethical themes in Plato's dialogues.
Prerequisite: PHL200Y1

**PHL304H1 Aristotle [39L]**
Selected anthropological, ethical and metaphysical themes in the works of Aristotle.
Prerequisite: PHL200Y1

**PHL307H1 Augustine [39L]**
Central themes in St. Augustine's Christian philosophy, such as the problem of evil, the interior way to God, the goal of human life and the meaning of history.
Prerequisite: PHL200Y1/205H1

**PHL308H1 Aquinas [39L]**
Philosophical innovations that St. Thomas Aquinas made in the course of constructing a systematic theology: essence and existence, the Five Ways, separate intelligences, the human soul and ethics.
Prerequisite: PHL200Y1/205H1/206H1

**PHL309H1 Topics in Medieval Philosophy [39L]**
Study of a major philosophical figure from the medieval period, such as Anselm, Abelard, Bonaventure, Maimonides, Avicenna, Duns Scotus, William of Ockham; or consideration of a central philosophical topic in a variety of medieval authors, for example, universals, individuation, the existence of God, free will and free choice, eternity and creation.
Prerequisite: PHL200Y1/205H1/206H1

**PHL310H1 The Rationalists [39L]**
Central philosophical problems in philosophers such as Descartes, Spinoza, Leibniz, and their contemporaries.
Prerequisite: PHL210Y1

**PHL311H1 The Empiricists [39L]**
Central philosophical problems in philosophers such as Locke, Berkeley, Hume, and their contemporaries.
Prerequisite: PHL210Y1

**PHL313H1 Topics in 17th and 18th Century Philosophy [39L]**
Central philosophical problems arising in the early modern period.
Prerequisite: PHL210Y1

**PHL314H1 Kant (formerly PHL312H1) [39L]**
A systematic study of *The Critique of Pure Reason*.
Prerequisite: PHL210Y1
Exclusion: PHL312H1

**PHL315H1 Topics in 19th-Century Philosophy [39L]**
Central philosophical problems arising in the 19th century.
Prerequisite: PHL210Y1

**PHL316H1 Hegel [39L]**
An examination of Hegel's project of absolute knowing, its philosophical assumptions, and its implications for history, science and experience.
Prerequisite: PHL210Y1

**PHL317H1 Marx and Marxism [39L]**
An examination of some of the leading themes in the philosophy of Karl Marx. Developments of Marxist philosophy by later thinkers, and critics of Marxism, may also be considered.
Exclusion: PHL 216H1, PHL 318H1
Recommended Preparation: PHL 265H1/POL 200Y1

**PHL319H1 Philosophy and Psychoanalytic [39L] Theory**
A study of the fundamentals of psychoanalytic theory from a philosophical perspective, focusing on the works of Freud and others. Topics include mind (conscious and unconscious), instinctual drives, mechanisms of defence, the structure of personality, civilization, the nature of conscience, and the status of psychoanalysis.

**PHL320H1 Phenomenology [39L]**
Phenomenology is a method used in the analysis of human awareness and subjectivity. It has been applied in the social sciences, in the humanities, and in philosophy. Texts studied are from Husserl and later practitioners, e.g., Heidegger, Sartre, Merleau-Ponty, Gurwitsch, and Ricoeur.
Prerequisite: PHL210Y1/217H1

**PHL321H1 Heidegger [39L]**
Some work from the 1920's (either *Being and Time* or contemporary lectures) and selections from Heidegger's later work on poetry, technology, and history are studied. Heidegger's position within phenomenology and within the broader history of thought is charted.
Prerequisite: PHL217H1

**PHL322H1 Contemporary Continental [39L] Philosophy**
German and French philosophy after World War II, focusing on such topics as: debates about humanism, hermeneutics, critical theory, the structuralist movement, its successors such as deconstruction. Typical authors: Heidegger, Gadamer, Habermas, Levi-Strauss, Foucault, Derrida.
Prerequisite: PHL217H1

**PHL323H1 Social and Cultural Theory [39L]**
A study of philosophical approaches to understanding various aspects of contemporary culture and/or society. Topics may include theories of modernity, capitalism and consumerism, architecture and design, cultural pluralism, globalization, media and internet.

**PHL325H1 Early Analytic Philosophy [39L]**
An examination of some of the classic texts of early analytic philosophy, concentrating on the work of Frege, Russell, and Wittgenstein.
Prerequisite: PHL245H1 and one of PHL 232H1/240H1

**PHL326H1 Wittgenstein [39L]**
Wittgenstein's views on the structure and function of language, meaning, the possibility of a private language, and the concepts of feeling and thinking.
Prerequisite: One of PHL 210Y1/232H1/240H1

**PHL331H1 Metaphysics [39L]**
Historical and systematic approaches to topics in metaphysics, such as the nature of reality, substance and existence, necessity and possibility, causality, universals and particulars.
Prerequisite: PHL232H1
Exclusion: PHL 330Y1

**PHL332H1 Epistemology [39L]**
Historical and systematic approaches to topics in the theory of knowledge, such as truth, belief, justification, perception, a priori knowledge, certitude, skepticism, other minds.
Prerequisite: PHL232H1
Exclusion: PHL 330Y1

**PHL335H1 Issues in Philosophy of Religion [39L]**
Some specific problem(s) in the philosophy of religion, such as the relationship of religious faith and religious belief, the ontological argument for the existence of God, theories about divine transcendence, the philosophical presuppositions of religious doctrines, the modern critique of religion.

**PHL336H1 Islamic Philosophy [39L]**
An introduction to the major thinkers in classical Islamic philosophy, with emphasis placed on developing a properly philosophical understanding of the issues and arguments. Topics include the existence of God; creation and causality; human nature and knowledge; the nature of ethical obligations; and the constitution of the ideal political state.
Prerequisite: PHL200Y1

**PHL337H1 Topics in Chinese Philosophy [39L]**
An intermediate level treatment of such topics as: human nature; good and evil; the role of emotions; the metaphysical ultimate.
Prerequisite: PHL237H1

**PHL338H1 Jewish Philosophy [39L]**
A selection of texts and issues in Jewish philosophy, for example, Maimonides' *Guide of the Perplexed*, Buber's *The Prophetic Faith*, prophecy and revelation, Divine Command and morality, creation and eternity, the historical dimension of Jewish thought.

**PHL340H1 Issues in Philosophy of Mind [39L]**
Typical issues include: the mind-brain identity theory; intentionality and the mental; personal identity.
Prerequisite: One of UNI250Y1/PHL240H1

**PHL341H1 Freedom, Responsibility, and Human Action [39L]**
Human action, and the nature of freedom and responsibility in the light of contemporary knowledge concerning the causation of behaviour.
Prerequisite: PHL 210Y1/232H1/240H1

**PHL342H1 Minds and Machines [39L]**
Topics include: philosophical foundations of artificial intelligence theory; the computational theory of the mind; functionalism vs. reductionism; the problems of meaning in the philosophy of mind.

**JPP343Y1 Women in Western Political Thought [52L]**
An examination of social and political thought concerning the nature of women and their role in society, including the relation between the family and "civil society". The debate between Aristotle and Plato; treatment by early modern individualism; the anti-individualist theory; some major contemporary perspectives, especially liberal and Marxist feminism. (Given by the Departments of Philosophy and Political Science)
Prerequisite: PHL265H1/PHL267H1/POL200Y1/ WGS262Y1

**PHL345H1 Intermediate Logic [39L]**
A sequel to PHL245H1, developing skills in quantificational logic and treating of definite descriptions. The system developed is used to study a selection of the following topics: philosophical uses of logic, formal systems, set theory, non-classical logics, and metalogic.
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT

**PHL346H1 Philosophy of Mathematics [39L]**
Platonism versus nominalism, the relation between logic and mathematics, implications of Gödel's theorem, formalism and intuitionism.
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT

**PHL347H1 Modal Logic [39L]**
Formal study of the concepts of necessity and possibility; modal propositional and quantificational logic; possible-worlds semantics; the metaphysics of modality.
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT

**PHL348H1 Metalogic (formerly PHL344H1) [39L]**
Soundness and completeness of propositional and quantificational logic, undecidability of quantificational logic, and other metalogical topics.
Exclusion: MAT309H1/CSC438H1, PHL344H1
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT

**PHL349H1 Set Theory [39L]**
Axiomatic set theory developed in a practical way, as a logical tool for philosophers, with some attention to philosophical problems surrounding it.
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT

**HPS350H1 Revolution in Science**
See "History and Philosophy of Science and Technology"

**PHL351H1 Philosophy of Language [39L]**
The nature of language as a system of human communication, theories of meaning and meaningfulness, the relation of language to the world and to the human mind.
Prerequisite: PHL245H1 and one of PHL 232H1/240H1

**PHL355H1 Philosophy of Natural Science [39L]**
The structure and methods of science: explanation, methodology, realism and instrumentalism.

Recommended preparation: A solid background in science or HPS250H1/PHL246H1

**PHL356H1 Philosophy of Physics [39L]**
Introduction to philosophical issues which arise in modern physics, especially in Relativity and Quantum Mechanics. Topics include: the nature of spacetime, conventionality in geometry, determinism, and the relation between observation and existence.
Prerequisite: One full course in MAT/PHY; two full courses is recommended.

**PHL357H1 Philosophy of Biology [39L]**
Philosophical issues in the foundations of biology, e.g., the nature of life, evolutionary theory; controversies about natural selection; competing mechanisms, units of selection; the place of teleology in biology; biological puzzles about sex and sexual reproduction; the problem of species; genetics and reductionism; sociobiology; natural and artificial life.
Recommended preparation: HPS250H1/PHL246H1. Students with a background in Biology are exempt from the prerequisite of 1.5 courses in Philosophy

**PHL362H1 Philosophy of History [39L]**
Typical questions include: Has history any meaning? Can there be general theories of history? How are the findings of historians related to the theories of metaphysics and of science? Is history deterministic? Must the historian make value judgements? Is history science or an art? Are there historical forces or spirits of an epoch?

**PHL365H1 Political Philosophy [39L]**
A study of some of the central problems of political philosophy, addressed to historical and contemporary political theorists.
Prerequisite: PHL265H1/POL200Y1

**PHL370H1 Issues in Philosophy of Law [39L]**
Major issues in philosophy of law, such as legal positivism and its critics, law and liberalism, feminist critiques of law, punishment and responsibility.
Prerequisite: PHL271H1
Recommended preparation: PHL265H1

**PHL373H1 Issues in Environmental Ethics [39L]**
An intermediate-level examination of key issues in environmental philosophy, such as the ethics of animal welfare, duties to future generations, deep ecology, ecofeminism, sustainable development and international justice.
Prerequisite: PHL273H1

**PHL375H1 Ethics [39L]**
An intermediate-level study of selected issues in moral philosophy, or of influential contemporary or historical works in ethical theory.
Prerequisite: PHL275H1

**PHL378H1 War and Morality [39L]**
Moral and political issues concerning warfare: the theory of the "just war", pacifism, moral constraints on the conduct of war, war as an instrument of foreign policy, the strategy of deterrence. Special attention to the implications of nuclear weapons.
Prerequisite: PHL265H1/275H1

**PHL380H1 Global Bioethics [39L]**
An intermediate-level study of moral problems that arise in international contexts, including issues of special interest in bioethics: moral universalism and relativism; global distributive justice; poverty relief and international aid; international health disparities; globalization and health; HIV/AIDS; intellectual property and access to essential medicines; clinical trials in developing countries; exploitation and the 10/90 gap.
Prerequisite: PHL281H1

**PHL381H1 Ethics and Medical Research [39L]**
An intermediate-level study of problems in biomedical and behavioural research with human subjects: informed voluntary consent, risk and benefit, experimental therapy, randomized clinical trials, research codes and legal issues, dependent groups (human embryos, children, the aged, hospital patients, the dying, prisoners, the mentally ill.
Prerequisite: PHL281H1

**PHL382H1 Ethics: Death and Dying [39L]**
An intermediate-level study of moral and legal problems, including the philosophical significance of death, the high-tech prolongation of life, definition and determination of death, suicide, active and passive euthanasia, the withholding of treatment, palliative care and the control of pain, living wills; recent judicial decisions.
Prerequisite: PHL281H1

**PHL383H1 Ethics and Mental Health [39L]**
An intermediate-level study of moral and legal problems, including the concepts of mental health and illness, mental competence, dangerousness and psychiatric confidentiality, mental institutionalization, involuntary treatment and behaviour control, controversial therapies; legal issues: the Mental Health Act, involuntary commitment, the insanity defence.
Prerequisite: PHL281H1

**PHL384H1 Ethics, Genetics and Reproduction [39L]**
An intermediate-level study of moral and legal problems, including the ontological and moral status of the human embryo and fetus; human newborn, carrier and prenatal genetic screening for genetic defect, genetic therapy; the reproductive technologies (e.g., artificial insemination, in vitro fertilization); recent legislative proposals and judicial decisions.
Prerequisite: PHL281H1

**PHL385H1 Issues in Aesthetics [39L]**
Selected topics in the philosophy of art. Such issues as the following are discussed: whether different arts require different aesthetic principles; relations between art and language; the adequacy of traditional aesthetics to recent developments in the arts; art as an institution.
Recommended preparation: PHL285H1

**PHL388H1 Literature and Philosophy [39L]**
The literary expression of philosophical ideas and the interplay between literature and philosophy. Such philosophical issues as the nature and origin of good and evil in human beings, the nature and extent of human freedom and responsibility, and the diverse forms of linguistic expression. Such authors as Wordsworth, Mill, Dostoyevsky, Tolstoy, Miller, Camus, and Lawrence are studied.
Exclusion: PHL288H1

**PHL394H1 Markets and Morals [39L]**
A study of the standards that can be used to judge the performance of economic systems, e.g., efficiency, fairness, maximization, along with the different institutional mechanisms that can be used to organize economic activity, e.g., markets or hierarchies, public or private ownership.
Prerequisite: One of PHL265H1/275H1/POL200Y1

Exclusion: PHL296H1

**PHL395H1 Issues in Business Ethics [39L]**
A focused examination of moral issues that arise in the conduct of business, in areas such as accounting and finance, corporate governance, human resources, environmental conduct, business lobbying and regulatory compliance.
Prerequisite: PHL295H1

**PHL398H0 Independent Experiential Study Project**

**PHL399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

## 400-SERIES COURSES

### Notes

1. The general prerequisite for all 400-level courses is nine half-courses in philosophy. Most courses also have specific prerequisites. Students who do not meet the prerequisite for a particular course but believe that they have adequate preparation must obtain the permission of the instructor in order to gain entry to the course.
2. PHL 400H1-451H1 are undergraduate-level courses. PHL 470H1-489H1 are cross-listed graduate courses, available to undergraduates as well. Enrolment in these courses requires the permission of the instructor and the Department in addition to the completion of the prerequisites indicated below.
3. Individual Studies courses (PHL490Y1, PHL495H1/496H1/497H1/498H1/499H1), which involve directed study and research, are available to advanced students. Arrangements must be made with a faculty supervisor, and approval of the Undergraduate Co-ordinator obtained before registration.
4. No more than one individual studies course can be counted towards any philosophy program. Normally, no more than one-half individual studies course can be counted towards the 400-level course requirement for any Specialist or Combined Specialist Philosophy program.

**PHL400H1 Seminar in Ancient/Medieval Philosophy [39S]**
Advanced discussion of the principal figures and themes in ancient and/or medieval philosophy.
Prerequisite: PHL 200Y1

**PHL401H1 Seminar in the History of Philosophy [39S]**
Advanced study of some of the principal figures in a particular historical, philosophical tradition.
Prerequisite: PHL 200Y1/210Y1

**UNI401H1 Advanced Cognitive Science26S**
See "University College Courses"

**PHL402H1 Seminar in Early Modern Philosophy [39S]**
Advanced discussion of the principal figures and themes in the philosophy of the 17th and/or 18th centuries.
Prerequisite: PHL 210Y1

**PHL403H1 Seminar in 19th-Century Philosophy [39S]**
Advanced discussion of the principal figures and themes in 19th century philosophy.
Prerequisite: PHL 210Y1/217H1/315H1/316H1

**PHL404H1 Seminar in Epistemology [39S]**
Typical problems include the nature of knowledge and belief; perception; theories of truth and necessity; skepticism.
Prerequisite: PHL 232H1

**PHL405H1 Seminar in Philosophy of Mind [39S]**
Advanced study of a problem in the philosophy of mind.
Prerequisite: PHL 240H1/342H1/UNI 250Y1

**PHL406H1 Seminar in Metaphysics [39S]**
Typical problems include causality and determinism; ontological categories; mind and body; the objectivity of space and time.
Prerequisite: PHL 232H1

**PHL407H1 Seminar in Ethics [39S]**
Advanced discussion of issues in moral philosophy, including issues of applied ethics.
Prerequisite: PHL 275H1

**PHL408H1 Seminar in Philosophy [39S]**
Topics vary but bridge two or more areas or traditions of philosophy.

**PHL409H1 New Books Seminar [39S]**
Advanced study of key philosophical works published within the last five years.

**PHL410H1 Seminar in Continental Philosophy [39S]**
Advanced study of recent philosophical discussions within the continental tradition.
Prerequisite: PHL 217H1/315H1/316H1/319H1/320H1/321H1/322H1

**PHL411H1 Seminar in Analytic Philosophy [39S]**
Advanced study of some topic of current philosophical interest within the analytic tradition.
Prerequisite: PHL 245H1 and one of PHL 232H1/240H1

**PHL412H1 Seminar in Political Philosophy [39S]**
Advanced study of some topic in social or political philosophy.
Prerequisite: PHL 265H1/271H1

**PHL413H1 Seminar in Applied Ethics [39S]**
Advanced study of some topic in an area of applied ethics, including bioethics, environmental ethics, and so on.
Prerequisite: PHL 271H1/273H1/275H1/281Y1

**PHL414H1 Seminar in Philosophy of Religion [39S]**
Advanced study of topics in the philosophy of religion.
Prerequisite: PHL 235H1/335H1

**PHL415H1 Seminar in Philosophy of Science [39S]**
Advanced study of some area or problem in the philosophy of science.
Prerequisite: One of PHL 355H1 – 357H1 or HPS 250H1

**PHL440H1 Clinical Bioethics [39S]**
Advanced study of topics in bioethics, taught in conjunction with clinical bioethicists associated with the health care organization partners of the University of Toronto Joint Centre for Bioethics.
Prerequisite: PHL281H1, and permission of the instructor and Department. Limited to students enrolled in the Bioethics Specialist program.

**PHL451H1 Seminar in Logic/Philosophy of Language [39S]**
Advanced study of some topic in logic and/or the philosophy of language.
Prerequisite: PHL 245H1 and one of PHL 232H1/240H1/246H1

**PHL470H1 Advanced Bioethics [39S]**
Philosophical exploration of the foundations and methodology of bioethics. Offered jointly with PHL 2145H.
Prerequisite: PHL 281H1 and one of PHL 380H1/381H1/382H1/383H1/384H1, and permission of the instructor and Department. Limited to students enrolled in the Bioethics Specialist program.

**PHL471H1 Advanced Topics in Greek Philosophy [39S]**
Prerequisite: PHL200Y1 and permission of the instructor and Department

**PHL472H1 Advanced Topics in Medieval Philosophy [39S]**
Prerequisite: PHL 200Y1/205H1/ 206H1 and permission of the instructor and Department

**PHL473H1 Advanced Topics in Modern Philosophy [39S]**
Prerequisite: PHL210Y1 and permission of the instructor and Department

**PHL475H1 Advanced Topics in Moral Philosophy [39S]**
Prerequisite: PHL275H1 and permission of the instructor and Department

**PHL476H1 Advanced Topics in Epistemology [39S]**
Prerequisite: PHL232H1 and permission of the instructor and Department

**PHL477H1 Advanced Topics in Metaphysics [39S]**
Prerequisite: PHL232H1 and permission of the instructor and Department

**PHL478H1 Advanced Topics in Philosophy of Religion [39S]**
Prerequisite: PHL235H1/335H1 and permission of the instructor and Department

**PHL479H1 Advanced Topics in Philosophy of Mind [39S]**
Prerequisite: UNI250Y1/PHL240H1/340H1/ 341H1/342H1 and permission of the instructor and Department

**PHL480H1 Advanced Topics in Logic [39S]**
Prerequisite: Two of PHL344H1-349H1 and permission of the instructor and Department

**PHL481H1 Advanced Topics in the Philosophy of Language [39S]**
Prerequisite: PHL351H1 and permission of the instructor and Department

**PHL482H1 Advanced Topics in Philosophy of Natural Science [39S]**
Prerequisite: One of PHL355H1 – 357H1 or HPS 250H1, and permission of the instructor and Department

**PHL483H1 Advanced Topics in Social and Political Philosophy [39S]**
Prerequisite: PHL265H1 and permission of the instructor and Department

**PHL484H1 Advanced Topics in the Philosophy of Law [39S]**
Prerequisite: PHL271H1 and permission of the instructor and Department

**PHL485H1 Advanced Topics in Aesthetics [39S]**
Prerequisite: PHL285H1/PHL385H1 and permission of the instructor and Department

**PHL486H1 Advanced Topics in Philosophy of History [39S]**
Prerequisite: PHL362H1 and permission of the instructor and Department

**PHL487H1 Advanced Topics in Philosophy [TBA]**

**PHL488H1 Advanced Topics in Philosophy [TBA]**

**PHL489H1 Advanced Topics in Philosophy [TBA]**
Prerequisite: Permission of the instructor and Department

**PHL490Y1 Individual Studies (formerly PHL390Y1) [TBA]**

**PHL495H1 Individual Studies (formerly PHL395H1) [TBA]**

**PHL496H1 Individual Studies (formerly PHL396H1) [TBA]**

**PHL 497H1 Individual Studies (formerly PHL397H1) [TBA]**

**PHL 498H1 Individual Studies (formerly PHL398H1) [TBA]**

**PHL 499H1 Individual Studies (formerly PHL399H1) [TBA]**

# Physical Education and Health

## Offered by the Faculty of Physical Education & Health

The Faculty of Physical Education & Health offers the following courses to all students in the Faculty of Arts and Sciences.

**PHE110H1 Active Healthy Living [26L, 13P]**
This course increases student awareness of issues related to a healthy lifestyle and to the role of physical activity in promoting health across the lifespan. Important concepts in anatomy, physiology and nutrition are introduced, and the whole body benefits of physical activity are emphasized. Personal nutrition and lifestyle practices are examined and self-improvement plans developed. First class is mandatory. Full participation in physical activities including aquatics is required.
This course is particularly suitable as a Science Distribution course for students in the Humanities and Social Sciences.
Enrolment limit of 100 students.

## Faculty

### University Professors Emeriti

A.E. Litherland, B Sc, Ph D, FRSC, FRS
B.P. Stoicheff, OC, MA, Ph D, D Sc, FRSC, FRS

### Professors Emeriti

R.L. Armstrong, MA, Ph D, FRSC
R.E. Azuma, MA, Ph D
H.R. Cho, M Sc, Ph D
R.F. Code, AM, Ph D (UTM)
R.C. Desai, B Sc, Ph D
T.E. Drake, M Sc, Ph D
J.R. Drummond, MA, D Phil, FRSC
D.J. Dunlop, MA, Ph D, FRSC (UTM)
R.M. Farquhar, MA, Ph D, FRSC (UTM)
G.D. Garland, OC, MA, Ph D, FRSC
G.M. Graham, M Sc, Ph D
A. Griffin, M Sc, Ph D, FRSC (UTSC)
J.V. Iribarne, Dr In Chem
D.G. Ivey, MA, Ph D
A.E. Jacobs, M Sc, Ph D (UTSC)
A.W. Key, MA, D Phil (I)
J.D. King, BA, D Phil (UTSC)
P.P. Kronberg, M Sc, Ph D, D Sc †
M.J.G. Lee, MA, Ph D (UTSC)
R. List, Dipl Phys ETH, Dr Sc Nat, FRSC
R.K. Logan, B Sc, Ph D (N)
F.D. Manchester, M Sc, Ph D
A.D. May, MA, Ph D
K.G. McNeill, MA, D Phil, FI Nuc E (T)
J.W. Moffat, Ph D, D Sc
K.H. Norwich, M Sc, MD, Ph D †
P.J. O'Donnell, B Sc, Ph D (UTSC)
D.A.L. Paul, BA, Ph D
J.M. Perz, MA Sc, Ph D (UTSC)
J.D. Prentice, M Sc, Ph D
D.J. Rowe, MA, D Phil, FRSC
J.C. Stryland, Ph D
L.E.H. Trainor, MA, Ph D
M.B. Walker, B Eng, D Phil
G.F. West, MA, Ph D, FRSC
S.S.M. Wong, M Sc, Ph D
T.S. Yoon, M Sc, Ph D

### Professor and Chair of the Department

M. Luke, AM, Ph D

### Professor and Associate Chair (Graduate Studies)

T.G. Shepherd, B Sc, Ph D

### Associate Professor and Associate Chair (Undergraduate Studies)

D.C. Bailey, B Sc, Ph D

### University Professors

J.R. Bond, OC, MS, PH D, FRSC FRS †
S. John, B Sc, Ph D, FRSC
W.R. Peltier, M Sc, Ph D, FRSC
R.J.D. Miller, R.J.D., B Sc, Ph D, FRSC

### Professors

J Abbat, MA, Ph D †
R.C. Bailey, B Sc, Ph D
M.J. Bronskill, M Sc, Ph D, FCCPM †
D.J. Donaldson, BSc, Ph D †
R.N. Edwards, B Sc, Ph D, C Phys, F Inst P
R. Holdom, MA, Ph D
M.L.G. Joy, MA Sc, Ph D †
S.R. Julian, B Sc, M Sc, Ph D
Y-B. Kim, B Sc, M Sc, Ph D
L. Kofman, B Sc, Ph D †
G.J. Luste, BA, Ph D
J.F. Martin, B Sc, D Phil †
B. Milkereit, Ph D
J.X. Mitrovica, M Sc, Ph D
G.W.K. Moore, B Sc, Ph D (UTM)
S. Morris, M Sc, Ph D
N. Murray, Ph D †
R.S. Orr, B Sc, Ph D
J. Repka, B Sc, Ph D †
P.K. Sinervo, B Sc, Ph D, FRSC
J.E. Sipe, M Sc, Ph D, FRSC (T)
A.M. Steinberg, MA, Ph D
K. Strong, B Sc, D Phil
W. Trischuk, B Sc, Ph D
H.M. van Driel, M Sc, Ph D, FRSC
R. P. Young, Ph D †

### Associate Professors

K-Y. Chun, B A Sc, MA, Ph D †
A-A. Dhirani, BSc, Ph D †
K. Hori, B Sc, Ph D
D.F.V. James, Ph D
H-Y. Kee, MS, Ph D
P. Krieger, M Sc, Ph D
P.J. Kushner, B Sc, M Sc, PhD
H-K. Lo, Ph D
R.S. Marjoribanks, MS, Ph D
B. Netterfield, BS, Ph D
A. Peet, B Sc, Ph D
U-L. Pen, M Sc, Ph D †
E. Poppitz, Ph D
P. Savard, M Sc, Ph D
A.C. Thompson, BS, Ph D †
J.T. Wei, MS, Ph D

### Assistant Professors

V. Barzda, M Sc, Ph D (UTM)
C. Gradinaru, Ph D (UTM)
D.B.A. Jones, AB, SM, Ph D
Y-J. Kim, BS, Ph D
Q. Liu, BS, Ph D
J. Lowman, B A, M Sc, Ph D (UTSC)
D. McMillen, B Sc, M Sc, Ph D †
A. Paramekanti, B Tech, Ph D
S. Stanley, B Sc, Ph D
R. Teuscher, M Sc, Ph D †
J. Thywissen, MS, Ph D
K. Walker, B Sc, Ph D

M. Wells, B Sc, Ph D (UTSC) †

### Senior Lecturers

D.M. Harrison, M Sc, Ph D
R.M. Serbanescu, M Sc, Ph D

### Lecturers

V.B. Deyirmenjian, B Sc, Ph D
J. Harlow, B Sc, PhD

### Part-Time Lecturers

P. Savaria, M Sc, Ph D

† Cross-appointed or Research Scientist

Physics is the study of natural phenomena at the most fundamental level. Physicists investigate the properties of the states of matter and the structure and behaviour of the components of matter. The gravitational, electromagnetic and nuclear interactions are examined and different systems of mechanics including classical, relativistic, quantum and statistical, are developed to describe interactions between systems ranging from sub-atomic to galactic in size.

A program in physics has much to offer you. Besides traditional careers in teaching and research, knowledge of Physics is a powerful tool for a career in the Environmental or Life Sciences. An understanding of Physics is essential for those who are concerned about how society is affected by the impact of modern technology. The conceptual tools one acquires as a physicist can be applied with great success to many occupations.

The Specialist Program offers an intensive preparation for a career in Physics. By choosing courses from the wide variety offered, one can emphasize experimental, theoretical or even applied sides of physics. In fourth year, students intending to undertake graduate studies are encouraged to take advanced optional courses. Optional courses are offered in Sub-Atomic Physics, Quantum Optics and Condensed Matter Physics, or Geophysics and Atmospheric Physics, reflecting the research excellence of the faculty.

Programs in Biophysics and Molecular Biophysics are offered that combine the analytical problem solving skills of the physicist with sound backgrounds in relevant biology and chemistry. If you have an interest in biophysics please contact the Associate Chair for Undergraduate Studies.

The Applied Physics program focuses more on subject matter that will help one in an industrial career. As part of this program, students are encouraged to take advantage of the Professional Experience Year program.

A number of joint Physics Specialist programs are also offered in cooperation with the Departments of Astronomy, Chemistry, Computer Science, Environment, Geology, Mathematics, Philosophy, and Physiology.

The Professional Experience Year program ("PEY": see also page 19 and www.peyonline.com) is available to eligible, full-time Arts & Science Specialist students after their second year of study. Physics students are encouraged to take advantage of this opportunity to apply their scientific and mathematical skills in a 12-16 month professional internship.

Scientifically literate teachers are important for educating citizens in modern society. Students interested in a career as a teacher should contact the Associate Chair for Undergraduate Studies for advice on suitable programs and courses.

The Departmental website gives detailed information on programs and courses, and describes the operation of the Department and the counselling services available. All students, most particularly those entering first year, are strongly urged to consult the website before term begins.

Associate Chair (Undergraduate Studies):
Professor D. Bailey, Room 328, McLennan Physical Laboratories (416-978-6674);
E-mail address: ugchair@physics.utoronto.ca

Enquiries:
Undergraduate Office, Room 301, McLennan Physical Laboratories (416-978-7057)

Web site: http://www.physics.utoronto.ca

## Physics Programs

Enrolment in the Physics programs requires completion of four courses; no minimum GPA is required. Students with a good grade in PHY 110Y1 may apply to the Physics Undergraduate Office for permission to enter a Physics Program requiring PHY (131H1, 132H1)/138Y1 or (151H1, 152H1)/140Y1.

### Applied Physics (Science program)

Consult Professor D. Bailey, Associate Chair (Undergraduate Studies), Department of Physics.

**Specialist program:**
(13.5 full courses or their equivalent, including at least one 400-series course)

First Year:
MAT 135Y1/137Y1, 223H1; PHY (151H1, 152H1)/140Y1
Second Year:
MAT 235Y1/237Y1, 244H1; PHY 225H1, 251H1, 252H1, 255H1, 256H1
Third Year:
APM 346H1; MAT 334H1; PHY 351H1, 352H1, 355H1
Fourth Year:
1. PHY 459H1, 478H1/426H1
2. In addition, students are required in their 3rd/4th year to take 2.0 courses in practical physics from:

PHY 305-308H1; 407-408H1; 326H1/426H1/428H1/429H1; 495H1/496H1; and

3. An equivalent of 1.5 courses selected from one of the following streams:

Condensed Matter Physics and Quantum Optics: PHY 353H1, 485H1, 487H1
Atmospheric Physics: PHY 315H1, 353H1, 498H1
Geophysics: JGP 438H1, PHY 359H1, 493H1, 494H1

**Note:**
Students intending to pursue a career in Industry are strongly urged to take advantage of the Professional Experience Year Program.

## Biophysics (Science program)

Consult Associate Chair (Undergraduate Studies), Department of Physics or Physiology.

### Specialist program:

(15.5 full courses or their equivalent, including at least one 400-series course)

First Year:
BIO 150Y1; CHM (138H1, 139H1)/151Y1; MAT 135Y1/137Y1; PHY (131H1, 132H1)/ (151H1, 152H1)/138Y1/140Y1 (PHY (151H1, 152H1) recommended)
First or Second Year:
MAT 223H1
Second Year:
BCH 210H1; BIO 250Y1; CHM 247H1; MAT 235Y1/237Y1, 244H1; PHY 251H1
Third Year:
JBO 302Y1; PHY 225H1, 252H1, 255H1, 256H1, 346H1, 351H1
Fourth Year:
PSL 350H1/BIO 349H1; PHY 355H1, 407H1; PSL 303Y1, 432H1
NOTES: We strongly recommend you consider taking the research project PHY 478H1/PSL 499H1.

## Molecular Biophysics (Science program)

Consult Associate Chair (Undergraduate Studies), Department of Physics, Biochemistry, or Chemistry.

Molecular Biophysics is the application of physics and physical chemistry to biological problems at the molecular level. Ideas, instrumentation and computational models of physics and chemistry are used to understand the molecules of life. What are the three-dimensional structures of these molecules? How do these structures change over time? How do molecules interact to relay information? What are the forces that govern biomolecular interactions? How can we manipulate these molecules for the benefit of humankind? These are some of the questions that molecular biophysicists attempt to address rigorously. Of course many of the answers to these questions will have profound implications for human health. The Molecular Biophysics Program combines mathematics, physics, chemistry and biochemistry in an unusual and exciting opportunity for undergraduates, including undergraduate research in some of the finest laboratories in the world.

### Specialist program:

(16.0 full courses of their equivalent, including at least one 400-series course)

First Year (3.0 FCE):
CHM (138H1, 139H1)/151Y1; MAT 135Y1/137Y1/157Y1; PHY151H1/131H1, 152H1/132H1; (CHM 151Y1, PHY151H1, 152H1 recommended)
First or second year (0.5 FCE):
MAT 223H1/240H1
Second Year (3.5 FCE):
BCH 210H1; CHM (220H1, 221H1)/225Y1; MAT 235Y1/237Y1; PHY251H1, 252H1
Second or Third Year (2.0 FCE):
MAT 244H1; PHY225H1, 255H1; CHM 247H1/249H1
Third Year (3.0 FCE):
BCH 335H1/311H1, BCH 340H1; CHM 326H1/PHY355H1, CHM 327H1, PHY 346H1, 352H1
Third or Fourth Year (0.5 FCE):
APM346H1
Fourth Year (3.5 FCE)
BCH 427H1; CHM 328H1, CHM423H1/PHY457H1; PHY307H1, 351H1/353H1, BCH473Y1/PHY479Y1/CHM499Y1

## Physics (Science program)

Consult Professor D. Bailey, Associate Chair (Undergraduate Studies), Department of Physics.

**Specialist program:**

(13.0 full courses or their equivalent, including at least one full-course at the 400 level)

First Year:
MAT 137Y1/157Y1, 223H1; PHY (151H1, 152H1)/140Y1
Note: Students with a good grade in PHY 132H/110Y/138Y may ask the Physics Undergraduate Office for entry into this or other Physics Programs requiring PHY 152H /140Y.
Second Year:
MAT 237Y1, 244H1; PHY 225H1, 251H1, 252H1, 255H1, 256H1
Third Year:
APM 346H1; MAT 334H1; PHY 351H1, 352H1, 353H1, 355H1, 357H1/358H1/359H1
Fourth Year:
PHY 457H1; two of 459H1/460H1/480H1

**NOTE: Third/Fourth Year Laboratories:**
All specialists must take a minimum of 1.5 courses in practical physics in third/fourth year. One half-course must be in the Advanced Physics Laboratory.

Advanced Physics Laboratory: PHY 326H1, 426H1, 428H1, 429H1

Electronics Laboratory: PHY 305H1

Computational Laboratory: PHY 307H1/308H1/309H1/407H1/408H1/409H1

Medical Imaging: PHY 445H1

### Major programs:

**A. 'Core' Major**

(7.5 full courses or their equivalent, including at least 1.5 full-course equivalents at the 300+ level)

First Year:
MAT 137Y1, 223H1; PHY (151H1, 152H1)/140Y1
Second Year:
1. MAT 237Y1, PHY 225H1
2. Three of: PHY 251H1, 252H1, 255H1, 256H1

Third Year:
1. MAT 244H1; PHY 305H1/307H1/308H1/309H1/326H1
2. Two of: PHY 351H1, 352H1, 353H1, 355H1, 357H1, 358H1, 359H1

**B. 'General' Major**

(7 full courses or their equivalent, including at least 1.5 full-course equivalents at the 300+ level)

NOTE: This program is intended for students in the Life Sciences

First Year:
MAT 135Y1/137Y1; PHY (131H1, 132H1)/ (151H1, 152H1)/ 138Y1/140Y1

Second Year:
MAT 235Y1/237Y1; PHY 225H1, 238Y1/(251H1, 255H1)
Third Year:
1. MAT 244H1, PHY 256H1, 305H1/307H1/308H1/309H1/326H1
2. One full course equivalent from: JPA 305H1, JPA 310H1, JGP 438H1, PHY 315H1, 346H1, 445H1

**Minor programs:**

**A. 'Core' Minor**
(4 full courses or their equivalent)

First Year:
PHY (151H1, 152H1)/140Y1
Second Year:
1. PHY 225H1
2. Three of: PHY 251H1, 252H1, 255H1, 256H1
Third Year:
1. PHY 305H1/307H1/308H1/309H1/326H1
2. One of PHY 351H1, 352H1, 355H1

**B. 'Life, Environmental, and General' Minor**
(4 full courses or their equivalent)

First Year:
MAT 135Y1/137Y1; PHY (131H1, 132H1)/(151H1, 152H1)/138Y1/140Y1
Second Year:
ENV 235Y1/ PHY 238Y1 or any other 1 full course equivalent from PHY courses at the 200+ level
Third Year:
One full course equivalent from: BIO 472H1, JPA 305H1, JPA 310H1; JGP 438H1; PHY 315H1, 346H1, 445H1 or any other PHY300+ course; PSL454H1; JBO302Y may count as a half-course credit to this requirement.

**Earth Systems: Physics and Environment : see Centre for Environment**

**Physics and Astronomy: see Astronomy**

**Physics and Chemistry: see Chemical Physics in the Chemistry section**

**Physics and Computer Science: see Computer Science**

**Physics and Geology: see Geology**

**Physics and Mathematics: see Mathematics**

**Physics and Philosophy (Science program)**

Consult Associate Chair (Undergraduate Studies), Department of Physics or Philosophy.

**Specialist program:**
(16.0 full courses or their equivalent, including at least 2 full-course equivalents at the 400 level)

First Year:
PHY (151H1, 152H1)/140Y1; MAT137Y1/157Y1; MAT223H1; PHL 100Y1
Second Year:
MAT237Y1; MAT244H1; PHY251H1; PHY255H1; PHY256H1; HPS 250H1
Third Year:
MAT334H1; PHY252H1; PHY351H1; PHY352H1; PHY355H1
Fourth Year:
PHY457H1; PHY480H1/483H1; PHY491H1
Any Year:
PHL 245H1; 345H1/347H1/348H1/349H1; 355H1; 356H1; 415H1/482H1
2.5 additional PHL courses, including at least 0.5 at the 300+ level

**Planetary Science: see Astronomy and Astrophysics**

## Physics Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all PHY courses are classified as SCIENCE courses.

**Note**
Books listed in course descriptions will not necessarily be the texts for the course, but do indicate the level of presentation. More detailed and current information on courses is available through the Physics Department website. Pre- and co-requisites are recommendations which may be waived in special circumstances - students should consult the Department prior to the beginning of term.

**SCI199H1 First Year Seminar [26S]**

**SCI199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**PHY100H1 The Magic of Physics [26L, 13T]**
In 1915 Einstein presented a quartet of papers that revolutionized our understanding of gravity. He commented: "Hardly anyone who has truly understood this theory will be able to resist being captivated by its magic." The General Theory of Relativity is not the only theory of physics that is magical, and Einstein was not physics' only magician. We uncover the wonders of the classical and the quantum world courtesy of Galileo, Newton, Maxwell, Einstein, Heisenberg and others. Topics include planetary motion, chaos, the nature of light, time travel, black holes, matter waves, Schrödinger's cat, and quarks. No mathematics is required, and any necessary elementary classical physics is reviewed.
Exclusion: PHY131H/132H/151H/152H /110Y1/138Y/140Y taken previously or concurrently
PHY100H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**PHY101H1 Emergence in Nature [26L, 13T]**
The universe is not a rigid clockwork, but neither is it formless and random. Instead, it is filled with highly organized, evolved structures that have somehow emerged from simple rules of physics. Examples range from the structure of galaxies to the pattern of ripples on windblown sand, to biological and even social processes. These phenomena exist in spite of the universal tendency towards disorder. How is this possible?

Self-organization challenges the usual reductionistic scientific method, and begs the question of whether we can ever really understand or predict truly complex systems.
Exclusion: PHY131H/132H/151H/152H 110Y1/138Y/140Y taken previously or concurrently
PHY101H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**PHY131H1 Introduction to Physics I [26L, 24P, 12T]**
A first university physics course primarily for students not intending to pursue a Specialist or Major program in Physical or Mathematical Sciences. Topics include: momentum, energy, force, work, power, angular momentum, classical kinematics & dynamics, friction, thermal properties, gases, liquids, viscosity.
Exclusion: PHY151H1/110Y1138Y1/140Y1
Prerequisite: MCV4U Calculus & Vectors / MCB4U Functions & Calculus
Recommended preparation: SPH4U Physics and SCH4U Chemistry
Co-requisite: MAT135Y1/137Y1/157Y1

**PHY132H1 Introduction to Physics II [26L, 24P, 12T]**
The second university physics course primarily for students not intending to pursue a Specialist or Major program in Physical or Mathematical Sciences. Topics include: oscillations, waves, sound, light, electricity, magnetism, special relativity.
Exclusion: PHY152H1/110Y1138Y1/140Y1
Prerequisite: PHY131H1/151H1
Co-requisite: MAT135Y1/137Y1/157Y1

**PHY151H1 Foundations of Physics I [39L, 18P, 12T]**
The first physics course in many of the Specialist and Major Programs in Physical Sciences. It provides an introduction to the concepts, approaches and tools the physicist uses to describe the physical world while laying the foundation for classical and modern mechanics. Topics include: mathematics of physics, energy, momentum, conservation laws, kinematics, dynamics, and gravity.
Exclusion: PHY131H1/110Y1138Y1/140Y1
Prerequisite: MCV4U Calculus & Vectors / MCB4U Functions & Calculus; SPH4U Physics
Co-requisite: MAT137Y1/157Y1

**PHY152H1 Foundations of Physics II [39L, 18P, 12T]**
The second physics course in many of the Specialist and Major Programs in Physical Sciences. Topics include special relativity and electromagnetism.
Exclusion: PHY132H1/110Y1138Y1/140Y1
Prerequisite: PHY131H1/151H1
Co-requisite: MAT137Y1/157Y1

**PHY189H1 Physics at the Cutting Edge [39L]**
A limited enrollment seminar course for First Year Science students interested in current research in Physics. Students will meet active researchers studying the universe from the centre of the earth to the edge of the cosmos. Topics may range from string theory to experimental biological physics, from climate change to quantum computing, from superconductivity to earthquakes. The course may involve both individual and group work, essays and oral presentations.
Co-requisite: PHY132H1132H1/152H1

### Note
Exceptional first year students, for example those who have scored very high on the Canadian Association of Physics High School Exam, may be allowed direct enrollment in Physics Second Year Courses. Contact the Physics Undergraduate Office.

## 200-SERIES COURSES

### Note
All 200-series PHY courses except PHY201H1 and PHY205H1 require MAT135Y1/137Y1/157Y1.

**PHY201H1 Concepts of Physics [26L, 13T]**
A conceptual overview of some the most interesting advances in physics and the intellectual background in which they occurred. The interrelationship of the actual practice of physics and its cultural and intellectual context is emphasized.
PHY201H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**PHY205H1 The Physics of Everyday Life [26L, 13T]**
An introduction to the physics of everyday life. This conceptual course looks at everyday objects to learn about the basis for our modern technological world. Topics may include anything from automobiles to weather.
Exclusion: PHY131H/132H/151H/152H/110Y/138Y/140Y taken previously or concurrently
PHY205H1 is primarily intended as a Science Distribution Requirement course for students in the Humanities and Social Sciences.

**JOP210H1 Holography for 3D Visualization [26L, 58P]**
An introduction to the theory and practice of holography. Human perception & 3D visualization; fundamentals of 3D modeling; ray and wave optics; interference, diffraction, coherence; transmission and reflection holograms; color perception; stereograms. Applications of holography in art, medicine, and technology. Computer simulation, design, and construction of holograms.
Prerequisite: PHY110Y1/138Y1/140Y1/132H1/152H1/180H1/MIE100H1

**PHY225H1 Fundamental Physics Laboratory [26L, 78P]**
The 2nd year Physics Laboratory. Topics including experimental techniques, instrumentation, and data analysis are introduced through experiments, complementary lectures, and library research to some of the great experiments of physics.
Prerequisite: PHY138Y1/140Y1/132H1/152H1
Co-requisite: PHY 238Y/251H1/252H1/255H1/256H1

**ENV235Y1 Physics and Chemistry of the Evolving Earth [52L]**
See "Centre for Environment"
The formation and evolution of Earth as a planet in the Solar System: origin of the elements, composition of planets, mantle-core differentiation, tectonics, geologic change and time scales. The biosphere: i.e., the Earth's atmosphere, oceans and crust: operation as a physicochemical system, atmospheric composition and roles of major and minor constituents, ocean/atmosphere energy budgets, circulations and couplings;

climate, glaciation. The effects of human intervention and natural processes: e.g., groundwater quality, atmospheric change, volcanic activity. Given by the Departments of Physics and Chemistry.
Prerequisite: CHM (138H1, 139H1)/151Y1; MAT135Y1/137Y1/157Y1/JMB170Y1; PHY138Y1/140Y1/132H1/152H1 or Permission of the Instructor.

**PHY238Y1 Physics for the Life Sciences II [78L, 26T]**
Electromagnetism; biological effects of radiation; physical optics; macroscopic phenomena; heat engines and metabolism. Examples are taken, where applicable, from the life sciences.
Exclusion: PHY251H1
Prerequisite: (PHY110Y1, MAT135Y1)/PHY138Y1/140Y1/132H1/152H1
Recommended preparation: BIO150Y1/a CHM100-series course
Co-requisite: None, but students taking any higher level Physics course are expected to have at least MAT235Y1

**PHY251H1 Electricity and Magnetism [26L, 13T]**
Point charges; Coulomb's Law; electrostatic field and potential; Gauss' Law; conductors; electrostatic energy; magnetostatics; Ampere's Law; magnetostatic energy; Lorentz Force; Faraday's Law; dielectric and magnetic materials; Maxwell's equations.
Exclusion: PHY238Y1
Prerequisite: PHY138Y1/140Y1/132H1/152H1
Co-requisite: MAT235Y1/237Y1/257Y1

**PHY252H1 Thermal Physics [26L, 13T]**
The quantum statistical basis of macroscopic systems; definition of entropy in terms of the number of accessible states of a many particle system leading to simple expressions for absolute temperature, the canonical distribution, and the laws of thermodynamics. Specific effects of quantum statistics at high densities and low temperatures.
Prerequisite: PHY138Y1/140Y1/132H1/152H1
Co-requisite: MAT235Y1/237Y1/257Y1

**PHY255H1 Oscillations and Waves [26L, 13T]**
Complex notation; free, damped and forced harmonic oscillations; resonance; AC circuits; coupled oscillators; normal modes; travelling waves; simple harmonic wave; wave equation; wave impedance; transverse and longitudinal waves; flow of energy in waves; reflection and transmission at interfaces; group and phase velocity; Fourier series and Fourier transforms.
Prerequisite: PHY138Y1/140Y1/132H1/152H1
Co-requisite: MAT235Y1/237Y1/257Y1 (MAT244H1 recommended)

**PHY256H1 Introduction to Quantum Physics [39L, 13T]**
Failures of classical physics; the Quantum revolution; Stern-Gerlach effect; harmonic oscillator; uncertainty principle; interference packets; scattering and tunnelling in one-dimension.
Prerequisite: PHY138Y1/140Y1/132H1/152H1
Co-requisite: MAT235Y1/237Y1/257Y1 (MAT223H1/240H1 recommended)

**PHY299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

## 300-SERIES COURSES

### Note
Students taking 300-series courses are invited to attend the Thursday afternoon Department colloquia.

**JBO302Y1 Human Physiology and Biophysics [78L, 14T]**
Principles of Human Physiology with tutorials on the biophysical concepts applied to physiological processes. Restricted to students enrolled in the Biophysics and Physiology (Theoretical) programs.
Exclusion: PSL201Y1, 302Y1
Prerequisite: BIO150Y1; CHM138H1; MAT135Y1/137Y1; PHY138Y1/140Y1/132H1/152H1

**JPA305H1 Introduction to Archaeometry [26L, 13P]**
Introduction to methods for remote sensing of buried archaeological remains, (magnetics, resistivity, electromagnetics), dating (Carbon 14, TL, ESR, etc.) and analysis (X-Ray, INAA) of ancient materials. Application of methods and interpretation of results in archaeological contexts. Issues of art and authenticity are also addressed. Course includes a laboratory component. (Not offered every year) (Given by the Departments of Physics and Anthropology)

**JPA310H1 Physics and Archaeometry [26L, 13P]**
Introduction to the principles behind archaeometric methods for remote sensing, dating, and analysis of archaeological materials, and interpretation of results. Course includes both field and in-house laboratory components. Offered in conjunction with JPA305H1. (Not offered every year) (Given by the Departments of Physics and Anthropology)
Prerequisite: Any 1st-year Physics course or permission of instructor
Co-requisite: JPA305H1

**PHY305H1 Electronics Lab I [26L, 39P]**
The laboratory functions as an integrated lecture course/laboratory program. Passive linear circuits: theorems, networks, and equivalents; meters, transient and steady responses, power, transformers, transmission lines. Digital devices: gates logic, Boolean algebra, minimization, flip-flops, counters, delays. Op-amps: dependent sources, amplifiers, integrators, feedback, slew rate, filters. Diodes: peak detector, rectification, regulators. Noise: sources, grounding, shielding, ground loops. Transistors: characteristics, analysis, amplifier design.
Prerequisite: PHY225H1, 251H1, 255H1

### Note
Computational Laboratory: Students may select one or more modules from PHY307H1/308H1/309H1 below. The laboratory functions as an integrated lecture course/laboratory program. Students taking a second module can receive a 4th year credit (see listings for PHY407H/408H/409H).

**PHY307H1 Introduction to Computational Physics [13L, 39P]**
Problem solving with computers, using both algebraic and numerical methods. After a brief introduction to the basic techniques, various physics problems are treated with

increasingly more sophisticated techniques. Examples include the physical pendulum, heat equation, quantum mechanics, Monte Carlo simulation, differential equation, and graphical presentation of results.
Exclusion: PHY407H1
Co-requisite: Any third-year lecture course in Physics

**PHY308H1 Times Series Analysis [13L, 26P]**
The analysis of digital sequences; filters; the Fourier Transform; windows; truncation effects; aliasing; auto and cross-correlation; stochastic processes, power spectra; least squares filtering; application to real data series and experimental design.
Exclusion: PHY408H1
Co-requisite: Any third-year lecture course in Physics

**PHY309H1 Quantum Methods Using Computer Algebra [26L, 26P]**
Classic quantum mechanics problems are explored using Maple computer algebra and graphics. These include bound state and scattering problems in 1D, angular momentum and spin, commutator algebra, scattering in 3D and time dependent processes. General techniques for computer-aided problem solving are developed.
Exclusion: PHY409H1
Co-requisite: Any third-year lecture course in Physics

**PHY315H1 Radiation in Planetary Atmospheres [26L]**
The role of radiation in the generation, maintenance and evolution of planetary atmospheres and climate: Radiation laws, absorption and emission. Simple radiative exchange processes and atmospheric models. Energy balance. Radiation and climatic change. Comparative radiation studies in planetary atmospheres. Pollution and man-made effects.
Prerequisite: PHY238Y1/251H1; MAT235Y1/237Y1

**PHY326H1 Advanced Physics Laboratory [150P]**
Experiments in this course are designed to form a bridge to current experimental research. A wide range of exciting experiments relevant to modern research in physics is available. The laboratory is open from 9 a.m. - 5 p.m., Monday to Friday.
Prerequisite: PHY225H1, 251H1, 256H1

**PHY341H1 Physical Science in Contemporary Society [26L]**
Complex nature of the scientific method; inter-connection between theory, concepts and experimental data; characteristics of premature, pathological and pseudo-science; public perception and misperception of the scientific method; the supposed end of the Golden Era of Science; the insufficiency of reductionism; trends in modern science. (Offered in alternate years with PHY 342H1)
Prerequisite: PHY225H1/238Y1/251H1/252H1/255H1/256H1/ ENV235Y1

**PHY342H1 Current Questions in Mathematics and Science [26L]**
Topics of current prominence in the physical sciences and mathematics are discussed. Topics change each year as the sciences evolve. Appropriate topics might include: high-temperature superconductivity, cosmology, chaos and non-linear dynamics. (Offered in alternate years with PHY 341H1)
Prerequisite: PHY225H1/238Y1/251H1/252H1/255H1/256H1/ ENV235Y1

**PHY346H1 Intermediate Biophysics [26L, 13T]**
Molecular structure of biological systems: bonds, orbitals, molecular excitation and energy transfer, theory of absolute reaction rate, formation of biomacromolecules. Energetics and dynamics of biological systems: state functions, entropy and stability, thermodynamic basis of biochemical reactions, analysis of fluxes, electric fields in cells and organisms. The kinetics of biological systems: problems and approaches of system and compartmental analysis, models of biochemical reactions and some complex biological processes.
Prerequisite: MAT235Y1/237Y1/257Y1; PHY238Y1/251H1

**PHY351H1 Classical Mechanics [26L, 13T]**
Symmetry and conservation laws, stability and instability, generalized co-ordinates, Hamilton's principle, Hamilton's equations, phase space, Liouville's theorem, canonical transformations, Poisson brackets, Noether's theorem.
Prerequisite: MAT244H1/267H1; PHY255H1

**PHY352H1 Electromagnetic Theory [26L, 13T]**
Review of vector & tensor calculus, transformation properties of vectors & tensors, electrostatics, basic formulae of magnetostatics, electrodynamics (Maxwell's Equations), gauge transformations of scalar & vector potentials, retarded potentials, Liénard-Wiechert potentials, radiation, special theory of relativity, relativistic mechanics and relativistic electrodynamics.
Prerequisite: MAT223H1/240H1/244H1; PHY251H1, 255H1

**PHY353H1 Electromagnetic Waves [26L, 13T]**
Review of Maxwell's equations; electric fields in matter; magnetic fields in matter; electromotive force; electromagnetic induction; electromagnetic waves in vacuum; waves in dielectric and conductive materials, skin effect; waves in dispersive media: polarization phenomena; Fresnel equations; reflection and refraction from an interface; Brewster angle, total internal reflection; interference, coherence effects; interferometers; Fraunhofer and Fresnel diffraction; waveguides, optical fibres, radiation.
Prerequisite: PHY352H1

**PHY355H1 Quantum Mechanics I [26L, 13T]**
The general structure of wave mechanics; eigenfunctions and eigenvalues; operators; orbital angular momentum; spherical harmonics; central potential; separation of variables; hydrogen atom; Dirac notation; operator methods; harmonic oscillator and spin.
Exclusion: CHM326H1
Prerequisite: MAT223H1/240H1/244H1; PHY251H1, 256H1/ CHM225Y

**PHY357H1 Nuclear and Particle Physics [26L, 13T]**
The subatomic particles; nuclei, baryons and mesons, quarks, leptons and bosons; the structure of nuclei and hadronic matter; symmetries and conservation laws; fundamental forces and interactions, electromagnetic, weak, and strong; a selection of other topics, CP violation, nuclear models, standard model, proton decay, supergravity, nuclear and particle astrophysics. This course is not a prerequisite for any PHY 400-level course.
Prerequisite: PHY355H1

**PHY358H1 Atoms, Molecules and Solids [26L, 13T]**
Quantum theory of atoms, molecules, and solids; variational principle and perturbation theory; hydrogen and helium atoms; exchange and correlation energies; multielectron atoms; simple molecules; bonding and antibonding orbitals; rotation and

vibration of molecules; crystal binding; electron in a periodic potential; reciprocal lattice; Bloch's theorem; nearly-free electron model; Kronig-Penney model; energy bands; metals, semiconductors, and insulators; Fermi surfaces. This course is not a prerequisite for any PHY 400-level course.
Prerequisite: PHY355H1

**PHY359H1 Physics of the Earth [26L, 13T]**
Designed for students interested in the physics of the Earth and the planets. Study of the Earth as a unified dynamic system; determination of major internal divisions in the planet; development and evolution of the Earth's large scale surface features through plate tectonics; the age and thermal history of the planet; Earth's gravitational field and the concept of isostasy; mantle rheology and convection; Earth tides; geodetic measurement techniques, in particular modern space-based techniques.
Prerequisite: PHY 140Y1/152H1/255H1, MAT 235Y1/237Y1, MAT244 (Or permission of instructor)

**PHY371Y1 Supervised Reading in Physics [TBA]**

**PHY372H1 Supervised Reading in Physics [TBA]**
An individual study program chosen by the student with the advice of, and under the direction of, a staff member. A student may take advantage of this course either to specialize further in a field of interest or to explore interdisciplinary fields not available in the regular syllabus.
Prerequisite: Permission of Department

**PHY398H0 Independent Experiential Study Project**

**PHY399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

## 400-SERIES COURSES

### Note

It is recommended that students consult the Physics Undergraduate Associate Chair before enrolling in any of of PHY 470-472, PHY 478-479, or PHY 481-499. Students taking 400-series courses are invited to attend Thursday afternoon Department colloquia.

**PHY407H1 Introduction to Computational Physics [13L, 39P]**
For course description see PHY307H1.
Exclusion: PHY307H1
Prerequisite: PHY 308H1/309H1 or enrollment in Biophysics program

**PHY408H1 Times Series Analysis [13L, 26P]**
For course description see PHY308H1.
Exclusion: PHY308H1
Prerequisite: PHY 307H1/309H1

**PHY409H1 Quantum Methods Using Computer Algebra [26L, 26P]**
For course description see PHY309H1.
Exclusion: PHY309H1
Prerequisite: PHY 307H1/308H1

**PHY426H1 Advanced Physics Laboratory II [150P]**
Prerequisite: PHY 326H1

**PHY428H1 Advanced Physics Laboratory III[150P]**
Prerequisite: PHY 426H1/325Y1

**PHY429H1 Advanced Physics Laboratory IV[150P]**
Experiments in these advanced laboratory courses are designed to form a bridge to current experimental research. A wide range of experiments relevant to modern research in physics is available. These courses are a continuation of PHY326, but students have more freedom to progressively focus on specific areas of physics or to do extended experiments or projects. The lab is open from 9:00am. - 5:00pm, Monday to Friday.
Prerequisite: PHY 428H1

**JGP438H1 Shallow Crust Geophysics [26L, 52P]**
An introduction to the geophysical exploration of the subsurface. Topics covered include gravity, seismic, magnetic, electrical and electromagnetic surveying and their application in prospecting, hydrogeology, and environmental assessments. This course is intended primarily for geological engineering and geology students.
Exclusion: PHY496H1
Prerequisite: GLG306H1; MAT223H1/235Y1; PHY138Y1/140Y1/132H1/152H1 or permission of instructor

**PHY445H1 Medical Imaging [26L, 20P, 13T]**
The mathematical, physical and engineering basis for medical imaging is introduced by combining the mathematical description of linear systems with the physics of imaging systems utilizing x-rays, ultrasound, and magnetic resonance techniques. The combination of mathematics and physics that has lead to the development of modern medical imaging systems is emphasized. Data for problem sets and labs will be processed using MATLAB software. Students not in a physics specialist program should consult the lecturer about the recommended background
See Course Website at http://www.ecf.utoronto.ca/apsc/courses/bme595f for textbook and references
Prerequisite: MAT244H1/APM346H1; MAT235Y1/237Y1; PHY238Y1/251H1
Recommended preparation: PHY307H1/308H1

**PHY457H1 Quantum Mechanics II [26L, 13T]**
Quantum dynamics in Heisenberg and Schrödinger Pictures; WKB approximation; Variational Method; Time-Independent Perturbation Theory; Spin; Addition of Angular Momentum; Time-Dependent Perturbation Theory; Scattering.
Prerequisite: PHY355H1

**PHY459H1 Macroscopic Physics [26L, 13T]**
Thermal equilibrium and temperature; the three laws of thermodynamics; entropy and free energy, phases and phase transitions; Fluid dynamics; the Euler and Navier-Stokes equations; vorticity, waves; stability and instability; turbulence.
Prerequisite: PHY252H1, 351H1

**PHY460H1 Nonlinear Physics [26L]**
Nonlinear oscillator; nonlinear differential equations and fixed point analysis; stability and bifurcation; Fourier spectrum; Poincare sections; attractors and aperiodic attractors; KAM theorem; logistic maps and chaos; characterization of chaotic attractors; Benard-Rayleigh convection; Lorenz system.
Prerequisite: PHY351H1

**PHY471Y1 Supervised Reading in Physics [TBA]**

**PHY472H1 Supervised Reading in Physics [TBA]**
These self-study courses are similar to PHY371Y1/372H1, at a higher level.
Prerequisite: Permission of Department

**PHY478H1 Undergraduate Research Project [TBA]**

**PHY479Y1 Undergraduate Research Project [TBA]**
An introduction to research in Physics. For further information contact the Associate Chair, Undergraduate Studies.
Prerequisite: Permission of Department

## FOURTH-YEAR OPTIONAL ADVANCED PHYSICS COURSES

### Note
The Department of Physics offers senior undergraduate students a set of specialized optional courses. NONE of these courses are required to complete a Specialist Program in Physics but taking several of these courses is recommended strongly to students wishing to pursue graduate studies.

### Note
Most Advanced Courses are offered every year, but some are not. Please check the Physics Department website for current offerings. It is the student's responsibility to ensure they have adequate preparation for any of the Advanced courses. Please contact the course instructor or the Associate Chair, Undergraduate Studies for more information.

**PHY480H1 Basic Statistical Mechanics [26L]**
Classical and quantum statistical mechanics of noninteracting systems; the statistical basis of thermodynamics; ensembles, partition function; thermodynamic equilibrium; stability and fluctuations; formulation of quantum statistics; theory of simple gases; ideal Bose and Fermi systems.

**PHY483H1 Relativity Theory I [26L]**
Basis to Einstein's theory: differential geometry, tensor analysis, gravitational physics leading to General Relativity. Theory starting from solutions of Schwarzschild, Kerr, etc.

**PHY484H1 Relativity Theory II [26L]**
Applications of General Relativity to Astrophysics and Cosmology. Introduction to black holes, large-scale structure of the universe.

**PHY485H1 Modern Optics [26L]**
Basic optics and imaging, manipulation of polarization, diffraction theory, Gaussian beams, laser resonators, semiclassical laser theory and ultrafast pulse generation. Selected reviews from the range of modern areas of research, e.g. laser cooling, photonic bandgap structures, extreme optics, quantum information, and other topics.
Prerequisite: PHY353H1, 355H1

**PHY487H1 Condensed Matter Physics [26L]**
Introduction to the concepts used in the modern treatment of solids. The student is assumed to be familiar with elementary quantum mechanics. Topics include: crystal structure, the reciprocal lattice, crystal binding, the free electron model, electrons in periodic potential, lattice vibrations, electrons and holes, semiconductors, metals.

**PHY489H1 Introduction to High Energy Physics [26L]**
This course surveys the experimental basis and theoretical framework of the "Standard Model" of Particle Physics and its possible extensions. Topics include the standard electroweak model, scattering and parton distributions, strong interactions and quantum chromodynamics.

**PHY491H1 Current Interpretations of Quantum Mechanics [26L, 13T]**
Review of conventional, textbook quantum mechanics. Formal measurement theory and wave function collapse; quantum states and nonseparability, violation of local causality, Bell theorems, "quantum tricks", decoherence and the emergence of classical behaviour. Hidden variables, deBroglie-Bohm theory and generalizations, many-worlds interpretation and other theories of "beables". Consistent histories approach of Omnes and Gell-Mann and Hartle; nature of "True" and "Reliable" statements.
Prerequisite: PHY457H1

**PHY493H1 Geophysical Imaging I [26L]**
This course covers wavefield and ray approximation methods for imaging the interior of the Earth (including hydrocarbon reservoirs and mineral deposits) using seismology.

**PHY494H1 Geophysical Imaging II [26L]**
How to investigate Earth structure at depths ranging from metres to tens of kilometres using gravity, magnetic, electrical, electromagnetic and nuclear geophysical methods. Current methodologies and the theoretical basis for them are presented.

**PHY495H1 Experimental Global Geophysics [26L]**
This course deals with the numerical analysis of data associated with space geodesy, earthquake seismology, geomagnetism and palaeomagnetism, isotope geochronology, as well as numerical simulations of a wide variety of geodynamic processes (e.g. mantle convection, post-glacial rebound, Earth tides).
Co-requisite: PHY359H1

**PHY496H1 Experimental Applied Geophysics [39P]**
A laboratory course (with introductory lectures) dealing with physical methods for exploring Earth structure; i.e., seismic, gravity, magnetic, electrical, electromagnetic, and nuclear methods. It is designed to give "hands on" experience with the techniques of geophysical data analysis as well as data acquisition.
Exclusion: JGP438H1
Co-requisite: PHY493H1/494H1

**PHY498H1 Advanced Atmospheric Physics [26L]**
A preparatory course for research in experimental and theoretical atmospheric physics. Content will vary from year to year. Themes may include techniques for remote sensing of the Earth's atmosphere and surface; theoretical atmosphere-ocean dynamics; the physics of clouds, precipitation, and convection in the Earth's atmosphere.

# Planetary Science

## Sponsored by the Departments of Astronomy & Astrophysics, Chemistry, Geology and Physics

The Planetary Science Program is an interdisciplinary program sponsored by the Departments of Astronomy & Astrophysics, Chemistry, Geology and Physics. It focuses mainly on the study of the planets in our own solar system, but extrasolar planets are also discussed. The aim is to provide information about different techniques for studying the nature and origin of planets and planetary systems.

Students enrolled in this program must consult the undergraduate secretary of one of the participating departments for advice on the selection of courses. Students interested in pursuing graduate studies in one of these disciplines should include core courses from the appropriate department(s) in their course selection.

## Planetary Science Program

### Planetary Science (Science program)

**Specialist Program:**
(14 full courses or equivalent, including at least one 400+series course)

Enrolment in the Planetary Science Specialist program is open to students who have completed four full course equivalents.

First Year:
(CHM 138H1, 139H1)/151Y1; MAT 135Y1/137Y1; PHY(131H1, 132H1)/(151H1, 152H1) (MAT 137Y1 and PHY 151H1, 152H1 preferred)
First or Second Year:
MAT 223H1/240H1
Second or Third Year:
AST 221H1; CHM 225Y1/(PHY252H1, 256H1); CHM 238Y1; GLG 206H1, 216H1/207H1; MAT 235Y1/237Y1 (MAT 237Y1 preferred); MAT 244H1; PHY 251H1, 255H1
Third and/or Fourth Years:
1. PHY 315H1, 359H1
2. At least three of AST 325H1; CHM 327H1, 338H1; GLG 318H1, 440H1, 465H1; PHY 351H1, 407H1, 408H1, 499H1
3. One additional 300+series course; consult with appropriate Undergraduate Secretary for course selection

Fourth Year:
PLN 420H1, 425H1

## Planetary Science Courses

For Distribution Requirement purposes, all PLN courses are classified as SCIENCE courses (see page 26).

**PLN420H1 Interdisciplinary Seminar in Planetary Science [26S]**
Discussion of topics of current interest in planetary science with emphasis on papers published in scientific journals. This course is intended for students in the final year of the Planetary Science specialist program. Students must enrol with the course coordinator.

**PLN425H1 Research in Planetary Science [130P]**
Research report by student in consultation with individual staff member in Astronomy, Chemistry, Geology or Physics. This course is intended for students in the final year of the Planetary Science specialist program. Students must enrol with the course coordinator.

## Polish: See Slavic Lanaguages and Literatures

## Faculty

### University Professor Emeritus

P.H. Russell, OC, D Sc, MA, LL D, FRSC (I,T)

### Professors Emeriti

E.G. Andrew, BA, Ph D
J.S. Barker, MA, Ph D (N)
M. Brownstone, MS, DPA, LL D
S. Clarkson, MA, D de Rech, FRSC (M)
S.J. Colman, MA
M.W. Donnelly, MA, Ph D
J.S. Dupré, OC, O Ont, AM, Ph D, DScSoc, LL D, DU
V.C. Falkenheim, MA, Ph D
R. Gregor, MA, Ph D (T)
F.J.C. Griffiths, MIA, Ph D (U)
J.E. Hodgetts, OC, MA, Ph D, LL D, FRSC
G. Horowitz, MA, Ph D
A.W. Johnson, CC, MA, MPA, Ph D, LL D
B. Kovrig, MA, Ph D (T)
† A.M. Kruger, BA, Ph D
R.A. Manzer, MA, Ph D (University of Toronto Scarborough)
R.O. Matthews, BA, MIA, Ph D (T)
J.T. McLeod, MA, Ph D (U)
J. Nun, LL M, Ph D
F.W. Peers, B Ed, MA, Ph D
R.C. Pratt, OC, MA, M Phil, FRSC (U)
† A. Rotstein, BA, Ph D (M)
P. Silcox, MA, Ph D (University of Toronto Mississauga)
J.E. Smith, AB, Ph D, DLit
R.E. Stren, MA, Ph D (I)
C. Tuohy, MA, Ph D, FRSC
M.E. Wallace, BA, Ph D, FRSC
† M.H. Watkins, B COM, LL D (U)

### Professor and Chair of the Department

D.R. Cameron, M Sc, Ph D, FRSC

### University Professor and Associate Chair

J.G. Stein, OC, MA, Ph D, LL D, FRSC (U)

### Professor and Associate Chair (Graduate Studies)

S.E. Chambers, MA, M Phil, Ph D

### Associate Professor and Associate Chair (Undergraduate Studies)

L. White, MA, Ph D

### Professors

E. Adler, MA, Ph D
† R.C.A. Andersen, MA, Ph D
S. Bashevkin, MA, Ph D, FRSC (U)
H. Bathelt, Dipl-Geogr, Dr rer nat, Habil
R.S. Beiner, BA, D Phil, FRSC (University of Toronto Mississauga)
† S. Borins, BA, MPP, Ph D
A. Braun, MA, Ph D (University of Toronto Mississauga) (T)
† A.S. Brudner, LL B, MA, Ph D
J.H. Carens, M Phil (Theol), M Phil, Ph D
† F.A. Cunningham, MA, Ph D, FRSC (I)
R.B. Day, Dip REES, MA, Ph D (University of Toronto Mississauga)
† R.B. Deber, SM, Ph D (Health Policy)
H.D. Forbes, MA, Ph D
† R. Hirschl, LLB, MA, M Phil, Ph D
J.S. Kopstein, MA, Ph D
L. LeDuc, MA, Ph D (SM)
P.R. Magocsi, MA, MA, Ph D, FRSC
J. Nedelsky, MA, Ph D
N. Nevitte, MA, Ph D
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L.W. Pauly, MA, M Sc, Ph D (T)
D.M. Rayside, AM, Ph D (U)
† K. Roach, LLB, LLM, FRSC
A.G. Rubinoff, MA, Ph D (University of Toronto Scarborough)
K.R.J. Sandbrook, MA, D Phil, FRSC
D.V. Schwartz, MA, Ph D
† R. Simeon, MA, Ph D, FRSC
G. Skogstad, MA, Ph D (University of Toronto Scarborough)
P. H. Solomon, MA, Ph D (University of Toronto Mississauga)
S.G. Solomon, MA, Ph D (University of Toronto Scarborough)
† A. Stark, M Sc, AM, Ph D
J.A. Teichman, MA, Ph D (University of Toronto Scarborough)
R. Vipond, MA, Ph D (V)
† L.E. Weinrib, BA, LL B, LL M
D.A. Welch, AM, Ph D (U)
G. White, MA, Ph D (University of Toronto Mississauga)
M.S. Williams, AM, Ph D
D.A. Wolfe, MA, Ph D (University of Toronto Mississauga)

### Associate Professors

R.K. Balot, MA, Ph D
S. Bernstein, MA, Ph D (University of Toronto Mississauga)
J. Bertrand, M Sc, MA, Ph D
† S. Choudhry, LLB, LLM
D.B. Cook, MA, Ph D (V)
R.J. Deibert, MA, Ph D (T)
† D.L. Eyoh, MA, Ph D (N)
J.F. Fletcher, MA, Ph D
R.S. Haddow, M Sc, Ph D
R. Hansen, M Phil, D Phil
P.W.T. Kingston, MA, M Phil, D Phil (University of Toronto Scarborough)
R. Kingston, MA, Ph D
J.J. Kirton, MA, Ph D (T)
† N. Kokaz, MA, Ph D (U)
P.L. McCarney, MCP, Ph D
† D. Schneiderman, LLB, LLM
† A. Shachar, BA, LLB, LLM, JSD
† L. Sossin, MA, LLM, Ph D, JSD
N. Wiseman, MA, Ph D
J. Wong, MA, Ph D

# Political Science

### Assistant Professors

L. Alexander, MA, Ph D
A.M. Bejarano, MA, M Phil, Ph D (University of Toronto Mississauga)
S. Benjamin, B Arch, MS Arch, Ph D
C. Breunig, MA, Ph D
L. Gilady, MA, M Phil, Ph D
A. Handley, M Phil, Ph D
M.J. Hoffmann, M Phil, Ph D (University of Toronto Scarborough)
M. Kohn, MA, Ph D (University of Toronto Scarborough)
R. Levine, MA, Ph D
W. Mwangi, MA, Ph D (University of Toronto Mississauga)
C. Norrlöf, MA, Ph D (University of Toronto Scarborough)
L. Ong, MA, Ph D
D. Pond, MA, Ph D (University of Toronto Mississauga)
E. Schatz, MA, Ph D, (University of Toronto Mississauga)
T. Triadafilopoulos, MA, Ph D (University of Toronto Scarborough)
L. Way, MA, Ph D (University of Toronto Scarborough)
W. Wong, MA, Ph D

### Senior Lecturer

M. Lippincott, MA, Ph D (University of Toronto Mississauga)

† Cross-appointed

The study of Political Science at the University of Toronto is wide-ranging and diverse. Courses are offered in political theory, Canadian government, international relations, and the politics of societies that are industrialized, developing, and in transition. Many courses deal with issues (such as environmental politics, diversity, peace and conflict, globalization) that cut across fields. Course offerings are designed to introduce students to Political Science at the first year level, provide the foundations for further study at the second year level, and provide specialized lecture and seminar courses at the intermediate and advanced levels. Studies in Political Science provide students with a good grounding in one of the chief social science disciplines and an opportunity to explore the issues that confront us as individuals, groups, societies and on the international level as we prepare for the twenty-first century. In addition to the materials covered, Political Science courses are set up to offer students an opportunity to learn writing and analytical skills to support a challenging and diverse career.

Courses in Political Science dovetail with programs in many other disciplines of the social sciences and the humanities: Economics, Sociology, History, Philosophy, and Psychology. A student interested in Canadian studies or urban problems, for example, would be well advised to choose courses from all these disciplines, as would someone interested in international affairs or foreign area studies. A student planning graduate work in the social sciences should seek to obtain a basic understanding of each of these disciplines.

The Department publishes a Handbook for undergraduate students that provides detailed information on our programs, extended descriptions of courses, and background information on the interests of our instructors, and advice on how to put together a program. Copies may be obtained from the Department Office on the third floor of Sidney Smith Hall, or from the offices of College Registrars. The Association of Political Science Students, the students' organization for Political Science undergraduates, has an office in Room 1091, Sidney Smith Hall.

Undergraduate Director: Professor L. White, Sidney Smith Hall, Room 3030 (416-978-3342)

Undergraduate Administrator: E. Jagdeo, Sidney Smith Hall, Room 3027 (416-978-3340)

Enquiries: (416-978-3343)

Undergraduate Program Information and Course Descriptions: http://www.chass.utoronto.ca/polsci

## Political Science Programs

### Political Science (Arts program)

Enrolment in the Political Science Specialist, Major, and Joint Specialist Programs is limited. Students enrolling at the end of first year (or four full courses or their equivalent) must obtain a cumulative GPA of at least 2.0 and a mark of at least 67% in one full Political Science course or the equivalent in half courses. Students applying to enrol after second year (or eight full courses or their equivalent) must obtain a cumulative GPA of at least 2.3 and a mark of at least 70% in each of two full Political Science courses or the equivalent in half courses.

**Specialist program:**
(10 POL full courses or their equivalent including two 300+ series courses and two 400-series courses)

Notes:
1. At least one course in Canadian politics must be completed. The Canadian politics requirement will be satisfied by only POL103Y1/214Y1.
2. Students must complete courses in at least four fields: Canadian politics, political theory, and two of international relations, comparative politics (industrial), comparative politics (developing).

First Year:
POL103Y1/105Y1/108Y1
Higher Years:
1. POL200Y1, 242Y1, 320Y1
2. Two full courses from the following: POL201Y1/(203Y1/207Y1)/208Y1/214Y1/215Y1
3. Four additional POL courses

**Major program:**
(7 POL full courses or their equivalent including at least two 300+series courses)

Note:
At least one course in Canadian politics must be completed. The Canadian politics requirement will be satisfied by only POL103Y1/214Y1.

First Year:
POL103Y1/105Y1/108Y1
Higher Years:
1. POL200Y1
2. Two full courses from the following: POL201Y1/(203Y1/207Y1)/208Y1/214Y1/215Y1
3. Three additional POL courses

**Minor program:**
(4 POL full courses or their equivalent)

Enrolment in this program is limited to students with a

minimum grade of 65% in a POL course; and all students need to have completed 4 full course equivalents toward a degree.

Note:
The four POL full courses or their equivalent to include at least one 300+series course and no more than one at the 100-level.

**Political Science and Economics: see Economics**

**Political Science and History: see History**

**Political Science and Philosophy: see Philosophy**

**Political Science and Sociology (Arts program)**

Consult Department of Political Science.

Enrolment in this program is limited to students with 65% in SOC 101Y1, and 70% in each of SOC 200H1, 202H1, 203Y1, and 204H1. Students need to have completed 8 full courses and be enrolled in the Sociology Major program. Students should also have met the requirements of the Political Science Department (see details under Political Science above).

### Specialist program (Arts program):

(14.5 full courses or their equivalent)

**Political Science**
Seven courses, including at least one 300+ series course and one 400-series course.
Note:
At least one course in Canadian politics must be completed. The Canadian politics requirement will be satisfied by only POL103Y1/214Y1.
First Year:
POL103Y1/105Y1/108Y1
Higher Years:
1. POL200Y1
2. Two full courses from the following: POL201Y1/(203Y1/207Y1)/208Y1/214Y1/215Y1
3. Three additional POL courses

**Sociology**
7.5 full courses or equivalent
First Year:
SOC 101Y1
Higher Years:
1. SOC 200H1, 202H1, 203Y1, 204H1, 300H1, 376H1, 377H1, 387H1, 401Y1
2. One of the following: SOC 210Y1/213Y1/220Y1/260Y1/301Y1/306Y1/340Y1/360Y1/369Y1

## Political Science Courses

**SSC199H1/Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**PLEASE NOTE:**

**Not all courses are offered every year.**

**Almost all upper-level POL courses have prerequisites. Students without course prerequisites will be removed at any time they are discovered.**

### 100-Series Courses

**Note:**
**Students may enrol in only one of the following courses: POL103Y, 105Y, 108Y. All 100-series POL courses are mutually exclusive. Students enrolled in more than one of these courses (or completed one of these courses or a previous POL 100-series course with a mark of at least 50%) will be removed at any time they are discovered.**

**POL103Y1 Canada in Comparative Perspective [52L, 26T]**
This course introduces students to politics using a comparative approach; it examines the variety of political regimes that exist around the world, with particular attention to Canada. Emphasis is placed on how distinctive regimes reflect the different past and present social and economic settings of countries.
Exclusion: POL100Y, 102Y, 105Y, 108Y, 180H, 181H

**POL105Y1 Ethics and the Public Sphere [52L, 26T]**
An introduction to fundamental questions about the relation between ethics and politics. Do the constraints of political life entail a different set of ethical standards for individuals and groups than in other domains of life? How do various kinds of ethical issues become political ones? How should ethical disagreements be handled politically?
Exclusion: POL100Y, 102Y, 103Y, 108Y, 180H, 181H

**POL108Y1 Global Networks [52L, 26T]**
This course introduces students to the theory and practice of global networks and how networks differ from states and markets. The course begins with an overview of the differences between states, markets and networks in global politics. It then turns to several cases of contemporary networks, including terrorist, civil society, ethnic, and financial networks. The course concludes with an examination of the many challenges of regulating, hacking and holding accountable global networks in the 21st century.
Exclusion: POL100Y, 102Y, 103Y, 105Y, 180H, 181H, A83H/A84H

### 200-Series Courses

**POL200Y1 Political Theory: Visions of the Just/Good Society [52L, 26T]**
A selective presentation of critical encounters between philosophy and politics, dedicated to the quest for articulation and founding of the just/good society. Among the theorists examined are Plato, Aristotle, Machiavelli, Hobbes and Locke.

**POL201Y1 Politics of Development: Issues and Controversies [52L, 13T]**
A survey of the developmental challenges facing societies in Latin America, the Caribbean, Asia and Africa, and the efficacy of various development strategies and policies in meeting these challenges.
Prerequisite: One full POL course/4.0 FCEs in the Faculty of Arts and Science

**POL203Y1 U.S. Government and Politics [52L, 26T]**
An introduction to U.S. government and politics within an analytical framework that helps us understand how institutions structure incentives and decisions in the U.S. system. This class examines the political forces that forged contemporary American institutions to understand how these political institutions continue to provide stability while allowing opportunities for political change. We investigate whether these forces make American institutions different and why. Special attention is paid to current events and contemporary policy dilemmas.
Prerequisite: One full POL course/4.0 FCEs in the Faculty of Arts and Science/permission of the instructor.

**POL207Y1 Politics in Europe (formerly POL302Y) [52L, 26T]**
An introduction to comparative politics with a focus on Western Europe: types of democracy, changing economic and social governance, organized interests in Europe, party landscape, social movements. Special attention to Germany, Britain, France, Italy, and the European Union.
Exclusion: POL302Y
Prerequisite: A course in POL/EUR200Y
Recommended preparation: General history of Europe

**POL208Y1 Introduction to International Relations [52L, 26T]**
The course analyzes the impact of the individual, the nation-state, and the international and transnational systems on international conflict and conflict resolution, and examines the major problems the international community confronts in a rapidly changing international environment.
Prerequisite: One full POL course/4.0 FCEs in the Faculty of Arts and Science/permission of the instructor.
Recommended preparation: Prior reading or study of modern history

**POL214Y1 Canadian Government and Politics [52L, 26T]**
Canada's political system including the Constitution and institutional pillars of governance: cabinet and parliament, federalism, the *Charter of Rights*. Topics include: political parties, the electoral system, policymaking and public administration. Issues include identity, citizenship, ideology and political culture, regionalism, language politics, aboriginals, multiculturalism, gender, media, and interest groups.
Exclusion: POL 100Y, 102Y
Prerequisite: One full POL course/4.0 FCEs in the Faculty of Arts and Science

**POL215Y1 Politics and Transformation of Asia-Pacific [52L, 26T]**
This course provides a comparative analysis of selected countries of East and Southeast Asia, with an emphasis on changing views of citizenship as they have been shaped by political, socio-economic and cultural transformations in the region. The first term deals with the idea of the developmental state, inequality, democratization and nationalism. The second term takes up questions related to governance and corruption, culture, demographic changes and nascent forms of regionalism and globalization.
Prerequisite: One full POL course/4.0 FCEs in the Faculty of Arts and Science

**POL242Y1 Introduction to Research Methods [52L, 26T]**
This course is aimed at helping Political Science students to understand and use the quantitative methods and research designs now widely employed throughout the discipline.
Prerequisite: A course in POL

**POL299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

### 300-Series Courses

**Note:**

**Enrolment in POL 300-series courses is limited. See Registration Handbook and Timetable for details.**

**POL300H1 Topics in Comparative Politics [26L]**

**POL300Y1 Topics in Comparative Politics [52L]**
An introduction to the field of comparative politics. Content in any given year depends on instructor.
Prerequisite: A course in POL

**JMC301Y1 State and Society in 20th Century China [52L]**
This course explores China's efforts to construct a modern and effective political order in the face of powerful demographic and revolutionary challenges. The clash between competing ideologies, political and social movements and institutional alternatives in the context of rapid social and economic change are analyzed. (Given by the Departments of East Asian Studies and Political Science)
Prerequisite: EAS102Y/POL215Y/permission of the instructor
This is a Humanities and Social Science course

**POL301Y1 Government and Politics in Africa [52L]**
The continuing relevance of pre-colonial Africa; the nature and legacy of colonial rule; African nationalism and the consolidation of power in the newly-independent states; government, party and the people; the role of the military; national integration; dependency and neo-colonialism; socialism and development; democracy and human rights.
Prerequisite: A course in POL

**JHP304Y1 Ukraine: Politics, Economy and Society (formerly JHP 204Y) [52L]**
The history of Ukraine from earliest times to the present. Economic, political, and cultural movements; Kievan Rus', Polish-Lithuanian Commonwealth, Cossack state, national revival, twentieth century statehood, and unification. As this course is designed as an introductory course, the professor welcomes first- and second-year students to enroll, as well as upper-level students. (Given by the Departments of History and Political Science)
Exclusion: JHP204Y

**POL304H1 Ethnicity and Politics in Canada (formerly POL304Y1) [26L]**
Development of political institutions / policies to manage ethnic relations; political strategies and resources available to ethnic and national minorities for achieving goals. Case studies: self-government and First Nations; renewed federalism/sovereignty association and Quebecois; multiculturalism and minority rights.
Exclusion: POL304Y/SOC210Y
Prerequisite: POL103Y/214Y

**POL305Y1 Politics and Society in Latin America [52L]**
The colonial heritage, the failure of nation-states to develop as integrated and autonomous power structures, dependent capitalism and political order, contrasting types of domination, rigid monopolization and the flexible use of the state by the ruling sectors, national revolution and the socialist alternative.
Prerequisite: A course in POL

**POL311Y1 Ideas and Ideologies in Canadian Politics [52L]**
A study of the ideas that underlie Canadian politics emphasizing the similarities and differences between political parties. The sources and nature of liberalism, conservatism, socialism, nationalism, and multiculturalism in Canada.
Prerequisite: POL103Y/214Y

**POL312Y1 Canadian Foreign Policy [52L]**
Canada's response to the challenges of globalization and the post-cold war world. The major alternative theoretical approaches, the changing doctrines and patterns of Canadian foreign policy from 1945 to the present, the making of Canadian foreign policy, relations with the United States, within NAFTA, and with other global regions.
Prerequisite: POL108Y/208Y

**POL313Y1 Politics and Psychology [52L]**
Psychological implications of political theories. Attention to alternative approaches to research and theorizing. The bearing of psychological perspectives on political issues.
Prerequisite: A course in POL/PSY

**POL314Y1 Public Opinion and Voting [52L]**
The attitudes and behaviour of the mass public in Canada and other western democracies, with emphasis on voting and elections. Themes include the nature of social, psychological, and economic forces on public opinion and voting, political participation, mass media, public opinion polling, electoral systems, the role of parties, leaders, and issues in elections. Examination of recent national surveys of Canadian electorate.
Exclusion: POL314H
Prerequisite: POL103Y/214Y

**POL315H1 Sexual Diversity Politics [39L]**
An interdisciplinary examination of the development of political visibility by gays, lesbians, bisexuals, and the transgendered in the contemporary period; and an analysis of public policy on and state regulation of sexual diversity in Canada, the U.S., Europe, with additional attention paid to developments in Latin America, East Asia, and Africa.
Exclusion: POL315Y
Prerequisite: UNI255H/256H/one full course on the politics of 20th century Europe, U.S., or Canada/one full course on gender or sexuality/permission of the instructor

**POL316Y1 Contemporary Canadian Federalism [52L]**
Constitutional, political, administrative, and financial aspects of federal-provincial relations, regionalism, and cultural dualism.
Prerequisite: POL103Y/214Y

**POL317Y1 Comparative Public Policy: Developing World Perspectives and Global Change [52L]**
Draws from the major theoretical traditions in public policy and policymaking of the advanced industrial world, and applies these theories in understanding the developing world context and the new challenges of global change.
Prerequisite: EUR200Y/POL103Y/108Y/203Y/214Y

**POL318H1 Canada and the Global Challenge Since 9/11, Part I: NAFTA [26L]**
Deals with the political economy of Canada's position in North America. Starting with Harold Innis's theory of staple growth and the debate about the role of foreign investment in its economic (mis)development, we examine how Canada, having long resisted continental economic integration, turned to free trade as a panacea in the 1980s. The course ends with a detailed investigation of NAFTA's significance for Canadian public policy options in the light of the US war on terrorism.
Exclusion: POL341H (taken in 2008)
Prerequisite: POL103Y/108Y/214Y
Recommended preparation: ECO100Y/105Y

**POL319Y1 American Constitutional Law [52L]**
The American Constitution and the Supreme Court's role in its exposition and development. The fundamental principles of the constitution, judicial power, federalism, civil rights, freedom of speech and religion, criminal procedure. Discussion of Supreme Court cases. Comparisons with Canadian constitutional law throughout.
Prerequisite: POL203Y/a course in American history

**POL320Y1 Modern Political Thought [52L, 26T]**
The development of political thought from the Enlightenment and through the 19th century; implications for political thought in the 20th century. Democratic and anti-democratic tendencies.
Prerequisite: POL200Y

**POL321H1 Ethnic Politics in Comparative Perspective (formerly POL321Y1) [26L]**
Theoretical approaches to ethnic conflict and accommodation. Case studies drawn from: West Europe: conflict (Northern Ireland, Spain), consociation (Switzerland), and treatment of immigrant minorities; Israel and South Africa; East European disintegration: Yugoslavia and Czechoslovakia; collapse of former Soviet Union and conflict / state-building in post-Soviet space.
Exclusion: POL321Y
Prerequisite: POL103Y/108Y/214Y/EUR200Y

**POL323H1 Might and Right Among Nations (formerly POL323Y1) [26L]**
An exploration of the issue of justice among nations. Is such justice genuine or is it largely spurious? What are the prospects for a just international order? Careful examination and thorough discussion of texts by Thucydides, Rousseau, Kant, and other first-rate thinkers on these issues.
Exclusion: POL323Y
Prerequisite: POL200Y/208Y

**POL324Y1 European Politics in a Global World [52L]**
Integration in Europe: examines the forces that have historically divided and united the European continent. Particular attention is paid to the politics of regional disparities, the European Union and its institutions, and the dilemmas of including Europe's peripheries into broader economic and security structures of the continent.
Prerequisite: EUR200Y/a course in POL

**POL326Y1 United States Foreign Policy [52L]**
The foreign policy of the United States: tradition and context of American decision-making, the process by which it is formulated, application to a number of specific regions and problems in the world.
Prerequisite: POL203Y/208Y

**POL330H1 Politics and Morality [39L]**
The relationship between the individual's quest for the good life and the political order. The role of the wise person in civil society. Study of a small number of texts.
Exclusion: POL330H/Y
Prerequisite: POL200Y

**POL332Y1 Courts, Law, and Politics in Comparative Perspective [52L]**
A study of the role, autonomy, and power of courts in countries with different political regimes (USA, France, Russia), and of the problem of legal transition in formerly authoritarian, especially post-communist states.
Recommended preparation: A course in politics or history of the USA, Europe, or USSR/Russia or on courts/ constitutionalism.

**POL334H1 Quebec Politics and Social Change [26L]**
Study and analysis of the major events and issues in Quebec society and politics. Concentrates on recent years and on the political implications of post-war economic and social change.
Exclusion: POL334Y
Prerequisite: POL103Y/214Y

**POL335H1 Politics and Government of Japan [26L]**
The course is designed to trace Japan's rise to global prominence in the 20th century. Why has globalization in recent years prompted such extraordinary political and economic difficulties in Japan? The areas of discussion include also social and cultural aspects of modern public life.
Exclusion: POL335Y
Prerequisite: A course in POL

**POL336H1 Ontario Politics [26L]**
Government and politics in Canada's most populous province. Topics include the historical, socio-economic, and comparative settings of provincial politics. Attention is devoted to institutions, parties and elections, intergovernmental relations and the policy continuities and discontinuities of recent years.
Exclusion: POL336Y
Prerequisite: POL103Y/214Y

**POL337Y1 The Canadian Constitution [52L]**
The moral foundations, historical events, political forces and legal ideas that have shaped the Canadian constitution; the roots, legacies, and judicial interpretation of the Constitution Act 1867, the Constitution Act 1982, and the Charter of Rights and Freedoms; the politics of constitutional change; "differentiated citizenship", "rights talk", and the judicialization of politics.
Prerequisite: POL103Y/214Y

**POL340Y1 International Law [52L]**
International law as an instrument of conflict resolution. Recognition, sovereign immunity, subjects of international law, jurisdiction.
Prerequisite: POL208Y

**POL341H1 Canada and the Global Challenge Since 9/11, Part II: The WTO [26L]**
Political economy of Canada's position in the world trading system. Starting with globalization (understood as the economic and technological forces driving the integration of capital, production, and distribution markets across national borders) and global governance (institutional structures and rules established to manage countries' international economic behaviour), we focus on how, in the new security context of the US war on terrorism, the World Trade Organization affects Canada's capacity to develop policies for cultural, economic and environmental development.
Exclusion: POL318H (taken in 2008)
Prerequisite: POL103Y/108Y/214Y
Recommended preparation: ECO100Y/105Y

**POL342H1 Culture and Identity in World Politics [26L]**
A postpositivist and postmodernist critique of mainstream international relations thinking. In deconstructing prevalent assumptions about world politics as represented primarily by neorealist and neoliberal thought, this course highlights alternative perspectives on the construction and the emancipatory potential of political life.
Exclusion: POL342Y
Prerequisite: POL208Y

**JPP343Y1 Women in Western Political Thought [52L]**
An examination of selected texts in ancient and modern political theory focusing on the conceptual division between private and public spheres of activity and the theorization of sexual difference and sexual equality. Examines contemporary feminist perspectives in political theory. (Given by the Departments of Philosophy and Political Science)
Prerequisite: NEW360Y/PHL265H/POL200Y

**POL343Y1 Politics of Global Governance [52L]**
The history and politics of international governance, with particular emphasis on the League of Nations and its 19th century antecedents, the United Nations and the emergence of nongovernmental organizations; informal institutions and structures; and specific issue areas such as development, trade, finance, human rights and the environment.
Prerequisite: POL208Y

**POL344H1 Social Movements in Europe and North America (formerly POL344Y1) [26L]**
A comparative examination of the development of a variety of social movements, and their engagement with state institutions.

Among the activist movements being examined are those dealing with gender, the environment, and labour.
Exclusion: POL344Y
Recommended preparation: One full course on 20th century politics or history of Europe, U.S. or Canada/one full course on gender or sexuality

**POL345Y1 Becoming Israel: War, Peace, and the Politics of Israel's Identity (formerly POL345H1) [52L]**
An introduction to Israeli politics, society, institutions and political practice from the perspective of the development of Israeli identity (identities). Particular attention will be given to the sources of Israeli identity, to the main players involved in its politics, and to the role of regional war and the peace process in its development and inner conflicts.
Exclusion: POL345H1
Prerequisite: A course in POL

**POL349H1 Globalization and Urban Politics [26L]**
Major cities around the world have become intimately involved in a much more globalized world. The focus of this course is the political response of Canadian, American and European cities to this major challenge. Throughout the course, we ask what options are open to our cities effectively to operate in this new arena, while retaining their local values and democratic culture.
Exclusion: POL349Y1
Prerequisite:POL103Y/203Y/214Y

**POL350H1 Comparative Health Politics and Policy [26L]**
This course explores the historical and current theoretical debates surrounding health policy. In so doing, it offers a framework for examining different health system arrangements, and the politics of health care policymaking, in both the developed and developing world contexts, including cases from North America, Europe, East Asia, Latin America and Africa.
Prerequisite: 4.0 courses in the Faculty of Arts and Sciences, including at least one full year course in the social sciences (political science, sociology, history, anthropology, etc.)

**POL351Y1 Gender, Politics, and Public Policy in Comparative Perspective [52L]**
An introduction to gender and politics that examines women as political actors and their activities in formal and grassroots politics. The course also explores the impact of gender in public policy and how public policies shape gender relations. Cases to be drawn on include Canada, other countries in North America and Europe, and the developing world.
Prerequisite: A course in POL

**POL352H1 Inside Canadian Governments: Understanding the Policy Process [26L]**
This course could aptly be titled "the guts of government." It explores the institutions and processes that are involved in making public policies, and examines the challenges faced in public sector governance. Topics include new public management, alternative service delivery, and other ideas, institutions, and processes that have emerged to deliver public services.
Prerequisite: POL103Y/214Y

**POL354Y1 Politics and Society in Russia (formerly POL354H1) [52L]**
Explores tensions between democracy and authoritarianism after communist rule. Topics include: legacy of Soviet Union; political leadership; presidential power and executive - legislative conflict; federalism; elections and parties; civil society; ethnonationalism; corruption and organized crime.
Exclusion: POL204Y/354H
Prerequisite: One full POL course/ 4.0 FCEs in the Faculty of Arts and Science

**POL356Y1 Canadian Political Parties [52L]**
The evolution and setting of Canada's federal and provincial party systems. Topics include historical and theoretical perspectives, ideology, leadership selection, elections, financing, media, and representing interests.
Exclusion: POL211Y
Prerequisite: POL103Y/108Y/214Y

**POL357H1 Topics in South Asian Politics (formerly POL357Y1) [26L]**
Selected issues in South Asian politics. Content in any given year depends on instructor.
Exclusion: POL357Y
Prerequisite: POL201Y/permission of instructor

**POL358Y1 Post-Colonial Questions: Politics, Knowledge, Power [52L]**
This course interrogates the historical trajectories of colonialism and the emergence of the postcolonial condition by asking what is the "post" in post-colonial? What are the relationships between domination, ways of knowing and thinking about self and other, space and bodies? How do forms of violence become legitimated and deployed?
Prerequisite: POL200Y/201Y/NEW150Y/permission of instructor

**POL359Y1 Enlarging Europe: The European Union and Its Applicants [52L]**
The course provides an overview of the salient issues in the past enlargement rounds, furnishing the context for the study of current and future integration efforts. Readings will cover the current round of enlargement to the Central and East European countries, efforts related to South-Eastern Europe, as well as Turkey. Issues between the EU and Ukraine and Russia will also be studied, as will the relationship between the Union and its Southern Rim. Security issues related to NATO integration and operations will also be covered.
Prerequisite: EUR200Y/POL103Y/108Y

**POL364H1 Religion and Politics [39L]**
A comparative exploration of the political influence of religion in Canada, the United States, with some examples drawn from other regions in the world. Topics will include the political influence of high levels of religiosity, of progressive and traditionalist faith currents, and of organized religious institutions; the implications of religious rights for liberal democratic political practices; and the similarities and differences between Islamic, Christian, and Jewish interventions in western political systems.
Prerequisite: 1 FCE in the politics or history of 20th/21st century Europe, U.S. or Canada; or 1 FCE in religious studies

**POL366Y0 The New Europe: Culture Politics and Society in Central Europe [52L]**
This course examines the politics and societies of Central Europe, including Poland, Hungary, Czech Republic, Slovakia, and Austria. It deals with the key issues in the post-communist period including minority-majority relations, the profound social, political and economic changes since the fall of communism, and the "return to Europe".

**POL367Y0 Australia in Transition [52L]**
This course focuses on the dynamic changes that have been taking place in Australia since 1901. It examines Australia's rich indigenous and non-indigenous history; the complexity and challenges of Australia's migration and multiculturalism; key issues and practices in contemporary Australian politics; the complex interplay between institutional processes, political interest and the media; and the dynamics of Australia's engagement with the region and the rest of the world.

**POL370H1 International Political Economy (formerly POL370Y1 AND 454Y1) [26L]**
Organized around important topics in the study of international political economy. It explores the political underinnings of the global economy and the economic forces reshaping contemporary political environments. Specific policy issues are treated in a context that evaluates the explanatory power of various theoretical approaches.
Exclusion: POL370Y1/454Y1
Prerequisite: POL108Y/208Y; ECO100Y

**POL371H1 Institutions and the Spatial Construction of the Political Economy [26L]**
This course applies a relational perspective of economic action which emphasizes context, path-dependence and contingency. It explores the intentions, opportunities and constraints of economic agency by analyzing the interdependencies between institutions at different levels and industrial organization, interaction, innovation and evolution, thus exploring the spatial construction of the political economy.
Recommended Preparation: ECO100Y/ECO105Y
Prerequisite: POL103Y/108Y/207Y/208Y

**POL372H1 Political Economy of Germany and the EU [26L]**
The goal of this course is to explore the structure of the German political economy in the context of EU integration and economic globalisation. Drawing upon the varieties-of-capitalism approach, the main themes in the course will analyse the institutional conditions for growth. In a comparative perspective, the course explores the role of collective agents, corporate governance, collective bargaining, social security systems, population structure, immigration, reunification and their regional manifestations.
Exclusion: POL300H1(F) (Taken in 2007-08)
Prerequisite: A course in POL

**POL373H1 Emotions in Political Theory [26L]**
The emotions have become a new focus in political theory. We will explore some of these debates with particular attention to competing understandings of the emotions and of their place in politics in the history of political thought.
Recommended Preparation: POL320Y
Prerequisite: POL200Y

**POL380H1 Topics in International Politics [26L]**

**POL380Y1 Topics in International Politics [52L]**
Content in any given year depends on instructor.
Prerequisite: POL108Y/208Y

**POL395H1 Research Participation [TBA]**

**POL396H1 Research Participation [TBA]**

**POL397Y1 Research Participation [TBA]**
Credit course for supervised participation in a faculty research project. Offered only when a faculty member is willing and available to supervise. Interested faculty review plans with the Undergraduate Director, and then make the opportunity known to students as appropriate. Check with Undergraduate Office for more details and faculty proposal form.
Exclusion: POL299Y
Prerequisite: Available to students in their third year of study (who have completed at least 9 full courses or their equivalent)

**POL398H0 Independent Experiential Study Project**

**POL399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

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### 400-Series Courses

### Note

**Enrolment is limited in all Political Science and Joint Political Science 400-series courses. See Registration Handbook and Timetable for details.**

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**POL401H1 Dynamics of the Global Trade System [26S]**
This course addresses the global trading system by examining the political, economic, legal, and institutional forces that shape today's contemporary international system. It focuses particularly on the tension that have been generated between these globalizing technological and economic factors and the continuing efforts to protect national autonomy. At the top of the global trade regime sits the World Trade Organization which has emerged as the adjudicator of global trade law. Canada is equally affected by the North American Free Trade Agreement which, with the WTO, has reconstructed the governance of North America.
Prerequisite: Minimum 14 FCEs
Recommended Preparation: Some international economics and Canadian political economy.

**POL402H1 Problems in the Political Thought of the Socratic School (formerly POL402Y1) [26S]**
Study of a small number of texts illuminating the origins and/or legacy of Socratic political philosophy.
Exclusion: POL402H/Y1
Prerequisite: POL320Y/323H/323Y/330H/330Y

**POL403H1 Colonialism/Post-Colonialism: The Colonial State and Its Forms of Power [26S]**
The course examines the late colonial state with examples drawn mostly from South Asia and Africa. The theoretical material used is from the field of colonialism postcolonial studies. Amongst the themes that may be examined are colonial governmentality and the production of identities.
Prerequisite: POL358Y/362H5+363H5/permission of instructor

**POL404H1 The Problem of Natural Right [26S]**
A study of selected texts in ancient and/or modern political philosophy that reveal the arguments for and against the idea of natural right.
Exclusion: POL404Y
Prerequisite: POL320Y/323H/323Y/330H/330Y

**POL405Y1 Marxism [26L, 26S]**
A study of Marxism as political economy and philosophy with emphasis upon dialectics. Begins with Aristotle, Smith, Kant, Hegel and Marx. Includes Lenin, Trotsky, Bukharin, Preobrazhensky, Pashukanis, Hilferding, Bernstein, Kautsky, Luxemburg, Korsch, Gramsci, Marcuse, Lukacs, Althusser, Habermas. Theme: relations between science, economics, politics, law and philosophy.
Prerequisite: POL320Y

**POL408H1 Innovation and Governance [26S]**
This course explores technological change, its socio-economic consequences, spatial implications and aspects of economic policies. As future growth in the knowledge-based economy will be increasingly associated with new products, services and processes, questions of innovation performance and support policy are decisive at the firm, regional and national levels.
Prerequisite: ECO360Y/HPS201H/202H/a POL 200+ comparative industrial course/SOC317Y/356Y

**POL409H1 Political Economy of Technology: From the Auto-Industrial to the Information Age [26S]**
The course explores the centrality of science and technology in political affairs generally and its current significance for public policy in particular. It applies the conceptual tools of political economy to analyze the nature of technological change in industrial democracies. It assesses the social and political consequences of the current wave of technological innovation and alternative responses of industrial democracies. (Offered in alternate years)
Prerequisite: CSC300H/ECO360Y/GGR431H/HPS201H/202H/431H/POL218Y5/a 300 or 400 level course in comparative politics of industrial countries/SOC356Y

**POL410H1 Topics in Comparative Politics III [26S]**

**POL410Y1 Topics in Comparative Politics III [52S]**
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two POL courses in comparative politics or permission of the instructor

**POL412H1 Human Rights, Democracy and International Politics (formerly POL412Y1) [26S]**
Explores human rights with reference to global politics and common ways of thinking about democracy and its limits. Materials to be considered are theoretical, practical, empirical and historical, a number of them from Latin America. The defence and protection of human rights provides the basic reference point.
Exclusion: POL412Y
Prerequisite: POL201Y/208Y/320Y

**POL413H1 Global Environmental Politics [26S]**
Examines the challenges faced by humanity in dealing with global environmental problems and the politics of addressing them. Focuses on both the underlying factors that shape the politics of global environmental problems – such as scientific uncertainty, North-South conflict, and globalization – and explores attempts at the governance of specific environmental issues.
Recommended Preparation: A background in international relations and/or international political economy is strongly recommended.
Prerequisite: POL 208Y

**POL414H1 Identity, Democracy and Autocracy in Ukraine [26S]**
Enlargement of NATO and the EU into the former communist states of central and eastern Europe. Ukraine and some other post-communist states will be used as case studies to explain why some countries were successful in integration into NATO and the EU and the factors that blocked the integration of other states.

**POL415H1 Nationalism, Myth and History: Ukraine and the CIS [26S]**
The role of nationalism, myths and identity in the transitions within post-communist states. Ukraine and other former Soviet states will be used as case studies to investigate the role of regionalism, nation-building, inter-ethnic relations, historical myths and language in their state building processes.

**POL416Y1 Politics of the International System [52S]**
This course explores the nature and evolution of the international system, from both theoretical and historical perspectives. The primary concern of the course is with the maintenance of order in any international system, as it has been created and maintained historically, and how theory suggests it might be attained. We will examine, using contending theoretical perspectives, such questions as how systemic characteristics evolve, what creates equilibrium within a particular system, which forces cause upheaval or destruction, and what impacts such changes have on the units within the system.
Prerequisite: POL208Y

**POL417Y1 The Third World in International Politics [52S]**
The countries of Africa, Asia, Latin America, and the Middle East; their impact on the international system, and the external and internal factors that influence their international behaviour, with particular focus on civil wars.
Prerequisite: POL208Y/a POL course in comparative politics (developing countries)

**POL418Y1 Politics and Planning in Third World Cities [52S]**
The social and economic problems faced by large third world cities; relationship between urban politics and the kinds of solutions that are advanced. Settlement issues and low-cost housing policies, unemployment and marginal populations, the dynamics of urban government, and the politics of planning.
Prerequisite: POL201Y/301Y/305Y; minimum 14 FCEs

**POL419Y1 Quantitative Methods and Data Analysis [52S]**
The use of advanced data analysis techniques in the social sciences, management and analysis of large datasets, techniques of multivariate analysis, problems of causal inference and interpretation of data.
Exclusion: POL419H
Prerequisite: POL242Y/one course in STA
Recommended preparation: basic familiarity with SPSS

**POL420Y1 Elements of United States Foreign Policy [52S]**
Seminar on the tradition, process, and implementation of American foreign policy.
Prerequisite: POL203Y/208Y

**JPJ421Y1 Comparative Constitutionalism: Rights and Judicial Review [52S]**
The seminar explores the global expansion of judicial power through the constitutionalization of rights and the fortification of judicial review. Examination of moral foundations of constitutionalism; comparative analysis of constitutional rights jurisprudence; the politics of constitutional decision-making; and the impact of constitutional jurisprudence on social change.
Prerequisite: POL319Y/337Y
Recommended preparation: Basic grounding in the political and legal systems of the leading democracies is recommended.

**POL421H1 Maimonides and His Modern Interpreters [26S]**
The course offers an introduction to the seminal work of Jewish philosophy, 'The Guide of the Perplexed' by Moses Maimonides. We will delve into some of the basic themes of Jewish philosophical theology and religion as they are treated by Maimonides.
Exclusion: RLG433H1
Prerequisite: Minimum 14 FCEs

**POL422Y1 Topics in Soviet and Post-Soviet Politics [52S]**
In the first term, we will explore nationalities issues: interpretations of nationalities policies in the Soviet Union; role of ethnonationalism in disintegration of the Soviet state; role of ethnonationalism in state building and interstate relations in the successor states. In the second term, the seminar will explore law and politics in post-Soviet Russia, including courts and judicial reform, constitutional development, business disputes, and corruption.
Exclusion: POL422H
Prerequisite: HIS351Y/POL204Y/354H/354Y/a course in Russia/Soviet or East European politics

**POL423H1 The Politics of Public Sector Budgeting [26S]**
The course examines public sector budgeting at the federal and provincial levels in Canada. It investigates how economic, political and institutional factors are transformed into budgetary policy especially during times of fiscal constraint. Comparative analysis, budgeting theory, simulations and case studies inform this seminar.
Prerequisite: POL214Y

**POL425Y1 Multiculturalism in Canada [52S]**
An examination of the basic ideas underlying Canada's multicultural policies, especially as explained by Pierre Elliott Trudeau, and some interpretations of Canadian practice by political theorists, especially Charles Taylor and Will Kymlicka.
Exclusion: POL425H
Prerequisite: POL311Y/320Y

**POL427Y1 The Spirit of Democratic Citizenship [52S]**
This course examines the theoretical presuppositions orienting the construction of the behaviour and skills of democratic citizenship; simultaneously, students consider what is involved. The course consists of three parts: No One Truth, Evoking the Other, and the Spirit of Equality.
Exclusion: POL427H
Prerequisite: POL103Y/108Y/200Y

**POL429Y1 Nationalism, Ethnic Conflict and Democracy [52S]**
The main theories of ethnic conflict, ethnic violence and nationalism. Focus on the challenges of multiethnic diversity and nationalism for democracy. Origins of nations; construction of ethnic identities; nationalism in the 21st century; causes of ethnic conflict, ethnic riots, and ethnic violence; democracy and ethnic diversity; multination states and democracy.
Exclusion: POL429H
Prerequisite: A course in POL; minimum 14 FCEs

**POL430Y1 Comparative Studies in Jewish and Non-Jewish Political Thought [52S]**
A comparative examination of major texts of the Jewish tradition, ranging from the Torah to modernity, and texts of the classical or Western traditions raising similar questions. Close reading of a small number of capital works, with special attention to the problem of reason and revelation.
Prerequisite: POL200Y, 320Y/323H/323Y/330H/330Y/a relevant course in Jewish studies

**POL431Y1 Politics and Society in Contemporary China [52S]**
Issues and themes in China's modernization effort with emphasis on 20th century social, political and economic developments.
Exclusion: POL431H
Prerequisite: Two POL courses; minimum 14 FCEs

**POL432H1 Feminist Theory: Challenges to Legal and Political Thought [26S]**
Feminist theory offers basic challenges to the foundations of modern political and legal thought. It suggests a different conception of human nature and a different model of epistemology and of appropriate forms of argument about the traditional issues of legal and political theory: justice, power, equality and freedom. Introduction to the foundations of feminist theory, an analysis of its implications for traditional liberal theory, and an application of feminist theory to law.
Exclusion: POL432Y
Prerequisite: JPP343Y/POL320Y

**POL433H1 Topics in United States Government and Politics (formerly POL433Y1) [26S]**
Selected issues and topics in U.S. politics. Varies from year to year. For 2008-09, the topic is "Presidential Politics in America", focusing on the November 2008 presidential election.
Exclusion: POL433Y1
Prerequisite: A course in POL/permission of instructor

**POL434Y1 Enlightenment and its Critics [52S]**
This course explores, through the writings of its foremost advocates and adversaries, the Enlightenment, the movement to found political life on the principles of scientific reason, universally applicable and accessible to human beings.
Exclusion: POL434H
Prerequisite: POL320Y/330H/330Y

**POL435H1 Political Economy of Asia Pacific [26S]**
The course addresses questions regarding the cultural and organizational precedents for and against modern capitalist enterprise in East and Southeast Asia. Special effort given to tracing uneven geographical, gender and class participation in market growth and to the moral and political arguments that have been provoked regarding the consequences of the Asian "economic miracle" and its recent financial crisis.
Exclusion: POL435Y
Prerequisite: POL215Y

**POL436Y1 Problems of Political Community [52S]**
Explores a range of questions about political community in the modern world with attention to the relationship between claims about what political communities ought to be and empirical evidence of actual political arrangements. Focus varies from year to year.
Prerequisite: POL200Y/320Y

**POL438H1 Topics in Comparative Politics I [26S]**

**POL438Y1 Topics in Comparative Politics I [52S]**
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two courses in comparative politics/permission of instructor

**JPD439Y1 Post-Modern and Contemporary Thought [52S]**
The development of post-modern thought, particularly in French social philosophy is examined. Topics such as the nature of exchange, the impact of technology, virtual reality, the digital class are explored. Authors include Jean Baudrillard, Paul Virilio, Gilles Deleuze, Arthur Kroker, Fracois Lyotard.
Recommended preparation: POL200Y

**POL439H1 The Canadian Welfare State in Comparative Perspective [26S]**
This course examines contemporary Canadian social policy in light of the scholarly literature on the welfare states of advanced industrial societies. Topics include the variety of welfare state regimes in rich nations, and their comparative performance in reducing inequality and poverty, in labour market and economic outcomes, and in addressing the specific circumstances of women. Specific Canadian policy fields examined will include pensions, social assistance, child care and health insurance.
Prerequisite: POL103Y/214Y

**JHP440Y1 Gender & International Relations (formerly HIS440H1) [52S]**
The seminar explores the use of gender as a category of analysis in the study of international relations. Topics include gendered imagery and language in foreign policymaking; beliefs about women's relationship to war and peace; issues of gender, sexuality, and the military; and contributions of feminist theory to international relations theory. (Given by the Departments of History and Political Science)
Exclusion: HIS440H
Prerequisite: HIS103Y/245Y/377Y/POL208Y/permission of instructor

**POL440Y1 The Politics of Transition in Eastern Europe [52S]**
Comparative analysis of the former Communist states of Eastern Europe and the post-Communist successor states. This course also focuses on the dilemmas of transition and the problems of democratic consolidation in the region.
Prerequisite: POL204Y/208Y/354H/354Y

**POL441H1 Topics in Asian Politics [26S]**
Selected issues in Asian politics. Content in any given year depends on instructor.
Prerequisite: POL201Y; minimum 14 FCEs

**POL442H1 Topics in Latin American Politics [26S]**
This seminar starts with a brief consideration of democratic transitions in Latin America in the last 25 years. It then concentrates on the prospects and challenges of democratic consolidation in the region, while exploring the capacity/potential of institutional reform to address the fault-lines of democracy.
Exclusion: POL442Y
Prerequisite: POL201Y & 305Y; minimum 14 FCEs

**POL443H1 Topics in Comparative Politics II [26S]**

**POL443Y1 Topics in Comparative Politics II [52S]**
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two POL courses in comparative politics or permission of the instructor

**POL444Y1 The Political Theory of G.W.F. Hegel [52S]**
An examination of the Phenomenology of Spirit and the Philosophy of Right.
Prerequisite: POL320Y

**POL446Y1 20th-Century Political Thought [52S]**
An examination of the fundamental principles and dynamics of 20th century political ideologies, focusing on the formation of various types of totalitarianism and authoritarian individualism.
Prerequisite: POL200Y/320Y/a course in PHL

**POL447Y1 Political Economy of Development [52S]**
This course explores the rise, evolution, and performance of the dominant neoliberal approach to development and poverty reduction. It also assesses the feasibility and efficacy of alternative development strategies. Case studies are drawn from Latin America, Asia, and Africa.
Exclusion: JPE400H/Y
Prerequisite: POL201Y/215Y/301Y/305Y; minimum 14 FCEs
Recommended preparation: Introductory economics is helpful

**POL448H1 Law, Religion and Public Discourse [26S]**
One of the central purposes of the course will be to envision ways in which religious and spiritual beliefs could become respectable dimensions of legal, political, and academic discourse while sustaining a deep respect for pluralism and attending to the dangers that require the separation of church and state.
Prerequisite: POL320Y/permission of the instructor

**POL449H1 Qualitative Methods in Political Research [26S]**
This course surveys qualitative methods used in political science research. After briefly reviewing positivist and interpretivist research traditions, the course covers the ideal-typical and practical use of specific qualitative methods such as fieldwork, interviewing, archival research, participant observation, ethnography, counterfactuals, discourse analysis, and multiple-methods approaches.
Prerequisite: POL242Y

**POL450H1 Women and Politics [26S]**
This course addresses the large and growing comparative literature in two main areas: women's political attitudes and participation. Focusing on West European and U.S. materials, the first half examines "gender gap" differences between women's and men's political beliefs, while the second assesses patterns of involvement in political institutions.
Exclusion: POL450Y
Prerequisite: POL315H/315Y/344H/344Y/JPP343Y/permission of the instructor
Recommended preparation: At least one course in both political behaviour and women's studies

**POL452Y1 Multilevel Politics: The European Union in Comparative Perspective [52S]**
What is multilevel governance? Sources, structure, actors, processes, challenges. Focus on organizing redistributive policies, participation and accountability. The European Union compared with federal and semi-federal systems (e.g. Canada, U.S.A., Germany) and the European Union compared with regional and global regimes (NAFTA, WTO...).
Prerequisite: POL207Y/324Y/two FCEs in POL
Recommended preparation: Introductory textbook on European integration

**POL453Y1 The Politics of Post-Communism [52S]**
By intensively analyzing the theoretical literature on post-communism we explore the determinants of political and economic change. How did the 28 post-communist countries, having started from basically the same point, end up politically and economically so different?
Prerequisite: POL207Y/324Y/354H/354Y/HIS344Y/353Y/a course in Soviet, post-Soviet or European politics

**JHP454Y1 Twentieth Century Ukraine [52S]**
World War I and the Russian Revolution: the Ukrainian independence movement; the Soviet Ukraine and west Ukrainian lands during the interwar period; World War II and the German occupation; the Soviet Ukraine before and after the death of Stalin. Socio-economic, cultural, and political developments. (Given by the Departments of History and Political Science) (Offered every three years)
Prerequisite: A course in Modern European, East European, or Russian history or politics

**JPF455Y1 Cities [52L/S]**
Examines disciplinary and developmental boundaries relating to cities. By bringing together a cross-disciplinary faculty who focus on cities within Political Science, History, Philosophy, Literature, Design, Environment and Health, Geography or Social Work, the course explores inter-disciplinary city issues: global change; environment; economic adjustment; state reform and city politics; citizenship; community development; economic development; physical form, territory and political-economy of cities. (Given by the Departments of Literature, Philosophy, Political Science, Urban Studies, Faculty of Social Work and Faculty of Architecture, Landscape and Design)
Prerequisite: Minimum 14 FCEs/permission of instructor

**POL455Y1 Craft of Political Research [52S]**
Political Science is defined by the content of its investigations, not its methods. In this class, we will explore the conceptual, analytic and practical issues arising in the conduct of research in Political Science. With illustrations provided by guest speakers sharing their own research, the class contrasts and compares the diverse approaches taken by Political Scientists when they conduct their research to understand common dilemmas faced by researchers. The class culminates with a research design proposal incorporating knowledge of the approaches covered during the class.
Recommended preparation: This class is designed to help prepare students for graduate school in Political Science or those students interested in a "capstone" class at the culmination of their studies. No prior knowledge of qualitative or quantitative methods is assumed.
Prerequisite: Two POL 200-level or higher courses/permission of the instructor

**POL458H1 The Political Economy of International Trade [26S]**
The course explains why countries trade by looking at historical and contemporary trends in international trade. The course places particular emphasis on the interaction between political and economic processes in advancing trade. An important theme throughout the course is how the distribution of gains is connected to system stability.
Exclusion: POLC95H3
Prerequisite: ECO100Y and POL208Y and HIS344Y/permission of the instructor

**POL459Y1 The Military Instrument of Foreign Policy [52S]**
The relationship of military force to politics: Nuclear war and deterrence, conventional war, revolutionary war, terrorism and counter-insurgency are examined from the perspectives of the U.S., Russia and other contemporary military powers.
Prerequisite: POL208Y

**JUP460H1 Contemporary Issues in Peace and Conflict [26S]**

**JUP460Y1 Contemporary Issues in Peace and Conflict [52S]**
A colloquium (fall term) and research seminar (spring term, JUP460Y only) on security ontology and various meanings of security. Topics to be considered include planetary, ecospheric, state, societal, and human security. (Offered by the Department of Political Science and University College)
Exclusion: Students are not allowed to take both H and Y courses
Prerequisite: POL208Y and UNI360Y/permission of the instructor

**POL460H1 Studies in Modern Political Theory [26S]**
Studies on a modern political thinker or thinkers since Machiavelli.
Exclusion: POL460Y
Prerequisite: POL320Y/323H/323Y/330H/330Y

**POL462Y1 Comparative Political Parties and Elections [52S]**
Political parties and party systems in Canada, United States and selected European countries. Electoral systems, problems of representation, voting and elections and processes of political change in western democracies.
Exclusion: POL462H
Prerequisite: POL103Y/207Y/356Y

**POL463Y1 The Political Philosophy of Political Economy [26L,26S]**
Lectures relate economic organization to philosophical interpretations of community and citizenship. Philosophers include Plato, Aristotle, Calvin, Smith, Kant, Hegel, Marx, Habermas, Rawls and Hayek. Seminars interpret critical

moments of 20th century economic history from the standpoint of philosophy. Does philosophy clarify or obscure the meaning of economic history?
Exclusion: POL478Y5
Prerequisite: POL320Y/ECO302Y/ECO342Y
Recommended preparation: POL320Y/a course in 20th century economic history

**POL464H1 G8 and Global Governance I [26S]**
In the post-cold war, globalizing international system, the institutions of the G8 are emerging as an effective centre of global governance. Alternative conceptions of global governance and theories of international cooperation are used to explain G8 performance. National approaches to G8 diplomacy are assessed.
Prerequisite: POL108Y/208Y
Recommended preparation: POL312Y/324Y/326Y/341H/342H/342Y/343Y

**POL465H1 G8 and Global Governance II [26S]**
The performance of the G8 and other international institutions in securing cooperation and compliance, and shaping international order in major contemporary issues of political economy (finance, trade, employment, development), security (arms control, regional security, democracy and human rights) and transnational global issues (environmental protection, drugs, crime, infectious disease).
Prerequisite: POL108Y/208Y
Recommended preparation: POL312Y/324Y/326Y/341H/342H/342Y/343Y

**POL466H1 Topics in International Politics III [26S]**
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y

**POL468H1 Conflict and Conflict Management [26S]**
This seminar examines the source of conflict and various methods of conflict management. It focuses on organized conflict, and the manner in which such conflicts appear in character or scope in the contemporary international system.
Prerequisite: Minimum 14 FCEs
Recommended preparation: POL208Y

**POL469H1 Ethics and International Relations [26S]**
The course aims to explore the requirements of justice and fairness in international affairs. It is common to theorize international relations in terms of interests and power. But even the most cursory look at what important actors actually do in their international interactions reveals that they use normative language all the time. This has not gone unnoticed, with investigations of ethics in the international arena multiplying in recent years. Drawing on readings from political philosophy, legal theory, and normative international relations theory, the course will take up practical ethical dilemmas encountered in world affairs. The main focus of the course will be on institutions. Examples will be drawn from the issue areas of trade, health, and the environment, among others.
Prerequisite: POL208Y

**POL470Y1 Contemporary Issues in Foreign Policy [52S]**
This senior seminar involves a critical assessment of current foreign policy issues and contemporary world problems. Issues and case studies to be analyzed include: 1. International military interventions to respond to imminent threats or humanitarian crises, issues of legitimacy and effectiveness. e.g., Iraq, Afghanistan, Kosovo, Haiti. 2. Canada-US relations in international crisis management, the track record and the way ahead. 3. Globalization, international terrorism, and their effects on sovereignty, diplomacy and international institutions.
Prerequisite: POL208Y

**JPJ471H1 Constitutional Politics [26S]**
Explores fundamental issues in the design and amendment of constitutions, with particular reference to divided societies such as Canada, Belgium, Spain and South Africa. Includes both the processes and outcomes of constitutional politics, and their implications for conflict management, democracy, and effective governance. (Given by the Faculty of Law and the Department of Political Science)
Exclusion: POL471H
Prerequisite: Two 200+ courses in comparative or Canadian politics

**POL471H1 The Political Thought of George Grant [26S]**
George Grant's political, philosophical, and religious thought as found in his six short books and some supplementary readings. Liberalism, modernity, and technology from the stand point of political philosophy and Christian revelation.
Recommended Preparation: POL 200Y and 320Y
Prerequisite: POL 200Y/320Y

**POL472H1 The Comparative Political Economy of Industrial Societies [26S]**
Topics discussed in this seminar course will include the historical origins of advanced capitalist political economies, the 'Varieties of Capitalism' debate, current trajectories of different political economies, labour politics and regulation, the politics of macro-economic policy, the political economy of growth, and Canada's political economy.
Prerequisite: POL 103Y/108Y/207Y

**POL474H1 Politics and Policy Analysis [26S]**
Major theories of public policy-making and related approaches to policy analysis are examined from the perspective of political science. Key contributions to the theoretical literature pertaining to leading models are read and discussed. Models of public policy-making are successively applied to analysis of cases of Canadian and comparative policy development.
Prerequisite: POL103Y/214Y/317Y/352H

**POL475H1 Experiencing Public Policy-Making [26S]**
Examines how policies are developed and implemented, and seeks to improve students' analytic, writing and presentational skills. Through readings and role-playing sessions, exposes students to key challenges confronting policy-makers: preparing for government transitions, undertaking environmental scanning and scenario planning, evaluating alternative instruments for delivery programs, establishing consultation processes, restructuring government bureaucracies, and ensuring accountability.
Prerequisite: POL103Y/214Y; one POL 300-level course in Canadian politics

**POL477H1 Advanced Topics in International Political Economy [26S]**
This course is designed for advanced students with serious interests in the subfield of international political economy. Specific topics covered will vary, but all involve the deep interplay between politics and economics in the contemporary world.

Exclusion: POL454Y
Prerequisite: POL208Y; ECO100Y

**POL479H1 Topics in Middle East Politics [26S]**
This course examines the contemporary politics of the Middle East and North Africa. It seeks to examine the relative importance of political, socio-economic and ideological factors in the context of such issues as the resilience of authoritarism, the rise of civil society, and the resurgence of Islamic activism. Theoretical discussion is followed by case studies.
Prerequisite: POL201Y/NMC217Y; minimum 14 FCEs

**POL480Y1 Pluralism, Justice, and Equality (formerly POL480H1) [52S]**
Historically, liberalism has coped with the fact of social difference through doctrines of colour - or difference - blindness. Recent feminist and other critics of liberalism have argued that liberal conceptions of justice and impartiality fail to treat members of marginalized groups as equals. This course explores both sides of these debates.
Exclusion: POL480H1
Prerequisite: POL200Y/320Y/JPP343Y

**POL482H1 The Politics of Disease and Epidemic [26S]**
Considers how disease and epidemics intersect with broader processes of development. Introduces health issues in the developing world. Traces major advances - and setbacks – in improving the health of developing country populations; comparatively considers a number of modern-day and historic epidemics including HIV/AIDS and the Black Death.
Prerequisite: POL201Y or equivalent; minimum 14 FCEs.

**POL483H1 Cosmopolitanism [26S]**
This course covers growing debates in political theory on the issue of cosmopolitanism. Themes include the basis of universal obligation, its compatibility with nationalism and its implications for global justice. These themes will be explored historically, transculturally and through the lens of post-colonial theory.
Prerequisite: POL200Y

**POL484H1 Topics in Political Thought I [26S]**

**POL484Y1 Topics in Political Thought I [52S]**
A seminar on a central problem in political thought. It proceeds through the reading of a small number of major texts. Content in any given year depends on instructor.
Prerequisite: POL320Y/permission of instructor

**POL485H1 Topics in Political Thought II [26S]**

**POL485Y1 Topics in Political Thought II [52S]**
A seminar on a central problem in political thought. It proceeds through the reading of a small number of major texts. Content in any given year depends on instructor.
Prerequisite: POL320Y/permission of instructor

**POL486H1 Topics in International Politics I [26S]**

**POL486Y1 Topics in International Politics I [52S]**
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y

**POL487H1 Topics in International Politics II [26S]**

**POL487Y1 Topics in International Politics II [52S]**
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y

**POL488H1 Topics in African Politics I [26S]**

**POL488Y1 Topics in African Politics I [52S]**
In depth examination of specific themes relating to contemporary African politics. Content in any given year depends on instructor.
Prerequisite: HIS395Y/POL201Y/301Y; minimum 14 FCEs

**POL489H1 Topics in African Politics II [26S]**

**POL489Y1 Topics in African Politics II [52S]**
In depth examination of specific themes relating to contemporary African politics. Content in any given year depends on instructor.
Prerequisite: HIS395Y/POL201Y/301Y; minimum 14 FCEs

**POL490H1 Topics in Canadian Politics I [26S]**

**POL490Y1 Topics in Canadian Politics I [52S]**
Examines in depth enduring and emerging issues in Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y/214Y, one other POL course in Canadian politics or permission of instructor

**POL491H1 Topics in Canadian Politics II [26S]**

**POL491Y1 Topics in Canadian Politics II [52S]**
Examines in depth enduring and emerging issues in Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y/214Y, one other POL course in Canadian politics or permission of instructor

**POL492H1 Topics in Comparative Politics IV [26S]**

**POL492Y1 Topics in Comparative Politics IV [52S]**
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two POL courses in comparative politics or permission of the instructor

**JPJ494H1 Innovation and Knowledge Transfer in City Regions [26S]**
This course surveys two of the key themes related to the process of innovation in a knowledge-based economy: the process by which new knowledge is generated and effectively transferred to those organizations with the potential to commercialize it; and secondly, the paradoxical relationship between knowledge creation and proximity in a modern global economy. (Offered in alternate years)
Exclusion: LAW 453HS
Prerequisite: CSC300H/ECO360Y/GGR431H/ HPS 202H/431H/ POL218Y5/ a 300 or 400 level course in comparative politics (industrial countries)/POL409H/SOC356Y

**POL495Y1 Independent Studies [TBA]**
Open only when a Political Science full-time faculty member is willing and available to supervise. Students must find an appropriate supervisor in the Department of Political Science and obtain the approval of the Director of Undergraduate Studies before enrolling. Obtain details and an application form from the Department Undergraduate Office.
Exclusion: POL496H/497H

**POL496H1 Independent Studies [TBA]**

**POL497H1 Independent Studies [TBA]**
Open only when a Political Science full-time faculty member is willing and available to supervise. Students must find an appropriate supervisor in the Department of Political Science and obtain the approval of the Director of Undergraduate

Studies before enrolling. Obtain details and an application form from the Department Undergraduate Office.
Exclusion: POL495Y

**POL498H1 Intensive Course [TBA]**

**POL498Y1 Intensive Course [TBA]**
Content in any given year depends on instructor. Intensive courses are offered by distinguished visitors from around the world. Students in their 4th year are strongly encouraged to take advantage of this unique opportunity to study with one or more outstanding visiting international scholars that the Department brings from time to time. The intensive course usually runs for approximately 3-4 weeks.

**POL499Y1 Senior Thesis and Thesis Seminar [TBA]**
A 40 to 60 page (15,000 to 20,000 word) research paper (75% of final mark) written under the supervision of one faculty member and a companion thesis seminar (25% of final mark). The seminar provides a forum for students to periodically present and discuss their on-going research and to examine issues and approaches related to the structure, organization and presentation of the thesis.
Exclusion: POL 495/496/497 (taken in the same year)
Prerequisite: 4th year status in Specialist or Joint Specialist programs in Political Science; 3.0 GPA in Political Science courses; supervisor's approval; an approved thesis proposal.

# Portuguese

## Given by Members of the Department of Spanish and Portuguese

## Faculty

### Professors Emeriti

J.R. Webster, MA, Ph D, FRSC

### Associate Professor and Chair of the Department

S.J. Rupp, MA, M Phil, Ph D (V)

### Professor

R. Sternberg, MA, Ph D (SM)
J.Blackmore, MA, Ph D (V)

### Senior Lecturer and Associate Chair

M. Marujo, MA, Ph D

### Lecturer

J.Pedro Ferreira*

*Visiting

Portuguese is spoken by more than one hundred and seventy million people on four continents: Europe, Africa, Asia, and America. Twenty percent of all residents of the Western Hemisphere are Brazilians, who attest to the truth that one out of every five Americans - North, Central, South - speaks Portuguese as his or her native language.

The literature of Portugal has a tradition that goes back as far as the twelfth century, and the country's discoveries in the Renaissance led it to all corners of the globe. In the last two decades Portugal has given to Canada many thousands of new citizens, and Brazil is attracting the attention of Canadians through its vast potential as a land of culture, of natural resources, and of industry.

In addition to a full range of courses in language, Portuguese studies at the University of Toronto are concerned with the major trends and issues of Luso-Brazilian literature and culture and serve the programs in Latin-American Studies, European Studies and in African Studies.

The Department encourages students to consider completing part of their course work at a university in Portugal or Brazil.

Undergraduate Coordinator: Professor A.T. Perez-Léroux (416-813-4082). E-mail: spanport.undergraduate@utoronto.ca

Enquiries: Victoria College, Room 208 (416-813-4080)

## Portuguese Programs

Enrolment in the Portuguese programs requires the completion of four degree courses; no minimum GPA required.

### Portuguese (Arts program)

Consult Professor A.T. Perez-Léroux, Department of Spanish and Portuguese.

**Specialist program:**
(9 full courses or their equivalent, including at least one 400-series course)

First Year:
PRT 100Y1/110Y1/220Y1
Second Year:
1. PRT 220Y1/320Y1
2. PRT 258H1

Third and Fourth Years:
1. PRT 320Y1
2. At least one of PRT 420Y1, 423Y1
3. Plus additional PRT courses to make nine courses. Up to two full-course equivalents may be taken from cognate departmental or college offerings: GGR, HIS, LAS, POL, SPA. A complete list of eligible courses is available from the Undergraduate Coordinator.

**Major program:**
(7 full courses or their equivalent)

First Year:
PRT 100Y1/110Y1/220Y1
Second Year:
1. PRT 220Y1/320Y1
2. PRT 258H1

Third and Fourth Years:
1. PRT 320Y1
2. At least one of PRT 420Y1, 423Y1 is recommended for students who start in PRT 100Y1. At least one of PRT 420Y1, 423Y1 is required for students who start in PRT 220Y1 or higher language course.
3. Plus additional PRT courses to make seven courses. Up to one full-course equivalent may be taken from cognate departmental or college offerings: GGR, HIS, LAS, POL, SPA. A complete list of eligible courses is available form the Undergraduate Coordinator.

**Minor program:**
4 full courses or their equivalent including at least one course at the 300+ level.

### Faculty of Arts & Science Language Citation

The Department of Spanish and Portuguese participates in the Faculty of Arts and Science's Language Citation initiative for Portuguese.

To complete the language citation in Portuguese students will normally complete the two language-sequence courses that follow the introductory level:

PRT220Y1

PRT320Y1

Students should note that, as explained on the page 21 of this Calendar, the Language Citation is not equivalent to an

academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

**Portuguese: see also European Studies; Latin American Studies; Modern Languages and Literatures; Linguistics and Languages**

## Portuguese Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), PRT courses are classified as HUMANITIES courses.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

### Notes

1. All courses taught in Portuguese unless otherwise specified.

2. The Department reserves the right to place students in the language course best suited to their linguistic preparation.

**PRT100Y1 Beginners Portuguese [52L, 26P]**
An introduction to the main elements of the language with emphasis on oral and written practice. (May not be taken by students who, in the judgement of the Department, qualify for entry into PRT110Y1)
Exclusion: OAC Portuguese or equivalent

**PRT110Y1 Elementary Portuguese [52L, 26P]**
An introduction to Portuguese for students who speak or understand Portuguese but have not formally studied it. (May not be taken by students who, in the judgement of the Department, qualify for entry into PRT220Y1)
Exclusion: OAC Portuguese or equivalent
Prerequisite: A familiarity with Portuguese

**PRT217H1 Language Practice [26L]**
Communication practice in small groups, with an emphasis on skills in speaking, listening, and reading. Selective review of grammatical structures and active vocabulary, with readings from Portuguese authors.
Prerequisite: PRT100Y/110Y or permission of the Department

**PRT220Y1 Intermediate Portuguese [52L]**
Students enlarge their vocabulary and improve their oral and writing skills through reading, composition and translation.
Prerequisite: OAC Portuguese or equivalent/PRT100Y1/110Y1

**PRT250H1 Portuguese Culture & Civilization [26L]**
A survey of historical and cultural trends in Portugal from the Middle Ages to the present. Art and music are studied in addition to historical/cultural movements to gain a perspective of the uniqueness of Portugal both within Iberia and in Europe in general. (Offered in alternate years)

**PRT252H1 Portuguese Island Culture [26L]**
Study of Portuguese literature, art, and culture in the context of colonization and immigration, with a specific emphasis on the islands of the Portuguese Atlantic. Readings in the cultural heritage of island settlements, and in diasporic movements to other countries. (Offered in alternate years)

**PRT255H1 The Brazilian Puzzle: Culture and Identity [26L]**
Taught in English, this course examines the historical and cultural contexts of Brazilian identity. The impact of colonial history on issues such as race, religion and regionalism is explored. The course focuses on the 19th and 20th Centuries: Positivism, Modernism, the Anthropophagous Movement, music and Cinema Novo are discussed. (Offered in alternate years)

**PRT258H1 Introduction to Luso-BrazilianStudies (formerly PRT258Y1) [26L]**
The introductory study of literary texts and consideration of the various ways authors express and situate themselves in culture. Semiotics, gender, the literary canon, advertising, the nature of literary language, and cinema.
Exclusion: PRT258Y1
Co-requisite: PRT220Y1

**PRT299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**PRT320Y1 Composition and Oral Practice [52L]**
Intensive practice in written and oral Portuguese for the advanced student. Reading and discussion of contemporary literature.
Prerequisite: PRT220Y1

**PRT342H1 Machado de Assis: The Creation of the Modern Self (formerly PRT455Y1) [26L]**
Beginning with Memorias Postumas de Bras Cubas, Machado de Assis developed the art of creating characters who prefigure the 20th century self: contradictory, often delusional. His novels destroy whatever certainties the late 19th century offered. The course examines the transformation of Machado through readings of his novels. (Taught in English)
Exclusion: PRT 455Y1

**PRT351H1 Discovery and Conquest: Literature and Nationhood (formerly PRT351Y1) [26L]**
A study of the driving ideologies behind the "Age of Discoveries." Close scrutiny of key texts reveals how the ideas of displacement, sex, violence, gender, and colonization play crucial roles in the establishment and maintenance of nationhood and nationality in Renaissance Portugal. (Offered in alternate years)
Exclusion: PRT351Y1
Prerequisite: PRT210Y1/220Y1, 258H1

**PRT355H1 Topics in Brazilian Studies [26L]**
In years when this course is offered, topics are described in the departmental brochure.
Prerequisite: PRT258H1

**PRT357H1 Modern and Contemporary Brazilian Literature (formerly PRT457Y1) [52L]**
Focus on modern and contemporary Brazilian literature and its social contexts, and examination of the relationship between literary movements and Brazilian cinema, music and art. (Offered in alternate years)
Exclusion: PRT457Y1

Prerequisite: PRT220Y1, 258H1

**PRT358H1 Topics in Portuguese Studies [26L]**
In years when this course is offered, topics are described in detail in the departmental brochure.
Prerequisite: PRT220Y1, 258H1

**PRT359H1 From Pessoa to Saramago (formerly PRT456Y1) [52L]**
An examination of Portuguese literature as it confronts the changing social, political, and aesthetic currents of the twentieth century. The Orpheu movement of Fernando and Sa-Carneiro, Presenca and Neo-Realism as well as contemporary authors such as Lydia Jorge and Jose Saramago are studied. (Offered in alternate years)
Exclusion: PRT456Y1
Prerequisite: PRT220Y1, 258H1

**PRT365H1 The Rise of Modern Identity [52L]**
Studies Portuguese and Brazilian Romanticism tracing the development of a new sense of personal and national identity in those countries as reflected in novels, poems and essays. (Offered in alternate years)
Prerequisite: PRT258H or permission of instructor

**PRT398H0 Independent Experiential Study Project**

**PRT399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**PRT420Y1 Advanced Portuguese [52L]**
A study of the more advanced areas of Portuguese grammar and language use. Discussion of issues relating to syntax, vocabulary and style as they arise in essays and readings of literary texts. The expressive resources of the language. Introduction to the stylistic analysis of literary texts. Intensive written and oral practice. (Offered in alternate years)
Prerequisite: PRT320Y1

**PRT442H1 Eça de Queiroz: Portugal in the Crosshairs [26L]**
Whether writing about the adulterous and incestuous relationship between cousins, or the downfall of a great family, or later the transformation of a Parisian dandy into a robust Portuguese countryman, Eça had one great subject: Portugal. The course examines the shifting perspective of the country through close readings of novels.
Prerequisite: PRT 220Y1, PRT 258H1
Exclusion: PRT 356Y1 and PRT455Y1

**PRT452H1 Camões (formerly PRT352H) [26L]**
A study of the works of Camões, including the entirety of Os Lusíadas, and a substantial portion of the lyrics and theatre. (Offered in alternate years) (Taught in English)
Exclusion: PRT352H
Prerequisite: PRT220Y1, 258H1

**PRT454Y1 The Luso-Brazilian Novel [52L]**
Fiction in Portugal and Brazil from the 19th century to the present. Naturalism, realism, the experimental novels of the 1920's, the novel of social protest. (Offered in alternate years)
Prerequisite: PRT220Y1, 258H1

**PRT458H1 The Luso-Brazilian Short Story [26S]**
The development of the Luso-Brazilian short story. Examination of theories of the genre as they relate to short stories of Machado de Assis, Eça de Queiroz, Graciliano Ramos, João Guimareaes Rosa, Clarice Lispector and Miguel Torga. (Offered in alternate years)
Prerequisite: PRT220Y1, 258H1

**PRT490H1 Independent Study [TBA]**
Individual study with a member of staff on a topic of common interest including readings, discussion and written assignments.
Prerequisite: PRT320Y1 and written approval of the Undergraduate Coordinator

## Faculty

### Professors Emeriti

A.T. Davies, BA, BD, STM, Ph D (V)
L.S. Dewart, MA, Ph D (SM)
C.T. McIntire, MA, M Div, Ph D (V)
H.J. McSorley, MA, D Th (SM)
J.E. McWilliam, MA, Ph D (T)
G.A. Nicholson, MA, Ph D (T)
J.T. O'Connell, AB, Ph D (SM)
G.P. Richardson, B Arch, BD, Ph D, FRSC, FRAIC (U)
R.M. Savory, MA, Ph D, FRSC (T)
J.M. Vertin, MA, STL, Ph D (SM)
G.A.B. Watson, MA, STB (T)

### Professor and Chair of the Department

J.S. Kloppenborg, MA, Ph D (T)

### Associate Professor and Associate Chair

J. Newman, MAR, Ph D (V)

### Professors

D. Novak, MHL, Ph D (U)
L.E. Schmidt, MA, Ph D (SM)
R.E. Sinkewicz, AM, M Div, D Phil (CMS)

### Associate Professors

J. Bryant, MA, Ph D
A. Dhand MA, Ph D (V)
J.J. DiCenso, MA, Ph D
H. Fox, MS, MA, Ph D
G. Gillison, Ph D (T)
K. H. Green, MA, Ph D (U)
P. Klassen, MA, Ph D (V)
H. Najman, MA, Ph D
J. Newman, MAR, PhD (V)
W. Saleh, MA, Ph D

### Assistant Professors

J. Ahn, MA
C. Emmrich, MA, Ph D (University of Toronto Mississauga)
M. Fernando, MA, Ph D
F. Garrett MA, Ph D
A. Goodman, MA
L. Hayes, MA
J. Marshall, MA, Ph D
A. Mittermaier, Ph D
A. Rao, MA, Ph D (University of Toronto Mississauga)
S. Virani, MA, Ph D (University of Toronto Mississauga)

As an intellectual inquiry into an important dimension of human experience, the exploration of religion is intrinsically valuable and constitutes a rich resource for reflection on meaning in life and on personal growth. It also prepares students for a wide range of careers (e.g. social work, law, politics from the local to the international level, teaching, medicine, leadership in religious organizations). The academic study of religion, combined with appropriate language preparation, can also open out into graduate work leading to the M.A. and Ph.D. in the growing number of universities offering advanced graduate degrees in the field, and in the University's own Graduate Centre.

Historically, the academic study of religion has taken a variety of forms, each with its own rationale. The Department identifies itself with a model in which the major religious traditions (e.g. Buddhism, Christianity, Hinduism, Islam, Judaism) are studied within a comparative frame. We employ and encourage a variety of approaches (e.g. historical, textual, social scientific) without sacrificing specialized skills and training. The diversity which characterizes this model is reflected in the variety of courses offered or cross-listed by the Department, and by the wide range of training and expertise of our faculty.

Programs are described in detail in the Departmental Handbook; it also includes a limited number of cross-listed courses offered by Colleges or departments such as East Asian Studies, History, Near and Middle Eastern Civilizations, Philosophy, and Sociology. Students aiming to complete any RLG program should consult the Undergraduate Administrator at least once a year for assistance in selecting courses that address the student's interests and fulfill the program's requirements.

Undergraduate Administrator: 123 St. George Street, 2nd Floor (416-978-2395)

Enquiries: 123 St. George Street, 1st Floor (416-978-2395)

## Religion Programs

Enrolment in Religion programs requires completion of four courses; no minimum GPA required.

### Religion (Arts program)

**Specialist program:**
(10 full courses or their equivalent)

1. RLG100Y1/280Y1
2. RLG200Y1/210Y1/SOC250Y1/211Y1/212Y1
3. Four 300+ series courses, including at least one at the 400-level
4. Four other courses
5. Course selection must ensure that more than one religious tradition is studied (RLG100Y1/280Y1 does not fulfill this requirement); it must also ensure depth of study and focus in one area or stream of specialization
6. Two cross-listed courses may be counted (consult the Departmental Handbook for a list of eligible courses)
7. Besides any cross-listed courses, two courses in a single language other than English may be substituted for one 200-series RLG course

**Major program:**
(6 full courses or their equivalent)

1. RLG100Y1/280Y1
2. One course from: RLG200Y1-209H1, 242H5, 272H5, 273H5 or 274H1-275H1
3. Two full 300+ series courses
4. Two other courses
5. One cross-listed course may be counted (consult the Departmental Handbook for a list of eligible courses)

**Minor program:**
(4 full courses or their equivalent)

1. RLG100Y1/200Y1/280Y1
2. One 300+ series RLG course
3. Two other courses
4. No cross-listed courses may be counted

### Religion: Christian Origins (Arts program)

Consult John Kloppenborg, Department for the Study of Religion

**Specialist program:**
(11 full courses or their equivalent with four courses at the 300+level, including one course at the 400-level)

1. RLG100Y1/280Y1
2. RLG241Y1
3. RLG203Y1/RLG331Y1
4. Two full courses in Greek, normally fulfilled by GRK100Y1 or GRK102H1+200H1, and GRK201H1 and GRK202H1, (Note: Upon approval of the program coordinator, students may be permitted to substitute for these courses two full courses in another ancient language, e.g., Coptic, Syriac, Aramaic.)
5. Six 300+ half-courses (at least one must be from the 400-level) chosen from RLG319H1, 320H1, 321H1, 322H1, 323H1, 324H1, 325H1, 326H1, 327H1, 448H1, 449H1, 451H1, 452H1, 453H1, 454H1, 455H1, 458H1.
6. Four half courses or the equivalent chosen from CLA204H1, 230H1, 231H1, 232H1, 233H1, 305H1, 364H1, 365H, 368H1, 369H1, 370H1, 371H, 378H1, NMC250H1 (formerly 329H1) 252H1, 257H, 270Y1, 281 (formerly 252H1), 324H1, 338H, 360H, 361H, NML352H, 353H, 356Y, 357H, 358H, 359H, 451H, 452H, 454H, FAH300H1, 309H1, 312H, 313H, 316H, 318H, 319H, 418H1, 424H.
7. One full course in another religious tradition, preferably an Eastern tradition such as Hinduism or Buddhism.

### Buddhist Studies (Arts program)

**Specialist Program**
(10 full courses or their equivalent including at least one 400-series full course or equivalent)

1. RLG100Y1/280Y1
2. RLG206Y1
3. Two (2) consecutive (FCE) language courses in one of: Chinese, Japanese, Korean, Sanskrit or Tibetan.
4. Either one full RLG course in Judaism, Christianity or Islam, or one of: RLG210Y1, 211Y1, 212Y1.
5. A total of FIVE FCE chosen from the following list; at least three FCEs must be RLG courses. Three FCEs must be taken at the 300 level or higher, including at least 1 FCE at the 400 level. Second year courses: RLG205Y1, 236H1, 274H1, 275H1, EAS215, 241, HIS280Y1, 281Y1, 283Y1, NEW214Y1, 232Y1, PHL237H1; Third year courses: RLG360H5, 361H1, 363H1, 366H1, 367H1, 370H5, 371H1, 371H5; 372H1, 373H5, 374H5, 375H1, 376H1, 379H1, 380H1; EAS324H1, 325H1, 338H1, 342H1, 361, 368Y1, 369Y1; HIS380Y1, 381Y1; NEW331H1, 332H1, 333H1, 339H1; PHL337H1; FAH361H1, 362H1, 363H1, 364H1, 368H1; Fourth year courses: RLG463H1, 464H1, 465H1, 466H1, 467H1, 468H1, 490Y1 (on a topic in Buddhism), EAS468Y1, 469Y1, HIS409H1; NEW433H1.

**Major program:**
(7 full courses or their equivalent with at least two courses at the 300+level).

1. RLG100Y1/280Y1
2. RLG206Y1
3. Five full courses or their equivalent chosen from the following list; at least three FCEs must be RLG courses. Two FCEs must be at the 300 level or higher. Second year courses: RLG205Y1, 236H1, 274H1, 275H1, EAS215, 241, HIS280Y1, 281Y1, 283Y1, NEW214Y1, 232Y1, PHL237H1; Third year courses: RLG360H5, 361H1, 363H1, 366H1, 367H1, 370H5, 371H1, 371H5; 372H1, 373H5, 374H5, 375H1, 376H1, 379H1, 380H1; EAS324H, 325H, 338H, 342H, 361, 368Y1, 369Y1; HIS380Y1, 381Y1; NEW331H1, 332H1, 333H1, 339H1; PHL337H1; FAH361H, 362H1, 363H1, 364H1, 368H1; Fourth year courses: RLG463H1, 464H1, 465H1, 466H1, 467H1, 468H1, 490Y1 (on a topic in Buddhism); EAS468Y1, 469Y1; NEW433H1; HIS409H1

### Islamic Studies (Arts program)

**Major program:**
(7 full courses or their equivalent with at least three full courses at the 300+level)

1. RLG100Y 1/280Y1
2. RLG204Y1
3. RLG250H1/NMC381H1
4. One full course from the following: RLG200Y1, 210Y1, 211Y1, 212Y1
5. 3.5 full courses from the following list (3 FCEs must be at the 300+ level): RLG251H1, 351H1, 352H1, 353H1, 350H1, 354H1, 355H1, PHL336H1, NMC381H1, 387H1, 388H1, 389H1, RLG456H1, 457H1, 459H1, 461H1

### Religion and Philosophy: see Philosophy

## Religion Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all RLG courses are classified as HUMANITIES courses except RLG210Y1, 211Y1, 212Y1, 301H1, 302H1, 304H1, 307H1, 314H1, 315H1, 316H1, 353H1, 354H1, 355H1, 386Y1, and 459H1, which are SOCIAL SCIENCE courses.

**HUM199H1 First Year Seminar [26S]**

**HUM199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**RLG100Y1 World Religions [52L, 26T]**
An introductory study of the ideas, attitudes, practices, and contemporary situation of the Judaic, Christian, Muslim, Hindu, Buddhist, Confucian, Taoist, and Shinto religious traditions.
Exclusion: RLG280Y1; HUM B03H3, HUM B04H3. Note: HUM B03H3 and HUM B04H3 taken together are equivalent to RLG100Y1

### 200-Series Courses

**Note**
No 200-series course has a 100-series RLG course prerequisite or co-requisite.

**RLG200Y1 The Phenomenon of Religion (formerly RLG101Y1) [52L, 26T]**
Theories about the variety and nature of religious experience, personal and collective, including historiographic, psychological, sociological, anthropological, philosophical analyses of religion. How religious life is expressed in such forms as myth, narrative and ritual, systems of belief and value, morality and social institutions.
Exclusion: RLG101Y1, 101H5

**RLG201Y1 Aboriginal Religion [52L, 26T]**
A survey of spirits, indigenous rites, stories, visions, shamanic and healing practices. Canadian First Nations' and Metis' experiences placed in cross-cultural perspective. First Nations' and Metis' spiritualities studied academically in the history of religions, anthropology, and stories.
Recommended Preparation: RLG100Y1/200Y1/280Y1

**RLG202Y1 The Jewish Religious Tradition [52L, 26T]**
An introduction to the religious tradition of the Jews, from its ancient roots to its modern crises. Focus on great ideas, thinkers, books, movements, sects, and events in the historical development of Judaism through its four main periods - biblical, rabbinic, medieval, and modern.
Recommended Preparation: RLG100Y1/200Y1/280Y1
Exclusion: RLG202H5

**RLG203Y1 The Christian Religious Tradition [52L, 26T]**
An introduction to the Christian religious tradition as it has developed from the 1st century C.E. to the present and has been expressed in teachings, institutions, social attitudes, and the arts.
Recommended Preparation: RLG100Y1/200Y1/280Y1
Exclusion: RLG203H5

**RLG204Y1 The Islamic Religious Tradition [52L, 26T]**
The faith and practice of Islam: historical emergence, doctrinal development, and interaction with various world cultures. Note: this course is offered alternatively with NMC 185H1, to which is it equivalent.
Exclusion: NMC185Y1, NMC185H1, RLG204H5
Recommended Preparation: RLG100Y1/200Y1/280Y1

**RLG205Y1 The Hindu Religious Tradition [52L, 26T]**
A historical and thematic introduction to the Hindu religious tradition as embedded in the socio-cultural structures of India.
Recommended Preparation: RLG100Y1/200Y1/280Y1
Exclusion: RLG205H5

**RLG206Y1 The Buddhist Religious Tradition [52L, 26T]**
The teachings of the Buddha and the development, spread, and diversification of the Buddhist tradition from southern to northeastern Asia.
Recommended Preparation: RLG100Y1/200Y1/280Y1
Exclusion: RLG206H5

**RLG210Y1 Introduction to the Sociology of Religion [52L, 26T]**
Religion from the sociological viewpoint; religion as the source of meaning, community and power; conversion and commitment; religious organization, movements, and authority; the relation of religion to the individual, sexuality and gender; conflict and change; religion and secularization. Emphasis on classical thinkers (Durkheim, Marx, Weber) and contemporary applications. Note: This course is equivalent to SOC 250Y1.
Exclusion: SOC 250Y1
This is a Social Science course

**RLG211Y1 Introduction to the Psychology of Religion [52L, 26T]**
A survey of the psychological approaches to aspects of religion such as religious experience, doctrine, myth and symbols, ethics and human transformation. Attention will be given to phenomenological, psychoanalytic, Jungian, existentialist, and feminist approaches.
This is a Social Science course

**RLG212Y1 Introduction to the Anthropology of Religion [52L, 26T]**
Anthropological study of the supernatural in small-scale non-literate societies. A cross-cultural examination of systems of belief and ritual focusing on the relationship between spiritual beings and the cosmos as well as the rights and obligations which arise therefrom. Among the topics covered are: myth and ritual; shamanism and healing; magic, witchcraft and sorcery; divination; ancestor worship.
This is a Social Science course

**RLG213H1 Reading Sacred Texts [26L, 13T]**
Surveys interpretative traditions related to sacred texts, focusing on reading strategies that range from the literal to the figurative with attention to rationales that transform literal textual meanings and copyists' manipulations of texts. May focus on various religious traditions from year to year, targeting a single canonical tradition or comparative analysis. Students will gain insight into literalist, environmentalist, secularist and erotic approaches to texts

**RLG220H1 Philosophical Responses to the Holocaust [26L, 13 T]**
This course deals with how the momentous experience of the Holocaust, the systematic state-sponsored murder of six million Jews as well as many others, has forced thinkers, both religious and secular, to rethink the human condition.

**RLG221H1 Religious Ethics: The Jewish Tradition [26L, 13T]**
A brief survey of the Jewish biblical and rabbinic traditions; the extension of these teachings and methods of interpretation into the modern period; common and divergent Jewish positions on pressing moral issues today.

**RLG224Y1 Problems in Religious Ethics [52L, 26T]**
An introduction to the analysis of ethical problems in the context of the religious traditions of the West. Abortion, euthanasia, poverty, environmental degradation, militarism, sex, marriage, and the roles of men and women.
Exclusion: RLG105Y1

**RLG225H1 Christian Ethics and Human Sexuality [26L, 13T]**
The basis of Christian ethics for a formulation of standards of inter-personal conduct and sexual relations; an analysis of changing sexual mores, familial structures and child-rearing techniques; and a critical evaluation of the development of reproductive technologies.
Recommended Preparation: RLG224Y1

**RLG228H1 Religious Ethics: The Environment [26L, 13T]**
The ethics and religious symbolism of environmental change: animal domestication and experimentation, deforestation, population expansion, energy use, synthetics, waste and pollution.

**RLG229H1 Death, Dying and Afterlife [26L, 13T]**
This course introduces students to various religious approaches to death, the dead, and afterlife. Through considering different ways in which death has been thought about and dealt with, we will also explore different understandings of life and answers to what it means to be human.

**RLG230H1 Religion and Public Life [26L, 13T]**
Course examines various issues: the role of religions in public, political contexts, such as religion and secularism in democratic societies; religion, human rights, and law; religion and state power; the political nature of religious social structures, religion and the politics of gender and sexuality; interreligious conflict and alliances

**RLG231H1 Religion and Science (formerly RLG231Y1) [26L, 13T]**
The impact of the physical and social sciences on religion and religious thought. A comparative philosophical study of scientific and theological ways of analysis and of the status of scientific and religious assertions. Areas of cooperation and of conflict between the "two cultures."
Exclusion: RLG231Y1, SMC 230Y1

**RLG232H1 Religion and Film [26L, 13T]**
The role of film as a mediator of thought and experience concerning religious worldviews. The ways in which movies relate to humanity's quest to understand itself and its place in the universe are considered in this regard, along with the challenge which modernity presents to this task. Of central concern is the capacity of film to address religious issues through visual symbolic forms.
Exclusion: RLG232H5

**RLG236H1 Gender, Body and Sexuality in Asian Traditions [26L, 13T]**
A study of women in the religious traditions of South and East Asia, including historical developments, topical issues, and contemporary women's movements.

**RLG237H1 Women and Western Religions (formerly RLG237Y1) [26L, 2T]**
The social and legal status of women in Judaism, Christianity, and Islam. The historical and contemporary situation of women in these traditions.
Exclusion: RLG237Y1

**RLG239H1 Special Topics [26L]**
Some topic of central interest to students of religion, treated on a once-only basis by a professor visiting from another university. For details of this year's offering, consult the Department's current undergraduate handbook.

**RLG241Y1 Early Christian Writings I [52L, 26T]**
An introduction to New Testament literature, examined within the historical context of the first two centuries. No familiarity with Christianity or the New Testament is expected.
Exclusion: RLG241H5; 341H5; HUMC 14H3

**RLG243H1 Diasporic Religions [26L, 13T]**
An examination of religions in their contemporary diasporic and transnational modes. Issues addressed include the role of religions in sustaining identities across national boundaries, the enmeshment of religious minorities in political practices of governance, the impact of cultural forces such as commodification or gender upon religious representations and transformations, and the intersection of religion with other kinds of authoritative knowledge, such as medicine or law, in diasporic conditions.
Recommended Preparation: RLG100Y1

**RLG245Y1 Religions of the Silk Road [52L, 26T]**
An historical introduction to the religious traditions that flourished along the Silk Road, including Zoroastrianism, Manichaeism, Nestorian Christianity, Judaism, Buddhism and Islam. Drawing on a variety of sources (textual, archaeological, works of art), the course will focus on the spread and development of these traditions through the medieval period. Issues include cross-cultural exchange, religious syncretism, ethnic identity formation and so on. Emphasis will also be placed on religious and political events in modern Central Asia.
Recommended Preparation:RLG100Y1/280Y1/100H5

**RLG246H1 Karma and Dharma in Indic Tradition [26L] 13T**
A comparative study of the development of ethical perspectives in Hinduism, Buddhism, and Jainism, concluding with a discussion of contemporary moral issues

**RLG248H1 Martyrs, Mystics, and Saints [26L] 13T**
An examination of the variety of ways in which religious traditions construct sanctity, articulate categories of exceptionalism, and how exceptional persons function within social systems. Consideration of gender and social status in definitions of sanctity. Focus varies from year to year, and may focus either on constructions of sanctity in one religious tradition, or comparatively, comparing and contrasting ideas of sainthood and martyrdom in Christianity, Judaism, Islam, Hinduism and/or Buddhism.
Recommended Preparation: RLG100Y1/RLG100H5 / RLG280Y1

**RLG250H1 Islam in the Modern World [26L, 13T]**
An introduction to anthropological studies of Islamic modernities. We will consider topics such as (post)colonialism, Islam and human rights, Islamic feminism, jihad, and the everyday lives of Muslims in a globalized world.

**RLG251H1 Women in Islam [26L]**
An introduction to the role of women in Muslim societies in past and present. Topics include the status of women in the Qur'an and Islamic law, veiling, social change, and Islamic feminism.
Recommended Preparation: RLG100Y1/200Y1/204Y1/NMC 185H1/RLG204H5

**RLG260Y1 Introduction to Sanskrit [52L, 26T]**
An introduction to Sanskrit for beginners. An overview of basic grammar and development of vocabulary, with readings of simple texts.

**RLG261Y1 Introduction to Tibetan [52L, 26T]**
An introduction to Tibetan for beginners. An overview of basic grammar and development of vocabulary, with readings of simple texts.

**RLG274H1 Chinese Religions [26L, 13T]**
The religions and philosophies of China, including ancient religion and mythology, the three traditions of Confucianism, Taoism, and Buddhism (including their philosophical dimensions), and Chinese popular religion.
Exclusion: PHL237H1, RLG272Y1, 272H5, 370Y1

**RLG275H1 Japanese and Korean Religions [26L, 13T]**
The religions of Japan (Shinto, Buddhism, Confucianism) and the religions of Korea (Confucianism, Buddhism, Shamanism).
Exclusion: RLG273Y1, 273H5, 370Y1

**RLG280Y1 World Religions: A Comparative Study [52L, 26T]**
An alternative version of the content covered by RLG100Y1, for students in second year or higher who cannot or do not wish to take a further 100-level course. Students attend the RLG100Y1 lectures and tutorials but are expected to produce more substantial and more sophisticated written work, and are required to submit an extra written assignment.
Exclusion: RLG100Y1
Prerequisite: Completion of 6 full course equivalents

**RLG290Y1 Special Topics [26S]**
Topics vary from year to year.

**RLG299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

## 300-Series Courses

### Note

All 300-series courses normally presuppose at least three prior RLGhalf-courses (or equivalent). Only specific prerequisites or recommended preparations are listed below. Students who do not meet the prerequisites but believe they have adequate academic preparation should consult the Undergraduate Administrator regarding entry to the course.

**RLG301H1 Sigmund Freud on Religion [26L]**
Systematic analysis of Freud's main writings on religion, studied within the context of central concepts and issues in psychoanalysis such as: the Oedipus Complex, the meaning and function of symbols, the formation of the ego and the superego, and the relations between the individual and culture.
Prerequisite: RLG211Y1; See note above for general prerequisites
This is a Social Science course

**RLG302H1 Carl Jung's Theory of Religion [26L]**
Jung's analysis of the development of the personality through its life cycle, and of the central place which religion holds within the process of maturation. The unconscious, the collective unconscious, dreams, myths, symbols, and archetypes; implications for religious thought, therapy, education, and definitions of community.
Prerequisite: RLG211Y1; see note above for general prerequisites
This is a Social Science course

**RLG303H1 Evil and Suffering [26L]**
The existence of evil poses a problem to theistic beliefs and raises the question as to whether a belief in a deity is incompatible with the existence of evil and human (or other) suffering. This course examines the variety of ways in which religions have dealt with the existence of evil.
Prerequisite: See note above for general prerequisites
This is a Social Science course

**RLG304H1 Language, Symbols, Self [26L]**
Theories of the self that involve the constitutive role of language in its various forms. Problems of socially-conditioned worldviews and sense of self as related to discourse. Myth, symbol, metaphor, and literary arts as vehicles for personality development and self-transformation along religious lines.
Prerequisite: See note above for general prerequisites
This is a Social Science course

**RLG307H1 Religion and Society in Canada (formerly RLG307Y1) [26L]**
Sociological examination of religion in contemporary Canadian society: religions of English and French Canada; religious organization and demography; relation of religion to ethnicity, social questions and politics; secularization and privatization.
Exclusion: RLG307Y1
Prerequisite: RLG210Y1/SOC250Y/an introductory course in sociology; See note above for general prerequisites
This is a Social Science course

**RLG308H1 Religion and the City [26L]**
The course focuses on the role of religion in the genesis and development of cities, as well as the ways urbanization and immigration have transformed religious organizations and identities. Various methodologies, including ethnography, social and cultural history, and textual analysis will be considered. In some years, course projects will focus on mapping the changing significance and presence of particular religions in Toronto. Check with the department for the next scheduled focus for this course.
Prerequisite: See note above for general prerequisites

**RLG309Y1 Religion, Morality and Law [52L]**
The relationship and interaction between religious and ethical norms, social and political ideals, and systems of law. The course concerns the ongoing dialectic between religious and other values, the application of religious ideas to social orders, and questions of religious and human rights.
Prerequisite: three RLGor PHI/PHL half-courses and third year standing, See note above for general prerequisites
Exclusion: RLG309H5

**RLG310Y1 Modern Atheism and the Critique of Religion (formerly RLG310H1) [52L]**
Historical and critical-philosophical examination of the development of atheism in Western intellectual circles. Consideration of 18th, 19th and 20th century critiques of religion derived from theories of knowledge that privilege science; radical social and political thought; and analysis of the soul and its symbol-systems. Authors include Hume, Marx, Bakunin, Nietzsche, and Freud.
Prerequisite: three RLGor PHI/PHL half-courses and third year standing, See note above for general prerequisites

**RLG311H1 World Religions and Ecology [26L]**
A study of the responses of selected world religious traditions to the emergence of global ecological concerns. Key concepts and tenets of the traditions and their relevance for an examination of the environmental crisis.
Prerequisite: See note above for general prerequisites
Recommended preparation: RLG228H1
Exclusion: RLG311H5

**RLG314H1 Religion, Gender and Sexuality [26L]**
Examination of gender as a category in the understanding of religious roles, symbols, rituals, deities, and social relations. Survey of varieties of concepts of gender in recent feminist thought, and application of these concepts to religious life and experience. Examples will be drawn from a variety of religious traditions and groups, contemporary and historical.
Prerequisite: See note above for general prerequisites
Exclusion: RLG314H5
This is a Social Science course

**RLG315H1 Rites of Passage [26L]**
Analysis of rituals of transition form one social status to another (e.g., childbirth, initiation, weddings) from theoretical, historical and ethnographic perspectives. Particular attention is paid to the multi-religious North American environment, and to the importance of rites of passage in the construction of gendered identities.
Prerequisite: three half-courses in RLGor PHI/PHL
Prerequisite: See note above for general prerequisites
This is a Social Science course

**RLG316H1 Classical Anthropological Theories of Religion [26L]**
An examination of the theories of religion developed by late 19th and 20th century anthropologists such as Taylor, Frazer, Durkheim, Freud, Van Gennep, Levi-Strauss, Douglas and Turner. Their ideas about systems of ritual and belief in small-scale, non-literate, kinship-based societies.
Prerequisite:: RLG212Y1 or any Anthropology course.
Prerequisite: See note for above general prerequisites
This is a Social Science course

**RLG317H1 Religious Violence and Nonviolence [26L]**
Religious violence and nonviolence as they emerge in the tension between strict adherence to tradition and individual actions of charismatic figures. The place of violence and nonviolence in selected faith traditions.
Recommended preparation: RLG100Y1/280Y1; See note above for general prerequisites
Exclusion: RLG317H5

**RLG319H1 Reconception of Biblical Figures in Early Jewish and Christian Sources [26L]**
This course examines the origins, growth, and texture of traditions that developed in early Judaism and Christianity around selected biblical figures. With an eye to the function played and authority held by these traditions, the course will focus variously on Adam and Eve, Enoch, Abraham, Miriam, Levi, David, and Solomon.
Prerequisite: RLG241Y1/ NMC 280H / NMC 280Y1; See note above for general prerequisites

**RLG320H1 Judaism and Christianity in the Second Century [26L]**
Judaism and Christianity in the period from 70 C.E. to 200. CE. The course focuses on the relationship between the two religious groups, stressing the importance of the setting within the Roman Empire.
Prerequisite: RLG241Y1; See note above for general prerequisites

**RLG321H1 Early Christian Writings II [26L]**
An introduction to the first and second century Christian writings. A survey of the surviving works and their historical contexts, close analysis of selected texts and an examination of what these sources tell us about the early Christian communities.
Prerequisite: RLG241Y1/RLG203Y1; See note above for general prerequisites

**RLG322H1 Early Christian Gospels [26L]**
Literary, historical, and rhetorical analyses of selected early Christian gospels. The gospels to be treated will vary, but each year will include a selection from the four canonical gospels and extra-canonical gospels (the Gospel of Thomas, the Gospel of Philip, the Gospel of Peter, the Gospel of Truth, infancy gospels, and fragments of Jewish-Christian gospels)
Prerequisite:RLG241Y1; See note above for general prerequisites

**RLG323H1 Jesus of Nazareth [26L]**
An examination of the "historical Jesus" based on a critical study of the earliest accounts of Jesus, with intensive study of the Gospels to determine what can be said about Jesus' activities and teachings.
Prerequisite: RLG241Y1; See note for above general prerequisites
Exclusion: RLG323H5

**RLG324H1 Paul of Tarsus [26L]**
An examination of Paul's life and thought as seen in the early Christian literature written by him (the seven undisputed letters), about him (the Acts of the Apostles, the Acts of Paul) and in his name (the six disputed NT letters).
Prerequisite: RLG241Y1; See note for above general prerequisites
Exclusion: RLG324H5

**RLG325H1 Visions and Revelations in Ancient Judaism and Christianity [26L]**
This course treats the major elements of the apocalyptic literary corpus and accompanying visionary experiences in ancient Judaism and Christianity. Contemporary theories on the function and origin of apocalyptic literature.
Prerequisite: RLG202Y1/203Y1/241Y1 or permission of instructor; See note for above general prerequisites
Exclusion: NMC 338H, RLG325H5

**RLG326H1 Roots of Early Christianity and Rabbinic Judaism [26L]**
Analysis of selected documents of Second Temple Judaism in their historical contexts, as part of the generative matrix for both the early Jesus movement and the emergence of rabbinic Judaism.
Prerequisite: RLG241Y1/RLG202Y1/RLG203Y1; See note for general prerequisites
Exclusion: RLG326H5

**RLG327H1 Magic and Miracle in Early Christianity [26L]**
Magic, religion, astrology, alchemy, theurgy, miracle, divination—all of these phenomena characterize the context and practice of ancient Christianity. This course examines the constitution of these categories, the role and character of these phenomena in the Graeco-Roman world, and the interaction with and integration of these phenomena by ancient Christianity.
Prerequisite: RLG241Y1; See note above for general prerequisites

**RLG328H1 The Politics of Belief in Early Christianity**
This course examines historical processes, negotiations, and strategies involved in the consolidation of discourses and practices of orthodoxy and heresy in Christianity from the second through fifth centuries. Topics include: intellectual, therapeutic, and social models of orthodoxy; methods of discipline; historical events and contexts; the political and social contexts of theological conflict; and the gendered production of the orthodox subject.
Prerequisite: See note above for general prerequisites

**RLG329H1 The Development of Christian Identity [26L]**
The development of Christian identity, examined from a pscyo-social, ethical, and theological perspective, and as revealed in autobiographies, diaries and letters.

Prerequisite: one RLG course
Recommended Preparation: RLG241Y, 242Y; See note above for general prerequisites
Exclusion: RLG329H5

**RLG330H1 God and Evil [26L]**
A study of some of the most important and influential attempts by Christians to reconcile their experience and understanding of evil with their purported experience and understanding of God. Selections from biblical writers, Augustine of Hippo, Thomas Aquinas, John Calvin, Karl Barth, and Gustavo Gutierrez.
Prerequisite: Three half-courses in RLG, PHI/PHL or Christianity and Culture ; See note above for general prerequisites

**RLG331H1 Eastern Christianity [26L] (Formerly RLG331Y1)**
The formation and development of distinctively Eastern traditions of Christianity. The history and major writers of Eastern Christianity up to the fall of Constantinople in 1453. The development of the national Eastern Churches up through the modern period, and their particular contributions to the Eastern Christian tradition.
Prerequisite: See note above for general prerequisites
Exclusion RLG331Y

**RLG333H1 Christianity and Conflict [26L]**
This course focuses on modern Christianity as an instigator of conflict and a resource for its resolution. Exploring conflict among Christians and between Christians and non-Christians, topics may include missions and colonialism; gender and sexuality; anti-Semitism; pacifism and just war; Catholic-Protestant tensions; cultural diversity and syncretism; and church-state relations
Prerequisite: See note above for general prerequisites.

**RLG334H1 World History of Modern Christianity, 1770s-1914 [26L]**
Thoroughly cross-cultural study of how Christians across the world constructed the extraordinary variety of their religious life during the period when Christianity became by far the most widespread, the most diverse, and the most populous religion in world history. Emphasis on selected cultures on all continents.
Prerequisite: See note above for general prerequisites

**RLG335H1 World History of Modern Christianity, 1914-present [26L]**
Analysis of how Christians (i.e., one-third of the world's population) have engaged large themes since the First World War: liturgy, migration, creedal change, the Holy Spirit, religious privatization and public life, denominations, war, inculturation, scripture, secularity, disintegration of empires, world capitalism, encounter with Islam, Hinduism, Buddhism, indigenous religions, Judaism.
Prerequisite: See note above for general prerequisites

**RLG336Y1 Heresy and the Margins of Christian Identity [26L]**
A comparative study of the history of marginal movements within Christianity. Includes studies of the social-historical theories of internal constructions of "deviance" and studies of selected heretical movements and central responses to such movements. In individual years the course may focus on specific regions and include travel to selected sites.
Prerequisite: A second-year RLG course; See note above for general prerequisites

**RLG337H1 Witchcraft and Magic in Christian Tradition [26L, 13T]**
This course considers the history and theory of Western witchcraft, magic, and heresy in the mediaeval and early modern periods. Consideration of relevant anthropological theory, the relationship between constructions of witchcraft, the Enlightenment and the rise of science, and the role of gender in definitions of witchcraft.
Prerequisites: See note above for general prerequisites
Recommended Preparation: RLG203Y1/RLG203H5

**RLG338Y1 Technology, Ethics and the Future of Humanity [52L]**
The role of technology within various projections of global economic development, examined from a Christian ethical perspective. Ethical responses to problems that threaten the future of humanity: poverty, resource depletion, environmental degradation, arms build-up, and biotechnical revolution.
Prerequisite: See note above for general prerequisites
Recommended preparation: RLG224Y
Exclusion: RLG338H5

**RLG340Y1 Classical Jewish Theology [52L]**
A study of four great figures during critical moments in Jewish history, each of whom represents a turning point: Jeremiah (biblical era), Rabbi Akiva (rabbinic era), Moses Maimonides (medieval era), Franz Rosenzweig (modern era). Belief in God; Torah as law, teaching, tradition, revelation, eternity of Israel, meaning of Jewish suffering, problem of radical evil, history and messianism.
Prerequisite: RLG100Y1/202Y1/221H1/280Y1; See note above for general prerequisites

**RLG341H1 Dreaming of Zion: Exile and Return in Jewish Thought [26L]**
An inquiry into the theme of "exile and return" in Judaism, often called the leading idea of Jewish religious consciousness. Starting from Egyptian slavery and the Babylonian exile, and culminating in the ideas of modern Zionism, the course will examine a cross-section of Jewish thinkers--ancient, medieval, and modern.
Prerequisite:RLG100Y1/202Y1/280Y1/342Y1; See note above for general prerequisites

**RLG342Y1 Judaism in the Modern Age (formerly RLG244Y1) [52L]**
The development and range of modern Jewish religious thought from Spinoza, Mendelssohn and Krochmal, to Cohen, Rosenzweig and Buber. Responses to the challenges of modernity and fundamental alternatives in modern Judaism.
Prerequisite: RLG100Y1/202Y1/221H1/280Y1; See note above for general prerequisites

**RLG343H1 Kabbala: A History of Mystical Thought in Judaism [26L]**
A historical study of the Kabbala and the mystical tradition in Judaism, with emphasis on the ideas of Jewish mystical thinkers and movements.
Prerequisites: RLG100Y1/202Y1/280Y1; See note above for general prerequisites

**RLG344Y1 Antisemitism [26L]**
The religious and cultural roots of antisemitism and its manifestations in Western civilization: anti-Jewish aspects of pagan antiquity, the *adversus Judaeos* tradition in classical Christian theology; racist antisemitism in Europe (the Aryan

myth); the rise of political antisemitism; the Nazi phenomenon, antisemitism in Canada and the United States.
Prerequisite: A 200-level course in Judaism or Christianity or Western history; See note above for general prerequisites

**RLG345H1 Social Ecology and Judaism [26L]**
The environment and human society studied as systems of organization built for self-preservation. Such topics as vegetarianism and the humane treatment of animals, suicide and euthanasia, sustainability and recycling, explored from the perspective of Judaism.
Prerequisite: RLG100Y1/228H1/280Y1/one course in Jewish Studies

**RLG346H1 Time and Place in Judaism [26L]**
The meaning of holy time and holy place, the physics and metaphysics of time and space within Judaism. Topics include the garden of Eden, the temple, the netherworld, the land of Israel, and exile; the sabbath and the week; the human experience of aging as fulfillment and failing.
Prerequisite: RLG100Y1/280Y1/one course in Jewish Studies

**RLG350H1 The Life of Muhammad [26L]**
This course examines Muhammad's life as reflected in the biographies and historical writings of the Muslims. Students will be introduced to the critical methods used by scholars to investigate Muhammad's life. Issues include: relationship between Muhammad's life and Qur'an teachings and the veneration of Muhammad.
Prerequisite: See note above for general prerequisites

**RLG351H1 The Qur'an: An Introduction [26L]**
The revelatory process and the textual formation of the Qur'an, its pre-eminent orality and its principal themes and linguistic forms; the classical exegetical tradition and some contemporary approaches to its interpretation.
Prerequisite: RLG100Y1/204Y1/224H1/280Y1/NMC185Y1/ NMC185H
Exclusion: NMC 285H1, NMC 285Y1

**RLG352H1 Islam in Europe and North America [26L]**
Aspects of the relationship of Islam with other religions and cultures. Topics treated may include attention to both the medieval and the modern periods as well as to contemporary challenges faced by Muslim populations in Europe and North America.
Prerequisite: RLG100Y1/204Y1/224H1/280Y1/NMC185Y1

**RLG353H1 Islam and Popular Culture [26L]**
Examines popular culture in the Muslim world and the portrayal of Islam in Western popular culture. Film, internet, music, news media, and ethnographic writings on pop culture in the Muslim world. Attention will also be given to specific incidents, such as the Salman Rushdie debate and the Danish cartoon controversy.
Prerequisite: RLG204Y1/ RLG204H5/ NMC 185H1; See note above for general prerequisites
Recommended Preparation: RLG232H1
This is a Social Science course

**RLG354H1 Islam in Egypt [26L]**
This course complicates the notion of a monolithic Islam through looking at different forms of religious life found in Egypt, including Sufism, state Islam, reformist Islam, and Islamist movements.
Prerequisite: See note above for general prerequisites
This is a Social Science course

**RLG355H1 Anthropology of Islam [26S]**
Combines theoretical reflections on what an anthropology of Islam might entail with ethnographic readings on the practice of Islam in communities around the world.
Prerequisite: See note above for general prerequisites
This is a Social Science course

**RLG361H1 Hindu Myth [26L]**
Readings in Vedic, Pauranic, Tantric and folk myths; traditional Hindu understandings of myth; recent theories of interpretation, e.g. those of Levi-Strauss, Eliade, Ricoeur, applied to Hindu myths.
Prerequisite: RLG100Y1/205Y1/280Y1; See note above for general prerequisites

**RLG362H1 Rama Through the Ages: An Odyssey from Valmiki to Ayodhya [26L]**
A historical study of the Rama tradition incorporating text, orality, performance, and political theatre.
Prerequisite: RLG205Y; See note above for general prerequisites

**RLG363H1 Hindu Ritual [26L]**
Hindu ritual in its Vedic, Pauranic, Tantric, and popular forms; the meaning that ritual conveys to its participants and the relation of ritual to Hindu mythology and to social context.
Prerequisite: RLG100Y1/205Y1/280Y1; See note above for general prerequisites

**RLG364H1 Fiction, Film and Cyberspace: Hinduism and Contemporary Media [26L]**
A historically-informed look at Hinduism's engagement with contemporary media: books, television, film, and cyberspace.
Prerequisite: RLG205Y; See note above for general prerequisites

**RLG365H1 Modern Hinduism [26L]**
The development of modern Hindu religious thought in the contexts of colonialism, dialogue with "the West" and the secular Indian state.
Prerequisite: RLG100Y1/205Y1/280Y1; See note above for general prerequisites
Exclusion: RLG360H1

**RLG366H1 Classical Hindu Philosophy [26L]**
A study of six classical schools of Hindu philosophy, focusing on the key issues of the Self, the Real, karma and ethics.
Prerequisite: RLG100/205/280/ ;See note above for general prerequisites
Exclusion: RLG362H1

**RLG367H1 Religious Pluralism in Modern India [26L]**
A study of the multi-religious context of modern India, focusing particularly on "minority" traditions such as Sikhism, Islam, Jainism, Zoroastrianism and others.
Prerequisite: See note above for general prerequisites
Recommended preparation: RLG100Y1/280Y1/RLG205Y1

**RLG370Y1 Intermediate Tibetan [52L]**
Intermediate level language course focusing on both spoken and literary forms of Tibetan.
Prerequisite: The equivalent of one year of Tibetan language training.

**RLG371H1 Buddhism in East Asia [26L]**
The schools of Buddhism in East Asia, with focus on two principal ones: Ch'an (Zen) and Pure Land. Readings in translation from their basic sutras.
Prerequisite: RLG100Y1/206Y1/280Y1; See note above for general prerequisites
Exclusion: RLG371H5

**RLG372H1 Tibetan Buddhism [26L]**
A survey of the various schools of Tibetan Buddhism, focusing on differences in both theory and practice, with readings of Tibetan texts in translation and ethnographic studies of Buddhist practice in Tibet.
Prerequisite: RLG206Y; See note above for general prerequisites

**RLG373H1 Buddhist Meditation: Historical, Doctrinal, and Ethnographic Perspectives [26L]**
This course will examine Buddhist meditation, its history, and basic concepts through a critical analysis of primary and secondary readings. Students will be asked to explore the tensions between knowledge and experience, belief and ritual, theory and practice as it unfolds in different representations of Buddhist meditation. A brief survey of some of the more important traditions of Buddhist meditation will be accompanied by an in-depth look at the specific contexts from which they arose.
Prerequisite: See note above for general prerequisites
Recommended Preparation: RLG206Y1/ RLG206H5

**RLG375H1 Buddhist Thought in India and Tibet [26L]**
An introduction to philosophical thought in the Buddhist traditions of India and Tibet.
Prerequisite: RLG206Y1' See note above for general prerequisites

**RLG376H1 Death and Rebirth in Buddhist Traditions [26L]**
This course considers Buddhist notions of death, the afterlife, and rebirth. Topics include Buddhist cosmology and karmic causality, exemplary models of death and birth, and ritual studies of mortuary rites and birth practices. Readings will combine Buddhist primary texts in translation and secondary scholarship in religious studies and anthropology.
Prerequisite: RLG206Y1; See note above for general prerequisites

**RLG379H1 Daoism in Practice [26L]**
What is Daoism? In this course we will examine the history of Daoist practice in medieval East Asia, paying close attention to the way scholars of Daoism have defined their subject in relation to Buddhism and the indigenous traditions of China, Japan, and Korea. Topics may include Daoist ritual, priesthood, textual practices, cosmology, meditation and alchemy. Emphasis will be placed on contemporary Daoist practice in Taiwan and North America.
Prerequisite: See note above for general prerequisites
Recommended Preparation: RLG100Y1/280Y/208Y/274H1

**RLG380H1 Comparative Mysticism [26L]**
A comparative examination of Christian (Latin and Orthodox), Buddhist, Confucian, Taoist, Hindu and Islamic mystical traditions.
Prerequisite: See note above for general prerequisites

**RLG384H1 Pluralism and Dialogue [26L]**
The contemporary phenomenon of religious pluralism: its historical emergence, social context and intellectual justifications. Achievements, techniques and outstanding issues in inter-religious dialogue.
Prerequisite: See note above for general prerequisites

**RLG386Y1 Religions of Non-Literate Societies [52L]**
This course explores the nature of religion in societies whose main traditions are orally encoded. Emphasis will be placed on the peoples and cultures of Oceania in terms both of ethnography and of various theories about how to understand religion in small scale, kinship-based societies without written traditions.
Exclusion: RLG318Y1
Prerequisite: RLG212Y1 or 2nd year Social/Cultural Anthropology Course; See note above for general prerequisites
This is a Social Science course

**RLG388H1 Special Topics I [26L]**

**RLG389H1 Special Topics II [26L]**

**RLG398H0 Independent Experiential Study Project**

**RLG399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

## 400-Series Courses

### Note
400-series courses are intended primarily for Specialists and Majors who have already completed several RLG courses. Prerequisite for all 400-level courses is permission of the instructor. All 400-level courses are E indicator courses. Students must enrol at the Department.

**RLG400Y1 Independent Studies Abroad**

**RLG401H1 Independent Studies Abroad**

**RLG402H1 Independent Studies Abroad**
Intensive programs of study including site visits and lectures in areas of religious significance abroad. Preparatory work expected, together with paper or assignments upon return. (Y1 course: 4 weeks minimum; H course: 2 weeks minimum)

**RLG404H1 Method and Theory Seminar [26S]**
An advanced course in methodological and theoretical approaches to the study of religion. Topics considered include: historical development of religious studies; significance and application of interdisciplinary methodologies; key theorists and theoretical controversies. This team-taught course is of particular use to specialists and honours students seeking to develop superior research skills.

**RLG410Y1 Advanced Topics in Religion [26S]**

**RLG411H1 Advanced Topics in Religion [26S]**

**RLG412H1 Advanced Topics in Religion [26S]**

**RLG419H1 Secularism and Religion [26S]**
Themes considered include what notion of religion is necessary for secular governance, and how secularity relates to particular discourses of citizenship and practices of political rule. Case studies include the effects of colonial rule on religious life; Jewish emancipation in Europe; and religious freedom in France and North America

**RLG420H1 Religion and Philosophy in the European Enlightenment [26S]**
An advanced study of selected Enlightenment thinkers with a focus on their interpretations of religion. The work of Immanuel Kant will form a focus point, but others will be discussed as well. Issues include the rational critique of traditional religion, the relations among religion, ethics and politics, and the pursuit of universal approaches to religion.

**RLG421H1 Topics in Psychology of Religion [26S]**
Provides an in-depth study of selected theorists in the psychology of religion, such as Freud, Ricoeur, Lacan, and Kristeva. Approaches the topic both in terms of interpretive models applied to individual and cultural religious forms, such as symbols, rituals, and personal experiences, and in terms. Of religious subjectivity as related to self-knowledge and ethical development.

**RLG422H1 The Study of Non-Literate Religions in 19th and Early 20th Century France [26S]**
This course will concentrate on works by Emile Durkheim, Arnold Van Gennep, Marcel Mauss, Lucien Levy-Bruhl, Robert Hertz and others that attempted to establish universals of religious beliefs and experience. Topics include double burial, sacrifice, rites of passage, "participation", and concepts of sacred and profane.

**RLG423H1 The Birth of Anthropology [26S]**
This course will examine the 19th century origins of anthropology in the study of the bible and 'other' primitive religions. It will focus on influential works by Frazer, Tylor, Robertson-Smith, Mueller, Bachofen and Freud.

**RLG424H Dreams, Visions and the Imagination [26S]**
Approaches dreams and visions from philosophical, psychological and ethnographic perspectives. Considers how the relationship between imagination and reality is conceptualized in various religious contexts, with a focus on Muslim dream discourses.

**RLG430H1 Advanced Topics in Judaism [26S]**

**RLG431H1 Advanced Topics in Judaism [26S]**

**RLG432Y1 Natural Law in Judaism and Christianity [52S]**
This seminar deals with the question of how a religion like Judaism or Christianity, based on revelation and its norms, can acknowledge and incorporate norms discovered by human reason, without reducing reason to revelation or revelation to reason.

**RLG433H1 Maimonides and His Modern Interpreters [26S]**
An introduction to The Guide of the Perplexed by Moses Maimonides, and to some of the basic themes in Jewish philosophical theology and religion. Among topics to be considered through close textual study of the Guide: divine attributes; biblical interpretation; creation versus eternity; prophecy; providence, theodicy, and evil; wisdom and human perfection. Also to be examined are leading modern interpreters of Maimonides.
Exclusion: POL421H1

**RLG434H1 Modern Jewish Thought [26S]**
Close study of major themes, texts, and thinkers in modern Jewish thought. Focus put on the historical development of modern Judaism, with special emphasis on the Jewish religious and philosophical responses to the challenges of modernity. Among modern Jewish thinkers to be considered: Spinoza, Cohen, Rosenzweig, Buber, Scholem, Strauss, and Fackenheim.

**RLG435H1 The Thought of Leo Strauss [26S]**
The philosophic thought of Leo Strauss approached through his writings on modern Judaism. Primarily addressed will be the mutual relations between philosophy, theology, and politics. Among other topics to be dealt with: origins of modern Judaism, Zionism, liberal democracy, and biblical criticism; meaning of "Jerusalem and Athens"; cognitive value in the Hebrew Bible.

**RLG437H1 Constructions of Authority in Early Christianity [26L, 13T]**
This course examines changing patterns of authority and hierarchy in early Christian communities. Students will explore various roles and offices of authority in canonical and extra-canonical texts in relation to cultural, political, and theological constructions of body, gender, holiness, and orthodoxy as these contribute to developing models of authority. The goal of the course is to familiarize students with the constellation of ideas that participate in developing Christian notions of religious authority.
Prerequisite: Permission of instructor
Recommended Preparation: RLG203Y1/RLG203H5

**RLG440H1 Religion and Healing [26S]**
The relationship between religion and healing in the North American context through analysis of the religious roots of the biomedical model, as well as religious influences on alternative modes of healing.

**RLG442H1 North American Religions [26S]**
This course considers the varieties of religious practice in North America from anthropological and historical perspectives. Of particular interest are the ways religions have mutually influenced each other in the context of nineteenth and twentieth century North America.

**RLG448H1 Religion and Material Culture in the Ancient World [26S]**
The course emphasizes the importance of material culture (artifacts, tombs, architecture, art, industrial installations, etc.) in studying the ancient world, and how it relates to other ways of interpreting religion and society. The course does not require previous familiarity with archaeology, but it presupposes interest in studying a range of excavations. Open to advanced undergraduates and qualified graduate students with permission of the instructor.

**RLG449H1 The Synoptic Problem [26S]**
Investigation of the history of solutions to the Synoptic Problem from the eighteenth century to the present paying special attention to the revival of the Griesbach hypothesis and recent advances in the Two-Document hypothesis.
Prerequisite: RLG241Y1 and at least one of RLG319H1-327H1

**RLG451H1 The Parables of Jesus [26S]**
Examination of the parables in the gospels and other early Christian writers, and major trends in the modern analyses of the parables. Special attention will be paid to the social and economic world presupposed by the parables.
Prerequisite: RLG241Y1 and at least one of RLG319H1-327H1

**RLG452H1 The Death of Jesus [26S]**
Examination of the accounts of the passion and death of Jesus in their original historical and literary contexts.
Prerequisite: RLG241Y1 and at least one of RLG319H1-327H1

**RLG453H1 Christianity and Judaism in Colonial Context [26S]**
Sets the study of early Christianity and Second Temple Judaism into relation with postcolonial historiography. Topics include hybridity, armed resistance, the intersection of gender and colonization, diaspora, acculturation, and the production of subaltern forms of knowledge. Comparative material and theories of comparison are also treated.

**RLG454H1 Social History of the Jesus Movement [26S]**
The social setting of the early Jesus movement in Roman Palestine and the cities of the Eastern Empire. Topics will include: rank and legal status; patronalia and clientalia; marriage and divorce; forms of

association outside the family; slavery and manumission; loyalty to the empire and forms of resistance.
Prerequisite: RLG241Y1 and at least one of RLG319H1-327H1

**RLG455H1 Heresy and Deviance in Early Christianity [26S]**
A study of the construction of deviance or heresy within the literature of first and second century Christianity: tasks include a survey of sociological theory in its application to deviance in the ancient world and close readings of selected texts from first and second century Christian and pre-Christian communities..
Prerequisite: RLG241Y1 and at least one of RLG319H1-327H1

**RLG456H1 Readings in Qur'an and Tafsir [26S]**
This course is an introduction to the rich literature that has grown around the study of the Qur'an in the Arabic tradition. In addition to readings in the Qur'an students will read selections from works in ma`ani and majaz and major tafsir works. Selections include: al-Tabari, al-Tha`labi, al-Zamakhshari, al-Qurtubi and al-Razi. The course will culminate in a study of al-Itqan of al-Suyuti.
Prerequisite: At least two years of Arabic, or advanced reading knowledge, or permission of the instructor.

**RLG457H1 The Qur'an and its Interpretation [26S]**
This course is designed to orient students to the field of contemporary Qur'anic studies through reading and discussion of the text itself and of significant European-language scholarship about the Qur'an as well as through examination of the principal bibliographical tools for this subject area.
Prerequisite: At least two years of Arabic or advanced reading knowledge, or the permission of the instructor.

**RLG458H1 Apocryphal Bible [26S]**
Biblical or para-biblical literature continued to be produced by Jewish and Christian writers long after the establishment of the canons of the Jewish and Christian Bibles. This course introduces the student to some of the more important pieces of Old Testament pseudepigrapha and New Testament apocrypha and their modern scholarly study.

**RLG459H1 Disciplining Islam [26S]**
Considers the disciplinary power of modernity through case-studies on the codification of Islamic law and practice. Contrasting modernity's discipline with Islam's own disciplinary power. Readings include works by Saba Mahmood, Charles Hirschkind, Jakob Skovgaard-Petersen, Brinkley Messick, Michel Foucault and Talal Asad.
Prerequisite: Permission of Instructor
Recommended Preparation: RLG204Y1/RLG204H1/NMC 185H/ RLG250H1
This is a Social Science course

**RLG460H1 Ramayana in Literature, Theology, and Political Imagination [26S]**
This course explores how this conception is the result of a historical process by examining documentable transformations in the reception of the Ramayana. Our focus will be on the shift in the classification of the Ramayana from the inaugural work of Sanskrit literary culture (adi-kavya) in Sanskrit aesthetics to a work of tradition (smrti) in theological commentaries, the differences between the Ramayana's ideal of divine kingship and medieval theistic approaches to Rama's identification with Visnu, the rise of Rama worship, and the use of Rama's divinity in contemporary political discourse.
Prerequisite: Permission of instructor
Recommended Preparation: RLG205Y1 / RLG205H1

**RLG461H1 Ismaili History and Thought: The Persian Tradition [26S]**
Biblical Critical reading, analysis and interpretation of Ismaili historical and doctrinal works of the Persianate tradition as developed by authors such as Nasir-i Khusraw, Nasir al-Din Tusi, Nizari Quhistani and others. The primary authors studied will change yearly.

**RLG463H1 Causation, Movement and Time in Buddhist Scholastic Debate [26S]**
Starting from the basic Buddhist doctrines of karmic retribution and conditioned co-arising the course will explore how the idea of causation, the conceptualization of movement and their implications for models explaining the temporal character of the impermanent have shaped the course of Buddhist thought across schools and throughout various phases of Buddhist intellectual history in South Asia.
Prerequisite: Permission of Instructor
Recommended Preparation: RLG206Y1/ RLG206H5

**RLG464H1 History and Historiography of Buddhism [26S]**
This course examines histories of Buddhism authored inside and outside Asia, considering how various models of historiography affect our knowledge of Buddhism and Buddhist cultures. Readings will include translations of indigenous Buddhist histories, recent histories of Buddhism that have shaped the field of Buddhist Studies, and theoretical studies of historiography

**RLG465H1 Buddhism and Science [26S]**
Why associate Buddhism, or any religion for that matter, with science? We will attempt to answer this question by examining the specific concerns and agendas that governed and continue to govern the study of Buddhism and other Asian religions in the post-Enlightenment, colonial, and post-colonial eras. We will attempt to take the various representations of Buddhism as a "scientific" religion to task by examining them and their sources in their proper contexts.
Prerequisite: Permission of Instructor
Recommended Preparation: RLG206Y1 / RLG206H5

**RLG466H1 Buddhism and Society in East Asia [26S]**
Issues common to the establishment and development of the Buddhist tradition(s) in China, Korea, and Japan. The reactions to Buddhism by the societies in which it was being implanted. Transformation of Buddhist teachings, practice, iconography, institutions, etc. as they were assimilated by the host countries.

**RLG467H1 Esoteric Buddhism in East Asia [26S]**
An in-depth examination of the historical, ritual and doctrinal foundations of Esoteric Buddhism in China and Japan. Emphasis will be placed on the Japanese Shingon tradition. The course will begin with an overview of what we do (and do not) know about the rise of Buddhist Tantra in India and will conclude with a survey of recent scholarly debates over the nature of Tantra itself.
Prerequisite: Permission of instructor
Recommended Preparation: RLG206Y1; RLG371H1

**RLG468H1 Religion and Society in Classical Japan [26S]**
Major developments in the history of Japanese religious traditions from the earliest known times (ca. 6th cent. C.E.) to the beginning of the modern era. This course will focus on the relations between the religious dimension of Japanese society and its social-political-economic dimensions.

**RLG469Y1 Readings in Tibetan Buddhism52S**
Advanced readings in Tibetan Buddhist literature. Tibetan language skills required.

Prerequisite: Instructor's permission required for admission to course.

**RLG471H1 Advanced Topics South Asian Studies [26L]**
Content varies from year to year.

**RLG472H1 Religion and Aesthetics in South Asia [26S]**
'Religion' and 'aesthetics' are sometimes constructed as separate categories, but in South Asia religion is not often conceptually distinct from an autonomous sphere of aesthetic reflection. In conversation with recent sociological, anthropological, and philosophical writings, we will explore this issue through careful study of a variety of Sanskrit sources: the epics, Abhinavagupta's commentary on the Natya Sastra, Vaisnava, Saiva, and Jaina appropriations of Sanskrit aesthetics and courtly poetry, and the works of Rabindranath Tagore. Students are encouraged to work with sources in the primary languages, although materials will also be provided in translation

**RLG482H1 The Taking of Human Life [26S]**
Frequently today in discussions in bioethics dealing with life and death, even secular thinkers invoke the concept of the "sanctity of human life." Yet that concept is clearly religious in origin. What do the three great monotheistic traditions have to say about this concept and its ethical significance?

**RLG483H1 Christian Political Philosophy [26S]**
The writings of Simon Weil will be studied within the context of political theory and contemporary Christian philosophy. The basis for Weil's critique of the technological society will be examined.

**RLG484H1 Religion and the Environment [26S]**
This course examines how religious concerns within various religious traditions interface with contemporary environmental issues. Particular attention is paid to the challenge posed to the human and religious values of these traditions by the present ecological crisis and some salient ethical and religious responses to this challenge

**RLG486H1 Critiques of the Technological Society [26S]**
Major twentieth-century critiques of the technological society through an examination of the philosophical and theological writings of George Grant, Jacques Ellul and Simone Weil. Their seminal critiques will be contrasted with the ethical analyses of Ursula Franklin, Albert Borgmann, Hans Jonas, and Zygmunt Bauman.

**RLG487H1 Liberation Theology [26S]i**
This course explores the work of these two seminal contemporary Christian thinkers, Gustave Guitiérrez, founder of the liberation theology, and U.S. "geologian" Thomas Berry, a cultural historian and prime architect of "the new cosmology". The two thinkers highlight the conflict and convergence of social justice and ecological invitations within Christianity.

**RLG490Y1 Individual Studies [52S]**

**RLG491Y1 Individual Studies [52S]**

**RLG492H1 Individual Studies [26S]**

**RLG493H1 Individual Studies [26S]**

**RLG494H1 Individual Studies [26S]**
Student-initiated projects supervised by members of the Department. The student must obtain both a supervisor's agreement and the Department's approval in order to register. The maximum number of Individual Studies one may take is two full course equivalents. Deadline for submitting applications to Department including supervisor's approval is the first week of classes of the session.

## Renaissance Studies: see Victoria College

## Russian: see Slavic Languages and Literatures

## Serbian: see Slavic Languages and Literatures

## Sexual Diversity Studies: see University College

## Faculty

### Professors

A. Dooley, MA, Ph D
M. G. McGowan, MA, Ph D
D.A. Wilson, MA, Ph D

### Associate Professors

G. Silano, LLB, MA, Ph D

### Assistant Professors

Y. Fehige, MA, Dipl. Theol., Dr. Phil.
J. Harris, MA, Ph D
R. Locklin, MTS, Ph D
S. O'Connor, MA, Ph D

### Senior Lecturer

M. Nic Dhiarmada, MA, H Dip Ed

St. Michael's College offers a number of programs which emerge from its academic strength in various scholarly fields and reflect its centuries-old Christian intellectual traditions. Please consult the relevant brochures for more complete information on each program.

**Book and Media Studies:**

An interdisciplinary and historical investigation of the role of printing, books and reading in cultures past and present. Topics explored include: manuscript and book production, internet publishing, book illustrations, censorship, advertising, readership and electronic media.

**Celtic Studies:**

Examines the literature, languages, history, music, folklore and archaeology of the peoples of Ireland, Scotland and Wales. Investigates Celtic identities in the ancient and modern worlds, and explores the transmission of Irish, Scottish and Welsh traditions to Canada and the United States.

**Christianity and Culture:**

A multidisciplinary exploration of Christian traditions from artistic, literary, philosophical, theological, scientific, social and historical perspectives.

**Christianity and Culture: Major program in Religious Education**

This Major program is part of the Concurrent Teacher Education Program (CTEP) offered in partnership with the Ontario Institute for Studies in Education (OISE/UT) and is for those students preparing to become secondary school teachers of Religious Education in the Separate School Boards in Ontario. CTEP offers the students the opportunity to complete the HBA/HBSc degree and the BEd. The program is offered in partnership with OISE/UT. Complete description of the program may be found on the OISE website. Admission in CTEP is by application normally at the end of first year (or on completion of 4FCEs), when the Arts and Science subject POSts are selected. All applicants must have a minimum CGPA of 2.0.

**Mediaeval Studies:**

An interdisciplinary treatment of the history, art, literature and thought of the Middle Ages.

St. Michael's also offers a number of courses, listed below, which form part of the above programs, or of the programs of other colleges and departments, or are a reflection of staff and student academic interests not always available in departmental course offerings.

Principal & Program Director: Mark G. McGowan, 81 St. Mary Street, Room 127, Odette Hall (416-926-7102)

## St. Michael's College Programs

Enrolment in the Specialist, Major and Minor programs of St. Michael's College is open to students who have completed four courses; no minimum GPA required--with the exception of the Concurrent Education: Religious Education program.

### Book and Media Studies (Arts program)

Consult Dr. Dorothy Speirs, St. Michael's College

**Major program:**
(6 full courses or their equivalent, including at least two 300+ series courses)

1. SMC 219Y1
2. SMC 228H1; SMC 229H1
3. One full course or its equivalent from among SMC courses as designated by the program
4. Three full courses or their equivalent from: ABS300Y1/ 302H1/ANT323Y1/ENG232H1/234H1/235H1/322Y1/ FAH319H1/424H1/FCS297H1/FRE450H1/451H1/ HIS241H1/316H1/341Y/367H1/374H1/375H1/419H1/ 437H1/455H1/477H1/HPS201H1/202H1/INI301H1/305H1/ NMC357Y1/SLA254H1/SMC210Y1/217H1/300H1/301H1/ 304H1/305H1/314H1/315H1/358H1/361H1/364H1/398H1/ 399Y1/430H1/431H1/VIC345H1/VIS206H1/WDW385H1/ WGS271Y1

**Minor program**
(4 full courses or their equivalent, including at least one 300+ series course)

1. SMC 219Y1
2. SMC 228H1; SMC 229H1
3. Two courses or their equivalent from those included in 3. and 4. in the Major program above

### Celtic Studies (Arts program)

Consult Mairin Nic Dhiarmada, St. Michael's College.

**Specialist program:**
(10 full courses or their equivalent, at least four of which are 300+ series courses, including at least one 400-series course)

1. SMC 240Y1
2. Two of SMC 141Y1/241Y1/242Y1/243Y1/331Y1/440Y1/ 441Y1
3. Seven courses, either from List 2. above or SMC 250Y1/333H1/334H1/335Y1/336H1/ 342Y1/343Y1/344Y1/ 345Y1/346Y1/348Y1/349H1/350H1/351H1/352Y1/353Y1/ 354Y1/356H1/395Y1/396H1/411H1/412H1/413H1/414H1/ 416H1/451Y1

**Major program:**
(6 full courses or their equivalent, including at least two 300+ series courses)

1. SMC 240Y1
2. One of SMC 141Y1/241Y1/242Y1/243Y1/331Y1/440Y1/ 441Y1

3. Four additional courses from those listed in the Specialist program above

**Minor program:**
(4 full courses or equivalent chosen from those listed for the Specialist program, including at least one 300+ series course)

## Christianity And Culture (Arts program)

Consult Dr. Reid Locklin, St. Michael's College.

The courses of the Christianity and Culture Program include (1) all the SMC prefixed courses listed below under the Christianity and Culture heading, and (2) the following courses of other departments: HIS 469H1/ RLG 225H1/ 321H1/330H1/ 331Y1 /338Y1/384H1. In addition to Christianity and Culture courses, a number of other courses are cross-listed and may be counted towards the major and specialist programs as specified below. This list is available from the Programs Administrator, Room 132, Odette Hall, and on the St. Michael's College web site.

### Specialist program:

(10 full courses or their equivalent: at least four of which are 300+series courses, including one 400-level course; a total of two courses may be selected from the approved list of cross-listed courses)

1. SMC 103Y1/203Y1
2. One full course equivalent from SMC 200Y1/205H1/208Y1/215H1/230Y1
3. Any three of the following four options:
   a) Two courses from "Christianity and Society": SMC 203Y1/ 204H1/205H1/207H1/208Y1/209H1/215H1/218Y1/304H1/ 308H1/309H1/311H1/313H1/320H1/321H1/332H1/362Y1/390Y1/391H1/400H1/401H1/421H1/426H1433Y1/434H1/ HIS469H1/ RLG222H1/225H1/321H1 or relevant cross-listed courses
   b) Two courses from "Christianity and the Intellectual Tradition": SMC 208Y1/218Y1/307Y1/310H1/311H1/312H1/330Y1/332H1/ /390Y1/391H1/400H1/401H1/417H1/418H1/419H1/421H1/423H1/424H1/429H1/433Y1/434H1/RLG 321H1/ 330H1/331Y1/384H1 or relevant cross-listed courses
   c) Two courses from "Christianity, Arts and Letters": SMC 200Y1/201H1/206H1/216Y1/217H1/302H1/305H1/363H1/364H1/ 390Y1/391H1/400H1/401H1/422H1/425H1/428H1/433Y1/434H1 or relevant cross-listed courses
   d) Two courses from "Christianity and the Scientific Tradition": SMC 230Y1/306H1/371H1/390Y1/391H1/400H1/401H1/432H1/433Y1/434H1/RLG228H1/338Y1 or relevant cross-listed courses
4. Two additional Christianity and Culture courses or cross-listed courses.

**Major program:**
(6 full courses or their equivalent: at least two 300+series courses)

1. SMC 103Y1/203Y1
2. One full course equivalent from SMC 200Y1/205H1/208Y1/215H1/230Y1
3. Four additional Christianity and Culture courses, of which one course may be chosen from the approved list of cross-listed courses.

**Minor program:**
(4 full courses or their equivalent: at least one 300+ series course)

1. SMC 103Y1/203Y1
2. One full course equivalent from SMC 200Y1/205H1/208Y1/215H1/230Y1
3. Two additional Christianity and Culture courses

## Minor Program in Christianity and Education (Arts Program)

This program offers students the opportunity to consider the theory, practice and history of Christian pedagogy.

(4 full courses or their equivalent: at least one 300+ series course)

1. SMC103Y1
2. SMC312H1
3. SMC313H1
4. Two additional courses from Christianity and Culture: SMC200Y1/201H1/203Y1/204H1/205H1/206H1/207H/208Y1/209H1/215H1/216Y1/217H1/218Y1/230Y1/302H1/304H1/305H1/306H1/307Y1/308H1/309H1/310H1/311H1/320H1/321H1/330Y1/332H1/362Y1/363H1/364H1/371H1/417H1/418H1/419H1/421H1/422H1/423H1/424H1/425H1/426H1/428H1/429H1/432H1.

## Christianity and Culture: Major Program in Religious Education (Arts Program)

This program is only open to students in the Concurrent Education program. To apply to this program you must have a minimum CGPA of 2.0. Please note that having the minimum CPGA for application does not guarantee acceptance into the program. The application process includes the completion of a personal profile.

IMPORTANT NOTE: Status may be reviewed at the end of each fall-winter session to determine progress to subsequent years.

Consult Dr. Michael O'Connor, St. Michael's College

(8 full courses or their equivalent, at least two 300+ series courses

1. SMC103Y1
2. Two courses as follows: JSV200H1; SMC271H1; 272H1; 313H1
3. At least one half course from the following: SMC362Y1/426H1/471H1
4. 4.5 courses from the following: SMC200Y1/205H1/208Y1/215H1/216Y1/217H1/230Y1/304H1/305H1/307Y1/308H1/310H1/311H1/312H1/330Y1/363H1/371H1/417H1/418H1/419H1/428H1/429H1/RLG100Y1.

## Mediaeval Studies (Arts program)

Consult Professor Joseph Goering, St. Michael's College

**Specialist program:**
(12 full courses or their equivalent: at least four 300+ series courses including one 400-series course)

1. SMC 210Y1
2. Two courses or equivalent from the foundational courses listed below
3. Two courses or equivalent in Latin
4. SMC 490Y1: Senior Essay in Mediaeval Studies
5. Six courses or equivalent from the approved courses listed below

**Major program:**
(7 full courses or their equivalent: at least two 300+ series courses)

1. SMC 210Y1
2. One full course or its equivalent from the foundational courses listed below
3. Four full courses or their equivalent from the approved courses listed below
4. SMC 490Y1: Senior Essay in Mediaeval Studies, or another course from the approved courses

**Minor program:**
(4 full courses or their equivalent: at least one 300+ series courses)

1. SMC 210Y1
2. One course or equivalent from the foundational courses listed below
3. Two courses or equivalent from the approved courses listed below.

**Foundational Courses:**

| | |
|---|---|
| SMC 222H1 | Mediaeval Latin I |
| SMC 302H1 | Christianity and Symbols |
| SMC 307Y1 | Scripture in the Christian Tradition |
| SMC323H1 | Mediaeval Latin II |
| SMC 358H1 | The Mediaeval Book |
| SMC 359H1 | Mediaeval Theology |
| SMC 360H1 | Vernacular Literature of the Middle Ages |
| SMC 361H1 | Mediaeval Law |

**History:**
CLA 378H1/ HIS 208Y1/220Y1/251Y1/320Y1/322Y1/323H1/336H1/403Y1/ 424H1/427H1/428H1/432H1/434Y1/438H1/ HPS 201H1/430H1/ NMC 270H1/272H1/273Y1/353H1/366Y1/376H1/ SMC 211H1/215H1/ 345Y1/357H1/403H1/421H1/435H1

**Thought:**
CLA 336H1/ MAT 390H1/ PHL 200Y1/205H1/206H1/303H1/304H1/ 307H1/308H1/309H1/336H1/ RLG 241Y1/331Y1/ SMC 205H1/307Y1/332H1/350H1/ 359H1/361H1/402H1/425H1/435H1

**Literature:**

ENG 240Y1/241Y1/300Y1/330H1/367Y1/ 400Y1/401Y1/481H1/ FRE 321H/471H1/GER429H1/ ITA 311H1/312H1/320H1/430H1/ LAT 100Y1/ NMC 255H1/350H1/ SMC 222H1/323H1/343Y1/360H1/435H1/440Y1/441Y1/ 450Y1/ SLA 330Y1/ SPA 425H1/450H1

**The Arts:**
FAH215H1/216H1/316H1/318H1/319H1/325H1/326H1/327H1/328H1/420H1/421H1/424H1/425H1/426H1/492H1/MUS208H1/NMC366Y1/464H1/SMC302H1/344Y1/358H1/422H1/435H1

## St. Michael's College Courses

Listed in this order:

Book and Media Studies
Celtic Studies
Christianity & Culture
Mediaeval Studies
Other

See page 32 for Key to Course Descriptions

For Distribution Requirement purposes (see page 26), All SMC courses are classified as HUMANITIES courses, except JSV200H1, SMC271H1,272H1,344Y1,471H1, which are Social Science courses.

### Book and Media Studies Courses

**SMC219Y1 Mass Media in Culture and Society [52L, 26T]**
Designed to acquaint students with the essential notions of media studies, and to promote a conscious utilization of contemporary media. Starting with the preliminary definitions of "media," "mass," and "communications," the student is invited to consider critically the cultural constructs created by modern media, from print to photography, filming, TV, computer and Internet.

**SMC228H1 Elements of Material Bibliography and Print Culture [39L] (formerly SMC228Y1)**
An historical introduction to the evolution of printing processes since Gutenberg. Attention is given to topics such as the mechanization of printing, the industrialization of the book chain since the nineteenth century, typography and publishing. Visits to rare book collections are an integral part of the course. Note: this course is not intended as a guide to self-publishing nor as a workshop on book making.
Exclusion: SMC228Y1

**SMC229H1 Readers and Readerships [39L] (formerly SMC228Y1)**
An introduction to the history of reading in western culture, from ancient Greece to the twenty-first century. Attention is given to topics such as the causes and effects of different modes of reading (silent or vocalized, intensive or extensive, educational or escapist), book clubs, censorship, and the ways in which readers have influenced cultural production.
Exclusion: SMC228Y1

**SMC300H1 Special Topics in Book and Media Studies I [26L]**
Designed to provide for individual half-courses not already covered in the listed range of the Book and Media Studies Program offerings.
Prerequisite: Permission of the instructor
Recommended preparation: SMC219Y1; SMC228H1; SMC229H1

**SMC301H1 Special Topics in Book and Media Studies II [26L]**
Various topics are taken up each year, the content of which depends on the instructor. Students should check the college web site for details.
Prerequisite: Permission of the instructor
Recommended preparation: SMC219Y1; SMC228H1; SMC229H1

**SMC314H1 Media Revolutions [26L]**
A deeper examination of key cases in the development of media, such as the invention of movable type, the mechanization of the printing press, standardization of call number systems (Dewey, LC, etc.), the advent of radio, television and internet. Topics vary from year to year, according to the instructor.
Recommended preparation: SMC219Y1; SMC228H1; SMC229H1

**SMC315H1 The Newspaper in Canadian Society [26L, 10T]**
Through lectures, tutorials and fields trips, this course examines the origins and development of the English-language newspaper in Canada since the 18th century. Research projects focus on the historical newspaper collections of the University of Toronto libraries, the Toronto reference library, and the Archives of Ontario.
Recommended preparation: SMC219Y1; SMC228H1; SMC229H1

**SMC398H1 Independent Study in Book and Media Studies [TBA]**
An independent research project to be proposed by the student and supervised by a full-time faculty member affiliated with the Book and Media Studies Program.
Prerequisite: SMC219Y1; SMC228H1; SMC229H1; enrolment in the Major program; approval of Program Director

**SMC399Y1 Independent Study in Book and Media Studies [TBA]**
An independent research project to be proposed by the student and supervised by a full-time faculty member affiliated with the Book and Media Studies Program.
Prerequisite: SMC 219Y1; SMC228H1;SMC229H1; enrolment in the Major program; approval of Program Director

**SMC430H1 Advanced Topics in Book and Media Studies I [26S]**
A course/seminar on a topic to be determined annually.
Recommended preparation: SMC219Y1; SMC228H1; SMC229H1

**SMC431H1 Advanced Topics in Book and Media Studies II [26S]**
A course/seminar on a topic to be determined annually.
Recommended preparation: SMC219Y1; SMC228H1; SMC229H1

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## Celtic Studies Courses

**SMC141Y1 Introduction to the Irish Language [52L, 26T]**
This course in Modern Irish Language is designed for learners with no prior knowledge of the language. The course is intended to introduce students to and provide practice in the four language skills: listening, speaking, reading and writing.

**SMC240Y1 Celtic Culture Through the Ages [52L, 26T]**
The expression of Celtic culture in literature, history, folklore and myth from 600 B.C. to the present, with particular attention to the continuing Celtic contribution to Western culture.

**SMC241Y1 Intermediate Irish Language Studies [52L, 26T]**
This course builds on SMC 141Y1 Introduction to the Irish Language. It will provide further expansion of the four language skills: listening, speaking, reading and writing.
Prerequisite: SMC141Y1

**SMC242Y1 An Introduction to Scottish Gaelic [52L, 26T]**
An introduction to Scottish Gaelic language and culture. Students will master fundamentals of reading, writing, and the basics of grammar and will begin to speak Gaelic. Proverbs, poetry, songs and folktales introduce students to the language, literature and folklore of Gaelic Scotland and immigrant North America. No prior knowledge of the language is required.

**SMC243Y1 Modern Welsh [52L, 26T]**
An introductory course intended to provide a basic speaking and reading knowledge of Modern Welsh. Open to students with no prior experience of Welsh.

**SMC250Y1 Celtic Mythology (formerly SMC450Y1) [52L]**
This course covers the range of the Celtic mythological record from all the Celtic areas through an examination of the archaeological, inscriptional and textual sources. A critical evaluation is offered of various relevant mythic approaches.
Exclusion: SMC450Y1

**SMC331Y1 Advanced Irish Language [52L]**
Speaking, writing and reading competence is emphasized in this course. This course concentrates on the study of modern Irish literary texts, both poetry and prose and advanced translation into the Irish language.
Exclusion: SMC341Y1
Prerequisite: SMC141Y1, 241Y1 or permission of the instructor

**SMC333H1 Special Topics in Celtic Studies III (formerly SMC408H1/409H1) [26S]**

**SMC334H1 Special Topics in Celtic Studies III (formerly SMC408H1/409H1) [26S]**
Various topics are taken up each year, the content of which depends on the instructor. Students should check the college web site for details.
Prerequisite: Permission of the instructor.
Exclusion: SMC408H1, 409H1

**SMC335Y1 Special Topics in Celtic Studies I (formerly SMC410Y1) [52S]**
Topic varies from year to year, depending on the instructor. Students should check the college web site for details.
Prerequisite: Permission of the instructor.
Exclusion: SMC410Y1

**SMC336H1 Contemporary Irish Women's Writing [26L]**
This course explores the ways in which contemporary Irish women's writing engages with and challenges processes of patriarchy across a range of genres. Focus on women's use of alternative discourses such as folklore, the Irish language and dialect, as strategies for the appropriation of public spaces, to which, traditionally, women have been denied access. Irish language authors are studied in translation.
Exclusion: SMC333H1 (2007-08)

**SMC342Y1 Literature and Politics: Ireland, Scotland and Wales [52L]**
This course examines the way in which modern Irish, Scottish and Welsh writers have responded to the pressures of anglicization and modernization, and discusses literary reactions to social, ethnic and gender issues in contemporary culture.

**SMC343Y1 Celtic Literature and Society 500-1500 [52L]**
Literature in relation to the structure and development of the insular Celtic society that produced it; the Mythological, Ulster, Fenian, and Historical Saga cycles; voyages, visions, religious, lyric, and gnomic poetry, British heroic poetry, medieval Welsh narratives both secular and religious. Texts studied in translation.

**SMC344Y1 Celtic Archaeology and Art [52L]**
The art and archaeology of the Celtic peoples, with special reference to settlement patterns in Great Britain and Ireland. This is a Social Science course.

**SMC345Y1 From Tribalism to Feudalism: Early Celtic History [52L]**
The political and social development of Ireland, Scotland, Wales, and Brittany from the 5th to the 12th centuries.

**SMC346Y1 Celtic Folklore and Music [52L]**
An examination of the relationship between Celtic mythology and the ancient art of storytelling, and an exploration of the place of traditional music in modern society.

**SMC348Y1 Modern Irish History [52L]**
This course explores ethno-religious conflict and Anglo-Irish relations between 1791 and 1985. Special attention is paid to the rise of the United Irishmen and the Orange Order during the 1790s, the domestic and international repercussions of the Famine, the political revolution of 1916-23, and the troubles in Northern Ireland.

**SMC349H1 Seamus Heaney and Irish Literary Tradition [26L]**
This course examines the poetry and other writings of Seamus Heaney against the background of a modern tradition of Irish writing. Special attention is paid to issues of nationalism, the tensions of social and historical involvement, the place of Gaelic tradition and translation in the creation of a poet whose scope and audience is international.
Recommended preparation: SMC342Y1, ENG140Y1

**SMC350H1 Celtic Spirituality [26L]**
The religious culture of the early and mediaeval Celtic Church as manifested in the material and written record; its significance for contemporary religious movements. Texts studied include the Patrician dossier, early monastic Rules and Liturgies, selected hagiographical, homiletic, devotional and lyric texts.

**SMC351H1 The Blasket Island Writings [26L]**
The Blasket Islands lie off the southwest coast of Ireland. This course will examine the important "library" of books written and orally recorded by the islanders from the 1920s onwards. Special attention will be paid to "The Island Man"; "Peig" and "Twenty Years a Growing". Texts studied in translation.

**SMC352Y1 Modern Gaelic Literature [52L]**
A study of the Gaelic literature of Ireland from the seventeenth century to the present within its poetical and historical context. Texts of poetry, prose and historical writings from this era will be examined, concluding with a reading of contemporary writers. Texts will be studied in translation.
Exclusion: SMC347Y1

**SMC353Y1 Contemporary Irish Writing [52L]**
An introduction to contemporary Irish writing, in its social context, in both Irish and English languages. Among writers studied are Paul Muldoon, Eavan Boland, John McGahern, Michael Longley, Nuala Ni Dhomhnaill, Cathal O Searcaigh, Roddy Doyle, Caitlin Maude, and Alan Titley. Irish language authors are studied in translation.

**SMC354Y1 Celtic Cinema [78L]**
An introduction to the films of Ireland, Scotland and Wales, as they relate to representations of Celtic identity and the development of national cinema.

**SMC356H1 The Continental Celts [26L]**
The course examines the early history of the Celtic peoples in Europe from their first appearance in the material culture of prehistoric Europe to their eventual disappearance as a political power in the first century of Roman conquest.
Recommended preparation: SMC240Y1

**SMC395Y1 Independent Study in Celtic Studies [TBA]**
A research project chosen by the student in consultation with an instructor and approved by the Program Co-ordinator. Arrangements for the choice of topic and supervisor must be completed by the student before registration.
Prerequisite: Approval of Instructor and Program Director

**SMC396H1 Independent Study in Celtic Studies [TBA]**
A research project chosen by the student in consultation with an instructor and approved by the Program Co-ordinator. Arrangements for the choice of topic and supervisor must be completed by the student before registration.
Prerequisite: Approval of Instructor and Program Director

**SMC411H1 Advanced Topics in Celtic Studies II [26S]**

**SMC412H1 Advanced Topics in Celtic Studies II [26S]**
Various topics are taken up each year, the content of which depends on the instructor. Students should check the college web site for details.
Prerequisite: Permission of the instructor

**SMC413H1 The Irish in Canada [26S]**
This course explores the history of Irish migration and settlement in Canada with a special emphasis on political, social, economic and religious themes.
Exclusion: SMC411H1 (93-94), 412H1 (94-95)

**SMC414H1 The Scots in Canada [26S]**
This course explores, by means of the historical method, Scottish migration and settlement in Canada, with special emphasis on religious, cultural, political, social and economic themes.

**SMC416H1 Irish Nationalism in Canada and the United States [26S]**
This course examines the origins, character and development of Irish Nationalism in Canada and the United States . Special attention is paid to the United Irishmen in the United States, the Young Ireland exiles and the Fenian movement in North America.
Prerequisite: SMC348Y1; permission of the instructor

**SMC440Y1 Middle Welsh Language and Literature [52L]**
An introduction to the Welsh language and literature from the 10th to the 14th centuries.
Prerequisite: Permission of instructor

**SMC441Y1 Old and Middle Irish [52L]**
An introduction to Old and Middle Irish language and literature from the 7th to the 11th century.
Prerequisite: Permission of instructor

**SMC451Y1 Senior Essay in Celtic Studies [TBA]**
A scholarly project chosen by the student in consultation with an instructor and approved by the Program Coordinator. Arrangements for the choice of topic must be completed by the student before registration.
Prerequisite: Permission of instructor

### Christianity and Culture Courses

**SMC103Y1 Catholicism [52L, 26T]**
An introduction to Catholic Christianity, to its history, institutions, and theology. The second part of the course examines the renewal effort of Vatican II and offers a contemporary Catholic reading of the Creed.

**SMC200Y1 The Christian Imagination [52L, 26T]**
The purpose of this course is to introduce students to the depth and breadth of the imagination in the western Christian tradition. We shall explore components of the distinctively Christian imagination, as well as its expression in various media, including the visual and plastic arts, literature, film, and music.

**SMC201H1 Christianity and Literature (formerly Christian Classics) [26L, 13T]**
An exploration of major Christian themes, such as redemption and sacrifice, in works of ancient and modern literature. Includes an examination of different genres (the novel, poetry, drama), written for differing times and cultures.

**SMC203Y1 Christianity Encounters the Secular World [52L, 26T]**
Issues raised by Christianity's encounter with secular culture, and solutions proposed by the tradition: involvement in political structures, social movements, ethnic communities, and changing world views.

**SMC204H1 Christianity and Asia [26L, 13T]**
A study of key elements in the encounter of Christianity and Asia: e.g. the controversy over Chinese rites; Korea's conversion by lay philosophers; the development of Filipino folk Catholicism and its impact on politics; the influence of Indian thought on recent Western theologians.

**SMC205H1 Varieties of Christian Experience [26L, 13T]**
Exploration of the variety of forms which Christian personal experience has taken in the course of history (martyrdom, mysticism, monasticism, sanctification of ordinary life, etc.) in order to appreciate their variety, complexity, and deep unity.

**SMC206H1 Christianity and Music [26L, 13T]**
The various roles given music in Christian tradition and the impact of Christianity on Western music. Case studies from Gregorian chant to the present illustrate major issues (sacred vs. profane, acceptable styles or instruments, text and music, emotion and rationalism) to provide a critical vocabulary applicable to present works. Some background in music is required.
Recommended preparation: SMC200Y1/203Y1

**SMC207H1 Christianity in Latin America [26L, 13T]**
The development of Christian communities in Latin America with an emphasis on such themes as the Spanish Conquista, missions, church-state relations, popular religious culture, and the emergence of Liberation Theology.
Recommended preparation: SMC203Y1

**SMC208Y1 Major Christian Thinkers [52L, 26T]**
An introduction to the Christian intellectual tradition through a study of key figures representing a variety of historical periods, from the patristic through the medieval to the modern and contemporary. The selected authors discuss a range of religious, intellectual and human issues from basic Christian beliefs to the challenges of modern and postmodern cultures.

**SMC209H1 Christianity in Africa [26L, 13T]**
The social, theological, and institutional development of Christian communities in Africa, including the birth of early churches in North Africa, missionary activity, popular religion, and the emergence of new Christian movements in the post-colonial period.
Recommended preparation: SMC203Y1

**SMC215H1 Varieties of Christian Community [26S]**
Christian history has been characterized by an enduring and fruitful search for forms of religious community. This course surveys some communal attempts to express Christianity, monasticism, forms of common life for clerics, the Mendicants, lay confraternities, religious orders, and contemporary lay movements.

**SMC216Y1 Ritual and Worship [52L, 26T]**
An introduction to Christian ritual and worship, in cross-cultural and ecumenical perspective. Biblical roots and historical development of the Christian sacraments, especially baptism and the Eucharist. Contemporary Catholic perspectives on worship in a secular and multicultural world.

**SMC217H1 Literature and the Christian Child [26L, 13T]**
An exploration of connections between a child's moral development and literature in Christian traditions. We examine literary, historical and philosophical developments appropriate to the child's imagination. The course will include the study of poems, catechetical materials, novels and other texts written for children.

**SMC218Y1 Interreligious Dialogue and Practice [52L]**
An introduction to religious diversity as a feature of contemporary Christian life, thought and practice. Toronto offers a unique opportunity for students to engage questions of interreligious dialogue and practice in living, dynamic environments. This is a service-learning course: required placements will be arranged through the Centre for Community Partnerships.
Prerequisite: Four full courses
Recommended preparation: SMC103Y1; SMC203Y1; RLG100Y1

**SMC230Y1 Christianity and Science [52L, 26T]**
The course examines the emergence of the physical sciences within Christian culture. It also traces broad historical developments, such as the rise of technology and the acceptance of empirical observation as a method of inquiry, and their impact on Christian faith.
Exclusion: RLG231Y1

**SMC302H1 Christianity and Symbols [26L, 13T]**
The originality of Christian symbolism is explored through texts, images, and other media. We examine theories of symbolism, then explore the use of Christian symbolism and symbolic patterns in ancient and medieval art, architecture and literature.

**SMC304H1 Christianity, Law and Society [26L/S]**
An examination of Canon Law; the process by which it came into being, and its impact on contemporary culture. Premises and techniques of ecclesial law-making are compared to those of other systems of legislation. Specific sections of the Code of Canon Law are examined.
Recommended preparation: SMC203Y1

**SMC305H1 Christianity and Popular Culture39L**
An examination of both overt and covert representations of Christian ideas in contemporary popular media. We examine the ways in which Christian themes have been appropriated and subverted in mass media, while also examining the innovative ways these themes, such as redemption, sacrifice, vocation, and hope, are presented anew.
Recommended preparation: SMC200Y1

**SMC306H1 Christianity and New Technologies [26L, 13S]**
Technology represents a significant challenge to Christian traditions. This course will explore Christian responses to technologies such as genetic engineering, cyberspace, and life extension. Students will examine the metaphysical perspectives and metaphorical images that the Christian tradition presents to respond to the claims of unbridled technology.
Exclusion: RLG 338Y1
Recommended preparation: SMC 230Y1

**SMC307Y1 Scripture in Christian Tradition [52L, 26T]**
An introduction to the place and meaning of the Bible within the Christian tradition; the practice of biblical interpretation in the patristic, medieval and modern periods; a contemporary reading of one of the Gospels and of a letter of Paul.

**SMC308H1 Marriage and the Family in the Catholic Tradition (formerly Marriage and the Family in Canon Law) [26L/S]**
A close reading of the Code of Canon Law touching on the themes of marriage and the family; relationship to other fundamental Church statements (e.g. Familiaris Consortio); examination of issues raised by opposition between church teaching and other views.
Recommended preparation: SMC203Y1/304H1

**SMC309H1 Christianity and Politics [26L, 13T]**
This course explores developments in the relations between the Catholic Church and the states of Western Europe and America from the Enlightenment to the present. Of particular concern is Catholicism's response to the political theories of the Enlightenment, the secularization of the state and social justice issues.
Recommended preparation: SMC203Y1/HIS241H1

**SMC310H1 The Catechism of the Catholic Church [26S]**
Introduces students to the Catechism of the Catholic Church (1994) and its antecedents. After an historical survey of religious instruction in the Church, the students will engage in a close reading of selected sections of the Catechism of the Catholic Church.

**SMC311H1 Why the Church [26S]**
The Catholic Church claims to be the continuation of the event of Christ in history, the guarantor of the authenticity of each person's encounter with Christ, and the means by which His memory may be cultivated. The course examines the reasons for these claims and the forms they have taken.
Recommended preparation: SMC103Y1/200Y1/201H1, 205H1/216Y1

**SMC312H1 Catholicism and Education [26S]**
The Catholic Church has developed a distinctive approach to the pedagogical enterprise. This course explores aspects of this approach by an examination of canonical legislation and other texts published by ecclesiastical authorities and their application in Canada.

**SMC313H1 Catholic Education in Ontario [26L]**
An historical appraisal of the evolution of Catholic schools, universities, and catechetical education in Ontario. Special emphasis is placed on the evolution of Ontario's separate school system.

**SMC320H1 The Catholic Church in Canada (formerly SMC 420H1) [26L]**
An exploration of the historical development of Catholic communities and institutions in all regions of Canada since the 16th century. Emphasis placed on themes of mission, church-state relations, ethnicity, belief and practice, social justice, gender, and secularization.
Exclusion: SMC 420H1

**SMC321H1 The Catholic Church and Canadian Law [26S]**
The Church's self-understanding generates interesting problems in her relations with the civil societies in which she lives. These problems are often fruitful and leaves marks in the legislation of each of these societies. The proposed course will assess the extent to which this has been true in Canada, from the earliest days of European expansion until the present. After an historical introduction regarding the legal status of the Church in French and post-conquest Canada, the proposed course will study the current legal treatment of Church activity, institutions, and property. The legal treatment of criminous clerics will also be examined.
Recommended preparation: SMC203Y1

**SMC330Y1 Christ in Christian Tradition [52L, 26T]**
Faith in Christ is central to Christianity. This course examines both classical formulations of that faith and Enlightenment critiques of them. It introduces students to contemporary rethinking of christology in the light of modern science and philosophy, comparative religion, feminism, and liberation movements.

**SMC332H1 Apocalypse and Millennium (formerly SMC 402H1) [26L]**
The study of past outbursts of Christian interest in the millennium theme, and the end of the world, modern manifestations of this trend, and the implications of its contemporary revitalization at the dawn of the third millennium.

**SMC362Y1 Intercordia [26S] 26P**
Service learning course in social justice and international development. Seminars in the Winter term and international service with Intercordia Canada between May and July. There will be additional costs to students associated with this program. Duration is January to August; all add/cancel/refunds deadlines as per a regular S course.
Prerequisite: interview process prior to enrolment
Recommended preparation: SMC103Y1/SMC203Y1/SMC205H1

**SMC363H1 Music and Liturgy [26L]**
An exploration of the place of music in Christian worship, with a focus on contemporary Eucharist. Examination of the development of liturgico-musical principles and their practical implementation. Topics may include: styles and repertoires, singing liturgical texts, hymnody and other forms of congregational singing, choirs and cantors, the use of instruments.
Prerequisite: Completion of ten courses; two courses in Christianity and Culture
Recommended preparation: SMC206H1/SMC216Y1

**SMC364H1 The Christian Book [26L]**
An interdisciplinary examination of the Bible as artifact and as an index of culture, art, and language. Topics include: the mediaeval giant Bibles, illuminated and illustrated Bibles, the Gutenberg Bible, The King James Bible, the Bible industry, the Bible online, the Bible as sacred object, sacred language and vernacular.
Recommended preparation: SMC200Y1/SMC228H1/229H1

**SMC371H1 Faith and Physics [26L/S]**
The complex interplay between religious belief, culture, and the emergence of modern physical theory: rise and fall of mechanistic theories, relativity, particle physics and models of the Universe, Big Bang theory and Black Holes, etc.
Prerequisite: Four university courses

**SMC390Y1 Independent Studies in Christianity and Culture [TBA]**
A concluding course in Christianity and Culture, providing an opportunity to synthesize insights acquired during the course of the program (enrolment subject to availability of a supervisor).
Prerequisite: Written approval of Program Director

**SMC391H1 Independent Studies in Christianity and Culture [TBA]**

**SMC400H1 Advanced Topics in Christianity and Culture I [TBA]**
Prerequisite: Two courses in Christianity and Culture

**SMC401H1 Advanced Topics in Christianity and Culture II [TBA]**
Prerequisite: Two courses in Christianity and Culture

**SMC417H1 Methods in Biblical Studies OT [26L, 13T]**
A survey of the religious traditions of ancient Israel as they are reflected in the diverse types of literature found in the First Testament, with emphasis on their historical development and their relevance for contemporary scholarship. Topics to be considered include: Israelite origins, settlement in the land, social structures, the monarchy, prophecy, the exile and return.
Prerequisite: SMC307Y1

**SMC418H1 Methods in Biblical Studies NT [26L, 13T]**
Introduction to the major methods and issues in New Testament interpretation: textual criticism; the world of the New Testament; the composition, structure and theologies of the Synoptic Gospels; the Jesus of History and the Christ of Faith.
Prerequisite: SMC307Y1

**SMC419H1 Religious Pluralism and the Church [26S]**
This course will examine Christian responses to religious pluralism, focusing particularly upon twentieth-century developments in comparative theology, theology of religions, and inter-religious dialogue. Although the course will focus on examples from the context of post-Vatican II Catholicism, students will have opportunities to study comparable developments outside this tradition.
Prerequisite: Completion of 10 full-course credits
Recommended preparation: SMC103Y1/SMC330Y1

**SMC421H1 Jews and Judaism in Christian Traditions [26S]**
A seminar devoted to examining the changing representation of Jews and Judaism within Christian traditions over the past two thousand years.
Prerequisite: Completion of 10 full-course credits
Recommended preparation: SMC200Y1

**SMC422H1 Sacred Space in the Christian Tradition [26S]**
An examination of the development of sacred space in the early Church, reflection upon its place in the imaginative landscape of the European Middle Ages, and discussion of its implications for the understanding of space and place in our own culture.
Prerequisite: One course in the History of Christianity; completion of 10 full-course credits
Recommended preparation: SMC200Y1

**SMC423H1 Topics in the Theology of Culture I [26S]**
A seminar course engaging in theological reflection on and response to the shifting cultural realities of the twenty-first century. Topics for close examination may include: post-modernity, home and homelessness, and mass popular culture.
Prerequisite: Completion of 10 full-course credits
Recommended preparation: SMC200Y1/208Y1/305H1/330Y1/426H1

**SMC424H1 Topics in the Theology of Culture II [26S]**
A seminar course engaging in theological reflection on and response to the shifting cultural realities of the twenty-first century. Topics for close examination may include: post-modernity, home and homelessness, and mass popular culture.
Prerequisite: completion of 10 full-course credits
Recommended preparation: SMC200Y1/208Y1/305H1/330Y1/426H1

**SMC425H1 Uses of the Bible in the Middle Ages [26S]**
An examination of the use of the Bible in the mediaeval period (500-1500) as source of motifs in art and architecture, provider of stories for poetry and drama, authority in legal and political debate, and tool for teaching and preaching.
Prerequisite: One course in mediaeval history, art or literature; knowledge of the biblical text; completion of 10 full-course credits

**SMC426H1 The Social Justice Seminar [26S]**
A research seminar to explore the foundational principles and historical applications of Catholic social teaching since Rerum novarum. Special emphasis placed on scriptural texts, magisterial documents, and contemporary case studies. Integral to the course is a major paper based on primary source research.
Prerequisite: SMC203Y1/103Y1; completion of 10 full-course credits
Recommended preparation: SMC309H1/RLG336H1

**SMC428H1 The Spiritual in Modern Art [26L]**
An examination of key moments and figures in the recent history of the visual arts in Western culture and especially in Canada in which religious and spiritual themes surface in new and surprising ways. The course includes a study of works in the Donovan Collection at St. Michael's College.
Recommended Preparation: SMC 200Y1

**SMC429H1 Topics in Comparative Theology [26S]**
In the 20th and 21st centuries, religious thinkers increasingly cross religious boundaries in theological reflection. Each year, this seminar will focus on one topic, studied in confessional and comparative perspective, or on two or three major figures in the discipline of comparative theology. Sample topics include: salvation, mission, God, incarnation.

**SMC432H1 Christianity and Science on Human Sexuality [26S]**
A seminar addressing diverse and sometimes conflicting scientific, philosophical, and theological approaches to human sexuality, with a special focus on Habermas and compatibilism. Includes a systematic exploration of the ontology of the sexed human body and transsexuality, the metaphysics of human sexuality, and issues related to a science of orgasm.
Prerequisite: Permission of the instructor
Recommended preparation: PHL243H1; SMC230Y1

**SMC433Y1 Independent Studies in Christianity and Culture**

**SMC434H1 Independent Studies in Christianity and Culture**
An independent research project to be proposed by the student and supervised by a Christianity and Culture faculty member. The student, in consultation with the faculty member, may choose either a one-term (H) or a two-term (Y) project.
Prerequisite: Ten full courses

## Christianity & Culture: Major Program in Religious Education Courses

**JSV200H1 Communication and Conflict Resolution in Education [26L]**
This course aims to develop an understanding of social conflict and cultural diversity. How does conflict act as a catalyst for change? What do socio-cultural, cognitive, and motivational approaches teach us about conflict? Topics include: effects of conflict, human rights principles, cross-cultural understanding.
Prerequisite: Enrolment in Christianity and Culture CTEP Major or Victoria College CTEP Education Minor

**SMC271H1 Equity and Diversity in Education [26L]**
The course focuses on raising awareness and sensitivity to equity and diversity issues arising in schools and cultural communities. It examines how oppression works, and how cultural and educational resources may be brought to bear on reducing oppression and improving equity. The course includes a 20-hour field experience.
Prerequisite: Enrolment in Christianity and Culture CTEP Major
Exclusion: VIC260H1

**SMC272H1 Child and Adolescent Development in Education [26L]**
The course will provide an overview of developmental psychology from early childhood to late adolescence in relation to education, including: cognitive, social, emotional, moral, physical, religious and language development. It will examine various influences (family life, schooling and culture, etc.). This course includes a 20-hour field experience.
Prerequisite: Enrolment in Christianity and Culture CTEP Major
Exclusion: VIC261H1

**SMC471H1 Internship**
Arranged by each student in consultation with faculty, the internship enables teacher candidates to integrate, extend and deepen their learning experiences in a way not otherwise available in the program. Those wishing to take this course must have their program approved by the Program Director.
Prerequisite: Enrolment in Christianity and Culture CTEP Major

## Mediaeval Studies Courses

**SMC210Y1 The Mediaeval Tradition [52L, 26T]**
This course provides an introduction to the thought and culture of the European Middle Ages. Students are introduced to the important monuments of mediaeval History, Thought, Literature, and Art, and follow some of the common threads that run through all these disciplines. The course explores some of the classical antecedents and chief expressions of mediaeval life and thought.

**SMC211H1 The Middle Ages and the Movies [26L, 13T]**
This course examines the ways mediaeval themes have been presented in the cinema over the last century by taking exemplary films from different countries and epochs. The purpose is to explore each on three levels: the mediaeval reality, the subsequent legendary or literary elaboration, and the twentieth-century film rendition, regarded equally as work of art, ideology and economic product.

**SMC222H1 Mediaeval Latin I (formerly LAT322H1, SMC332H1) [52S]**
A survey of the prose and poetry of the Middle Ages with emphasis on the linguistic features of mediaeval Latin.
Prerequisite: LAT100Y1
Exclusion: LAT322H1, SMC332H1

**SMC323H1 Mediaeval Latin II (formerly LAT323H1) [52S]**
Study of a wide variety of mediaeval Latin texts.
Prerequisite: LAT202H1/SMC222H1

**SMC357H1 The Mediaeval Child [26L]**
This course examines birth, nourishment, education and death of children in the Middle Ages. What was it like to be a mediaeval boy or girl? What kind of relationship did children have with their parents, with their teachers, or with other children? Primary sources are examined and interdisciplinary methods employed.
Recommended preparation: SMC210Y1/HIS220Y1

**SMC358H1 The Mediaeval Book [26S]**
This course examines the most salient aspects of mediaeval manuscript culture. We will study, first, how the parchment for books was folded, pricked, ruled and bound, and second, what scripts were employed in the different codices. We will also examine the various types of books made in the Middle Ages and the challenges they pose to modern scholars.
Recommended preparation: LAT100Y1; SMC210Y1 or a course in mediaeval history.

**SMC359H1 Mediaeval Theology [26L]**
An introduction to the discipline of theology as taught in the mediaeval schools. Building on a basic knowledge of Christian scriptures and of philosophical argument, this course will offer an organic exposition of mediaeval theology, together with an introduction into the scientific method of theological investigation as practised in the Middle ages.
Recommended preparation: SMC210Y1

**SMC360H1 Vernacular Literature of the Middle Ages (formerly SMC420H1) [26L]**
This course surveys mediaeval vernacular literature within the cultural context of Europe and considers the development of different literary genres such as epic, romance and lyric. Relations between vernacular literatures, and between vernacular and latin literature are also studied.
Recommended preparation: SMC210Y1
Exclusion: SMC420H1

**SMC361H1 Mediaeval Law (formerly SMC405H1) [26S]**
Mediaeval jurisprudence combines the high technical quality of Roman law with the requirements of Christianity. The seminar provides an overview of the development of mediaeval learned jurisprudence; select texts from Roman and canon law, with their glosses, are read in order to explore more specifically the methods and concerns of mediaeval jurists.
Recommended preparation: HIS 220Y1/SMC 210Y1
Exclusion: SMC405H1

**SMC402H1 Mediaeval Canon Law [26S]**
The rise of the science of canon law is one of the great intellectual developments of the High Middle Ages. In the proposed course, the aims and techniques of the canonical jurists would be explored by a close reading of their normative texts and glosses.
Recommended preparation: HIS220Y1/SMC203Y1/SMC210Y1

**SMC403H1 The Mediaeval Church [26S]**
This seminar explores the development of some of the institutions of mediaeval Christendom, such as guilds, the University and the Papacy, in relation to social and intellectual movements of the age.
Recommended preparation: SMC210Y1/HIS220Y1

**SMC406H1 Mediaeval Seminar II [26S, 13T]**
A fourth-year seminar on a topic to be determined annually.
Prerequisite: Permission of the instructor
Recommended preparation: SMC210Y1 or other medieval courses

**SMC407Y1 Mediaeval Seminar I [52S, 26T]**
A fourth-year seminar on a topic to be determined annually.
Prerequisite: Permission of the instructor
Recommended preparation: SMC210Y1 or other mediaeval courses

**SMC435H1 Independent Studies in Mediaeval Studies**
An independent research project to be proposed by the student and supervised by a member of faculty affiliated with the Mediaeval Studies Program.
Prerequisite: Ten full courses

**SMC490Y1 Senior Essay in Mediaeval Studies [TBA]**
A scholarly project chosen by the student in consultation with an instructor and approved by the Program Co-ordinator. Arrangements for the choice of topic and supervisor must be completed by the student before registration.

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### Other St. Michael's College Courses

**SMC299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**SMC380H1 St. Michael's College Independent Studies**

**SMC381Y1 St. Michael's College Independent Studies**
An opportunity for students to pursue an independent course of study not otherwise available in the Faculty of Arts and Science.
Prerequisite: Permission of the Principal of St. Michael's College. Normally restricted to students who have completed at least ten full courses with a CGPA of at least 2.5. Application forms are available in the St. Michael's College Principal's Office. A completed application signed by the student and by the supervising instructor must be submitted to the St. Michael's College Principal's Office for approval; at least one month before the beginning of the semester.

**SMC480H1 St. Michael's College Independent Studies**

**SMC481Y1 St. Michael's College Independent Studies**
An opportunity for students to pursue an independent course of study not otherwise available in the Faculty of Arts and Science.
Prerequisite: Permission of the Principal of St. Michael's College. Normally restricted to students who have completed at least fifteen full courses with a CGPA of at least 2.5. Application forms are available in the St. Michael's College Principal's Office. A completed application signed by the student and by the supervising instructor must be submitted to the St. Michael's College Principal's Office for approval at least one month before the beginning of the semester.

## Faculty

### Professors Emeriti

C.H. Bedford, MA, Ph D
G. Bisztray, MA, Ph D
B. Budurowycz, MA, BLS, Ph D
L. Dolezel, Ph D
K.A. Lantz, MA, Ph D
R. Lindheim, MA
R.H. Marshall, Ph D
N. Pavliuc, MA, Ph D
C.V. Ponomareff, MA, Ph D
R.D.B. Thomson, MA, D Phil
N.N. Shneidman, MPHE, MA, Dip REES, Ph D

### Professor and Chair of the Department

C. E. Kramer, MA, Ph D

### Associate Professor and Graduate Coordinator

T. Trojanowska, MA, Ph D

### Associate Professor and Undergraduate Coordinator

L. Livak, MA, Ph D

### Professors

C.J. Barnes, MA, Ph D
D.T. Orwin, MA, Ph D

### Associate Professors

V. Ambros, MA, Ph D
R. Bogert, MA, Ph D
T. Koznarsky, Ph D
J. Schallert, Ph D
M. Tarnawsky, Ph D

### Lecturer in Russian, Language Program Coordinator

Julia Mikhailova, MA, Ph D

For over one thousand years the countries of the Slavic world have played a prominent role in international life, and have provided our civilization with numerous writers, musicians, philosophers, religious and political thinkers, and scientists of note. The richness of the Slavic cultures has a special significance for Canada, since the vast influx of Slavs, which began in the last century, has contributed greatly to the Canadian cultural mosaic.

The Department of Slavic Languages and Literatures offers an extensive range of courses in Russian, Polish, Ukrainian, Czech and Slovak, Croatian, Serbian, and Macedonian languages and literatures, as well as in Slavic linguistics. Within this range there are courses suitable for inclusion in a wide variety of programs of study, whether or not the student has studied any Slavic language previously. Some students may specialize in Slavic Languages and Literatures, i.e. Russian, Polish or Ukrainian (see Programs of Study). Others may simply wish to gain a working knowledge of Russian or another Slavic language to aid their reading of important material in another field. Language study emphasizes small instructional groups, with some laboratory or conversational practice, and the use of literary materials.

Courses in the literatures and cultures of various Slavic countries explore the artistic, intellectual, and social currents of their civilizations, trace the literary history of each country, and examine the works of major authors. To encourage an awareness of the significance and pertinence of Slavic literatures and cultures, many of our courses are offered in translation.

The growing importance of Eastern Europe in contemporary affairs has had the effect of making academic study of this area especially lively and relevant. The student whose interest in the Russian or East European world is political, historical, or sociological can specialize in Russian and East European Studies, or pursue a course in Political Science, History, or Sociology, and at the same time take language courses, and perhaps selected courses in literature, in this Department. Students planning to specialize in Economics, Psychology, Mathematics, or any number of other fields, who have a special interest in the Russian or East European area, will find an advanced knowledge of Russian or of another Slavic language an important intellectual and professional asset.

Students intending to take a Program offered by the Department are asked to study carefully the Programs of Study and are urged to begin their language training as soon as possible. A Departmental brochure is available on request.

Undergraduate Secretary:
Professor Joseph Schallert, 121 St. Joseph Street, Room 419, joseph.schallert@utoronto.ca, 416-926-1300, ext. 3246.

Web site: www.utoronto.ca/slavic

## Slavic Languages and Literatures Programs

Enrolment in the Slavic Languages and Literatures programs requires the completion of four courses; no minimum GPA required.

### Croatian And Serbian Studies (Arts program)

**Major program:**
(6 full courses or their equivalent)

1. SLA 307Y1 or SLA 316Y1. Prerequisite for SLA 307Y1 is SLA 207Y1 or equivalent knowledge. Prerequisite for SLA 316Y1 is SLA 237Y1 or equivalent knowledge. SLA207Y1 or SLA237Y1, if taken, also count toward the program requirements.
2. SLA 217Y1 or SLA 227Y1
3. A minimum of two full courses or equivalent from: SLA 217Y1, 227Y1, 327H1, 337H1, 347H1, 407H1, 417H1, 427H1
4. Additional courses needed to satisfy requirements. Students may choose SLA 202H1, SLA 330Y1, or courses related to Croatian and Serbian studies offered in other departments and approved by the undergraduate coordinator of the Slavic Department.

**Minor program:**
(4 full courses or their equivalent)

Four approved courses from the offerings indicated in the major program above.

# Slavic Languages and Literatures

## Czech And Slovak Studies (Arts program)

**Major program:**
(6 full courses or their equivalent)

First Year:
SLA 205Y1
Higher Years:
1. SLA 305Y1
2. Four courses from: HIS 251Y1; SLA 215H1, 225H1, 404H1, 405H1, 425Y1, 435H1, 445H1, 455H1, 465H1, 475H1

**Minor program:**
(4 full courses or their equivalent)

1. SLA 205Y1/305Y1
2. Three courses from: HIS 251Y1; SLA 215H1, 225H1, 305Y1, 404H1, 405H1, 425Y1, 435H1, 445H1, 455H1, 465H1, 475H1

## Polish Language And Literature (Arts program)

**Major program:**
(6 full courses or their equivalent)

First Year:
SLA 106Y1
Higher Years:
1. SLA 206Y1, 216Y1, 306H1, 336H1
2. Two courses from: SLA 226H1, 346H1, 356H1, 406H1, 416H1, 424H1, 436H1, 446H1, 476H1

**Minor program:**
(4 full courses or their equivalent)

1. SLA 106Y1/206Y1, 216Y1
2. Two other Polish offerings, including at least one 300+ series course

## Polish Studies (Arts program)

**Major program:**
(7 full courses or their equivalent)

1. A sequence of two of the following language courses, depending on the student's skill level:
   a) SLA 106Y1, 206Y1;
   b) SLA 206Y1, 306H1/336H1
   c) SLA 306H1/336H1, 346H/356H1/SLA 216Y1
3. HIS 353Y1
4. Three courses chosen from groups A and B below:

**Group A: Slavic**
SLA 226H1, 346H1, 356H1, 406H1, 416H1, 436H1, 446H1, 476H1

**Group B: History**
HIS 251Y1, 433H1, 461H1

**Minor program:**
(4 full courses or their equivalent)

1. A sequence of two of the following language courses, depending on the students skill level:
   a. SLA 106Y1, 206Y1;
   b. SLA 206Y1, 306H1/336H1;
   c. SLA 306H1/336H1, 346H1/356H1
2. SLA216Y1
3. HIS 353Y1

**Polish - see also: Modern Languages And Literatures; Linguistics And Languages**

## Russian Language And Literature (Arts program)

**Specialist program:**
(9 full courses or their equivalent including at least one full course at the 400-level)

First Year:
SLA 100Y1
Higher Years:
1. SLA 220Y1, 240H1/241H1, 320Y1, 339H1, 340H1, 420Y1
2. Three courses from: SLA 234H1, 244H1, 250Y1, 252H1, 302H, 311H1, 312H1, 314H1, 315H1, 317H1, 321Y1, 330Y1, 331H1, 332H1, 343H1, 344H1, 351H, 367H1, 370H1, 402H1, 403H1, 415H1, 420Y1, 423H1, 433H1, 440H1, 441H1, 449H1, 450H, 451H1, 452Y1, 460H1, 461H1, 462H1, 464H1

**Major program:**
(7 full courses or their equivalent)

First Year:
SLA 100Y1
Higher Years:
1. SLA 220Y1, 240H1/241H1, 320Y1, 339H1, 340H1
2. Two courses from: SLA 234H1, 244H1, 250Y1, 252H1, 302H1, 311H1, 312H1, 314H1, 315H1, 317H1, 321Y1, 330Y1, 331H1, 332H1, 343H1, 344H1, 351H, 367H1, 370H1, 402H1, 403H1, 415H1, 420Y1, 423H1, 433H1, 440H1, 441H1, 449H1, 450H, 451H1, 452Y1, 460H1, 461H1, 462H1, 464H1

NOTE: Students with OAC Russian or equivalent will take the language sequence SLA 220Y1, 320Y1, 420Y1.

**Minor program:**
(4 full courses or their equivalent)

Any combination approved by the Department of two Russian language courses and two courses in Russian literature, including at least one course at the 300+series level

## Russian Language (Arts program):

**Minor program**
(4 full courses or equivalent, including one 300+series course)

Four courses from: SLA 100Y1, 220Y1, 320Y1, 321H1, 330Y1, 420Y1, 452Y1

**Russian - see also: Modern Languages And Literatures, Linguistics And Languages**

## Russian Literature in Translation (Arts program)

**Minor program:**
Four full courses or their equivalent, including one 300+ series course.

1. SLA240H1 and 241H1
2. SLA339H1 and 340H1
3. Two additional approved full-course equivalents in Russian literature and/or culture.

## Slavic Languages (Arts program)

Consult Department Of Slavic Languages And Literatures

### Specialist program:
(11 full courses or their equivalent, including at least one 400-series course)

LIN 100Y1 and approved first courses in any two Slavic languages
Higher Years:
1. LIN (228H1, 229H1)/(231H1/232H1); SLA 330Y1
2. Remainder of 3-year sequences in the two Slavic languages
3. Two courses from: SLA 425Y1, 430Y1, 438H1, 452Y1, 468H1 chosen to correspond with the Slavic languages studied

## Slavic Languages and Literatures (Arts program)

Consult Department of Slavic Languages and Literatures

### Specialist program:
(14 full courses or their equivalent, including at least one 400-series course from any TWO of Groups A, B, C above)

**A. Russian**
First Year:
SLA 100Y1
Higher Years:
1. SLA 220Y1, 240H1, 241H1, 320Y1, 339H1, 340H1
2. Two courses from: SLA 234H1, 244H1, 250Y1, 252H1, 311H1, 312H1, 314H1, 315H1, 317H1, 321H1, 330Y1, 331H1, 332H1, 343H1, 344H1, 351H, 367H1, 370H1, 402H1, 403H1, 415H1, 420Y1, 423H1, 433H1, 440H1, 441H1, 449H1, 450H, 451H1, 452Y1, 460H1, 461H1, 462H1, 464H1

**B. Polish**
First Year:
SLA 106Y1
Higher Years:
1. SLA 206Y1, 216Y1, 306H1, 336H1, 406H1/406Y1, 416Y1
2. Two courses from: SLA 226H1, 330Y1, 346H1, 356H1, 406H1/406Y1, 416Y1, 436H1, 446H1, 476H1

**C. Ukrainian**
First Year:
SLA 108Y1
Higher Years:
1. SLA 208Y1, 308Y1
2. Four courses from: SLA 218Y1, 228H1, 238H1, 248H1, 253H1, 318H1, 328H1, 330Y1, 408H1, 418H1, 419Y1, 428Y1, 429H1, 438H1, 448H1, 458H1, 468H1

## Ukrainian Language And Literature (Arts program)

Consult Department of Slavic Languages and Literatures.

### Specialist program:
(9 full courses or their equivalent, including at least one 400-series course)

First Year:
SLA 108Y1
Higher Years:
1. SLA 208Y1, 218Y1, 308Y1, 438H1, 468H1
2. Four courses, including at least one at the 300+level., from: SLA 228H1, 238H1, 248H1, 253H1, 318H1, 328H1, 330Y1, 408H1, 418H1, 419Y1, 428Y1, 429H1, 448H1, 458H1. Courses in Ukrainian history may also be counted toward this programme.

### Major program:
(6 full courses or their equivalent)

SLA 108Y1
Higher Years:
1. SLA 208Y1, 218Y1
2. Three courses, including at least one at the 300+level., from: SLA 228H1, 238H1, 248H1, 253H1, 308Y1, 318H1, 328H1, 408H1, 418H1, 419Y1, 428Y1, 429H1, 438H1, 448H1, 458H1, 468H1. Courses in Ukrainian history may also be counted toward this programme.

### Minor program:
(4 full courses or their equivalent)

1. SLA 218Y1
2. Three Ukrainian courses, including one language course and at least one course at the 300+level. One course in Ukrainian history may also be counted toward this programme.

## Faculty of Arts & Science Language Citation

The Department of Slavic Languages and Literatures participates in the Faculty of Arts and Science's Language Citation initiative. Students may achieve this Citation in Croatian, Czech, Polish, Russian, Serbian, and Ukrainian. Students interested in completing the Language Citation in languages taught in the Slavic Department but not listed here should consult the Undergraduate Coordinator of the Department of Slavic Languages and Literatures.

Language study is a demanding and intellectually rewarding educational experience. Our students learn to communicate both orally and in writing in other languages and are thus able to experience other parts of the world in more intimate ways. Their access to other cultures opens doors for further study and employment. Students in our department also have the opportunity to read a vast array of world-renowned authors in the original languages, as well as works – normally not available in English – in other areas of study, for example, cinema studies, drama, folklore, history, intellectual history, philosophy, mathematics, and political science.

The Language Citation recognizes a significant level of achievement in language study. For course selection students should consult the Undergraduate Coordinator as early as possible since not every language course is offered each year. Students who begin language study at the Intermediate level should consult the Undergraduate Coordinator for approval of advanced literature and culture courses that may satisfy the requirements for the Language Citation.

The Language Citation in Croatian or Serbian is available to students who complete either SLA307Y1 or SLA316Y1 plus an additional FCE, approved by the department, in South Slavic literature or culture with readings and discussion in the target language with a grade of at least B-.

The Language Citation in Czech is available to students who complete SLA204Y1 and 305Y1 with a grade of at least B-.

The Language Citation in Polish is available to students who complete SLA206Y1, SLA306H1 and SLA336H1 with a grade of at least B-.

The Language Citation in Russian is available to students who complete, with a grade of at least B- , two FCEs: SLA220Y1, SLA320Y1, or SLA420Y1.

The Language Citation in Ukrainian is available to students who complete SLA208Y1

Students should note that, as explained on the page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

**Ukrainian - See Also Modern Languages And Literatures; Linguistics And Languages**

## Slavic Languages and Literatures Courses

See page 32 for Key to Course Descriptions.

(Croatian; Czech & Slovak; Macedonian; Polish; Russian; Serbian; Slavic Linguistics; Ukrainian)

For Distribution Requirement purposes (see page 26), all SLA courses are classified as HUMANITIES courses.

### Note

The Department reserves the right to place students in the language course best suited to their linguistic preparation.

**HUM199H1/Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**SLA202H1 Jewish Communities in Slavic Countries [26L]**
Literature about the Jewish community in Slavic countries. How do these Jewish minorities perceive and identify themselves? How are they perceived by others?

**SLA251H1 Origins of Slavic Civilization [26L]**
Surveys the history, archaeology, anthropology, religions, literature, architecture, and art of the Slavs from their pre-historic origin to the Baroque era. Examines the rise of the medieval Slavic nations, states, churches, and cultures; Scythian, Greco-Roman, Byzantine, Western European, and Oriental influences. Lectures are richly illustrated with slides.

**SLA253H1 East Slavic Civilizations to the 18th Century [26L]**
A survey of East Slavic civilizations through art, architecture, literature and religion. Includes the Scythians, whose battle skills and gold fascinated the ancient world; Kyivan Rus' and its princes, monks and martyrs; the rise of the Cossacks; and Peter the Great, founder of the Russian Empire and St. Petersburg. Lectures, with emphasis on visual presentation. Readings in English.

**SLA254H1 Stone Books to Sky Books: Book as Institution, Commerce and Art in the Slavic Tradition [13L, 13S]**
Evolution of book and written/printed media in the Slavic world: legends (and forgeries) of ancient letters, mediaeval illuminated manuscripts, baroque visual poetry, pocket books for enlightened ladies and peasant comic strips, futurist painting and writing on faces, hand-written and painted books of the modernist artists and poets. Readings in English.

**SLA255H1 Slavic Languages: Unity and Diversity [26L/S]**
The course introduces the student to the exploration of linguistic relations among Slavic languages and dialects, as well as to language contacts between Slavic and its neighbors. Language is viewed in connection with history, geography, mythology and religion, family and social structure, literature, and alphabets.
Prerequisite: First-year course of any Slavic language (cf. SLA 100Y, 105Y, 106Y, 108Y, 109Y, 207Y, 237Y) or knowledge of a Slavic language

**SLA299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**SLA302H1 The Imaginary Jew [39S]**
The course examines the genesis and evolution of the image of the Jew, central to all European cultures, from the theology and psychology of Christian anti-Judaism to their reflection in folklore, visual, plastic, and verbal arts, and to the survival of the imaginary Jew in secular forms. Special attention is given to the Jews of Slavic and East European imagination. All readings are in English.

**SLA380H1 Language, Politics and Identity [26S]**
Examines the multi-faceted nature of languages by comparing issues of language contact and conflict in the Former Soviet Union and in Central and Southeastern Europe. Explores issues such as language standards, language rights, language conflict, and linguistic identity.
Recommended preparation: Knowledge of at least one Slavic language is recommended.

**SLA395Y1 Readings in Slavic Literature [52S]**
This course examines a special topic in Slavic Literature. The topic varies from year to year. Consult the department for more details.

**SLA396H1 Readings in Slavic Studies [26S]**
This course examines a special topic in Slavic Studies. The topic varies from year to year. Consult the department for more details.

**SLA398H0 Independent Experiential Study Project**

**SLA399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**SLA422Y1 History into Literature: Jaan Kross and the 20th Century East European Historical Novel [26L, 26S]**
A seminar focused on contemporary Estonian novelist Jaan Kross (1920- ), whose historical fictions of the distant past resonated analogically with Soviet realities. East and West European traditions of historical fiction; questions of national identity, cultural diversity, and postSoviet challenges to revisioning the past. Readings (in English) also include Pushkin, Tolstoy, Tynianov and Sienkiewicz.

**SLA424H1 Theatre and Cinema in Extremis [26L, 26P]**
A study of the effects on aesthetic form of the totalitarian experience in Russia, Poland and Czechoslovakia. The Russian, Polish, and Czech avant-garde, poised between the bankruptcy of traditional aesthetics and the search for new forms in the post-revolutionary/post-Holocaust world. Co-taught course. Readings in English. (Offered every three years)
Exclusion: SLA424Y1
Recommended preparation: Prior completion of a course in drama or cinema

**SLA 453H1 Women in East European Fiction [26S]**
In East European literary texts of the post 1990 era, this course examines connections and disconnections between gender and social change, and women`s resistant and compliant discourses on war, nationalism, reproduction, the fictional representation of rape as a war crime, and women writers` responses to postcommunist eroticism and feminisms. All readings in English.

**SLA476H1 Twentieth Century Theatre and Performance: Modernism, Avant-Garde, Postmodernism [39S]**
Theoretical thought and theatre practice of these directors are placed within a context of theatre reforms in the 20th century, from naturalism and symbolism, through retheatricalization of theatre, to a ritualistic and mythic holy theatre. Readings in English.
Prerequisite: Permission of instructor

**SLA477H1 Performance: Theory and Practice [26S]**
This course begins with selected theoretical approaches to performance. It then focuses on the examples of major European artists and performances of the 20th and 21st centuries and their impact on our understanding of contemporary staging practices. Eventually, these theories and practices are used for different forms of analysis of the selected performances, including live productions in Toronto theatres.

**SLA485H1 Laughter and Forgetting in Milan Kundera [26S]**
Laughter and forgetting is a recurrent theme in both Kundera's fictional and essayistic work. This class will examine the variations of this topic in Kunders's work and discuss the prosaic, dramatic and essayistic texts of his Czech period and attempt to place Kundera within the European context of the 'art of fiction'. All readings in English.

**SLA498Y1 Independent Studies**
A scholarly project on an approved literary or linguistics topic supervised by one of the Department's instructors.
Prerequisite: Permission of the Department

**SLA499H1 Independent Studies**
A scholarly project on an approved literary or linguistics topic supervised by one of the Departments instructors.
Prerequisite: Permission of the Department

## Croatian and Serbian Courses

**SLA207Y1 Elementary Serbian [104P]**
Basic phonology, morphology and sentence structure. Composition, oral practice and readings from Serbian literature. Open only to students with little or no knowledge of Serbian. (Offered in alternate years)

**SLA217Y1 Serbian Cultural History [52L]**
A survey of culture in literature, film and the fine arts from the coming of the Serbs to Southeastern Europe until World War I. The legacy of Byzantium and Rome; the Middle Ages; the Baroque Enlightenment; the Serbian National Revival; Romanticism, Realism, and Modernism. Readings in English.
Exclusion: SLA217H1

**SLA227Y1 Croatian Cultural History [52L]**
A survey of culture in literature, film and the fine arts from the coming of the Croats to Southeastern Europe until World War I. The Greek and Latin heritages; the medieval Croatian State; Humanism and Reformation among the Croats; the Dalmatian Renaissance and Baroque; the Illyrian Movement and Croatian National Revival; Romanticism, Realism, and Modernism. Readings in English.
Exclusion: SLA227H1

**SLA237Y1 Elementary Croatian [104P]**
Basic phonology, morphology and sentence structure. Composition, oral practice and readings from Croatian literature. Open only to students with little or no knowledge of Croatian. (Offered in alternate years)

**SLA307Y1 Advanced Serbian [104P]**
Systematic study of orthography and syntax. Advanced composition and oral practice. Reading and translation of more complex texts from Serbian writers. (Offered in alternate years)
Prerequisite: SLA207Y1 or equivalent knowledge of the language

**SLA316Y1 Advanced Croatian [104P]**
Systematic study of orthography and syntax. Advanced composition and oral practice. Reading and translation of more complex texts from Croatian writers. (Offered in alternate years)
Prerequisite: SLA237Y1 or equivalent knowledge of the language

**SLA327H1 The Balkan Short Story [26S]**
Studies of short stories written since 1950. Focus on innovative writers and current trends. Readings in the original and English.

**SLA337H1 Political Drama from Dubrovnik to the Danube [26S]**
Classic plays from the Renaissance to the present studied in reference to the contemporary national, ethnic and ideological background of south-eastern and central Europe.

**SLA347H1 South Slavic Folklore [26S]**
Historical and stylistic study of the customs, oral lore and traditions among pagan, Roman Catholic, Eastern Orthodox and Moslem Slavs. The role of folklore in the ethnogenesis of national culture. Readings in the original and English.

**SLA407H1 Modern Croatian Bards [26S]**
Verse since 1900 by the major poets of the nation. Focus on the Croatian Moderna, Expessionism and other Avant-Garde movements. Readings in Croatian and English.

**SLA417H1 Modern Serbian Bards [26S]**
Verse since 1900 by the major poets of the nation. Focus on the Serbian Moderna, Expessionism and other Avant-Garde movements. Readings in Serbian and English.
Exclusion: SLA407H1

**SLA427H1 Bosnian, Croatian and Serbian On Film [13S, 13P]**
Bosnian, Croatian, and Serbian studied through film. Cultural and linguistic comprehension of scenario texts and inter-active screenings of classic films from the 1950s to the present. Oral and written exercises in speech patterns, appearance, behaviour and cultural attitudes. Films subtitled in original language. Elementary language knowledge is required.
Recommended preparation: SLA307Y or SLA326Y

## Czech Courses

**SLA105Y1 Elementary Czech [104P]**
Grammar, composition, and conversation. Readings from Czech literature. Open only to students with little or no knowledge of the language.

**SLA204Y1 Intermediate Czech (formerly SLA205H1) [104P]**
Using selected texts of diverse styles, this class surveys Czech grammar and introduces various aspects of syntax, composition and translation. Special attention will be paid to oral practice.
Exclusion: SLA205H1

**SLA215H1 Czech and Slovak Cultures (formerly SLA215Y1) [26L]**
Some of the most important features of Czech and Slovak cultural history are introduced in a survey of the national myths, traditions and cultural trends. (Offered every three years)
Exclusion: SLA215Y1

**SLA225H1 The Czech and Slovak Cinema [26S, 13P]**
From the "New Wave" of the 60s to the present. The films of major directors - Forman, Menzel, Chytilová - and of talented newcomers. Screening of films censored and prohibited over the last 25 years. English subtitles. (Offered every three years)

**SLA305H1 Advanced Czech [104S]**
Morphology, syntax, composition and translation, oral practice. Contemporary Czech texts representing diverse styles.
Prerequisite: SLA205Y1

**SLA404H1 From The National Revival to Modernism: Czech Literature of the 19th Century [26S]**
Beginning with the forged manuscripts of the early 19th century this course examines Czech Romanticism, Realism and Symbolism within the context of European culture. Readings include works by Macha, Nimcova, Neruda, Zeyer, Havlieek Borovsky. (Offered every three years). Readings in Czech and Slovak.
Prerequisite: SLA305Y1 or permission of the instructor
Exclusion: SLA405Y1

**SLA405Y1 On the Waves of the Avant-garde and Beyond: Czech Literature of the 20th Century (formerly SLA405H1) [52S]**
The experiments of the 1920s serve as a point of departure for studies in Czech culture from the early 20th century to the present artistic innovations. Readings include works by Jaroslav Seifert, Karel Teige, Karel apek, F. Langer, V. Nezval, M. Kundera, V. Linhartová and others. (Offered every three years). Readings in Czech.
Prerequisite: SLA305Y1 or permission of the instructor
Exclusion: SLA405H1

**SLA425Y1 History of the Czech Literary Language [52S]**
A study of original and translated works to trace the formation and development of the Czech literary language and to train students to differentiate literary styles, genres, and epochs. Readings include chronicles, sermons, travel accounts, dialogues and significant literary texts. (Offered every three years)
Prerequisite: Permission of instructor

**SLA435H1 Readings in Czech and Slovak [52P]**
Advanced students are presented with a variety of texts - literary, journalistic, scientific - tailored to their needs and interests. (Offered every three years)
Exclusion: SLA435Y1
Prerequisite: Permission of instructor

**SLA445H1 Magic Prague [39S]**
This class explores Prague as a meeting point of different cultures. Questions of centre and margin of multiculturalism and nationalism are discussed, based on texts by Jan Neruda, F. Kafka, M. Cvetaeva and others.

**SLA455H1 Czech Style and Syntax [39S]**
Based on the theories of the Prague linguistic Circle this class explores selected concepts of Czech stylistics and syntax. Examples include a variety of literary styles, genres, and epochs. This is a Literature course that requires an advanced knowledge of Czech.

**SLA465H1 Czech Short Story [39S]**
Introduces the problematics of public places and private spaces through various works of Czech writers from the 19th and 20th centuries. A variety of texts by modern Czech authors are explored through the prism of contemporary narrative theory. Special attention is paid to questions of differences in styles and epochs.

**SLA475H1 Modern Czech Drama [39S]**
Introduces students to the most important plays of contemporary Czech authors. (This is graduate/undergraduate course)

## Macedonian Courses

**SLA109Y1 Elementary Macedonian [78P]**
The basic features of the grammar of the Macedonian literary language. Acquisition of essential vocabulary for practical conversation and for comprehension. Development of reading and writing skills. Open only to students with little or no knowledge of the literary language. (Offered in alternate years)

**SLA209Y1 Intermediate Macedonian [78P]**
Systematic study of morphology. Reading and translation of more complex texts; more advanced composition; oral practice. (Offered in alternate years)
Prerequisite: SLA109Y1

## Polish Courses

**SLA106Y1 Elementary Polish [26L, 78P]**
Basic vocabulary, essential morphology, simple sentence patterns. Regular language laboratory sessions. Reading of contemporary texts. Open only to students with little or no knowledge of the language.

**SLA206Y1 Intermediate Polish [26L, 78P]**
Intensive study of morphology; translation into Polish. Literary texts; oral practice.
Prerequisite: Grade 13 Polish/SLA106Y1

**SLA216Y1 The Dynamics of Polish Literature and Culture: A Survey [52L]**
Major cultural traditions, historical processes, myths, and figures that have shaped and redefined Polish civilization and national identity are problematized and contextualized with the help of works of literature, history, philosophy, political science, music, visual and performing arts. Readings in English (also available in Polish). (Offered in alternate years)

**SLA226H1 Postwar Polish Cinema [26L, 26P]**
The "Polish School" in cinema, its predecessors and successors, their artistic accomplishments, major theoretical and thematic concerns, and their place on the map of European cinema. Films of Ford, Wajda, Polanski, Konwicki, Borowczyk, Has, Kawalerowicz, Zanussi, Kieslowski, and of the new generation of Polish film makers. Films and discussions in English. (Offered every three years)

**SLA306H1 Advanced Polish I [52P]**
Syntax, word formation, and stylistics. Compositions and precis. Critical evaluation of literary works and articles in Polish. Extensive reading and translation. (Offered in alternate years)
Prerequisite: SLA206Y1

**SLA336H1 Advanced Polish II[52P]**
Continuation of 306H1. A variety of cultural materials are used to advance skills in composition, translation, and conversation. Reading and discussion of literary and non-literary texts.
Prerequisite: SLA306H1 or permission of instructor

**SLA346H1 From Eastern Europe to European Union: Polish Postwar Culture [26S]**
Probes the paradoxes of politics, culture and everyday life by analyzing the complex coexistence of art and literature with changing cultural politics in a totalitarian and post-totalitarian system, with simplistic ideology and political dissent, and with prevailing myths about the West and the East. Readings in English (Polish for majors).
Recommended Preparation: SLA216Y1

**SLA356H1 What's New? Polish Culture Today [26S]**
The amazing cultural transformations of Poland in the last fifteen years within a changing Europe. The impact of these changes on Poland's social consciousness and the perception of identity, history, and nationhood. The most recent literature, fine arts, music, and popular culture. Readings in English (Polish for majors).
Recommended Preparation: SLA216Y1

**SLA406H1 The Curtain Never Falls: Polish Drama and Theatre in Context (formerly SLA406Y1) [26S]**
Study of drama as a literary and theatrical genre in its thematic and formal diversity in Polish literature from the 16th to the 20th century is combined with investigations of the role of the theatre as cultural institution in different periods of Polish history. Readings in English (in Polish for students in the major program). (Offered every three years)
Exclusion: SLA406Y1

**SLA416H1 Polish Fiction or a Disrupted Funeral of the Novel [26S]**
Innovative reading of Polish fiction from the 18th to the 20th century. Study of narrative strategies, of the function of language and literary conventions, of various styles and poetics, of the issue of representation. In addition to the works of fiction (primarily novels, but also short stories), the reading list includes literary criticism and literary theory. Readings in English (in Polish for students in the major program). (Offered every three years)

**SLA436H1 Rebels, Scoffers, and Jesters: Polish Culture from Different Perspectives [26S]**
An advanced course on artistic, political, aesthetic, philosophical, and ideological dissenters who questioned, undermined, and redefined the main traditions in Polish culture from the 18th to the 21st centuries. Readings in English (Polish for majors).
Prerequisite: SLA216Y1
Recommended Preparation: SLA336H1

**SLA446H1 Polish Poetry [26S]**
Polish literature is known for its exquisite poetry, from the works of Jan Kochanowski, Sep-Szarzynski, Adam Mickiewicz, Juliusz Slowacki, and C.K. Norwid, through the great modernists like Kasprowicz and Boleslaw Lesmian, to the postwar Polish School of Poetry of Czeslaw Milosz, Herbert, Tadeusz Rozewicz, Wislawa Szymborska, and Miron Bialoszewski. This course puts the canon of Polish poetry to a comparative, analytical, and re-interpretative test.
Prerequisite: SLA336H1 or Permission of instructor

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### Russian Courses

**SLA100Y1 Elementary Russian [130P]**
The basic features of the grammar. Acquisition of essential vocabulary for practical conversation and for comprehension. Development of reading and writing skills. (May not be taken by students who, in the judgement of the Department, qualify for entry into SLA220Y1 or SLA110H1)

**SLA110H1 Russian for Heritage Speakers [52P]**
This course is designed for students with Russian background -- students who are raised at home where Russian is/was spoken, who speak or merely understand basic Russian but are otherwise illiterate in Russian (cannot/ have difficulty reading and writing). This course will help heritage learners of Russian develop/ maintain writing and reading skills as well as develop cultural literacy.
Prerequisite: permission of instructor

**SLA211 H0 Russian in Action [52P]**
Emphasis on expansion of vocabulary, developing conversational and listening skills, and intensive practice in real-life situations. Offered as part of Summer Program in Moscow.
Prerequisite: Basic knowledge of Russian (novice or intermediate levels)

**SLA220Y1 Intermediate Russian [130P]**
Continuation of morphology. Word formation, composition, and translation. Intensive reading of classical and contemporary literary texts. Oral practice. Not intended for native speakers.
Prerequisite: Grade 13 Russian/SLA100Y1

**SLA231H0 Special Topics in Russian Studies [TBA]**
Usually offered during the summer through the Woodsworth Summer Abroad program. Content varies from year to year based on instructor.

**SLA234H1 Russian and Soviet Cinema [13L, 26P]**
A survey of the Russian cinematic tradition from its beginnings through the first decade following the disintegration of the USSR. The course examines the avant-garde cinema and film

theory of the 1920s; the totalitarian esthetics of the 1920s–1940s and the ideological uses of film art; the revolution in film theory and practice in the 1950s–1960s; cinema as medium of cultural dissent and as witness to social change. Students also acquire basic skills of film analysis. Taught in English, all films subtitled in English.

**SLA240H1 New Forms For New Ideas, 1820-1860 [26L, 13T]**
A novel in verse (Pushkin's Eugene Onegin), a novel stitched from stories (Lermontov's Hero of Our Times); a mock epic (Gogol's Dead Souls), and others. Struggling with social change and new ideas, Russian authors create unique works of fiction. Readings in English and, for majors, in the original. Offered alternate years.

**SLA241H1 New Forms For New Ideas, 1860-1900 [26L, 13P]**
Fathers and Children (Turgenev), Crime and Punishment (Dostoevsky), The Cossacks (Tolstoy), Lady With A Dog (Chekhov): why do these great Russian works and others still have the power to fascinate and change us? Readings in English and, for majors, in the original. Offered alternate years.
Exclusion: SLA240Y1
Recommended Preparation: SLA240H1

**SLA244H1 Studies in Film Genre I: Russian and Soviet Comedy [26S, 13P]**
Russian film comedy from the early 20th century to the present. Films are analyzed stylistically and in the context of the theory of laughter. We examine silent comedy, the Soviet propaganda film, the Stalinist musical comedy, satirical film, and the black comedy. Cinema as medium of cultural dissent and witness to social change. Taught in English. Films have English subtitles. No prior knowledge of Russian required.
Recommended Preparation: SLA234H1

**SLA250Y1 Russian Cultural Heritage [52L]**
A chronological multimedia survey of Russian culture from pre-Christian to post-Soviet times, emphasizing the clash between established authority and dissent, and tracing the conservative and radical currents in Russian literature and the arts, social thought and spirituality. Readings in English of classic poems, stories and novels, supplemented by videos and slides.

**SLA252H1 Russian Short Fiction [26S]**
An exploration of the elements of the short story through close readings of works by 19th and 20th century writers. Stories in translation by Pushkin, Gogol, Turgenev, Dostoevsky, Chekhov, Olesha, Babel, and others.

**SLA311H1 Gogol [26S]**
Fantastic and grotesque works by the most hilarious, obsessive, and delusional character in Russian literature, who teased, fascinated, and polarized readers. Gogol's writings are examined with various theoretical approaches. Includes cinematic (Taras Bulba, Viy, Overcoat) and musical (Rimsky-Korsakov's "Christmas Eve," Shostakovich's "Nose") re-creations of Gogol's works. All readings in English.

**SLA312H1 Nabokov [26S]**
A study of Vladimir Nabokov's novels written in Europe and the United States. Special attention is paid to the nature and evolution of Nabokov's aesthetics; the place of his novels in European and American literary traditions; Nabokov's creative uses of exile to artistic, philosophical and ideological ends; the aesthetic and cultural implications of the writer's switch from Russian to English. Novels studied: Defense, Despair, The Gift, The Real Life of Sebastian Knight, Lolita, Pnin, Pale Fire. The course is taught in English. All readings are in English.

**SLA314H1 Dostoevsky [13L, 13T]**
Crime and Punishment, The Brothers Karamazov, and short works. Dostoevsky's political, psychological, and religious ideas as they shape and are shaped by his literary art. Readings in English.

**SLA315H1 The Russian Novel: Case Studies [26S]**
One major Russian novel: its genesis, structure, artistic devices, and philosophical significance. Various critical approaches; cognate literary works. Students are expected to have read the novel before the course begins. Consult the Department for title of novel. Readings in English. (Offered in alternate years)

**SLA317H1 Tolstoy [26S]**
War and Peace or Anna Karenina, and some shorter works. Tolstoy's political, psychological, and religious ideas as they shape and are shaped by his literary art. Readings in English.

**SLA320Y1 Advanced Russian [130S]**
Syntax of the simple and compound sentence. Participles and gerunds. Problems in grammar and word formation. Composition, translation and conversation. Reading and discussion of literary and non-literary texts.
Prerequisite: SLA220Y1; native speakers of Russian admitted only with permission of instructor

**SLA321Y1 Conversational Russian [78S]**
Expansion of vocabulary and development of conversational skills. Discussion of a variety of topics (history, culture, art, politics, law, social and economic problems, contemporary events). Class is taught in round-table format.
Exclusion: Native speakers of Russian
Prerequisite: SLA220Y1and permission of instructor

**SLA331H1 Experiments and Revolutions in Art and Literature of the Late Russian Empire—Early Soviet Union [26S]**
Painting and literature from 1890–1930s. New revolutionary paths for the advancement of man and society through art. Symbolism, neoprimitivism, futurism, suprematism, and constructivism. Kandinsky, Bely, Zamyatin, Goncharova, Malevich, Tatlin, Filonov, and many others. All readings in English.

**SLA332H1 Literature and Music in Russia [13L, 13S]**
This course, on the interaction between artistic genres, introduces a series of Russian and other literary works of the 19–20th C that have inspired Russian musical masterpieces in the operatic, song, and symphonic repertoire. Texts are studied in translation. Basic Russian and musical literacy useful, but not obligatory.

**SLA339H1 The Twilight of an Empire: Russian Art and Thought in the European Fin de Siècle [13L, 26T**
The course explores Russia's artistic and intellectual responses to social and cultural upheaval in the two decades preceding WWI. Students engage in a comparative study of modernist art and thought in Russia and Western Europe. Topics may include Symbolism and Decadence in literature (Sologub, Belyi, Huysmans, Wilde, etc.); the fin de siècle sensibility in Russian and West European thought (Solòv'ev, Rozanov, Nordau, Weininger); visual and plastic arts (Art Nouveau, Secession, World of Art), music, and film. Taught in English. All readings are in English. No prior knowledge of Russian language or culture is required.

**SLA340H1 Narrative Revolution and Counterrevolution in 20th-Century Russian Prose [13L, 26T]**
The course examines experimental approaches to story-telling and genre limitations in Russian prose, as well as conservative reactions to these experiments, from 1917 to the end of the USSR. Topics may include: formalism, expressionism, stylization, and avant-garde in the 1920s (I. Babel', M. Zoshchenko, Iu. Olesha, A. Remizov, D. Kharms, V. Nabokov); the esthetics of Socialist Realism; the prose of poets (M. Tsvetaeva, B. Pasternak, O. Mandel'shtam, Vl. Khodasevich); underground and émigré memoirs (N. Mandel'shtam, E. Ginzburg, N. Berberova); genre crossovers: documentary novels, fictional criticism (V. Grossman, Abram Terts, L. Tsypkin). Taught in English. All readings are in English. No prior knowledge of Russian language or culture is required.

**SLA343H1 Post-Stalinist and Contemporary Russian Literature [13L, 13S]**
A study of major books and writers of the last forty years (novels, short stories, verse) which are involved in the post-Stalin artistic and cultural liberation, the rediscovery of Russian literature's links with its own vital tradition, and development of a Russian brand of modern and 'post-modern' writing. (Readings in English)

**SLA344H1 The Gulag in Literature [13L, 13S]**
The experience of prison as reflected by Russian writers. The rise and persistence of the prison camp system; physical and spiritual survival; the literary value of the prison experience. Works (in translation) by Dostoevsky, Solzhenitsyn, Shalamov, Ginzburg and others.

**SLA351H1 Language Practice [TBA]**
A practical course in Russian phonetics. Development of pronunciation skills. For students of all levels excluding native and heritage speakers.

**SLA367H1 Chekhov [26S]**
Selected stories, plays; stylistic, structural, and thematic analysis, literary and historical context, influence in Russia and the West. Readings in English and, for Specialists in Russian, in the original. (Offered in alternate years)

**SLA370H1 Russian Romantic Poetry [39S]**
An introduction to Russian Romanticism through the major works of one or more poets (chosen variously from Pushkin, Lermontov, Tyutchev, Baratynsky, et al.). Close readings of lyric and narrative verse. The rudiments of Russian versification. Relations with Western European poets. All texts read in Russian.
Co-requisite: SLA320Y1

**SLA400H1 Mediaeval Russia Writes [26L/S]**
Explores the development of the types of writing (e.g. chronicles, vitae, epics, tales, poetry) used to capture the cultural, political, religious, and aesthetic experiences of Mediaeval Rus' from the 11th to 17th century. Readings in English. Where appropriate, majors will read some excerpts in the original.
Recommended Preparation: Some reading knowledge of Russian desirable but not required

**SLA402H1 Advanced Russian Language Skills I [39S]**
A series of translation exercises from English to Russian (and some from Russian to English) designed to expand students' ability to respond to and translate a variety of advanced prose texts in different styles and registers.
Prerequisite: SLA320Y1 or permission of the instructor

**SLA403H1 Advanced Russian Language Skills II [39S]**
This course follows on from SLA 402, which is, however, not a prerequisite for enrolment. The course provides complex and stylistically varied exercises in translation from Russian into English and vice versa, and should be of equal benefit to those with native Russian and native English.
Prerequisite: SLA320Y1 or permission of the instructor

**SLA415H1 Studies in Russian Literature of the 18th Century [39S]**
The prose, poetry and dramaturgy of the most prominent literary figures of the eighteenth century, including Karamzin, Lomonosov, Fonvizin, Derzhavin and Krylov; aspects of literature during the reign of Peter I; literature and satirical journalism during the reign of Catherine II. (Taught in Russian)
Prerequisite: Permission of the instructor

**SLA420Y1 Studies in Russian Syntax and Stylistics [130S]**
Syntactic structures and their relation to meaning and style, word order, intonation. Consolidation of morphology, vocabulary building through extensive reading. Translation, composition, and oral practice.
Prerequisite: SLA320Y1; native speakers of Russian admitted only with permission of instructor

**SLA423H1 War and Peace (formerly SLA323H1) [39S]**
War and Peace in depth, and from various points of view, literary, political, philosophical, historical, and psychological. Various critical approaches; cognate literary works. Students are expected to have read the novel before the course begins. Readings in English. (Offered in alternate years)
Exclusion: SLA323H1
Recommended Preparation: SLA 317H1

**SLA433H1 Anna Karenina (formerly SLA324H1) [39S]**
Anna Karenina in depth, and from various points of view, literary, political, philosophical, historical, and psychological. Various critical approaches; cognate literary works. Students are expected to have read the novel before the course begins. Readings in English. (Offered in alternate years)
Exclusion: SLA324H1
Recommended Preparation: SLA 317H1

**SLA440H1 Introduction to Russian 19th Century Poetry (formerly SLA440Y1) [26S]**
Starting with pre-Pushkinian Classicism this course surveys the development of Russian lyric verse (with some excursions also into narrative verse); major topics studied include: Pushkin, Russian Byronism, the Pushkin Pleïade, Nekrasov's civic verse; philosophical verse by Tyutchev; Impressionist and Decadent poets. Readings in Russian.
Prerequisite: SLA320Y1/340H1 Exclusion: SLA440Y1

**SLA441H1 Modern Russian Poetry [26S]**
This course follows on from SLA440H, although the latter is not a prerequisite for enrolment. A chronological survey begins with Symbolist verse; special attention is devoted to Blok, Akhmatova, Mandelstam, Pasternak, Mayakovsky; other modernists studied include Tsvetaeva, Esenin, Zabolotsky; study of the post-Stalin revival begins with Voznesensky and Evtushenko, concluding with Iosif Brodsky. Readings in Russian.
Prerequisite: SLA320Y1 or 340H1

**SLA442H1 Russian Symbolism [26L]**
Course provides a general introduction to Russian Decadent/ Symbolist culture. Attention concentrates on belletristic prose, verse, and theatre of major Symbolists, as well as attendant theoretical and critical writings. Comparisons are made with similar trends in Western European literature, and links are established with similar phenomena in art, music, philosophy.
Prerequisite: 300 level competence in Russian, or permission of course instructor

**SLA449H1 Russian Thinkers [39S]**
Social and political change, and national and spiritual destiny in the philosophical, journalistic and critical writings of nineteenth century Russia. From Slavophiles and Westernizers to anarchists, nihilists and revolutionary populists. Readings in English and, for Russian majors, in the original. Offered in alternate years.

**SLA451H1 Russian Acmeist Poetry [26S]**
This course examines the Acmeist phenomenon, studying writings by Kuzmin, Gorodetsky, Narbut, Nadezhda Mandelstam and others, making a special study of Akhmatova, Mandelstam, Gumilev. Other topics include: critical reception of Acmeist writings, Acmeist posts' interaction with other contemporary writers, ideological and cultural aspects of the movement. All readings in Russian.

**SLA450H1 Pushkin and His Age [26P]**
Lyric poetry, poems, selected prose and Evgeny Onegin. Pushkin and the idea of a writer in the Russia of his time; his image as a national poet. Readings in Russian.
Prerequisite: Permission of the instructor.

**SLA460H1 Contemporary Russian Literature [26L]**
Major writers and literary groupings of the past decade; the literary process in post-Soviet Russia. (Taught in Russian)
Prerequisite: Permission of the instructor

**SLA461H1 Literary Scandals in 20th Century Russia [26L]**
An examination of twentieth-century literature through exploration of major literary scandals, including Blok/Bely, Mayakovsky, Voloshin, Zoshchenko/Akhmatova, the Nobel and Booker Prizes; how these illustrate tensions within literature and reveal the literary process. (Taught in Russian)
Prerequisite: Permission of the instructor

**SLA462H1 Russian Comic Fiction: Chekhov, Zoshchenko, Dovlatov [26S]**
The characteristics and the tradition of Russian comic writing, from Chekhov's early stories to the Soviet "meshchanin" of Mikhail Zoschenko and the émigrés of Sergei Dovlatov. (Taught in Russian)

**SLA463H1 Themes in Russian Realism [26L]**
What is distinctive about Russian realism? The course will examine nineteenth century Russian realist fiction in relation to various theoretical approaches from Erich Auerbach to Roman Jakobson, and will read contemporary works of criticism or thought from Russia and Europe that may have influenced it.
Prerequisite: The equivalent of one FCE in literature

**SLA464H1 Studies in the Russian Novel [26L]**
An examination of the most prominent Russian novelists of the last several decades, including Erofeev, Bitov, Sorokin and Azolsky. The genesis, structure, artistic devices and philosophical significance of their novels, critical approaches to them, cognate works. (Taught in Russian)
Prerequisite: Permission of the instructor

## Slavic Linguistics Courses

**SLA330Y1 Old Church Slavonic [52S]**
Structure and history. Reading and linguistic study of Old Slavonic texts.
Prerequisite: Permission of instructor

**SLA452Y1 Structure of Russian [52S]**
The phonology, morphology and syntax of contemporary standard Russian from a formal and semantic standpoint.
Prerequisite: SLA320Y1

## Ukrainian Courses

Web site: www.chass.utoronto.ca/~tarn/courses/

**SLA108Y1 Elementary Ukrainian [104P]**
Basic vocabulary, simple sentence patterns, essential morphology. Internet language laboratory drills. Intended for students with little or no knowledge of the language.

**SLA208Y1 Intermediate Ukrainian [104P]**
Study of morphology through grammar drills; oral practice; reading of texts from Ukrainian literature.
Prerequisite: Permission of instructor

**SLA218Y1 Ukrainian Literature and Culture [26L, 26S]**
A general survey of Ukrainian culture through an examination of selected literary works and their social, political, historical, philosophical, and aesthetic context. The course covers the period from Kyivan Rus' to the present. Readings in English. (Offered in alternate years)

**SLA228H1 20th Century Ukrainian Fiction in Translation [13L, 13S]**
A selection of twentieth century Ukrainian novels and short prose in English translation. From the intellectual novel of the 1920s, through socialist realism, to the new prose of the 1990s. Authors include Pidmohylny, Antonenko-Davydovych, Honchar, Shevchuk, Andrukhovych and Zabuzhko. (Offered in alternate years)
Recommended preparation: any course in literature

**SLA238H1 Literature of the Ukrainian-Canadian Experience [26S]**
A selection of literary texts depicting or reflecting the experience and perceptions of Ukrainians in Canada from the first immigrants to the present. Texts include works originally written in English, French and Ukrainian, but all readings are in English. Authors include: Kiriak, Kostash, Ryga, Galay, Suknaski, Kulyk Keefer. (Offered in alternate years)
Recommended preparation: any course in literature

**SLA248H1 Women and Women's Themes in Ukrainian Literature [26S]**
This course examines the presentation of women and women's themes in works of Ukrainian literature. The subjects covered include: role models, freedom, socialism, nationalism, feminism, and sexuality.

**SLA308Y1 Advanced Ukrainian [104P]**
Review of morphology and study of syntax. Short compositions based on literary and critical texts. Voluntary language laboratory.
Prerequisite: Permission of instructor

**SLA318H1 Kyiv-Kiev-Kijow: A City through Cultures and Centuries [26L]**
A cultural history of the Ukrainian capital; Ukrainian, Russian, Polish and Jewish "versions" of the city; artworks and literary texts that capture the complexity of Kyivan history and culture. Readings in the original languages encouraged but not required.

**SLA328H1 The Culture of Contemporary Ukraine [26S]**
Contemporary Ukraine is an amalgam of various cultural traditions. This course examines its languages, religions, nationalities, literature, cinema, arts, print and broadcast media, regions, education, and social groups. Special attention is given to the factors that influence public perceptions of identity. All readings are in English.

**SLA408H1 The Ukrainian Short Story [26S]**
The development of the short story from Kvitka-Osnovianenko to the present day. All readings in the original. (Offered every four years)
Prerequisite: Permission of instructor

**SLA418H1 Ukrainian Drama [26S]**
The development of Ukrainian drama from Kotliarevsky to the present day. All readings in the original. (Offered every four years)
Prerequisite: Permission of instructor

**SLA419Y1 Ukrainian Poetry [52S]**
A survey of Ukrainian poetry from Skovoroda to the present day. All readings in the original. (Offered every four years)
Prerequisite: Permission of instructor

**SLA428Y1 The Ukrainian Novel [52S]**
Major works by Kulish, Nechui-Levytsky, Myrny, Franko, Kotsiubynsky, Kobylianska, Vynnychenko, Ianovsky, Pidmohylny, Honchar, Andrukhovych, and Zabuzhko. Readings in Ukrainian. (Offered every four years)
Prerequisite: Permission of instructor

**SLA429H1 Shevchenko [26S]**
A critical study of Taras Shevchenko. Life, works, and significance. Readings in Ukrainian.
Prerequisite: Permission of instructor

**SLA438H1 Style and Structure of Ukrainian [39S]**
Beginning with an overview of the synchronic structure of Ukrainian (phonetics, phonology, morphology, syntax), the course introduces various styles of contemporary Ukrainian. Emphasis is on the practical usage of various styles. A number of sociolinguistic questions are examined: dialects, jargons, slang, and the language situation in contemporary Ukraine.
Prerequisite: Permission of instructor

**SLA448H1 Ukrainian Literature of the17th and 18th Centuries [26S]**
A survey of Ukrainian literature from the Renaissance to the National Revival: polemical literature, baroque poetry, school drama, religious and philosophical treatises, history-writing, dumy and satire. Major figures include Smotrysky, Vyshensky, Prokopovych and Skovoroda. Works are read in modern Ukrainian and English translations.
Prerequisite: Permission of instructor
Recommended preparation: A 400-level course in Ukrainian literature

**SLA458H1 Ukrainian for the 21st Century [39S]**
This course introduces students to contemporary Ukrainian using approaches beyond grammar and traditional classroom interaction. Emphasis is on the enhancement of language skills in the context of contemporary Ukraine. Students develop practical skills based on traditional media as well as on multimedia resources, including those of the Internet.
Prerequisite: Permission of instructor
Recommended preparation: SLA208Y1, 308Y1

**SLA468H1 Aspects of Literary Translation of Ukrainian [39P]**
This course introduces the problems of written translation of literary works from Ukrainian into English: evaluation and comparison of existing translations, practical exercises; treatment of common difficulties in translating, various literary genres and styles, dialectical, social, generational and other subvarieties of language, as well as idiomatic and figurative language.
Prerequisite: Permission of instructor
Recommended preparation: SLA308Y1 or permission of instructor

# Sociology

## Faculty

### Professors Emeriti

R.F. Badgley, MA, Ph D
R. Breton, MA, Ph D, FRSC (SM)
D.F. Campbell, Ph D (UTM)
A.R. Gillis, MA, Ph D
O. Hall, Ph D, LL D, FRSC
E.B. Harvey, MA, Ph D
N.L. Howell, BA, Ph D
W.W. Isajiw, MA, Ph D (S)
M.J. Kelner, Ph D, LL D
D.W. Magill, MA, Ph D (N)
H.M. Makler, MA, Ph D
W.M. Michelson, AM, Ph D, FRSC
J.W. Salaff, MA, Ph D
E. Silva, Ph D (UTM)
J.H. Simpson, BD, Th M, Ph D (UTM)
M. Spencer, MA, Ph D (UTM)
L. Zakuta, MA, Ph D
I.M. Zeitlin, Ph D (T)

### Professor and Chair of the Department

B. Wheaton, MA, Ph D

### Associate Professor and Associate Chair

S. Welsh, MA, Ph D

### Associate Professor and Associate Chair

A.M. Sorenson, MA, Ph D

### Professors

Z, Baber, MA, PhD (UTM)
B. Baldus, MA, Dr Sc Pol
Y.M. Bodemann, MA, Ph D
M. Boyd, Ph D, FRSC
R. Brym, MA, Ph D
B.H. Erickson, MA, Ph D
E.W-C. Fong, MA, Ph D
H. Friedmann, Ph D (UTM)
R. Gartner, MS, Ph D
J. Hannigan, MA, Ph D (S)
C.L. Jones, MA, Ph D
J.B. Kervin, BA, Ph D (UTM)
C. Kruttschnitt, MS, Ph D
J. Myles, Ph D, FRSC
R. O'Toole, MA, Ph D (S)
I. Peng, MA, Ph D
J.G. Reitz, BS, Ph D, FRSC
S. Schieman, MA, Ph D
J. Tanner, B Sc, MA, Ph D (S)
L. Tepperman, AM, Ph D (N)
B. Wellman, MA, Ph D

### Associate Professors

M. Blute, Ph D (UTM)
D. Brownfield, MA, Ph D (UTM)
J. Bryant, MA, Ph D
B. Fox, Ph D
K. Hannah-Moffat, MA, Ph D (UTM)
P.C. Hsiung, MA, Ph D (S)
W.J. Magee, MS, Ph D
A. Sev'er, MA, Ph D (S)
S. Ungar, Ph D (S)
W.H. Vanderburg, MA Sc, Ph D, P Eng
J.W.P. Veugelers, MA, Ph D

### Assistant Professors

S. Abraham, Ph D (UTM)
S. Baumann, MA, Ph D (UTM)
D. Behrens, M Sc, Ph D
B. Berry, Ph D
C. Cranford, MA, Ph D (UTM)
R. Dinovitzer, MA, PhD (UTM)
J. Hermer, Ph D (S)
J. Johnston, MA, Ph D (UTM)
A.C. Korteweg, MA, Ph D (UTM)
P. Landolt, Ph D (S)
V. Leschziner, Ph D
K. Liddle, MA, Ph. D. (S)
A. Marin, Ph D
A. Mullen, Ph D (S)
P. Maurutto, MA, Ph D (UTM)
J. Taylor, PhD
W. Zhang, PhD (UTM)

### Adjunct Professors

J. Armstrong, Ph D
J. Baum, Ph D
R. Blickstead, MBA
L. Calzavara, Ph D
P. Erickson, Ph D
R. Glazier, M Ph, MD
A. Greve, Dr. Oecon.
A. Hathaway, Ph D
D. Livingstone, Ph D
G. Moore, Ph D

### Senior Lecturer

B. Green, Ph D (UTM)

Sociological investigation ranges from the analysis of small groups to large social systems. Using a variety of methods and skills, Sociology explores how our individual and collective ways of thinking, feeling and acting are shaped by our social experience. Sociological perspectives and methods are now an essential feature of modern culture, public debate and policy in governmental, commercial, and non-profit organizations. The basic sociological hypothesis that "the social matters" is a guiding source of new intellectual and research agendas in disciplines and professional schools throughout the university.

Sociological perspectives and research skills can also provide helpful preparation for many careers, including: government, politics, industry, education and journalism. Medical, legal, and environment fields report an increasing need for sociologists. Municipal governments hire specialists in urban sociology, community relations, policy and planning. In private business sociologists work in management consulting firms and public polling organizations, as well as in labour relations and human resources. A professional career in sociology, however, requires training beyond the undergraduate level.

Much of the undergraduate and graduate teaching and research in the department reflect areas of strength that include: crime, law and deviance, gender and family, health and mental health, law, immigration and ethnic relations, labour markets and work, and political sociology. Additional strengths follow from developing areas in the discipline, including globalization, the life course and aging, social policy, and the sociology of culture.

Some SOC courses are restricted (see Note 1 below). Other SOC courses are not restricted but preference is given to students in Sociology programs. Almost all 200-, 300-, and 400-level courses have prerequisites.

Undergraduate Director: Professor A. Sorenson, Room 246, 725 Spadina Ave. 416- 978-4266

Undergraduate Advisor: Ms. A. Mitchell, Room 284, 725 Spadina Ave.

All Enquiries: 416-978-3412 (choose option 2)

Undergraduate Program Information and Course Descriptions: available at http://www.utoronto.ca/sociology

## Sociology Programs

Enrolment in Sociology Programs is limited. Consult the *Registration Handbook and Timetable* for enrolment details.

### Sociology (Arts program)

**Specialist program:**
(10 full courses or their equivalent, including at least one 400-series course)

Entry Requirements:
1) a minimum grade of 65% in SOC 101Y1;
2) a minimum grade of 70% in each of SOC 200H1, SOC202H1, 203Y1, and SOC204H1; and
3) all students must have completed 8 full courses and be enrolled in the sociology major program.

1. SOC 101Y1
2. SOC 200H1, SOC202H1, SOC 203Y1, SOC204H1. In order to complete the Specialist program in the usual four-year period, these courses must be taken immediately following SOC 101Y1.
3. SOC 300H1, 376H1, 377H1, 387H1
4. SOC 401Y1
5. Three and a half additional 200+ level SOC full courses

NOTE: The Department recommends that the Major Program requirements be complete at the end of the 15th full course (normally the end of third year)

**Major program:**
(6.5 full courses or their equivalent)

Entry Requirements:
Option 1) a minimum grade of 65% in SOC 101Y1; and all students need to have completed 4 full courses towards a degree;
or
Option 2) a mark of 72% in each of two advanced sociology courses and a CGPA of 3.0 (73%-76%).

1. SOC 101Y1
2. SOC 200H1, SOC202H1, SOC 203Y1, SOC204H1. In order to complete the Major program in the usual three year period, these courses must be taken immediately following SOC 101Y1.
3. Three additional 200+ level SOC courses or the equivalent, including at least two 300+ level courses or the equivalent.

**Minor program:**
(4 full courses or their equivalent)

Entry Requirements:
a minimum grade of 65% in SOC 101Y1; and all students need to have completed 4 full courses towards a degree

1. SOC 101Y1
2. Three additional 200+ level SOC courses or the equivalent, including at least one 300+ level course or the equivalent

### Sociology and Economics - See Economics

### Sociology and Philosophy: see Philosophy

### Sociology and Political Science: see Political Science

### Sociology and Urban Studies (Arts program)

Consult Department of Sociology and Dr. R. DiFrancesco, Innis College.

**Specialist program:**
(14.5 full courses or their equivalent, including at least two 400-series courses)

Entry Requirements:
1) a minimum grade of 65% in SOC 101Y1;
2) a minimum grade of 70% in each of SOC 200H1, SOC202H1, 203Y1, and SOC204H1; and 3) all students must have completed 8 full courses and be enrolled in the sociology major program.

First Year:
1. SOC 101Y1
2. Two of ECO 100Y1/105Y1, GGR 124Y1, a POL 100-level course/POL 214Y1

Higher Years:
1. INI 235Y1, 306Y1, 430Y1
2. SOC 200H1, 202H1, 203Y1, 204H1, 300H1, 276H1, 277H1, 387H1, 401Y1
3. One of SOC 205Y1/385Y1
4. An additional 2.0 courses selected from Groups A/B/C/D/F (not Group E: Sociology) with no more than 1.0 from any group:

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**Group A: Economics**
ECO 200Y1, 236H1, 316Y1, 319H1, 333Y1, 334Y1, 410H1; GGR 220Y1, 324H1, 326H1, 357H1

**Group B: Geography**
JGI 346H1, 360H1; GGR 252H1, 323H1, 324H1, 339H1, 357H1, 364H1, 459H1

**Group C: History and Architecture**
ARC 283H1, FAH 208H1, 209H1, 212H1, 213H1, 214H1, 375H1, 376H1, 377H1, 405H1; GGR 336H1, 366H1

**Group D: Politics**
POL 209Y1, 221H1, 317Y1, 321Y1, 333Y1, 336H1, 418Y1, 436Y1, 472H1, 473H1, 474H1, 475H1

**Group F: Environment**
GGR 314H1, 332H1, 435H1

## Sociology Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes, all SOC courses are classified as SOCIAL SCIENCE courses (see page 26).

### Note 1.

Enrolment in SOC 200H1, 202H1, 204H1, 300H1, 376H1, 377H1, 401Y1 is restricted as stated in the course descriptions below. Ineligible students will be removed even if the course appears on their timetable.

**SSC199H1 First Year Seminar [52S]**

**SSC199Y1 First Year Seminar [26S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**SOC101Y1 Introduction to Sociology [52L, 26T]**
The basic principles and methods of sociology applied to the study of human societies; social sources of differing values and conceptions of reality, and the influences of these on the behaviour of individuals, patterns of relations among groups, and social stability and change.

### Note

Obtaining 65% or more in SOC101Y1 is a requirement for entry into all SOC programs. SOC101Y1 is also a requirement for completing all SOC programs. Credit for higher-level SOC course will not waive this requirement.

### 200-Series Courses

### Note

Almost all upper-level SOC courses have prerequisites. Students without course prerequisites will be removed at any time they are discovered.

**SOC200H1 Logic of Social Inquiry (formerly SOC200Y1) [26, 26T]**
This course reviews the basic issues that concern all types of data collection methods used by social scientists to test theory. Key topics include selection, sampling, and measurement. The course explores how error affects the data gathered in experiments and non-experimental studies, and in qualitative and quantitative research. The course emphasizes critical thinking about the empirical research presented in everyday life, as well as preparation for more advanced research courses. SOC200H1 is a restricted course. Enrolment is limited to sociology Majors (see Note 1 above)
Exclusion: SOC200Y1, JBS229H1, POL242Y1, UNI200Y1, WDW350Y1
Prerequisite: SOC101Y1

**SOC202H1 Quantitative Analysis in Social Science Research (formerly SOC300Y1) [26L]**
Introduction in quantitative social science research – from descriptive statistics to hypothesis testing using various strategies for the analysis of bivariate relationships.
Enrolment is limited to students admitted to the sociology major program.
Exclusion SOC200Y1, SOC300Y1, ECO220Y1, GGR270H1, PSY201H1, STA220H1, STA248H1, POL242Y1, WDW350Y1
Prerequisite: SOC101Y1, SOC200H1.

**SOC203Y1 History of Social Theory [52L]**
Development of sociological theory in the 19th and 20th centuries; history of ideas; formal analysis; relationship between theory and empirical inquiry.
Exclusion: SOC314Y1
Prerequisite: SOC101Y1

**SOC204H1 Qualitative Analysis in Social Science Research (formerly SOC387Y1) [26L]**
Introduction to the methods and issues of qualitative social science research – the theories, methods for data collection and analysis, and the personal and ethical issues relating to qualitative research. Enrollment is limited to students admitted to the sociology major program.
Exclusion: SOC200Y1, SOC387Y1
Prerequisite: SOC101Y. SOC200H1

**SOC205Y1 Urban Sociology [52L]**
Complementary perspectives of the city: as an evolving entity historically (urbanization); as a way of life and adaptation, reflecting cultures and subcultures (urbanism); as territorial parts reflecting and contributing to social processes (ecological perspective); as a unit managed by formal and informal parties (structural perspective).
Prerequisite: SOC101Y1

**SOC207Y1 Sociology of Work & Occupations [52L]**
The nature and meaning of work in relation to changes in the position of the professions, unions and government, of women and minority groups, and in industrial societies more generally. Career choice and strategies, occupational mobility, and individual satisfaction at work.
Prerequisite: SOC101Y1

**SOC210Y1 Ethnicity in Social Organization [52L]**
Impact of racial, ethnic, and linguistic heterogeneity and of various patterns of immigration on economic, political, and cultural institutions, and on individual identity, self-conceptions, social attitudes, and relations.
Prerequisite: SOC101Y1

**SOC212Y1 Deviance and Control [52L]**
Sociological analysis of deviance (acts or persons that violate the normative structures of society) and social control (societal responses that attempt to reduce, treat, or transform deviance). What is deviance? What are different ways societies respond to deviance? What are the consequences of efforts to regulate, prevent, and punish deviance?
Prerequisite: SOC101Y1

**SOC213Y1 Law and Society [52L]**
An introduction to social scientific perspectives and research on the nature, sources, dimensions, and impact of law; conceptual issues and methodological strategies in establishing and

interpreting linkages between legal and other social structures and processes.
Prerequisite: SOC101Y1

**SOC214Y1 Sociology of the Family [52L, 26T]**
An examination of cross-cultural variations and social-historical changes in the organization of family life, followed by a critical look at the key activities in family life today. Emphasis is on gender relations.
Prerequisite: SOC101Y1

**SOC215Y1 Socialization [52L]**
The acquisition and reproduction of personality, culture, and social structure. The social construction of everyday life and secondary socialization is emphasized, with focus on work and family.
Prerequisite: SOC101Y1

**SOC218Y1 Asian Communities in Canada (formerly SOC342Y1) [52L]**
The course will explore the structures and processes of Asian communities in Canada. Historical development of various Asian communities will be explored. Other topics include ethnic economy, ethnic media, ethnic churches, and ethnic voluntary organizations in Asian communities. Experts in related topics are invited to present their research findings. Non-sociology students may seek departmental permission to enrol.
Exclusion: SOC 342Y1/394Y1
Prerequisite: SOC101Y1 or permission of Department (see Department before enroling in course)

**SOC220Y1 Social Inequality in Canada [52L]**
An analysis of historical and contemporary empirical patterns of inequality in Canada. The focus is on income, power, ethnic, regional, and gender inequalities.
Prerequisite: SOC101Y1

**SOC243H1 Sociology of Health and Illness [26L]**
Provides overview of how social factors influence behaviours related to health and illness, definitions of illness and social responses to illness. Addresses questions such as why rates of illness and responses to illnesses vary with historical and biographic conditions or how behaviours related to health and illness affect social relations.
Exclusion: SOC242Y1
Prerequisite: SOC101Y1

**SOC244H1 Sociology of Health Care [26L]**
Examines factors that influence the organizational structure of health care systems, how these organizations develop, how they are maintained, and how they can be change. Topics also include the social forces that influence the relationship between healthcare providers and consumers.
Exclusion: SOC242Y1
Prerequisite: SOC101Y1

**SOC246H1 The Sociology of Aging [39L]**
Social gerontology deals with many social aspects of advanced age, e.g. problems of retirement, post-retirement life, living arrangements and family, changes in identity, and new roles for later life, in Canada and in a cross-cultural perspective. Focus is on individual aspects of aging.
Exclusion: SOC245Y1
Prerequisite: SOC101Y1

**SOC247H1 The Sociology of Aging II [39L]**
Social gerontology deals with many social aspects of advanced age. Focus is on institutional level analysis of the programs that assist with aging problems.
Exclusion: SOC245Y1
Prerequisite: SOC101Y1

**SOC250Y1 Sociology of Religion [52L]**
This course will examine religious beliefs, practices, and experiences from a historical-sociological and comparative perspective. Classical and contemporary theories will be reviewed and applied to investigate such topics as: the social origins of religions; the formation of religious communities; heresies, schisms and the making of orthodoxies; secularization and fundamentalism; cults and new religious movements; religious regulation of the body and person; and the variable linkages of religion to politics, war, art and science.
Exclusion: RLG210Y1
Prerequisite: SOC101Y1

**SOC256H1 Lives and Societies [26L]**
Characteristics of very different kinds of societies, from hunters and gatherers to modern postindustrial countries, and how these affect features of individual lives including: life stages, their status, and transitions between them; the variety of possible life courses; rates of birth and death, and their implications for people, their kin, and their societies.
Exclusion: SOC255Y1
Prerequisite: SOC101Y1

**SOC257H1 Lives in Canada [26L]**
The life course in Canada, in the twentieth century and today, with some comparisons to other first world countries. How lives have changed over the past century; how lives are affected by history and social location; the impact of the life trajectories on health and crime.
Exclusion: SOC255Y1
Prerequisite: SOC101Y1

**SOC260Y1 Power and Policy in Canadian Society [52L]**
Examination of the forces and factors that drive and shape policy in Canadian society. The policy areas examined may include: education, labour force and employment, employment equity, ethnocultural relations, and the environment. Exploration of the applications of sociology in the formulation and evaluation of policy choices.
Prerequisite: SOC101Y1

**SOC263H1 The Quality of Social Life (formerly SOC262Y1) [26L]**
This course focuses on macro-micro connections between qualities of social aggregates (ranging from families to nations) and the subjective experiences of members of those aggregates (ranging from happiness/satisfaction to social isolation and stigma).
Prerequisite: PSY100H1/SOC101Y1

**SOC270H1 Comparative Social Inequality [26L]**
This course offers an introduction to the study of processes of social stratification and structures of inequality with an emphasis on comparative, cross-national studies that include Canada as point of reference.
Prerequisite: SOC101Y1

**SOC278Y1 Introduction to Social Policy [52L]**
1) Introduces students to the theoretical foundations of social policy; and 2) examines some of the key social policy issues. The

first part of the course will focus on the theoretical bases of the social policy, including class, gender, race, social citizenship, and welfare regimes. We will also try to situate these ideas in historical and societal contexts. The second part will examine some of the key social policy issues, such as health care, housing, immigration, race, and politics of welfare retrenchment.
Prerequisite: SOC101Y1

**SOC279H1 Contentious Politics [26L]**
This course introduces students to the sociological study of collective action. Students will explore how movements in a variety of historical and global contexts endeavor to produce social change. In this process, we will examine political and cultural opportunities and obstacles, organizational dynamics, resources, collective action frames, strategies and tactics.

**SOC293Y1 Selected Topics in Sociological Research [TBA]**

**SOC294Y1 Selected Topics in Sociological Research [TBA]**

**SOC296Y1 Selected Topics in Sociological Research [TBA]**
An opportunity to explore a sociological topic in depth. Courses relate to instructor's area of research, so topics vary from year to year. Consult the Departmental website for current course offerings.
Exclusion, Prerequisite, Recommended preparation: varies according to particular course offering; consult descriptions at Departmental website for exact prerequisites

**SOC296H1 Selected Topics in Sociological Research [TBA]**

**SOC297H1 Selected Topics in Sociological Research [TBA]**

**SOC298H1 Selected Topics in Sociological Research [TBA]**
An opportunity to explore a sociological topic in depth. Courses relate to instructor's area of research, so topics vary from year to year. Consult the Departmental website for current course offerings.
Exclusion, Prerequisite, Recommended preparation: varies according to particular course offering; consult descriptions at Departmental website for exact prerequisites

**SOC299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

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### 300-Series Courses

#### Note
Almost all upper-level SOC courses have prerequisites. Students without course prerequisites will be removed at any time they are discovered.

**SOC300H1 Applications of Quantitative Methods in the Social Sciences (formerly SOC300Y1) [26L, 26T]**
Provides students with the opportunity to develop an understanding of the logic of multivariate analysis applying various strategies for the analysis of complex multivariate data. Enrolment is limited to sociology specialists.
Enrolment is limited to students admitted to the sociology specialist program.
Exclusion: SOC300Y1, ECO220Y1, PSY202H1, STA222H, STA250H1
Prerequisite: SOC202H1.

**SOC301Y1 Theories of Inequality [52L]**
Theories of social inequality, its historical evolution, and the determinants of continuity and change of patterns of social inequality.
Prerequisite: SOC203Y1

**SOC303H1 Family Demography [26L]**
Describes the political, social and economic implications of diversity in family structure. Uses empirical studies in the sociological tradition to describe current trends in living arrangements and family relationships. Examines social and economic consequences of the inconsistencies between public definitions and the reality of family life.
Prerequisite: SOC101Y1

**SOC304H1 Status Attainment [26L]**
Shows how "getting ahead" or becoming "downwardly mobile" are affected by social as well as economic factors. Links the experience of mobility to larger scale social change.
Prerequisite: SOC101Y1

**SOC306Y1 Sociology of Crime and Delinquency [52L]**
Examines explanation, theory construction, measurement procedures, and techniques for data collection and analysis within the sociology of crime and delinquency.
Prerequisite: SOC101Y1

**SOC309Y1 HIV and AIDS: Social Policies and Programs (formerly SOC309H1) [52L]**
Explores and discusses specific theories of action. Applies theories to various factors associated with AIDS/HIV. Examines political, scientific, health, social, economic, and cultural environments. This course forces students to examine the hidden theoretical assumptions surrounding AIDS/HIV.
Prerequisite: SOC101Y1

**SOC310H1 The Sociology of Juvenile Crime [26L]**
Examine and evaluate sociological theories and research on the causes and correlates of juvenile crime, with a focus on recent theoretical developments and quantitative analyses of juvenile offending (not delinquency). The course highlights the effects of structural conditions, cultural factors, and individual decisions.
Prerequisite: SOC101Y1

**SOC312Y1 Population and Society [52L]**
Population processes (birth, death, and migration) and their relationship to social, cultural, and economic change.
Prerequisite: SOC101Y1

**SOC317Y1 Industrial Sociology (formerly SOC316Y1) [52L]**
Labour/management relations in industrial societies; impact of technological change on work organizations and labour markets; implications for understanding various topics including social mobility, labour market segmentation, job satisfaction, work/family relations, immigration and race, power in organizations, union and industrial conflict, organizational culture, and the social control of industry.
Prerequisite: SOC101Y1

**SOC320Y1 Applied Sociology [52L]**
Uses of sociological research in guiding social policies and programs. Evaluation research and needs assessment methods are emphasized. Students are required to engage in a research

practicum (apprenticeship) at an agency working towards social change or providing social services.
Prerequisite: A 200+ level SOC course

**SOC327Y1 Families and Health [52L]**
Themes include the demand for caregiving, evolving and emerging diseases (genetic, environmental, social, cancer-linked), state's role in health care, factors affecting caregivers, home health care procedures, how families organize to deal with health problems.
Prerequisite: SOC101Y1

**SOC325Y1 Society in the Labyrinth of Technology [52L]**
Evolving contemporary ways of life on the basis of highly specialized knowledge as opposed to tradition has led society into a labyrinth of technology. It involves breaking the bonds with local cultures and ecosystems in order to re-create them around a universal science, technology, economy and ecological footprint.
Exclusion: SOC356Y if taken in 2006-07 and SOC393Y if taken in 2007-08
Recommended Preparation: 2 years of Sociology

**SOC330Y1 Comparative Ethnic Relations [52L]**
Comparative study of interethnic relations, including comparisons of ethnic groups and types of ethnic groups and comparisons of their relative position in different institutions, social structures, and societies. Comparisons made with respect to the impact of society on ethnic groups, and ethnic groups in society.
Prerequisite: A 200+ level SOC course

**SOC336H1 Immigration and Race Relations in Canada [26L]**
Examines the economic, social, cultural and political impacts of 20th century immigration in Canada, and emerging race and ethnic relations. Topics include immigration policy; population impact; community formation; labour markets; enclave economies; welfare use by immigrants; the criminal justice system; racial conflict; multiculturalism and race; and equity policies.
Prerequisite: SOC101Y1

**SOC339H1 Immigration and Employment [26L]**
Examines labour market and employment situation of immigrants, from economic and sociological perspectives, emphasizing recent Canadian experience in comparative context. Topics include immigrant human and social capital, declining immigrant earnings, the knowledge economy, skill-underutilization, racial discrimination, labour market structure, unionization, immigrant entrepreneurship, immigrant offspring, and labour market and immigration policy.
Prerequisite: SOC101Y1

**SOC341Y1 The Jewish Community in Europe and North America [78L]**
Classical and recent writings on Jewish ethno-national identity in the modern period; communal organization; forms of Jewish life in the diaspora and its relationship to other ethnic groups and to society at large; contemporary role of the Holocaust and ethnic memory; Jews in Canada; gender in the Jewish community.

**SOC344Y1 Contemporary International Migration [52L]**
This overview course focuses on trends and issues associated with contemporary international migration flows and migrant settlement. Emphasis is on Canada although attention is also given to other countries. Topics include causes and types of migration, immigration policy, immigrant women, children of immigrants, and health, language and economic issues.
Prerequisite: SOC101Y1

**SOC347H1 Sociology of Language (formerly SOC274H1) [26L]**
This course studies the effects of language on human societies, focusing attention on how language changes with social class, gender, and social situations. This course will include studies of language taboos, pidgin and Creole languages, and bilingualism and multilingualism.
Exclusion: JAL253H1, SOC274H1
Prerequisite: SOC101Y1

**SOC348H1 Sociology & Emotions [26L]**
This class will provide a broad overview of major issues and theories in the sociology of emotions, and more generally considers the role of emotions in a range of sociological theories. There is an emphasis on how emotions are related to social rankings.
Prerequisite: A 200+ level SOC course

**SOC352H1 Introduction to Canadian Health Care Policy [26L]**
This course will introduce students to development and issues related to Canadian health care policy. The course will examine: 1) basic policy making process; 2) policy making process in Canadian context; 3) development of Canadian health care policy; and 4) current health care reform debates and issues.
Prerequisite: A 200+ level SOC course
Exclusion: SOC 351Y1, UNI300Y1

**SOC354H1 Emergent Issues in Health and Social Policies [26L]**
This course explores emerging issues in health and social policies. Using the framework of social determinants of health, this course examines: 1) the implications of social factors such as socio-economic inequity, gender, race, homelessness, age, and citizenship status on individual health, and 2) policy options to address these issues
Prerequisite: SOC352H1
Exclusion: SOC351Y1, UNI300Y1

**SOC355Y1 Structural Analysis [52L]**
The structure of social relationships, including both personal networks and the overall organization of whole social settings. The role of social structure in social support, access to scarce resources, power conflict, mobilization, diffusion, and beliefs.
Prerequisite: SOC101Y1

**SOC356Y1 Technology and Society [52L]**
This course analyzes the interplay between new communication technologies and society. It will consider how technological developments affect social systems, and conversely, how social systems affect the nature and use of technology. Much of the course will be devoted to studying the impact of computerization and the advent of the information highway.
Prerequisite: A 200+ level SOC course

**SOC358H1 Cities and Social Pathology [26L]**
Focuses on relationship between urbanization and crime. Urbanization and the size of cities are examined as correlates, and perhaps causes, of crime, delinquency, the development of "deviant service centers", mental illness, and suicide. Does housing level show a link between housing design, crowding, floor level, etc. and crime, delinquency, depression?

Prerequisite: SOC205Y1 or SOC212Y1

**SOC360Y1 Sociology of Cultural Studies [52L]**
Examination of cultural process practices through which culture is constituted (ordered) and reproduced. A dominant cultural order is created and reproduced through the process of selective tradition, which is treated as natural and "taken for granted." The cultural processes involve the interaction of economic, political, ideological and cultural practices.
Prerequisite: A 200+ level SOC course

**SOC363H1 Sociology of Mental Health and Mental Disorders (formerly SOC262Y1, 264H1) [26L]**
An overview of the link between social inequality and emotional inequality, focusing on differences in mental health across social groups and the role of stress and coping resources in explaining group differences.
Prerequisite: A 200+ level SOC course, PSY101H1 or a 200+ level PSY course

**SOC364H1 Urban Health [26L]**
Cities are home to particular populations (the poor, the homeless, racial and ethnic minorities, immigrants, and the young and old) and have distinct risks and protections relevant to health. Patterns of health in cities, historical developments, and emerging literature and methodology are used to uncover how everyday settings influence health.
Exclusion: SOC396H1 in 02-03 and 04-05
Prerequisite: A 200+ level SOC course

**SOC365Y1 Gender Relations [52L]**
Examination of historical and contemporary sources of gender inequity, and the many dimensions of gender difference and inequality today.
Prerequisite: SOC101Y1

**SOC366H1 Sociology of Women and Work [26L]**
Women's paid and unpaid work and the relationship between the two. Questions about gender gap in earnings, sexual segregation of the labour force, restructuring of paid work, sexual harassment, paid domestic work, and the division of housework and child care.
Prerequisite: SOC101Y1

**SOC367H1 Race, Class, and Gender [26L]**
In this class, we analyze the ways in which race, class, gender and sexuality interact and shape communities, life opportunities, perspectives and politics. We will read contemporary ethnographies concerning work, socialization, and urban life against current sociological theories about inequality and intersectionality, and identity.
Prerequisite: SOC101Y1

**SOC369Y1 The Canadian Community [52L]**
Attention focused on case studies which investigate the social organization of Canadian communities. The case study approach emphasizes theory and methods. The major course requirement is an ethnographic study of a "community."
Prerequisite: A 200+ level SOC course

**SOC370Y1 Sociology of Labour [78L]**
The role and development of labour and the labour movement in Canada, its differential success in various industries and regions, and its impact on other aspects of society.
Prerequisite: 200+ level SOC course

**SOC373H1 Sociology of Disability I (formerly SOC273H1) [26L]**
The experience of disability and the social definition of the experience for self and others. Combination seminar and lecture format.
Exclusion: SOC273H1

**SOC374H1 Sociology of Disability II [13L/13S]**
The experience of disability and the social definition of the experience for self and others. Combination seminar and lecture format. continuation of Disability I.
Exclusion: offered as SOC297H1 in 20011 session

**SOC375Y1 Sociology of Organizations [52L]**
Internal structure of formal and informal organizations; bureaucracies; patterns of interorganizational relations; impact of organizations on social structure and social classes of different societies.
Prerequisite: A 200+ level SOC course

**SOC376H1 Theories of Private and Public Life (formerly SOC389Y1) [26L]**
A selective introduction to major thinkers (such as De Beauvoir and Habermas) and approaches in contemporary sociology. Enrolment is limited to students in the sociology specialist program.
Prerequisite SOC203Y1
Exclusion: SOC389Y1

**SOC377H1 Micro and Macro Theory (formerly SOC389Y1) [26L]**
A selective introduction to major thinkers (such as Fanon, Blau, and Collins) and approaches in contemporary sociology. (adjunct to Theories of Private and Public Life). Topics include the structure-agency debate, methodological individualism, and anticolonialism. Enrolment is limited to students in the sociology specialist program.
Prerequisite: SOC203Y1
Exclusion: SOC389Y1

**SOC380H1 Sociology of Everyday Life 2: Institutional Context [26L]**
The study of social institutions at the macro and meso- levels, through every day experiences. These broader structures are examined through people's personal experiences. A related course, Soc 388H, focuses on the structures of social interaction at the micro level. Soc 380H1 compliments that course, but can be taken independently.
Prerequisite: A 200+ level SOC course

**SOC381Y1 Culture and Social Structure (formerly SOC393Y1) [52L]**
Our society includes many varieties of cultural tastes and practices. How are these related to inequality? How do cultural repertoires shape people's lives, including school success, careers, romance, marriage and friendship? How is culture produced in art worlds and industries, transmitted more or less successfully and creatively received?
Prerequisite: SOC101Y1

**SOC382Y1 Social Issues (formerly SOC399Y1) [52L]**
Many on-going changes - in education, crime, family life, population, and the environment, among others - give rise to troubling social problems. This course uses sociological analysis and the findings of sociological research to examine public discussions and policies proposed to deal with both new and enduring social problems.
Exclusion: SOC399Y1

Prerequisite: A 200+level SOC course

**SOC383H1 The Sociology of Women and International Migration [26L]**
Examines the international migration of women in post-industrial economies with emphasis on Canada. Topics include: theories of female migration; the impacts of immigration policies; migration trends and entry status; integration issues pertaining to family, language knowledge, citizenship and economic status; labour market barriers and public policy consideration.
Prerequisite: SOC101Y1

**SOC385H1 Social Ecology [26L]**
Provides a framework for the empirical analysis and practical solution of problems dealing with human well-being which have contextual dimensions. Topics dealt with cover both built and natural environments, as well as aspects of technology. Each student examines a particular problem in detail.
Prerequisite: A 200-level SOC course; or an Environmental Science course focusing on urban and/or natural environments (see Department before enrolling in this course)

**SOC386Y1 Urbanization [52L]**
Examines explanation, theory construction, measurement procedures, and the logic of quantitative analysis within urban sociology and social demography.
Prerequisite: A 200+ level SOC course

**SOC387H1 Qualitative Analysis (formerly SOC387Y1) [26L]**
This course gives students the opportunity to apply their understanding of the research process to the design and implementation of an original research project.
Enrollment is limited to students admitted to the sociology specialist program
Prerequisite: SOC204H
Exclusion: SOC387Y1

**SOC388H1 Sociology of Everyday Life [26L]**
Explores the structure and interactions of everyday experience. Views our lives as socially ordered and ourselves as agents. Offers experience in qualitative research and using writing experience.
Prerequisite: A 200+ level SOC course

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### Note
Independent Research courses SOC390Y1, 391H1, and 392H1 are restricted. Deadline for submitting applications to Department, including supervisor's approval, is the first day of classes of the session. Strongly recommend earlier application as arrangements with supervisor are required in advance.

**SOC390Y1 Independent Research [TBA]**

**SOC391H1 Independent Research [TBA]**

**SOC392H1 Independent Research [TBA]**
An opportunity to pursue independently a sociological topic of interest with a Departmental advisor. Intended for students in a Sociology program who have completed a minimum of 10 courses.
Prerequisite: By application (see Department before session begins). Consult Departmental website for procedure.

**SOC393Y1 Selected Topics in Sociological Research [TBA]**

**SOC394Y1 Selected Topics in Sociological Research [TBA]**
An opportunity to explore a sociological topic in depth. Courses relate to instructor's area of research, so topics vary from year to year. Consult the Departmental website for current course offerings.
Prerequisite: Varies according to particular course offering; consult description at Departmental website for exact prerequisites

**SOC395H1 Selected Topics in Sociological Research [TBA]**

**SOC396H1 Selected Topics in Sociological Research [TBA]**

**SOC397H1 Selected Topics in Sociological Research [TBA]**
An opportunity to explore a sociological topic in depth. Courses relate to instructor's area of research, so topics vary from year to year. Visit Department or consult the Departmental website for current course offerings.
Prerequisite: Varies according to particular course offering; consult description at Departmental website for exact prerequisites

**SOC398H0 Independent Experiential Study Project**

**SOC399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

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### 400-Level Courses

### Note
Almost all upper-level SOC courses have prerequisites. Students without course prerequisites will be removed at any time they are discovered.

**SOC401Y1 Advanced Seminar [52S]**
Provides sociology Specialists with an opportunity to explore a sociological topic in depth. Varies in focus from year to year. Consult the Departmental website for current course offering. SOC401Y1 is a restricted course. Enrolment is limited to sociology Specialists (see Note 1 above).
Prerequisite: SOC300H1/300Y1, 376H1, 377H1, 389Y1

**SOC410H1 Sexuality and Modernity [26L]**
A sociological examination of sexuality in the modern West, including the treatment of sexuality as a topic of investigation by science (sexology, psychoanalysis), the sociohistorical context of these investigations, and issues around sexuality and urbanization, capitalism, and mass culture more generally.
Prerequisite: For non-soc majors, by permission of instructor

**SOC420Y1 Social Problems [52L]**
This course examines how social problems and the contexts in which they occur change historically. Topics dis-cussed include poverty, substance abuse, crime and violence, racial and ethnic relations, sexism and gender inequality, workplace problems, unemployment, family issues, ageism, urban problems, homelessness, war and terrorism, and social problems of the future.
Prerequisite: SOC101Y1

Recommended Preparation: One or more 2nd and 3rd year courses in sociology

**SOC422H1 Political Sociology [26L]**
This fourth year course will provide an advanced treatment of selected topics in political sociology. Specific topics to be covered are the relationship between political systems and cleavage voting, the relationship between social class and attitudes and voting, the post-materialist thesis, social capital and civic participation, gender politics, the various varieties, causes and effects of welfare states, and social movements. The course will have both a Canadian and international focus.
Prerequisite: Introductory sociology or introductory political science.

**SOC442Y1 Practicum in Health Studies [52L]**
Individual field placement with a health research or administration professional, in which the student applies theory and skills to a specific project. Culminates in an oral and written report.
Exclusion: UNI400Y1
Prerequisite: 300 level sociology course

**SOC451H1 Analysis and Interpretation of Survey Data [26L]**
Covers statistical methods currently used in the major sociological journals including multiple linear regression, logistic regression, and the fitting of loglinear models to tables of cross-classified categorical data. Stresses presentation skills and sociological interpretation of results.
Prerequisite: SOC300H1; or a full-course equivalent to SOC300H1 (see Department before enroling in course)

**SOC452H1 Methods and Models of Demography [26L]**
Students learn to calculate life tables and total fertility rates, and apply these concepts in computer projections and simulations.
Prerequisite: SOC101Y1, 200H1

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**Note**
Independent Research courses SOC 490Y1, 491H1, and 492H1 are restricted. Deadline for submitting applications to Department, including supervisor's approval, is the first day of classes of the session. Strongly recommend earlier application as arrangements with supervisor are required in advance.

**SOC490Y1 Independent Research [TBA]**

**SOC491H1 Independent Research [TBA]**

**SOC492H1 Independent Research [TBA]**
An opportunity to pursue independently a sociological topic of interest with a Departmental advisor. Intended for students in a Sociology program who have completed a minimum of 15.0 courses.
Prerequisite: By application (see Department before session begins). Visit Department or consult Departmental website for procedure.

**SOC493Y1 Selected Topics in Sociological Research [TBA]**

**SOC494Y1 Selected Topics in Sociological Research [TBA]**

**SOC495Y1 Selected Topics in Sociological Research [TBA]**
An opportunity to explore a sociological topic in depth. Courses relate to instructor's area of research, so topics vary from year to year. Visit Department or consult the Departmental website for current course offerings.
Prerequisite: Varies according to particular course offering; consult description at Departmental website for exact prerequisites

**SOC496H1 Selected Topics in Sociological Research [TBA]**

**SOC497H1 Selected Topics in Sociological Research [TBA]**

**SOC498H1 Selected Topics in Sociological Research [TBA]**
An opportunity to explore a sociological topic in depth. Courses relate to instructor's area of research, so topics vary from year to year. Visit Department or consult the Departmental website for current course offerings.
Prerequisite: Varies according to particular course offering; consult description at Departmental website for exact prerequisites

**Note**
Graduate courses available to fourth-year Specialists with permission of the instructor and a minimum GPA of 3.3 for undergraduate program credit. Consult the Department for enrolment procedures.

## South Asian Studies: see New College

## Faculty

### Professors Emeriti

J.F. Burke, MA, Ph D
K.A.A. Ellis, MA, Ph D, Dr Fil, FRSC
R.J. Glickman, AM, Ph D
J. Gulsoy, MA, Ph D, D Honoris Causa,FRSC
O. Hegyi, MA, Ph D (UTM)
J.G. Hughes, MA, Ph D
P.R. León, MA, Ph D (S)
E.G. Neglia, MA, Ph D (UTM)
A. Percival, MA, Ph D
W.L. Rolph, MA, Phil M (I)
R. Skyrme, MA, M Litt, Ph D (S)
G.L. Stagg, MBE, MA, AM
M.J. Valdés, MA, Ph D, FRSC, Miembro Correspondiente de la Academia Mexicana (U)
J.R. Webster, MA, Ph D, FRSC (SM)

### Associate Professor and Chair of the Department

S.J. Rupp, MA, M Phil, Ph D (V)

### Professors

J. Blackmore, MA, Ph D (V)
R. Sternberg, MA, Ph D (SM)

### Associate Professors

L. Colantoni, MA, Ph D
A.T. Pérez-Leroux, MA, Ph D
R. Sarabia, MA, Ph D

### Assistant Professors

R. Davidson, MA, Ph D
Y. Iglesias, Ph D
S. Munjic, MA, Ph D
V. Rivas, MA, Ph D
N.E. Rodríguez, Ph D
D. Rojinsky, MA, Ph D

### Lecturer

M. Ramirez, MA, Ph D

Hispanic culture offers a variety probably unrivalled by any other modern Western culture. In the Middle Ages, Spain was the vital point of contact of the Christian, Jewish, and Islamic civilizations. In the early modern period it led the way in the exploration and settlement of the New World, contributing significantly to the evolution of a flourishing Ibero-American culture. Today it is estimated that Spanish is one of three most widely-spoken languages in the world.

Spanish studies at the University of Toronto are mainly, but by no means exclusively, concerned with the language and literature of the Spanish-speaking peoples. Courses in Hispanic linguistics, in business Spanish, in the history and structure of the Spanish language and literature are complemented by studies of the social, artistic, and intellectual history of both Spain and Spanish-America. Spanish and Portuguese form part of the interdisciplinary programs in European Studies and Latin-American Studies.

The progression of courses in the language sequence is designed to accommodate a wide range of previous preparation in the spoken and written language. In their first year, beginners receive an intensive course, SPA 100Y1; those with OAC/Grade 12 standing begin their University studies in SPA 220Y1; students who on entry are already well qualified in Spanish and demonstrate both oral and written fluency are expected to proceed directly to more advanced levels of study. Throughout the language stream, stress is laid both on the cultural component of language acquisition and on the range of practical applications to which both the spoken and the written language may be put. Courses in phonetics, in business Spanish, and in the history and structure of the Spanish language provide an array of possible options for students in the upper years.

Following an introduction to the methodologies of critical analysis as applied to Hispanic texts, students have a wide selection of courses on the literatures of Spain and Spanish America: medieval Spanish literature; early modern prose, verse and drama; the modern novel, short story, poetry, drama and film. In all years, the works are read and discussed not only in terms of their individual artistic value but also as illustrations of the outlook and the intellectual climate of their age.

In conjunction with Woodsworth College, the department makes SPA courses available during the summer at the University of Guadalajara. Interested students should contact the Professional and International Programs, Woodsworth College (summer.abroad@utoronto.ca)

For the Portuguese component, see under Portuguese Program in this Calendar.

Undergraduate Coordinator: Professor A.T. Pérez-Leroux, (416-813-4082). E-mail: spanport.undergraduate@utoronto.ca

Enquiries: Victoria College, Room 208 (416-813-4080)

## Spanish Programs

Enrolment in the Spanish programs requires the completion of four degree courses; no minimum GPA required.

### Spanish (Arts program)

Consult Professor A.T. Pérez-Leroux, Department of Spanish and Portuguese.

**Specialist program:**
(9 full courses or their equivalent, including at least one 400-series course)

First Year:
SPA 100Y1/220Y1; SPA 319Y1 (for native/bilingual speakers of Spanish)
Second Year:
SPA 220Y1/320Y1; SPA 420H1 (for speakers who have taken SPA 319Y1 in first year)
Third and Fourth Years:
1. SPA 320Y1, 420H1, 454H1
2. SPA 450H1 or 452H1
3. One 300/400-series half-course in language or linguistics
4. One course in Spanish American literature from the 300/400-series
5. Plus additional SPA courses to make the equivalent of 9 courses. Up to two full-course equivalents may be taken from cognate departmental or college offerings: GGR, HIS, LAS, LIN, POL, PRT. A complete list of eligible courses is

available from the Undergraduate Coordinator. Students interested in Latin America are encouraged to take an introductory course in Portuguese (PRT 100Y1/110Y1).

**Major program:**
(7 full courses or their equivalent)

First Year:
SPA 100Y1/220Y1; SPA 319Y1 (for native/bilingual speakers of Spanish)
Second Year:
SPA 220Y1/320Y1; SPA 420H1 (for speakers who have taken SPA 319Y1 in first year)
Third and Fourth Years:
1. SPA 320Y1, 454H1
2. SPA 450H1 or 452H1
3. SPA 420H1 is recommended for students who start in SPA 100Y1
4. SPA 420H1 is required for students who start in SPA 220Y1 or higher language course; plus a 300/400-series half-course in language or linguistics
5. Plus additional SPA courses, including a 300/400-series half-course in Spanish American literature, to make seven courses. Up to one full-course equivalent may be taken from cognate departmental or college offerings: GGR, HIS, LAS, LIN, POL, PRT. A complete list of eligible courses is available from the Undergraduate Coordinator. Students interested in Latin America are encouraged to take an introductory course in Portuguese (PRT 100Y1/110Y1).

**Minor program:**
(4 full courses or their equivalent)

SPA 319Y1/320Y1 plus additional SPA courses to make four courses. Up to one full-course equivalent of cognate credit may be taken in Portuguese.

## Faculty of Arts & Science Language Citation

The Department of Spanish and Portuguese participates in the Faculty of Arts and Science's Language Citation initiative for Spanish.

To complete the language citation in Spanish students will normally complete the two language-sequence courses that follow the introductory level:

SPA220Y1

SPA320Y1

Native and bilingual speakers should complete SPA319Y1 and two additional half-courses in Spanish in the 300- or 400-series.

Students should note that, as explained on the page 21 of this Calendar, the Language Citation is not equivalent to an academic program and that enrolment in a program is not necessary in order to earn the recognition bestowed by the Citation.

## Spanish: see also European Studies, Latin American Studies, Modern Languages And Literatures, Linguistics And Languages

## Spanish Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), SPA courses are classified as HUMANITIES courses.

**HUM 199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

### Notes

1. The Department reserves the right to place students in the language course best suited to their linguistic preparation.

2. Students with an adequate knowledge of Spanish may be required to substitute another Spanish literature or culture course for the language course at any level.

**SPA100Y1 Spanish for Beginners [26L, 52T]**
Introduction to the Spanish language for beginning students; overview of basic grammatical structures, development of vocabulary and oral and written expression.
Exclusion: OAC/Grade 12 U Spanish or equivalent knowledge of Spanish

**SPA220Y1 Intermediate Spanish [52L, 26P]**
Intermediate Spanish for non-natives. Intensive grammar review of the structures of Spanish integrated with an introduction to reading authentic Spanish material, with practice designed to build vocabulary and to improve oral and written expression.
Exclusion:SPA319Y1
Prerequisite: OAC/Grade 12 U Spanish/SPA100Y1

**SPA254H0 Mexican Culture [50L]**
Survey of Mexican culture and society, with attention to central issues in history, politics, education, and popular tradition, and important thinkers of twentieth-century Mexico: Paz, Fuentes, and others. (Offered only in Guadalajara)
Prerequisite: SPA220Y1/319Y1 and Placement Examination for the Guadalajara Program

**SPA258H1 Introduction to Hispanic Literary Studies [26L]**
Introduction to university literary studies in Spanish. Critical terminology and methods. Representative selections of modern Spanish and Spanish American prose, poetry, and drama. (Offered in alternate years)
Prerequisite: OAC/Grade 12 U Spanish/SPA100Y1
Co-requisite: SPA220Y1/319Y1

**SPA259H1 Introduction to Hispanic Cultural Studies [26L]**
Forms of cultural expression in Spain, Latin America and Spanish-speaking North America, with study of representative media, including literature, journalism, film, visual art, and the urban environment. Introduction to methods of cultural analysis. (Offered in alternate years).
Prerequisite: SPA 100Y1
Co-requisite: SPA 220Y1/319Y1

**SPA281Y0 Art and Politics in Contemporary Mexico [75L]**
Art and culture since the period of the Mexican Revolution, studied in the context of political and social developments. Lectures and readings in English. Field trips around the city of Guadalajara are offered as part of the course. (Offered only in Guadalajara)

**SPA299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**SPA317H0 Language Practice [50L]**
Communication practice in small groups, with an emphasis on skills in speaking, listening, and writing. Selective review of grammatical structures and active vocabulary. (Offered only in Guadalajara)
Prerequisite: SPA220Y1/319Yand Placement Examination for the Guadalajara Program

**SPA319Y1 Spanish for Bilingual and Native Speakers [26L]**
Survey of the mechanics of writing and basic grammar for fluent speakers of Spanish with limited or no exposure to written Spanish; English/Spanish spelling differences, written and spoken registers of Spanish, basic aspects of the grammatical system.
Exclusion: SPA100Y1, 220Y1, 320Y1

**SPA320Y1 Advanced Spanish [52L, 26P]**
Advanced Spanish for non-natives. Selective review of grammar with emphasis on the complex sentence; intensive practice in written and oral expression to improve proficiency.
Exclusion: SPA319Y1
Prerequisite: SPA220Y1

**SPA321H1 Spanish Phonetics and Pronunciation [26L]**
An introduction to articulatory phonetics, Spanish sound patterns, phonetics, phonology; the basic concepts of phonetic description and transcription; the study of Spanish vowel and consonant systems, stress and intonation.
Prerequisite: SPA220Y1/319Y1

**SPA322H1 Introduction to Hispanic Linguistics [26L]**
The basic concepts and analytic tools of linguistics applied to the study of Spanish, with a focus on the Spanish phonological, morphological, and syntactic systems. Theoretical discussion and practical exercises in analytic techniques.(offered in alternate years)
Prerequisite: SPA 220Y1/319Y1
Recommended preparation: SPA 321H1

**SPA323H1 Business Spanish (formerly SPA323Y1) [26L]**
Practical uses of spoken and written Spanish for business contexts. This course builds on grammar and vocabulary knowledge already acquired at the intermediate level, and is directed primarily at students pursuing a second major in Ibero-American Studies or European Studies. (Offered in alternate years)
Exclusion: SPA323Y1
Prerequisite: SPA220Y1/319Y1

**SPA324H1 Spanish Bilingualism [26L]**
Spanish bilingualism from three different perspectives: linguistic, sociolinguistic, psycholinguistic. Analysis of typical language contact phenomena with materials from Spanish. Case studies of Spanish in contact and discussion of the psychological consequences of bilingual childhood. Introduction to survey methods in sociolinguistics and psycholinguistics, and basic techniques for conducting language interviews.
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA321H1

**SPA325H1 Catalan Language and Culture [26L]**
Study of Catalan language through an overview of grammatical structures and exercises in proficiency skills, complemented by readings in Catalan history and society to attain interdisciplinary cultural literacy . Analysis of works by Llull, March, d'Ors, Gaudi, Rodoreda, and others. (Offered in alternate years)
Prerequisite: SPA220Y1/PRT220Y1 or an equivalent course in French or Italian
Exclusion: SPA225Y1

**SPA341H1 Modernist Movements in Spain [26L]**
Literary and artistic movements in Spain from 1890 to 1940, with special attention to the convergence and mutual mediation of politics and art. Materials to be studied include novels, poetry, the urban environment, graphic art, literary journals and manifestos, and some early Hispanic film. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended Preparation: SPA258H1/SPA259H1

**SPA345H1 Spanish Cinema [26L]**
Analysis of the development of Spanish Cinema within its social and political contexts. Directors studied include Buñuel, Bardem, Erice, Saura, Almodóvar and Bigas Luna. (Offered in alternate years).
Prerequisite: SPA 220Y1/319Y1
Recommended Preparation: SPA258H1/SPA259H1

**SPA352H1 Writing and Culture in Early Modern Spain [26L]**
Representative literary and cultural texts from the early modern period, studied in relation to the history and society of imperial Spain. Discussion will centre on such issues as the formation of the state, urbanization, court culture, social order and disorder, and cultural discourses of identity and difference. (Offered in alternate years)
Prerequisite: SPA 220Y1/319Y1
Recommended Preparation: SPA258H1/SPA259H1

**SPA375H1 Latin American Cinema [26L]**
Latin American cinema within the framework of cultural studies, film theory, and film criticism. Analysis of representative films from Argentina (Solanas, Puenzo), Brazil (Babenco, Camus, Salles), Cuba (Ichaso, Gutiérrez Alea, Solás), Mexico (Ripstein, Cuarón, González Iñárritu), and Venezuela (Román Chalbaud). (Offered in alternate years)
Prerequisite: SPA220Y1/SPA319Y1
Recommended preparation: SPA258H1/259H1

**SPA380H1 Colonial Literatures and Cultures [26L]**
Issues of gender, race, and identity in major texts from the colonial period, from the Conquest to the end of the eighteenth century. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA381H1 Nation, Identity and Literary Modernism in Spanish-America [26L]**
Analysis of poetry, short stories, essays, and graphic art in the context of nation-building and the question of identity during the nineteenth century. Modernismo studied as the first literary

movement of Spanish American origin. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA382H1 Spanish American Women in Art, Film, and Literature [26L]**
Study of different creative expressions by women in Spanish America from the colonial period to the present; analysis of selected works of visual art, film, essays, poetry, and fiction. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA384H1 Avant-Garde Movements in Spanish America [26L]**
Study through representative works of major artistic and literary movements in 20th and 21st century Spanish America: avant-garde poetry, theatre of the absurd, surrealist art, neo-realism, postmodernism. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA385H1 Literature and Social Change in Spanish America [26L]**
Modern literature in its critical relation to social conditions. Emphasis on socio-historical context, ideologies of the period and writers' views of their social responsibility as a framework for literary analysis (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA387H0 Contemporary Mexican Literature [50L]**
Social change and literary innovation in Mexican literature since the 1950s; analysis of selections from Agustín, Juan Rulfo, Carlos Fuentes, Fernando del Paso, Octavio Paz, Laura Esquivel, and others. (Offered only in Guadalajara)
Prerequisite: SPA220H1/319Y1 and Placement Examination for the Guadalajara Program

**SPA398H0 Independent Experiential Study Project**

**SPA399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**SPA420H1 Advanced Grammar [26L]**
Linguistic analysis with the objective of improving students' command of Spanish grammar. Advanced review of traditional grammatical topics, including the verbal and pronominal systems, and Spanish copulas and embedded clauses. This course assumes familiarity with the grammatical terminology introduced in SPA 220Y1.
Prerequisite: SPA319Y1/320Y1

**SPA421H1 The Structure of Spanish [26L]**
Study of Spanish morphology and syntax: syntactic categories in Spanish, the structure and interpretation of simple and complex sentences. (Offered in alternate years)
Prerequisite: SPA319Y1/320Y1, 321H1 or permission of department
Recommended preparation: SPA322H1

**SPA422H1 Sociolinguistics of Spanish [26L]**
Study of linguistic variation across the Spanish-speaking world; central issues in phonological, morphological, and syntactic variation, analyzed from a geographical as well as from a social point of view. (Offered in alternate years)
Prerequisite: SPA321H1, 420H1 or permission of the department
Recommended preparation: SPA322H1

**SPA423H1 Spanish Phonology [26L]**
Theoretical and experimental approaches to Spanish phonology. Topics include: Spanish phonemic inventory, sound patterns, suprasegmentals (stress and intonation), synchronic and diachronic variation. Methods of data collection and analysis in the discipline, with practical applications.
Prerequisite: SPA321H1, or SPA322H1, or permission of the Department

**SPA425H1 History of the Spanish Language [26L]**
The evolution of Spanish. The dialectalization of Hispano-Latin through inherent linguistic changes and influences from other languages and the development of Castilian into one of the world's most important languages. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1, 321H1; SPA421H1 strongly recommended

**SPA435H1 Fictions of Contemporary Spain [26L]**
Study of major currents in narrative fiction during the last twenty years, a period of return to democratic government, the relaxing of censorship and the opening up of Spanish culture. Analysis of works from several generations of male and female writers. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA438H1 Topics in Modern Spanish Literature [26S]**
A course on a specific topic in modern Spanish literature, designed for advanced students. Course content and instructor are established on a yearly basis.
Prerequisite: SPA220Y1/319Y1

**SPA450H1 Studies in Medieval Iberian Literature [26L]**
Medieval works studied in relation to literary and cultural traditions. Issues of genre, discourse, and ideology are scrutinized in various texts, including lyric, narrative, and moral and didactic writings. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA352H1

**SPA452H1 Theatre and Representation in Golden Age Spain [26L]**
Study of theatre and the idea of representation, with reference to parallels in lyric poetry and visual art. Emphasis on the Spanish comedia as a genre, and on its interaction with other artistic forms in the Golden Age. (Offered in alternate years)
Exclusion: SPA350Y1
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA320Y1, 352H1

**SPA454H1 Cervantes and Golden Age Narrative [26L]**
Detailed study of Don Quixote as a foundational text in the European literary tradition, with attention to the conventions, genres, and literary techniques that inform the text. Parallel readings in romance, picaresque fiction, and the ballad tradition.
Exclusion: SPA350Y1
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA329Y1, 352H1

**SPA467H1 Topics in Spanish-American Culture [26L]**
A course on a specific topic in Spanish American culture, designed for advanced students. Course content and instructor are established on a yearly basis.
Prerequisite: SPA220Y1/SPA319Y1

**SPA468H1 Topics in Modern Spanish-American Literature [26S]**
A course on a specific topic in Spanish American literature, designed for advanced students. Course content and instructor are established on a yearly basis.
Prerequisite: SPA220Y1/319Y1

**SPA471H1 The Historical Novel in Spanish America [26L]**
Issues of nationalism, historical awareness, and the rewriting of the past in Spanish American fiction, with detailed study of representative texts. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA480H1 Theories of Culture in Latin America [26L]**
Theories of cultural identity and production, as articulated by Latin American thinkers since the Independence period. Issues for study will include civilization and barbarity, cultural imperialism, the commodification and consumption of cultural icons, museums, the mass media and national identity, processes of transculturation and cultural hybridity. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y
Recommended Preparation: SPA258H1/259H1

**SPA482H1 20th-Century Spanish American Narrative [26L]**
Detailed study of the major movements in Spanish-American narrative, including magic realism, fantastic literature, women's writing, and testimonial literature, through analysis of representative novels and short stories. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA486H1 Contemporary Caribbean Literatures and Identities [26L]**
Literature studied as a socio-political space for the articulation of new concepts of cultural identity; examination of cultural change and aesthetic innovation in selected poetic, dramatic, and narrative texts from different national traditions (Cuba, the Dominican Republic, Puerto Rico). (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1

**SPA487H1 The Culture of Revolution [26L]**
Detailed study of key moments and texts in Spanish American culture from the nineteenth and twentieth centuries, focussing on such topics as the creation of new nations, indigenismo, Caribbean anti-slavery literature, and the Mexican and Cuban Revolutions. (Offered in alternate years)
Prerequisite: SPA220Y1/319Y1
Recommended preparation: SPA258H1/259H1

**SPA488H1 Central America Postwar Narrative [26L]**
The end of civil and military conflicts in the last decade of the 20th century reshapes the political landscape of Central America. Through selected readings of novels and short stories from representative writers, issues of immigration, displacement, and globalization are discussed to understand these changes in the region.
Prerequisite: SPA220Y1/319Y1
Recommended Preparation: SPA258H1

**SPA490H1 Independent Study [TBA]**

**SPA491H1 Independent Study [TBA]**
Individual study with a member of staff on a topic of common interest including readings, discussion and written assignments.
Prerequisite:SPA319Y1/320Y1 and written approval of the Undergraduate Coordinator

# Statistics

## Faculty

### Professors Emeriti
D.F. Andrews, M Sc, Ph D
D.A.S. Fraser, BA, Ph D, FRSC
I. Guttman, MA, Ph D
M.S. Srivastava, M Sc, Ph D

### Professor and Chair of the Department
K. Knight, M Sc, Ph D

### Professor and Associate Chair - Graduate Studies
A. Feuerverger, B Sc, Ph D

### Professor and Associate Chair - Undergraduate Studies
D. Brenner M Sc, Ph D

### University Professor
N.M. Reid, M Sc, Ph D, FRSC

### Professors
S. Broverman, M Sc, Ph D, ASA
M.J. Evans, MA, Ph D (UTSC)
A. Feuerverger, B Sc, Ph D
X.S. Lin, M Sc, Ph D, ASA
P. McDunnough, M Sc, Ph D
R. Neal, B Sc, Ph D
J. Quastel, MS, Ph D
J.S. Rosenthal, MA, Ph D
J. Stafford, M Sc, Ph D

### Associate Professors
D. Brenner, M Sc, Ph D
L.J. Brunner, MA, Ph D (UTM)
R. Craiu, B Sc, Ph D

### Assistant Professors
O. Angel, B Sc, Ph D (UTM)
A. Badescu, B Sc, M Sc, Ph D
S. Jaimungal, B A Sc, M Sc, Ph D
B. Virág, Ph D (UTSC)
F. Yao, B Sc, M Sc, Ph D

### Senior Lecturer
A. Gibbs, B Math, B Ed, M Sc, Ph D
S.A. Hashim, B Sc, Ph D (UTSC)
A.M. Vukov, MA, ASA
A. Weir, B Sc, M Sc, Ph D (UTM)

### Lecturer
K. Butler, M Sc, Ph D (UTSC)

Statistical methods have applications in almost all areas of science, engineering, business, government, and industry. The practising statistician is involved in such diverse projects as designing clinical trials to test a new drug, economic model-building to evaluate the costs of a guaranteed-income scheme, predicting the outcome of a national election, planning a survey of television viewing habits, and estimating animal populations.

Today's consumer is bombarded with the results of so many quantitative studies using statistical methodology that it is necessary to know something about statistics in order to be properly critical. A basic knowledge of statistics should be an integral part of everyone's general education.

Probability theory is used to analyse the changing balance among the age-groups in a population as the birth rate changes, the control force needed to keep an aircraft on course through gusts of wind, the chance that the demand for electricity by all the customers served by a substation will exceed its capacity. These are just three of many phenomena that can be analysed in terms of randomness and probability.

The course offerings are intended not only for specialists in the theory of the subject but also to serve the needs of the many other disciplines that use statistical methods, e.g. in sample survey design and experimental design. Students following the Specialist Program are encouraged to include courses in major fields of application in their overall program. The Major Program can be profitably combined with specialization in another discipline. Students in these programs may also qualify for the A.Stat. designation from the Statistical Society of Canada.

Both applied and theoretical courses are offered in Statistics and Probability. The foundation courses STA 220H1, 221H1, 250H1, 255H1, 257H1, and 261H1 are distinguished primarily by their mathematical demands, as indicated by the prerequisites. Students interested in the Biological or Social Sciences will generally find the most relevant courses of the more advanced courses to be STA 302H1, 322H1, 332H1, and 429H1. Furthermore, the probability course STA 347H1 will be of interest to those whose field of application includes stochastic models.

Associate Chair, Undergraduate Studies: Professor D. Brenner; e-mail: brenner@utstat.utoronto.ca

Enquiries: 100 St. George Street, Sidney Smith Hall, Room 6018 (416-978-3452)

## Statistics Programs

Enrolment in these programs requires completion of four courses; no minimum GPA is required.

### Statistics (Science program)

**Specialist program:**
(11 full courses or their equivalent, including at least one 400-series course)

First Year:
CSC 148H1/260H1 (may be taken in 2nd year); MAT 137Y1/157Y1
Second Year:
MAT 223H1/240H1, 224H1/247H1; MAT 237Y1/235Y1/257Y1; STA (257H1, 261H1) (MAT 223H1/240H1 recommended in First Year)
Higher Years:
1. STA 302H1, 347H1, 352Y1
2. 1.5 courses from Group A (MAT 237Y1 required) or 1.5 courses from Group B:
3. 1.0 course from: APM 346H1/351Y1, MAT 334H1/354H1, 337H1/357H1, 301H1/347Y1
4. 2.0 full courses from: ACT 300+ level courses; CSC 336H1/350H1, 354H1, 384H1; STA 300+ level courses

**Group A:**
STA 410H1/442H1, 414H1/422H1/438H1, 447H1

**Group B:**
STA 410H1, 442H1, 414H1/437H1/457H1
Note
Substitutions of other Science/Social Science 300+ level courses for up to 1.0 courses in 4. above are possible with approval of the Undergraduate Coordinator

### Major program:
(6.5 full courses or their equivalent)

First Year:
CSC 108H1/148H1/260H1 (may be taken in 2nd year); MAT 135Y1/137Y1/157Y1
Second Year:
MAT 223H1/240H1, 235Y1/237Y1/257Y1; STA (257H1, 261H1)/(250H1, 255H1)/(247H1, 248H1)
(MAT 223H1/240H1 recommended in First Year)
Higher Years:
1. STA 302H1
2. A selection of four STA half-courses from STA 322H1, 332H1, 347H1, 352Y1, 410H1, 414H1, 422H1, 437H1, 438H1, 442H1, 457H1, 447H1, 450H1

**Note**
Suggested combinations for the four STA half courses are as follows:
1. Four of: STA 347H1, 352Y1, 447H1
2. Four of: STA 322H1, 332H1, 410H1, 437H1, 442H1, 457H1
3. Four of: STA 332H1, 347H1, 410H1/437H1, 442H1/422H1

### Minor program:
(4 full courses or their equivalent)

1. MAT 135Y1/137Y1
2. MAT 223H1/240H1; STA (250H1/(220H1, 221H1), 255H1)/STA (247H1, 248H1)/STA (257H1, 261H1)
3. STA (302H1, 352Y1)/three STA half-courses at the 300/400-level

### Statistics and Computer Science - See Computer Science

### Statistics and Economics - See Economics

### Statistics and Mathematics (Science program)

Consult Professor J.S. Rosenthal, Department of Statistics.

### Specialist program:
(11 full courses or their equivalent, including at least one 400-series course)

First Year:
MAT 157Y1, 240H1
Second Year:
MAT 247H1, 257Y1, 267H1, STA 257H1, 261H1
Third and Fourth Years:
1. MAT 327H1, 354H1, 357H1; STA 352Y1, 347H1, 447H1
2. At least 2 half-courses from STA 302H1, 332H1, 410H1, 414H1, 437H1, 442H1, 450H1
3. At least 2 half-courses from STA 422H1, 438H1, 457H1
4. At least one 300+ level f.c.e. from APM, CSC, MAT

**Note**
The Department recommends that PHY 151H1, 152H1 be taken in first year, and that CSC 148H1/260H1 be taken during the program

## Statistics Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26) STA 220H1, 221H1, 250H1, 255H1, and 257H1 have NO distribution requirement status; STA 429H1 is a SCIENCE or SOCIAL SCIENCE course; all other STA courses are classified as SCIENCE courses.

**SCI199H1 First Year Seminar [26S]**

**SCI199Y1 First Year Seminar [52S]**
Undergraduate seminar that focuses on specific ideas, questions, phenomena or controversies, taught by a regular Faculty member deeply engaged in the discipline. Open only to newly admitted first year students. It may serve as a distribution requirement course; see page 48.

**STA107H1 An Introduction to Probability and Modelling [39L, 13T]**
Introduction to the theory of probability, with emphasis on the construction of discrete probability models for applications. After this course, students are expected to understand the concept of randomness and aspects of its mathematical representation. Topics include random variables, Venn diagrams, discrete probability distributions, expectation and variance, independence, conditional probability, the central limit theorem, applications to the analysis of algorithms and simulating systems such as queues.
Exclusion: ECO220Y1, ECO227Y1/STA247H1STA255H1/257H1/
Co-requisite: MAT135Y1/137Y1/157Y1(MAT137Y1/157Y1 is strongly recommended; MAT133Y1 is not acceptable)

**STA220H1 The Practice of Statistics I [39L, 13T]**
An introductory course in statistical concepts and methods, emphasizing exploratory data analysis for univariate and bivariate data, sampling and experimental designs, basic probability models, estimation and tests of hypothesis in one-sample and comparative two-sample studies. A statistical computing package is used but no prior computing experience is assumed.
Exclusion: ECO220Y1/227Y1/GGR270H1/PSY201H1/SOC300Y1/STA250H1/261H1/248H1
Prerequisite: Grade 12 Mathematics and one University course in the physical, social, or life sciences
STA220H1 does not count as a distribution requirement course.

**STA221H1 The Practice of Statistics II [39L, 13T]**
Continuation of STA220H1, emphasizing major methods of data analysis such as analysis of variance for one factor and multiple factor designs, regression models, categorical and non-parametric methods.
Exclusion:ECO220Y1/227Y1/GGR270Y1 /PSY202H1/SOC300Y1/STA261H1/250H1/248H1
Prerequisite: STA220H1
STA221H1 does not count as a distribution requirement course.

**STA247H1 Probability with Computer Applications [39L, 13T]**
Introduction to the theory of probability, with emphasis on applications in computer science. The topics covered include random variables, discrete and continuous probability distributions, expectation and variance, independence, conditional probability, normal, exponential, binomial, and Poisson distributions, the central limit theorem, sampling

distributions, estimation and testing, applications to the analysis of algorithms, and simulating systems such as queues.
Prerequisite: MAT 135Y1/137Y1/157Y1; CSC 108H1/148H1
Exclusion: ECO 227Y1/STA 255H1/257H1

**STA248H1 Statistics for Computer Scientists [39L, 13T]**
A survey of statistical methodology with emphasis on data analysis and applications. The topics covered include descriptive statistics , data collection and the design of experiments, univariate and multivariate design, tests of significance and confidence intervals, power, multiple regressions and the analysis of variance, and count data. Students learn to use a statistical computer package as part of the course.
Prerequisite: STA 247H1/255H1/257H1; CSC 108H1/148H1
Exclusion: ECO 220Y1/227Y1/GGR 270Y1/PSY 201H1/SOC 300Y1/STA220H1/221H1/250H1/261H1

**STA250H1 Statistical Concepts [39L, 13T]**
A survey of statistical methodology with emphasis on data analysis and applications. The topics covered include descriptive statistics, basic probability, simulation, data collection and the design of experiments, tests of significance and confidence intervals, power, multiple regression and the analysis of variance, and count data. Students learn to use a statistical computer package as part of the course.
Exclusion: ECO220Y1/227Y1/GGR270Y1/PSY201H1/SOC300Y1/STA220H1/261H1/221H1/248H1
Prerequisite: MAT133Y1/135Y1/137Y1/157Y1
STA250H1 does not count as a distribution requirement course

**STA255H1 Statistical Theory [39L, 13T]**
This courses deals with the mathematical aspects of some of the topics discussed in STA250H1. Topics include discrete and continuous probability distributions, conditional probability, expectation, sampling distributions, estimation and testing, the linear model.
Exclusion: ECO220Y1/227Y1/STA257H1/261H1/247H1/248H1
Prerequisite: STA250H1/221H1, MAT135Y1/137Y1/ 157Y1
STA255H1 does not count as a distribution requirement course.

**STA257H1 Probability and Statistics I [39L, 13T]**
This course covers probability including its role in statistical modelling. Topics include probability distributions, expectation, continuous and discrete random variables and vectors, distribution functions. Basic limiting results and the normal distribution presented with a view to their applications in statistics.
Exclusion: ECO227Y1/STA255H1/247H1
Prerequisite: MAT135Y1/137Y1/157Y1 (MAT137Y1/157Y1 is strongly recommended)
Co-requisite: MAT235Y1/237Y1/257Y1 (MAT237Y1/257Y1 is strongly recommended)
STA257H1 does not count as a distribution requirement course.

**STA261H1 Probability and Statistics II [39L, 13T]**
A sequel to STA257H1 giving an introduction to current statistical theory and methods. Topics include: estimation, testing, and confidence intervals; unbiasedness, sufficiency, likelihood; simple linear and generalized linear models.
Exclusion: ECO227Y1STA248H1/255H1
Prerequisite: STA257H1

**STA299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**STA302H1 Regression Analysis [39L]**
Analysis of the multiple regression model by least squares; statistical properties of least squares analysis, estimate of error; residual and regression sums of squares; distribution theory under normality of the observations; confidence regions and intervals; tests for normality; variance stabilizing transformations, multicollinearity, variable search method.
Exclusion: ECO327Y1/357Y1
Prerequisite: STA255H1/248H1/261H1/ECO220Y1(70%)/227Y1/(STA257H1, MAT224H1)

**STA322H1 Design of Sample Surveys [39L]**
Designing samples for valid inferences about populations at reasonable cost: stratification, cluster/multi-stage sampling, unequal probability selection, ratio estimation, control of non-sampling errors (e.g. non-response, sensitive questions, interviewer bias).
Prerequisite: ECO220Y1/227Y1/GGR270H1 / PSY202H1/SOC300Y1/STA221H1/255H1/261H1/248H1

**STA332H1 Experimental Design (formerly STA402H1) [39L]**
Design and analysis of experiments: randomization; analysis of variance; block designs; orthogonal polynomials; factorial designs; response surface methodology; designs for quality control.
Prerequisite: STA302H1/352Y1/ECO327Y1/357Y1
Exclusion: STA402H1

**STA347H1 Probability [39L]**
An overview of probability from a non-measure theoretic point of view. Random variables/vectors; independence, conditional expectation/probability and consequences. Various types of convergence leading to proofs of the major theorems in basic probability. An introduction to simple stochastic processes such as Poisson and branching processes.
Prerequisite: STA247H1/255H1/257H1/(ECO227, MAT237Y1/257Y1), MAT223H1/240H1; MAT235Y1/237Y1/257Y1
Note: STA257H1 and MAT237Y1/257Y1; MAT (223H1, 224H1)/240H1 are very strongly recommended)

**STA352Y1 Introduction to Mathematical Statistics [78L]**
Introduction to statistical theory and its application. Basic inference concepts. Likelihood function, Likelihood statistic. Simple large sample theory. Least squares and generalizations, survey of estimation methods. Testing hypotheses, p-values and confidence intervals. Bayesian-fequentist interface. Analysis of Variance from a vector-geometric viewpoint. Conditional inference.
Prerequisite: MAT235Y1/MAT237Y1/MAT257Y1; STA261H1/(STA257H1, MAT224H1)/(ECO227Y1, MAT237Y1/MAT257Y1) (MAT237Y1/MAT257Y1 very strongly recommended).

**STA398H0 Independent Experiential Study Project**

**STA399Y0 Independent Experiential Study Project**
An instructor-supervised group project in an off-campus setting. See page 48 for details.

**STA410H1 Statistical Computation [39L]**
Programming in an interactive statistical environment. Generating random variates and evaluating statistical methods by simulation. Algorithms for linear models, maximum likelihood

estimation, and Bayesian inference. Statistical algorithms such as the Kalman filter and the EM algorithm. Graphical display of data.
Prerequisite: STA302H1, CSC108H1

**STA412H1 Methods of Nonparametric Inference [52L, 26P]**
Modern methods of nonparametric inference, with special emphasis on bootstrap methods, and including density estimation, kernel regression, smoothing methods and functional data analysis.
Prerequisite: STA302H1, 352Y1

**STA414H1 Statistical Methods for Data Mining and Machine Learning [52L, 26P]**
Statistical aspects of supervised learning: regression with spline bases, regularization methods, parametric and nonparametric classification methods, nearest neighbours, cross-validation and model selection, generalized additive models, trees, model averaging, clustering and nearest neigtbour methods for unsupervised learning.
Prerequisite: STA302H1/CSC411H1

**STA422H1 Theory of Statistical Inference [39L]**
The course discusses foundational aspects of various theories of statistics. Specific topics covered include: likelihood based inference, decision theory, fiducial and structural inference, Bayesian inference.
Prerequisite: STA352Y1

**STA429H1 Advanced Statistics for the Life and Social Sciences [39L]**
The course discusses many advanced statistical methods used in the life and social sciences. Emphasis is on learning how to become a critical interpreter of these methodologies while keeping mathematical requirements low. Topics covered include multiple regression, logistic regression, discriminant and cluster analysis, principal components and factor analysis.
Exclusion: All 300+ level STA courses except STA322H1
Prerequisite: ECO220Y1/227Y1/GGR270Y1 /PSY202H1/ SOC300Y1/STA221H1/250H1
STA429H1 does not count towards any STA programs

**STA437H1 Methods for Multivariate Data [26L, 13P]**
Practical techniques for the analysis of multivariate data; fundamental methods of data reduction with an introduction to underlying distribution theory; basic estimation and hypothesis testing for multivariate means and variances; regression coefficients; principal components and partial, multiple and canonical correlations; multivariate analysis of variance; profile analysis and curve fitting for repeated measurements; classification and the linear discriminant function.
Prerequisite: ECO327Y1/357Y1/STA302H1/352Y1
Recommended preparation: APM233Y1/MAT223H1/240H1

**STA438H1 Theoretical Multivariate Statistics [39L]**
An introductory survey of current multivariate analysis, multivariate normal distributions, distribution of multiple and partial correlations, Wishart distributions, distribution of Hotelling's T2, testing and estimation of regression parameters, classification and discrimination.
Prerequisite: MAT223H1/240H1, STA352Y1/437H1 (STA352Y1 strongly recommended)

**STA442H1 Methods of Applied Statistics [39L]**
Advanced topics in statistics and data analysis with emphasis on applications. Diagnostics and residuals in linear models, introductions to generalized linear models, graphical methods, additional topics such as random effects models, split plot designs, analysis of censored data, introduced as needed in the context of case studies.
Prerequisite: ECO327Y1/357Y1/STA302H1 ; STA332H1

**STA447H1 Stochastic Processes (formerly STA348H1) [39L]**
Discrete and continuous time processes with an emphasis on Markov, Gaussian and renewal processes. Martingales and further limit theorems. A variety of applications taken from some of the following areas are discussed in the context of stochastic modeling: Information Theory, Quantum Mechanics, Statistical Analyses of Stochastic Processes, Population Growth Models, Reliability, Queuing Models, Stochastic Calculus, Simulation (Monte Carlo Methods).
Exclusion: STA348H1
Prerequisite: STA347H1

**STA450H1 Topics in Statistics [39L]**
Topics of current research interest are covered. Topics change from year to year, and students should consult the department for information on material presented in a given year.

**STA457H1 Time Series Analysis [39L]**
An overview of methods and problems in the analysis of time series data. Topics include: descriptive methods, filtering and smoothing time series, theory of stationary processes, identification and estimation of time series models, forecasting, seasonal adjustment, spectral estimation, bivariate time series models.
Prerequisite: ECO327Y1/357Y1/STA302H1
Recommended preparation: MAT235Y1/237Y1/257Y1

**STA496H1 Readings in Statistics [TBA]**

**STA497H1 Readings in Statistics [TBA]**
Independent study under the direction of a faculty member. Persons wishing to take this course must have the permission of the Undergraduate Secretary and of the prospective supervisor.

**STA498Y1 Readings in Statistics [TBA]**

**STA499Y1 Readings in Statistics [TBA]**
Independent study under the direction of a faculty member. Persons wishing to take this course must have the permission of the Undergraduate Secretary and of the prospective supervisor.

## Toxicology: see Life Sciences: Pharmacology and Toxicology

# Trinity College

Trinity College offers Trinity One, a set of first-year courses, an independent studies program, and three inter-disciplinary programs: Ethics, Society, and Law; Immunology; International Relations. The Major Program in Ethics, Society, and Law assembles courses offered by a variety of Departments and Colleges, including History, Philosophy, Political Science, Religion, Sociology, and Woodsworth College. The Specialist Program in Immunology is assembled from offerings by the Departments of Biochemistry, Immunology, Microbiology, and Molecular Genetics and Molecular Biology. The International Relations Program encompasses courses offered by the Departments of History, Political Science, and Economics.

### Trinity One

Trinity One provides first-year students with the opportunity to explore together significant issues and ideas pertaining to the conduct of human life and world affairs. There are two streams in Trinity One, each linked to a prominent aspect of the College's intellectual identity. One of the streams focuses on international relations, the other on ethics. Each stream includes two seminar courses limited to 25 students. These courses foster small-group discussion and emphasize the development of critical-thinking, oral-presentation, writing and research skills. Cocurricular events, drawing upon the resources of the Munk Centre for International Studies at Trinity College and the University of Toronto's Centre for Ethics (located at Trinity), enable students in both streams of Trinity One to hear guest speakers and to engage in informal conversation with one another and with their professors.

## Trinity College Programs

### Ethics, Society, and Law (Arts program)

Consult: Prof. John Duncan, Room 216, Larkin Building, Trinity College, 416-978-2165.

Enrolment is limited to students with a CGPA of 2.80 who have completed four courses.

### Major program

(7 full courses or their equivalent)

The following requirements apply to students who enrol in the program after September 23, 2007. The requirements in the 2006-07 Calendar apply to students who enrolled in the program prior to 2007-08.

1. PHL 271H1 (recommended to be taken in the first year of registration in the program)
2. POL 200Y1/PHL 265H1/PHL 275H1 (to be taken in any year of registration in the program)
3. TRN 303H1 (to be taken in the second year of registration in the program)
4. TRN 412H1 (to be taken in the final year of registration in the program)
5. If POL 200Y1 is taken in satisfaction of requirement 2 above, then 4.5 full courses or the equivalent must be taken from Groups A-D, including at least one from each of Groups A-C and at least two at the 300+ level. If PHL 265H1/PHL 275H1 is taken in satisfaction of requirement 2 above, then five full courses or the equivalent must be taken from Groups A-D, including at least one from each of Groups A-C and at least two at the 300+ level.

**Group A (Ethics)**
PHL273H1,275H1, 281Y1, 295H1, 341H1, 373H1, 375H1, 378H1,380H1, 381H1, 382H1, 383H1, 384H1, 394H1, 407H1; POL330H1; PSY314H1; RLG221H1,, 228H1;TRN311H1

**Group B (Society)**
ANT 204Y1; CSC 300H1; ECO 313H1, 332H1, 336Y1, 340H1; ENV 447H1, GGR 233Y1, 331H1, 393H1; HIS 332H1, 355H1; HPS 324H1; JGE 221Y1; PHL 265H1, 365H1; POL 200Y1, 214Y1, 320Y1, 404H1, 405Y1, 412H1, 432H1; PSY 311H1, 321H1; SOC 203Y1, 212Y1, 215Y1, 301Y1, 306Y1;WDW 200Y1, 300H1, 320H1, 335H1, 340H1, 380H1, 385H1;WGS 373H1

**Group C (Law)**
CLA 336H1; ECO 320H1; ENV 422H1; NMC 484H1; PHL 370H1, 484H1; POL 319Y1, 332Y1, 337Y1, 340Y1; SMC 304H1, 361H1; SOC 213Y1;TRN 305Y1, 425Y1;WDW220Y1, 365H1, 420H1;WGS 365H1

**Group D (Further Courses)**

RLG 309Y1;TRN 200Y1, 300H1, 301Y1, 302Y1, 400H1, 404Y1, 405Y1, 406H1/407Y1

N.B. The above WDW courses are only available to students enrolled in the double major program Ethics, Society, and Law/ Criminology

### Immunology Studies:

Consult Prof. J.C. Zúñiga-Pflücker (416-978-0926)

For more information please see the entry under Life Sciences - Immunology

### Independent Studies

Consult Professor C. Kanaganayakam, Room 305, Larkin Building, Trinity College (416-978-8250).

The College's Independent Studies Program affords students the opportunity of investigating in depth topics of their own choice that are not directly part of the present curriculum. These topics normally involve interdisciplinary study, though under some circumstances they may require concentrated work in a single discipline. The scope of acceptable topics embraces the natural and social sciences as well as the humanities. Participation in the program is restricted to students who have completed at least ten courses. The maximum number of independent studies half courses for which a student may receive credit is one, and the maximum number of independent studies full courses for which a student may receive credit is two. Thus the maximum number of independent studies full course equivalents for which a student may receive credit is 2.5. Normally the work done is to be the equivalent of two full courses. Permission to register in an independent studies half course, or in an independent studies full course, will normally be granted only to students with a cumulative GPA of at least 3.50. Permission to undertake an independent studies project for the equivalent of two full courses will normally be granted only to students with a cumulative GPA of at least 3.70.

All proposals are subject to the approval of the Coordinator.

Students must submit to the Coordinator before the beginning of the academic year a copy of their academic transcript and an outline of their topic (signed by the supervisor) and a suggested bibliography. For evaluation of the work done in the program a short thesis or equivalent is required, prepared and

submitted by the last day of classes in the fall or winter session as appropriate. The supervisor and a second reader (nominated by the supervisor and approved by the Coordinator before the end of September) are responsible for the evaluation. The Coordinator will require regular progress reports throughout the year.

Either the supervisor or the second reader must be a tenured University of Toronto faculty member. A supervisor who is not a tenured University of Toronto faculty member will normally be required to be a full-time faculty member of the University.

Students enrolling for the first time register for one or more of TRN 300H1, 301Y1, 302Y1, or for one or more of TRN 400H1, 404Y1, and 405Y1, as appropriate. Those enrolling for a second time register in one or more of TRN 400H1, 404Y1, and 405Y1, as appropriate.

## International Relations (Arts program)

Consult the Office of the International Relations Program, Room 310N, Munk Centre for International Studies, 416-946-8950.

Enrolment in the Specialist Program is limited to students with a CGPA of 3.00, and a combined average of at least 67% in required first-year courses. A personal interview completes admission to the program.

**Specialist program:**
(13 full courses or their equivalent, including at least two 400-series courses)

First Year:
ECO 100Y1/105Y1; HIS 103Y1 or TRN 150Y1/151Y1 or two of VIC 181H1, 183H1, 184H1, 185H1; one introductory modern language course or MAT133Y1/137Y1
NOTE: Students who intend to apply for the Specialist program are strongly encouraged to take ECO 100Y1; POL 108Y1 is optional, and can replace one of the POL options under 2nd, 3rd or 4th years below.
Second and Third Years:
1. POL 208Y1 (must be taken in Second Year)
2. ECO 230Y1/364H1 + 365H1, 342Y1; HIS 311Y1, 344Y1; POL 312Y1/326Y1/340Y1

Second, Third or Fourth Year:
Normally two full course equivalents from: ANT 452H1; ECO 200Y1, 202Y1, 230Y1/364H1 + 365H1, 303Y1, 324Y1; EUR 200Y1; GGR 439H1; HIS 241H1, 242H1, 250Y1, 251Y1, 271Y1, 304H1, 327H1, 329H1, 334Y1, 338H1, 343Y1, 347H1, 376H1, 377Y1; JMC 301Y1; LAS 200Y1; NMC 358H1, 378H1; POL 108Y1, 201Y1, 312Y1, 318H1, 323H1, 324Y1, 326Y1, 335H1, 340Y1, 341H1, 342 H1, 343Y1, 370H1
Fourth Year:
Two full course equivalents from the following seminars: ECO 419H1, 429Y1, 459H1; HIS 401Y1, 405Y1, 436H1, 445H1, 451H1, 453H1, 455H1, 457H1, 458Y1, 471H1, 473Y1, 479H1, 488H1, 492H1, 497Y1, 498H1; JHP 400Y1; JUP 460H1; JUP 460Y1; NMC 474H1, 476H1; POL 401H1, 410H1, 412H1, 413H1, 414H1, 415H1, 416Y1, 417Y1, 420Y1, 435H1, 440Y1, 441H1, 442H1, 452Y1, 453Y1, 458H1, 459Y1, 464H1, 465H1, 466H1, 468H1, 469H1, 470Y1, 477H1, 486H1/Y1, 487H1/Y1, 495Y1, 496H1; TRN 410Y1, 411Y1, 419Y1, 421Y1

Notes:
1. Language skills are vital for the study of international relations.
2. Nine full courses in the Program should be completed among the student's first 15 courses.
3. Students may change from Major to Specialist Programs only if they meet current Specialist requirements and if places are available.

**Major program:**
(7 full courses or their equivalent)

Enrolment in the Major Program is limited to students with a CGPA of 2.70, and a combined average of at least 67% in required first-year courses. A personal interview completes admission to the program.

First Year: ECO 100Y1/105Y1, HIS 103Y1 or TRN 150Y1/151Y1 or two of VIC 181H1, 183H1, 184H1, 185H1
Higher Years:
1. POL 208Y1 (must be taken in Second Year)
2. ECO 230Y1/342Y1, HIS 311Y1, 344Y1, POL 312Y1/326Y1/340Y1

## International Relations Program/Peace and Conflict Studies Program (Arts program)

Consult the Office of the International Relations Program, Room 310N, Munk Centre for International Studies, 946-8950 or the Office of the Peace and Conflict Studies Program, Room H11, University College, 416-978-2485.

Admission to the Joint Specialist program requires students to complete specified first year courses plus the approval of the Directors of the International Relations Program and the Peace and Conflict Studies program through an interview. A limited number of students are accepted each year. Enrolment in the Joint Specialist Program is limited to students with a First-year CGPA of 3.00.

**Joint Specialist program:**
(13 full courses or their equivalent, including at least two 400-series courses)

First Year:
ECO 100Y1/105Y1; HIS 103Y1; PSY100H1 + PSY220H1/SOC101Y1
Second Year:
ECO 230Y1; POL 208Y1; UNI 260Y1
Third Year:
HIS 311Y1/344Y1; UNI 360Y
Fourth Year:
JUP 460Y1 plus
One full course equivalent from the following: HIS 458Y1, 473Y1, 479H1, 482H1, 488H1, 497Y1, 498H1; TRN 421Y1
Note: In addition, students must meet the Peace and Conflict Studies Program requirement of completing a cluster of 3 full course equivalents to be chosen in consultation with the Peace and Conflict Studies Program Director.

## Trinity College Courses

(Trinity One; Ethics, Society, & Law; Independent Studies; International Relations; Other)

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all TRN courses are classified as HUMANITIES courses except TRN 150Y1, 151Y1, 305Y1 and 425Y1, which are SOCIAL SCIENCE courses, and TRN 419Y1, which is both a HUMANITIES and a SOCIAL SCIENCE course.

### Trinity One

Students participating in Vic One are excluded from Trinity One.

**TRN150Y1 National versus International [52S]**
This seminar examines the rise of nationalisms and nation states since the 16th century and the ways these intersect or compete with international movements, ideas and institutions. Topics may include the Enlightenment, the French Revolution, the birth of Germany, peace movements, the League of Nations, and humanitarian relief. Open only to students admitted to Trinity One.
Co-requisites: TRN151Y1 & a first-year course in History or Political Science or Economics or Sociology or a course with permission of the Coordinator.
This is a Social Science course.

**TRN151Y1 Global Governance [52S]**
This seminar course provides an orientation to the study of contemporary world order. Topics may include important legacies of the world wars of the 20th century, theories of conflict and cooperation, and new forms of transnational collaboration. Open only to students admitted to Trinity One.
Co-requisites: TRN150Y1 & a first-year course in History or Political Science or Economics or Sociology or a course with permission of the Coordinator.
This is a Social Science course.

**TRN170Y1 Ethics and the Creative Imagination [52S]**
A seminar course that explores ethical issues through the study of works of the creative imagination that pose or provoke questions of right and wrong, good and evil, justice and injustice. The selected works will be drawn from such fields as literature, film, and the visual and performing arts. Open only to students admitted to Trinity One.
Co-requisites: TRN171Y1 & a first-year course in English or Philosophy or Political Science or a course with permission of the Coordinator.

**TRN171Y1 Ethics and the Public Sphere [52S]**
A seminar course that explores ethical issues arising in such public domains as international relations, law, science, business, the arts, civil society, public life, the mass media, popular culture. Issues may include war crimes, human rights, assisted suicide, genetic engineering, corporate responsibility, private vice and public virtue, "the tragedy of the commons". Open only to students admitted to Trinity One.
Co-requisites: TRN170Y1 & a first-year course in English or Philosophy or Political Science or a course with permission of the Coordinator.

### Ethics, Society, and Law Courses

**TRN 303H1 Ethics and Society [26L]**
An exploration of the ethical dimensions of selected contemporary social issues. Students in the major program in Ethics. Society, and Law have enrolment priority.
Prerequisite: PHL 271H1

**TRN305Y1 Basic Principles of Law [52L]**
The nature and justifications of legal rules as preparation for the study of basic principles of law governing the relations between individual citizens, and the relations between individual citizens and the state. Contract, torts, criminal and administrative law. (Enrolment limited: TRN305Y1 is not open to Commerce students. Commerce students should enrol in MGT393H1/394H1 in which they have priority.)
Prerequisite: A student must be in third or fourth year.
This is a Social Science course

**TRN311H1 Ethics and Human Liberation [26S]**
The ethical implications of critical social theory, in particular that of the 'Frankfurt School'. The possibilities for justice and freedom in contemporary capitalism; the potential for social movements, such as the women's movement, for emancipatory transformation.
Recommended preparation: A half-course in ethics/women's studies/PHL267H1

**TRN406H1 Community Research Partnerships in Ethics**

**TRN 407Y1 Community Research Partnerships in Ethics**
Students undertake research projects designed to meet the knowledge needs of ethics-oriented organizations in the broader community.
Prerequisite: Students must be in the final year of registration in the Major Program in Ethics, Society, and Law and will normally have a CGPA of at least 3.20. Enrolment is by application. See the Registration Handbook and Timetable for enrolment procedures.

**TRN412H1 Seminar in Ethics, Society, and Law (formerly TRN312H1) [TBA]**
Prerequisite: Students must be in their final year of registration in the Major Program: Ethics, Society And Law. See the Registration Handbook and Timetable for enrolment procedures.
Recommended preparation: TRN305Y1/WDW220Y1/ equivalent background knowledge
Exclusion: TRN312H1

**TRN425Y1 Law Workshops Course [TBA]**
Students attend workshops in the Faculty of Law, meet for related discussion and complete related assignments. Enrolment is restricted to qualified fourth-year students registered in the Major Program Ethics, Society, and Law.
This is a Social Science course.

### Independent Studies Courses

**TRN299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**TRN300H1 Trinity Independent Studies [TBA]**

**TRN301Y1 Trinity Independent Studies [TBA]**

**TRN302Y1 Trinity Independent Studies [TBA]**

**TRN400H1 Trinity Independent Studies [TBA]**

**TRN404Y1 Trinity Independent Studies [TBA]**

**TRN405Y1 Trinity Independent Studies [TBA]**

### International Relations Courses

(See the International Relations Program Office for details)

**TRN410Y1 Selected Topics in International Studies [TBA]**

Prerequisite: Enrolment in the International Relations specialist program or in a History or Political Science specialist program

Exlcusion: TRN410H1

**TRN411Y1 Selected Topics in International Studies [TBA]**

Prerequisite: Enrolment in the International Relations program or in a History major or specialist program, or permission of instructor

**TRN419Y1 Comparative American, British and Canadian Foreign Policy [52S]**

The origins and evolution of American, British and Canadian foreign policy from the late 18th century to the present. Policies are compared in order to understand the development of these countries as nations and actors in the international community.

Prerequisite: Students must have a background in one of Canadian, British or American history.

This is a Humanities and a Social Science course.

**TRN421Y1 The Practice and Institutions of Diplomacy (formerly JHP420Y1) [52S]**

Evaluation of the nature of foreign policy negotiation and decision-making from the perspective of the practitioner.

Prerequisite: ECO342Y1/HIS311Y1/POL312Y1

### Other Trinity College Courses

**TRN190Y1 Critical Reading and Critical Writing [52S]**

This course introduces students to a number of critical approaches and develops the student's own responses to texts through an understanding of critical vocabulary and the art of close analytical reading. Students also learn how to make their own critical analysis more effective through oral presentations and written work.

**TRN200Y1 Modes of Reasoning (formerly TRN200H1) [26L, 26S]**

First term: students are taught how to recognize, analyze, evaluate, and construct arguments in ordinary English prose. Second term: one or more discipline-related modes of reasoning (e.g., scientific reasoning, ethical reasoning, legal reasoning) studied with reference to a selection of contemporary social issues.

Exclusion: PHL 247H1/PHI 247H1/TRN200H1

## Ukrainian: see Slavic Lanaguges and Literatures

# University College

## Faculty

### Professor

P. Kleber, MA, Ph D (Drama)

### Associate Professor

T. Homer-Dixon, BA, Ph D (Peace & Conflict Studies)
E. Gilbert, MA, Ph D (Canadian Studies)

### Assistant Professors

A. Ackerman, MA, Ph D (Drama)
A. Budde, MA, Ph D (Drama)
A. Egoyan, BA (Drama)
A. Janson, MA (Drama)
N. Kokaz, BA, Ph D (Peace & Conflict Studies)
J. Luo, MA, Ph D (Cognitive Science)
D. McGregor, MA, Ph D (Aboriginal Studies)
J. Saul, MA, Ph D (Canadian Studies)
C. Wesley-Esquimaux, MA, Ph D (Aboriginal Studies)

### Senior Lecturers

S. Bush (Drama)
K. Gass, BA (Drama)
A. McKay (Aboriginal Studies)
J. Plotnick, MA, M Sc (Writing Workshop)
R. Salutin, MA (Canadian Studies)

### Lecturers

S. Lyons, BA (Drama)
J. Vervaeke, MA, Ph D (Cognitive Science)

University College offers a number of programs and courses outside the areas traditionally covered by departments. These include programs and courses in Aboriginal Studies, Canadian Studies, Cognitive Science, Cognitive Science and Artificial Intelligence, Drama, Health Studies, Peace and Conflict Studies, and Sexual Diversity Studies, in addition to 199Y1 Seminars, and introductory courses for non-specialists in mathematics and physics. The overall aims of the College Programs are to foster interdisciplinary work in significant areas of study and to encourage intellectual breadth. Many program courses are open to students not enrolled in the programs themselves.

**The Aboriginal Studies Program (Major, Minor)**

is described elsewhere in this Calendar, under Aboriginal Studies.

**The Canadian Studies Program (Specialist, Major, Minor)**

offers opportunities to study Canadian culture and society in an interdisciplinary manner and to explore cultural, social, economical and political developments in this diverse country. Students in the Specialist and Major programs select courses from the Humanities or Social Sciences. They are encouraged to consider additional courses in Aboriginal Studies in completing the requirements of the Program.

**The Cognitive Science Program (Specialist, Major)**

is an interdisciplinary exploration of the nature of cognition, drawing on the perspectives of Philosophy, Psychology, and Linguistics.

**The Cognitive Science and Artificial Intelligence Program (Specialist, Major)**

is an interdisciplinary exploration of the nature of cognition, drawing mainly on the perspectives of Computer Science and two of Linguistics, Philosophy, and Psychology.

**The Drama Program (Specialist, Major, Minor)**

is described elsewhere in this Calendar, under Drama.

**The Health Studies Program (Specialist, Major)**

focuses the many areas of study that surround, interact with and support bio-medical research and clinical activity in regard to health, including health policy, practices, research methods, and sociocultural expression. The Major serves as a general introduction; the Specialist provides a more intense research focus with more methodological emphasis.

**The Peace and Conflict Studies Program (Specialist, Major)**

provides undergraduates with an interdisciplinary education in the causes of human conflict and strategies for its resolution; topics of study include war, revolution, rebellion, ethnic strife, international law, and negotiation theory.

**The Sexual Diversity Studies Program (Specialist, Major, Minor)**

allows students to focus on questions of sexual identity, difference, and dissidence across disciplinary lines and cultural frameworks.

UNI, DRM and ABS courses are staffed by a combination of specific program staff members and members of various University departments, and are open to all students of the University. Further information on University College programs is available from the College.

Enquiries: Programs Office, University College, Room 251 (416-978-6276)

## University College Programs

### Aboriginal Studies - See Aboriginal Studies

### Canadian Studies (Arts program)

Consult Programs Office, Room E103, University College, 416-978-8153 or visit the Canadian Studies website at www.utoronto.ca/canstudies/ .

Completion of four courses is required for enrolment in the Canadian Studies Specialist or Major program; no minimum GPA required.

#### Specialist program:

(12 full courses or their equivalent including at least three 300+series full-year equivalent courses and at least one 400-series full-year equivalent course)

First Year:
One full course from the following list: ANT 100Y1; ECO 100Y1/105Y1; ENG 140Y1;; FSL 121Y1/161Y1/163H1/181Y1; GGR 107Y1/124Y1; POL 103Y1; SOC 101Y1
First or Second Year:
1. UNI 220Y1; HIS 263Y1

2. One full course equivalent from FSL 161Y1/163H1/181Y1/183H1/261Y1/262Y1/264Y1/281Y1/ABS210Y1/310Y1

Higher Years:
1. UNI 320Y1, 420Y1
2. Six full course equivalents from one or both of the two perspectives listed below. Suitable courses not on the list may be considered. Course selections require approval from the Canadian Studies Programs Office.

**Major program:**
(8 full courses or their equivalent including at least two 300+series courses)

First Year:
One full course from the following list: ANT 100Y1; ECO 100Y1/105Y1; ENG 140Y1; FSL 121Y1/161Y1/163H1/181Y1; GGR 107Y1/124Y1; POL 103Y1; SOC 101Y1
First or Second Year:
UNI 220Y1; HIS 263Y1
Higher Years:
1. UNI 320Y1
2. Four full course equivalents from either one of the two perspectives listed below, one of which must be a 300+series course. Suitable courses not on the list may be considered. Course selections require approval from the Canadian Studies Programs Office.

**Minor program:**
(4 full courses)

1. One full course from the following list: ANT 100Y1; ECO 100Y1/105Y1; ENG 140Y1;FSL 121Y1/161Y1/163H1/181Y1; GGR 107Y1/124Y1; POL 103Y1; SOC 101Y1
2. UNI 220Y1; HIS 263Y1
3. UNI 320Y1

**Humanities Perspectives on Canada**
Humanities courses with a focus on Canada offered by University College and other departments and interdisciplinary programs including Aboriginal Studies, Cinema Studies, Drama, English, Fine Art, French, History, Italian Studies, Religious Studies and Slavic Studies. For a list of courses fitting under this rubric, please consult the Canadian Studies website at www.utoronto.ca/canstudies/.

**Social Science Perspectives on Canada**
Social Science courses with a focus on Canada offered by University College and other departments and interdisciplinary programs including Aboriginal Studies, Anthropology, Economics, Geography, Political Science, Sociology and Urban Studies. For a list of courses fitting under this rubric, please consult the Canadian Studies website at www.utoronto.ca/canstudies/.

## Cognitive Science (Arts program)

Consult the Programs Office, Room A102, University College, 416-946-3391 or visit the Cognitive Science website at www.cogsci.utoronto.ca.

Admission in the Specialist program requires (1) 70% or better in PHL201H1 or 63% or better in one of the following: UNI250Y1, ANT100Y1, LIN100Y1, PHL100Y1, or PSY100H1; and (2) a GPA of 2.0. Completion of four full course equivalents is required for admission in the Major program; no minimum GPA required.

Students enroled in the Specialist and Major program who have taken UNI250Y1 are permitted to take the PSY courses listed in the program without taking PSY100H1. Students should explore combining this program with a Major in Anthropology, Computer Science, Linguistics, Philosophy, or Psychology.

**Specialist program:**
(12 full courses or their equivalent, including at least one 400-series full course equivalent)

First Year:
CSC 107H1/108H1/150H1; UNI 250Y1; LIN 100Y1; PHL 240H1
Second Year:
LIN 228H1/232H1/JAL 253H1; HPS 250H1; PHL 245H1; PSY 201H1/STA 220H1/250H1; PSY 270H1, PSY 210H1/280H1/290H1
Second and Third Years:
UNI 301H1, 302H1
Third and Fourth Years:
Cognitive Science: UNI401H1; UNI 402
Psychology: PSY370H1; two of PSY 312H1/316H1/371H1/372H1/380H1/393H1
Linguistics: one of JLP 315H1/374H1/471H1/LIN 323H1/331H1/341H1/372H1/423H1
Philosophy: PHL 342H1; PHL 340; one of PHL 325H1/326H1//344H1/345H1/347H1/349H1/351H1/479H1/480H1/481H1
0.5 additional full course equivalents from among the above listed courses not yet taken, or from the following list: UNI402H1, 403H1; PSY 379H1, 389H1, 392H1, 396H1, PSY410H1, 472H1, 473H1. (With the permission of the Program Director, the following may also be counted: LIN495Y1-499H1; PHL490Y1, 496H1-499H1; PSY303H1, 304H1, 401H1-404H1, 470H1, 471H1, 480H1, 490H1.)
NOTE: Some courses listed in the paragraph above have prerequisites or recommended preparation not included in this program. Students interested in speech recognition should take LIN323H1 and LIN423H1; in cognitive development PSY210H1, 312H1, 410H1, and JLP315H1; in the brain PHL340H1, PSY290H1, 391H1, 393H1, and 490H1; in perception PSY 280H1, 380H1, and 480H1; in language and thought PHL 351H1, 451H1, and LIN 372H1; in psycholinguistics JLP 315H1 and 471H1; in thinking and reasoning PHL 247H1, PSY 371H1, 472H1, and 473H1.

**Major program:**
(7 full courses or their equivalent)

First Year:
UNI 250Y1; LIN 100Y1; PHL 245H1
Second Year:
PSY 201H1/STA 220H1/250H1; PSY 270H1; PSY 210H1/280H1/290H1
Second and Higher Years:
Cognitive Science: UNI 301H1 (optional), 302H1, HPS 250H1
Psychology: PSY 312H1/316H1/370H1/371H1/372H1/380H1/393H1/410H1
Linguistics: JLP 315H1/374H1/LIN 228H1/372H1
Philosophy: PHL 325H1/326H1/340H1/342H1/344H1/345H1/347H1/349H1/ 351H1/479H1/480H1/481H1
Third or Fourth Year:
UNI 402H1 (optional), 403H1 (optional), 450H1

## Cognitive Science and Artificial Intelligence (Science program)

Consult the Programs Office, Room A102, University College, 416-946-3391 or visit the Cognitive Science website at www.cogsci.utoronto.ca.

Admission in this program requires (1) 63% or better in CSC148H1/150H1 or 63% or better in UNI250Y1 or PSY100H1; and (2) a GPA of 2.0. Students enroled in this program who have taken UNI250Y1 are permitted to take the PSY courses listed in the program without taking PSY100H1. Students should explore combining this program with a Major in Anthropology, Computer Science, Linguistics, Philosophy, or Psychology.

**Specialist program:**
(13 full courses or their equivalent, including at least one 400-series full course equivalent)

First Year:
CSC 148H1/150H1, 165H1/240H1*; UNI 250Y1; MAT 135Y1/136Y1/137Y1/157Y1
Second Year:
CSC207H1, 236H1/240H1*; HPS 250H1; PSY 270H1;
* CSC240H1 is an accelerated alternative to CSC165H1 and CSC236H1, intended for students with a strong mathematical background. Consult the Computer Science undergraduate office for further advice.
Second and Higher Years:
STA 247H1/255H1/257H1
UNI 301H1/CSC 321H1, UNI 302H1; CSC 324H1; CSC 384H1; PSY 371H1
Two of the following course sequences:
Psychology Stream: PSY 201H1/210H1/280H1/290H1, 370H1/STA220H1/250H1/261H1, one of PSY 312H1/316H1/372H1/380H1/391H1/392H1/393H1/470H1/471H1/472H1/473H1
Linguistics Stream: LIN 100Y1; one of JLP 315H1/374H1/LIN 323H1/331H1/341H1/372H1/423H1
Philosophy Stream: PHL 245H1, 340H1/342H1
One addition half course from among the above listed course not yet taken or CSC318H1,320H1, 330H1
1, CSC321HI,324HI,340HI, 363/365HI, 373/375HI,401HI,420HI,428HI,448HI,465HI,485HI,486HI,487HI; JLP471HI;PSSSY379HI, 389Hi,392HI,396HI,410HI, 472HI, 473HI.
Third or Fourth Year:
UNI 450H1: UNI 402: UNI 403
NOTE: Some courses listed in the paragraph above have prerequisites or recommended preparation not included in this program. Students interested in speech recognition should take LIN228H1, LIN323H1, and LIN423H1; in cognitive development PSY312H1, PSY410H1 and JLP315H1; in the brain PHL340H1, PSY290H1, PSY391H1, PSY393H1, and PSY490H1; in perception PSY280H1, PSY380H1, PSY480H1 and CSC487H1; in language and thought PHL 350H1, 450H1; LIN372H1, and CSC485H1; in psycholinguistics JLP315H1 and JLP471H1; in thinking and reasoning PHL247H1, PSY471H1, PSY472H1, PSY473H1, and CSC486H1.

**Major program**
(8 full courses or their equivalent)

Admission in this program requires:
1. 63% or better in CSC148H1/CSC150H1/UNI250Y1/PSY100H1,
2. GPA of 2.0, and
3. Enrolment in the Major or Specialist program in Computer Science.

NOTE: In order to enrol in the Cognitive Science and Artificial Intelligence Major Program you will be required to register also for a Computer Science Major. (The latter is a restricted enrolment program and has certain admission requirements; please see the Computer Science program description.)

Students enrolled in this program who have taken UNI250Y1 are permitted to take the PSY courses listed in the program without taking PSY100H1.

First Year: UNI250Y1, PHY110Y1/138Y1/140Y1/BIO150Y1/(CHM138H1, 139H1)/151Y
Second & Higher Years: HPS250H1, UNI301H1, 302H1, CSC321H, 384H1, UNI402H1, 403H1
At least 2 FCEs covering at least 2 of the following disciplines, chosen from:
Psychology:
PSY201H1/STA220H1/248H1/250H1, PSY202H1/STA221H1/250H1, 210H1, 220H1, 230H1, 260H1, 270H1, 280H1, 290H1, 300H1, 303H1, 304H1, 305H1, 309H1, 314H1, 316H1, 319H1, 325H1, 330H1, 331H1, 362H1, 369H1, 370H1, 371H1, 372H1, 375H1, 378H1, 379H1, 380H1, 389H1, 390H1, 392H1, 393H1, 394H1, 396H1, 397H1, 399H1

Philosophy:
PHL210Y1, 217H1, 232H1, 240H1, 244H1, 245H1, 246H1, 310H1, 311H1, 312H1, 315H1, 319H1, 320H1, 321H1, 322H1, 325H1, 326H1, 331H1, 332H1, 340H1, 341H1, 342H1, 344H1, 345H1, 346H1, 347H1, 349H1, 351H1, 355H1, 356H1, 357H1, 405H1; HPS350H1

Linguistics:
LIN100H1, 228H1, 229H1, 232H1, 241H1, 305H1, 306H1, 322H1, 323H1, 331H1, 333H1, 341H1, 351H1, 356H1, 362H1, 398H0, 399Y0, 495Y1, 496H1, 497Y1, 498H1, 499H1; JLP315H1, 374H1, 471H1; JAL328H1; JLS474H1

Human Biology, Biology & Physiology:
BIO250Y1/BIO255Y1/PSL201Y1/(PSL300H1, PSL301H1), HMB204H1, 265H1, 300H1, 305H1, 320H1, 420H1
Third or Fourth Year: UNI401H1

## Drama: see Drama

## Health Studies (Arts program)

**Specialist program**
(11 full courses or their equivalent, including at least one 400-series course)

Enrolment in the Specialist Program is limited; selection is based on a personal statement, interview and GPA. To apply students must have competed four full credits or their equivalent. For further details on the application process please visit the Health Studies website at http://www.uc.utoronto.ca/healthstudies/

First Year: No specific courses required. (Students are advised to take introductory courses that will serve as prerequisites for optional courses of interest to them later in the program, e.g. ANT100Y1, POL 102Y1/POL103Y1, PSY100H1, SOC101Y1.) A course in biology or physiology is also recommended.
Second Year: STA220H1, 221H1, UNI200H1, 209H1, 211H1, 237H1
Third Year: UNI310H1, 330H1, 350Y1, 373H1 plus HMB303H1 or ABS350Y1

Fourth Year: UNI411Y1, 450Y1, 464H1 plus STA429H1 or UNI440H1
Remaining credits should be fulfilled by choosing one of the following streams:

Anthropology stream: ABS350Y1, ANT348Y1, 469H1, 455Y1
Political Science stream: POL201Y1, ANT349H1, POL 447Y1

### Major Program
(7 full courses or their equivalent)

Enrolment in the Major Program is limited. Students must have competed four full credits or their equivalent and have a competitive GPA. For further details on the application process please visit the Health Studies website at http://www.uc.utoronto.ca/healthstudies/

First Year: No specific courses required. (Students are advised to take introductory courses that will serve as prerequisites for optional courses of interest to them later in the program, e.g. ANT100Y1, POL 102Y1/POL103Y1, PSY100H1, SOC101Y1.) A course in biology or physiology is also recommended.
Second Year: STA220H1, 221H, UNI200H1, 209H1, 211H1, 237H1
Third Year: UNI310H1, 330H1, 373H1 plus HMB303H1 or ABS350Y1
Fourth Year: UNI411Y1, 464H1 plus STA429H1 or UNI440H
Major Program can be supplemented/enhanced by choosing courses in one of the following streams:

Anthropology stream: ABS350Y, ANT348Y, 469H, 455Y
Political Science stream: POL201Y, ANT349H, POL 447Y

## Peace and Conflict Studies (Arts program)

Consult Program Assistant, Room H11, University College, 416-978-2485.

Enrolment in the Specialist and Major programs is limited; selection is based on a personal interview and GPA. To apply, students must have completed ANY four full courses, or their equivalent. The Director approves each student's proposed program of study based on its relevance, coherence and focus.

### Specialist program:
(12 full courses or their equivalent, including at least one 400-series course)

1. HIS 103Y1/ECO 100Y1/105Y1(PSY 100H1 + PSY 220H)/ SOC 101Y1; POL 208Y1
2. UNI 260Y1, 360Y1, JUP 460Y1
3. Three courses from one of Groups A, B, C, D, E or F (below); at least one course must be at the 300+ series level
4. Three complementary courses with either a disciplinary, regional, or thematic focus relevant to Peace and Conflict Studies (on approval of the Director); at least one must be at the 300+ level

**Disciplinary focus:**
3 courses from one of ANT, ECO, GGR and Environmental Studies (combined), HIS, HPS, PHL, POL, PSY, RLG, SOC. (Note: HIS is excluded for students who have taken 3 HIS courses in 3. above; POL is excluded for students who have taken 3 POL courses in 3. above.)

**Regional Studies focus:**
3 courses on, for example, Canada, Southern Africa, the Middle East, or Latin America.

**Thematic focus:**
3 courses on a topic such as negotiation and conflict resolution, diplomatic history, gender and conflict, morality of war, quantitative analysis, group-identity conflict, economic development and conflict, or environmental change and conflict.

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**Group A**
HIS 103Y1, 106Y1, 202H, , 232Y1, 241H1, 242H1, 243H1, 244H1, 250Y1, 251Y1, 271Y1, 296Y, 303Y1, 311Y1, 317H1, 319H1, 325H1, 333Y1, 334Y1, 338Y1, 343Y1, 344Y1, 351H1, 355Y1, 356H1, 359H, 370H1, 372H1, 377Y1, 379H1, 386Y1, 390Y1, 396H1, 401Y1, 405Y1, 407H1, 408Y, 412Y1, 414H1, 415H, 421Y1, 424Y1, 429Y1, 436Y1, 442Y1, 445H1, 451H1, 453H1, 458Y1, 461H1, 473H1, 475H1, 480H1, 488H1, 491Y1, 492Y1, JHP435Y, 440Y, TRN421Y1

**Group B**
JHP 440Y1, JPE 400Y1, POL 108Y1, 201Y1, , 242Y1, 300H1/Y1, 301Y1, 304H1, 305Y1, 310Y1, 312Y1, 313Y1, 321H1, 323Y1, 324Y1, 326Y1, 340Y1, 342H1, 343Y1, 345H1, 346H1, 347Y1, 354H1, 358Y1, , 364H1, 370Y, 405Y1, 412Y1, 416Y1, 417Y1, 419Y1, 422Y1, 428H1, 429Y1, 435H1, 445Y1, 447Y1, 448H1, 459Y1, 463Y1, 464H1, 465H1, 467H1, 468H1, 469H1, 476H1, 479H1, 480H1, 486H1, 487H1

**Group C**
JLP 374H1, 471H1, PSY 100H1, 201H1, 210H1, 220H1, 270H1, 280H1, 300H1, 301H1, 311H1, 312H1, 314H1, 320H1, 321H1, 322H1, 324H1, 326H1, 328H1, 334H1, 370H1, 372H1, 420H1, 471H1, 472H1, 473H1

**Group D**
ENV 200Y1, 234Y1, 235Y1, 321Y1, GGR 107Y1, 124Y1, 203H1, 220Y1, 233Y1, 312H1, 314H1, 331H1, 338H1, 343H1, 364H1, 368H1, 393H1, 409H1, 415H1, 439H1, 452H1, 333H1, 398H0/399Y0, 418H1, 435H1, 494H1, JIE 222Y1, PHL 273H1, 373H1

**Group E**
ANT 100Y1, 204Y1, , 329Y1, 343Y1, 349H1, 362Y1, 363Y1, 364Y1, 366H1, 368H1, 395Y0/396Y0, 425H1, 426H1, 427H1, 440H1, 448H1, 450H1, 452H1, SOC 205Y1, 210Y1, 212Y1, 213Y1, 215Y1, 220Y1, 250Y1, 301Y1, 306Y1, 312Y1, 320Y1, 330Y1, 336H1, 344Y1, 355Y1, 356Y1, 360Y1, 365Y1, 367H1, 386Y1

**Group F**
JPP 343Y1, PHL 230H1, 232H1, 235H1, 240H1, 244H1, 247H1, 271H1, 273H1, 275H1, 317H1, , 340H1, 341H1, 342H1, 351H1, 357H1, 365H1, 370H1, 373H1, 375H1, 378H1, 380H1, 394H1, RLG 333H1, UNI250H1

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### Major program:
(7 full courses or their equivalent)

1. HIS 103Y1/ECO 100Y1/105Y1; (PSY 100H1 + PSY 220H)/ SOC 101Y1; POL 208Y1
2. UNI 260Y1, 360Y1
3. Two complementary courses, at least one of which must be at the 300+ series level, from:
   ECO 230Y1, GGR 439H1, HIS 241H1, 242H1, 343Y1,

344Y1, 377Y1, 401Y1, 412Y1, 445H1; HPS 306H1; PHL 378H1; POL 201Y1, 304H1, 310Y1, 313Y1, 321H1, 323Y1, 326Y1, 340Y1, 346H1, 417Y1, 454Y1; PSY 220H1, 270H1, 322H1; RLG 100Y1; SOC 210Y1, 330Y1; or alternative courses on the approval of the Program Director

### Joint International Relations Program/Peace and Conflict Studies Program - See Trinity College

### Sexual Diversity Studies (Arts program)

Consult Program Assistant, Room 251, University College, 416-978-6276.

Completion of four courses is required for enrolment in the Sexual Diversity Studies program. Students enrolling in the program should confer with the Program Director at their earliest convenience.

Additional courses may be approved by the Program Director on an individual basis. Students are responsible for checking co- and prerequisites for courses from Group A and Group B.

**Specialist program:**
(Ten full courses or their equivalent)

1. UNI255H, UNI256H
2. 0.5 full-course equivalent (FCE) in theory at the 300+ level: UNI 354H, UNI355H, or another upper-level theory course approved by the Program Director.
3. At least 4 FCEs from Group A
4. Remaining course requirements may be drawn from Group A or B.
5. At least one FCE in the area of sexual diversity must be at the fourth-year level (these need not be SDS courses*)

Additional courses may be approved by the Program Director on an individual basis. Students are responsible for checking co- and prerequisites for courses form Group A and Group B.

**Major program:**
(6 full courses or their equivalent; 2.0 full-course equivalents must be at the 300+ level)

1. UNI255H1, UNI256H1
2. At least one of UNI354H1, UNI355H1
3. At least two of POL315H1, UNI365H1, ENG273Y1
4. At least two full course equivalents from Group A.
5. Any remaining course requirements may be drawn from Group B to a total of 6.0 FCE.

N.B. At least two full course equivalents must be drawn from courses at the 300+ level.

**Minor program:**
(4 full courses or their equivalent)

1. UNI 255HI/256H1
2. Choose between option a) and b)
   a) At least two of ENG273Y1/POL315H1/UNI354H1
   b) At least two of ENG273Y1/POL315H1/UNI355H1
3. Remaining requirements from any combination of courses from Group A and Group B to a total of 4.0 FCE.

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**Group A:**
ANT366Y1, ENG273Y1, ENG290Y1, GGR363H1, JAL355H1, NEW240Y1, WGS261Y1, WGS374H1, PHL243H1, POL315H1, SOC309Y1, SOC367H1, UNI354H1, UNI355H1, UNI365H1, UNI375H1, UNI455H1, UNI475H1, VIC343Y1, VIS202H1, VIS208H1, WDW380H1, WDW387H1

**Group B:**
ANT323Y1, ANT343Y1, ANT427H1, ENG250Y1, ENG254Y1, ENG339H1, ENG349H1, , ENG361H1, FRE315H1, FRE326Y1, GGR124Y1, GGR327H1, GGR362H1, HIS245Y1, HIS363H1, HIS375H1, HIS383H1, HIS447Y1, HIS459H1, HIS476Y1, INI323Y1, INI330Y1, INI385Y1, JPP343Y1, WGS160Y1, WGS271Y1, , WGS365H1, WGS368H1, WGS369H1, PHL267H1, PHL271H1, POL216H1, POL332Y1, POL344Y1, POL364H1, POL432Y1, PSY323H1, RLG236H1, RLG237H1, RLG309Y1, RLG314H1, SOC214Y1, SOC365Y1, UNI220Y1, VIS209H1, VIS217H1, VIS218H1, VIS302H1, VIS318H1, VIS319H1

## University College Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), UNI courses are variously classified; see entry at end of each course.

### Canadian Studies Courses

**JWU200H1 Toronto in the Canadian Context [26L]**
Toronto is a complex urban region marked by social diversity and a multi-textured cultural scene. This course examines Toronto's history, culture, society, economy and status as a global city within the Canadian context.
This is a Humanities or Social Science course.

**UNI201H1 Aspects of Québec Society [26S]**
Contemporary Québec from social, economic and political perspectives.
This is a Social Science course

**UNI202H1 Aspects of Québec Culture [26S]**
An exploration of modern Québec culture as expressed in literature and the performing arts. Through a selection of internationally-known entertainers, we examine form, artistic innovation, communication of information and knowledge and spectatorship. Novels and plays provide key elements such as tradition and historical context.
This is a Humanities course

**UNI205H1 Topics in Canadian Studies I [26L]**
A focused introduction to specific issues in Canadian culture and society. Content will vary from year to year. Specific course information will be available on the Canadian Studies web site at www.utoronto.ca/canstudies .
This is a Humanities or Social Science course.

**SOC218Y1 Asian Communities in Canada (formerly SOC342Y1) [52L]**
The course will explore the structures and processes of Asian communities in Canada. Historical development of various Asian communities will be explored. Other topics include ethnic economy, ethnic media, ethnic churches, and ethnic voluntary organizations in Asian communities. Experts in related topics are invited to present their research findings. Non-sociology students may seek departmental permission to enrol.
Exclusion: SOC 342Y1/394Y1
This is a Social Science course

**UNI218H1 Voices in Canadian Writing [26S]**
A study of the variety of voices in Canadian fiction. Issues such as marginalization and the formulation of the Canadian canon are discussed.

This is a Humanities course

**UNI220Y1 Understanding Canada Today: Re-Imagining the Nation [52L, 26T]**
An introduction to key events and issues in contemporary Canada. This course provides a multi-disciplinary perspective on a wide range of topics such as constitutional reform; multiculturalism and immigration; social welfare; environmentalism; globalization; economic policy; gender and sexuality; arts and culture.
This is a Humanities or a Social Science course

**UNI221H1 Culture and the Media in Canada [26L]**
An exploration of the encounter between culture and mass communication in Canadian society. The course includes a consideration of the major institutions affecting culture such as the CBC, the NFB, and the granting bodies, and largely focuses on particular instances and case studies in the arts and media. Emphasis is placed on the changing role of nationalism, and the relationship between political concerns and Canadian culture.
This is a Social Science course

**UNI280H1 Canadian Jewish History [26L]**
This course focuses on initial settlement patterns of Jewish people in Toronto and elsewhere, community growth including suburbanization, and contemporary challenges such as anti-Semitism and assimilation.
This is a Humanities and Social Science course.

**UNI304H1 Beyond Multiculturalism: Ethnicity and Race in Canada [26S]**
A multidisciplinary examination of the emergence of new approaches to identity and community that go beyond official bilingualism and multiculturalism. To include cultural/literary works as well as historical and social scientific analyses illuminating relations between cultural and racial communities in post 1960's Canada, with an emphasis on Toronto.
Prerequisite: UNI 220Y1 or two courses on the study of Canada
This is a Humanities or a Social Science course

**UNI305H1 Topics in Canadian Studies II [26L]**
An in-depth study of selected questions in contemporary Canadian culture and society. Content will vary from year to year. Specific course information will be available on the Canadian Studies web site at www.utoronto.ca/canstudies .
This is a Humanities or Social Science course.

**UNI307Y1 Asian Cultures in Canada [52L]**
An exploration of the cultural histories and creative production specific to a wide range of Asian communities in Canada. Content will present humanities perspectives according to the instructor's specialty. Experts in specific areas —literature, dance, drama, film—will be invited to present their work.
Recommended Preparation: UNI 220Y1

**UNI317Y1 Politics of Aboriginal Self-Government [52L]**

**UNI317H1 Politics of Aboriginal Self-Government [26L]**
A survey of some of the main issues surrounding the politics of Aboriginal self-government in Canada. Proceeding historically, the course examines the legal and political conditions that have fuelled the call for self-government. (Offered in alternate years)
Prerequisite: ABS201Y1/POL102Y1/103Y1/UNI220Y1 or permission of the instructor
This is a Social Science course

**JUG320H1 The Canadian Wilderness [26L]**
The idea of wilderness permeates narratives of Canadian national identity, while policy-makers seek to manage and contain natural areas. This course compares and contrasts historical and contemporary wilderness narratives in literature, painting and film with policies in areas such as conservation, urban planning, land claims and tourism. (Offered by University College and the Geography Department.)
This is a Social Science course

**UNI320Y1 Canadian Questions: Issues and Debates [52L]**
An in-depth study of selected questions facing contemporary Canada. Students are encouraged to examine topics from multiple disciplinary perspectives drawn from the Social Sciences and Humanities. Issues addressed in recent years include: multiculturalism in contemporary film; residential schools; African Canadian culture; North American integration; citizenship and global cities; genetics and cloning.
This is a Humanities or a Social Science course

**UNI325H1 Queerly Canadian [26L]**
This course focuses on Canadian literary and artistic productions that challenge prevailing notions of nationality and sexuality, exploring not only how artists struggle with that ongoing Canadian thematic of being and belonging, but also celebrate pleasure and desire as a way of imagining and articulating an alternative national politics.
Prerequisite: UNI255H1/UNI256H1 or UNI220Y1 or permission of instructor
Exclusion: UNI375H1 Special Topics: Queerly Canadian
This is a Humanities course

**UNI380H1 Socio-Cultural Perspective of the Canadian Jewish Community [26L]**
This course examines the relationship between prominent Canadians who happen to be Jews and those w hose work is founded in the identity as Jews; the diversity of the community on the basis of religion, language, class, ideology etc.; contributions to the arts and scholarship; and the role of Jewish women.
This a Humanities and Social Science course.

**UNI420Y1 Senior Essay [52S]**
Students select an appropriate research topic and, in consultation with the Program Director, make arrangements with a suitable supervisor. Research projects must be approved by the supervisor preferably and by the Director of the Canadian Studies Program, by April of the preceding academic year. Students meet periodically during the year in seminar to participate in peer evaluations of: statement of research, literature review, methods of analysis, and to share reports of progress in research.
Prerequisite: Open only to Majors and Specialists in the Canadian Studies program

**UNI430H1 Senior Seminar: Special Topics in Canadian Studies [26S]**
An upper level seminar. Topics vary from year to year depending on instructor.
Prerequisite: UNI220Y1 or two courses on the study of Canada

### Cognitive Science & Artificial Intelligence Course

**UNI250Y1 Introduction to Cognitive Science (formerly JUP250Y1) [78L]**
An introduction to the problems, theories and research [strategies central to the interdisciplinary field focussing on the nature and organization of the human mind and other cognitive systems. Interrelations among the philosophical, psychological, linguistic and computer science aspects of the field are emphasized. (Offered by University College and the Department of Philosophy)
Exclusion: JUP250Y1
This is a Humanities course

**UNI301H1 Exploring Artificial Intelligence Models & Programs (formerly JUP301H1) [13L, 26P]**
A hands-on course for students with some programming background to enable direct understandings of programs in traditional AI, neural networks, genetic algorithms, artificial life, dynamic systems, and robotics. Simple and classical algorithms are demonstrated, and students will learn to operate and extend them. This course gives second- and third-year students experience of working models that they have read about, and can also serve as an introduction to programming in artificial intelligence and cognitive science.
Prerequisite: CSC107H1/108H1 or Instructor's permission
Co-requisite: UNI250Y1
Exclusion: JUP301H1
This is a Science course.

**UNI302H1 Bases of Cognition (formerly JUP302H1) [39L]**
Extending the depth of understanding of conceptual issues in cognitive science, including intentionality, semantics, mechanism, and consciousness. Students study primary literature, including. Descartes, Turing, Chomsky, Brooks, Dennett, Searle, et al. and they elaborate their own conceptual frameworks in cognitive science.Co-requisite: UNI250Y1
Exclusion: JUP302H1
This is a Humanities course.

**UNI401H1 Advanced Cognitive Science (formerly JUP450H1) [26S]**
A seminar on the following questions: "What is consciousness? What does it take for a creature to be conscious? What is objectivity? How may a creature be objective?" Students bring to bear on these questions their diverse background in analytic philosophy, anthropology, artificial intelligence, connectionism, linguistics, neuroscience, phenomenology, or psychology. Readings cover visual perception, spatial navigation, attention, working memory, reference, object permanence, evolution of language, the frame problem, the binding problem, and the qualia problem.
Prerequisite: UNI302H1 or permission on the instructor
Exclusion: JUP450H1

**UNI402H1 Theoretical Psychology [52L, 26P]**
An introduction to the techniques of theory simplification, amplification, integration, and generation, which provide a bridge between psychology and the philosophy of science. Emphasis is placed on the skills of critical thinking and theory analysis needed to support these techniques and to build a methodology for cognitive science.
Prerequisite: UNI 250Y1
This is a Science course

**UNI403H1 Introduction to Cognitive Robotics [13L, 26P]**
A hands-on course to advance practical skills and theoretical understanding through challenging students to a series of cognitively significant robotics tasks in realistic settings. Students bring to bear on robot construction their prior study in artificial intelligence, psychology, and philosophy and develop a strong background for thinking about embeddedness and embodiment issues that have been at the centre of recent cognitive science.
Prerequisite: UNI301H1 or permission from instructor
This is a Science course

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### Health Studies Courses

Students enrolled in the Health Studies program are given the first opportunity to enroll in these courses.

**UNI200H1 Introduction to Research Methods in Health Studies (formerly UNI200Y1) [39L]**
This course will offer students in Health Studies a basic understanding of research design and data collection on health topics and the usefulness of data collection in the formation of health policy.
Exclusion: POL 242Y1, SOC 200H1, UNI200Y1, WDW 350Y1
This is a Social Science course

**UNI210H1 Introduction to Statistical Analysis in Health Studies (formerly UNI200Y1) [39L]**
This course will offer students in Health Studies a basic understanding of statistical data analysis, data interpretation, and the use of such data in the formation of health policy.
Exclusion: POL 242Y1, SOC 202H1, UNI200Y1, WDW 350Y1
This is a Social Science course

**UNI209H1 Introduction to Health: Determinants of Health & Health Care [26L]**
A multidisciplinary approach to understanding perspectives in health, health equity, and primary health care. Themes include critical discussion of the measurements of health outcomes and the socioeconomic and political factors that affect health, including among neglected and marginalized populations in Canada and globally.
Exclusion: HMB203
This is a Social Science course.

**UNI237H1 Introduction to HIV/AIDS: Health, Sexuality and Gender [26L]**
A critical examination of the HIV/AIDS global pandemic from a multidisciplinary perspective and with an emphasis on sexuality. The course examines the basic biology of HIV/AIDS and then covers social, historical, political, cultural, gender, and public health aspects of HIV/AIDS. Attention is given to the distinct features of vulnerable and marginalized populations, prevention, treatment, drug development, and access to medicines.
UNI237H1 is particularly intended for students in the Health Studies and Sexual Diversity Studies Programs.
This is a Social Science course.

**UNI300H1 Canadian Health Care Policy (formerly UNI300Y) [26L]**
This course introduces students to development and issues related to Canadian health care policy. The course examines basic policy making process; policy making process in Canadian context; development of Canadian health care policy; and

current health care reform debates and issues.Health care is increasingly contentious with aging population, advancements in medical technology, government fiscal restraints. How to achieve best health care given limited resources, and ensure fair, equal, accessible health care. Overview of current policy issues and its relationship to social inequality, gender, and race, provide analytical tools for understanding.
Exclusion: SOC 351Y1, 352H1, UNI300Y
Prerequisite: UNI 200H1, 210H1
This is a Social Science course

**UNI309H1 Special Topics in Health Studies [26L]**
Study of a particular topic in Health Studies. The specific content of this course will vary from one year to another, depending on the availability of particular health researchers and scholars. In a given year, the course may focus on HIV/AIDS, tobacco addiction, nutritional issues, or gerontology and health problems related to the aging process.

**UNI310H1 Emerging issues in Health and Social Policies (formerly UNI300Y) [26L]**
This course explores emerging issues in health and social policies. Using the framework of social determinants of health, this course examines the implications of social factors such as socio-economic inequity, gender, race, homelessness, age, and citizenship status on individual health; and policy options to address these issues.
Exclusion; UNI300Y1

**UNI330H1 Health and Pharmaceuticals [26L]**
A critical examination of drug development, including the role of health professionals and the pharmaceutical industry in researching, testing, marketing, licensing, and evaluating pharmaceutical drugs. Topics include the differing needs for drug development in different societies, evaluation and dispensing in lower income countries, and potential conflicts of interest in drug development.
Prerequisite: UNI200H1, HMB303H1
This is a Social Science course.

**UNI350Y1 Undergraduate Research Project I [52L]**
The research course required for Health Studies students in the Specialist stream. Students engage in a specific research project within the program. The course includes sessions on the development of a project, data analysis and presentation, formulation of a grant proposal and writing of "peer-reviewed papers."
Prerequisite: UNI200H1, STA221H1
This is a Social Science course.

**UNI370H1 Psychology of Physical Activity and Sport [39L]**
This course develops the students' understanding of individual behaviour towards physical activity, sport and play. While the focus is on the individual participant, the course also examines the basic psychological theories underlying behaviour.
Exclusion: PHE 300H1
Corequisite: UNI 200H1, 210H1
This is a Social Science course

**UNI371H1 Physical Activity and Social Inequality [26L, 13T]**
Opportunities for physical activity are profoundly affected by the social structures of Canadian society and persistent inequalities. This course enables students to study the effects of class, gender, race, and sexuality upon opportunities, programs and practices and the means by which social equity might be more effectively pursued.
Exclusion: PHE 301H1
Corequisite: UNI 200H1, 210H1
This is a Social Science course

**UNI373H1 Population Health [39L]**
This issue-oriented course will extend students' understanding of the broad definitions of health and its determinants, and population-based strategies of health promotion in Canada. Topics include: variations in health status as affected by population patterns, class, gender, ethnicity, employment, and family composition; the major causes of morbidity and mortality; the concept of "community health", and the opportunities and constraints facing public policy.
Exclusion: PHE 312H1
Corequisite: UNI 200H1, 210H1
This is a Social Science course

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### Note
Students enrolled in the Health Studies program are given the first opportunity to enroll in these courses.

**UNI400Y1 Practicum in Health Studies [TBA]**
Individual field placement with a health research or administration professional, in which the student applies theory and skills to a specific project. Culminates in an oral and written report.
This is a Social Science course

**UNI409H1 Special Topics on Health Research [26S]**
The specific content of this course will vary from one year to another, depending on the availability of particular health researchers and scholars. In a given year, the course may focus on AIDS, tobacco addiction, nutritional issues in low-income countries, and the persistence of infant health problems in poor Canadian communities.
This is a Social Science course.

**UNI410H1 Communities and Community [26S] Health**
This course is about the formation and growth of communities –about their social organization and the problems that small and vulnerable communities often face. There will be a focus on problems of poverty, social marginality, and powerlessness, and the health consequences of these for community members.
Prerequisite: UNI 200H1, 210H1
This is a Social Science course.

**UNI411Y1 Health, Biology & Determinants of Diseases in Neglected Populations52L**
A critical examination of diseases such as malaria, HIV, cholera, tuberculosis as well as the determinants of health that affect marginalized populations. The course discusses the prevalence, etiology, and biology of diseases, the socioeconomic, medical and other factors that create vulnerable populations, and the challenges involved in improving access to treatments and prevention. (note: this course will be given for the first time in 2009-2010)
Prerequisite: UNI310H, HMB303
Recommended Preparation: An undergraduate biology course
This is a Social Science course.

**UNI440H1 Epidemiology [26S]**
This course aims to provide an introductory understanding of the basic concepts and methods in eipdemiology. The emphasis will be on descriptive methods and study design. Computational techniques, measurement problems, and issues that surround the drawing of inferences from area-level or other aggregate data will be discussed.
Prerequisite: UNI 200H1, 210H1
Recommended preparation:, UNI 373H1
This is a Social Science course.

**UNI450Y1 Undergraduate Research Project 2 [52L]**
The second research course required for Health Studies students in the Specialist stream. Students engage in a specific research project during their last two years within the program. This course is a continuation of UNI350Y and will further develop the skills addressed in that course. Student will prepare an "undergraduate thesis" by the end of this academic year.
Prerequisite: UNI200H, STA221H1, UNI350Y
This is a Social Science course.

**UNI464H1 International Health [26L]**
A course intended to widen the horizons and learning opportunities of future health system managers through international and intercultural learning, and to provide a learning environment for understanding different ways of approaching issues and problems related to health sciences management.
This is a Social Science course

**UNI451Y1 Independent Research in Health Studies [TBA]**
This two-semester course designation will permit students to gain academic credit for health studies pursued independently under the supervision of a University of Toronto faculty member; or to participate in an ongoing health research project under the joint supervision of the project's Principal Investigator and the Director of the Health Studies Program.
Prerequisite: UNI 200H1, 210H1
This is a Social Science course.

**UNI470H1 Health Psychology: Physical Education & Health [39L]**
This course provides students with an overview of contemporary topics in health psychology: psychological theory, research and skills relevant to the promotion and maintenance of optimal health and the prevention and treatment of illness and physical injury. The first half of the course will cover theoretical frameworks for understanding health behaviour, motivation, and psycho-social factors that influence health attitudes and behaviour. In the second half, topics germane to clinical health psychology and multi-disciplinary settings will be explored. Emphasis on the role of health psychology and exercise wellness behaviour, and on professional issues and ethical practices for physical and health education students.
This is a Social Science course

**UNI471H1 Physical Activity, Health and the Media [26L, 13T]**
This course draws upon communications theory, political economy, semiology and sociology to examine the ways in which meanings about physical activity are produced, distributed, and consumed through the media. Topics include: the social marketing of health, advertising and the "body politic", media advocacy, sports and fitness marketing, and the production of sport as a media event.
Prerequisite: PHE 301H1/UNI 371H1
Exclusion: PHE 402H1
This is a Social Science course

**UNI472H1 Body, Health and Culture [26L, 13T]**
This course examines the body as a terrain of complex cultural politics. Drawing upon a variety of sources, especially post-modern theory, cultural anthropology, and philosophy, it will consider the ways in which the "body" has been conceptualized and the ways in which discourses on bodies have led to important political struggles, particularly in the social construction of health and sickness.
Exclusion: PHE 403H1
This is a Social Science course

**UNI473H1 Physical Activity in the Ancient and Early Modern World [26L]**
The ancient Greeks and Romans were intensely interested in sport, physical education, and the maintenance of physical strength and health. The Renaissance revived this interest and transformed physical pursuits from marginal activities into structured components of the social system. Our contemporary concepts of sport, health, and physical culture were first formulated at that time. The readings (in English translation) will be taken from original ancient and early-modern documents.
Exclusion: PHE 423H1
This is a Social Science course

**UNI476H1 Historical Approaches to Health [26S]**
The specific content of this course will vary from one year to another, depending on the availability of particular historians to offer the course. In a given year, the course may focus on the Black Death epidemic in Europe, problems of sanitation in ancient Rome, nutritional issues in pre-industrial China, and so on.
This is a Humanities or Social Science course.

**UNI480H1 Independent Research in Health Studies [TBA]**
This one-semester course will permit students to gain academic credit for health studies pursued independently under the supervision of a University of Toronto faculty member; or to participate in an ongoing health research project under the joint supervision of the project's Principal Investigator and the Director of the Health Studies Program
Prerequisite: UNI200H1, 210H1
This is a Social Science course.

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### Peace and Conflict Studies Courses

**UNI260Y1 Introduction to Peace and Conflict Studies (formerly UNI110Y1) [78L]**
A review of the full range of theories explaining the nature and causes of conflict and possibilities for its resolution; provides students with a set of theoretical tools for effective analysis of interpersonal, civil, and international conflict.
Exclusion: UNI110Y1
This is a Social Science course

**UNI360Y1 Topics in Peace and Conflict [52L]**
An in-depth exploration of selected issues introduced in UNI260Y1. Topics may include: negotiation theory; ethnic and

group-identity conflict; feminist perspectives on peace and war; mathematical modeling of arms races and war; decision-making theory and conflict; environmental change and conflict; and traditional perspectives on statecraft.
Prerequisite: UNI260Y1 or permission of the instructor
Recommended preparation: POL208Y1
This is a Social Science course

**UNI361H1 Special Topics in Peace and Conflict Studies [26S]**

**UNI361Y1 Special Topics in Peace and Conflict Studies [52S]**

An exploration of selected issues in the field of Peace and Conflict Studies involving an overseas and/or practicum component
Prerequisite: permission from the Instructor.
Recommended Preparation: POL 208Y1, UNI 260Y1

**JUP460H1 Contemporary Issues in Peace and Conflict [26S]**

**JUP460Y1 Contemporary Issues in Peace and Conflict [52S]**

A colloquium (fall term) and research seminar (spring term, JUP460Y only) on security ontology and various meanings of security. Topics to be considered include planetary, ecospheric, state, societal, and human security. (Offered by the Department of Political Science and University College)
Exclusion: Students are not allowed to take both H and Y courses
Prerequisite: POL208Y and UNI360Y/permission of the instructor
This is a Social Science course

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## Sexual Diversity Studies Courses

**UNI237H1 Introduction to HIV/AIDS: Health, Sexuality and Gender [26L]**

A critical examination of the HIV/AIDS global pandemic from a multidisciplinary perspective and with an emphasis on sexuality. The course examines the basic biology of HIV/AIDS and then covers social, historical, political, cultural, gender, and public health aspects of HIV/AIDS. Attention is given to the distinct features of vulnerable and marginalized populations, prevention, treatment, drug development, and access to medicines. UNI237H1 is particularly intended for students in the Health Studies and Sexual Diversity Studies Programs.
This is a Humanities and Social Science course
This course is cross listed with Health Studies

**UNI255H1 History and Perspectives in Sexual Diversity [26L, 13T]**

An interdisciplinary examination of sexuality across cultures and periods. How are sexualities represented? How are they suppressed or celebrated? How and why are they labeled as straight, gay, lesbian, bisexual, queer, or perverse? How do sexualities change with ethnicity, class, and gender?
This is a Humanities or Social Science course

**UNI 256H1 Sexualities: Social, Organizational, and Legal Contexts [26L, 13T]**

A social sciences approach to sexual diversity across societies, and of the increased visibility of that diversity in such settings as the family, the workplace, and the law, as well as the role that such contexts play in shaping sexual identity.
This is a Social Science course.

**UNI325H1 Queerly Canadian [26L]**

This course focuses on Canadian literary and artistic productions that challenge prevailing notions of nationality and sexuality, exploring not only how artists struggle with that ongoing Canadian thematic of being and belonging, but also celebrate pleasure and desire as a way of imagining and articulating an alternative national politics.
Prerequisite: UNI255H1/UNI256H1 or UNI220Y1 or permission of instructor
Exclusion: UNI375H1 Special Topics: Queerly Canadian
This is a Humanities course

**UNI354H1 Theories of Sexuality I: The Foundations [26L]**

A survey of classic western theories of sexuality; each theory is examined in terms of the practices it allows and prohibits. Under consideration are not only the descriptive and/or prescriptive aspects of a particular framework but its epistemic grounds, and implications for understanding identity, body, community, and state.
Prerequisite: UNI255H1
This is a Humanities or Social Science course

**UNI355H1 Theories of Sexuality II: Contemporary Perspectives [26L]**

An integrated survey of some ways in which sexuality has been theorized recently. How have desire and its identities been conceptualized and deployed? What are the implications for psychoanalysis, feminism, and cultural production? What interconnections are yet to be made between sexuality and the markers of gender, race, and class?
Prerequisite: UNI255H1 or permission of instructor
This is a Humanities or Social Science course

**UNI365H1 Sexuality and Law [26L/S]**

An overview of the points where sexuality and law intersect, through surveying ways of thinking about how law interprets, regulates and defines sexuality, and how communities and groups oppressed on the basis of sexuality fare under the law in Canada and elsewhere.
Prerequisite: POL315H1/UNI255H1/UNI256H1 or permission of instructor
This is a Humanities course

**UNI375H1 Special Topics in Sexual Diversity Studies [26L/S]**

Topics vary from year to year depending on instructor. This seminar is intended to expose students in the Sexual Diversity Studies program to topics that may not be covered by permanent university courses. See www.utoronto.ca/sexualdiversity/special.html for descriptions of current topics.
Prerequisite: UNI255H1/UNI256H1 or permission of instructor

**UNI377H1 Lesbian Studies [26L]**

This multidisciplinary course will examine multiple lesbian identities that have varied in time and place. The course will pose such questions as: What does "lesbian" mean? Why have changes occurred in meaning? How has the identity of lesbian been culturally represented and politically expressed in various social and political contexts? It will also take up contemporary theoretical, cultural, and political understandings of lesbianism.
Prerequisite: UNI255H or UNI256
This is a Humanities or Social Science course.

**UNI455H1 Special Topics in Sexual Diversity Studies [26S]**

Topics vary from year to year depending on instructor. This seminar is intended to expose students in the Sexual Diversity Studies program to topics that may not be covered by permanent university courses. See www.utoronto.ca/sexualdiversity/special.html for descriptions of current topics.
Prerequisite: UNI 255H1/UNI256H1

Recommended preparation: POL 315H1/UNI 354H1/UNI355H1
This is a Humanities or Social Science course

**UNI458H1 Research Essay in Sexual Diversity [26S]**
A research essay under the supervision of a faculty member with knowledge of sexual diversity, the proposal and supervisor subject to the approval of the SDS Program Director.
Prerequisite: UNI 255H, UNI 256H
This is a Humanities course.

**UNI459Y1 Honours Essay in Sexual Diversity [52S]**
A major research essay prepared over the course of two academic terms (one year), under the supervision of a faculty member with knowledge of sexual diversity, the proposal and supervisor subject to the approval of the SDS Program Director.
Prerequisite: UNI 255H, UNI 256H
This is a Humanities course.

**UNI475H1 The New Queer Visibility [26S]**
This interdisciplinary course critically examines the socio-political cultural context that has produced a new queer visibility. The course assesses many of the post-Stonewall changes in the North American public sphere and the interrelationship between the new queer visibility and the North American public sphere.
Prerequisite: UNI255H1 and UNI355H1 or permission of the instructor
This is a Humanities or Social Science course

**UNI477H1 Transgender Studies [26S]**
This course introduces students to Trans Studies as an emerging interdisciplinary field of scholarship from various angles: academic, activist, socio-historical, and clinical. Students will develop their abilities to assess representations of trans and intersexed people and social issues, taking into account how race, citizenship, gender, sexuality, culture and dis/ability are materially and socially constructed together to give meaning to the category "trans."
Prerequisite: UNI255H or UNI256H
This is a Humanities or Social Science course.

### Other University College Courses

**JUM202H1 Mathematics as an Interdisciplinary Pursuit (formerly JUM102H1) [26L, 13T]**
A study of the interaction of mathematics with other fields of inquiry: how mathematics influences, and is influenced by, the evolution of science and culture. Art, music, and literature, as well as the more traditionally related areas of the natural and social sciences may be considered. (Offered every three years)
Exclusion: JUM102H1
JUM202H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**JUM203H1 Mathematics as Recreation (formerly JUM103H1) [26L, 13T]**
A study of games, puzzles and problems focusing on the deeper principles they illustrate. Concentration is on problems arising out of number theory and geometry, with emphasis on the process of mathematical reasoning. Technical requirements are kept to a minimum. A foundation is provided for a continuing lay interest in mathematics. (Offered every three years)
Exclusion: JUM103H1
JUM203H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**JUM204H1 Mathematics and Poetry [39L]**
An interdisciplinary exploration of creativity and imagination as they arise in the study of mathematics and poetry. (Offered every three years)
Exclusion: JEM204H1
JUM204H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**JUM205H1 Mathematical Personalities (formerly JUM105H1) [26L, 13T]**
An in-depth study of the life, times and work of several mathematicians who have been particularly influential. Examples may include Newton, Euler, Gauss, Kowalewski, Hilbert, Hardy, Ramanujan, Gödel, Erdös, Coxeter, Grothendieck. (Offered every three years)
Exclusion: JUM105H1
JUM205H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

**UNI299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**UNI393Y1 University College Independent Studies [TBA]**

**UNI394H1 University College Independent Studies [TBA]**
An opportunity to pursue at the 300-level an independent course of study not otherwise available within the Faculty. A written proposal, co-signed by the instructor, must be submitted on the appropriate proposal form for approval by the Vice-Principal of University College prior to registration.
Prerequisite: Permission of University College Vice-Principal

**UNI495Y1 University College Independent Studies [TBA]**

**UNI496H1 University College Independent Studies [TBA]**
An opportunity to pursue at the 400-level an independent course of study not otherwise available within the Faculty. A written proposal, co-signed by the instructor, must be submitted on the appropriate proposal form for approval by the Vice-Principal of University College prior to registration.
Prerequisite: Permission of University College Vice-Principal

## Urban Studies: see Innis College

## Faculty

### Professors Emeriti

A. Baines, MD, PhD (Vic One)
D. Duffy, MA, PhD (Vic One)
E. Kushner, PhD (Renaissance Studies)

### Professors

K.R. Bartlett, MA, Ph D (Renaissance Studies)
R. Comay, PhD (Literary Studies)
P. Corey, MA, PhD (Vic One)
M. Danesi, MA, PhD FRSC (Semiotics)
K. Eisenbichler, MA, Ph D (Renaissance Studies)
N. Terpstra, MA, PhD (Renaissance Studies)

### Associate Professors

B. Baigrie, PhD (Vic One)
E. Cazdyn, PhD (Literary Studies)
M. Legge, MDiv, PhD
A. Motsch, MA, PhD (Literary Studies)
M. Nyquist, MA, PhD (Literary Studies)
J.W. Patrick, MA, PhD (Literary Studies)
L. Somigli, PhD (Literary Studies)

### Assistant Professors

S. Cook, PhD (Vic One)
A. Komaromi, MA, PhD (Literary Studies)

### Senior Lecturers

J. Levine, MA, Ph D (Literary Studies)
A. Urbancic, MA, PhD (Vic One)

### Special Lecturers

P. Harris, MA (Vic One)
A. Moritz, MA, PhD (Vic One and Creative Writing)

### Visiting Professor

D. Wright, BSc, MBA (Kenneth and Patricia Taylor Distinguished Visiting Professor in Foreign Affairs) (Vic One)
D. Gilmour (Pelham Edgar Visiting Professor)

Victoria College offers *VIC One*, a first year sequence of courses, and interdisciplinary programs and courses listed below so that students have an opportunity to examine important themes and problems of our culture from a variety of points of view. Most of the courses introduce ideas and methods from various disciplines; in this way students can explore areas of interest they otherwise might overlook, and also gain insight into comparative studies.

Several of the courses have a place in the established programs of study indicated below. In addition, the courses are designed to serve the interests of those who, whatever their intended field of specialization, wish to introduce variety into their program, or who have not decided on a discipline, and wish to examine different approaches to humane studies.

#### Vic One

Victoria College offers first-year Arts and Science students an opportunity for a unique educational experience that draws upon the college's history and identity. Four streams with differing emphasis are available in this foundation year program, known as Vic One. They are named in honour of four respected Canadian leaders, all Victoria College alumni. The Frye stream, named after former Victoria College professor and renowned literary critic Northrop Frye, focuses on the humanities. The Pearson stream, named after former Canadian Prime Minister Lester Pearson is concerned with the social sciences. The Augusta Stowe-Gullen stream, named after the first woman to graduate from a Canadian medical school, is of interest to students wishing to pursue studies in the life sciences. The Egerton Ryerson stream, named after the first Principal of the College who was a pioneer in Canadian education, is an opportunity to introduce first year students to issues in education and teaching.

The four streams feature seminars, lectures, small tutorials and informal conversation, and are enriched by guest professors, visiting artists, writers, ambassadors and other public figures.

Each Vic One stream comprises three first-year courses out of the five courses taken by most first year students. Two courses in each stream are seminar courses given by Victoria College. They have a limited enrolment of 25 students in each class. The third course is selected, in the Pearson stream, from the first-year offerings in history or political science; in the Frye stream, it is JEF 100Y: The Western Tradition; in the Stowe-Gullen stream, it is BIO 150Y: Organisms in their Environment, and in the Egerton Ryerson stream, it is PSY 100H1, Introductory Psychology.

Vic One enrolment is limited to 150 students. It requires an application that is found on the Vic One web site (http://www.vicu.utoronto.ca/vic/one.htm). All first-year students in the Faculty of Arts and Science (St. George campus), regardless of college membership, are eligible for admission to Vic One. Admission decisions are made based on extra-curricular activities, a short original essay and the student's entering grades.

#### Vic First Pathways: Studies for First Year

Vic First Pathways is a Victoria College initiative that offers you the opportunity to experience a small class environment in your first year. Students enroll in two linked courses: one, a large enrolment class offered by the Faculty of Arts and Science; the other, a small enrolment companion Vic-sponsored course. Taking these two related courses will provide you with the opportunity to have contact with distinguished teaching faculty and also provide you with an excellent gateway to, and foundation for, subsequent studies.

Vic First Pathways offers you a chance to share a common avenue of academic learning and adds extra value in out-of-class activities. Priority will be given to Victoria College students at the beginning of registration. Thereafter, Vic First Pathways will be open to all first-year students in the Faculty of Arts and Science.

PLEASE NOTE; These courses are open to students NOT enrolled in Vic One, Trin One or a first-year seminar (199Y).

#### The Literary Studies Program

(Specialist, Major and Minor) will be attractive to students who wish to read works drawn from a variety of languages and cultural contexts. The program combines close attention to literary texts with theoretical reflection on relations between literary and non-literary works (for example, philosophy, art, film, history). Contemporary debates in literary and cultural theory will play a key role.

Students may enroll in one of two streams, Comparative Literature (Specialist and Major) or Interdisciplinary Studies (Specialist and Major). Students may also enroll in the Minor program, or in the joint Specialist with Philosophy.

**Students who enrolled in one of the Literary Studies programs prior to July 2007 may, if they wish, follow the requirements in place in 2006. (VIC 309H1 and VIC310H1 will be considered equivalent to VIC310Y1.)**

**The Renaissance Studies Program**

(Specialist, Major and Minor) studies one of the critical periods in European and world history. The Renaissance witnessed changes in art and literature, in social and political development, and in technology and science that were to transform our concept of the world. This interdisciplinary program is particularly attractive to students of history, politics, literature, fine art, history of science, music and theatre, because it assembles aspects of all these studies to focus on one seminal period in Western civilization.

**The Semiotics and Communication Theory Program**

( Major and Minor) investigates the science of communication and sign systems, the ways people understand phenomena and organize them mentally, the ways in which they devise means for transmitting that understanding and for sharing it with others. It covers all non-verbal signalling and extends to domains whose communicative dimension is perceived only unconsciously or subliminally. Knowledge, meaning, intention and action are thus fundamental concepts in the semiotic investigation of phenomena.

**Concurrent Teacher Education Program**

(Joint BA/BSc/BEd) prepares students for a career in teaching as well as encourages students to follow an Arts and Science program of study focussed on the urban environment. Program begins in 2008 with entry in second year. Students in first year should consider the Ryerson Stream of Vic One as preparation. Enrolment is limited to 30 students.

## Victoria College Programs

### Concurrent Teacher Education Program (CTEP)*

*CTEP will be offered beginning September 2008. First year students interested in the program should consider enrolling in the Ryerson Stream of Vic One.

CTEP offers students the opportunity to complete the B.A./B.Sc degree and the B.Ed. The program is offered in partnership with O.I.S.E. Complete description of the program may be found on the OISE web site. Admission into the CTEP is by application at the end of first year when the Arts and Science subject POSTs are selected. To apply to this program students must have a minimum CGPA of 2.0. Please note that having the minimum CPGA for application does not guarantee acceptance into the program. The application process includes the completion of a personal profile. All applicants must have completed PSY 100H. Recommended preparation is the Ryerson stream of Vic One.

#### Requirement of CTEP for BA/B.Sc./B.ED Students

All students admitted to the Victoria College CTEP are required to enroll in the Education and Society minor program. It is also recommended, in addition to the B.Ed. courses and associated requirements, that students select a major or minor in the general area of urban studies.

CTEP students may fulfill the remaining major or minor for the B.A./B.Ed. degree as they wish. CTEP students may not enroll in specialist programs in order to have sufficient space in their program to complete the concurrent B.ED requirements.

#### Major and Minor Programs in the Urban Environment

Students are recommended to enroll in either a major or minor in any of the Faculty's programs concerning the urban environment.

### Minor Program Education and Society (CTEP)

The minor in Education and Society is open only to students registered in the Concurrent Teacher Education Program who must take the minor.

(4 full courses or their equivalent, including at least one 300+ series course)

1. PSY100H
2. An additional half-year or full year/first year course selected from ANT 100Y, SOC 100Y or GGR 124Y. *Vic One* Ryerson students may satisfy this requirement with either VIC 150Y or VIC 151Y.
3. VIC 260H Equity and Diversity in Education
   VIC 261H Child and Adolescent Development in Education
   JSV 262H Communication and Conflict Resolution
4. VIC 360H CTEP Internship
5. One other course related to Education and Society at the 300 level or higher selected from the offerings in Sociology, Anthropology or Geography (Arts). Courses in other departments, including those in the Department of Theory and Policy Studies at OISE require approval of the CTEP Vic Coordinator.

### Literary Studies (Arts program)

Program Coordinators Professor E. Cazdyn and Professor R. Comay

Enrolment in the Literary Studies program is open to students upon completion of four courses; no minimum GPA required. The program will begin in second year. However, JEF100Y1 or VIC201Y1 are recommended introductory courses for first year students.

All students following a major or specialist program will be required to study a second language, and should consider beginning such course work in their first year.

#### Specialist program in the Comparative Literature stream:

(13-14 full courses or their equivalent)

1. Complete major in the Comparative Literature stream (see requirements below)
2. Complete a major in a literature other than English
3. Normally VIC490Y1. Please consult the program coordinator for further instruction.

#### Major program in the Comparative Literature stream:

(7 full courses or their equivalent)

1. VIC 201Y1, 210Y1and one of 309H1/310H1/310Y1/311H1

2. 1.0 FCE from VIC 300H1/Y1, VIC 301H1/Y1, VIC309H1/VIC310H1/310Y1, VIC 401H1/Y1, VIC 410H1/Y1, VIC 411H1/Y1, JNV 300H1. In exceptional circumstances, and with the permission of the program coordinator, students may choose another course.
3. 3.0 FCE's in literature in the original language (not English). 1.0 FCE may be at the 200 level. At least 2.0 FCE's must be at the 300+ level.

**Specialist program in the Interdisciplinary stream:**
(12 full courses or their equivalent, including at least 1.0 400 level course)

1. VIC 201Y1, 210Y1and one of 309H1/310H1/310Y1/311H1
2. 2.0 FCE's from VIC 300H1/Y1, 301H1/Y1, 309H1/310H1/310Y1, 401H1/Y1, 410Y1, 411H1/Y1, JNV 300H1
3. 4.0 FCE's in another discipline chosen in consultation with the program coordinator.
4. 2.0 FCE's in a language other than English, at least 1.0 at the 300+ level
5. Normally VIC 490Y1. Please consult the program coordinator for further instruction.

**Major program in the Interdisciplinary stream:**
(7 full courses or their equivalent)

1. VIC 201Y1, 210Y1 and one of 309H1/310H1/310Y1/311H1
2. 1.0 FCE from VIC 300H1/Y1, 301H1/Y1, 309H1/310H1/310Y1, 401H1/Y1, 410Y1, 411H1/Y1, JNV 300H1
3. 1.0 FCE in a language other than English at the 200+ level
4. 2.0 FCE's in another discipline chosen in consultation with the program coordinator

**Minor program:**
(4 full courses or their equivalent, including at least one 300+ level course)

Four courses from: VIC 201Y1, 210Y1, 300H1/Y1, 301H1/Y1, 309H1/310H1/Y1, 311H1, 401H1/Y1, 410H1/Y1, 411H1/Y1, JNV 300H1.

## Literary Studies and Philosophy (Arts program)

Consult Professor R. Comay, Department of Philosophy.

**Specialist program:**
(14 full courses or their equivalent, including at least one 400 series course)

1. Major in the Interdisciplinary stream
2. Major in Philosophy
3. Normally VIC 490Y1. Please consult the program coordinator for further instruction.

## Renaissance Studies (Arts program)

Consult Professor N. Terpstra, Victoria College.

Enrolment in the Renaissance Studies program is open to students upon completion of four courses; no minimum GPA required.

**Specialist Program**
(10 full courses or their equivalent, including at least three 300+ series courses and one 400-level course):

1. VIC 240Y1
2. Six additional full course equivalents from the Major program.
3. One Research Course (a 299Y1, 399Y1, or Independent Studies course on a topic in Renaissance studies approved by Program Coordinator)
4. Two full course equivalents in a language (only one may be at the introductory level).

**Major program:**
(6 full courses or their equivalent, including at least two 300+ series courses)

1. VIC 440Y1
2. Equivalent of two full credits from: VIC 240Y1, 341H1, 343Y1, 344H1, 345H1, 347Y1, 348Y1, 349H1/Y1, 449H1/Y1.
3. One full course equivalent in Literature from: ENG 220Y1, 243Y1, 301H1, 302Y1, 303H1, 304Y1, 330H1, 332H1, 335H1, 336H1; FRE 319H1, 320H1/Y1, 321H1; ITA 249H1, 312H1, 325H1, 332H1, 356Y1, 357Y1, 370H1/Y1, 409H1, 426H1, 470H1 494H1; PRT 351H1; SPA 352H1, 452H1, 454H1.
4. One full course equivalent in History or Economics from: ECO 301Y1; HIS 243H1, 303Y1, 309H1, 319H1, 357Y1, 362H1, 403H1, 438H1, 441H1, 443H1/Y1.
5. One full course equivalent in Art or Music from: FAH 230H1, 330H1, 331H1, 333H1, 335H1, 339H1, 340H1, 341H1, 342H1, 344H1, 370H1, 371H1, 393Y1, 430H1, 432H1, 438H1, 439H1, 440H1, 493H1; MUS 208H1.

**Minor program:**
(4 full courses or their equivalent, including at least one 300+ series course)

1. Equivalent of two full courses from: VIC 240Y1, 341H1, 343Y1, 344H1, 345H1, 347Y1, 348Y1, 349H1/Y1, 440Y1, 449H1/Y1
2. Two full courses from any of those listed above

## Semiotics and Communication Theory (Arts program)

Program Director, Principal D. Cook, Victoria College.

Program Coordinator, Professor M. Danesi, Victoria College.

Note: Enrolment in the Semiotics program is limited to students with a CGPA of 2.8 in at least four full courses or their equivalent. Achievement of this minimum CGPA does not guarantee enrolment in the program.

**Major program:**
(7 full courses or their equivalent, including at least two 300+series courses)

1. One course from: ANT 100Y1, LIN 100Y1, PHL 100Y1, PHL 102Y1, SOC 101Y1
2. Three full course equivalents from: VIC 220Y1, 223Y1, 320Y1, 323Y1.
3. Three full course equivalents from at least two different disciplines from Groups A-E.

**Minor program:**
(4 full courses or their equivalent, including at least one 300+series course)

1. One course from: ANT 100Y1, LIN 100Y1, PHL 100Y1, PHL 102Y1, SOC 101Y.
2. Two full course equivalents from: VIC 220Y1, 223Y1, 320Y1 and 323Y1.
3. One full course equivalent from Groups A-E.

Note: JFV 323H1 is a recommended Group E course.

**Group A: Anthropology**
ANT 204Y1, 253H1, 323H1/Y, 328H1, 329Y1, 334Y1, 351H1, 356H1, 366Y1, 425H1, 426H1, 427H1, 450H1, 461H1; JAL 253H1, 328H1, 355H1, 356H1

**Group B: Linguistics**
LIN 200H1, 229H1, 231H1, 232H1, 315H1, 341H1, 372H1, 415H1, 417H1, 480H1; JAL 254H1, 328H1; JLP 306H1, 315H1, 374H1

**Group C: Philosophy**
PHL 200H1, 201H1, 220H1, 235H1, 236Y1, 240H1, 243H1, 244H1, 245H1, 250H1, 255H1, 267H1, 285H1, 288H1, 304H1, 305H1, 306H1, 307H1, 310H1, 311H1, 312H1, 315H1, 316H1, 318H1, 320H1, 321H1, 322H1, 325H1, 326H1, 340H1, 342H1, 346H1, 351H1, 385H1; JUP250Y1

**Group D: Psychology**
PSY 210H1, 220H1, 260H1, 270H1, 280H1, 300H1, 301H1, 311H1, 312H1, 316H1, 320H1, 323H1, 325H1, 334H1, 362H1, 370H1, 371H1, 372H1; JLP 315H1

**Group E: Other Related Area Courses**
CLA 202H1, 203H1, 204H1, 219H1, 305H1; DRM 200Y1, 230Y1, 260H1, 262H1, 264H1, 266H1; ENG 290Y1, 366Y1; FAH 212H1, 214H1, 287H1, 288H1, 367H1, 378H1, 385H1; VIS 201H1, 202H1, 203H1, 204H1, 205H1, 206H1, 207H1, 208H1, 209H1, 212H1, 213H1, 307H1, 312H1, 313H1, 315H1, 316H1; HIS 316H1, 367H1, 374H1, 375H1, 419H1; HPS 201H1, 202H1, 250H1, 323H1, 324H1; INI 212Y1, 214Y1, 225Y1, 301Y1, 322H1, 323Y1, 327Y1, 329Y1, 330Y1, 423H1, 426H1, 428H1; JFV 323H1; MUS 200H1, 211H1, 303H1; NEW 240Y1, 261Y1, 271Y1, 302Y1, 303H1, 360Y1, 368H1, 371H1, 372H1; POL 213Y; RLG 200Y1, 210Y1, 211Y1, 230Y1, 232H1, 233H1, 237Y1, 301H1, 302H1, 304H1, 315H1, 380H1; SMC 210Y1, 402H1; SOC 365Y1, 367H1, 381Y1, 388H1; UNI 221H1, 250Y1, 255H1, 355H1; JUM 200Y1; VIC 210Y1, 211Y1, 300Y1, 310Y1, 322H1, 343Y1, 345Y1, 410Y1, 411Y1.

## Victoria College Courses

Vic One, Vic First Pathways, Literary Studies; Renaissance Studies; Semiotics; Other.

See page 32 for Key to Course Descriptions.

### Vic One

Consult Vic One Liaison Officer, Michelle Mitrovich, Victoria College m.mitrovich@utoronto.ca

Frye/Pearson academic coordinator: Dr Anne Urbancic, Victoria College

Stowe-Gullen academic coordinator: Dr Andrew Baines, Victoria College

Egerton Ryerson academic coordinator: Dr. Sheila Cook, Victoria College

The following courses are available to students admitted to Vic One:

### Egerton Ryerson Stream

**VIC150Y1 School and Society (formerly INX199Y1, The University and Society)**
This course will be about the history of school and will examine the philosophical questions about the nature and purpose of learning, and also the economic or "human capital" value of education with respect to both the student and the state.
Co-requisites: VIC 151Y1 and PSY 100H1
Exclusion: INX199Y1 (The University and Society)
This is a Social Science course.

**VIC151Y1 Theories and Practices of Teaching**
The course studies the history and philosophy of teaching with a view to having students develop their personal understanding of teaching. Students will be involved in a practicum.
Co-requisites: VIC 150Y1 and PSY 100H1
This is a Humanities course.

### Frye Stream

**VIC162H1 Cultural Forms and Their Meanings**
A study of culture with a view to developing basic concepts with examples drawn from the visual arts, music, film, architecture, and/or local urban artifacts.
Co-requisites: VIC163H1, 164H1, 165H1 & JEF100Y1
This is a Humanities course

**VIC163H1 Cultural Forms and Their Meanings: People and Ideas**
A study of culture with a view to developing basic concepts with examples drawn from the visual arts, music, film, architecture, and/or local urban artifacts. We will emphasize how contemporary thought has affected the practice of everyday life.
Co-requisites: VIC 162H1, VIC 164H1, VIC 165H1 & JEF 100Y1
This is a Humanities course

**VIC164H1 The Medieval Mind: Expression and the Forms of Life**
Ages A study of the ideas and concerns of creative thinkers and their impact upon cultures. The course explores the literary and artistic realms of the imagination during the Middle Ages in a variety of forms, including literary texts, art and music to understand how humans imaginatively interacted with each other and brought their surroundings into culture hundreds of years ago.
Co-requisites: VIC165H1, 162H1, 163H1 & JEF100Y
This is a Humanities course

**VIC165H1 Ideas and Their Consequences: Isolation and Communion in Modern Culture**
A study of the ideas and concerns of creative thinkers and their impact upon cultures. The course will include scientific thinkers as well as religious figures from the major traditions. Attention will be given to modes of reasoning, cultural definition and expression. We will emphasize literary and philosophical concepts in the rise of modernism.
Co-requisites: VIC 164H1, VIC 162H1, VIC 163H1 & JEF100Y1
This is a Humanities course

### Stowe-Gullen Stream

**VIC170Y1 Introduction to the Rhetoric of Science: Probability and Persuasion**
How rhetoric and statistical analysis are used to communicate scientific observations and theories will be examined in

seminars. Problems including the nature of evidence, risk assessment, random error and systematic error (bias) will be discussed using examples drawn from the physical, life and social sciences.
Co-requisites BIO 150Y1 & VIC 171Y1
This is a Humanities or Social Science course.

**VIC171Y1 Methodology, Theory and Practice in the Natural Sciences**
An examination of scientific theories and their logic, the role in life sciences of models and mathematics, and issues in experimental design and data analysis. Particular emphasis will be placed on evolutionary theory, genomics, contemporary scientific controversies and ethical issues.
Co-requisites BIO 150Y1 & VIC170Y1
This is a Humanities course.

### Pearson Stream

**VIC181H1 Events and the Public Sphere: World Affairs**
A seminar course that examines a specific event or events in relation to the public sphere. This course will review issues in contemporary world affairs, from the fall of the Berlin Wall to the present day. The course will examine the politics and practice of foreign policy decision making. Issues to be covered include the collapse of the Soviet Union, intervention in humanitarian crises, and the conflicts in Afghanistan and Iraq.
Co-requisites: VIC183H1, 184H1, 185H1, and a First year course in HIS or POL
This is a Social Science course

**VIC183H1 Individuals and the Public Sphere: Shaping Memory**
A seminar course that examines the contribution of an individual or individuals to the public sphere. The course will explore how public service and citizenship are developed in the context of studying the social, philosophical, cultural and scientific context of the period. Topics could include the role of law and government, civil liberties, rights and responsibilities, the role of protest. We will examine individuals who have shaped the processes by which modern memory is formed.
Co-requisites: VIC181H1, VIC184H1, VIC185H1 & a first year course in History or Political Science
This is a Social Science course.

**VIC184H1 Individuals and the Public Sphere: Cultural Memory**
A seminar course that examines the contribution of an individual or individuals to the public sphere. The course will explore how public service and citizenship are developed in the context of studying the social, philosophical, cultural and scientific context of the period. Topics could include the role of law and government, civil liberties, rights and responsibilities, the role of protest. We will examine our evolving role in developing cultural memory.
Co-requisites: VIC181H1, VIC183H1, VIC185H1 & a first year course in History or Political Science
This is a Social Science course

**VIC185H1 Events in the Public Sphere: Social Justice**
The course uses events or an event to discuss the nature of society including major revolutions, economic crises, and the impact of significant artistic, cultural and technological developments. Emphasis on social justice.
Co-requisites: VIC 181H1, VIC 183H1, VIC 184H1 and a First year course in History or Political Science.
This is a Social Science course.

### Vic First Pathways: Studies for First Year

Consult Program Liaison Officer, Keri Todd, Victoria College, keri.todd@utoronto.ca

**VIC101H1 Conflict Theory and Practice (formerly VIC101Y1) [26S, 13P]**
The course is a general orientation toward conflict, and develops a basic understanding of essential conflict resolution principles that will complement the study of conflict theory. The course will examine the differences between conflicts and disputes, the functions and desirability of conflict, and the conditions that facilitate conversion of conflicts from destructive to constructive.
Exclusion: VIC101Y1
Co-requisite: ECO 100Y1
This is a Social Science course.

**VIC102Y1 Ethics and the Public: Case Studies (formerly VIC182H1) [52S, 26P]**
This course examines a specific event, or events, in relation to the public sphere. The course will use events or an event as an entry point to discuss the nature of society including topics such as major revolutions, economic crises, the impact of the appearance of significant artistic or cultural works, and the impact of technological changes. We will emphasize case studies of recent social issues.
Co-requisite: POL 103Y1/SOC 101Y1
Exclusion: VIC182H1
This is either a Humanities or a Social Science course.

**VIC103H1 Ideas and Fine Thoughts [26S]**

**VIC103Y1 Ideas and Fine Thoughts [52S]**
This course examines how political ideas are formed and developed through literature, art, plays, essays and philosophical works in the twentieth century.
Co-requisite: ENG 110Y1/ENG 140Y1
This is either a Humanities or a Social Science course.

**VIC104H1 Common Vices and Neglected Virtues: Intro to Ethics of Character [26S, 26P]**
Vice is popular: a prestigious university press has brought out a series of seven books on the Seven Deadly Sins. This course examines such questions as the following. Are greed, lust and gluttony just bad names for necessary and otherwise acceptable instincts? What is the place, in a good human life, of such qualities as honesty, trust, civility and the like? Are vices and virtues culturally determined or a matter of individual preference? Can character be taught, or is it rather a matter of genes and luck?
Co-requisite: PHL 100Y1/RLG 100Y1
This is a Humanities course.

**VIC105H1 Odysseys: The Search for Meaning [26S, 26P]**
Metaphors and motivations of journeying have long intrigued human beings as they have attempted to understand the meaning of their existence: the setting out, the seeking for a desired object, the pilgrimage of religious observance, and the longing to return home. Through texts, art, music and film, this course will explore some of the shaping journey-myths of our culture from classical, Hebrew, medieval and modern sources.
Co-requisite: PHL 100Y1/MUS 110H1
This is a Humanities course.

**VIC106H1 Topics in the History of Mind, Brain and Behavioural Science [26S]**
This course explores central developments and ongoing controversies in the scientific study of the human mind, brain and behavior. It examines topics such as: psychoanalysis, behaviourism, humanistic psychology, evolutionary psychology, intelligence testing, and feminist perspectives. Goals include understanding the historical evolution and social relevance of scientific psychology.
Co-requisite: PSY100H1
This is either a Humanities or Social Science course.

**VIC107H1 Topics in the History of Evolution, Heredity, and Behaviour [26S]**
In this course we examine major episodes in the history of evolution and genetics in the XX century. Topics include Darwinian evolution, sociobiology and evolutionary psychology, eugenics, and genetic screening and therapy. We will examine different views about the control of evolution and genetic manipulation in their socio-cultural-economic context and discuss the ethical and social implications of those views.
Co-requisite: BIO150Y1
This is either a Humanities or Social Science course.

**VIC108H1 Belonging, Imagination and the Uses of History in the Shaping of National Identity [26S]**

**VIC108Y1 Belonging, Imagination and the Uses of History in the Shaping of National Identity [52S]**
This course will examine a number of questions related to the origins of national identities and the sustainability of nation-states. Topics covered will include: language, ethnicity, religion, politics, war, symbols, the arts, sport and public spectacle, and cuisine.
Co-requisite: HIS 106Y1/SOC 101Y1
This is either a Humanities or Social Science course.

**VIC111Y1 Introduction to Material Culture [52S, 26P]**
This course is about things – the everyday objects of past and present cultures. It examines the meanings people have invested in objects and how those meanings have changed over time. Using interdisciplinary approaches, students investigate objects found in homes, retail spaces, cities, art galleries and museums in order to develop new understandings of the objects that structure daily lives and their material world.
Co-requisite: ANT 100Y1/FAH 101H1
This is either a Humanities or a Social Science course.

**VIC112Y1 Puzzles, Discovery and the Human Imagination [52S, 26P]**
There has never been a period of time, nor has there ever been a culture, without some kind of puzzle tradition. Are puzzles just playful artifacts, intended merely to entertain? Or are they mirrors of something much more fundamental in human life? The course will take a close look at what puzzles tell us about the human mind and human culture.
Co-requisite: One of ANT 100Y1/BIO 150Y1/HPS 100H1.
This is either a Humanities or a Social Science course.

**VIC114Y1 Renaissance in Popular Culture [52S, 26P]**
This course explores the depiction of the Renaissance in a wide range of plays, films and novels. The focus is on the exchange between film, fiction, and 'fact', and on how the values and concerns of the present shape creative recreations of the past in popular culture.
Co-requisite: HIS 109Y1/INI 115Y1
This is a Humanities course.

**VIC115Y1 Imagined Power: Literature and Film [52S, 26P]**
In this course we will study a number of literary and cinematic works that take up questions of power, duty, rights, responsibility, and freedom. Our texts will be drawn from a long history, and from many parts of the world. The sequence however will not be chronological.
Co-requisite: A 100 series Political Science course.
This is either a Humanities or Social Science course.

**VIC116Y1 Narrative Medical Ethics [52S, 26P]**
A philosophical consideration through literature, articles and film as well as medical case studies to consider ethical elements of medical decision-making.
Co-requisite: BIO150Y1/PSY100H1
This is a Humanities course.

**VIC117H1 Understanding the Performing Arts: Interpretation and Expression [52S, 26P]**
This course examines two key issues about the performing arts that concern both artists and theorists: the nature of interpretation and of expression. What might we mean when we say that a work, a piece of music or a dance for example expresses something? What is it to express? And what is the nature of interpretation? Are there any constraints or boundaries on interpretation? We will draw on both philosophers and non-philosophers to explore these sorts of questions.
Co-requisites: DRM100Y1/MUS110H1/FAH101H1/FAH102H1/VIS120H1/VIS130H1 or a first-year language course.
This is a Humanities course.

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### Literary Studies Courses

For Distribution Requirement purposes (see page 26), all VIC Literary Studies courses are classified as HUMANITIES courses.

**VIC201Y1 Ancient and Medieval Literary Modes: Conventions and Continuities [52L,26T]**
Selected forms (such as epic, romance, satire, tragedy, lyric, utopia, autobiography, confession), with special attention to their roots in the Ancient and Medieval period. Texts may include selections from Aboriginal, Asian, Hebrew and Babylonian creation myths, epic narratives; history and law; drama; lyric poetry, songs and spells; philosophy and theology.
Exclusion: VIC110Y1

**VIC210Y1 Literary Studies II: Empire, Literature and Modernity [52L, 26T]**
The rise of modern European literatures in various contexts - colonialism, humanism, literacy, nation-states, democracy, ideology, individualism - that prompted development of new literary genres, figures, personae and filiations.

**VIC300H1 Special Topics I: Literary Studies [26S]**

**VIC300Y1 Special Topics I: Literary Studies [52S]**
Interdisciplinary seminar on an author or extensive work (eg. Proust's, *Remembrance of Things Past*, Joyce's, *Finnegans Wake*) or on a genre. Emphasis on literature and its relation to fine arts, philosophy, politics, history

Prerequisite: A course in Literary Studies or instructor's approval

**VIC 301H1 Special Topics II: Literary Studies [26S]**

**VIC 301Y1 Special Topics II: Literary Studies [52S]**
Interdisciplinary seminar on a historical period (eg. Late Antiquity, Romanticism, the Harlem Renaissance) or critical event. Emphasis on literature and its relation to fine arts, philosophy, politics, history.
Prerequisite: A course in Literary Studies or instructor's approval

**VIC309H1 Literary Studies III: The Modernist Avant Garde (formerly VIC310Y1) [26L, 13T]**
Detailed study of a major modernist text or author(s), some of the surrounding theoretical debates, and other forms of cultural expression such as cinema, photography, collage, mass advertising, music, etc, that may be relevant.
Exclusion: VIC 310Y1

**VIC310H1 Literary Studies III: After Modernism (formerly VIC310Y1) [26L, 13T]**
Texts from the second half of the 20th century and after, to foreground the reaction to modernism, and to consider the challenges to memory and representation that accompany historical crisis. Questions of language, representation, aesthetics and politics, interpretation.
Exclusion: VIC 310Y1

**VIC311H1 Translation (formerly VIC311Y1) [26L]**
An introduction to the main questions raised by translation studies, and an examination of the relationships it has established with other disciplines such as linguistics, film studies, literary theory, philosophy, anthropology, political-economy, psychoanalysis, the hard sciences.
Exclusion: VIC311Y1

**VIC401H1 Seminar in Comparative Literature [26S]**

**VIC401Y1 Seminar in Comparative Literature [52S]**
This course offers senior students in Literary Studies the opportunity to take part in a graduate seminar in Comparative Literature. Topics change annually.

**VIC410H1 Seminar in Literary Studies [26S]**

**VIC410Y1 Seminar in Literary Studies [52S]**
For senior students enrolled in the Literary Studies program, although other students are welcome. Intensive study of general issues of poetics and critical theory, including representative literary and philosophical texts.
Prerequisite: At least one course in Literary Studies

**VIC411H1 Postmodernist Approaches to Film and Literature [26S]**

**VIC411Y1 Postmodernist Approaches to Film and Literature [52S]**
Study of current filmic and literary theories, with emphasis on the rhetoric of film: the concept of the trope, metaphor, metonymy, allegory, irony, repetition, and specific thematic tropes like the eye, the face, the death mask, the mirror, the dream, etc.
Prerequisite: A course in Literary Studies or Cinema Studies, or permission of the instructor.

**JNV300H1 Gender, History and Literature [26S]**
The study of a selected group of creative writers from at least two national literatures whose texts raise issues regarding gender as either an historically or culturally variable construct. Texts will be chosen on the basis of a shared historical era, a literary genre, experience, institutional categorization, or project.
Prerequisite: One course in Literary Studies or one course in Women's Studies and Gender Studies

## Renaissance Studies Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all VIC Renaissance Studies courses are classified as HUMANITIES courses.

**VIC240Y1 The Civilization of Renaissance Europe [52L]**
An interdisciplinary introduction to the civilization of the Renaissance illustrated by a study of the institutions, thought, politics, society and culture of both Italy and Northern Europe. Italian city states such as Florence, Urbino and Venice, Papal Rome and despotic Milan are compared with the northern dynastic monarchies of France and England.

**VIC341H1 The Self and Society: Women, Men and Children [26S]**
A study of the changing conception of the human self in the Renaissance, and of its representation by major authors: Erasmus, Rabelais, Marguerite de Navarre, Castiglione, Machiavelli and others.

**VIC342H1 Women and Writing in the Renaissance [26S]**
Focusing on writers from various geographical areas, the course examines a variety of texts by early modern women (for example, treatises, letters, and poetry) so as to explore the female experience in a literate society, with particular attention to how women constructed a gendered identity for themselves against the backdrop of the cultural debates of the time.

**VIC343Y1 Sex and Gender (formerly VIC343H1) [52S]**
An interdisciplinary approach to questions of gender and sexuality in early modern Europe, with special focus on the representations of the sexual drive, the gender roles of men and women, and varieties of sexual experience in the literature and art of the period.
Exclusion: VIC343H1

**VIC344H1 Renaissance Narrative (formerly VIC242H1) [26S]**
Focuses on analysis of short stories and longer prose works including, in English translation: Boccaccio's stories of love, fortune and human intelligence in the *Decameron*; Rabelais' humorous parody of high culture in *Gargantua*; the tragic tale of *Romeo and Juliet*; and the adventures of picaresque rogues in *Lazarillo de Tormes* and Nashe's *Unfortunate Traveler*.
Exclusion: VIC242H1

**VIC345H1 Media and Communications in the Early Modern Era [26S]**
This course examines the various media (printing press, representational art, music, preaching) and social and political forces (family and political networks, censorship, education, etc.) that conditioned the communication of ideas in early modern society.

**VIC347Y1 Studies in Renaissance Performance [52L]**
Studies in the development of new musical and/or dramatic forms in the Renaissance. The course will combine seminars and lectures with a series of musical and/or dramatic performances taking place in Toronto over the course of an academic year.
Recommended preparation: VIC 240Y1, or another course in Renaissance Studies.

**VIC348Y1 The Renaissance in the Cities [52L]**
An interdisciplinary course exploring the history, art, architecture, literature, and music of the Renaissance in one or more cities from ca. 1400-1650. The course will investigate how local political and social-historical contexts shape ideas and cultural forms, and so illustrate the process and effects of cross-fertilization in the Renaissance period.
Recommended preparation: VIC 240Y1, or another course in Renaissance Studies.

**VIC349H1 Special Topics in the Renaissance [26L, 13P]**

**VIC349Y1 Special Topics in the Renaissance [52L, 26P]**
Studies in an aspect of the Renaissance based around lectures, seminars, and readings. See annual course listing for the year's theme.
Recommended preparation: VIC 240Y1, or another course in Renaissance Studies.

**VIC440Y1 Florence and the Renaissance [52L]**
An interdisciplinary seminar on Florence in the 15th and 16th centuries: humanism, culture and society in the republican period, the rise of the Medici, Florentine neoplatonism, the establishment of the Medici principate, culture, society and religion.
Prerequisite: VIC 240Y1 or permission of instructor

**VIC449H1 Advanced Seminar in the Renaissance [26S, 13P]**

**VIC449Y1 Advanced Seminar in the Renaissance [52S, 26P]**
An in-depth study in an aspect of the Renaissance based around lectures, seminars, and readings. Content in any given year depends on instructor. See annual course listing for the year's theme.
Recommended preparation: VIC 240Y1, or another course in Renaissance Studies.

## Semiotics Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all VIC Semiotics courses are classified as SOCIAL SCIENCE courses.

**VIC220Y1 Post-Structuralism/Post-Modernism [52L, 26T]**
Studies the international culture emerging in media and literature and examines recent communication theory as it applies to literary, social and cultural issues.
Prerequisite: One course from: ANT 100Y1, LIN 100Y1, PHL 100Y1, PHL 102Y1, SOC 101Y.

**VIC223Y1 Signs, Meanings, and Culture [52L, 26P]**
This course will introduce the main elements of semiotic theory, applying it to the study of human culture, from language, myth, and art to popular forms of culture such as pop music and cinema. It will deal with primary texts in the development of semiotics, and cover a broad range of cultural applications of semiotic theory.
Prerequisite: One course from: ANT100Y1, LIN 100Y1, PHL 100Y1, PHL 102Y, SOC100Y1.
Exclusion: VIC 120Y1

**VIC320Y1 Semiotics of Visual Art [52L, 26T]**
Theories and models of applied semiotics: analysis of sign systems as articulated in various forms of artistic and cultural production.
Prerequisite: VIC 120Y1/VIC223Y1, VIC 220Y1

**VIC322H1 Topics in Semiotics [26S]**
An in-depth examination of some aspect of Semiotic theory or practice. Content in any given year depends on instructor. Not offered every year.
Prerequisite: VIC 120Y1/VIC 223Y1, VIC 220Y1.

**JFV323H1 Semiotics and Literature [26S]**
The study of readings from major French literary semioticians will be combined with the practical application of theory to the analysis of selected literary texts. (Given by the Department of French and Victoria College)
Prerequisite: At least 5 course credits in any subject.
Exclusion(s): FRE 444H1/445H1
Recommended Preparation: FRE240Y1/VIC 120Y1/VIC 223Y1
This is a humanities or social science course.

**VIC323Y1 Theories of the Sign (formerly VIC420Y1) [52L, 26T]**
Theories of signification studied with a focus on major works in the semiotics of modern and contemporary culture.
Prerequisite: ANT 323Y1, VIC 120Y1/VIC 223Y1, VIC 220Y1/221Y1/VIC 320Y1.
Exclusion: VIC420Y1

## Concurrent Teacher Education Program (CTEP) Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), VIC CTEP courses are classified in various ways; see individual course descriptions for classification.

**VIC260H1 Child and Adolescent Development in Education [26L]**
This course examines how children and adolescents develop and explores how best to facilitate their growth and learning in the area of education. Major topics include cognitive, emotional, social, moral, physical and language development. Themes addressed include interpersonal relationships such as pro-social and aggressive behaviour, as well as the influence of schooling, family life and culture. This course includes a 20-hour field experience located in a school and entails observation of development across the various age groups. This may be satisfied by participation in Vic Reach or in another organization with the approval of the CTEP Vic Coordinator.
Exclusion: SMC271H1
This is a Science or Social Science course.

**VIC261H1 Equity and Diversity in Education [26L]**
This course focuses on raising awareness and sensitivity to equity and diversity issues facing teachers and students in diverse schools and cultural communities. It builds knowledge of how oppression works and how cultural resources and educational practices may be brought to bear on reducing oppression and improving equity. This course's field experience entails observation of and participation in equity and diversity efforts in a culturally-rooted school and/or community organization.
Exclusion: SMC272H1
This is a Social Science course.

**JSV262H1 Communication and Conflict Resolution [26L]**
The purpose of this course is to provide knowledge and skill acquisition in the areas of interpersonal conflict resolution and communication.

This is a Social Science course.

**VIC360H1 CTEP Internship TBA**
Students are required to complete an internship in an educational or community source environment. This may be satisfied by participation in Vic Reach or in another organization with the approval of the CTEP Vic Coordinator. Written assessment of the internship will be required.
This is a Social Science course.

### Other Victoria College Courses

**VIC299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**VIC350Y1 Creative Writing: A Multicultural Approach [52S]**
Practice and instruction in writing poetry and fiction, paired with study of literature and theory introducing the multicultural richness of contemporary English writing. Approximately three-quarters of class periods are workshops, one-quarter lecture discussions. Work by many writers from contemporary and traditional literatures are read in English translation.
Prerequisite: four credits
This is a Humanities course

**VIC351H1 Learning Communities and Higher Education in Canada [26S]**
This course examines the evolution of higher education in Canada. Using Victoria University and Victoria's affiliates as a case study, the course explores the intersection of gender, race, class and religion. Comparisons are made with other denominational and secular institutions in the context of late nineteenth and early twentieth century education. International contexts of education through student service and missions are discussed.
This is a Social Science course.

**VIC352Y1 Love, Sex and Death in Short Fiction [52L]**
This course will examine how a variety of international authors, both nineteenth century and modern, handle the themes of mortality, sexual passion and love in their short fiction. Particular emphasis will be placed on the artistry of the writer's presentation, the role of dialogue, the economy of narrative, etc, etc. Students will read Chekhov (*The Kiss*, *Lady with a Dog*) and Tolstoy (*Master and Man*) but will also be exposed to such contemporary popular authors as Elmore Leonard (*When the Women Come Out to Dance*), Truman Capote (*Mojave*), Richard Ford (*The Occidentals*), Philip Roth (*The Dying Animal*), Ian McEwen, (*The Cement Garden*) and David Bezmosghis (*Natasha*).
This is a Humanities course.

**VIC359H1 Special Topics Seminar [26S]**

**VIC359Y1 Special Topics Seminar [52S]**
An upper level course. Topics vary from year to year depending on instructor.
Prerequisite: Students must have completed a minimum of 10 FCEs.
This is either a Humanities, Social Sciences or Science course.

**VIC397H1 International Study**
Course content, travel destination, etc., will depend on instructor. Topics will vary from year to year.
Prerequisite: Students must have completed a minimum of 10 FCEs.
This is a Social Sciences course.

**VIC390Y1 Victoria College Independent Studies [TBA]**

**VIC391H1 Victoria College Independent Studies [TBA]**

**VIC490Y1 Victoria College Independent Studies [TBA]**

**VIC491H1 Victoria College Independent Studies [TBA]**
These courses provide an opportunity to design an interdisciplinary course of study not otherwise available within the Faculty. Written application (detailed proposal, reading list and a letter of support from a Victoria College faculty member who is prepared to supervise) must be made through the Program Director for approval by Victoria College Council's Academic Advisory Committee at least one month prior to the start of the relevant term. Students should have a minimum CGPA of 3 and have completed 10 FCEs for 390Y1 or 391H1, and a minimum of 15 FCEs for 490Y1 or 491H1. Students should contact Lynn Welsh, VC 105, lynn.welsh@utoronto.ca.
Prerequisite: Permission of College Program Director

## Visual Studies: see Art

# Women and Gender Studies

## Faculty

### Professors

E.K. Armatage, BA, MA, PhD
J. Alexander, BSW, MA, PhD
S. Mojab, BA, MEd, PhD
K.P. Morgan, BA, MA, MEd, PhD

### Associate Professors

B. McElhinny, BA, PhD
M. Murphy, BA, PhD
M. Nyquist, BA, MA, PhD
K. Rittich, Mus Bac, LLM, SJD
A. Trotz, BA, MPhil, PhD

### Assistant Professors

A. Tambe, BA, MA, PhD
J. Taylor, BA, MA, PhD

### Senior Lecturers

J. Larkin, BA, MEd, PhD

Women and Gender Studies provides an interdisciplinary and culturally inclusive approach to understanding gender. The curriculum addresses the meaning and importance of gender in a variety of individual, institutional and transnational contexts. It provides opportunities to learn about feminist activism and resistance in areas such as citizenship, globalization, religious fundamentalism, war, technoscience, environmentalism and women's health. The program fosters a strong student community through a wide range of workshops and events as well as academic and practical links to local, national and international organizations. Women and Gender Studies scholarship and organizational initiatives thus address the location of the University of Toronto within a culturally diverse, economically disparate and socially complex city and nation.

Undergraduate Coordinator: Professor J. Taylor, New College, Room 2029 (416-978-5238).

Undergraduate Administrator: Marian Reed, New College, Room 2036 (416-978-3668).

Email: grad.womenstudies@utoronto.ca

Web site: www.utoronto.ca/wgsi

## Women and Gender Studies Programs

### Women and Gender Studies (Arts Program)

**Specialist program:**
(10 full courses or their equivalent, including at least five full 300+ series courses and at least one course at the 400-level)

1. WGS160Y1
2. WGS262Y1
3. WGS460Y1 and one additional full-course equivalent at the 400+ level
4. Four additional full-course equivalents from the core group below
5. Two additional full-course equivalents from Group A or B

**Major program:**
(7 full courses or their equivalent, including at least three full 300+ series courses)

1. WGS160Y1
2. WGS262Y1
3. Three additional full-course equivalents from the core group below
4. Two additional full-course equivalents from Group A or B

**Minor program:**
(4 full courses or their equivalent, including at least one full 300+ series course)

1. WGS160Y1 and/or WGS261Y1
2. Two (with both WGS160Y1 and WGS261Y1) or three (with only one of WGS160Y1 or WGS261Y1) additional full-course equivalents from the core group below or from Group A

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**Core Group:**
WGS160Y1, WGS261Y1, WGS262Y1, WGS271Y1, WGS330H1-339H1, WGS362H1, WGS363H1, WGS365H1, WGS366H1, WGS367H1, WGS368H1, WGS369Y1, WGS372H1, WGS373H1, WGS374H1, WGS375H1, WGS380H1, JNV300H1, WGS425Y1, WGS434H1, WGS435H1, WGS440H1, WGS445H1, WGS451H1, WGS460Y1, WGS461Y1, WGS462H1, WGS463H1, WGS465H1, WGS470Y1

**Group A: (Women and gender relations)**
ANT343Y1, ANT460H1; CLA219H1, CLA220H1; EAS303H1, EAS452H1, EAS453H1, EAS462H1; ENG233Y1, ENG307H1, ENG355H1, FAH425H1, FCS497H1; FRE304H1, FRE305H1, GER421H11; GGR320H1, GGR327H1; HIS202H1, HIS245Y1, HIS306H1, HIS348H1, HIS354Y1, HIS363H1, HIS366Y1, HIS383H1, HIS406H1, HIS418H1, HIS446Y1, HIS448H1, HIS481H1, HIS483H1; ITA455H1; JAL355H1; JHP440Y1; JPP343Y1; NEW240Y1, NEW325H1; NMC284H1, NMC484H1; PHL243H1, PHL267H1; POL315H1, POL344H1, POL351Y1, POL432Y1, POL450H1, POL480H1; PSY323H1; RLG251H1, RLG236H1, RLG237H1, RLG313H1, RLG314H1, RLG315H1; SLA248H1, SLA453H1; SOC365Y1, SOC366H1, SOC367H1, SOC383H1; SPA382H1; VIC341H1, VIC342H1, VIC343Y1, VIS209H1

**Group B: (General interest)**
ANT329Y1, ANT427H1; ENG273Y1, ENG290Y1; FCS395H1; GGR362H1, GGR363H1; HIS341Y1, HIS459H1; INI327Y1; ITA493H1; NEW302Y1, NEW424Y1; NMC276Y1; PHE403H1; PHL281Y1, PHL384H1; PRT351H1; SOC207Y1, SOC214Y1, SOC215H1, SOC220Y1, SOC375Y1; SPA380H1; TRN311H1, TRN320Y1; UNI255H1, UNI354H1, UNI355H1, UNI371H1; VIC210Y1; VIS310H1

## Women and Gender Studies Courses

For Distribution Requirement purposes (see page 26) all WGS courses are classified as Humanities courses except WGS261Y1 and 425Y1, which are Social Science courses.

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### 100-Series Courses

During the first round of enrolment, WGS160Y1 is subject to certain enrolment restrictions. Please refer to the 2008-2009 Registration Handbook & Timetable.

**WGS160Y1 Introduction to Women and Gender Studies (formerly NEW260Y1)** [52L, 26T]

An integrated and historical approach to social relations of gender, race, class, sexuality and disability, particularly as they relate to

women's lives and struggles across different locales, including Canada.
Exclusion: NEW260Y1/WGS260Y1

### 200-Series Courses

During the course enrolment period, WGS262Y1 is subject to certain enrolment restrictions. Please refer to the 2008-2009 Registration Handbook & Timetable.

**WGS261Y1 Scientific Constructions of Sex and Gender [52L, 26T]**
Critically examines how the scientific construction of sex and gender in the context of race, class and nation have both reinforced and challenged racial hierarchies, colonialism and the formation of academic disciplines such as psychology, anthropology and biology.
This is a Social Science course

**WGS262Y1 Texts, Theories, Histories [52L, 26T]**
Examines modes of theories that shaped feminist thought and situates them historically and transnationally so as to emphasize the social conditions and conflicts in which ideas and politics arise, change and circulate.
Prerequisite: NEW160Y1/WGS160Y1

**WGS271Y1 Gender, Race and Class in Contemporary Popular Culture (formerly NEW371H1) [26L]**
A critical examination of institutions, representations and practices associated with contemporary popular culture, mass-produced, local and alternative.
Exclusion: NEW371H1

### 300-Series Courses

During the first round of enrolment, 300-Series Courses are subject to certain enrolment restrictions. Please refer to the 2008-2009 Registration Handbook & Timetable.

**Note:**
Courses numbered WGS330H1 - 339H1 are reserved for Special Topics in Women and Gender Studies offered each year by visiting scholars. Topics will change according to the interests of the instructor.

**WGS330H1 Special Topic in Women and Gender Studies: Caribbean Women Writers [26L]**
A critical feminist reading of selected works of fiction, poetry and essays by Caribbean women writers. The aim is to appraise the development of this literature, situate texts within the key social and political debates which have influenced the region's literary output, as well as to consider the implications of the environments within which these writers function.
Recommended preparation: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS334H1 Special Topic in Women and Gender Studies**

**WGS335H1 Special Topic in Women and Gender Studies**
An upper level seminar. Subjects of study vary from year to year.
Recommended preparation: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS336H1 Selected Topics in Cultural Studies [26L]**
An upper level course. Topics vary from year to year.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS362H1 Selected Topics in Gender and History [26S]**
An upper level seminar. Subjects of study vary from year to year.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS363H1 Selected Topics in Gender and Theory [26S]**
An upper level seminar. Subjects of study vary from year to year.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS365H1 Gender Issues in the Law [26L]**
Examines the operation of the law as it affects women, the construction and representation of women within the legal system, and the scope for feminist and intersectional analyses of law. Includes an analysis of specific legal issues such as sexuality and reproduction, equality, employment, violence and immigration.
Recommended preparation: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS366H1 Gender and Disability [26L]**
A critical interdisciplinary investigation of how gender impacts on central topics in disability studies: ableism as a political ideology; the normalized body and cultural representations; sexuality, violence and nurturance relations; the cognitive and social roles of medicine; transnational perspectives on disability, disability rights and issues of social justice.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1/NEW271Y1/WGS271Y1/NEW367H1/WGS367H1
Recommended preparation: WGS240Y1/WGS372H1/WGS374H1/PHL384H1/POL315H1/POL344Y1/ SOC373H1/SOC374H1/UNI 255H1/355H1

**WGS367H1 The Politics of Gender [26L], 13T and Health**
Examines diverse traditions and normative models of health (e.g. biomedicine, social constructionist, aboriginal health) in conjunction with analyses of the origin, politics, and theoretical perspectives of contemporary Women's Health Movements. Topics may include fertility, sexuality, poverty, violence, labour, ageing, (dis)ability, and health care provision.
Recommended preparation: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1/WGS262Y1/PHL281H1/SOC325Y1

**WGS368H1 Gender and Cultural Difference: Transnational Perspectives (formerly NEW368Y1) [26L]**
Explores the ways in which gendered constructions of cultural identity and difference are implicated in local and transnational political projects, including feminism. Challenges colonialist stereotypes of women as exotic or "victims of culture".
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1/ permission of the instructor
Exclusion: NEW368Y1

**WGS369H1 Studies in Post-Colonialism (formerly NEW369H1) [26L]**
Examines gendered representations of race, ethnicity, class, sexuality and disability in a variety of colonial, neo-colonial, and "post"-colonial contexts. Topics may include the emergence of racialist, feminist, liberatory and neoconservative discourses as inscribed in literary texts, historical documents, cultural artifacts and mass media.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1/ permission of the instructor
Exclusion: NEW369H1

**WGS372H1 Women and Psychology/ Psychoanalysis [26L]**
An interdisciplinary analysis of the relationship of women to a variety of psychological and psychoanalytical theories and

practices. Topics may include women and the psychological establishment; women's mental health issues; feminist approaches to psychoanalysis.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1/ permission of the instructor

**WGS373H1 Gender and Violence [26L]**
An interdisciplinary study of gendered violence in both historical and contemporary contexts including topics such as textual and visual representations; legal and theoretical analyses; structural violence; war and militarization; sexual violence; and resistance and community mobilization.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1/ permission of the instructor

**WGS374H1 Feminist Studies in Sexuality [26L]**
Sexual agency as understood and enacted by women in diverse cultural and historical contexts. An exploration of the ways in which women have theorized and experienced sexual expectations, practices and identities.
Prerequisite: NEW160Y1/WGS160Y1

**WGS375H1 Colonialism, Sexuality, Spirituality and the Law [26L]**
Examines the challenge indigenous knowledges posed to colonialism by analyzing Spanish and British legal codes. Focusing on the links between sexuality and spirituality, we explore how gender shaped the social dynamics of conquest and resistance and draw out the implications for contemporary colonialisms.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS380H1 Aboriginal, Black and Immigrant Women in the Land of Dollars [26L]**
Examines the gendered effects of white settler colonization on/in 21st Century Canada and traces the formation of multiple settlements by examining black and immigrant populations. The course poses a challenge to contemporary formulations of diaspora and multiculturalism. It examines solidarity movements within and across these three communities.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1

**WGS385H1 Gender and Neoliberalism [26L]**
Reviews major feminist transnational, Marxist and Foucaultian approaches to the study of neoliberalism. Adopts a comparative, historical and global approach to the ways that gender is implicated in state restructuring, changing roles for corporations and non-governmental organizations, changing norms for personhood, sovereignty and citizenship, and changing ideas about time/space.
Prerequisite: WGS160Y1
Recommended Preparation: WGS262Y1

**JNV300H1 Gender, History and Literature [26L]**
The study of a selected group of creative writers from at least two national literatures whose texts raise issues regarding gender as either an historically or culturally variable construct. Texts will be chosen on the basis of a shared historical era, a literary genre, experience, institutional categorization, or project.
Prerequisite: One course in Literary Studies or one course in Women and Gender Studies

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### 400-Series Courses

Students wishing to enrol in 400-Series courses must fill out a ballot form available from the Women and Gender Studies Program Office, Room 2036, Wilson Hall, New College, 40 Willcocks St. This form must be signed and approved by both the course instructor and the Undergraduate Coordinator for the Women and Gender Studies Program. Students cannot enrol in 400-Series courses on ROSI.

**WGS425Y1 Women and Issues of International Development [52S]**
Provides a gender analysis of the political economy of development and globalization, and a critical overview of related feminist theoretical, policy, and strategy debates. Issues explored include feminisation of labour, gender mainstreaming, trafficking in women, poverty-alleviation strategies, and transnational feminist organizing.
Recommended Preparation: NEW160Y1/WGS160Y1, POL201Y1 or another course addressing development issues, and a half course at the 300+ level in Women and Gender Studies.
This is a Social Science course

**WGS434H1 Advanced Topics in Women and Gender Studies [26S]**

**WGS435H1 Advanced Topics in Women and Gender Studies [26S]**
An upper level seminar. Topics vary from year to year depending on instructor.
Recommended preparation: NEW160Y1/WGS160Y1 and one full course at the 300+ level in Women and Gender Studies

**WGS440H1 Gender and the Sacred [26S]**
Examines how gender illuminates the sacred by focusing upon the forces of nature within the Vodou and Yoruba cosmological systems. Explores how these sacred knowledges disturb the secular parameters of feminism through close attention to the conceptual and ceremonial practices among practitioners in the diaspora.
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1 and one full course at the 300+ level in Women and Gender Studies.
Exclusion: NEW435H1/WGS435H1, winter session 2005.

**WGS445H1 Migrations of the Sacred [26S]**
Considers the gendered impact of migration on women's indigenous spiritual practices, taking globalization as a political economic starting point. Focuses on the lives of women whose experiences emblematize displacement and examines how women's agency interrupts and transforms normative meanings of 'tradition' and "modernity.'
Prerequisite: NEW160Y1/WGS160Y1/NEW261Y1/WGS261Y1 and one full course at the 300+ level in Women and Gender Studies

**WGS451H1 Independent Study in Women and Gender Studies Issues [TBA]**
Under supervision, students pursue topics in Women and Gender Studies not currently part of the curriculum.
Prerequisite: Permission of the Undergraduate Coordinator, Women and Gender Studies Program

**WGS460Y1 Advanced Research Seminar in Women and Gender Studies [TBA]**
Supervised individual research project undertaken in Third or Fourth year. Students attend a seminar to discuss research methods and findings. A required course for Specialist students.
Prerequisite: Permission of the Undergraduate Coordinator, Women and Gender Studies Program
Recommended Preparation: NEW160Y1/WGS160Y1 and one full course at the 300+/400+ level in Women and Gender Studies.

**WGS461Y1 Advanced Topics in Women and Gender Studies [52S]**
An upper level seminar. Topics vary from year to year depending on the instructor.
Prerequisite: NEW160Y1/WGS160Y1 and a half course at the 300+ level in Women and Gender Studies

**WGS462H1 Advanced Topics in Gender and History [26S]**
An upper-level seminar. Topics vary from year to year depending on instructor.
Prerequisite: NEW160Y1/WGS160Y1 and one full course at the 300+ level in Women and Gender Studies

**WGS463H1 Advanced Topics in Gender Theory [26S]**
Senior students may pursue more advanced study in feminist theory. Topics vary from year to year depending on instructor.
Prerequisite: NEW160Y1/WGS160Y1 and one full course at the 300+ level in Women and Gender Studies

**WGS465H1 Special Topics in Gender and the Law [26S]**
Senior students may pursue advanced study in gender and law. Topics vary from year to year.
Prerequisite: NEW160Y1/WGS160Y1, NEW365H1/WGS365H1, or permission of the instructor

**WGS470Y1 Women and Gender Studies Practicum [52S]**
The application of theoretical study to practical community experience. Advanced Women and Gender Studies students have the opportunity to apply knowledge acquired in the Women and Gender Studies curriculum through a practicum placement within a community organization.
Prerequisite: NEW160Y1/WGS160Y1 and at least one full course at the 300+/400+ level in Women and Gender Studies.

# Woodsworth College

## Faculty

### Professors

A.N. Doob, AB, Ph D
R.V. Ericson, MA, PhD, Litt.D., FRSC (obiit)
R. Gartner, MS, PhD
F.J. Reid, M Sc, Ph D
M. Valverde, MA, Ph D, FRSC

### Associate Professors

J.W. Browne, MA
S. Wortley, MA, Ph D

### Assistant Professors

R. Levi, BCL, LLB, LLM, SJD
W. Watson, BSc, PhD

### Senior Lecturers

W.B. MacDonald, BA, MA
J.B. Rose, BA, MA
T.P. Socknat, BAE, MA, PhD

### Lecturers

T. Moritz, BA, MA, PhD
L. Riznek, MA, PhD

### Adjunct Professors

R.F. Barnhorst, BA, LLB, JSD
B. Davies, BA, MA, LLB

Woodsworth College sponsors programs in two areas - Criminology and Employment Relations. The specialist and major programs in Criminology provide students with a foundation to begin the study of crime and the administration of the Canadian criminal justice system. The programs in Criminology may be combined with programs in Political Science, Psychology or Sociology.

The specialist and major programs in Employment Relations provide students with the opportunity to study the employment relationship in a Canadian context, from the perspectives of a number of disciplines such as economics, history, law, management, political science, and sociology. Students enrolled in the Criminology and Employment Relations programs are given priority when registering in WDW courses.

Enquiries: Program Office, Woodsworth College, Room 236 (416-978-5783), or at www.wdw.utoronto.ca.

## Woodsworth College Programs

### Criminology (Arts program)

Consult Program Office, Woodsworth College.

Enrolment in the specialist program is limited. Students apply during the spring term of the year in which they complete either eight full credit courses or twelve full credit courses. Students applying after eight full credit courses must have obtained an average of at least 80% in WDW 200Y1 and 220Y1 combined, and have a CGPA of at least 3.0.

Students applying after twelve full credit courses must have obtained an average of at least 80% in WDW 200Y1 and 220Y1 and two additional full WDW Criminology credits, and have a CGPA of at least 3.0. Meeting the minimum requirements may not guarantee admission.

**Specialist program:**
(10 full courses or their equivalent, including at least four 300+ series courses, one of which must be a 400-series course)

1. One 100-series full course equivalent chosen from the following list: ECO/HIS/PHL/POL/SOC
2. WDW 200Y1, 220Y1
3. WDW 300H1, 320H1, 335H1, 340H1, 350H1/350Y1
4. At least one full credit from: WDW 310H1, 355H1, 360H1, 365H1, 370H1, 375H1, 380H1, 385H1, 387H1, 388H1, 389Y0, 390H1, 391H1, 392H1, 393H1, 394H1, 395H1, 396H1, 397Y1, 450H1
5. One full credit from: WDW 400H1, 405H1, 410H1, 415H1, 420H1, 425H1, 435H1, 440H1, 480H1
6. Two full credits from: HIS 332H1, 355H1; PHL 271H1, 370H1; POL 332Y1; PSY 201H1, 202H1, 220H1, 240H1, 328H1; SOC 212Y1, 213Y1, 306Y1, 358H1; TRN 305Y1; or additional courses from Group 4 or 5 above

Note: At least seven WDW Criminology full credits must be completed.

**Major program:**
(7 full courses or their equivalent, including at least two 300+ series courses)

Enrolment in the major program is limited to students with a CGPA of at least 2.50 who have completed four or more full credits, including one of the courses specified under 1. below. Meeting the minimum requirements may not guarantee admission.

1. One 100-series full course equivalent chosen from the following list: ECO/HIS/PHL/POL/SOC
2. WDW 200Y1, 220Y1
3. Two full credits from: WDW 300H1, 310H1, 320H1, 335H1, 340H1, 350H1, 350Y1, 355H1, 360H1, 365H1, 370H1, 375H1, 380H1, 385H1, 387H1, 388H1, 389Y0, 390H1, 391H1, 392H1, 393H1, 394H1, 395H1, 396H1, 397Y1, 400H1, 405H1, 420H1, 425H1, 480H1
4. Two full credits from: HIS 332H1, 355H1; PHL 271H1, 370H1; POL 332Y1; PSY 201H1, 202H1, 220H1, 240H1, 328H1; SOC 200Y1, 200H1, 202H1, 212Y1, 213Y1, 306Y1, 358H1; TRN 305Y1; or additional courses from Group 3 above

### Employment Relations (Arts program)

Consult Program Office, Woodsworth College.

Enrolment in the specialist program is limited to students with a CGPA of at least 2.50 who have completed four or more full credits, including ECO 100Y1(67%)/105Y1(80%) and SOC 101Y1. Meeting the minimum requirements may not guarantee admission.

**Specialist program:**
(10 full courses or their equivalent including at least four courses at the 300+level)

1. ECO 100Y1/105Y1; SOC 101Y1
2. WDW244H1, 260H1
3. ECO 239Y1/339Y1; HIS 313H1
4. One full course equivalent from: ECO 220Y1; PSY (201H1 and 202H1); SOC 200Y1/(200H1 and 202H1)
5. One full course from: ECO 321Y1; HIS 263Y1; POL 103Y1, 214Y1

6. Two full course equivalents from: MGT 120H1, 201H1, 223H1; RSM 222H1; SOC 207Y1, 317Y1, 339H1, 367H1, 370Y1, 375Y1; WDW 344H1, 345H1, 346H1, 347H1, 348H1, 349H1, 367H1, 378H1, 396H1, 397Y1, 444H1
7. MGT 460H1/ RSM 460H1; WDW 430Y1

**Major program:**
(7 full courses or their equivalent including at least two at the 300+ level)

Enrolment in the major program is limited to students with a CGPA of at least 2.30 who have completed four or more full credits, including ECO 100Y1/105Y1 and SOC 101Y1. Meeting the minimum requirements may not guarantee admission.

1. ECO 100Y1/105Y1; SOC 101Y1
2. WDW244H1, 260H1
3. Two and a half credits, including at least one-half credit at the 300+ level from: ECO 239Y1/339Y1; HIS 313H1; MGT 120H1, 201H1, 223H1; RSM 222H1; SOC 207Y1, 317Y1, 339H1, 367H1, 370Y1, 375Y1; WDW 344H1, 345H1, 346H1, 347H1, 348H1, 349H1, 367H1, 378H1, 396H1, 397Y1, 444H1
4. MGT 460H1/RSM 460H1; WDW 430Y1

## Woodsworth College Courses

See page 32 for Key to Course Descriptions.

For Distribution Requirement purposes (see page 26), all WDW courses are classified as SOCIAL SCIENCE courses.

### Criminology Courses

For all WDW Criminology courses, students must be enrolled in the Specialist or Major Program in Criminology.

**WDW200Y1 Introduction to Criminology [52L, 26T]**
The nature of crime and the Canadian system designed to control it. Introduction to major approaches to understanding crime and the development of criminal law, significant research on crime and the criminal justice system, laws and procedures related to crime and crime control in Canada. Not open to first year students.
Prerequisites: Four full credits including one full credit in ECO/ HIS/ PHL/POL/SOC, and a CGPA of 2.5

**WDW220Y1 Introduction to Criminal Law and Procedure [52L, 26T]**
An introduction to criminal law and the criminal process. The essential elements of criminal liability, including defences to criminal charges, the general characteristics of offences against the person, sexual offences, regulatory offences, and 'victimless offences.' The criminal process, from investigation to sentencing, and the implications of the Charter of Rights for both substantive criminal law and criminal procedure.
Co- or Prerequisite: WDW200Y1

**WDW300H1 Crime: Theory and Policy [39L]**
Major social and political theories of crime, law and justice, and their implications for policy development in the criminal justice system. The origins of central ideas that influence criminological theory and policy, seen in an historical context. Students are encouraged to develop the analytical skills needed to think critically about criminal justice policy.
Prerequisite: An average of at least 70% in WDW200Y1 and 220Y1 combined, and a CGPA of 2.5.

**WDW310H1 Crime and Society in Canadian History [39L]**
Criminal justice history in the context of Canada's social, political and economic development from the 18th to the 20th centuries. Topics covered include: colonization and resistance, gender and sexuality, policing and punishment, and the development of criminal law.
Prerequisite: WDW200Y1, 220Y1

**WDW320H1 The Prosecution Process [39L]**
A critical examination of the process by which certain conduct is identified, prosecuted and punished as "crime", and the process by which individuals become "criminals". The evolution of the modern prosecution system, including the exercise of prosecutorial discretion, rules of evidence, socially constructed defences, disparity in sentencing, and wrongful convictions.
Prerequisite: WDW200Y1, 220Y1

**WDW335H1 Policing [39L]**
A theoretical framework is developed to examine the nature of policing, its structure and function. Attention is given to the history of policing and to its public and private forms. An examination of the objectives and domain, as well as the strategies, powers, and authority of contemporary policing; including decision-making, wrong-doing, accountability, and the decentralization of policing.
Prerequisite: WDW200Y1, 220Y1

**WDW340H1 Penology [39L]**
The study of punishment from historical and philosophical perspectives, with a focus on contemporary Canadian policy issues. Topics covered include penal theory, prisons and non-carceral forms of punishment, and the goals of penal reform.
Prerequisite: WDW200Y1, 220Y1

**WDW350H1 Research Methods in Criminology (formerly WDW350Y1) [39L]**
An introduction to social science research methods used by criminologists. An understanding of the strengths and weaknesses of published criminological research is developed. Specific technical issues such as sampling and measurement are taught in the context of examining alternative ways of answering research questions.
Prerequisites: An average of at least 70% in WDW 200Y & 220Y combined, and a CGPA of 2.50.
Exclusions: SOC 200Y1, SOC 200H, WDW 350Y1

**WDW355H1 Data Analysis in Criminology [39L]**
By learning how to use quantitative data to answer research questions, students develop the ability to apply basic descriptive and inferential statistical techniques to improve their comprehension of criminological data. Each student carries out a research project using publicly available data, and develops an understanding of the manner in which data are analyzed in published criminological research.
Prerequisite: WDW 350H1
Exclusion: ECO 220Y1, GGR 270H1, PSY 201H1, POL 242Y1, STA 220H1, STA 248H1, WDW 350Y1

**WDW360H1 Law and Psychiatry [39L]**
The increasing involvement of psychiatrists and other mental health professionals in the criminal justice system over the past 150 years, including contemporary Canadian practices. Emphasis is placed on understanding and evaluating competing interpretations of this phenomenon.
Prerequisite: WDW200Y1, 220Y1

**WDW365H1 Crime and Mind [39L]**
Legal, psychological and sociological understandings of issues in the criminal justice system, through a consideration of topics including: criminal intent, the insanity defence, the concept of 'psychopathy', the use of 'battered woman syndrome' as part of a self-defence, issues of transcultural psychiatry, and jury screening for bias.
Prerequisite: WDW200Y1, 220Y1

**WDW370H1 Youth Justice [39L]**
Administration of the youth justice system in Canada. The Youth Criminal Justice Act provides a legal framework for considering individual rights, the protection of society, and the welfare of young people. An analysis of legal principles and practices at various stages in the youth justice process. Policy issues and proposals for reform.
Prerequisite: WDW200Y1, 220Y1

**WDW375H1 Young Offenders [39L]**
Historical and contemporary definitions of illegal conduct by young persons. The nature and extent of youth crime, and an analysis of theories which attempt to explain it. Assessment of the effectiveness of treatment and other strategies for preventing and responding to youth crime.
Prerequisite: WDW200Y1, 220Y1

**WDW380H1 Crime and Gender [39L]**
Theory, research and policy related to the ways in which gender shapes criminal behaviour, the administration of criminal justice, and the criminal law. How notions of different types of masculinity and femininity are embedded in and influence both the operation of the criminal justice system as well as criminal behaviours. The regulation of gender and sexuality through the criminal law and through crime.
Prerequisite: WDW200Y1, 220Y1

**WDW385H1 Representing Crime & Authority [39L]**
Cultural constructions of crime, disorder, dangerousness and risk are integral parts of the criminal justice system. A critical analysis of how police, crown attorneys, judges and the media construct their authority through symbols and images, in order to "explain" and manage crime, and how these representations are regarded in public discourse.
Prerequisite: WDW200Y1, 220Y1

**WDW387H1 Legal Regulation of Morality [39L]**
Regimes for prohibiting and regulating consensual activities such as drug use, pornography, prostitution, abortion, and gambling. Historical evolution of the law, current substantive elements required for conviction, philosophical and criminological perspectives on the decriminalization or legalization of these activities, and an examination of how other countries regulate them.
Prerequisite: UNI255H1/256H1/WDW 200Y1, 220Y1
Exclusion: WDW 391H1 in 2002

**WDW388H1 Drugs, Crime & Control [39L]**
Drugs, drug use and addiction from a criminological perspective. The history and social construction of addiction, licit and illicit drugs, criminal and disease models of drug use, drug control laws, drugs in the media, legal and constitutional issues related to drug control, policy reform, and implications for social control.
Prerequisite: WDW 200Y1, 220Y1
Exclusion: WDW 390H1 in 2005

**WDW389Y0 Topics in Criminology [TBA]**
Topics in Criminology offered in an international setting. The content may vary from year to year.

**WDW390H1 Topics in Criminology [39L]**

**WDW391H1 Topics in Criminology [39L]**

**WDW392H1 Topics in Criminology [39L]**

**WDW393H1 Topics in Criminology [39L]**

**WDW394H1 Topics in Criminology [39L]**
Topics vary from year to year, but the objective of the course is to explore emerging issues in Criminology, and their social, legal, ethical and political implications.
Prerequisite: WDW200Y1, 220Y1

**WDW395H1 Independent Study [TBA]**
Independent study under the direction of a Criminology faculty member.
Prerequisite: WDW200Y1, 220Y1. Approval of the Undergraduate Co-ordinator is required.

**WDW400H1 Current Issues in Criminology [26S]**
An advanced seminar exploring in detail current issues in Criminology. Topics vary from year to year, but the objective of the course is to discuss current issues and their social, ethical and legal implications.
Prerequisite: An average of at least 75% in four full WDW Criminology credits, and a CGPA of at least 3.0.

**WDW415H1 Crime and Politics [26S]**
An advanced seminar examining the development of criminal justice and penal policies in Canada, the United States, Western Europe and Russia; the way authorities in those countries define and manage political deviance and the intrusion of politics into the administration of justice, especially in non-democratic settings.
Prerequisite: An average of at least 75% in four full WDW Criminology credits, and a CGPA of at least 3.0.

**WDW420H1 Current Issues in Criminal Law [26S]**
An advanced seminar exploring in detail current issues in criminal law. Topics vary from year to year, but the objective of the course is to discuss current policy and case law developments in the criminal law, and their social, political and ethical implications. The role of Parliament and the judiciary in the development of the criminal law is considered.
Prerequisite: An average of at least 75% in four full WDW Criminology credits, and a CGPA of at least 3.0.

**WDW425H1 International Criminal Law [26S]**
An advanced seminar focusing on the legal and conceptual framework for responding to state violence and war crimes, and the challenges faced by various international legal institutions. Legal doctrines of sovereign immunity and universal jurisdiction, the history of international criminal prosecutions, and substantive international criminal law are examined.
Prerequisite: An average of at least 75% in four full WDW Criminology credits, and a CGPA of at least 3.0.

**WDW450H1 Criminology Research Project [TBA]**
An individual research project under the direction of a Criminology faculty member. Approval of the Undergraduate Co-ordinator is required.
Prerequisite: An average of at least 75% in four full WDW Criminology credits, and a CGPA of at least 3.0.

**WDW480H1 Interpersonal Violence [26S]**
The meaning, purposes and sources of interpersonal violence, including an examination of debates over defining and documenting violence, and a review of the research on the relationships between illegitimate, interpersonal violence and state-approved or state-initiated violence. Cultural, social and individual correlates of interpersonal violence; law's violence; and how violence is justified and denied.
Exclusion: WDW 400H1 in 2004-2006
Prerequisite: An average of at least 75% in four full WDW Criminology credits, and a CGPA of at least 3.0.

### Employment Relations Courses

**WDW240H1 Topics in Employment Relations [39L]**
Topics vary from year to year, but the objective of the course is to discuss current employment relations issues and their economic, legal, political and social implications.

**WDW244H1 Labour Relations [39L]**
Introduction to the institutions, issues and legislation affecting the employment relationship in the public and private sectors in Canada, with emphasis on collective bargaining. The economic and political environment, history of the labour movement, union organization, certification, contract negotiation, strikes, dispute resolution, contract administration and grievances.
Exclusion: ECO244Y1, WDW244Y1
Prerequisite: Four courses and a CGPA of at least 2.0

**WDW260H1 Organizational Behaviour [39L]**
Introduction to the nature of organizations and the behaviour of individuals and groups within organizations, including topics such as culture and diversity, reward systems, motivation, leadership, politics, communication, decision-making, conflict and group processes. Not recommended for students in Commerce programs.
Exclusion: MGT262H1, RSM260H1
Prerequisite: Four courses and a CGPA of at least 2.0

**WDW344H1 Topics in Employment Relations [39L]**

**WDW345H1 Topics in Employment Relations [39L]**

**WDW346H1 Topics in Employment Relations [39L]**

**WDW347H1 Topics in Employment Relations [39L]**

**WDW348H1 Topics in Employment Relations [39L]**

**WDW349H1 Topics in Employment Relations [39L]**
Topics vary from year to year, but the objective of the course is to discuss current employment relations issues and their economic, legal, political and social implications.

**WDW367H1 Compensation [39L]**
The theory and process of developing and administering compensation systems. Through the core compensation principles of efficiency, equity, consistency and competitiveness we consider such topics as: job analysis, job evaluation, pay levels and structures, pay for performance, benefits, and compensating special groups of workers.
Prerequisite: WDW260H1/MGT262H1/RSM260H1

**WDW378H1 Employment Health [39L]**
The influence of legislation, the labour market and collective bargaining on health policies and programs in the workplace. The rights and responsibilities of employers, employees, unions and governments for the regulation and promotion of workplace health and safety; and the implications of evolving demographic, economic, and social factors.
Prerequisite: WDW 244H1, 260H1

**WDW430Y1 Employment Law [52L]**
The major legal structures which regulate the employment relationship in the public and private sectors: the common law of contract (master/servant law), legislation governing collective bargaining, the primary statutes (Employment Standards Act, Labour Relations Act, Occupational Health and Safety Act, Workplace Safety and Insurance Act, and the Human Rights Code).
Prerequisite: Thirteen full credits, including WDW244H1 and WDW260H1

**WDW444H1 Seminar in Employment Relations [26S]**
An advanced seminar examining contemporary issues in the employment relations and human resources field. Topics vary from year to year, but the objective of the course is to discuss current issues and their economic, legal and social implications.
Prerequisite: Thirteen full credits, including WDW 244H1 and WDW 260H1, and a CGPA of at least 2.50.

### Other Woodsworth College Courses

**WDW299Y1 Research Opportunity Program**
Credit course for supervised participation in faculty research project. See page 48 for details.

**WDW396H1 Research Participation [TBA]**

**WDW397Y1 Research Participation [TBA]**
Credit course for supervised participation in a faculty research project. Offered only when a faculty member is willing and available to supervise. Faculty members review proposals with the Program Director, then make the opportunity known to students as appropriate. Open only to third and fourth year students enrolled in a Criminology or Employment Relations program.
Prerequisite: Completion of at least nine full courses. A CGPA of at least 3.0 is recommended. Approval of the Undergraduate Coordinator is required.

## Writing and Rhetoric: see Innis College

## Writing in Arts and Science

(Note: For courses in creative writing, see entries under "English" (ENG), "Innis College" (INI) and "Victoria" (VIC) in this Calendar.)

The ability to think critically and to write well-organized, clear, grammatical prose is important to your work in many courses. It will improve your chances if you apply to graduate or professional schools and will also give you an advantage in the workplace. To help you develop your writing skills, Arts and Science provides a range of instructional resources.

### Courses

Departments and programs integrate instruction on writing into their courses, and some offer courses that concentrate on communication in their disciplines. Check the course listings by department. In any course, your instructors will provide guidelines for course assignments, and you may ask them to discuss written work that has been graded and returned to you.

In addition, the university offers a number of courses in writing non-fiction prose:

ENG100H1 (Effective Writing) is listed under "English" in this Calendar

TRN190Y1 (Critical Reading and Critical Writing) is listed under "Trinity College"

Innis College now offers a minor program called Writing and Rhetoric. See the program website at **www.utoronto.ca/innis/wr/.** Its offerings include the following courses, all listed under "Innis College": INI103H1 (Writing Essays), INI104H1 (Writing Reports), INI203Y1 (Foundations of Written Discourse), INI204Y1 (The Academic Writing Process), INI300Y1 (Strategic Writing in Business and the Professions: Theory and Practice), INI301H1 (Contemporary Issues and Written Discourse: Rhetoric and the Print Media), INI304H1 (Critical Thinking and Inquiry in Written Communication), INI305H1 (Word and Image in Modern Writing), INI311Y1 (Seminar in Creative Writing), and INI412Y1 (Prose Style across Genres).

The University of Toronto at Mississauga (UTM) offers a major and minor program in Professional Writing and Communication. For more information, see the UTM timetable at **www.utm.utoronto.ca/~utmor/student/timetable/.** Consult with your college registrar about taking courses at UTM. These are among the courses offered: WRI203H5 (Expressive Writing), WRI303H5 (Specialized Prose), WRI307H5 (Science and Writing), WRI310H5 (Social and Professional Languages), WRI320H5 (History and Writing), WRI325H5 (Community and Writing) , WRI330H5 (Oral Rhetoric), WRI340H5 (Critical Reading and Listening), WRI392H5 (Research and Writing), WRI395H5 (Re-languaging: Writing across Cultures and Languages), and WRT420H5 (Making a Book).

**WRT Courses** provide opportunities for senior students to develop advanced writing skills in their disciplines. These courses count for degree credit but are evaluated on a CREDIT / NO CREDIT basis. No grades are awarded or calculated in the GPA. Regular tuition is charged. These courses cannot be taken to fulfill the distribution requirement.

**WRT306H1 Writing for Scientists [26L]**
Intensive practice and instruction for senior science students. Teaches the essentials of writing in science courses and scientific research. Examines individual and collaborative activities in academic and professional life, focusing on such genres as the abstract, research report, poster, proposal, and product documentation. Readings introduce themes applicable to written communication in the sciences.
Prerequisite: 9.0 courses completed; major or specialist enrolment in science program
Exclusion: CSC290H1, HMB397H1, PSY309H1, PSL497H1, WRT307H1
WRT306H1 has NO distribution requirement status

**WRT307H1 Writing for Social Scientists [26L]**
Intensive practice and instruction for senior social-science students. Teaches the essentials of social-science writing in academic and professional life, with attention to individual and collaborative projects. Focuses on genres such as the abstract, proposal, research report, and position paper. Readings introduce themes applicable to written communication in the social sciences.
Prerequisite: 9.0 courses completed; major or specialist enrolment in social science program
Exclusion: INI204Y1, INI300Y1, WRT306H1
WRT307H1 has NO distribution requirement status.

### Writing Centres

The Writing Centres provided free of charge at undergraduate colleges will help you develop the writing skills needed throughout your university studies. They offer both individual and group instruction. See the webpage **www.utoronto.ca/writing/news.html** for announcements about group workshops and non-credit courses.

In individual consultations, trained writing instructors help you improve your ability to plan, write, and revise, using your assignments from any subject as examples. Some instructors specialize in the needs of students using English as a second language. You are entitled to use the writing centre of the college where you are registered or living in residence, or of the department where you are taking a course. All the college writing centres now use an online booking system for which you need a UTORid. To make an appointment with your writing centre, use the contact information given below or start from the common login page at **awc2.wdw.utoronto.ca/awc-login/.** Here is a list of Arts and Science writing centres, including contact information.

French Department Writing Labs: ask your professor or inquire at 416-926-2302.

Innis College Writing Centre, Room 322, **www.utoronto.ca/innis/writing.htm**

New College Writing Centre, Wilson Hall, Room 2045 and 2047, **www.newcollege.utoronto.ca/site6.aspx**

Philosophy Department Writing Clinic, 215 Huron Street, 9th Floor, 416-978-3314

St. Michael's College Writing Centre, Kelly Library, Rooms 230 and 231, **www.utoronto.ca/stmikes/campus/student_services_wc.html**

Trinity College Writing Centre, Larkin Building, Room 302, **www.trinity.utoronto.ca/Writing/**

University College Writing Workshop, Laidlaw Library, Room 214, **www.utoronto.ca/ucwriting/**

Victoria College Writing Workshop, Northrop Frye Hall, Rooms 103A and 103B, **www.vicu.utoronto.ca/academic/tutorial/writing.htm**

Woodsworth College Academic Writing Centre, Room 214, **www.wdw.utoronto.ca/current/awchome.htm**

### Self-Help Material

Campus libraries stock many reference guides on academic writing. Besides general handbooks on style and format, you will find books that specialize in the ways to write for specific disciplines. You can also consult the website "Writing at the University of Toronto" at **www.utoronto.ca/writing**. It offers over 60 specialized files giving advice on university writing, along with links to other useful online and print resources, and it gives current information on writing instruction at U of T.

## Yiddish: see Germanic Languages & Literatures

## Rules and Regulations

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UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

The undergraduate academic Calendar of the Faculty of Arts & Science is published in both online and printed editions. Every effort has been made to ensure the compatability of both versions. In the case of any discrepancy, the online version shall apply. Any post-publication corrections and/or updates to the print edition of this Calendar will be posted on the Faculty Registrar's web site at http://www.artsci.utoronto.ca/current. Students are strongly advised to check back regularly to keep informed of changes.

While Departmental counsellors and the Registrars of the Colleges are always available to give advice and guidance, it must be clearly understood that **THE ULTIMATE RESPONSIBILITY RESTS WITH THE STUDENT** for completeness and correctness of course selection, for compliance with prerequisite, co-requisite requirements, etc., for completion of Program details, for proper observance of the Distribution Requirement and for observance of regulations, deadlines, etc.

Students are responsible for seeking guidance from a responsible officer if they are in any doubt; misunderstanding, or advice received from another student will not be accepted as cause for dispensation from any regulation, deadline, program or degree requirement.

## Degrees Offered on the St. George Campus

Effective for students registering in a degree program in the Faculty for the first time in the 2001 summer session or later, the St. George Campus of the Faculty of Arts and Science has discontinued the 15-course (three-year) B.A. and B.Sc. degrees; ONLY 20-course (four-year) Honours B.A., B.Sc. and B.Com degrees will be available. Students registered in a degree program in the Faculty before the 2001 summer session may still choose a 15-course (three-year) degree.

## Changes in Programs of Study and/or Courses

The programs of study that our Calendar lists and describes are available for the year(s) to which the calendar applies. They may not necessarily be available in later years. If the University or the Faculty must change the content of programs of study or withdraw them, all reasonable possible advance notice and alternative instruction will be given. The University will not, however, be liable for any loss, damages, or other expenses that such changes might cause.

For each program of study offered by the University through the Faculty, the courses necessary to complete the minimum requirements of the program will be made available annually. We must, however, reserve the right otherwise to change the content of courses, instructors and instructional assignments, enrolment limitations, pre-requisites and co-requisites, grading policies, requirements for promotion and timetables without prior notice.

## Regulations and Policies

As members of the University of Toronto community, students assume certain responsibilities and are guaranteed certain rights and freedoms.

The University has several policies that are approved by the Governing Council and that apply to all students. Each student must become familiar with the policies. The University will assume that he or she has done so. The rules and regulations of the Faculty are listed in this calendar. In applying to the Faculty, the student assumes certain responsibilities to the University and the Faculty and, if admitted and registered, shall be subject to all rules, regulations and policies cited in the Calendar, as amended from time to time.

All University policies can be found at www.governingcouncil.utoronto.ca/policies.htm. Some policies or portions of policies are published in the "Rules and Regulations" section of this Calendar. Those which are of particular importance to students are: the Policy on Access to Student Academic Records; the Code of Behaviour on Academic Matters; the Code of Student Conduct; the Grading Practices Policy; and the Policy on Official Correspondence with Students.

More information about students' rights and responsibilities can be found at www.students.utoronto.ca/The_Basics/Rights_and_Rules.htm.

## Enrolment Limitations

The University makes every reasonable effort to plan and control enrolment to ensure that all of our students are qualified to complete the programs 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 programs, courses, or sections listed in the calendar, and to withdraw courses or sections for which enrolment or resources are insufficient. The University will not be liable for any loss, damages, or other expenses that such limitations or withdrawals might cause.

## Copyright in Instructional Settings

If a student wishes to tape-record, photograph, video-record or otherwise reproduce lecture presentations, course notes or other similar materials provided by instructors, he or she must obtain the instructor's written consent beforehand. Otherwise all such reproduction is an infringement of copyright and is absolutely prohibited. In the case of private use by students with disabilities, the instructor's consent will not be unreasonably withheld.

## 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 Academic Records, strictly controls access to Person I.D. numbers. The University assumes and expects that students will protect the confidentiality of their Person I.D.'s.

## Fees and Other Charges

The University reserves the right to alter the fees and other charges described in the Calendar.

## Notice of Collection concerning Freedom of Information and Protection of Privacy

The University of Toronto respects your privacy. Personal

information that you provide to the University is collected pursuant to section 2(14) of the University of Toronto Act, 1971. It is collected for the purpose of administering admission, registration, academic programs, university-related student activities, activities of student societies, financial assistance and awards, graduation and university advancement, and for the purpose of statistical reporting to government agencies. At all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act.

If you have questions, please refer to www.utoronto.ca/privacy or contact the University Freedom of Information and Protection of Privacy Coordinator at 416 946-7303, McMurrich Building,room 201, 12 Queen's Park Crescent West, Toronto, ON, M5S 1A8.

An expanded version of this Notice can be found at www.fippa.utoronto.ca/policy/nocx.htm.

### Registration

Details of the procedures by which students of the Faculty of Arts and Science register and enrol in courses for which they are eligible, and pay or make arrangements to pay fees, are found in the *Registration Handbook and Timetable*, which students receive from their college. (Any student allowed to register one day after the end of the first week of classes is charged a late fee.

### Passed Courses May Not Be Repeated

Students may not repeat any course in which they have already obtained a mark of 50% or higher. The only exceptions occur when students require a course with a specific grade for entry to a limited-enrolment Program. Students may repeat such a course only once as an "extra" course, which will have no effect on status or Grade-Point Average. There are no supplemental examinations or provisions to "upgrade" a mark. All courses taken, except those officially cancelled, remain on the record.

### Degree Courses and "Extra" Courses: Chronological Principle

Courses are credited towards a degree chronologically. For example, if a student has already passed six 100-series courses and then enrols in further 100-series courses, the more recent courses are counted as "Extra" courses. An exception occurs when a student who has completed 5.5 100-series courses enrols in a full course at the 100-level in a subsequent session; the most recently taken half-course becomes "extra."

## Taking Courses Outside the Faculty

### Courses at University of Toronto Scarborough and University of Toronto Mississauga

Students registered on the St. George campus of the Faculty of Arts and Science may enrol in most courses offered by University of Toronto Mississauga and University of Toronto Scarborough, provided that they meet the enrolment controls and prerequisites established by those divisions. These courses count towards the 20 credits required for a St. George degree and are included in the CGPA. These courses may also count towards St. George program requirements; students should check with their program office before enrolling.

### Courses of Other Divisions

Students should select their courses from those offered in the Faculty of Arts and Science. If, however, they identify a course(s) offered in another division, faculty or school of the University that may be appropriate for inclusion in their degree program, they may petition for permission to register in the course for degree credit. In the petition, students must establish that the content and aims of the course(s) are valid for a specific Arts and Science program and cannot not be met by courses offered within the Faculty of Arts and Science. The students should initiate the procedure well in advance of the beginning of classes, so that they may choose alternate courses should the request is denied. The Faculty will not accept as reasons for taking courses in other divisions the wish to satisfy requirements to qualify for programs and organisations outside the Faculty or to prepare for non-academic or professional purposes.

Graduate Courses: Acceptance of petitions to take graduate courses is further subject to the requirements of the School of Graduate Studies (CGPA of 3.0).

Non-degree students may enrol through this Faculty in courses given by this Faculty or the University of Toronto Mississauga or the University of Toronto Scarborough only.

See the section on petitions and appeals starting on page 497 for more information.

### Courses of Other Universities (Letters of Permission and Transfer Credit)

Degree students with a cumulative grade point average of at least 1.50 before studying elsewhere may take a maximum of 5.0 full-course equivalents elsewhere for transfer credit. Students admitted with transfer credit may be limited in the number of courses that they may transfer after admission and should consult the chart available on the web at www.artsci.utoronto.ca/current/undergraduate/tc. Prior to taking courses at another university, students are advised to request a Letter of Permission to confirm acceptability of those courses for transfer credit. Otherwise, students may submit a request for transfer credit after completing courses elsewhere. Permission obtained from an instructor or from a department for program purposes, however, does not obligate the Faculty to grant transfer credit. There is a $25.00 non-refundable charge for each request. Assessments of transfer credit may take several weeks to process depending on the time of year and the nature of the request. Applicants are responsible for submitting requests well in advance of any deadlines they must meet and for obtaining the appropriate counselling concerning the Letter

of Permission and/or Transfer Credit process.

**Note:**

Only one transfer credit may be used to satisfy the requirement of 300+ series courses for the degree. Please refer to the Letters of Permission and Transfer Credit (Post-Admission) Guidelines on the Registrar's Office web site at www.artsci.utoronto.ca/current/undergraduate/tc.

### Study Elsewhere Opportunities

U of T offers a wide range of opportunities to study elsewhere. For more information contact:

International Student Exchange Office
Rm. 202, Koffler Centre, 214 College St.
416-946-3138
student.exchange@utoronto.ca
www.utoronto.ca/student.exchange

Summer Abroad Program
Room 231, Woodsworth College, 119 St. George St.
416-978-8713
summer.abroad@utoronto.ca
www.summerabroad.utoronto.ca

## Cancelling Courses or Registration

### Cancelling Courses

Students who do not intend to complete a course or courses must use the Student Web Service to cancel the course before the final date to cancel courses from the academic record (see Sessional Dates, page 7). Students still enrolled in a course after the final date to cancel the course will receive a grade for that course. Not attending classes or ceasing to complete further course work or not writing the examination do not constitute grounds for cancellation without academic penalty from a course; the course remains on the record with the grade earned, including "0" for incomplete work.

Students are not permitted to cancel or withdraw from a course in which an allegation of academic misconduct is pending from the time of the alleged offence until the final disposition of the accusation.

### Cancelling Registration

Students who wish to cancel all their current courses, and do not intend to enrol in any other courses for the rest of the session (Fall, Winter or Summer) must cancel their registration by using the Student Web Service at *www.rosi.utoronto.ca* or in writing by notifying their College Registrar. The cancellation of registration must be completed by the appropriate deadline in order for the student not to incur an academic penalty. Before any refund is authorized, they must:

1. Pay any outstanding fees;
2. return any books to the Library and pay any outstanding fines;
3. vacate any laboratory or athletic lockers and return any equipment in their possession.

## Corrections to the Academic Record

The Faculty will accept requests for corrections to an academic record of the Fall-Winter Session up to the following 15 November, and corrections to their record of the Summer Session up to the following 28/29 February.

**Note:**

Students are responsible for ensuring that they provide a valid mailing address to assure that they receive a Statement of Results at the end of the Fall-Winter and Summer Sessions. The mailing address must be kept up-to-date on the Student Web Service at *www.rosi.utoronto.ca*. Students who cease attending a course without officially cancelling or after the cancellation deadline will be considered to be enrolled in that course. It will be included in their official Statement of Results.

## Fees

Fees are subject to change at any time by approval of the Governing Council. Tuition fees normally consist of academic fees (including instruction and library) and incidental/ancillary fees (including Hart House, Health Services, Athletics and student organizations). Additional ancillary fees may also be assessed for enrolment in some specific courses. Consult the Student Accounts web site at *www.fees.utoronto.ca* or the Bursars of St. Michael's and Trinity Colleges.

### Fees Invoice and Payment

Students receive an invoice by mail or in person at Students Accounts or their college bursar's office (St. Michael's and Trinity students) detailing fees for their specific program and selection of courses. Payment is made at a financial institution — consult the instructions sent with the invoice. You can also pay your fees using telephone or online banking if your bank offers this service. Refer to the Registration Handbook & Timetable for further details.

### Payment Deadlines

Deadlines are available from the Student Accounts Office or from the college bursar's offices (St. Michael's and Trinity students).

To avoid delays, students are advised to pay fees early.

All fees and charges posted to your account are payable. If not paid in full, any outstanding account balance is subject to a monthly service charge of 1.5% per month compounded (19.56% per annum). Outstanding charges on your account from prior sessions are subject to a service charge as of the 15th of every month until paid in full."

Students with outstanding accounts may not receive official transcripts and may not re-register at the University until these accounts are paid.

### Fees for International Students

In accordance with the recommendation of the Government of Ontario, certain categories of students who are neither Canadian citizens nor permanent residents of Canada are charged higher academic fees. Refer to the Student Accounts web site at *www.fees.utoronto.ca* for details.

Further information on fees may be obtained by students of Innis, New, University, Victoria and Woodsworth Colleges from the Student Accounts Office, University of Toronto, 215 Huron St., Toronto, Ontario, M5S 1A2; 416-978-2142. Students of St.

Michael's and Trinity Colleges should consult their College Bursar.

### Financial Assistance

A limited number of in-course bursaries, scholarships and awards is available to students who need financial assistance or who qualify for them on the basis of academic merit. Information on these, and the Ontario Student Assistance Program, is available on the following web sites:

Faculty of Arts & Science web site: www.artsci.utoronto.ca

Admissions and Awards web site: www.adm.utoronto.ca/fa/

or the College Registrars' offices and web sites.

### Sanctions on Account of Outstanding Obligations

The following are recognized University obligations:

(a) tuition fees;
(b) academic and other incidental fees;
(c) residence fees and charges;
(d) library fines;
(e) loans made by Colleges, the Faculty or the University;
(f) Health Service accounts;
(g) unreturned or damaged instruments, materials and equipment;
(h) orders for the restitution, rectification or the payment of damages, fines, bonds for good behaviour, and requirement of public service work imposed under the authority of the Code of Student Conduct.

The following academic sanctions are imposed on Arts and Science students with outstanding University obligations:

1. Official transcripts of record will not be issued;
2. Registration will be refused to continuing or returning students.

Payments made by continuing or returning students will first be applied to outstanding University debts and then to current fees.

## Course Marks

### Term Work and Term Test Regulations

The following regulations summarize the Faculty's implementation of the University's Grading Practices Policy, Parts I and II of which are reprinted in full starting on page 502 (Part III is an administrative appendix and is available upon request from the Office of the Vice-President and Provost; however grade scales may be seen on page 495 of this *Calendar*).

#### Marking Schemes

Both essays (or equivalent work) and examinations (including term tests) are normally required for standing in courses. In courses where only one form of evaluation is used, a single piece of work cannot count for all of the final mark.

Self-evaluation by individual students or by groups of students is not permissible unless the specific consent of the Arts and Science Faculty Council is received.

As early as possible in each course, and no later than the last date to enrol in courses, the instructor must announce in a regularly-scheduled class the methods by which student performance will be evaluated, their relative weight in the final mark, including any discretionary factor, and the due dates. These methods must be in accord with applicable University and Faculty policies (See TERM WORK and TERM TEST below, especially bold-faced items.) Instructors must file a copy of their marking scheme for each course with the Departmental or Program Office at the beginning of the term.

Once the weight of each component of the course work is given, it may not be changed unless approved by a majority of the students present and voting at a regularly-scheduled meeting of the class.

After the last date to cancel the course without academic penalty, no change in marks weighting may take place unless there is unanimous consent of all students present and voting, and notice must be given at the regularly-scheduled class meeting previous to that at which the issue is to be raised.

Students may petition for deletion of the course from their record and receive an appropriate fees refund, should an infraction of the Grading Practices Policy occur. Petitions must be filed by the last day of classes, before all course work has been completed.

#### Term Work

Instructors shall return by the deadline one or more marked assignments worth a combined total of at least 10% of the total course mark for H courses and 20% for Y courses.

The deadline for returning such marked work shall be the last regularly scheduled class meeting prior to the deadline to cancel without academic penalty, with one exception: for courses that run the entire Fall/Winter Session (Y1Y or H1Y courses), the deadline shall be the last regularly-scheduled class meeting of the first week of classes in January.

All term work must be submitted on or before the last day of classes in the course concerned, unless an earlier date is specified by the instructor. Students who for reasons beyond their control are unable to submit an assignment by its deadline must obtain approval from their instructor for an extension of the deadline. This extension may be for no longer than the end of the Final Examination period. If additional time beyond this period is required, students must petition through their College Registrar before the end of the examination period for a further extension of the deadline.

Students are strongly advised to keep rough and draft work and copies of their essays and assignments, as these may be required by the instructor.

All written work that has been evaluated should be returned with such detailed comment as the instructor deems appropriate, and time made available for discussion of it. Any enquiries about a graded piece of work must be made within one month of the date the work was returned to the class. Instructors must keep unclaimed term work for at least six months beyond the end of the course.

### Term Tests

No term test or combination of term tests held in the last two weeks of classes at the end of any term may have a total weight greater than 25% of the final mark.

All term tests must be held on or before the last day of classes. No term test may be held during the "Reading Week" in February, during the "Study Week" in April, or during Faculty Examination Periods, except for those in F or Y-courses scheduled by the Faculty in December.

#### Missed Term Tests

Students who miss a term test will be assigned a mark of zero for that test unless they satisfy the following conditions:

1. Students who miss a term test for reasons entirely beyond their control may, within one week of the missed test, submit to the instructor or department/program a written request for special consideration explaining the reason for missing the test, and attaching appropriate documentation, such as a medical certificate.
2. If a written request with documentation cannot be submitted within one week, the department may consider a request to extend the time limit.
3. A student whose explanation is accepted by the department will be entitled to one of the following considerations:
   a) In courses where there is no other term work as part of the evaluation scheme, a makeup test must be given.
   b) In other courses, the department/program may either give a makeup test OR increase the weighting of other graded work by the amount of the missed test. In no case may the weighting of the final examination in a 100-level course be increased beyond 2/3 of the total course mark.
4. If the student is granted permission to take a makeup test and misses it, then he or she is assigned a mark of zero for the test unless the department/program is satisfied that missing the makeup test was unavoidable. No student is automatically entitled to a second makeup test.*
5. A student who misses a term test cannot subsequently petition for late withdrawal from the course without academic penalty on the grounds that he or she has had no term work returned before the drop date.

*** Note**

This means that if a department is persuaded of the student's grounds for missing the makeup test, it may decide to compensate for the missed test in whatever way it chooses, which could be by giving another makeup test; the student cannot demand another makeup test.

## Faculty Final Examinations

A Faculty final examination common to all sections of the course and counting for between one-third and two-thirds of the final mark must be held in each 100-series course, unless exemption has been granted by the Arts and Science Faculty Council. In 200-, 300- and 400-series courses, the Departments will decide whether or not an examination is appropriate, and report to the Committee. The ratio of term work to examination mark will be the same for all sections of multi-section courses that have final examinations. The relative value of each part of a written examination must be indicated on the question paper.

Final examinations are held at the end of each session or subsession. Students taking courses during the day may be required to write evening examinations, and students taking evening courses may be required to write examinations during the day. Examinations may be held on Saturdays. Students who make personal commitments during the examination period do so at their own risk. No special consideration is given and no special arrangements are made in the event of conflicts.

Students who are unable to write their examinations due to illness, domestic affliction, etc., should contact their College Registrar (see "Petitions Regarding Examinations", page 497). Students who have two Faculty final examinations at the same time, or three consecutive Faculty final examinations (e.g., morning, afternoon, evening; or afternoon, evening, next morning) should contact the Office of the Faculty Registrar well before the examination period begins. Information regarding dates, times and locations of examinations will not be given by telephone or email; for the most up to date examination timetable consult the Faculty's current students web site at www.artsci.utoronto.ca/current.

### Rules for the Conduct of Examinations

1. No person will be allowed in an examination room during an examination except the candidates concerned and those supervising the examination.
2. Candidates must appear at the examination room at least twenty minutes before the commencement of the examination.
3. Candidates shall bring their student photo identification cards and place them in a conspicuous place on their desks.
4. Bags and books are to be deposited in areas designated by the Chief Presiding Officer and are not to be taken to the examination desk or table. Students may place their purses on the floor under their chairs.
5. The Chief Presiding Officer has authority to assign seats to candidates.
6. Candidates shall not communicate with one another in any manner whatsoever during the examination.
7. No materials or electronic devices shall be brought into the room or used at an examination except those authorized by the Chief Presiding Officer or Examiner. Unauthorized materials include, but are not limited to: books, class notes, or aid sheets. Unauthorized electronic devices include, but are not limited to: cellular telephones, laptop computers, calculators, MP3 players (such as an iPod), Personal Digital Assistants ("PDA" such as Palm Pilot or Blackberry), pagers, electronic dictionaries, Compact Disc Players, and Mini DIsc Players..

8. Candidates who bring any unauthorized materials or electronic devices into an examination room or who assist or obtain assistance from other candidates or from any unauthorized source are liable to penalties under the Code of Behaviour on Academic Matters, including the loss of academic credit and expulsion.
9. In general, candidates will not be permitted to enter an examination room later than fifteen minutes after the commencement of the examination, nor to leave except under supervision until at least half an hour after the examination has commenced.
10. Candidates shall remain seated at their desks during the final ten minutes of each examination.
11. At the conclusion of an examination, all writing shall cease. The Chief Presiding Officer may seize the papers of candidates who fail to observe this requirement, and a penalty may be imposed.
12. Examination books and other material issued for the examination shall not be removed from the examination room except by authority of the Chief Presiding Officer.

## Special Accommodations Fee

Students who request permission to write an examination outside the normal examination arrangements must submit a petition making their request at least three weeks prior to the beginning of the examination period. Late requests cannot be accommodated. A non-refundable fee of $30.00 for each examination is charged at the time of application. Students who have been granted permission to write a deferred examination will pay this fee in addition to the deferred examination fee of $70.00 per examination.

If permission has been granted for the examination to be written at an "Outside Centre", students are also responsible for all costs for invigilation, postage, etc. charged by the centres involved. These costs can reach as high as $100.00 per examination; students are advised to determine the total cost before petitioning. Such permission is granted only in the most extreme circumstances.

## Credit/No Credit

Effective beginning the 2008-09 Fall-Winter Session, degree students in the Faculty of Arts & Science may select up to 1.0 full-course equivalents of their degree credits to be assessed on a Credit/ No Credit basis. Students must choose this mode of assessment **no later than the last day to enrol in the relevant course**. Once the deadline has passed, students may not under any circumstances reverse this decision.

To achieve a status of CR (Credit), a student must achieve a final mark of at least 60%. Marks below that will be assessed as NCR (No Credit). Courses with a final status of CR will count as degree credits but will have no effect on the student's GPA. They will count as Distribution Requirements and degree credits, but cannot be used to satisfy subject POSt requirements.

Courses with a final status of NCR will not count as degree credits but will not count as failures, and will also not be included in the GPA calculation.

Students may exercise this option to a total of 1.0 full-course equivalents within the total number of credits required for a degree. The choice is not restricted as to year or level of course. This option is not available to Arts & Science non-degree students or to students from other faculties/divisions of the University of Toronto.

### Repeating a Courses as an "Extra"

A student may repeat 1.0 full-course equivalent in which he or she has received a passing mark for reasons other than to gain a required mark above passing to qualify for entry into a Subject POSt or a course required for a prerequisite. Such a repeated course will be designated an "Extra" course: it will appear on the academic record, but will be marked "Extra" and will not be included in GPA calculations or in the degree credit count.

Students requesting to repeat a course in this way must do so at their college registrar's office, where they will receive appropriate advising and will be enrolled, provided there is space available, only after other degree students have had an opportunity to enroll.

## Grading Regulations

### Grading Scale

| Percentage | Letter Grade | Grade Point Value * | Grade Definition | |
|---|---|---|---|---|
| 90-100 | A+ | 4.0 | | |
| 85-89 | A | 4.0 | Excellent → | Strong evidence of original thinking; good organization; capacity to analyze and synthesize; superior grasp of subject matter with sound critical evaluations; evidence of extensive knowledge base. |
| 80-84 | A- | 3.7 | | |
| 77-79 | B+ | 3.3 | | |
| 73-76 | B | 3.0 | Good → | Evidence of grasp of subject matter, some evidence of critical capacity and analytic ability; reasonable understanding of relevant issues; evidence of familiarity with literature. |
| 70-72 | B- | 2.7 | | |
| 67-69 | C+ | 2.3 | | |
| 63-66 | C | 2.0 | Adequate → | Student who is profiting from his/her university experience; understanding of the subject matter; ability to develop solutions to simple problems in the material. |
| 60-62 | C- | 1.7 | | |
| 57-59 | D+ | 1.3 | | |
| 53-56 | D | 1.0 | Marginal → | Some evidence of familiarity with subject matter and some evidence that critical and analytic skills have been developed. |
| 50-52 | D- | 0.7 | | |
| 0-49 | F | 0.0 | Inadequate → | Little evidence of even superficial understanding of subject matter; weakness in critical and analytic skills; with limited or irrelevant use of literature. |

* The grade point values above apply to marks earned in individual courses; grade point averages are weighted sums of the grade points earned (see below), and thus do not necessarily correspond exactly to the scale above. For example, a B+ average would include grade point averages from 3.20 to 3.49, while the lowest B- average would be 2.50.

**Note:**

In order to "obtain standing" in a course, a student must receive at least a passing grade (50%) in that course. A Grade of "F" is a failure. There are no supplemental examination privileges in the Faculty.

Other notations, which have no grade point values, and which may be authorized only by petition, are:

**AEG**

Aegrotat Standing on the basis of term work and medical evidence

**CR/NCR**

Credit/No Credit; is not in general use in the Faculty

**NGA**

No Grade Available

**GWR**
Grade withheld pending Review

**IPR**
(Course) In Progress

**SDF**
Standing Deferred granted by petition

**WDR**
Late Withdrawal without academic penalty after the relevant deadline. Removal of a grade for incomplete work when withdrawal before the end of the course has been caused by circumstances beyond the student's control, arising after the last date for course cancellation. Changes to the record will be authorized by petition only in exceptional circumstances.

**EXT or XTR or X**
Extra Course not for degree credit; course has no effect on status or grade point average.

## Grade Point Average

The Grade Point Average is the weighted sum (a full course is weighted as 2, a half-course as 1) of the grade points earned, divided by the number of courses in which grade points were earned.

However, courses noted "AEG" are not included in the average, nor are transfer credits, courses taken elsewhere on a Letter of Permission, nor courses designated as "extra." Courses taken as Non-degree students and Non-degree visiting students are included in the CGPA.

Three types of grade point averages are used:

1. The Sessional GPA is based on courses taken in a single session (Fall, Winter or Summer);
2. The Annual GPA is based on courses taken in the Fall-Winter Sessions;
3. The Cumulative GPA takes into account all courses not marked "extra" in the Faculty.

A Sessional, Annual, and Cumulative GPA is also calculated for all Non-degree and Non-degree visiting students. For Non-degree students who have completed a degree in the Faculty, the Cumulative GPA includes all courses taken both as a degree student and as a non-degree student.

## Academic Standing

There are four kinds of academic standing which apply to students who have attempted at least four courses in the Faculty: In Good Standing; On Probation; On Suspension; Refused Further Registration

Academic standing is assessed twice a year:

1. At the end of the Winter Session; the GPAs used for this status assessment are the annual and the cumulative GPAs.
2. At the end of the Summer Session; the GPAs used for this status assessment are the sessional and the cumulative GPAs.

### In Good Standing:

Students are described as In Good Standing if they are neither On Probation, Suspended nor Refused Further Registration; these terms are explained below. For students with particularly noteworthy academic results, there are three specific forms of recognition, which are described in the "Student Services & Resources" section starting on page 14.

### Probation; Suspension; Refused Further Registration

The following regulations apply to students who have attempted at least four courses* in the Faculty.

1. A student shall be on academic probation who
   a) has a cumulative GPA of less than 1.50 or
   b) returns from suspension.
2. A student who, at the end of the Winter or Summer Session during which he or she is on probation
   a) has a cumulative GPA of 1.50 or more shall be in good standing

b) has a cumulative GPA of less than 1.50 but an annual GPA of 1.70 or more (Winter Session)/sessional GPA of 1.70 or more (Summer Session) shall continue on probation.

c) has a cumulative GPA of less than 1.50 and an annual GPA of less than 1.70 (Winter Session)/sessional GPA of less than 1.70 (Summer Session) shall be suspended for one calendar year unless he or she has been so suspended previously, in which case he or she shall be suspended for three years.

3. A student who, having been suspended for three years, is again liable for suspension shall be refused further registration in the Faculty.

* Courses attempted are those in which a student remains formally enrolled on the last date for cancellation, unless the academic penalty normally attached to a later cancellation is removed by petition.

**NOTE: Students "On Academic Probation" may take no more than five courses in each of the Fall and Winter Sessions.**

## Grades Review Procedure

The Arts and Science Faculty Council administers the Grading Regulations, and reviews course grades submitted by Departments. The Faculty, through this Committee, is responsible for assigning the official course grades, which are communicated to the students by the Faculty Registrar.

Each Chair appoints a departmental review committee to review grades submitted by instructors. The committee may ask for clarification of any anomalous results or distributions, or disparity between sections of the same courses. Both the departmental review committee, through the Chair, and the Faculty review committee, through the Dean, have the right, in consultation with the instructor of the course, to adjust marks where there is an obvious and unexplained discrepancy between the marks submitted and the perceived standards of the Faculty. Final marks are official, and may be communicated to the students only after the review procedure has taken place. Grades, as an expression of the instructor's best judgment of each student's overall performance, will not be determined by any system of quotas.

## Appeals and Petitions

Students are responsible for observing sessional dates, course prerequisites, and exclusion, satisfying the degree requirements and following the rules and regulations in the *Calendar* and the *Registration Handbook and Timetable*; failure to inform themselves of the preceding information may result in academic and/or financial penalties. Students should always consult their College Registrar immediately for guidance if anything happens that interferes with continuing or completing their courses, or that appears to be contrary to rules, regulations and deadlines.

### Departmental Appeals

Issues arising within a course that concern the pedagogical relationship of the instructor and the student, such as the organization of a course, grading practices, or conduct of instructors, fall within the authority of the department or college sponsoring the course. Students are encouraged to discuss any issues regarding the academic aspects of a course with the instructor. It is recommended that if appropriate an issue should be documented in writing. The successive stages of appeal after the course instructor are as follows: the Undergraduate Secretary; the Chair of the Department or the College Program Director; then the Dean of the Faculty. An appeal must have been reviewed at the departmental level before referral to the Dean; appeals to the Dean MUST be in writing.

### Petitions to the Faculty

Issues relating to degree requirements and administrative regulations may be petitioned to the Faculty within specific time limitations. The Faculty considers petitions to have regulations waived or varied, if a student presents compelling reasons; however, students must convince the Faculty that they have acted responsibly and with good judgment in observing Faculty regulations. The Committee on Standing routinely denies petitions that in its view do not present a valid reason for an exemption from the regulations. Students are encouraged to seek counselling and, if necessary, to initiate a petition through the office of their College Registrar.

Petitions must 1) state the student's request; 2) the reasons for the request in a clear and concise manner; and 3) be accompanied by relevant supporting documentation. The petition is considered in confidence by the Committee on Standing, which is charged with interpreting and administering the regulations of the Faculty. The Committee has the authority to grant exceptions and to attach conditions to its decisions.

It is the responsibility of the student to provide an accurate mailing and email (UTORmail) address to which a petition decision may be sent. Non-receipt of a decision due to incorrect address/email address is not grounds for reconsideration.

### Deadlines to File Petitions

**Term Work**

The last day of the examination period

**Examinations**

Within one week of the end of the examination period; end of first week of classes in January for the December examination period

**Withdrawal**

Fall-Winter Session courses: the following 15 November
Summer Session courses: the following 28/29 February

All supporting documentation must be submitted within three weeks of the date of initiating the petition. Late petitions and petitions with late documentation will not be considered.

### Documentation in Support of Petitions

The Faculty seeks documentation that provides pertinent evidence for decisions determining whether or not an exception should be made to regulations that are designed to ensure equitable treatment for all students.

**Medical Documentation:**

The University of Toronto Student Medical Certificate must be submitted in support of a request for an exemption from Faculty regulations, if illness is being used as the reason for the request. The claim of illness, however, is not sufficient grounds in itself to guarantee approval of the request. This certificate is available online at *www.utoronto.ca/health*, or at the Health Services (Medical and Psychiatric Services), the Office of the Faculty Registrar, College Registrar's Offices, departments and other offices of the University as well as in the *Registration Handbook and Timetable*. The certificate is titled as follows:

**University of Toronto Medical Certificate**

Other medical notes will not be accepted. Note that the physician's report must establish that the patient was examined and diagnosed at the time of illness, not after the fact. The Faculty will not accept a statement that merely confirms a report of illness made by the student and documented by the physician.

### Petitions Regarding Courses in Other Divisions– see page 490.

### Petitions Regarding Term Work (see also page 492)

Matters concerning term work normally fall within the authority of the instructor. Students unable to comply with given deadlines must contact their instructor prior to the deadline if an extension to the deadline is requested. All term work must be submitted by the last day of classes, unless an earlier date has been specified. Instructors may grant extensions beyond their own deadlines or beyond the last day of classes up to the last day of the examination period provided that a student presents reasons of illness, etc., with appropriate documentation. Extensions beyond the last day of the examination period interfere with the Faculty's schedule for the submission of final grades and must therefore be approved by petition. These petitions for an extension of time for term work must be initiated by the last day of the relevant examination period. Late requests will not be accepted. Students must file the petition after consultation with the instructor regarding a suitable extension date. The Committee on Standing consults the department concerned for information about the status of the course work, and the steps, if any, that must be taken to complete the course. Students seeking an extension of time for term work are expected to continue their course work while they await a decision. They will not be granted additional time after the petition decision has been issued.

### Petitions Regarding Examinations (see also page 493)

Students are expected to write examinations as scheduled. Only in cases of documented debilitating illness or legitimate conflict should a student request a deferral of a final examination. Students who are too ill and/or incapacitated at the time of the examinations should petition to defer the examination they are unable to attend due to their medical condition. Petitions based on travel, employment, or personal plans will not be considered.

A deferred special examination at a subsequent examination period or the regular offering of the examination when next taught may be granted at the discretion of the Faculty. Satisfactory evidence in the form of the University of Toronto Student Medical Certificate* (see above) must be provided to corroborate the illness. Students with chronic illnesses must provide medical documentation for the specific date on which the illness was acute. Students must submit a petition within one week of the end of the examination period through their college registrar. There is a fee of $70.00 per deferred examination (maximum $140.00). In the petition decision students are notified of the examination period in which the deferred examination will take place, and if the examination will be a regular or special examination. They must register and pay the fee by a given deadline, in order that arrangements can be made, an examination requested, etc. The Faculty will notify those who do not register by the deadline that they have lost their privilege of a deferred examination and will revert the grade to one that includes a "0" for the final examination. No further consideration will be given. The Faculty posts personal deferred examination schedules online for students who have paid the deferred examination fee, as soon after the regular examinations have been scheduled as possible. Those who do not pay the deferred examination fee lose the privilege of a deferred examination and their grade reverts to one that includes a "0" for the final examination.

| Final Examination | Deferred Examination |
|---|---|
| April/May | June examination period, if course is offered in Summer Session May to June;<br>August examination period for all others |
| June | August examination period, if course offered in Summer Session May/July - August<br>December examination period, if course offered in Fall Session<br>August examination periods for all others |
| August | December examination period |
| December | April/May examination period, if course offered in Winter Session<br>Reading Week for all others |

Students who must write a deferred examination in a course that serves as a prerequisite for subsequent courses may enrol in those courses with the approval of the department concerned and provided that the term mark in the prerequisite (deferred) course is at least 60%.

**Notes:**

N.B. Students who are granted Deferred Standing (i.e., the notation of "SDF", for an extension of time for term work or for a deferred examination) and who have earned a Cumulative Grade Point Average of less than 1.50, will not be permitted to enrol in further courses until the outstanding course work has been completed and final cumulative and sessional GPAs and status for the session have been assessed.

If students decide to write an examination which does not go well, they MAY NOT PETITION FOR A REWRITE. Post hoc arguments claiming an inability to function at full potential or to exhibit full knowledge of the subject matter will not be accepted as grounds for consideration of a petition concerning performance on an examination. Furthermore, students who choose to write an examination against medical recommendation should do so knowing that they will not be given consideration after the examination has been written. Students must not only take responsibility for making appropriate judgements about their fitness to attend examinations, but also must accept the outcome of their choices.

Students who miss a deferred examination receive a grade of "0" for the examination in the calculation of the final grade. If the Faculty accepts the student's reasons for missing a deferred examination as legitimate, a further deferred examination may be permitted; however, the "SDF" notation will be replaced by the original grade. Students are charged a further fee for each subsequent deferred examination. Note that in such situations of further deferrals the Committee on Standing regularly prohibits registration in further sessions until the outstanding course work has been completed.

### Appeals Against Petition Decisions

Appeals against petition decisions progress as follows:

1. First petition to the Committee on Standing by appropriate deadline submitted through College Registrar (see Deadlines to File Petitions);
2. Appeal to the Committee on Standing within ninety days of the first decision; second petition submitted through the College Registrar;
3. Appeal to the Faculty Academic Appeals Board within ninety days of the second decision; written request for a hearing submitted through the College Registrar;
4. Appeal to the Academic Appeals Committee of Governing Council within ninety days of the decision of the Faculty Academic Appeals Board; written request for a hearing submitted directly to the Governing Council Office in Simcoe Hall, to the attention of Mr. A. Gray.

## Reassessment of Marks

### Reread of Final Examination

If a student believes that a final examination has been incorrectly marked in its substance, he/she may request a "reread." The student must first purchase a photocopy of the final examination from the Office of the Faculty Registrar, for a fee of $13.00 per course. The student must then fill out a "Request for Reread of Final Examination" form, which is available at the Office of the Faculty Registrar and on the Faculty Registrar's web site at www.artsci.utoronto.ca/current/undergraduate/exams. The student must demonstrate that his/her answers are substantially correct by citing specific instances of disagreement, supported by such documentary evidence as course handouts, textbooks, lecture notes, etc. The student must do more than simply assert that "I disagree with the marking," or that "I believe I deserve more marks." The Department concerned will reread the examination in light of the arguments presented. There is a $35.00 fee for this procedure, which is in addition to the fee of $13.00 charged for the photocopy of the final examination. The fee must be submitted, with the completed form, to the Office of the Faculty Registrar within six months of the final examination period. If the mark is changed as a result of this review both the photocopy and reread fees will be refunded. It should be noted that when a course is failed, the examination must be reread before the mark is reported.

### Recheck of Course Mark

If a student believes that there has been an arithmetical error in calculating the course mark, he/she may request a "recheck." This can be done with or without purchasing a photocopy of the final examination. The student must fill out a "Request for Recheck of Course Mark" form, which is available at the Office of the Faculty Registrar and on the Faculty Registrar's web site atwww.artsci.utoronto.ca/current/undergraduate/exams. The student must indicate precisely where he/she thinks the error has occurred. The Department concerned will check that all answers have been marked, and that the marks have been added correctly; the examination will not be reread. The Department will also check that all term work marks have been correctly calculated. There is no charge for this procedure. The completed form must be submitted to the Office of the Faculty Registrar within six months of the final examination period. If the mark is changed as a result of this review, the photocopy fee will be refunded.

**Note:**

A reread or recheck may result in a raised mark, a lowered mark, or no change.

Deadlines for requesting a photocopy of a final examination, a reread or a recheck:

February examinations: the following August 31
April/May examinations: the following November 15
June examinations: the following January 15
August examinations: the following February 28/29
December examinations: the following June 30

## Student Records

The "official student academic record" is maintained by the Faculty, which shall designate the document, form or medium containing the official version and how official copies of such information will be identified.

Student academic records refer to information concerning admission to, and academic performance at, this University. The "official student academic record" contains:

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 enrolment information;
3. results for each course and academic period;
4. narrative evaluations of a student's academic performance, used to judge his or her progress;
5. basis for a student's admission such as the application for admission and supporting documents;
6. results of petitions and appeals;
7. medical information relevant to a student's academic performance, furnished at the request or with the consent of the student;
8. letters of reference, whether or not they have been provided on the understanding that they shall be maintained in confidence;
9. personal and biographical information such as address, and telephone number.

## Access to Student Records

1. Access by a student.

(i) Students may examine and have copies made of their academic record as defined above, with the exception of those portions of the record which comprise letters of reference which have been provided or obtained on the expressed or implied understanding that they shall be maintained in confidence. A student may however, be advised of the identity of the authors of any confidential letters contained in his or her official academic record.

(ii) Students' requests to examine any part of their "official student academic record" shall be made in writing and shall be complied with within thirty days of receipt.

(iii) Students may challenge the accuracy of their academic record with the exception of the materials specifically excluded above and may have their record supplemented with comments so long as the sources of such comments are identified and the official student academic record remains securely within the custody of the academic division. Reference to such comments would not necessarily appear on official academic reports such as the transcript or the Statement of Results. (Note that access to medical information shall only be granted to members of the teaching and administrative staff with the prior expressed or implied consent of the student and, if applicable, in the case of a medical assessment, the originator (physician, etc.) of such.)

(iv) It is assumed that all documents relating to petitions and appeals and not provided on the understanding that they shall be maintained in confidence will be retained within the division, and when needed by the student, will be made freely available. In addition, The Statutory Powers Procedure Act, 1971 of Ontario requires that where the good character, propriety of conduct or competence of a party is in issue in any proceedings in a tribunal to which the Act applies (such as the Academic Appeals Board of the Governing Council), the part is entitled to be furnished prior to the hearing with "reasonable information" of any allegations with respect hereto.

**2. Access by University Staff.**

Members of the teaching and administrative staff of the University shall have access to relevant portions of a student's academic record in the performance of their duties.

**3. Access by U of T campus organizations.**

Student organizations in the U. of T. may have access to all information available freely to persons outside the university and to the residence address and telephone number of the student, for the legitimate internal use of that organization.

**4. Access by Others**

a) By the act of registration, a student gives implicit consent for a minimal amount of information to be made freely available to all inquirers:
- the academic divisions(s) and the session(s) in which a student is or has been registered,
- degree(s) received and date(s) of convocation.

b) Any other information shall be released to other persons and agencies only with the student's prior expressed written consent, or on the presentation of a court order, or in accordance with the requirements of professional licensing or certification bodies or the Ministry of Colleges and Universities for an annual enrolment audit, or otherwise under compulsion of law. A record shall be kept of permissions granted to any persons or agencies outside the university for access to a student's academic record.

c) General statistical material drawn from academic records not disclosing the identities of students may be released for research and informational purposes.

### Refusal of Access

The University reserves the right to withhold transcripts of students who have outstanding debts.

### Custody of Student Academic Records

Academic records are normally under the custodial responsibility of the academic divisions. Seventy-five years after a student has ceased to be registered, all such records become the responsibility of the University Archivist and become open to researchers authorized by the University of Toronto.

### Personal Information

Personal information is a vital part of the student's official University record and is used to issue statements of results, transcripts, graduation information, diplomas and other official documents. The University is also required by law to collect certain information for the Federal and Provincial Governments; this is reported only in aggregate form and is considered confidential by the University.

Any change in the following must therefore be reported immediately to the College Registrar:

1. legal name;
2. Social Insurance Number;
3. citizenship status in Canada;

### Mailing Address

Address information (mailing and permanenet) must be viewed and changed on the Student Web Service (at *www.rosi.utoronto.ca*) or in your College Registrar's Office. It is the student's responsibility to ensure that the mailing address is kept up-to-date on the SWS.

### E-Mail Address

As a student at the University of Toronto, you have automatic access to the Information Commons, which is your passport to e-mail, the library and the Internet. Once you have your TCard, you must activate your University of Toronto e-mail account. Setting up a UTORmail account is mandatory; see "University Policy on Official Correspondence with Students" in the next column.

### T-Card

The T Card is a wallet-sized card bearing the student's photograph, and serves as evidence of registration in the Faculty and as a library card. It is used for identification purposes within the University, such as Faculty examinations, student activities, and Athletic Association privileges. The loss of the card must be reported promptly to the College Registrar, and the card must be surrendered if a student withdraws from the University or transfers to another College or Faculty. There is a fee for the replacement of lost cards.

### Statement of Results

Beginning with the 2008 Summer Session, the Faculty of Arts & Science will no longer be mailing Statements of Results to students in good standing. Students will be able to check their course results, grade point averages and academic status by accessing their academic record online through the Student Web Service. Final course results will be available for viewing on the Student Web Service as soon as they are approved while academic status and grade point averages will be available approximately two weeks after the end of the examination period. Note that academic status and cumulative grade point averages are only assessed in June (for the Fall/Winter Sessions) and in August (for the Summer Session).

Students not in good standing, those with amended grades and those with graduation requests will receive notification in writing by surface mail.

### Transcripts

The transcript of a student's record reports their complete registration history at the university including courses in progress and the standing in all courses attempted along with course average, information about the student's academic status including records of suspension and refusal of further registration, current academic sanctions, and completion of degree requirements and of subject POSt(s).

Final course results are added to each student's record at the end of each session and Summer subsession. GPAs are calculated at the end of each session. Individual courses that a student cancels within the normal time limit are not shown.

Copies of the transcript are issued at the student's request. In accordance with the University's policy on access to student records, the student's signature is required for the release of the record when ordered in person, by fax, or by mail.

The University of Toronto issues only consolidated transcripts, including a student's total academic record at the University. Students may request consolidated transcripts online at *www.rosi.utoronto.ca*. Requests may also be made in person, by fax, or by mail, to:

University of Toronto Transcript Centre
Room 1006, Sidney Smith Hall
100 St. George Street
Toronto, ON M5S 3G3
FAX: 416-978-2487

Request forms can be obtained online at www.artsci.utoronto.ca/current/undergraduate/transcripts.

A fee of $10.00 (subject to change), which includes GST., is charged for each transcript. Cheques and money orders should be made payable to the University of Toronto.

The University of Toronto cannot be responsible for transcripts lost or delayed in the mail. Transcripts are not issued for students who have outstanding financial obligations with the University.

## University Policy on Official Correspondence with Students

The University and its divisions may use the postal mail system and/or electronic message services (e.g., electronic mail and other computer-based on-line correspondence systems) as mechanisms for delivering official correspondence to students.

Official correspondence may include, but is not limited to, matters related to students' participation in their academic programs, important information concerning University and program scheduling, fees information, and other matters concerning the administration and governance of the University.

**Postal Addresses and Electronic Mail Accounts**

Students are responsible for maintaining and advising the University, on the University's student information system (currently ROSI), of a current and valid postal address as well as the address for a University-issued electronic mail account that meets a standard of service set by the Vice-President and Provost.

Failure to do so may result in a student missing important information and will not be considered an acceptable rationale for failing to receive official correspondence from the University.

**University rights and responsibilities regarding official correspondence**

The University provides centrally supported technical services and the infrastructure to make electronic mail and/or on-line communications systems available to students. University correspondence delivered by electronic mail is subject to the same public information, privacy and records retention requirements and policies as are other university correspondence and student records. The University's

expectations concerning use of information and communication technology are articulated in the guidelines on Appropriate Use of Information and Communication Technology (available on the web site of the Office of the Vice-President and Provost: http://www.provost.utoronto.ca/English/Appropriate-Use-of-Information-and-Communication-Technology.html.)

**Students' rights and responsibilities regarding retrieval of official correspondence**

Students are expected to monitor and retrieve their mail, including electronic messaging account[s] issued to them by the University, on a frequent and consistent basis. Students have the responsibility to recognize that certain communications may be time-critical. Students have the right to forward their University-issued electronic mail account to another electronic mail service provider address but remain responsible for ensuring that all University electronic message communication sent to the official University-issued account is received and read.

## University Grading Practices Policy

### 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 Programs.

### 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 indicated in Part II of this Policy shall be published in the Calendar of the division. Similarly a copy shall be given to all students upon initial registration and to all instructors and others, including teaching assistants, involved in the evaluation of student performance. The Policy is in three parts: Part I deals with grades, Part II outlines grading procedures to be adhered to in divisional regulations adopted as part of this Policy, and Part III is an administrative appendix that is available on the Governing Council website: www.utoronto.ca/govcncl/pap/policies/grading.pdf.

### Part I: Grades

#### Meaning of Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well he or she has command of the course materials.

I.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.

I.2 Grades for each course shall be assigned with reference to the following meanings (which may be expanded in the divisional regulations under Part II): Excellent, Good, Adequate, Marginal, Inadequate.

#### Grade Scales

I.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 - 100; and/or
c) for graduate divisions only, a truncated refined letter grade scale in which FZ replaces the C, D and F grades in (a) above.
d) the scales Honours/Pass/Fail and Credit/No Credit.

#### Grades vs. Scores

I.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. (NOTE: A table of correspondence and a translation table are defined (under "Grading Regulations" on page 495) for each of the letter grade scales referred to in I.3(a) in order to allow the conversion, when necessary, of a grade assigned from one scale to the corresponding grade in another. It should be noted that these tables are not to be used to translate a score to a grade directly.)

#### Grade Reporting

I.5 Grades will be assigned according to the numerical scale of marks referred to in I.3 (b) above, and converted to the refined letter grade scale of I.3(a) above. The H/P/FL and CR/NCR scales of I.3(d) above may also be used. However, the grades assigned in a course must all be from the same scale.

I.6 All non-grade designators used in reporting course results must correspond to the University-wide standard. A list of the currently approved designators and their meanings is given in the Appendix A.2

I.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:
a) an enrolment history, which traces chronologically the student's entire participation at the University;

b) 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+/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),
c) an average grade for each course expressed using the refined letter grade scale (Note: these calculations should be restricted to courses of a specific size),
d) both numeric mark and its letter grade equivalent, where possible, for all courses,
e) course weight values, expressed using a uniform system of values allowing for the relative values needed by each division,
f) transfer credits granted,
g) academic honours, scholarships and awards sanctioned by the University,
h) a comprehensive guide explaining all grades and symbols used on the transcript.

## Part II: Grading Procedures

### Approval of Grades

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 procedure. 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.

### Divisional Review Committee

II.1 In each division, a committee chaired by the divisional head or designate, and where appropriate, an additional committee structure, with the chairs (or their designates) 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 approval methods of evaluation;
c) review, adjust and approve course grades recommended by instructors. The grades recommended for any individual student in the professional faculties may be adjusted according to his or her performance in the course or program as determined by the committee. The divisional committee has the final responsibility for assigning the official course grade.

### Classroom Procedures

II.2 To ensure that the method of evaluation in every course reflects appropriate academic standards and fairness to students, divisional regulations governing classroom procedures must 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 enrolment) 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 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. should have a value of more than 80% of the grade. Criteria for exemption 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 performance, whether essay, lab report, review, etc., shall be returned to the student prior to the last date for cancelling the course without academic penalty.
g) Grades shall be recommended by the instructor in reference to the approved grades 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 fuller or more specific provisions, for example in place of such terms as "a simple majority" (b), "one-third of the final grade" (d), or in particularizing the evaluation methods referred to in (a) and (b).

### Procedures in the Event of Disruptions

II.3 The following principles shall apply in the event of disruption of the academic program:

(i) The academic integrity of academic programs must be honoured; and
(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 co-ordinators responsible for courses that are disrupted shall determine, as the disruption proceeds, whether any changes to classroom procedures are needed to complete the course.

c) Changes to the 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 consensus 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 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 the classroom votes. The chair or division head shall then 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 absence of the instructor such changes will be made by the divisional 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) Where a declared disruption occurs in a specific course after the last date to drop courses for the academic term or session, students who do not wish to complete the course(s) during that term or session may, prior to the last day of classes, withdraw without academic penalty. Students who cancel a course prior to the last day of classes as a result of declared disruption in that course shall receive a full refund of the course tuition fee.

h) Where students have not attended classes that are meeting, they nonetheless remain responsible for the course work and meeting course requirements. However, where possible, reasonable extension of deadlines for the course requirements, or provision of make-up tests shall be made and reasonable alternative access to material covered should be provided.

i) A student who considers that disruption has unreasonably affected his or her grade in a course may appeal the grade following the procedures as set out in each division. If the petition is approved, the student's original grade will be replaced by either an assessed grade or by a grade of CR/NCR, or as deemed appropriate in the particular circumstances.

### Assessment in Clinical and Field Settings

II.4 Divisions may make reasonable exemptions to the classroom procedures described above in circumstances such as field or clinical courses where adherence to these procedures is not possible. Nevertheless, it is obligatory that the assessment of the performance of students in clinical or field settings should be fair, humane, valid, reliable and in accordance with the principles enunciated in the University Grading Practices Policy. Accordingly, where a student's performance in a clinical or field setting is to be assessed for credit, the evaluation must encompass as a minimum:

a) a formal statement describing the evaluation process, including the criteria to be used in assessing the performance of students and the appeal mechanisms available. This statement should be available to all students before or at the beginning of the clinical or field experience;

b) a mid-way performance evaluation with feedback to the student;

c) written documentation of the final assessment.

In addition, for such clinical and field experiences, divisions must ensure that:

d) clinical and field assessors are fully informed regarding University, divisional and course policies concerning evaluation procedures, including the specific assessment procedures to be applied in any particular field or clinical setting.

Any exception from the above would require a divisional request with explanation for approval by the Governing Council.

### Grade Review and Approval Process

II.5 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 any 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 injurious to 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 appeals committee(s).

e) Where grades have been adjusted by a divisional committee, the students as well as the instructor shall be informed. On request, the students or the instructor shall be given the reason for the adjustment of grades, a description of the methodology used to adjust the grades, and a description of the divisional appeal procedure.

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 reason for the change 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 grades 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.

### Appeal Procedure

II.6 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.

### Student Access to Examination Papers

II.7

a) All divisions should provide access to copies of the previous year's final examination papers and other years' papers where feasible. Exemptions may be granted by an appropriate committee of the division or department.

b) I All divisions should provide students with the opportunity within a reasonable time to review their examination paper where feasible. A recovery fee should be set to cover administrative costs including photocopying.

c) I All divisions should provide, in addition to the customary re-reading of papers and the re-checking of marks, the opportunity for students to petition for the re-reading of their examination where feasible. A cost recovery fee should be set and returned where appropriate.

### Conflict of Interest

II.8

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.

## Discipline: Code of Behaviour on Academic Matters

The Governing Council of the University of Toronto has approved a Code of Behaviour, which sets out clearly the standard of conduct in academic matters expected of members of the University community. The Code is enforced by the Provost and the Disciplinary Tribunal. Below are extracts from the Code, covering offences, sanctions and procedures as they apply to students. The full text is available from the Office of the Dean, and the Offices of College Registrars.

The University and its members have a responsibility to ensure that a climate that might encourage, or conditions that might enable, cheating, misrepresentation or unfairness not be tolerated. To this end all must acknowledge that seeking credit or other advantages by fraud or misrepresentation, or seeking to disadvantage others by disruptive behaviour is unacceptable, as is any dishonesty or unfairness in dealing with the work or record of a student.

Wherever in the Code an offence is described as depending on "knowing", the offence shall likewise be deemed to have committed if the person ought reasonably to have known.

### B.I. Offences

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 for admission to 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 use or possess an unauthorized aid or aids or obtain unauthorized assistance in any academic examination or term test or in connection with any other form of academic work;
   c) to personate another person, or to have another person personate, at any academic examination or term test or in connection with any other form of academic work;
   d) 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;
   e) to submit, without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course or program of study in the University or elsewhere;
   f) to submit for credit any academic work containing a purported statement of fact or reference to a source which has been concocted.
2. It shall be an offence for a faculty member knowingly:
   a) to approve any of the previously described offences;
   b) to evaluate an application for admission or transfer to a course or program of study by other than duly established and published criteria;
   c) to evaluate academic work by a student by reference to any criterion that does not relate to its merit, to the time within which it is to be submitted or to the manner in which it is to be performed.
3. It shall be an offence for a faculty member and student alike knowingly:
   a) to forge or in any other way alter or falsify any academic record, or to utter, circulate or make use of any such forged, altered or falsified record, whether the record be in print or electronic form.
   b) to engage in any form of cheating, academic dishonesty or misconduct, fraud or misrepresentation not herein otherwise described, in order to obtain academic credit or other academic advantage of any kind.
4. A graduate of the University may be charged with any of the above offences committed intentionally while he or she was an active student, when, in the opinion of the Provost,

the offence, if detected, would have resulted in a sanction sufficiently severe that the degree would not have been granted at the time it was.

## B.II. Parties to Offences

1.
   a) Every member is a party to an offence under this Code who knowingly:
      i) actually commits it;
      ii) does or omits to do anything for the purpose of aiding or assisting another member to commit the offence;
      (iii) does or omits to do anything for the purpose of aiding or assisting any other person who, if that person were a member, would have committed the offence;
      (iv) abets, counsels, procures or conspires with another member to commit or be a party to an offence; or
      (v) abets, counsels, procures or conspires with any other person who, if that person were a member, would have committed or have been a part to the offence.
   b) Every party to an offence under this Code is liable upon admission of the commission thereof, or upon conviction, as the case may be, to the sanctions applicable to that offence.
2. Every member who, having an intent to commit an offence under this Code, does or omits to do anything for the purpose of carrying out that intention (other than mere preparation to commit the offence) is guilty of an attempt to commit the offence and liable upon conviction to the same sanctions as if he or she had committed the offence.
3. When a group is found guilty of an offence under this Code, every officer, director or agent of the group, being a member of the University, who directed, authorized or participated in the commission of the offence is a party to and guilty of the offence and is liable upon conviction to the sanctions provided for the offence.

## C.I.(a) Divisional Procedures

NOTE: Where a student commits an offence, the faculty in which the student is registered has responsibility over the student in the matter. In the case of Scarborough and Erindale colleges, the college is deemed to be the faculty.

1. No hearing within the meaning of Section 2 of the Statutory Powers of Procedures 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 learning 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 subsection 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. (See also Section C.I.(B)1.)
5. When the 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 being informed, the chair of the department and the instructor shall be invited by the dean to be present at the meeting with the student. The dean shall conduct the interview.
6. Before proceeding with the meeting, the 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 or admission, but shall warn 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 hearing of any charge with respect to the offence or alleged offence in question. The 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 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 any, made in such a meeting may be used or received in evidence against the student in any such hearing.
7. If the dean, on the advice of the department chair and the instructor, or if the department chair, on the advice of the instructor, subsequently decides that no academic offence has been committed and that no further action in the matter is required, the student shall be so informed in writing and the student's work shall be accepted for normal evaluation or, if the student was prevented from withdrawing from the course by the withdrawal date, he or she shall be allowed to do so. Thereafter, the matter shall not be introduced into evidence at a Tribunal hearing for another offence.
8. If the student admits the alleged offence, the dean or the department chair may either impose the sanction that he or she considers appropriate under Section C.I.(B) or refer the matter to the dean or Provost, as the case may be, and in either event shall inform the student in writing accordingly. No further action in the matter shall be taken by the instructor, the department chair or the dean if the dean imposes a sanction.
9. If the student is dissatisfied with a sanction imposed by the department chair or the dean, as the case may be, the student may refer the matter to the dean or Provost, as the case may be, for consideration.
10. If the student does not admit the alleged offence, the dean may, after consultation with the instructor and the department chair, requires 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 defect or

irregularity in such procedures, shall not invalidate any subsequent proceedings of or before the Tribunal, unless the chair of the hearing considers that such failure, defect or irregularity resulted in a substantial wrong, detriment or prejudice to the accused. The chair will determine at the opening of the hearing whether there is going to be any objection to 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 to bar him or her from a facility. When or at any time after an accusation has been reported to the dean, he or she may cause a notation to be recorded on the student's academic record and transcript in a course and/or the student's academic status is under review. A student upon whom a sanction has been imposed by the dean or the department chair under Section C.I.(B) or who has been convicted by the Tribunal shall not be allowed to withdraw from a course so as to avoid the sanction imposed.
13. A record of cases disposed of under Section C.I.(A) and of the sanctions imposed shall be kept in the academic unit concerned and may be referred to by the 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 to the Secretary of the Tribunal for use in the Provost's annual report to the Academic Board. The 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 proctor 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 proctor or invigilator shall so inform the student's 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 and not involving the submission of academic work, such as those concerning forgery or uttering, library or computer material or library or computer resources, 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 of this section.

### C.I.(b) Divisional Sanctions

1. In an assignment worth 10 percent or less of the final grade, the department chair may handle the matter if:
   a) the student admits guilt; and
   b) the assignment of a penalty is limited to at most a mark of zero for the piece of work.

If the student does not admit guilt, or if the department chair chooses, the matter shall be brought before the dean.

2. One or more of the following sanctions may be imposed by the dean where a student admits to the commission of an offence:
   a) an oral and/or written reprimand;
   b) an oral and/or written reprimand and, with the permission of the instructor, the resubmission 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 misused 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 in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed.
3. The 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, indicate appropriate sanctions for certain offences. These guidelines shall be sent for information to the Academic Board and attached to the Code as Appendix "C".

## Conduct: Code of Student Conduct

### Summary of Code of Student Conduct

Non-academic offences are defined in the University's Code of Student Conduct (2002), the full text of which may be obtained from the Office of the Assistant Vice-President, Student Affairs. A summary of the Code is provided below.

Extracts from the Code are printed here in ordinary type, and additional comments etc., are in italics. References in square brackets are to original section numbering in the Code.

### [B.] Offences

The following offences constitute conduct that shall be deemed to be offences 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 offences described in the Code of Behaviour on Academic Matters, or

to another disciplinary body within the University of Toronto, as in the case of sexual harassment as described in the Policy and Procedures: Sexual Harassment; or to a divisional disciplinary body, such as a residence council or a recreational athletics disciplinary body; or is covered under these policies but which is deemed by the head of the division to be more appropriately handled by the Code of Student Conduct; 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; and

(iv) has not been dealt with under provisions for the discipline of students with respect to University offices and services whose procedures apply to students in several academic divisions, such as University residences, libraries or athletic and recreational facilities.

### 1. Offences Against Persons

a) No person shall assault another person sexually 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.

c) No person shall knowingly create a condition that unnecessarily endangers the health or safety of other persons.

d) No person shall threaten any other person with damage to such person's property, or knowingly cause any other person to fear damage to her or his property.

e) No person shall engage in a course of vexatious conduct that is directed at one or more specific individuals, and that is based on the race, ancestry, place of origin, colour, ethnic origin, citizenship, sex, sexual orientation, creed, age, marital status, family status, handicap, receipt of public assistance or record of offences of that individual or those individuals, and that is known to be unwelcome, and that exceeds the bounds of freedom of expression or academic freedom as these are understood in University policies and accepted practices, including but not restricted to, those explicitly adopted.

(Note: terms in this section are to be understood as they are defined or used in the Ontario Human Rights Code. Vexatious conduct that is based on sex or sexual orientation is considered an offence under the University's Policy and Procedures: Sexual Harassment. If the Sexual Harassment Officer believes, after consultation with relevant parties, that a complaint based on sex or sexual orientation would be better handled under the Code of Student Conduct, the Officer may refer the matter to the appropriate head of division.)

f) (i) No person shall, by engaging in the conduct described in subsection (ii) below, whether on the premises of the University or away from the premises of the University, cause another person or persons to fear for their safety or the safety of another person known to them while on the premises of the University of Toronto or in the course of activities sponsored by the University of Toronto or by any of its divisions, or cause another person or persons to be impeded in exercising the freedom to participate reasonably in the programs of the University and in activities in or on the University premises, knowing that their conduct will cause such fear, or recklessly as to whether their conduct causes such fear.

(ii) The conduct mentioned in subsection (i) consists of:

a) repeatedly following from place to place the other person or anyone known to them;

b) repeatedly and persistently communicating with, either directly or indirectly, the other person or anyone known to them;

c) besetting or repeatedly watching the dwelling-house, or place where the other person, or anyone known to them, resides, works, carries on business or happens to be; or

d) engaging in threatening conduct directed at the other person or any member of the family, friends or colleagues of the other person.

### 2. Disruption

No person shall cause by action, threat or otherwise, a disturbance that the member knows obstructs any activity organized by the University of Toronto or by any of its divisions, or the right of another member or members to carry on their legitimate activities, to speak or to associate with others.

For example, peaceful picketing or other activity outside 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 forcible 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 or 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 property 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 contrary to 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 internal or external communications facility to which legitimate authorization has not been granted. No person shall use any such facility for any commercial, disruptive or unauthorized purpose.

c) No person shall knowingly mutilate, misplace, misfile, or render inoperable any stored information such as books, film, data files or programs from a library, computer or other such 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. Aiding 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 procedures 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.

## [C.] Procedures

### 1. General

a) The University shall establish a centrally appointed pool of trained Investigating and Hearing Officers, who shall be available to the divisions, at the discretion of the head of the division, if that is considered appropriate or preferable for any reason.

b) Each division shall appoint an Investigating Officer and a Hearing Officer, who may be a student, staff or faculty member from that division.

c) Whether the incident is investigated locally or centrally, every effort shall be made to conclude the case through to delivery of a final decision within the University whithin one year form the alleged incident or misconduct.

d) Pursuant to the provisions of Section D., interim conditions may be imposed by the head of the division.

e) For purposes of confidential and central record keeping, a one-page summary of the outcome of all investigations, whether or not they have proceeded to a Hearing, shall be copied to the Judicial Affairs Officer in the Office of Governing Council.

f) Whenever possible and appropriate, informal resolution and mediation shall be used to resolve issues of individual behaviour before resort is made to formal disciplinarary procedures.

### 2. Specific

a) An Investigating Officer 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 elected student leader or leaders of the division, to investigate complaints made against student members of that division. Investigating Officers shall hold office until their successors are appointed.

b) A Hearing Officer shall be appointed for a term of up to three years by the council of each division to decide on complaints under this Code made against student members of that division. Hearing Officers shall hold office until their successors are appointed.

c) If the Investigating Officer is unable to conduct an investigation, or the Hearing Officer is unable to conduct a hearing, or where the head of the division believes on reasonable grounds that the appointed officer is inappropriate to conduct the particular investigation or chair a particular hearing, then the head of the division shall seek ann appointment from the central pool for that particular case. If the head of the division intends to request either suspension from registration or expulsion from the University as a sanction in a particular case, or if the case appears to the head of the division to require a Hearing Officer with legal qualifications, then the Senior Chair of the University Tribunal may, on the application of the head of the division, appoint a legally qualified person as Hearing Officer for that particular case.

d) Where the head of the division has reason to believe that a non-academic offence as defined in this Code may have been committed by a student member or members of the division, the Investigating Officer will conduct an investigation into the case. After having completed the investigation, the Investigating Officer shall report on the investigation to the head of the division. If the head of the division concludes, on the basis of this report, that the student or students may have committed an offence under the Code of Student Conduct, the head of the division shall have the discretion to request that a hearing take place to determin whether the student or students have commited the offence alleged.

e) The hearing will be chaired by the Hearing Officer. The case will be presented by the Investigating Officer, who may be assisted and represented by legal counsel. If the right to a hearing is waived, or after a hearing, the Hearing Officer will rule on whether the student or students have committed the offence alleged and may impose one or more sanctions as listed below. The accused student or students may be assisted and represented by another person, who may be legal counsel.

f) Appeals against decisions of bodies acting under authority from the council of a division to hear cases arising out of residence codes of behaviour may be made to the Hearing Officer of the division, where provision therefor has been made by the council of that division.

g) Appeals against the decision of the Hearing Officer may be made to the Discipline Appeals Board of the Governing Council.

h) Where the head of a division has reason to believe that a non-academic offence may have been committed by a group of students including students from that division and from another division or divisions, the head may consult with the head of the other division or divisions involved and may then agree that some or all of the cases will be investigated jointly by the Investigating Officers of the divisions of the students involved and that some or all of the cases will be heard together by the Hearing Officer of one of the divisions agreed upon by the head and presented by one of the Investigating Officers agreed upon by the heads.

## [D.] interim conditions and measures

### 1. Interim Conditions: Ongoing Personal Safety

In those cases where the allegations of behaviour are serious and, if proven, could constitute a significant personal safety threat to other students or members of the University community, the head of the division is authorized to impose interim conditions that balance the need of complainants for safety with the requirement of fairness to the respondent student. The interim conditions are in no way to be construed as indicative of guilt, and shall remain in place until the charges are disposed of under the Code's procedures.

### 2. Interim Measures: Urgent Situations

In some circumstances, such as those involving serious threats or violent behaviour, it may be necessary to remove a student from the University. Where the head of the division has requested an investigatioin by the Investigating Officer and the investigation is pending, the Vice-President & Provost (or delegate) may, on the advice of the head of the division, suspend the student or students temporarily for up to three working days if, in the opinion of the Vice-President & Provost (or delegate), there is reasonable apprehension that the safety of others is endangered, damage to University properly is likely to occur, or the continued presence of the student(s) would be disruptive to the legitimate operations of the University. The student(s) shall be informed immediately in writing of the reasons for the suspensionb and shall be afforded the opportunity to respond. Any such temporary suspension may be reviewed by the Vice-President & Provost (or delegate) within the three-day temporary suspension period, following a preliminary investigatioin, and either revoked or continued. If the suspension is continued, the student(s) may appeal to the Senior Chair (or delegate), or the Associate Chair (or delegate) of the University Tribunal, who shall hear and decide on the appeal within five days.

## [E.] 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 written reprimand.
2. Order for restitution, rectification or the payment of damages.
3. A fine or bond for good behaviour not to exceed $500.
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 of Toronto or any of its divisions or the ability of other students to continue their programs of study. Where the sanction of suspension and/or expulsion has been imposed on a student, the Vice-President & Provost (or delegate) shall have the power to record that sanction on the student's academic record and transcript for such length of time as he or she considers appropriate.

A sanction of suspension shall be recorded on the student's academic record and transcript up to five years. The following wording shall be used: "Suspended from the University of Toronto for reasons of non-academic misconduct for a period of [length of suspension], [date]."

A sanction of expulsion shall be permanently recorded on a student's academic record and transcript. The following wording shall be used: "Expelled from the University of Toronto for reasons of non-academic miscondut, [date]."

6. Suspension from registration in any course or program of a division or divisions for a period of up to one year.
7. Recommendation of expulsion from the University.

## About the University, the Faculty and the Colleges

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UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

# About the University, the Faculty and the Colleges

## Brief History of the University of Toronto and the Faculty of Arts & Science

Following are significant dates for the University and the Faculty. For a description of their governing structures, and details of the Colleges in the Faculty, please see the following pages.

1827 Royal Charter granted to establish King's College at York (Toronto), the state university of the Province of Upper Canada.

1836 Upper Canada Academy founded at Cobourg, Ontario. It became Victoria College in 1841.

1843 Official opening of King's College, located in former Parliament Buildings of the Province of Upper Canada.
First degrees granted in 1844.

1849 King's College became University of Toronto; connection with the Church of England terminated.

1851 University of Trinity College established by Church of England.

1852 St. Michael's College established by the Basilian Order.

1853 University College established, assuming responsibility for all teaching in Arts in the University;
the University became an examining and degree-granting body.

1856 Construction of present University College building started. Completed in 1859.

1881 St. Michael's College affiliated with the University. Full federation in 1910.

1887 Instruction begun in fields other than arts and the sciences. University College became purely an Arts College.

1890 East section of University College building, including University Library, gutted by fire. It was immediately reconstructed.

1892 Victoria College moved from Cobourg and federated with the University of Toronto.

1892 University Library opened; enlarged in 1909 and in 1954. (Now Sigmund Samuel Library)

1904 Trinity College federated with the University of Toronto.

1905 Part-time courses leading to the B.A. degree established.

1906 University of Toronto Act laid foundation for constitution of the University.

1920 Degree of Bachelor of Commerce established.

1925 Trinity College moved to present buildings from old Queen Street site.

1931 Ontario Upper School (Grade XIII) standing required for admission.

1960 Name of Faculty of Arts changed to "Faculty of Arts and Science."

1961 Degree of Bachelor of Science established.

1962 New College established.

1964 Innis College established.

1965 Scarborough College established.

1967 Erindale College established.

1971 University of Toronto Act 1971 established current governance of the University by a Governing Council.
Scarborough College became separate Arts and Science division in the University.

1973 John P. Robarts Research Library opened.

1974 Woodsworth College established.

2003 University of Toronto Mississauga became separate Arts and Science division in the University.

## Officers of the University of Toronto

A list of officials of the University of Toronto can be found at:
http://www.governingcouncil.utoronto.ca/Page81.aspx

## Governing Council of the University

The overall governance of the University rests with the Governing Council which directs university policies. The Governing Council is composed of the Chancellor and the President who are ex-officio members; 2 members appointed by the President, 16 members appointed by the Lieutenant-Governor-in-Council; 12 members elected by the teaching staff from among the teaching staff; 8 members, 4 of whom are elected by and from among the full-time undergraduate students, and 2 of whom are elected by and from among the graduate students, and 2 of whom are elected by and from among the part-time undergraduate students; 2 members elected by the administrative staff from among the administrative staff; and 8 members who are not students or members of the teaching or administrative staff elected by the alumni from among the alumni.

## Officers of the Faculty of Arts & Science

**Interim Dean**

Meric Gertler

**Vice-Dean, Academic**

Anne Lancashire

**Acting Vice-Dean, Graduate Education & Research**

Robert Baker

**Vice-Dean, Interdisciplinary Affairs**

David Klausner

**Vice-Dean, Students**

Suzanne Stevenson

**Vice-Dean, Undergraduate Education & Teaching**

Susan Howson

**Assistant Dean and Director, Planning & Information Technology**

TBA

**Assistant Dean and Executive Director of Advancement**

Nadina Jamison

**Assistant Dean/Faculty Registrar and Secretary**

Glenn Loney

**Assistant Dean and Director of Communications**

Kim Luke

**Assistant Dean and Director, Office of the Dean and Executive Assistant to the Dean**

Vera Melnyk

**Assistant Dean, Human Resources**

Carol Robb

**Assistant Dean and Director of Finance**

Isaak Siboni

## Governing Structure of the Faculty

### The Arts and Science Council

The Arts and Science Council is the governing body in the Faculty of Arts and Science. The Council is composed of elected members from the Faculty's undergraduate and graduate students, teaching staff, administrative and technical staff, and normally meets eight times per year. It approves policy for the Faculty in the areas of admissions, curriculum development, evaluation and academic standing, among others, and determines the Faculty's rules and regulations. Budgetary and administrative matters are not within the purview of Council; those responsibilities lie with the Dean of the Faculty.

The Council has a number of Standing Committees charged with specific responsibilities to formulate policy and to apply it in specific cases. Those committees are: Undergraduate Curriculum Committees, Committee on Standing (petitions), Academic Appeals Board, and the Committee on Admissions. Approval of graduate curriculum in the Faculty is delegated to a Three Campus Curriculum Committee and reported to Council for information only.

Details on the Council and its sub-committees, along with the Constitution and By-Laws, rules for elections, meeting dates and agendas can be found on the Faculty's Governance web site at http://www.artsci.utoronto.ca/main/facultygovernance.

### Elections to Council and its Committees

Elections to fill the positions on the Arts and Science Council and its committees are held in the Spring for the following year's Council and committees. The exception is the election of First-Year representatives, held early in the Fall Term. Notification of the nomination and election dates, as well as nomination forms, will be available on the Faculty's Governance web site and from the Office of the Faculty Registrar. Students will be notified by email sent to their UTORmail account.

## The Colleges

### Innis College

**Principal**
J. Paterson, Ph D, FRSC

**Vice-Principal**
R. Riendeau, MA

**Assistant Principal and Registrar**
D. Boere, MA

**Associate Registrar—Academic**
C. Li Tang, BA

**Associate Registrar—Administrative**
T. MacKay, MA

**Associate Registrar—Recruitment and Transition**
D. Gray, M Ed

**Dean of Residence**
G. Spencer

**Chief Administrative Officer**
B. Coates, BCom CA

Innis College offers its 1,700 students high academic standards, a dedicated faculty and staff, and a vibrant undergraduate community within the University of Toronto. Innis contributes four interdisciplinary programs to the Faculty of Arts and Science, listed under "Innis College" in the calendar: Cinema Studies; Urban Studies; and Writing, Rhetoric and Critical Analysis. College academic services include the library, the writing centre, and the math/stats centre and are designed to ease the transition to university and support Innis students throughout their university careers.

Founded in 1964 and named in honour of the late Harold Innis, political economist and pioneer in communication studies, Innis College is housed in a unique three-story building that blends old and new styles by incorporating a substantial Victorian home into a functional modern structure. At the core is the Town Hall, a forum-style auditorium. Classrooms and offices for the 25 professors associated with the College and its programs occupy the second and third floors. A library, a café with an outdoor patio, a rooftop garden, and study, lounge and student union space complete the facilities. Across the street, the Innis Residence is a modern apartment-style complex featuring 327 single rooms in four- or five-bedroom suites. The residence houses a diverse community of Innis students and students from professional faculties.

Innis is the only undergraduate college at U of T that ensures equal representation of faculty and staff and students in its decision-making process. With its parity governance structure, innovative academic programming, independent community living, civic outreach, and informed activism, Innis College has created a community in which students can flourish academically and socially.

### New College

**Principal**
R. Halpern, Ph D

**Vice-Principal**
J. Larkin, Ph D

**Assistant Principal and Registrar**
S.J. Walker, MA

**Associate Registrar (Administrative)**
D.M. Chang, BA

**Associate Registrar (Student Services)**
P.W. Russell, B Ed, MA

**Assistant Registrar**
M. Cheung, BSc

**Dean of Students**
TBA

**Director, Business Services**
R. Vander Kraats, MASc, MBA, P Eng

**Director, Writing Centre**
D. Knott, MA, MTS

**Alumni Development Officer**
B.A. Registe, BA

**Senior Development Officer**
K. Mehta, BEd, MA

**Librarian**
J. Guillaume, BA, MS

New College, established in 1962, is open to students of all Faculties and Schools in the University. Approximately 4,500 of its students are in the Faculty of Arts and Science, and 400 in other divisions. Members of the College, whether in humanities, social science, science or professional programs, may broaden their university experience by meeting others from different fields and subject areas.

Arts and Science students have the full range of the Faculty curriculum open to them. The College takes part in their instruction through University courses taught by cross-appointed staff; and also through interdisciplinary courses (listed with the prefix "NEW" in the Calendar) designed to interest students in all Faculties. Individual tutoring is offered in Mathematics and Statistics, and the Writing Centre gives help with written assignments and reports. The College Registrar's Office provides academic, financial, and personal counselling.

The College's three modern, conveniently-located buildings provide academic, library, computing, dining and social facilities for all members, and also house the College residences. This creates an atmosphere of community, promoting contacts among students and staff and encouraging non-residents to become involved in college life. The residences accommodate approximately 860 students and welcome applicants from the Toronto area as well as from out- of-town. Residence application is made through the University Office of Admissions and Awards; further information about residence may be

obtained from the Residence Office, New College. For further information about the College, please contact the Registrar, New College, 300 Huron Street, Toronto, Ontario, M5S 3J6.

E-mail: newcollege.registrar@utoronto.ca
Website: www.newcollege.utoronto.ca

## St. Michael's College

**Chancellor**
The Most Reverend Archbishop Thomas Collins, SSL, STD, DD

**President & Vice-Chancellor**
R.M.H. Alway, O.C., O.Ont, MA, Phil M, D. Litt. S

**Principal and Program Director**
M. G. McGowan, BA, MA, Ph D

**Registrar**
D. Chevrier, BA

**Associate Registrar (Admissions & Recruitment)**
A. McGee, BA

**Associate Registrar (Administrative)**
M. Memari, BA

**Assistant Registrar (Academic)**
G. George, BA

**Assistant Registrar (Scholarships & Financial Aid)**
P. Maskwa

**Dean of Students**
D. Rendle, BA MIR

**Dean of Women (Loretto College)**
A. Convertini, BA, B Ed, M Ed

**Programs Administrator**
M. O'Connor, Ph B, STB, STL. D Phil

**Bursar**
P. Venton BA, MA

**Librarian**
J.B. Bengtson, BA, MA, M Phil

**Director, Writing Centre**
S. Hoselton, MA

St. Michael's College was founded in 1852 and is situated on the historic east side of campus in the heart of Toronto. St. Michael's provides an oasis within the University of Toronto and the city itself. St. Michael's is located just minutes from public transit, libraries, Bloor & Yonge Street shopping, museums and theatres. St. Michael's is rich in tradition and has some of the most spectacular architecture on the University of Toronto campus.

Building on its distinguished tradition of academic excellence, the College is committed to enhancing and enriching the academic and personal growth of all of its students. There are approximately 4000 full-time and 500 part-time students registered in a variety of programs leading to a Bachelor of Arts, Bachelor of Science or Bachelor of Commerce degree.

St. Michael's College is rooted in an intellectual Catholic tradition. At the same time, it welcomes students, staff and faculty from every faith and background. The College actively seeks to build a community in which cultural and other differences are appreciated and celebrated.

St. Michael's students have access to all of the facilities located at the University of Toronto; however, the facilities and programs within St. Michael's College are second to none. Facilities such as the John M. Kelly Library with its 400,000 volumes and over 1000 periodicals, the student centre, Chaplaincy program, the various clubs and sports, Mathematics Aid and Writing Centre, Debating Union and Theatre groups are just a few examples. Programs offered at St. Michael's College are Book and Media Studies, Christianity and Culture, Mediaeval Studies and Celtic Studies. In 2008, and in partnership with the Ontario Institute for Studies in Education (OISE/UT), St. Michael's College will begin admitting second-year students into a Concurrent Teacher Education Program (CTEP) which will train teachers of Religious Education for the Catholic high schools in Ontario. This program will combine a Bachelor of Arts degree, built around a specially-designed major in Christianity and Culture, with a Bachelor of Education degree. The program will be completed over five years.

Residence accommodations are available for both men and women. Applicants interested in visiting the residences should contact the Dean of Students, St. Michael's College Residence at smc.residence@utoronto.ca OR Dean of Women, Loretto College at loretto.college@utoronto.ca.

All prospective students are encouraged to see the Associate Registrar for information, counselling and a visit. You may contact the office at stmichaels.registrar@utoronto.ca. The Registrar's office is in Room 207, Alumni Hall, 121 St. Joseph Street. College mailing address is 81 St. Mary Street, Toronto, ON M5S 1J4.

Telephone: 416-926-7117.
stmichaels.registrar@utoronto.ca
www.utoronto.ca/stmikes

## Trinity College

**Chancellor**
TBA

**Provost and Vice-Chancellor**
A. Orchard, BA, Ph D

**Vice-Provost and Dean of Arts**
D.P.H. Allen, MA, B. Phil, D. Phil

**Registrar and Director of Student Services**
B.W. Bowden, MA, Ph D

**Associate Registrar**
B. Ferguson, MA, Ph D

**Assistant Registrar**
N. De Melo, BA

**Dean of Students**
K. Castle, BA

**Bursar**
G.B. Seaborn, BA, MBA

**Librarian**
L.W. Corman, MA, MLS

Trinity College opened its doors as a university on Queen St. East in 1852, graduating students in Arts, Music, Medicine and

Divinity; in 1904 it federated with the University of Toronto, building a near-replica of its original building when it opened on this campus. The College enrols approximately 1,700 students in Arts, Science, and Commerce. It has established interdisciplinary programs in Ethics, Society, and Law; Immunology; and International Relations. The College maintains particular library strengths in these areas as well as in English, History and Philosophy.

The College's limited enrolment fosters a sense of community among faculty and students. Its resident Academic Dons, (senior graduate students who offer tutoring assistance in the Humanities, Life Sciences, Physical Sciences, Social Sciences and Commerce), along with the Registrarial staff facilitate informal contact for students with College Fellows who are faculty members drawn from many Arts and Science departments as well as from other Faculties. The College also provides the services of a Writing Centre (978-3530), and a Math Aid Centre (978-8454). In the College's campus are its Library which includes reference collections, several small reading rooms and reservable rooms for group-study, Chapel, cafeteria, dining halls, common rooms, theatre, and sports facilities. Student debating, athletic and drama societies anchor a very active student ethos and 25% of the College students live in residence. Both residences, at St. Hilda's and around the Trinity Quadrangle, house women and men, usually allocated by floor. The Gerald Larkin Academic Building, on Devonshire Place, includes the Buttery, theatre, the Centre for Ethics, lecture rooms and offices of many of the teaching staff, together with the Math Aid and Writing Centre. The International Relations Programme and its faculty members are housed in the north building of the Munk Centre for International Studies. The Buttery provides eating, lounge, and study space that is ideal for group discussions and computer use, as well as offices for "non-resident" students and the adjacent theatre. For further information about the College and for residence applications write the Registrar, Trinity College, Toronto, Ontario, M5S 1H8. The Registrar will see prospective students by appointment.

E-mail address: registrar@trinity.utoronto.ca
Web site: http://www.Trinity.utoronto.ca

## University College

**Principal**
S. Bashevkin, MA, PhD

**Vice-Principal**
J. L. Matus, MA, PhD

**Registrar**
S. Cornack, BA

**Associate Registrar**
L. Nauman, BA

**Assistant Registrar**
J. Rodriguez

**Dean of Students**
N. Robinson, M Ed

**Chief Administrative Officer**
J. Linley, CMA

**Director of Alumni and Development**
K. Aucoin, CFRE

**Librarian**
M. Fulford, BA, MLS

**Writing Workshop Director**
J. Plotnick, MA, M Sc

University College was established in 1853 as the Provincial Arts College (the successor to King's College, founded in 1827); it still occupies its original building near the centre of the St. George Campus. The College's students may enrol in any of the courses offered by the Faculty of Arts and Science. In addition, University College offers six interdisciplinary programs, including Canadian Studies, Cognitive Science and Artificial Intelligence, Drama, Health Studies, Peace and Conflict Studies, and Sexual Diversity Studies. College courses in these and other areas are listed in the Calendar under Drama and University College.

University College offers residence accommodation for 700 undergraduates in both single and double rooms in its three co-educational residences, the Sir Daniel Wilson Residence, Whitney Hall, and Morrison Hall. Enquiries should be addressed to the Residence Office, 79 St. George Street, Toronto, Ontario, M5S 2E7. University College also offers study and social space for off-campus students at the University College Commuter Centre. University College offers the services of a Computing Centre, a Math Aid Centre and a Writing Workshop. Other amenities include the University College Library, which comprises a circulating collection supporting UC programs and a spacious reading room; the U.C. Union with its dining hall and common rooms; the Playhouse, a theatre for student productions; the Junior Common Room; and the University College Literary and Athletic Society, Canada's oldest student government, which sponsors a great variety of athletic, intellectual and social activities.

## Victoria College

**Chancellor**
N.F. Jewison, BA, CC, LLD

**President Emeritus**
J.E. Hodgetts, MA, PhD, FRSC

**President and Vice-Chancellor**
P.W. Gooch, MA, Ph D

**Principal and Program Director**
D.B. Cook, MA, PhD

**Associate Director, Office of the Principal**
J.L. Welsh

**Registrar**
S.C. McDonald, BA

**Associate Registrar**
E. Melo, BA

**Assistant Registrar**
V. Ferrier, BA

**Assistant Registrar**
Anna Kot, BA, M I St

**Manager, Student Awards, Financial Aid**
Angela Prediger

**Director, Alumni Affairs and University Advancement**
L.D. Davies, BA

**Bursar**
D. Keeling, BA, MA

**Dean of Students**
J. Hunter BA

**Librarian**
R.C. Brandeis, BA, MLS, Ph D

Victoria College, founded in 1836 as Upper Canada Academy, was granted a university charter in 1841 and federated with the University of Toronto in 1892.

The college is located on a 15-acre site at the north-east corner of Queen's Park opposite the Royal Ontario Museum. It offers many facilities to its students, including the E.J. Pratt Library with its 220,000 volumes, the Wymilwood Student Union, and a playing field. The Victoria College building, opened in 1892, contains classrooms, some faculty and administrative offices, Chapel and Alumni Hall. Northrop Frye Hall, completed in 1966, also provides office space for most of the administrative and teaching staff and contains classrooms and a large auditorium theatre. The Isabel Bader Theatre opened in 2001 offering a 500-seat state-of-the-art lecture hall with excellent facilities for the performing arts. Academic advising and support is provided by the Registrar's Office. In addition, the College has a Math Aid Centre, a Writing Workshop, and tutorial services in a wide range of subjects.

Residence accommodation for approximately 800 students is available on campus. Annesley Hall, Margaret Addison Hall and Burwash Hall provide accommodation in single and double rooms for chiefly undergraduate students. The Lower Houses of Burwash Hall and Rowell Jackman Hall, an apartment style residence, house upper-year undergraduate and graduate students. All residence students take their meals in Burwash Dining Hall. Non-residence students may purchase meal tickets for Burwash or take light meals at the Wymilwood Cafe (Ned's). Further information about residences may be obtained by writing to the Dean of Students, Victoria College, Toronto, Ontario, M5S 1K7.

E-mail: vic.registrar@utoronto.ca
Web site: http://vicu.utoronto.ca

## Woodsworth College

**Principal (as of July 1, 2008)**
J.R. Desloges, MSc, Ph D

**Acting Principal (until June 30, 2008)**
J.W. Browne, MA

**Registrar**
C. Shook, BA, MA

**Program Director**
W.H. Bateman, BA

**Director, Professional & International Programs**
Y. Ali, BA, MSc

**Associate Registrar**
J.N. Guyatt, BA

**Associate Registrar**
A.M. Armogan

**Associate Registrar**
W. Wong, BSc

**Dean of Students**
L. Nassim, BA

**Director, Academic Writing Centre**
W. B. MacDonald, BA, MA

**Executive Director: Advancement, Alumni & Communications**
B. Track, BA, CFRE

**Chief Administrative Officer**
M. Choi, B Com, CA

Woodsworth College is named in honour of James Shaver Woodsworth (1874-1942), minister, pacifist, social activist and Member of Parliament who was strongly committed to broadening educational opportunities for all. The College traces its roots to 1905 when a part-time program leading to the Bachelor of Arts degree was established at the University of Toronto. In 1920 the Department of University Extension was organized to offer credit and non-credit courses.

Woodsworth College was formally constituted in 1974 to offer credit courses primarily for part-time students in a number of faculties. In 1999 the College opened its doors to students proceeding directly from high school to full time studies. Woodsworth College is now home to over 3500 full time students and 2500 part-time students, who enrol in the full range of Arts and Science courses and programs - day and evening, summer and winter. The College also offers undergraduate degree programs in Criminology and Employment Relations; the Academic Bridging Program; international summer programs in Australia, Central Europe, China, Ecuador, England, France, Germany, Italy, Japan, Jordan, Mexico and Russia; and postgraduate certificates in Human Resource Management and Teaching English to Speakers of Other Languages.

A special feature of Woodsworth College is the academic support program which includes academic counselling, financial aid, study skills seminars, the Academic Writing Centre, and the Mathematics Lab. In co-operation with the Commerce Program, the recently expanded Computer Lab has thirty work stations with web access, word editing software and printing facilities. The Computer Lab is available to students enrolled in the Commerce Program or Woodsworth College, and is open extended hours. For further details e-mail wdwregistrar@utoronto.ca or check www.wdw.utoronto.ca.

Our new residence at the corner of Bloor Street West and St. George Street accommodates 371 students in air-conditioned suites with private single bedrooms. Each suite accommodates four to six students, with a shared living area, a full kitchen and two washrooms. There is twenty-four hour security, high speed internet access, common areas and laundry facilities. In addition, we offer a Residence Life Program of social and educational activities. The Woodsworth College Residence provides students with an exceptional residential experience in a modern building that is conveniently located, close to classrooms, libraries, athletic facilities and the subway. More information about the residence can be obtained at www.wdw.utoronto.ca/residence.

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