

## UNIVERSITY OF TORONTO FACULTY of ARTS \& SCIENCE

## Message from the Dean

Welcome to the 2012-2013 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.

While such choice is exciting, it can also be somewhat overwhelming trying to decide which courses to take. Please remember that 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. Whether you need information about your program requirements, or are seeking advice about small-group learning, research or international experiences, your college registrar's office is always your first stop for assistance. I encourage you to take advantage of these services, whether you are at the beginning, middle or end of your university career.

It is also important that you know that the Faculty of Arts \& Science values your input on all aspects of your student life. We strive to deliver the best possible educational experience and your views matter to us. In particular, I ask that you please take a bit of time to let us know how you feel your courses and professors measure up by completing the Faculty's student course evaluations. These evaluations are very important because we use the information in many ways, including in decisions regarding promotion and tenure.

I hope you have a wonderful year.
Sincerely,

## Junc Syethe

Meric Gertler, FRSC
Dean \& Professor of Geography
Goldring Chair in Canadian Studies

# Checklist by Year of Study 



Newly-admitted to the Faculty of Arts \& Science?
Attend a first-year academic orientation session at your College or check your College website for information for newly-admitted students. Your College Registrar's Office is your "Reliable First Stop" where you can get information and advice.
Read the Calendar for course descriptions, program and degree requirements, and rules and regulations of the Faculty and the University. Use the Registration Handbook \& Timetable for class scheduling information and instructions on course enrolment and fees payment.
Get your TCard and obtain a UTmail+ email account beginning in June (www.utoronto.ca/ tcard)
Learn about the many support services, resources, and opportunities available to you as a student (www.life.utoronto.ca)
Consider signing up for a College One program (www.artsci.utoronto.ca/futurestudents/ones) or a First Year Learning Community (www.flc.utoronto.ca).
Continuing in First Year?
Make an appointment with your College Registrar to discuss your plans for the year and for completing the requirements for your desired subject POSt(s).
Utilize the many academic resources (Writing Centres, Math Aid Centres, etc.) available to you as a student.


Make sure you're enrolled in the right combination of subject POSts before your course enrolment period starts in July.
Meet with your college registrar's office to discuss your course choices and develop an academic plan.
Consider one of the Faculty's research opportunities.
Consider studying abroad.
Utilize writing centres and the Academic Success Centre.
Begin researching graduate and professional school requirements.
Take time to do something new! Connect with others who have different interests or backgrounds. Attend an event that you haven't participated in before.


Check in with your Departmental Sponsors and your College Registrar about your program requirements and general degree requirements, respectively.
Start looking at requirements and timelines for graduate/professional school, or post-graduate program applications
Visit the Career Centre (www.careers.utoronto.ca) - learn about their many services, sign up for career preparation workshops, and browse volunteer/employment opportunities Consider applying for one of the Faculty's Research Excursions courses (398H0/399Y0).


Early in the year, meet with an advisor at your College Registrar's Office to make sure that you are taking the right courses to finish your degree.
Complete applications to graduate, professional or post-graduate schools and programs.
Beginning October 1, declare your intent to graduate on ROSI.
Register for the Recent Graduates Employment Service which assists recent $U$ of $T$ grads find employment through full-time job listings, programs, and services (www.careers.utoronto.ca).
Make an appointment with a U of T career counsellor to reflect on and identify your career path and goals (www.careers.utoronto.ca).
Begin planning your finances for life after graduation.

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 BE TAKEN AS THE OFFICIAL VERSION. Any post-publication corrections and/or updates to the print edition of this Calendar will be posted on the Faculty Registrar's web site. Students are strongly advised to check the online version of the Calendar 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 Breadth or 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, ONLY 20-course (fouryear) Honours B.A., B.Sc. and BCom degrees will be available. The St. George Campus of the Faculty of Arts and Science has discontinued the 15-course (three-year) B.A. and B.Sc. degrees. 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 or offered in all 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 corequisites, grading policies, requirements for promotion and timetables without prior notice.

## University 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 which apply to all students. Each student must become familiar with these 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 institution-wide University policies can be found at: http:// www.governingcouncil.utoronto.ca/policies.htm

Those which are of particular importance to students are:
Code of Behaviour on Academic Matters Code of Student Conduct
Grading Practices Policy
Policy on Official Correspondence with Students
More information about students' rights and responsibilities can be found at http://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.

Note that where such permission is granted by the instructor, materials reproduced are for the student's individual private use only, not for further reproduction or publication.
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 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 of Personal Information

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, universityrelated 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 http:// www.fippa.utoronto.ca/policy/nocx.htm

## Contents

## Quick Reference Page

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; GCW=Governing Council web site: www.governingcouncil. utoronto.ca/policies)

## ACADEMIC MISCONDUCT

Code of Academic Behaviour (i.e., plagiarism, cheating, etc) Code of Student Conduct, GCW.

## 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 Student Life Programs and Services directly. See www.life.utoronto.ca and ULife at www.ulife.utoronto.ca.

## CLASS LOCATIONS

Classroom locations on ROSI and in RHT. Department locations, Calendar. Other locations: use the $U$ of $T$ Map at http://map.utoronto.ca/.

## COURSE EVALUATIONS

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

## COURSES

Descriptions listed alphabetically by sponsoring unit in the Calendar. Scheduling information and enrolment instructions in the RHT.

## DEGREE REQUIREMENTS

Hon.BA/BSc, Calendar Degree Requirements section; BCom Calendar Degree Requirements section.

## EXAMS

Final Examination timetables, ASW.
Rules, Calendar Rules and Regulations section. Also see ASW under "Examinations" for Rules for the Conduct of Examinations, and Appendix to the Petitions Guide.

Old exams: the Library website: http://eres.library.utoronto.ca.

## FEES

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

See also Calendar Rules and Regulations section and RHT.

## FINANCIAL AID

Admissions \& Awards website: http://www.adm.utoronto.ca/ admawards/html/financial\%20aid/mainfapage.htm. Advising from your college Registrar's Office and Admissions \& Awards.

## GRADING \& MARKS

A\&S grading scale \& policies, Calendar Rules and Regulations section; UofT Grading Practices Policy, GCW.

## PETITIONS

Official rules, Calendar Rules and Regulations section. See also the informal Petitions Guide on the ASW. Advising: see your College Registrar's Office.

## PROGRAMS

General definitions and rules, Degree Requirements section of the Calendar. Alphabetical listing of all Subject POSts (programs of study), RHT. Contacts \& enrolment instructions, RHT.

## SCHOLARSHIPS

Admissions \& Awards website: http://www.adm.utoronto.ca/ admawards/html/awards/mainawdpage.htm; Arts \& Science web site: http://www.artsci.utoronto.ca/current/undergraduate/ undergraduatescholarships.

## TRANSCRIPTS

Can be ordered on ROSI at www.rosi.utoronto.ca or from the University of Toronto Transcript Centre (UTTC), Sidney Smith Hall, room 1006, Toronto, ON M5S 3G3. Information also on ASW.

# 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. 

Table of Contents

| Section | Page |
| :---: | :---: |
| Sessional Dates . . . . . . . . . . . . . . . . . . . . . . 7 |  |
| 2012 Summer Session | . . 7 |
| 2012 Fall Session | 7 |
| 2013 Winter Session |  |
| Admission |  |
| Minimum Admission Requirements | 10 |
| English Facility Requirement. | 10 |
| Other Admission Categories | 10 |
| Re-Registration in the Faculty. | 12 |
| Admission to Other Faculties/Programs | 12 |
| Student Services \& Resources . . . . . . . . . . . |  |
| Academic \& Personal Counselling: The Colleg |  |
| Office of the Faculty Registrar. | 15 |
| Services and Programs for Students | 15 |
| Study Abroad and Student Exchange |  |
| Professional Experience Year | 18 |
| Arts \& Science Students' Union | 18 |
| Assoc. of Part-Time Undergraduate Students. | 19 |
| Jack McClelland Writer-In-Residence | 19 |
| Awards | 19 |
| First-Year Learning Communities |  |
| Degree Requirements . . . . . . . . . . . . . . . . . 20 |  |
| Quck Reference Ch | 21 |
| Honours Bachelor of Arts/ |  |
| Honours Bachelor of Science | 22 |
| General Requirements | 22 |
| Program Requirements | 23 |
| The Breadth Requirement | 23 |
| The Distribution Requirement | 24 |
| Bachelor of Commerce | 24 |
| Concurrent Teacher Education Program | 25 |
| Faculty of Arts \& Science Language Citation | 26 |
| Guide to Programs \& Courses . . . . . . . . . . . 27 |  |
| Codes Used in the Program of Study Listings . . 28 |  |
| Choosing Courses. | 28 |
| Key to Course Descriptions. . . . . . . . . . . . . . . . 28 |  |
| Course Load . . . . . . . . . . . . . . . . . . . . . . . . . . 28 |  |
| Year of Study . . . . . . . . . . . . . . . . . . . . . . . . 29 |  |
| Full/Part-Time Status . . . . . . . . . . . . . . . . . . . 29 |  |
| Codes Used in the Course Descriptions . . . . . . 29 |  |
| How to Read a Course Description. . . . . . . . . . 31 |  |
| Arts \& Science Programs and Courses | 32 |

## Contents

Pharmaceutical Chemistry.412Pharmacology \& Toxicology ..... 415
Philosophy ..... 424
Physics ..... 435
Physiology ..... 444
Planetary Science ..... 449
Political Science ..... 450
Portuguese ..... 467
Psychology ..... 470
Public Health Sciences ..... 481
Public Policy ..... 483
Religion ..... 484
Rotman Commerce ..... 500
St. Michael's College ..... 511
Slavic Languages \& Literatures. ..... 528
Sociology ..... 543
South Asian Studies ..... 557
Spanish ..... 558
Statistics ..... 564
Trinity College ..... 570
University College ..... 575
Victoria College ..... 586
Visual Studies ..... 67
Women \& Gender Studies. ..... 601
Woodsworth College ..... 606
Writing in Arts \& Science ..... 616
About the University \& the Faculty ..... 617
Brief History of the University \& the Faculty ..... 618
Officers of the University ..... 618
Governing Council of the University ..... 618
Officers of the Faculty ..... 618
Governing Structure of the Faculty ..... 619
The Colleges ..... 620
Innis College .....  20
New College ..... 620
St. Michael's College .....  20
Trinity College ..... 621
University College ..... 622
Victoria College ..... 622
Woodsworth College ..... 623
Rules and Regulations. ..... 624
Important Notice ..... 625
Taking Courses Outside the Faculty ..... 625
Cancelling Courses or Registration. ..... 626
Fees. ..... 626
Course Marks ..... 627
Faculty Final Examinations ..... 628

| Section | Page | Section | Page |
| :---: | :---: | :---: | :---: |
| Latin. | 118 | Credit/No Credit. | 629 |
| Latin American Studies | 345 | Late Withdrawal (LWD) | 629 |
| Life Sciences | 348 | "Extra" Courses: 100-serie |  |
| Linguistics | 349 | Excluded Courses . | 630 |
| Materials Science | 354 | Grading Regulations | 631 |
| Mathematics | 357 | Grade Point Average . | 632 |
| Modern Languages \& Literatures | 370 | Academic Standing | 632 |
| Molecular Genetics \& Microbiology. | 371 | Grades Review Procedure | 632 |
| Music . | 375 | Appeals \& Petitions . | 632 |
| National University of Singapore. | 380 | Reassessment of Marks | 635 |
| Near \& Middle Eastern Civilizations | 381 | Student Records | 635 |
| New College | 395 | Transcripts | 636 |
| Nutritional Sciences. | 406 | University of Toronto Regul |  |
| Peace, Conflict and Justice Studies Pharmaceutical Chemistry | 409 | Index | 637 |

## 2012 Summer Session

| May 2012 |  |
| :--- | :--- |
| 14 | Classes begin in $F$ and $Y$ section code courses |
| 21 | Last day to add courses with $F$ and $Y$ section |
|  | codes |
| 21 | Victoria Day; University closed |
| June 2012 |  |

June 2012
12-19 Arts \& Science Spring Convocations
11 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.
22 Classes end in $F$ section code courses
25-29 Final examinations in $F$ section code courses, and deferred examinations in specified $S$ section code courses from April 2012 (Note: Y section code courses do not meet this week)
29 Last date to file a petition regarding term work in 2012 summer session $F$ section code courses

## July 2012

2 Canada Day holiday; University closed
3 Classes begin in S section code courses ; First day to request November 2012 graduation
$6 \quad$ Last date to file a petition regarding a final examination in 2012 summer session $F$ section code courses
$9 \quad$ Last day to add courses with S section codes 18 Examination timetable for $S$ and $Y$ section code courses posted
22 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.
30 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 2012

1 Last day to request November 2011 graduation
$6 \quad$ Civic holiday; University closed
13 Classes end in $S$ and $Y$ section code courses
14-17 Final examinations in $S$ and $Y$ section code courses, deferred examinations from April 2012, and specified courses from June 2012
17 Last date to file a petition regarding term work in
24 Last date to file a petition regarding a final examination in 2012 summer session Y/S section code courses

## 2012 Fall Session

## August 2012

21
Bank tuition fee payment (or official deferral) must be done by this date for registration

## September 2012

3 Labour Day; University closed
10 Fall term classes begin in $F$ and $Y$ section code courses
$16 \quad$ Waiting lists for $F$ and $Y$ section code courses close
23 Last day to add courses with $F$ and $Y$ section codes;
Last day to enrol in Subject POSt for 2012-2013 Session
October 2012
1 First date to request June 2012 graduation
8 Thanksgiving; University closed
12 Examination timetable for $F$ section code courses posted

## November 2012

4 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.
12-13 Fall break (no classes)
15 Deadline to request corrections to 2011-2012 Fall/ Winter academic record
TBA Arts and Science Fall Convocations. Please check "Ceremony Dates" at www.convocation. utoronto.ca/dates.htm.

## December 2012

4 Classes end
5 Makeup Monday classes
6-7 Study period
7 Last date to request June 2013 graduation
10-21 Final examinations in $F$ section code courses, and deferred exams from August 2012; Term tests in $Y$ section code courses
21 Last date to file a petition regarding term work in 2012 fall session $F$ section courses 22 Winter holidays begin; University is closed December 24 to January 4, 2013 inclusive

## 2013 Winter Session

## January 2013

 examination in 2012 fall session $F$ section coursesWaiting lists for S section code courses close
13
20

Deadline to enrol in $S$ section code courses

## Sessional Dates

## February 2013

| 15 | Final examination timetable for S/Y courses <br> posted |
| :---: | :--- |
| 18 | Last day to drop courses with Y section codes <br> from academic record and GPA. After this <br> 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. |  |
|  | Family Day; University closed |
| Reading Week; deferred examinations from |  |
| $28-22$ | December 2012 <br> Deadline to request corrections to 2012 Summer <br> academic record |

## March 2013

10 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.
29 Good Friday: University closed
April 2013

| 5 | Classes end <br> $8-9$ |
| :--- | :--- |
| Study period; no tests or examinations in this <br> period |  |
| $10-30$ | Final examinations in S and Y section code <br> courses and deferred examinations from |
| 30 | December 2012 |
|  | Last date to file a petition regarding term work for <br> 2012-2013 fall-winter sessions Y/S section code <br> courses |

## May 2013

7 Last date to file a petition regarding a final examination for 2012-2013 fall-winter sessions Y/S section code courses
20 Victoria Day; University closed

## June 2013

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

## Admission to the Faculty of Arts \& Science

Minimum Admission Requirements . . . . . . . . . . . . . . . . . . . . . . . . . . . 10

English Facility Requirement. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
Other Admission Categories . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
Re-Registration in the Faculty . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12
Admission to Other University of Toronto Faculties/Programs . . . . . . . . 12


UNIVERSITY OF TORONTO
FACULTY of ARTS \& SCIENCE

## Admission

## Admission to the Faculty <br> Detailed admission requirements are contained in the University of Toronto Undergraduate Admissions Bulletin, which is available in secondary school guidance offices throughout Ontario, on the Admissions and Awards web site at www.adm.utoronto.ca, on the University's web site for future students, or through the Faculty of Arts and Science Student Recruitment Office.

## Admissions and Awards

University of Toronto
172 St. George St.
Toronto, Ontario, Canada
M5R 0A3
416-978-2190
www.adm.utoronto.ca

## Arts \& Science Student Recruitment Office

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 all Other Applicants

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 and outside Canada. Detailed information about admission requirements is available on the Admissions and Awards web site at www.adm.utoronto.ca. The specific average or standing required for admission varies from year to year.
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.

## PUMP (Preparing for University Math Program)

PUMP is a non-credit, intensive course specially designed to prepare students for entry-level university 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 PUMP web site at www.math.toronto. edu/cms/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.

## 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 the 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 for previous study. Students who have completed postsecondary 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 required as part of the transfer credit assessment.

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 normally have these courses and grades included in the Arts \& Science 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 "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 the Rules and Regulations section under "Academic Status" in this Calendar. Students admitted On Probation 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. Note that not all privileges extended to degree students are extended to nondegree students (e.g., CR/NCR). To apply for admyission as a Non-degree student, visit the Admissions and Awards web site at www.adm.utoronto.ca.

## 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. It is not possible to complete a second undergraduate degree in the same field as the first degree; e.g., a second Bachelor of Arts degree. Those who are admitted will be granted a maximum of one year of transfer credit (5 full credit courses)- four at the 100 level and one at the 200 level. 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. .Students who have completed postsecondary studies are required to apply for on-admission transfer credit. For admission and application information, visit the Admissions and Awards web site at www.adm. utoronto.ca.

## 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 the Rules and Regulations section, and will have the consequences of these applied to them (e.g., probation and suspension for poor academic performance). Students must observe Faculty policies, including the prohibition on repeating a "passed" course. For application information and deadlines, check the Visiting Students web site at 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 College of last registration. The home university may still require a valid Letter of Permission in order to assess studies done at the University of Toronto for transfer credit.

## 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. Nondegree 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 632). Students must observe Faculty policies, including the prohibition on repeating a "passed" course. For application information and deadlines, check the International Summer Program web site at www.isprogram.utoronto.ca or contact Woodsworth College, University of Toronto, Toronto M5S 1A9, (416-9785880).

## Admission as a Non-Matriculant Student

Candidates who do not meet the published admission requirements may qualify for various humanities and social science programs through either the Academic Bridging Program or the Transitional Year Program. Candidates who have already attempted degree studies are not eligible for these programs.

The Academic Bridging Program is a part-time program intended for Canadian citizens/permanent residents/ protected persons (convention refugees) who do not hold the published admission requirements to qualify for degree studies. Detailed information, including applications and deadlines for the Academic Bridging Program is available through the Academic Bridging Program, Woodsworth College, website at www.wdw.utoronto.ca/bridging.

## Admission

The Transitional Year Programme (TYP) is designed for those who could not finish high school because of financial constraints, family difficulties or other circumstances beyond their control. It is a one-year, full-time program leading toward admission into an Arts and Science degree program. Detailed information is available through www.typ.utoronto. ca.

## Admission Restricted to "Part-Time"

Students restricted to a reduced course load on admission from the Academic Bridging Program 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. See also Number of Courses Taken ("Course Load"). If these students wish to transfer to full-time studies, they may apply through their College Registrar after the session in which they pass the fourth course in the Faculty with a minimum cumulative Grade Point Average of 2.50. Candidates who have achieved the minimum required grade of $63 \%$ in the Bridging course for admission to the Faculty of Arts and Science may count the Bridging course towards their degree.

## 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 non-degree 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 who were previously registered as degree or non-degree students in this Faculty, who have completed at least one course in the Faculty, and 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 who were previously registered in the Faculty but who did not achieve final standing in at least one course must re-apply for admission through the Ontario Universities Application Centre.
Students with outstanding accounts may not re-register at the University until these accounts are paid. See the Student Accounts web site at www.fees.utoronto.ca for payment information; for payment deadlines, check the Registration Handbook \& Timetable.
"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 NonDegree Visiting Students" on the previous page 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/ futurestudents/academics/professional.
Academic and Personal Counselling: The Colleges ..... 14
Office of the Faculty Registrar ..... 15
Services and Programs for Students. ..... 15
Academic Support ..... 15
Careers. ..... 15
Diversity \& Equity ..... 15
Family Life ..... 16
Community Safety ..... 16
Community Service ..... 16
Rights \& Responsibilities ..... 16
Faith \& Spirituality ..... 16
Housing ..... 16
Health \& Wellness ..... 16
Study Abroad and Student Exchange ..... 17
Centre for International Experience ..... 17
Summer Abroad Program ..... 17
International Course Modules ..... 18
Professional Experience Year ..... 18
Student Unions and Associations
Arts \& Science Students' Union ..... 18
Association of Part-Time Undergraduate Students ..... 19
Jack McClelland Writer-In-Residence ..... 19
Awards ..... 19
First-Year Learning Communities ..... 19

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 your home in the familiar neighbourhood that is 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 \& 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 or consult the College Registrar.

Students with complaints or 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 Associate Chair/ 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 web sites 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
www.twitter.com/innisregistrar
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, Rm. 157, 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.-12:00 p.m.; 1:30-4:00 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, Tuesday, Thursday,: 9:30 a.m-4:30 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.

## Student Services \& Resources

## 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. $\mathrm{ca} /$ 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, 416978-2487 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)

## Services and Programs for Students

## Academic Support

Your Registrar is a reliable first-stop whenever you have questions, concerns or are facing issues that are getting in the way of your success.

The Academic Success Centre is the place to go to learn how to develop skills in time management, exam preparation, textbook reading, note-taking, and dealing with anxiety, procrastination and perfectionism. Make an appointment with a learning skills counsellor at the reception desk or by calling 416-978-7970. You can also visit the ASC drop-in centre in the Koffler building at 214 College Street. www.asc.utoronto. ca.

If you have a disability, Accessibility Services is your home base for support. It is important to contact the office as soon as you are accepted to $U$ of $T$ so that accommodations for your needs are in place before classes start. All information about your disability is confidential and won't be shared with units outside of Accessibility Services without your consent. www.accessibility.utoronto.ca. 416-978-8060.

Tutors are available at First Nations House to help aboriginal students develop their research, essay writing and study skills. Tutors can also help students find academic support in specific fields of study, such as math and science. www.fnh.utoronto.ca. 416-978-8227. If you're facing challenging personal circumstances that are affecting your academic performance, feel free to seek emotional and psychological support from U of T's Counselling and Psychological Services. www.caps.utoronto.ca. 416-9788070.

Careers
You don't have to look far at $U$ of $T$ to find part-time work! We post thousands of paid and volunteer jobs each year from on- and off-campus employers who feel that a student would make a valuable part of their team. We even provide you with employment skills development through our Career Centre with announcements, events, blogs and articles about finding work and developing career skills. www.careers.utoronto.ca. 416978-8000.

International students must get a work permit if they wish to work off campus, are required to work in a co-op placement as part of their program or want to work in Canada after graduating. Contact the Centre for International Experience for assistance with work and postgraduation work permit applications. www.cie.utoronto.ca. 416-978-2564.

## Diversity \& Equity

Diversity and equity are fundamental values at the University of Toronto. Students from every background are supported by policies and resources that help create an inclusive environment and one that actively works against discrimination.

The Sexual and Gender Diversity Office offers support and information to students who are "out" or questioning their sexual orientation or gender identity. The office also works with students, faculty and staff to provide training and education on issues related to sexual diversity, antiheterosexist programming, and events and programs for the LGBTQ community at $U$ of $T$. www.sgdo.utoronto.ca. 416-946-5624

The Sexual Harassment Office handles harassment complaints based on sex or sexual orientation and provides guides for undergraduate and graduate students. www. utoronto.ca/sho. 416-978-3908.

The Status of Women Office aims to improve the status of all women by identifying and removing barriers and inequities. www.status-women.utoronto.ca. 416-978-2196.

The Anti-Racism and Cultural Diversity Office provides complaint management and resolution for issues related to discrimination or harassment based on race, ancestry, place of origin, religion, colour, ethnic origin, citizenship or creed. You are also welcome contact the office if you are seeking a forum to discuss ideas that will strengthen $U$ of T's diverse community and its commitment to an equitable environment. www.antiracism.utoronto.ca. 416-978-1259.

U of T's Multi-Faith Centre for Spiritual Study and Practice was created to provide a place for students, staff and faculty of all spiritual beliefs to learn to respect and understand one another. The Centre facilitates an accepting environment where members of various communities can reflect, worship, contemplate, teach, read, study, celebrate, mourn and share. www.multifaith.utoronto.ca. 416-946-3120.

Accessibility Services provides services and resources to students with all types of disabilities, such as physical, sensory, medical, mental health, learning and temporary. www.accessibility.utoronto.ca. 416-978-8060.

## Student Services \& Resources

## Eamily Life

The Family Care Office provides free confidential information, guidance, referrals and advocacy for students, staff, faculty and their families. You can take advantage of free workshops, support groups and seminars. Our Resource Centre contains practical information on a broad range of family care issues, from pregnancy and infant care to lesbian and gay parenting, from special needs children to caring for elderly family members. www.familycare.utoronto.ca. 416-978-0951.

## Community Safety

The Community Safety Office addresses personal and community safety issues for students, staff and faculty across all three campuses. The office provides assistance to students, staff and faculty who have had their personal safety compromised, develops and delivers educational initiatives addressing personal safety, promotes and delivers selfdefense courses on campus, and coordinates and responds to critical incidents on campus. www.communitysafety. utoronto.ca. 416.978.1485.

## Community Service

Your learning experience is by no means limited to the campus precinct. There are so many reasons to volunteer in the University of Toronto community or for one of the hundreds of causes in the Greater Toronto Area -you'll not only gain invaluable skills that will better prepare you for the working world but also become more well-rounded and enjoy the fulfillment of helping others.
At $U$ of $T$ we provide you with opportunities to get involved in community work through volunteer postings, the Centre for Community Partnerships, volunteer chapters, volunteer fairs and initiatives led by student groups.
Regularly checking volunteer postings is the perfect way to get a feel for the wide range of opportunities that exist. Whether you're looking for experience in a specific area or are hoping to get ideas on how broaden your horizons, feel free to review postings throughout the school year. Offcampus volunteer jobs are posted at the Career Centre. On-campus volunteer jobs are posted on Ulife.

The Centre for Community Partnerships: www.ccp.utoronto. ca. 416-9786558.

Career Centre: www.careers.utoronto.ca. 416-978-8000.
Ulife: www.ulife.utoronto.ca.

## Rights \& responsibilities

The University of Toronto respects and upholds all students' rights but also entrusts you with certain responsibilities and expects you to be familiar with, and follow, the policies developed to protect everyone's safety, security and integrity. http://uoft.me/rights.
$U$ of $T$ is committed to fairness in its dealings with its individual members and to ensuring that their rights are protected. In support of this commitment, the Office of the University Ombudsperson operates independently of the administration, being accountable only to the Governing

Council, and has unrestricted access to all University authorities. www.utoronto.ca/ombudsperson. (416) 9463485.

## Eaith \& Spirituality

The University of Toronto's Multi-Faith Centre for Spiritual Study and Practice was created to provide a place for students, staff and faculty of all spiritual beliefs to learn to respect and understand one another. The Centre facilitates an accepting environment where members of various communities can reflect, worship, contemplate, teach, read, study, celebrate, mourn and share. The Centre is also home to the offices of the Campus Chaplains' Association and offers facilities, such as a main activity hall for large events, a mediation room with a "living wall" for quiet contemplation, meeting spaces and ablution rooms. www.multifaith.utoronto. ca. 416-946-3120.

## Housing

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.
Student Housing Services also provides emergency and temporary housing for all $U$ of $T$ students, so contact them to get connected with an emergency housing coordinator. www. housing.utoronto.ca. 416-9788045.

## Health \& Wellness

Wellness refers to your overall physical, emotional, intellectual, spiritual and social condition, not simply the absence of illness. So when you're not feeling your best, there are a number of services on campus to help you get back on track.

Counselling and Psychological Services (CAPS) offers assessment, treatment and referrals for a wide range of emotional and psychological issues. www.caps.utoronto.ca. 416-978-8070.

The Health Service offers students the same services as a family doctor's office and more. The Health Service team includes family physicians, registered nurses, a dietician, support staff and a lab technician that provide confidential, student-centred health care, including comprehensive medical care, immunization, diagnostic testing, sexual health care, counselling and referrals. Services are available to all full- and part-time students who possess a valid Tcard and have health insurance coverage. www.healthservice.utoronto. ca. 416-978-8030.
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.

## Study Abroad/Study Elsewhere

## The Centre for International Experience (CIE) - 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 Centre for International Experience's Student Exchange Program. 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 CIE 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, Spain, Sweden, Switzerland, Taiwan, United States, Wales and the West Indies. Please check our website for an up-to-date listing of our exchange partners.

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

For more information, please contact the CIE:
Cumberland House, Room 204
Telephone: (416) 946-3138
student.exchange@utoronto.ca
www.cie.utoronto.ca
Note that students participating in an exchange through the Centre for International Experience will have their credits assessed for transfer upon return. You are eligible to participate in up to three terms of exchange. You can arrange your exchange semesters in multiple ways you may do a full year and additional semester or three consecutive summers or three separate semesters in up to three locations! The maximum amount of transfer credits you may earn through exchange is 7.5 (provided you don't have more than 2.5 transfer credits already on admission or on Letter of Permission). In order to be considered for
full transfer credits, you must complete the equivalent "full course load" at the host institution. Note that this term does not refer to the minimum full time load at an institution. To find out what constitutes a full course load at your host university, please refer to the the CIE webpage (www.cie. utoronto.ca) for that host institution. Studying at another institution does bring a degree of academic risk. Although the Faculty of Arts \& Science cannot guarantee that the courses you choose will receive full credit, we will do our best to ensure you receive a fair assessment. If you have provided detailed outlines and received transfer credit recommendations from the relevant Departmental contact for transfer credit prior to your departure, then the risk is negligible.

## 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 2012 programs are offered in:

■ Central Europe (based in the Czech Republic)

- China (Hong Kong)
- China (Shanghai)
- England (Oxford)
- Ecuador (Amazon, Galapagos, Andes)
- France (Tours)
- Germany (Berlin)
- India (Mumbai)
- Italy (Siena)
- Japan (Tokyo)
- Jordan (Madaba)
- Kenya (Nairobi, Masai Mara, Mombasa)
- Southeastern Europe (based in Austria)
- United Arab Emirates (Sharjah and Dubai
- Science Abroad (China, Hungary, India, Switzerland, Taiwan)

Check the Summer Abroad web site in the fall to see the 2013 program list!

Courses: Students take specially designed University of Toronto undergraduate degree credit courses, relevant to the location, for a period of 3 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, film, architecture, fine art, religion, and languages. The Science Abroad program allows students in various science disciplines to earn a fullyear research credit while gaining laboratory experience overseas. Most courses do not have prerequisites.

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

## Student Services \& Resources

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.summerabroad.utoronto.ca

## International Course Module

Directors:
Ito Peng, Associate Dean Interdisciplinary and International Affairs
Mary-Priscilla Stevens, Director, International Programs and Partnerships

Contact: deb.shaw@utoronto.ca (416-978-0359)
The Faculty of Arts \& Science's Internationalized Course Modules (ICM) program provides an opportunity for faculty members to incorporate an intensive international experience into the framework of existing undergraduate courses. Arts and Science (St. George) faculty members, or students with support of a faculty member, propose modules in the early fall. Proposals are selected in late fall and ICMs take place over Reading Week in February.

Students' participation in the ICM is incorporated into their final course grade. In many cases, ICM participants share their experiences with the wider Arts and Science community through publications, presentations or web-based resources. A limited number of ICMs are available and funding is provided only for Arts and Science (St. George) students enrolled in the course in which the module is proposed.

The ICM is designed to enhance students' classroom learning in a wide range of areas through the application of course content to relevant resources around the globe. Past ICMs have examined the role of international organizations in post-conflict Kosovo, geologic history
through the fossil, rock and structural record of the Chilean Andes, communal labor practices in Ghana and urbanization in China.

For additional international research opportunities, please see information on Research Excursions: 398H0/399Y0 Courses.

## Professional Experience Year

The Professional Experience Year (PEY) Internship Program provides students with an opportunity to gain industry experience in a field related to their academic program. The PEY program consists of a $12-16$ month, full-time, paid internship, beginning between May and September
and ending the following year. The length of the internship allows sufficient time for students to undertake substantive projects and to be involved in challenging and productive work. As a result of the experience, students return to their studies with a greater understanding of their discipline from a practical, hands-on perspective. Students registered in the PEY program also participate in a developmental program, consisting of a variety of small and large group workshops, as well as individualized consultations tailored to the student's needs and goals. The objective is for students to acquire knowledge and gain insight that will remain invaluable to their ongoing career development, beyond the academic years.

Registration in the PEY program is open to eligible full-time Arts \& Science students, completing their 2nd or 3rd year of study. In addition, students must be in good academic standing and should have a minimum cumulative average (CGPA) of 2.0 (C). An application fee will be paid by the student at the time of registration into the PEY program. A placement fee will be paid by the student if and when they secure a PEY internship, and at that time they will be registered in the course, PEY500Y1Y. Incidental fees to maintain student status and the accompanying benefits will also apply. Tuition fees are not paid for the period that the student is on their PEY internship. Neither the application fee, nor the placement fee is refundable. Students who secure a PEY internship will return to full-time studies following the completion of their $12-16$ month internship.

For further information, contact the Engineering Career Centre/PEY Office at 416-978-6649, or visit www. engineeringcareers.utoronto.ca.

## Student Unions and Associations

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

The Arts and Science Students' Union (ASSU) represents over 23,000 full-time undergraduates in the Faculty of Arts and Science on the St. George Campus. ASSU is an umbrella organization with over 55 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 tests, lockers, photocopying, faxing and pop. ASSU runs a volunteer tutoring program called Project: Universal Minds, where university students go into local high schools and tutor students in English, Maths and Sciences. 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, programmes and resources within the

## Student Services \& Resources

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 please telephone 416-978-3993, or send an e-mail to info.apus@ utoronto.ca.

## The 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.

## 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 eight year, the program offers FLCs in seven areas:
commerce, computer science, economics, life sciences, philosophy, actuarial science, and international relations. 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 students to the resources, opportunities, culture, and treasures of the campus and its surrounding community. There is no cost to participate in the FLC program and students who successfully complete the program will receive a non-academic notation on their transcript.

The 24 students in each FLC will be enrolled in some of the same courses and will meet regularly outside of class time for valuable and engaging activities. Each FLC group is facilitated by an upper-year student Peer Mentor and an Assistant Peer Mentor, under the guidance of an Advisor (from the college, department, or program); these individuals are the FLC Team. Further information on how to get involved in the FLC program as a Peer Mentor can be found on the FLC website. Some of the interesting and fun topics that may be covered in FLC meetings include: time management, study skills and strategies, academic integrity, getting involved on campus, mastering tests and exams, choosing a program of study, better health for better GPA, and career explorations. There will also be recreational and social activities, and much more! Students interested in joining the FLC program should be motivated to learn and develop themselves personally and socially, as well as academically. You can find more detailed information about the "flick" program on the FLC web site: www.flc.utoronto.ca.

## Contact:

Heidi Pepper Coles
FLC Program Coordinator
heidi.pepper@utoronto.ca 416.978.5471
Degree Requirements
Quick Reference ..... 21
Honours Bachelor of Arts/Honours Bachelor of Science. ..... 22
Discontinued Degrees and Upgrading ..... 22
General Requirements ..... 22
Program Requirements ..... 23
Bachelor of Commerce ..... 24
The Breadth Requirement ..... 23
The Distribution Requirement ..... 24
Concurrent Teacher Education Program ..... 25
Faculty of Arts \& Science Language Citation Program ..... 26

## UNIVERSITY OF TORONTO FACULTY of ARTS \& SCIENCE

## Degree Requirements

For the complete and detailed description of degree requirements, check following pages of this Degree Requirements section of the Calendar. This chart is intended as a quick reference to describe the minimum degree requirements.

| Type of Degree | Honours B.A./B.Sc. | BCom |
| :---: | :---: | :---: |
| Number of Credits | 20.0 | 20.0 (10.0 RSM/MGT courses, 10.0 other A\&S courses) |
| Level of Credits | ■ Maximum 6.0 100-level ■ At least 6.0 300/400-level | $\square$ Maximum 6.0 100-level $\square$ At least $6.0300 / 400$-level, including at least 1.0400 -series |
| Program Requirements | ■ 1 Specialist, or <br> ■ 2 Majors*, or <br> - 1 Major + <br> 2 Minors* <br> * must consist of 12.0 different courses | ■ Management, Finance \& Economics, or Accounting Specialist |
| Cumulative Grade Point Average | 1.85 | 1.85 |
| Breadth Requirement (for students beginning degree studies in September 2010 or after) | Must take at least 4.0 credits that have been designated as satisfying the Breadth Requirement. Must be either <br> (a) at least 1.0 credit in each of 4 of the 5 categories below, or (b) at least 1.0 credit in each of any 3 of the 5 categories, and at least 0.5 credits in each of the other 2 categories. <br> 1 Creative and Cultural Representations <br> 2. Thought, Belief, and Behaviour <br> 3. Society and Its Institutions <br> 4. Living Things and Their Environment <br> 5. The Physical and Mathematical Universes <br> N.B. Some restrictions on the acceptability of certain courses apply to <br> B.Com students (see the Rotman Commerce section of the Calendar). |  |
| Distribution Requirement (for students who began degree studies in the Faculty of Arts \& Science prior to September 2010) | Must take at least 1.0 credit from each of the following three areas: <br> - Humanities <br> - Social Sciences <br> - Sciences <br> N.B. Some restrictions on the acceptability of science courses apply to B.Com students (see the Rotman Commerce section of the Calendar). |  |

## Degree Requirements

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.

The Faculty of Arts \& Science offers the following degrees, all of which are Honours degrees:

- Honours Bachelor of Arts
- Honours Bachelor of Science
- Bachelor of Commerce (jointly with the Rotman School of Management)

The Faculty also offers:

- Concurrent Teacher Education Program - The Faculty of Arts \& Science Language Citation Program


## 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., complete with a grade of $50 \%$ or more or CR) 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 threeletter designator ("AST", "ENG", etc.). Courses beyond this limit will not be included in the 20 courses required for the degree, but will be counted in all other respects.
(b) Complete one of the following program requirements One specialist program (which includes at least one course at the 400level) 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) For students who began degree studies in the Faculty of Arts \& Science in September 2010 or after: complete the new Breadth Requirement OR
For students who began degree studies in the Faculty of Arts \& Science prior to September 2010: complete the Distribution Requirement.
(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).

## Discontinued Degrees and Upgrading

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 (mid-April/early October) from the program sponsor;
2. an email from the Office of Convocation providing details of the convocation ceremony (late March/mid-October);
3. a letter from the Office of the Faculty Registrar confirming degree eligibility (end of May/late October).

## "Second Degree" Requirements

Students who have graduated with a degree from the Faculty of Arts \& Science 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) transferred/retained 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 admission POSt and 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.
Please note: in the requirements below the word "course" means one full-course equivalent.

## 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 14 courses in one or more disciplines (note that some interdisciplinary Specialist programs may require up to 16 courses). 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, including at least one 400-series half course.

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

## PLEASE NOTE

Some courses included as program options may have prerequisites as requirements not listed in the program but which must be taken. Programs which list optional courses do not necessarily list their 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*).

* For example,

Lucy is enrolled in the Physiology Major (8.0 FCEs) and the Biology Major (8.0 FCEs). In order to meet the 12.0 different course requirement, she may have up to 4.0 overlapping credits between her majors $(8.0+8.0=16.0 ; 16.0-12.0=$ 4.0). These two programs contain 3.0 core FCEs in common: (BIO120H1+BIO130H1), (CHM138H1+CHM139H1), and $(\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1)$. Therefore, she may take up to 1.0 more overlapping course between the majors. In short, 8.0 for PSL +8.0 for $\mathrm{BIO}=16.0$ courses; 16.0 courses -12.0 different courses $=4.0$ overlaps allowed).
Christina is enrolled in the Economics Major (7.0 FCEs) and the Statistics Major (6.5 FCEs). In order to meet the 12.0 different course requirement, she may have up to 1.5 overlapping credits between her majors ( $7.0+6.5$ $=13.5 ; 13.5-12.0=1.5$ ). She takes MAT135Y1 and STA257H1+STA261H1 (2.0 FCEs total) towards both programs. Since she has exceeded the 1.5 credit overlap limit by 0.5 , she must take an additional 0.5 credit towards one of the majors so that she will have 12.0 different courses between them.
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.

## The Breadth Requirement

Students beginning degree studies in the Faculty of Arts \& Science in September 2010 or after are required to complete the following Breadth Requirement as part of their Degree Requirements. (The Distribution Requirement described following this section does not apply to such students.)
Courses in the Faculty of Arts and Science are classified into five Breadth categories by subject content. (Note that some courses are not designated and do not count toward this requirement.) The purpose of the Breadth Requirement is to ensure all students graduating with an Honours degree from the Faculty of Arts and Science have chosen courses across a broad range of subject areas in the Faculty as part of their undergraduate education.

1. Creative and Cultural Representations
2. Thought, Belief, and Behaviour
3. Society and Its Institutions
4. Living Things and Their Environment
5. The Physical and Mathematical Universes

Students must take at least 4 full-course equivalents (FCEs) that have been designated as satisfying the Breadth Requirement. These 4 credits must be either (a) at least 1 FCE in each of any 4 of the 5 categories above, or (b) at least 1 FCE in each of any 3 of the 5 categories, and at least 0.5 FCE in each of the other 2 categories.
A course's Breadth designation can be found following the course description in the Calendar for the year in which the course is taken. For example:

ECO100Y1 Introduction to Economics [48L, 24T]
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 DR=SOC SCI; BR=3

ECO100Y1 counts as one credit (1 FCE) in category 3 (Society and Its Institutions.)

ENG215H1 The Canadian Short Story [36L]
An introduction to the Canadian short story, this course emphasizes its rich variety of settings, subjects, and styles.
DR=HUM; BR=1
ENG215H1 counts as one half credit ( 0.5 FCE) in Category 1 (Creative and Cultural Representations).

HIS109Y1 The Development of European Civilization, 1350-1945 [48L, 20T]
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, 18151914; the Collapse of the Old Order and the Condition of Modern Europe, 1914-1945.
Exclusion: HIS103Y1, 104Y1, 106Y1, 107Y1
DR=HUM; BR=1+3
HIS109Y1 counts as one half credit (0.5 FCE) in Category 1 (Creative and Cultural Representations) and one half credit ( 0.5 FCE) in Category 3 (Society and Its Institutions.)
Courses marked "BR=None" do not count toward any breadth category.

Courses count toward the Breadth Requirement as they have been classified in the Calendar of the year in which they were taken
Students may count towards the Breadth Requirement any course which has a Breadth designation, and in which they have achieved standing, whether or not the course is used to satisfy a Subject POSt requirement, and whether or not the course was taken as CR/NCR.

## The Distribution Requirement

This Distribution Requirement applies only to students who began degree studies in the Faculty of Arts \& Science prior to September 2010. (The Breadth Requirement described above does not apply to such students.)

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

Humanities, Social Science, and Science
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.
A course's Distribution Requirement designation can be found following the course description in the Calendar for the year in which the course is taken. For example:

ECO100Y1 Introduction to Economics [48L, 24T] 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 DR=SOC SCI; BR=3
ECO100Y1 counts as one Social Science credit (1 FCE.)
ENG215H1 The Canadian Short Story [36L]
An introduction to the Canadian short story, this course emphasizes its rich variety of settings, subjects, and styles.
DR=HUM; BR=1
ENG215H1 counts as one half Humanities credit (0.5 FCE.)

## Bachelor of Commerce (BCom) Degree Requirements

(See also the complete Rotman Commerce degree, program and course listing, starting on page 500)
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 -Accounting, Finance and Economics, or Management, (see below);
(c) For students who began September 2010 or after: complete the Breadth Requirement for BCom students (see below)
OR
For students who began degree studies prior to September 2010: complete the Distribution Requirement for BCom students (see below).
(d) Obtain standing (i.e., complete with a grade of $50 \%$ or more or CR) 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.)
(e) 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

Registrar 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 (mid-April/early October) from the program sponsor;
2. an email from the Office of Convocation providing details of the convocation ceremony (late March/mid-October);
3. a letter from the Office of the Faculty Registrar confirming degree eligibility (end of May/late October).

## Faculty Breadth Requirement for BCom Students

Students beginning degree studies in September 2010 or after are required to complete the following Breadth Requirement as part of their Degree Requirements. Courses in the Faculty of Arts \& Science are classified into five Breadth categories by subject content. (Note that some courses are not designated and do not count toward this requirement.). The purpose of the Breadth Requirement is to ensure all students graduating with an Honours degree from the Faculty of Arts \& Science have chosen courses across a broad range of subject areas in the Faculty as part of their undergraduate education.

1. Creative and Cultural Representations
2. Thought, Belief, and Behaviour
3. Society and Its Institutions
4. Living Things and Their Environment
5. The Physical and Mathematical Universes

Students must take at least 4 full-course equivalents (FCEs) that have been designated as satisfying the Breadth Requirement. To satisfy the requirements for the Bachelor of Commerce, Rotman Commerce students must a) complete at least 1 FCE from Category 1 (Creative and Cultural Representations) AND b) complete at least 1 FCE in each of any 4 of the 5 categories above, OR, at least 1 FCE in each of any 3 of the 5 categories, and at least 0.5 FCE in each of the other 2 categories.
Note that there is no Breadth Requirement status for MGT120H1/MGT201H1, COM110H1, RSM100Y1, and that MAT133Y1 and ECO220Y1 (and courses deemed equivalent in the program requirements in the Calendar) cannot be used to satisfy the Breadth Requirement.
A course's Breadth designation can be found following the course description in the Calendar for the year in which the course is taken.
Courses marked "BR=None" do not count toward any breadth category.
Courses count toward the Breadth Requirement as they have been classified in the Calendar of the year in which they were taken.

Students may count towards the Breadth Requirement any course which has a Breadth designation, and in which they have achieved standing, whether or not the course is used to satisfy a Subject POSt requirement, and whether or not the course was taken as CR/NCR.
Students who transfer from the University of Toronto Mississauga or Scarborough must meet the Rotman Commerce BCom Breadth Requirement.

## Faculty Distribution Requirement for BCom Students

Students who began degree studies PRIOR to September 2010 must complete the Faculty Distribution Requirement for

BCom students.
As part of the degree requirements for the BCom, students must complete 1 full-course equivalent (FCE) in EACH OF the HUMANITIES, the SOCIAL SCIENCES and the SCIENCES AREAS as defined below:

1. one FCE must be from the Humanities.
2. one FCE must be from the Social Sciences (MGT/RSM courses may be used to meet this requirement with the exception of MGT120H1/MGT201H1, COM110H1, and RSM100Y1 which have NO Distribution Requirement status).
3. one FCE must be from the Sciences, 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 BCom Distribution Requirement.

## CTEP: Concurrent Teacher Education Program

CTEP is an educational opportunity for qualified students to complete both an Honours Bachelor degree from the Faculty of Arts \& Science, and a Bachelor of Education degree from the Ontario Institute for Studies in Education (OISE), concurrently over a five-year period. The curricula of the two degrees are integrated and lead to primary-junior or secondary teaching credentials upon completion.
A number of divisions in the University of Toronto participate in this program, each with their own specialized area of teacher preparation. The Faculty of Arts \& Science offers two programs connected with CTEP: Victoria College sponsors a program in "Education \& Society" aimed at students preparing to teach in the Primary-Junior division of urban schools. St. Michael's College sponsors a program in "Concurrent Education: Religious Education" aimed at students preparing to teach Religious Education in high schools in the Catholic school boards. More complete information may be found under the Calendar entries for the two colleges and on their websites.

Both CTEP programs require application to, admission by, and completion of the relevant Type 3 Subject POST as part of the requirements for the Hon. Bachelors portion of the joint degrees. Application to these POSts follows the normal timing and process for Type 3 POSt admission in Arts \& Science, and requires completion of a CTEP Student Profile. Admission is open to Arts \& Science students from any college.
As the curricula of the Hon. Bachelors and B.Ed. are linked together in CTEP, the requirements for completing the two degrees are also interlinked. Students in the Program must meet the normal Arts \& Science requirements of the Hon. Bachelors, and they must meet the requirements of the B.Ed. as established by OISE. The latter includes a requirement to achieve a cumulative GPA of at least 2.50 in the Hon. Bachelors upon graduation. To facilitate this, CTEP has a requirement for "Good Standing in CTEP" that students must maintain a cumulative GPA of 2.50 on their Arts \& Science (i.e., non-B.Ed.) courses as they move through the program. (Requirements for advancing in the B.Ed. portion of the program will be determined separately by OISE.)

## 1. Graduation from CTEP

In order to graduate from CTEP, students will be required:
a. To complete the requirements of the Hon. Bachelors degree, including a CTEP Subject POSt, with a cumulative GPA of at least 2.50 on courses counting toward that degree;
b. To complete the requirements of the B.Ed. (5.0 full credits comprised of courses/practicum; 1.0 in year 3, 2.5 in year $4,1.5$ in year 5 , and an annual CTEP e-portfolio.

## 2. Standing in CTEP

A student's standing in CTEP will be assessed for the first time when the student has completed at least 8.0 full-course equivalents. This includes all courses in which the student has final standing (passes and failures). Standing in CTEP will be assessed again at the completion of each Fall/Winter session in which the student is registered.

## 3. In Good Standing in CTEP

Students who maintain a cumulative GPA of at least 2.50 shall be In Good Standing in CTEP.

## 4. On Probation in CTEP

Students who have attempted at least eight full credits and have a cumulative GPA below 2.50 shall be On Probation in CTEP.

## 5. Clearing Probation in CTEP

Students may clear probation in CTEP by achieving a cumulative GPA of at least 2.50. Students who have cleared probation shall be In Good Standing in CTEP.

## 6. Continuing on Probation in CTEP

Students who achieve an annual GPA of at least 2.70 in the Fall/Winter session may continue On Probation in CTEP until such time as they raise their cumulative GPA to 2.50 and return to In Good Standing in CTEP.

## 7. Required to Withdraw from CTEP

The following students will be required to withdraw from CTEP:
a. Any student On Probation in CTEP who fails to achieve an annual GPA of at least 2.70.
b. Any student who, under the general rules governing overall standing for the Hon. Bachelors degree, incurs a suspension.
c. Any student who fails to meet the requirements for continued enrolment in the B.Ed. program, as determined by OISE.
Such students may continue toward their Hon. Bachelors degree, provided they are eligible to do so under general Faculty of Arts \& Science rules, but must withdraw from CTEP.

See entries under "Victoria College" and "St. Michael's College" for details on CTEP Subject POSts.

## 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
Classics
East Asian Studies
French
Germanic Languages \& Literatures
Italian Studies
Near \& Middle Eastern Civilizations
Portuguese
Slavic Languages \& Literatures
Spanish

## Guide to Programs and Courses

Guide to Programs \& Courses
Codes Used in the Program of Study Listings ..... 28
Choosing Courses ..... 28
Key to Course Descriptions ..... 28
Number of Courses Taken: Course Load ..... 28
Year of Study ..... 29
Full/Part-Time Status ..... 29
Codes Used in the Course Descriptions ..... 29
How to Read a Course Description ..... 31
Arts \& Science Programs and Courses ..... 32

UNIVERSITY OF TORONTO FACULTY of ARTS \& SCIENCE

## Guide to Programs and Courses

## 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 semicolon 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 Y 1 or H 1 in a course code in this Calendar indicates the credit value:
$\mathrm{Y} 1=\mathrm{a}$ 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:

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.

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 according to admission category.

## Key to Course Descriptions

Course descriptions, in alphabetical order by Department/ College, are listed in the Programs and Courses section. 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 in the Faculty of Arts \& Science are limited to a course load of 6 courses per term in the Fall/Winter session and 2 courses per term in the Summer session. College Registrars may approve an exception to this limit where circumstances warrant. For details on term load, check the Registration Handbook \& Timetable.

## Guide to Programs and Courses

4. 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).
5. 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.)
6. Students should attempt to balance their course load between the Fall and Winter Sessions.
7. To calculate course loads, students should consult this Calendar together with the Registration Handbook \& Timetable. The code " Y 1 " or " H 1 " in a course code in the Calendar indicate the credit value:
$\mathrm{Y} 1=$ a full course, for which one credit is given, e.g., ANT 100Y1
$\mathrm{H} 1=\mathrm{a}$ half-course, for which one-half credit is given, e.g., HIS 332H1
8. 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
9. Students should note that courses designated as "...Y1F" or "...Y1S" in the Timetable are particularly demanding.
10. 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).
11. 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.
12. 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 beyond six in the FallWinter Sessions.
13. 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.

## 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, Repeating Courses, "Extra" Courses: 100-series, Repeating and Excluded Courses Courses Outside the Faculty and University

For information on these matters see the Rules and Regulations section.

## 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.

## 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

## Guide to Programs and Courses

together, separated by " $/$ " which means "OR"; for instance, "ECO 350Y1/351H1/352H1" = ECO 350Y1 OR ECO 351H1 OR ECO 352 H 1 , each one being a seminar on a selected subject.

## "Y1" and "H1" Course Suffixes

The codes " Y 1 " or " H 1 " 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
H 1 = a half-course, for which one-half credit is given, e.g., HIS 322 H1.

## Types and Duration of Instruction

## L= Lectures

S= Seminars
$\mathrm{P}=$ Practical work in laboratories or studios
T= Tutorials
In the Fall-Winter Sessions the normal period of instruction is 24 weeks; the Fall Session lasts 12 weeks, and the Winter Session lasts 12 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 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.
This image 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 322 H 1 S
> Y = Fall and Winter sessions, or First and Second subsessions of the Summer Session, e.g., ANT 100Y1 Y

## Guide to Programs and Courses

## How to Read a Course Description



## Programs and Courses

## Arts and Science Programs \& Courses

| Sponsoring Department/College/Program | Office | Section | Page |
| :---: | :---: | :---: | :---: |
| Section | Page | Mathematics | 357 |
| First-Year Seminars Program |  | Modern Languages \& Literatures | 370 |
| Research Opportunity Program. . | 33 | Molecular Genetics \& Microbiology. | 371 375 |
| Research Excursions. . . . . . . . . . . . . . . . . | 33 | National University of Singapore. | 380 |
| Aboriginal Studies | 34 | Near \& Middle Eastern Civilizations | 381 |
| Academic Bridging Program | 39 | New College . . . . . . . . . . . . . . . . | 395 |
| Actuarial Science. | 40 | Nutritional Sciences. | 406 |
| American Studies | 43 | Peace, Conflict and Justice Studies | 409 |
| Anatomy ... | 46 | Pharmaceutical Chemistry. . . . . . . | 412 |
| Anthropology | 47 | Pharmacology \& Toxicology . . . | 415 |
| Archaeology. . . . . . | 60 | Philosophy . . . . . . . . . . . . . . . . | 424 |
| Architectural Studies . . . . . . . . . | 63 67 | Physics . | 435 |
| Asia-Pacific Studies (Dr. David Chu Program) |  | Physiology . . . . . . | 444 |
| Astronomy \& Astrophysics. . . . . . . . . . . . . . . | . 88 | Planetary Science | 449 |
| Biochemistry | 92 | Portuguese . . . . | 467 |
| Bioinformatics \& Computational Biology . | 92 | Psychology | 470 |
| Biology. | . 98 | Public Health Sciences | 481 |
| Canadian Institute for Theoretical Astrophysics | 101 | Public Policy . . . . . . . | 483 |
| Cell \& Systems Biology . . . . . . . | 102 | Religion.... | 484 |
| Chemistry | 109 | Rotman Commerce | 500 |
| Classics . . . . . . . | 118 | St. Michael's College | 511 |
| Comparative Literature | 128 | Slavic Languages \& Literatures. | 528 |
| Computer Science. | 129 | Sociology. . . . . | 543 |
| Diaspora \& Transnational Studies. | 143 | South Asian Studies | 557 558 |
| Drama | 148 | Statistics | 564 |
| East Asian Studies | 154 | Trinity College | 570 |
| Ecology \& Evolutionary Biology. | 168 | University College | 575 |
| Economics. | 180 | Victoria College | 586 |
| English................ | 192 | Visual Studies | 67 |
| Estonian. . | 217 | Women \& Gender Studies. | 601 |
| Ethics, Centre for. | 218 | Woodsworth College . . . | 606 |
| European Studies | 219 | Writing in Arts \& Science. | 616 |
| Finnish. | 221 |  |  |
| Forest Conservation | 224 |  |  |
| French | 229 |  |  |
| Geography. | 240 |  |  |
| Geology . | 258 |  |  |
| German | 264 |  |  |
| Greek. | 118 |  |  |
| History | 270 |  |  |
| History \& Philosophy of Science \& Technology. | 291 |  |  |
| Human Biology | 296 |  |  |
| Hungarian | 308 |  |  |
| Immunology. | 310 |  |  |
| Innis College | 313 |  |  |
| Italian Studies | 326 |  |  |
| Jewish Studies. | 334 |  |  |
| Joint Courses Listing | 339 |  |  |
| Kinesiology \& Physical Education . | 341 |  |  |
| Laboratory Medicine \& Pathobiology. | 342 |  |  |
| Latin. . . . . . . . . . | 118 |  |  |
| Latin American Studies | 345 |  |  |
| Life Sciences . | 348 |  |  |
| Linguistics | 349 |  |  |
| Materials Science | 354 |  |  |

## First Year Seminars: 199H1/Y1 Courses

Director: Anne-Marie Brousseau, Associate Dean Undergraduate Academic Programs
deb.shaw@utoronto.ca (416-978-0359)
The199Y1 and199H1 seminars are designed to provide entering Arts \& Science (St. George) degree 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 diversity of the Faculty of Arts \& Science.
Each 199Y1 and199H1 seminar has a generic designator, which corresponds to the Breadth Category the course can fulfill: CCR199 (Creative and Cultural Representations), TBB199 (Thought, Belief, and Behaviour), SII199 (Society and Its Institutions), LTE199 (Living Things and Their Environment), PMU199 (The Physical and Mathematical Universes), or XBC199 (Y course that counts as half in each of two breadth categories).

The199Y1 and199H1 seminars count for degree credit in the same way as any other course, but do not count towards a subject POSt. First-Year Seminars can be used to satisfy the Breadth Requirement; for details, see page 23). NOTE: 198H1 may be used to allow enrolment in two 199H1 seminars in the same session. Students may enrol in ONLY one199Y1 OR two 199H1s courses.

## Research Opportunity Program: 299Y1 Courses

Director: Anne-Marie Brousseau, Associate Dean Undergraduate Academic Programs deb.shaw@utoronto.ca (416-978-0359)

The Research Opportunity Program (ROP) provides an opportunity for Arts \& Science (St. George) degree students in their second year (i.e., after completing at least 4 but not more than 8.5 credits) to earn one course credit by participating in a faculty member's research project. Each 299Y1 course has a program-specific designator, such as ANT, CLA, CSB, VIC, etc. Not all departments or programs will necessarily participate in the ROP each year.

Descriptions of ROP projects are available on the Faculty's web site mid-February. Students wishing to participate should email online ROP Application forms to deb.shaw@ utoronto.ca by the due date indicated on the website. Students can apply to a maximum of three ROPs in total, but can accept only one project. Students are informed in early July (mid-April for Summer courses) whether they have been accepted. Successful applicants are registered by the Program office.

Students are expected to keep a journal recording meetings, progress, and what was learned about the project in particular and the nature of research in general.

## Research Excursions: 398H0/399Y0 Courses

Directors: Ito Peng, Associate Dean Interdisciplinary and International Affairs, Mary-Priscilla Stevens, Director, International Programs and Partnerships deb.shaw@utoronto.ca (416-978-0359)

The 398/399 Research Excursions (399) provides an opportunity for Arts \& Science (St. George) degree students in their third year (i.e., after completing at least 9 but not more than 13.5 credits) to participate in a practical or experiential activity under the supervision of a faculty member. The practical, experiential component can take the form of research/learning 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). The projects run within the MayAugust period, when both Faculty and students would be able to make the time commitments necessary. Regular tuition fees apply.

Each $398 \mathrm{H0} 0 / 399 \mathrm{Y} 0$ has a program-specific designator, such as ANT, CLA, CSB, VIC, etc., and would be eligible to count towards program completion if the program sponsor (Chair or Director) so chooses. A limited number of $398 \mathrm{HO} / 399 \mathrm{YO}$ courses are available each year. Faculty supervisors propose the projects and choose the students who apply.

Students must also attend a Safety Abroad Seminar.
Descriptions of the projects are available on the Faculty's web site mid-February.
Applications are available online and must be emailed to the supervising instructor by late February. Students are informed in mid-March whether they have been accepted. Successful applicants are registered by the Program office.

## Aboriginal Studies

## Faculty

## Assistant Professors

R. Kuokkanen
C. Suzack

Senior Lecturer
A. McKay

## Associate Professor

D. McGregor

Aboriginal Studies is an interdisciplinary undergraduate program dedicated to the study and research of Indigenous peoples in Canada and throughout the world. The program offers courses that engender a rigorous and respectful understanding of Indigenous peoples' languages, knowledges, cultures, histories, politics, arts, intellectual traditions and research methodologies. ABS offers Specialist, Major, and Minor Programs within the Faculty of Arts \& Science. Students are encouraged to seek counselling and information about this program from aboriginal.studies@ utoronto.ca or on our website at http://www.utoronto.ca/abs.

## Aboriginal Studies Programs

## Aboriginal Studies Specialist (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalents, including at least one 400+level course)

ABS201Y1
ABS210Y1/ABS220Y1/(ABS230H1, ABS231H1)
ABS300Y1 and ABS301Y1
ABS460Y1
5. Four additional full-course equivalent from Group A (note: some of these courses have prerequisites)
6. One additional FCE from Group A or Group B below (note: some of these courses have prerequisites)
7. For numbers 5 and 6 above, 2 FCE's must be at the 300 level.

## Note

A student who wishes to complete their program in four years should take at least two courses in Aboriginal Studies each year for the first two years, for example, ABS201Y1 and ABS210Y1/ABS220Y1/ ABS230H1 and ABS231H1 the first year; ABS300Y1 and another 300 level course from ABS, or GGR (formerly known as JAG) the second year; ABS301Y1 and another 300 level course from ABS, or GGR the third year; and a four hundred level ABS or JFP course; or one 400 level half course and one 300 level course in their final year.

## Aboriginal Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent, including at least two 300+level courses)

ABS201Y1
ABS210Y1/ABS220Y1/ABS230H1 and ABS231H1
ABS300Y1 and ABS301Y1
4. Two additional full-course equivalents from ABS, JFP, JPA or GGR (formerly known as 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)
6. Of the courses chosen, at least 2 FCE must be at the 300+ level and .5 FCE at the 400 level.

## Aboriginal Studies Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including at least one fullcourse equivalent at the 300+-level)

1. ABS201Y1
2. ABS300Y1/ABS301Y1
3. One additional full-course equivalent ABS, JFP, JPA or GGR (formerly known as 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)

## Note

A student who wishes to complete their program in four years should take at least two courses in Aboriginal Studies each year for the first two years, for example, ABS201Y1 and ABS210Y1/ABS220Y1/ ABS230H1 and ABS231H1 the first year; ABS300Y1 and another 300 level course from ABS, or GGR (formerly known as JAG) the second year; ABS301Y1 and another 300 level course from ABS, or GGR the third year; and a four hundred level ABS or JFP course; or one 400 level half course and one 300 level course in their final year.

## Aboriginal Studies Groups

Group A:
ABS210Y1 Introduction to Anishinaabemowin
ABS220Y1 Introduction to an Iroquoian Language
ABS230H1 Introduction to Inuktitut
ABS231H1 Elementary Inuktitut
ABS250H1 Indigenous Environmental Education
ABS302H1 Aboriginal People in the Mass Media
ABS310Y1 Anishinaabemowin II
ABS323Y1 Intermediate Iroquoian Language
ABS320Y1/ Aboriginal Visual Expression: Technical and
ABS321H1 Theoretical Aspects
ABS330Y1/ Aboriginal Music: Technical and Theoretical
ABS331H1 Aspects
ABS341H1 Indigenous Theatre
ABS350Y1 Aboriginal Health Systems
ABS351Y1 Aboriginal Legends and Teaching
ABS353H1 First Nations Politics in Canada
ABS354H1 Aboriginal Rights and Indigenous Law in Canada
ABS360Y1 Politics and Process of Reconciliation in Canada
ABS402H1 Traditional Indigenous Ecological Knowledge
ABS405Y1 Methodology in Aboriginal Studies
ABS495Y1 Independent Research
ABS496H1 Independent Research
ABS497H1 Independent Research
ABS498Y1 Independent Research

## Aboriginal Studies

| ANT315H1 | Arctic Archaeology |
| :--- | :--- |
| ANT365H1 | Native America and the State |
| ANT353H1 | Anthropology of Indigeneity |
| ANT463H1 | Native Rights, Canadian Law |
| ENG254Y1 | Indigenous Literatures of North America |
| ENG355H1 | Indigenous Women's Literature |
| HIS369Y1 | Aboriginal Peoples of the Great Lakes from <br>  <br> 1500 to 1830 |
| HIS472H1 | Indigenous-Newcomer Relations in |
|  | Canadian History |
| JPA461H1 | Globalization and Indigenous Politics |
| GGR321H1 | Aboriginal People and Environmental |
|  | Issues in Canada (formerly known as |
|  | JAG321H1) |
| JFP450H1 | Aboriginal Issues in Health and Healing |
|  | (offered by the Faculty of Pharmacy) |
| LIN458H1 | Revitalizing Languages |
| Group B: |  |
| ANT200Y1 | Introduction to Archaeology |
| ANT204H1 | Anthropology of the Comtemporary World |
| ANT319Y1 | Archaeology of North America |
| ANT311Y1 | Archaeological Fieldwork |
| ANT348H1 | Anthropology of Health |
| ANT367Y1 | Indigenous Spirituality |
| ANT410H1 | Hunter-Gatherers Past and Present |
| ANT454H1 | The Anthropology of Music \& Art |
| FOR200H1 | Conservation of Canada's Forests |
| HIS106Y1 | Natives, Settlers, and Slaves: Colonizing <br> the Americas, 14921804 |
| HIS294Y1 | Caribbean History and Culture: Indigenous |
| HIS358H1 | Era to 1886 |
| How the West was Colonized |  |
| HIS384H1 | Colonial Canada <br> INI327Y1 |
| Screening Race (pre-requisite required) |  |
| LIN351H1 | Sociolinguistic Patterns in Language |
| NEW224Y1 | Caribbean Thought I |
| NEW240Y1 | Introduction to Equity Studies |
| NEW324Y1 | Caribbean Thought I |
|  |  |

## Faculty of Arts \& Science Language Citation

Aboriginal Studies participates in the Faculty of Arts \& Science Language Citation Initiative for Anishinaabemowin. The study of the Anishinaabe language 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 Anishinaabemowin is available to students who complete ABS210Y1 and earn a grade of at least B- in ABS310Y1 and ABS301Y1.

Students should note that, as explained in 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

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## ABS201Y1 Introduction to Aboriginal Studies [48L/24T]

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.
DR=HUM/SOC SCI ; BR=1+3
ABS210Y1 Introduction to Anishinaabemowin [72L] An introduction to the Anishinaabe language, including the syllabic writing system.
DR=HUM ; BR=1

## ABS220Y1 Introduction to an Iroquoian Language

 [72L]An introduction to one of the languages of the Iroquoian language family.
DR=HUM ; BR=1

## ABS230H1 Introduction to Inuktitut [24L]

An introduction to one dialect of Inuktitut, the language of the Inuit, including aspects of other dialects and the syllabic writing system.
DR=HUM ; BR=1

## ABS231H1 Elementary Inuktitut [24L]

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
DR=HUM; BR=1

## ABS240Y1 Ecological Interactions: Intro to Aboriginal

 and Western Sciences [48L/72P]Introduction to methodologies and applications of Aboriginal and Western sciences, with an emphasis on environmental change, animal behaviour, evolution, sustainable practices, and implications of intrinsic ecological connections. Exploratory labs, often outdoors, develop literacy and skills in each paradigm as well as critical thought, creative reflection, and synthesis of knowledge.
Prerequisite: ABS201Y1
DR=SCI; BR=4

## ABS250H1 Indigenous Environmental Education [24S]

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.

## Aboriginal Studies

Prerequisite: ABS201Y1
DR=SOC SCI; BR=3

## ABS300Y1 Worldviews, Indigenous Knowledges, and Oral Tradition [48L]

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
DR=HUM/SOC SCI; BR=1
ABS301Y1 Native Language and Culture [48L] Examination of the historical interplay of Indigenous languages and cultures in Canada. Particular focus is on the language and culture of an Indigenous people of Ontario.

## Prerequisite: ABS201Y1

Exclusion: ABS200Y1
DR=HUM/SOC SCI; BR=1

## ABS302H1 Aboriginal Representation in the Mass Media and Society [24L]

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
DR=HUM/SOC SCI; BR=1

## ABS303YO Aboriginal Australia

An overview of Aboriginal history and culture in Australia, including its precolonial past, land, society, and culture. Includes discussion of Aboriginal rights, health, and modes of creative expression. This course will be offered on-site in Australia as part of the Woodsworth College Summer Abroad program.
DR=SOC SCI; BR=3

## JPA308H1 Aboriginal Politics in Canada (formerly POL308H1) [24L]

Explores key issues in Aboriginal politics in Canada. Provides students with an overview of historical and contemporary socio-political issues in Aboriginal societies and institutions such as Aboriginal self-governance, land claims and treaty negotiations. (Given by the Department of Political Science and the Aboriginal Studies Program)
Prerequisite: ABS201Y1/POL103Y1/POL214Y1/POL224Y1 Exclusion: ABS353H1 and ABS354H1 or POL308H1 DR=SOC SCI; BR=3

## ABS310Y1 Anishinaabemowin II [72L]

Further study of the Anishinaabe language with emphasis on speaking and writing.
Prerequisite: ABS210Y1
DR=HUM; BR=1

## ABS322H1 Indigenous Narratives of Empowerment [24L]

This course explores Indigenous decolonization and empowerment by analysing comparatively theoretical and literary debates that focus on issues of sovereignty, gender, grass-roots activism, and anti-racism. It analyses several
emerging paradigm approaches to this set of debates including intersectional critical-race theory, Indigenous feminisms, and decolonization practices in theorectial and literary texts.
Prerequisite: ABS201Y1
DR=HUM/SOC SCI; BR=1
ABS323Y1 Intermediate Iroquoian Language [72L] Further study of an Iroquoian language.
Prerequisite: ABS220Y1
DR=HUM; BR=1

ABS330Y1 | Aboriginal Music: Technical and Theoretical |
| :--- |
| Aspects [48L] |

Contemporary and historical musical performance practices
of Aboriginal people of North and South America.
Prerequisite: ABS201Y1
DR=HUM; BR=1

ABS331H1 Aboriginal Music: Technical and Theoretical Aspects [24L]
Contemporary and historical musical performance practices of Aboriginal people of North and South America.
Prerequisite: ABS201Y1
DR=HUM; BR=1

## ABS340Y1 Aboriginal Health Science [48L/48P]

This course is themed in six-week quarters addressing four aspects of Western Science (basic, applied, clinical and population health). Within each quarter, the Western Science theme is examined holistically using Indigenous Science and the four aspects of the Medicine Wheel (physical, mental, emotional, spiritual).
Prerequisite: ABS201Y1 and ABS240Y1
DR=SCI; BR=4
ABS341H1 North American Indigenous Theatre [24L]
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/ABS301Y1/ABS331H1/DRM100Y1 DR=HUM ; BR=1

## ABS350Y1 Aboriginal Health Systems [48L]

An overview of Aboriginal health systems, internationally, nationally, provincially and locally, with a focus on Ontario. iscussion of health models and strategies, policy, legislation, jurisdictional issues, Aboriginal health initiatives.
Prerequisite: ABS201Y1/(UNI200H1 + UNI210H1)
DR=SOC SCI ; BR=3
ABS351Y1 Indigenous Legends \& Teaching (formerly ABS351H1) [24L]
An introduction to laws of Indigenous societies, focusing on the Anishinaabe, as seen through legends and teachings.
Prerequisite: ABS201Y1
Exclusion: ABS351H1
DR=HUM/SOC SCI; BR=1

## ABS353H1 First Nations Politics in Canada [24L]

 This course examines recent trends in First Nations politics and their effects on the social, economic and political lives of First Nations Peoples. It provides students with an in-depth understanding of the socio-political and cultural context for First Nations societies in contemporary settings. It explores
## Aboriginal Studies

the legacies of the Indian Act, the tabling of the 1969
White Paper and responses to it, the emergence of current Indigenous political movements, Constitutional issues, First Nations citizenship, self-governance and land claims.
Prerequisite: ABS201Y1
DR=HUM/SOC SCI; BR=3
JPA354H1 Aboriginal Rights and Indigenous Law in Canada (formerly ABS354H1) [24L]
Examines Aboriginal rights and Indigenous law in Canada from a sociopolitical perspective. Studies key cases of contemporary Aboriginal case law, Section 35 of the Constitution, issues related to criminal and restorative justice, customary law and Indigenous legal traditions and lawmaking.
Prerequisite: JPA308H1/POL 308H1 and ABS201Y1
Exclusion: ABS354H1
DR=HUM/SOC SCI; BR=3

## ABS360Y1 Politics and Process of Reconciliation in

 Canada [48L]This course uses relationship-building methodologies to develop skills and explore the concept and processes of reconciliation. Through class discussion, guest speakers, and comparative readings on Canadian and Indigenous colonial history, Indigenous organizing and solidarity movements, students will examine reconciliation and determine whether it is a different process than decolonization.
Prerequisite: ABS201Y1 or permission of instructor
Recommended Preparation: ABS201Y1
DR=SOC SCI; BR=3
ABS398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None
ABS399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None

## ABS402H1 Traditional Indigenous Ecological Knowledge [36L]

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
DR=HUM/SOC SCI; BR=2
ABS403H1 Aboriginal People in Urban Areas [24L]
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
DR=HUM/SOC SCI; BR=3
ABS405Y1 Indigenous Thought \& Expression: Creative Non-fiction [48S]
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
DR=HUM; BR=2

## JFP450H1 Aboriginal Issues in Health and Healing [24L]

This course consists of an examination of health and healing from a holistic perspective (mental, physical, emotional, spiritual) and how colonialism, culture, and public policy have impacted the health of Aboriginal peoples in the present day. This course is built around a case-based project in which students working in interdisciplinary groups take on the role of a traditional Aboriginal healer, and then assess their healing strategy from a biomedical perspective. (Offered by the Faculty of Pharmacy)
DR=HUM/SOC SCI; BR=3
ABS460Y1 Methodology in Aboriginal Studies [72L] 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: ABS 201 Y 1 + permission of the instructor + 4th year status in Specialist or Joint Specialist program in Aboriginal Studies.
DR=HUM/SOC SCI; BR=3

## JPA461Y1 Globalization and Indigenous Politics (formerly JPA461H1) [48S]

This course explores the intersections of globalization and indigenous politics and introduces students to critical considerations of globalization from the perspective of indigenous peoples. It investigates the dominant economic paradigm as the historical outcome of colonization and examines political and economic alternatives and challenges that various indigenous struggles embody and embrace. Issues explored in the course include indigenous epistemologies, impacts of globalization on indigenous peoples, international indigenous organizing, democratization and political participation, human rights, indigenous economies, contested sovereignties and indigenous social movements. It examines indigenous communities as heterogeneous locations where not only impacts of globalization but forms of engagement and resistance take various forms. (Given by the Department of Political Science and the Aboriginal Studies Program)
Prerequisite: POL201Y1/permission of instructor Exclusion: POL410H1F (taken in 2009-10); JPA461H1
Recommended Preparation: Studies in Indigenous/
Aboriginal politics or law; studies in globalization DR=SOC SCI; BR=3

## Aboriginal Studies

## JPA462H1 Contemporary Indigenous Theory and Political Thought [24S]

Explores some of the key texts of contemporary critical Indigenous theory and political thought. Provides students with an in-depth understanding of the development of Indigenous critical and political thought in the past two decades. Key texts include: Deloria, Vine Jr.1999. Spirit \& Reason; Waters, Anne. 2004. American Indian thought: Philosophical essays; Muecke, Stephen. 2004. Ancient and Modern: Time, Culture, and Indigenous Philosophy; Turner, Dale. 2006.This is Not a Peace Pipe and Borrows, John (2010). Drawing out law. (Given by the Department of
Political Science and Aboriginal Studies Program)
Prerequisite: ABS300Y1/POL308H1/JPA308H1/permission of instructor, and completion of minimum 14.0 FCEs
DR=SOC SCI; BR=3

## ABS491Y1 Topics in International Indigenous Studies

 [48S]This seminar provides an in-depth examination of Indigenous studies in international contexts. Content in any given year depends on the instructors. See Aboriginal Studies website for more detail.
Prerequisite: ABS201Y1 and two additional ABS designator full-course equivalents.
Recommended Preparation: ABS360Y1
DR=HUM/SOC SCI; BR=3

## ABS495Y1 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 DR=HUM/SOC SCI; BR=None

## ABS496H1 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
DR=HUM/SOC SCI; BR=None
ABS497H1 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
DR=HUM/SOC SCI; BR=None

## 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
DR=HUM/SOC SCI; BR=None

## Millie Rotman Shime Academic Bridging Program

The Academic Bridging Program enables mature students who are at least 20 years of age (decreasing the minimum age requirement to 19 years of age is currently being considered) 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: ENG185Y1 (Introduction to the Study of Literature), JWH100Y1 (Canadian History), and JWU100Y1 (Contemporary Canada).

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

## Academic Bridging_Program Courses

## Note

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

## ENG185Y1 Introduction to the Study of Literature

 [72L]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 course may not count toward any English program.
DR=HUM; BR=1
JWH100Y1 Canadian History [72L]
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. Students write short essays in and out of class and conduct library research in the preparation of major essays.
DR=HUM; BR=3
JWU100Y1 Contemporary Canada [72L]
This interdisciplinary, foundational 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. Students sharpen their academic skills in writing short essays, a book review, a research proposal and a standard research paper.
DR=HUM/SOC SCI; BR=1+3

## Actuarial Science

## 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
J. Stafford, M Sc, Ph D

Associate Professor and Associate Chair Graduate Studies
S. Jaimungal , BA Sc, M Sc, Ph D

Associate Professor and Associate Chair
(Undergraduate)
D. Brenner M Sc, Ph D

Professor and Associate Chair
Undergraduate Studies
S. Broverman, M Sc, Ph D, ASA

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
K. Knight, M 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

## Associate Professors

A. Badescu, B Sc, M Sc, Ph D
D. Brenner M Sc, Ph D
L.J. Brunner, MA, Ph D (UTM)
R. Craiu, B Sc, Ph D
S. Jaimungal, BASc, M Sc, PhD
F. Yao, B Sc, M Sc, Ph D

## Assistant Professors

B. Virg, Ph D (UTSC)
Z. Zhou, B Sc, Ph D

## Senior Lecturers

A. Gibbs, B Math, B Ed, M Sc, Ph D
A.M. Vukov, MA, ASA
A. Weir, B Sc, M Sc, Ph D (UTM)

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. ACT230H1 and 240H1, though somewhat technical, are courses 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 6022 (416978-5136)

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

Associate Chair, Undergraduate Studies: Actuarial Science Professor S Broverman; e-mail: sam@utstat.utoronto.ca

## Actuarial Science Programs

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.

## Actuarial Science Specialist (Science Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Required courses: MAT137Y1 with a final mark of at least $65 \%$ and ECO100Y1 with a final mark of at least $70 \%$.
(12 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.sa

First Year:

1. ECO100Y1 (70\%)
2. MAT137Y1 ( $65 \%$ )/MAT157Y1
3. MAT223H1/MAT240H1 (should be taken in first year) Second Year:
4. ACT240H1, ACT245H1, ACT247H1
5. MAT237Y1/MAT257Y1
6. STA257H1, STA261H1
7. MGT201H1

Higher Years:

1. ACT348H1, ACT349H1, ACT370H1, ACT451H1, ACT452H1, ACT455H1, ACT460H1, ACT466H1
2. STA302H1, STA347H1, STA457H1 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.
3. MAT246H1 recommended. Students who have an interest in pursuing studies in mathematical finance can take MAT224H1 and MAAT336H1. Required courses:

MAT137Y1 and ECO100Y1. These requirements will be strictly enforced. Students should expect prerequisite to be strictly enforced.
4. Students in the Actuarial Science Specialist program who have successfully completed ACT348H1 may be eligible to enroll in the following RSM courses (provided the appropriate prerequisites and corequisites are met): RSM430H1, RSM433H1, RSM437H1
5. CSC 108 H 1 recommended

## Actuarial Science Major (Science Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Required courses: MAT137Y1 with a final mark of at least 65\% and ECO100Y1 with a final mark of at least 70\%.
( 8.5 courses or their equivalent, including at least two fullcourse equivalents at the 300+-level)

First Year:

1. MAT137Y1 (65\%)/MAT157Y1
2. ECO100Y1 (70\%)
3. MAT223H1/MAT240H1 (should be taken in first year) Higher Years:
4. MGT201H1
5. ACT240H1, ACT245H1, ACT247H1, ACT348H1, ACT370H1
6. MAT237Y1/MAT257Y1
7. STA257H1, STA261H1

5 Two of: ACT349H1, ACT451H1, ACT452H1, ACT455H1, ACT460H1, STA302H1, STA347H1, STA457H1

## Actuarial Science Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## ACT230H1 Mathematics of Finance for Non-Actuaries [24L/12T]

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
DR=SCI; BR=5

## ACT240H1 Mathematics of Investment \& Credit [24L/12T]

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: MAT137Y1 (minimum grade 65\%)/MAT157Y1
Exclusion: ACT230H1
DR=SCI; BR=5
ACT245H1 Financial Principles for Actuarial Science I [24L/12T]
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 (minimum grade 65\%)/ MAT157Y1
DR=SCI ; BR=5
ACT247H1 Introductory Life Contingencies [36L]
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; MAT137Y1 (minimum grade 65\%)/ MAT157Y1; STA257H1
DR=SCI; BR=5
ACT348H1 Advanced Life Contingencies [36L]
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); ACT247H1 (minimum grade C); (STA257H1,STA261H1); MAT237Y1

## DR=SCI; BR=5

## ACT349H1 Corporate Finance for Actuarial Science

 [24L/12T]Actuarial applications of financial mathematics and economics.
Prerequisite: ACT240H1 (minimum grade C); ACT245H1 (minimum grade C); ACT247H1 (minimum grade C); (STA257H1, STA261H1); MAT237Y1
Exclusion: ECO358H1, ECO359H1, MGT331Y1, MGT337Y1 DR=SCI; BR=5

## ACT370H1 Financial Principles for Actuarial Science II [36L]

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); ACT247H1 (minimum grade C); (STA257H1,STA261H1); MAT237Y1
Exclusion: MGT438H1
DR=SCI; BR=5

## ACT398H0 Independent Experiential Study Project [TBA]

An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI ; BR=5

## Actuarial Science

## ACT399Y0 Independent Experiential Study Project [TBA]

An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI ; BR=5

## ACT451H1 Loss Models [36L]

Loss models policy adjustments, frequency and severity models, compound distributions.
Prerequisite: Pre- or co-requisite: STA261H1
Corequisite: Pre- or co-requisite: ACT348H1, STA347H1
DR=SCI ; BR=5

## ACT452H1 Loss Models II [36L]

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: ACT348H1, ACT451H1; STA261H1, STA347H1 DR=SCI; BR=5

## ACT455H1 Advanced Topics in Actuarial Science [36L]

Advanced life contingencies, multiple decrement theory, insurance policy expenses, multi-state transition models, Poisson processes.
Prerequisite: ACT348H1; STA347H1
DR=SCI; BR=5

## ACT460H1 Stochastic Methods for Actuarial Science [36L]

Applications of the lognormal distribution, Brownian motion, geometric Brownian motion, martingales, Itos limma, stochastic differential equations, interest rate models, the Black-Scholes model, volatility, value at risk, conditional tail expectation.
Prerequisite: ACT370H1; STA347H1
DR=SCI; BR=5

## ACT466H1 Credibility and Simulation [36L]

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; STA261H1, STA347H1
DR=SCI; BR=5
ACT470H1 Advanced Pension Mathematics [36L]
Topics in pension mathematics; funding methods for pension
plans. (Offered in alternate years)
Prerequisite: ACT348H1 or permission of instructor
Corequisite: ACT455H1
DR=SCI ; BR=5
ACT471H1 Actuarial Applications of Finance [36L]
Assets, liability and investment management for pension plans. (Offered in alternate years)
Prerequisite: ACT349H1/ /MGT337Y1/(ECO358H1, ECO359H1) or permission of instructor
DR=SCI; BR=5
ACT473H1 Issues In Actuarial Practice [24L/24T]
Case study approach to current issues in life insurance, pension consulting and casualty actuarial practice. The focus of the course will be on communication and presentation.

Prerequisite: ACT348H1, ACT349H1, ACT451H1, ACT460H1
DR=SCI; BR=5
ACT496H1 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.
DR=SCI; BR=5
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.
DR=SCI; BR=5
ACT498Y1 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.
DR=SCI; BR=5
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.
DR=SCI; BR=5

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.

Associate Professor and Director of the Centre : Elspeth Brown

## American Studies Programs

## American Studies Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
6.5 full courses or equivalent (FCEs), specified as follows:

1. Students must take one of the 200-level gateway survey courses in American Studies, English, History, Geography, or Political Science indicated below.
2. Students must take USA300H1
3. Students must take at least .5 courses in American Studies at the 400+ level.
4. The Faculty of Arts \& Science requires American Studies majors to complete at least 0.5 FCE in Arts \& science courses in Breadth Requirement Category 5: The Physical and Mathematical Universes.
5. Overall, students must take 1.0 FCEs in at least three disciplines (and American Studies can be one of them).
6. At least 2.0 of the student's 6.5 courses must be at the $300+$ level or above.
First year:
Students are encouraged to take any pre-requisites for the 200-level courses, and/or enrol directly in USA200H1 as a first year student. Of the required second-year disciplinary survey courses only one, POL203Y1, has a pre-requisite; students interested in politics, therefore, should take one full POL course, a pre-req for POL203Y1. Other recommended courses at the first year level include: HIS106Y1 Natives, Settlers and Slaves: Colonizing the Americas, 1492-1804.
Second year:
USA200H1 Introduction to American Studies (recommended)
HIS271Y1 History of the United States since 1607 (or) ENG250Y1 American Literature (or) GGR240H1/GGR254H1 Historical Geography of North America/Geography USA (or)
POL203Y1 U.S. Government and Politics
Third year and Fourth Year: USA300H1 plus at least 1.0 $300+$ or above series courses from the list below, as well as .5 courses in American Studies at the 400+ level.

## American Studies Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including at least one 300+ series course in at least two disciplines)
Second year:

1. HIS271Y1 or ENG250Y1 or POL203Y1 or GGR240H1/ GGR254H1 Third year:
2. USA300H1

Second, third, or fourth year:
3. 2.5 courses from the following:

ABS302H1, ABS341H1; ANT357H1, ANT365H1;
DRM310H1; ECO423H1; ENG250Y1, ENG254Y1, ENG268H1, ENG275Y1, ENG360H1, ENG363Y1, ENG364Y1, ENG365H1, ENG368H1, ENG434H1/ ENG435H1/ENG436Y1/ENG437Y1, ENG438H1/ ENG439Y1; FAH375H1; GGR240H1, GGR254H1, GGR336H1, GGR339H1; HIS106Y1, HIS202H1, HIS271Y1, HIS300H1, HIS310H1, HIS316H1, HIS343Y1, HIS365H1, HIS366H1, HIS369H1, HIS370H1, HIS372H1, HIS374H1, HIS375H1, HIS376H1, HIS377H1, HIS378H1, HIS389H1, HIS393H1, HIS400H1, HIS401H1, HIS404H1, HIS408Y1, HIS436H1, HIS447H1, HIS463H1, HIS471H1, HIS473Y1, HIS475H1, HIS476H1, HIS478H1, HIS479H1, HIS484H1, HIS487H1; INI225Y1, INI322Y1, INI324Y1, INI383H1, INI397H1, INI467H1, INI482Y1, INI483H1, INI484H1; MUS306H1; POL203Y1, POL326Y1, POL420Y1, POL433H1; RLG315H1, RLG442H1; USA200H1, USA310H1, USA400H1, USA401H1, USA494H1, USA495Y1: VIC130H1, VIC132H1
NOTE: Other 300+ series courses with American content may be allowed; students should seek early approval of program credit for such courses.

## Courses eligible for program credit

Courses eligible for program credit include those appearing below. Please note that some of these courses have prerequisites; in all cases, and for updates on courses being offered, check individual department/program websites. Other 300+ series courses with American content may be allowed; students should seek early approval of program credit for such courses.

## American Studies

USA200H1 Introduction to American Studies
USA300H1 Theories and Methods in American Studies (req.)
USA310H1 Approaches to American Studies
USA400H1 Topics in American Studies I
USA401H1 Topics in American Studies II
USA494H1 Independent Studies USA495Y1 Independent Studies
Aboriginal Studies
ABS302H1 Aboriginal Representation in the Mass Media and Society
ABS341H1 North American Indigenous Theatre

## Anthropology

ANT357H1 Cultures of U.S. Empire
ANT365H1 Native America and the State

## American Studies

## Cinema Studies

INI225Y1 American Popular Film Since 1970
INI322Y1 Avant-Garde and Experimental Film
INI324Y1 American Filmmaking in the Studio Era
INI383H1 The Origins of the Animation Industry, 1900-1950: A Technosocial History
INI482Y1/INI483H1/INI484H1 Advanced Studies in Cinema (depending on topic)
Drama
DRM310H1 Contemporary American Drama

## Economics

ECO423H1 Topics in North American Economic History

## English

ENG250Y1 American Literature
ENG254Y1 Indigenous Literatures of North America
ENG268H1 Asian North American Literature
ENG275Y1 Jewish Literature in English
ENG360H1 Early American Literature
ENG363Y1 Nineteenth-Century American Literature
ENG364Y1 Twentieth-Century American Literature
ENG365H1 Contemporary American Fiction
ENG368H1 Asian North American Poetry and Prose
ENG434H1/ENG435H1/ENG436Y1/ENG437Y1 Advanced
Studies: American and Transnational Literatures
ENG438H1/ENG439Y1 Advanced Studies Seminar:
American and Transnational Literatures

## Fine Art History

FAH375H1 American Architecture: A Survey
Geography
GGR240H1 Historical Geography of North America
GGR254H1 Geography USA
GGR336H1 Urban Historical Geography of North America
GGR339H1 Urban Geography, Planning and Political Processes

## History

HIS106Y1 Natives, Settlers and Slaves: Colonizing the Americas, 14921804
HIS202H1 Gender, Race and Science
HIS271Y1 American History Since 1607
HIS300H1 Energy Cultures in North American History
HIS310H1 Histories of North American Consumer Culture
HIS316H1 History of Advertising
HIS343Y1 History of Modern Espionage
HIS365H1 History of the Great Lakes Region
HIS366H1 Aboriginal Peoples of the Great Lakes from 1815 to the Present
HIS369H1 Aboriginal Peoples of the Great Lakes from 1500
HIS370H1 The Black Experience in the United States Since the Civil War
HIS372H1 United States \& Great Depression
HIS374H1 American Consumerism - The Beginnings
HIS375H1 Politics and Protest in Postwar North America
HIS376H1 The United States: Now -and Then
HIS377H1 20th-Century American Foreign Relations
HIS378H1 America in the 1960s
HIS389H1 Topics in History (depending on topic)
HIS393H1 Slavery and the American South
USA400H1 The American War in Vietnam
HIS401H1 History of the Cold War
HIS404H1 Topics in North American Environmental History
HIS408Y1 History of Race Relations in America

HIS436H1 Culture and the Cold War
HIS447H1 Sex, Money, and American Empire
HIS436H1 Cloth in American History to 1865
HIS471H1 United States and Globalization
HIS473Y1 The United States and Asia in the Cold War Era
HIS475H1 Race, Segregation, and Protest: South Africa and the United States
HIS476H1 Voices from Black America
HIS478H1 Hellhound on my Trail: Living the Blues in the Mississippi Delta, 1890-1945
HIS479H1 American Foreign Policy Since World War II
HIS484H1 The Car in North American History
HIS487H1 Animal and Human Rights in the Anglo-American Culture
Music
MUS306H1 Popular Music in North America
Political Science
POL203Y1 U.S. Government and Politics
POL326Y1 United States Foreign Policy
POL349H1 Globalization and Urban Politics
POL420Y1 Elements of United States Foreign Policy
POL433H1 Topics in United States Government and Politics

## Religion

RLG315H1 Rites of Passage
RLG442H1 North American Religions

## Victoria College

VIC132H1 The USA in the Cold War
VIC130H1 Movies, Madness and the Modern Condition

## American Studies Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

USA200H1 Introduction to American Studies [24L]
An interdisciplinary introduction to the study of the United States and to the field of American Studies. Drawing from a variety of source materials ranging from political and literary to visual culture and material artifacts, this course examines the politics, history and culture of the U.S. A major emphasis will be learning to analyze primary sources.
DR=HUM/SOC SCI; BR=3
USA300H1 Theories and Methods in American Studies (formerly USA300Y1) [24L]
This course, required for majors and minors but open to all who have met the pre-req, explores a range of approaches to the field of American Studies. The course is organized around the decade of the 1920s, a period of tremendous social, political, and economic change as the U.S. emerged from WWI as a global industrial power and Americans debated competing ideas about the meanings of modernity. The course looks at the 1920s through a series of thematic weeks, drawing from interdisciplinary primary and secondary sources, such as black migration and urban modernities; gender, sexuality, and global beauty culture; immigration policy and racial formation; modernism in the visual arts;

## American Studies

Prohibition and gangsters; market empires and global commodity chains. Students will be introduced to some of the many theories and methods that have animated the field of American Studies, including historical methods; formal analysis of visual and literary texts; commodity chain analysis; race, commodity, gender, diaspora and affect.
Prerequisite: HIS271Y1/ENG250Y1/POL203Y1/GGR240H1/
GGR254H1
Exclusion: USA300Y1
DR=HUM/SOC SCI; BR=3
USA310H1 Approaches to American Studies [24L]
Topic for Spring 2011: Technology and American LifeThis course examines the place of technology in American culture from the 18thcentury to the present, with a particular focus on the entanglement of commerce (money; markets; manufacturing; industry) with life itself (humans; animals; plants and microbes). What counts as an American life? How have different kinds of life been granted different kinds of value, both historically but also by scholars in the interdisciplinary field of American Studies? How has technology figured in the production, management, taking and (more recently) banking of American life? And how has American life (in all its varied forms and scales) shaped the history of technology? Readings pair recent scholarship with literary and theoretical texts. Key sites of study range from slave pens, iron mills, farms, factories, hospitals and prisons to nuclear test sites, dead malls, toxic ghost towns and organ banks.
Prerequisite: At least two courses from the American Studies list or USA 300 H 1
DR=HUM/SOC SCI; BR=None
USA400H1 Topics in American Studies I [24S]
Topic for fall 2010: Taking Shots at the Man: Assassination and the American PresidencyThis interdisciplinary seminar focuses on political violence directed at the U.S. President from the Civil War to the War on Terror. At key historical moments of national crisis, the office of the Presidency has repeatedly become a target of assassination. While much can be learned by investigating the grievances articulated by assassins, interpretations of their explanations shifted considerably as their acts reverberated through American culture. Public debates surrounding these acts of violence have been framed by historically-specific notions of race, class, gender, and mental fitness. In this class we will cover several assassination attempts from 1865-2001 through interwoven themes of power and memory. As a capstone course, students will be required to pursue original research on a topic of their choice, and write a 25 page research paper.
Prerequisite: At least two courses from the American Studies list
DR=HUM/SOC SCI; BR=None
USA401H1 Topics in American Studies II [24S]
In depth examination of specific themes relating to American Studies.
Prerequisite: At least two courses from the American Studies list
DR=HUM/SOC SCI; BR=None

USA494H1 Independent Studies
Independent Studies.
DR=HUM/SOC SCI; BR=None
USA495Y1 Independent Studies Independent Studies. DR=HUM/SOC SCI; BR=None

## Anatomy

## Faculty

## Professor Emerita

P.A. Stewart, PhD

## Associate Professor and Chair of the

Department
Cindi Morshead, PhD

## Professors

A.M. Agur, MSc, PhD
J.A. Saint-Cyr, MSc, PhD
I.M. Taylor, MD
M.J. Wiley, MSc, PhD

## Assistant Professors

P. Koeberle, PhD
H.S. Sun, MD, MSc, PhD

## Lecturers

B. Ballyk, MSc, PhD
J. Laprade, PhD

## Anatomy Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
ANA300Y1 Human Anatomy and Histology [86L/18P]
Structure of the human body and its relationship to function.
Basic Human Histology, Gross Anatomy, and Neuroanatomy.
Prerequisite: BIO130H1/BIO150Y1
DR=SCI; BR=4
ANA301H1 Human Embryology [48L]
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: BIO130H1/BIO150Y1
DR=SCI; BR=4
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
$\mathrm{DR}=\mathrm{SCI} ; \mathrm{BR}=4$

## Anthropology

## Faculty

University Professor Emeritus
R.B. Lee, MA, Ph D, FRSC

Professors Emeriti
F.D. Burton, MA, Ph D (UTSC)
J.J. Chew, MA, Ph D
R.B. Drewitt, Ph D
M.R. Kleindienst, MA, Ph D (UTM)
J. Mavalwala, M Sc, Ph D
F.J. Melbye, MA, Ph D (UTM)
S. Nagata, MA, Ph D (U)
S.B. Philpott, MA, Ph D
A.K. Ray, M Sc, Ph D
W.J. Samarin, BA, Ph D
B.A. Sigmon, MS, Ph D (UTM)
G.A. Smith, MA, Ph D (U)
D.H. Turner, BA, Ph D (T)

## Associate Professors Emeriti

M.A. Latta, MA, Ph D (UTSC)
M.D. Levin, MA, Ph D (N)

## 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
M. Chazan, M Phil, Ph D (V)
G.G. Coupland, MA, Ph D
G.W. Crawford, MA, Ph D, FRSC (UTM)
M. Danesi, MA, Ph D, FRSC (V)
T.M. Friesen, MA, Ph D
I. Kalmar, MA, Ph D (W, V)
M.J. Lambek, MA, Ph D, FRSC (UTSC)
T. Li, MA, Ph D (U)
H.V. Luong, MA, Ph D
S.K. Pfeiffer, MA, Ph D
D. Sellen, MA, Ph D

## Associate Professors

S. Bamford, MA, Ph D (UTSC)
J. Barker, MA, Ph D
H. Cunningham, MA, Ph D (U)
G.S. Gillison, BA, Ph D (S, T)
S. Lehman, MA, PhD
B. McElhinny, MA, Ph D
H. Miller, MA, PhD (UTM)
V. Napolitano, MA, Ph D
E. Parra, BS, Ph D (UTM)
T.L. Rogers, MA, PhD (UTM)
T. Sanders, MA PH D (UTM)
L.A. Sawchuk, MA, Ph D (UTSC)
M. Schillaci, MA, PH D (UTSC)
J. Sidnell, MA, Ph D (UTM)
K. Sieciechowicz, MA, Ph D (U)
D.G. Smith, MA, Ph D (UTM)
J. Song, Ph D
H. Wardlow, MA, Ph D, MPH

Assistant Professors
F. Cody, MA, Ph D (UTM, AI)
G. Daswani, MSc, Ph D (UTSC)
N. Dave, MA, Ph D
G. Dewar, MA, Ph D (UTSC)
C. Krupa, MA, Ph D (UTSC)
L. Mortensen, MA, Ph D (UTSC)
A. Muehlebach, MA, Ph D (UTM)
J. Parga, MA, Ph D (UTSC)
A. Paz, Ph D (UTSC)
S. Satsuka, MA, Ph D
M. Silcox, Ph D (UTSC)
E. Swenson, MA, Ph D
A. Yao, MA, Ph D (UTM)
D. Young, MA, Ph D (UTSC)

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 peoples 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 nonhuman 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.

## Anthropology

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

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, HAJ, JAL and JGA.


## Anthropology Major (General) (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Courses for admission: ANT100Y1 with a final mark of at least $67 \%$ or ANT200Y1 or ANT203Y1 or ANT204H1 or ANT207H1 with a final mark of at least $70 \%$.

## Major program:

(6.5 full courses or their equivalent)

First and/or Second Year

1. ANT100Y1
2. ANT207H1
3. 1.0 FCE from ANT200Y1, ANT203Y1
4. 0.5 from ANT204H1, ANT208H1, ANT253H1

Upper years
5. 2.5 FCE at the $300+-l e v e l$ from one of Groups A, B, or C, including at least 0.5 FCE at the 400 -level.
6. 1.0 additional FCE from a Group other than that used to meet requirement \#5

## Anthropology Minor (General) (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Courses for admission: ANT100Y1 with a final mark of at least $67 \%$ or ANT200Y1 or ANT203Y1 or ANT204H1 or ANT207H1 with a final mark of at least $70 \%$.

## Minor program:

(4 full courses or their equivalent including at least one 300level course; excluding ANT497Y/ANT498H/ ANT499H)
First and/or Second Year

1. ANT100Y1
2. 2 FCE's from ANT200Y1, ANT203Y1, ANT207H1, ANT253H1
Upper years
3. One full course equivalent at the 300 -level from Groups A, B, or C

## Anthropology Major (Biological) (Science Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Courses for admission: ANT100Y1 with a final mark of at least $67 \%$ or ANT203Y1 with a final mark of at least $70 \%$.
( 7.5 full courses or their equivalent, including at least 2 FCE at the $300+$ level, 0.5 FCE of which must be at the 400-level)
First Year and/or Second Year:

1. BIO 120 H 1
2. ANT 100 Y 1 or BIO 220 H 1 . If BIO 220 H 1 is taken, students must take an additional 0.5 FCE in ANT
3. ANT203Y1

Upper Years:
4. 2.0 FCE from ANT208H1, ANT333Y1, ANT334H1, ANT335Y1, ANT336H1
5. 2.5 additional FCE from: Group B and/or ANT406H1, ANT415Y1, ARH312Y1
6. 0.5 FCE at the 400 -level from Group B

## Anthropology Specialist (Society, Culture, and Language) (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.

Courses for admission: ANT207H1 with a final mark of at least $70 \%$.
(10 full courses or their equivalent, including at least 2 FCE at the 400 level)
First and/or Second Year

1. ANT204H1 and ANT207H1

Upper years
2. ANT370H1 and ANT380H1
3. 6 FCE from Group C including at least 0.5 FCE course from Subgroup C(i)
4. ANT 475 H 1 and an additional 1.5 FCE at the 400 -level Note: Students who enrolled in the Specialist in Anthropology (Social/Cultural) in 2009-10 or 2010-11 and who did not take ANT210H1 are strongly encouraged to take ANT380H1, but may instead take an additional half course from Group C

## Anthropology Major (Society, Culture, and Language) (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Courses for admission: ANT100Y1 with a final mark of at least $67 \%$ or ANT207H1 with a final mark of at least $70 \%$.
(6.5 full courses or their equivalent including at least 2.0 FCE at the 300+ level and 1 FCE at the 400 level)
First and/or Second Year

1. ANT207H1
2. ANT204H1 or ANT253H1

Upper years
3. ANT370H1 or ANT325H1
4. Five additional FCE from Group C including at least 1 FCE at the 400 level. Students who want to focus more specifically on the role of language in culture and society should take ANT253H1, ANT325H1, and courses in the C (ii) Subgroup

## Anthropology Groups

Group A: (Archaeology)
ANT200Y1, ANT299Y1, ANT311Y1, ANT314H1, ANT315H1, ANT316H1, ANT317H1, ANT318H1, ANT319Y1, ANT320H1, ANT406H1, ANT407H1, ANT409H1, ANT410H1, ANT411H1, ANT412H1, ANT415Y1, ANT416H1, ANT419H1, ANT420H1, ANT497Y1/ANT498H1/ANT499H1; ARH305H1, ARH306Y1, ARH309H1, ARH312Y1, ARH360H1, ARH361H1, ARH482H1, ARH495H1

## Group B: (Biological)

ANT203Y1, ANT208H1, ANT299Y1, ANT330Y1, ANT333Y1, ANT334H1, ANT335Y1, ANT336H1, ANT371H1, ANT430H1, ANT432H1, ANT433H1, ANT434H1, ANT435H1, ANT436H1, ANT481H1, ANT497Y1/ANT498H1/ANT499H1

Group C: (Society, Culture, and Language)
ANT110H1, ANT204H1, ANT207H1, ANT208H1, ANT299Y1, ANT322H1, ANT323Y1, ANT324H1, ANT343H1, ANT345H1, ANT346H1, ANT347Y1, ANT348H1, ANT350H1, ANT351H1, ANT353H1, ANT356H1, ANT358H1, ANT363Y1, ANT364Y1, ANT366H1, ANT367Y1, ANT369H1, ANT370H1, ANT371H1, ANT373H1, ANT374H1, ANT376H1, ANT378H1, ANT380H1, ANT435H1, ANT440H1, ANT441H1, ANT442H1, ANT444Y1, ANT445H1, ANT450H1, ANT451H1, ANT452H1, ANT454H1, ANT456H1, ANT457H1, ANT460H1, ANT462H1, ANT465H1, ANT469H1, ANT475H1, ANT480H1, ANT484H1, ANT490Y1, ANT497Y1/ANT498H1/ANT499H1; HAJ453H1; JNH 350H1; NEW250Y1

Subgroup C (i): (Society, Culture and LanguageArea)
ANT340H1, ANT341H1, ANT352H1, ANT354H1, ANT365H1, ANT377H1, ANT446H1, ANT467H1, ANT468H1

Subgroup C(ii): (Society, Culture and Language -Linguistic)
ANT253H1, ANT325H1, ANT329H1, ANT427H1, ANT444Y1, ANT483H1, ANT497Y1/ANT498H1/ANT499H1; JAL328H1, JAL353H1, JAL355H1, JAL401H1

## See also

## Aboriginal Studies - See Aboriginal Studies

Archaeology - See Archaeology

## Environmental Anthropology Minor- See Centre

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

## Anthropology Courses

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

## Anthropology Social Science Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
ANT100Y1 Introduction to Anthropology [48L/12T]
Society and culture from various anthropological perspectives: sociocultural, biological, archaeological, and linguistic.
$\mathrm{DR}=\mathrm{SOC} \mathrm{SCI} ; \mathrm{BR}=3+4$

## ANT110H1 Representing Nature [36L]

The distinction between nature and culture is often described as a central feature of "modernity" and it certainly remains relevant to many current debates about ecology and environment. This course explores various approaches to "nature" through a variety of written and visual texts, and focuses on representations of the nature/culture dualism. The course's main objectives are 1) to engender discussion and debate about "nature" and how it is represented in a variety of contemporary texts; 2) introduce students to some of the key positions on "nature" among classical and contemporary social theorists; and 3) expose students to pressing ecological issues in a way that fosters their critical engagement with "nature frameworks."

## DR=SOC SCI; BR=1

ANT200Y1 Introduction to Archaeology [48L/24T] How did art and technology develop in the course of human evolution? What led to the development of agriculture and settled village life? How did social inequality and urbanism emerge? This course takes a global perspective to explore the archaeological evidence that sheds light on these questions and other aspects of prehistory and early history. Students will engage with the challenges posed by new discoveries and also with recent developments in archaeological method and theory. The goal of the course is to involve students with the current state of archaeological research and some of the major issues archaeologists work to address.
Recommended Preparation: ANT100Y1
DR=SOC SCI; BR=3

## ANT204H1 Anthropology of the Contemporary World (formerly ANT204Y1) [24L/12T]

A course focused on recent anthropological scholarship that seeks to understand and explain the transformation of contemporary societies and cultures. Topics may include some of the following: new patterns of global inequality, war and neo-colonialism, health and globalization, social justice and indigeneity, religious fundamentalism, gender

## Anthropology

inequalities, biotechnologies and society etc.
Exclusion: ANT204Y1
Recommended Preparation: ANT100Y1
DR=SOC SCI; BR=3

## ANT207H1 Core Concepts in Social and Cultural Anthropology [24L/12T]

Society, culture, kinship, exchange, community, identity, politics, belief: these and other core concepts are explored in this course, which lays the foundation for advanced courses in social and cultural anthropology.
DR=SOC SCI ; BR=3

## ANT208H1 Medical Anthropology: an Evolutionary Perspective on Human Health [24L/10T]

Introduction to applied evolutionary medical anthropology. It explores evidence for the evolution of human vulnerability to disease across the life cycle (conception to death) and implications for health of contemporary populations in gendered cross-cultural perspective.
Recommended Preparation: ANT100Y1/BIO120H1
DR=SOC SCI/SCI; BR=4

## ANT253H1 Language \& Society [24L]

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 analysisphonology, morphology, grammar, syntax, and semantics. The objective of the course is to provide a broad framework for understanding the role of language in society.
Exclusion: JAL253H1
Recommended Preparation: ANT100Y1
DR=SOC SCI; BR=2

## ANT299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SOC SCI ; BR=None

## ARH305H1 Archaeological Interpretation [24L]

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 PostProcessual Archaeology.
Prerequisite: ANT200Y1
DR=SOC SCI; BR=2

## ARH306Y1 Archaeological Field Methods [12L/61P]

 Intensive instruction in archaeological field methods and acquisition of field skills, including archaeological search and survey, site mapping, laying out excavation grids, use of theodolites, total station, and GPS, stratigraphic excavation, stratigraphy, field recording, screening sediment, Ontario license and reporting requirements. Normally this course would take place on campus or at Joker's Hill, in summer. Prerequisite: ANT200Y1/NMC260Y1/NMC261Y0 DR=SOC SCI; BR=NoneARH309H1 Archaeology, Ethics, and the Public [24L]
An analysis of ethics in contemporary archaeology that covers reburial and repatriation, interpretation of the
archaeological record in the context of historically oppressed groups, ethnic minorities, and non-western societies, the ethics of collecting and managing cultural property, relationships with the media, the debates surrounding looting, and other issues.
Prerequisite: ANT200Y1
DR=SOC SCI; BR=3

## ANT311Y1 Archaeological Fieldwork

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
DR=SOC SCI; BR=None
ARH312Y1 Archaeological Laboratory [28L/44P] 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, STA221H1, STA250H1, STA257H1, STA261H1, ANTC35H3**. Note: *Geography
Pre- or co-requisites waived for Anthropology and Archaeology students; ** to be taken at the Scarborough Campus
DR=SOC SCI ; BR=5
ANT314H1 Archaeology of the Pacific Northwest [24L]
An archaeological survey of the human prehistory of northwestern North America from the late Pleistocene to the time of early European contact. Geographical coverage will include the Northwest Coast, California, and the Intermontane Plateau.
Prerequisite: ANT200Y1
DR=SOC SCI; BR=3

## ANT315H1 Arctic Archaeology [24L]

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
DR=SOC SCI; BR=3
ANT316H1 Ancient Cultures of Mesoamerica [24L]
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
DR=SOC SCI; BR=3

## ANT317H1 Archaeology of Eastern North America [24L]

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: ANT200Y1
DR=SOC SCI; BR=3

## ANT318H1 The Preindustrial City and Urban Social Theory [24L]

This course offers a comparative examination of the rise and organization of ancient cities through a detailed investigation of urban social theory. We will explore competing anthropological interpretations of urban process while probing the political, ideological, and economic structures of the worlds earliest cities. Students will have the opportunity to consider a broad range of subjects, including mechanisms of city genesis; urban-rural relations; the intersections of city and state; and historical variation in urban landscapes, ideologies, and political economies.
Prerequisite: ANT200Y1
DR=SOC SCI; BR=3

## ANT319Y1 Archaeology of North America (formerly ANT310Y1) [48L]

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.
Prerequisite: ANT200Y1
Exclusion: ANT309H1, ANT310Y1
DR=SOC SCI; BR=3
ANT320H1 Ancient Cultures of the Andes [24L]
This class offers intensive study of the archaeology and culture history of the Andean region prior to the Spanish conquest. The complexity and distinctiveness of Andean social organization, political institutions, religious ideologies, and economic practices have long fascinated anthropologists. Ultimately, the course will explore Andean cultures over a 10,000 year period, highlighting key debates, current research projects, and innovative theoretical approaches shaping contemporary archeological scholarship in South America and beyond.
Prerequisite: ANT100Y1 or ANT200Y1
DR=SOC SCI; BR=3
ANT322H1 Anthropology of Youth Culture [24L]
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: ANT204H1
DR=SOC SCI; BR=3

## ANT323Y1 Social Theory through Everyday Life [48L]

Theories of culture and society, with examples from ordinary life and fantasy and their popular expressions.
Prerequisite: Any 200+ course in ANT/SOC
DR=SOC SCI; BR=1

## ANT324H1 Tourism \& Globalization (formerly ANT443H1) [24L]

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 peoples everyday lives.
Prerequisite: ANT204H1 or ANT207H1
Exclusion: ANT443H1
DR=SOC SCI; BR=3

## ANT325H1 Language in Anthropological Thought (formerly ANT425H1) [24L]

How ideas about language fit into the overall views of humankind as expressed by selected anthropologists, linguists, sociologists, and philosophers.
Prerequisite: ANT204H1/ ANT253H1
Exclusion: ANT425Y1; ANT425H1
DR=SOC SCI; BR=2

## JAL328H1 Writing Systems [24L]

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) (Not offered every year)
Prerequisite: ANT100Y1/LIN100Y1/LIN200H1
DR=SOC SCI; BR=2

## ANT329H1 Language \& Power Structure (formerly ANT329Y1) [24L]

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, advertising, and politics with a focus on North America.
Prerequisite: ANT204H1/ANT207H1/ANT253H1/VIC223Y1/ one of 200+ series H1 course in SOC/POL/LIN/Women's Studies
Exclusion: ANT329Y1
DR=SOC SCI; BR=2
ANT340H1 Anthropology of Latin America [24L]
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: ANT204H1
DR=SOC SCI; BR=3

## ANT341H1 China in Transition (formerly ANT341Y1) [24L]

This course offers a general introduction to contemporary China in a global context from an anthropological perspective. It covers four major aspects of Chinese culture and society: Political Economy, Social Relations, Modernities and Modernization, and Overseas Chinese.
Prerequisite: ANT207H1
Exclusion: ANT341Y1
DR=SOC SCI; BR=3

## ANT343H1 Social Anthropology of Gender (formerly

 ANT343Y1) [24L]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.

## Anthropology

Prerequisite: ANT207H1
Exclusion: ANT343Y1
DR=SOC SCI; BR=3
ANT345H1 Global Health: Anthropological Perspectives [24L]
This course examines medical anthropologys contributions to, and critiques of, global health policies and programs. Topics covered include: colonialism and health, the political ecology of disease, indigenous constructions of illness and healing, medical pluralism, the politics of primary health care, population policies, reproductive health, and AIDS.
Prerequisite: ANT207H1
Recommended Preparation: ANT348H1
DR=SOC SCI; BR=3
ANT346H1 Anthropology of Food [24L]
Social anthropological perspective on the nature and meaning of food production, culinary cultures, industrial food, food as metaphor, and famine and hunger.
Prerequisite: ANT100Y1/ANT204H1
DR=SOC SCI; BR=3

## ANT347Y1 Metropolis: Global Cities [48L]

The role of culture, cultural diversity, space and performance in urban institutions and settings. The cultural context and consequence of urbanization.
Recommended Preparation: ANT204H1
DR=SOC SCI; BR=3

## ANT348H1 Anthropology of Health (formerly ANT348Y1) [24L]

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.
Prerequisite: ANT207H1
Exclusion: ANT348Y1
DR=SOC SCI; BR=3

## ANT350H1 Anthropology of Work [24L]

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: ANT207H1

DR=SOC SCI; BR=3
ANT351H1 Contested Environments [24L]
This course utilizes a social movements perspective to examine the various kinds of conflicts emerging over environment, including disputes over food, animal rights, parks, wilderness, energy, and water. Building on the anthropological literature on landscape and political ecology, this course explores the various ways in which social movement constituencies are responding to and engaging with the uncertain and uneven nature of environmental change.
Prerequisite: ANT204H1
DR=SOC SCI; BR=3
ANT352H1 South Asia: Practices, Theories, Representations (formerly ANT352Y1) [24L]
This course examines key themes in the constitution of South Asia as an area for ethnographic analysis.

Lectures and discussions will focus on classic works in the anthropology of South Asia, examining the rise of gatekeeping concepts such as caste, the village, collectivity, and the oppression of women. The course provides theoretical and historical perspectives for the anthropological study of contemporary South Asia.
Prerequisite: ANT207H1
Exclusion: ANT352Y1
DR=SOC SCI; BR=3
ANT353H1 Indigeneity Politics [24L]
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: ANT204H1
DR=SOC SCI; BR=3

## JAL353H1 Conversational Structures [36L]

An introduction to the detailed observation of ordinary conversational interaction, and to some of the main ways in which such interaction is organized. The focus is on developing the capacity to discern orderliness in the details of everyday interaction, and beginning independent research in this area. (Given by the Departments of Anthropology and Linguistics)
Prerequisite: LIN100Y1/LIN200H1/ANT253H1 DR=SOC SCI; BR=2

## ANT354H1 Japan in Global Context: Anthropological Perspectives (formerly ANT354Y1) [24L]

This course examines how what we know as Japan and its culture has been constructed through global interactions. Topics include gender and sexuality, race and ethnicity, social and family life, work and leisure, and Japanese identity amid changing global power relations.
Prerequisite: ANT204H1 or ANT207H1
Exclusion: ANT354Y1
DR=SOC SCI; BR=3
JAL355H1 Language and Gender [24L]
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 FCE at the 200-level in LIN/ANT/JAL/SOC/ WGS
Recommended Preparation: ANT204H1/ANT253H1/
SOC200H1/SOC214H1
DR=SOC SCI; BR=3
ANT356H1 Anthropology of Religion [24L]
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.

## Anthropology

Prerequisite: ANT204H1
DR=SOC SCI; BR=2

## ANT358H1 Medical Anthropology and Social Justice [24L/12T]

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 worlds population, based on class position, gender, and geographical region.
Prerequisite: ANT204H1
DR=SOC SCI; BR=3

## ARH360H1 Prehistory of the Near East (formerly ANT360Y1) [24L]

From earliest times through the rise of complex huntergatherers, and the food producing revolution to politically complex societies in Southwest Asia.
Prerequisite: ANT200Y1/NMC260Y1
Exclusion: ARH360Y1
DR=SOC SCI; BR=3

## 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
DR=SOC SCI; BR=None
ANT363Y1 Anthropology of State Societies [48L]
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.
Prerequisite: ANT207H1
Exclusion: ANT363H1
DR=SOC SCI; BR=3
ANT364Y1 Environment \& Globalization [48L]
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: ANT207H1
DR=SOC SCI; BR=3

## ANT365H1 Native America and the State (formerly ANT365Y1) [24L]

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: ANT204H1
Exclusion: ANT365Y1
DR=SOC SCI; BR=3

## ANT366H1 Anthropology of Social Movements: Theory and Method (formerly ANT366Y1) [24L]

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: ANT207H1
Exclusion: ANT366Y1
DR=SOC SCI; BR=3

## ANT367Y1 Indigenous Spirituality (formerly ANT367H1)

 [48L]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: ANT204H1
Exclusion: ANT367H1
DR=SOC SCI; BR=2

## ANT369H1 Anthropology in Action [24L]

This course highlights the diverse ways that social/cultural anthropologists engage with the world beyond the university. Students learn about the many practical applications of anthropological methods and theory. As well, the ethical and political complexities of applied anthropology and activism in anthropology are considered.
Prerequisite: ANT204H1
DR=SOC SCI; BR=3

## ANT370H1 Introduction to Social Anthropological Theory [24P]

An in-depth critical review of foundational ideas in the development of the practice of Anthropology. Topics may include questioning fieldwork, origins and legacies of functionalism, cultural materialism, politics of culture, power and political economy, globalization and post modernism, gender and post-structuralism.
Prerequisite: ANT207H1
DR=SOC SCI ; BR=3

## ANT371H1 Human Nutritional Ecology (formerly ANT471H1) [24L]

A detailed review of human dietary adaptations, subsistence strategies; and the suite of cognitive, cultural and life history traits that make humans so adaptable. Focus is on the relevance of the past to understanding the modern world food system and finding solutions to contemporary problems in population, food, and health.
Prerequisite: ANT203Y1/ANT204H1
Exclusion: ANT471H1
DR=SOC SCI/SCI; BR=3

## ANT373H1 Anthropology of Education [24L]

This course focuses on the role of formal education in contemporary societies around the world. Education and schooling have come to be accepted as essential for social development and economic growth. This claim is critically assessed in terms of how education systems reflect and shape society, economy and politics at local, national and global levels.

## Anthropology

Prerequisite: ANT207H1
DR=SOC SCI; BR=3

## ANT374H1 Rethinking Development, or the Improvement of the World [24L]

Development, or deliberate intervention to improve the lives of people deemed to be lacking, or left behind, has shaped the modern world for at least a century. Drawing on historical and ethnographic studies, this course examines the trajectory of development as a concept and practice, and traces its effects.
Prerequisite: ANT207H1
DR=SOC SCI; BR=3

## ANT376H1 Anthropology of Animals [24L]

The relationship between humans and other animals is one of the most hotly debated topics of our times. Through key classic and contemporary writings, this course introduces students to the interdisciplinary field of animal studies, and explores how anthropologists and other theorists have critically engaged in debates about animal and human distinctions.
Prerequisite: ANT204H1
DR=SOC SCI; BR=3

## ANT377H1 Transnational Korea in and outside the Peninsula [24L]

This course addresses reading ethnography as a tool to understand compressed and complex modernity such as Korean societies, both in and outside of the Korean peninsula. In particular, this course aims to develop students' critical thinking on class, ethnicity, gender, family, and migration in Korea and diasporic societies of Koreans in Canada, China, Japan, and US.
Prerequisite: Completion of at least 4 full course equivalents including 2 full course equivalents from Group C DR=SOC SCI; BR=3

## ANT378H1 Gift, Money, and Finance [24L]

This course introduces dialogue between anthropological literature and other disciplinary studies in regards to the economy and culture of gift and money transaction as a key aspect of human society. Studying the history of gift and money economy from agricultural societies and diverse developments of finance market culture in recent era through various perspectives (e.g., ethnographic, sociological, politico-economic, and historical views), this course aims to train students developing a critical understanding of capitalism.
Prerequisite: ANT204H1/ANT207H1
DR=SOC SCI; BR=3

## ANT380H1 Craft of Social/Cultural Anthropology (formerly ANT210H1) [36S]

This is an interactive course in which students conduct small ethnographic and library research projects, write up their results, and present their work to the class. By "doing anthropology" students will learn to think critically about the social theories underpinning ethnographic research, as well as the challenges of representing human practice.
Prerequisite: ANT204H1
Exclusion: ANT210H1
DR=SOC SCI; BR=3
ANT395Y0 Special Topics in Anthropology [48S]
Studies in anthropology taken abroad. Areas of concentration vary depending on the instructor and year offered.

Recommended Preparation: ANT100Y1/ANT204H1

## DR=SOC SCI; BR=None

ANT396Y0 Special Topics in Anthropology [48S]
Studies in anthropology taken abroad. Areas of concentration vary depending on the instructor and year offered.
Recommended Preparation: ANT100Y1/ANT204H1

## DR=SOC SCI; BR=None

ANT398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None
ANT399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None

## JAL401H1 Field Linguistics [48P]

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 and LIN331H1 or permission of the instructor
DR=SOC SCI; BR=2

## ANT406H1 Lithic Analysis [24L/12P]

Core reduction strategies, replication, experimental archaeology, use-wear, design approaches, ground stone, inferring behaviour from lithic artifacts.
Prerequisite: ANT200Y1, ARH312Y1, ARH305H1
DR=SOC SCI; BR=5

## ANT407H1 Inka and Aztec States [24L]

This course provides a comparative study of the emergence, organization, and transformation of the two historicallydocumented states of the native Americas: the Inka and the Aztec. Students will have the opportunity to analyze ethnohistorical and archaeological data in order to critically evaluate models of the pre-industrial state while gauging the anthropological significance of either convergence or particularity in the historical development of centralized political formations.
Prerequisite: ANT200Y1, ARH305H1
DR=SOC SCI; BR=3
ANT409H1 Landscape Archaeology [24L/12P]
Archaeological survey, spatial analysis of archaeological evidence over landscapes and territories, and ways archaeologists attempt to interpret landscapes, regional settlement systems, agricultural land use, regional exchange and communication, and past people's perceptions of or ideas about landscape.
Prerequisite: ARH305H1
Recommended Preparation: GGR270H1
DR=SOC SCI; BR=3
ANT410H1 Hunter-Gatherers Past \& Present [24S]
Examines the diversity of recent hunter-gatherer societies, as a source of analogues for understanding the archaeological record of past foraging peoples.
Prerequisite: ARH305H1
DR=SOC SCI; BR=3
ANT411H1 Advanced Archaeological Theory [24S]
Seminar in the critical examination of major schools of archaeological thought.

# Anthropology 

Prerequisite: ARH305H1
DR=SOC SCI; BR=2
ANT412H1 Historical Archaeology [16L/8P]
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/HIS384H1 DR=SOC SCI; BR=3

## ANT415Y1 Laboratory in Faunal Archaeo-Osteology [48P/48S]

Examination and interpretation of faunal material from archaeological
sites as evidence for culture.
Prerequisite: ARH312Y1
DR=SOC SCI/SCI ; BR=4+5
ANT416H1 Archaeology of Ritual and Identity [24L]
This course offers a comparative survey of archaeological approaches to ritual practice as it relates to identity politics, personhood, and the negotiation of power relations in past societies. An important goal of the seminar is to introduce students to social theories on the inherent materiality of ritual performance, whether orchestrated in everyday practice or in elaborate religious and political spectacles.
Prerequisite: Completion of a minimum of 12.0 FCEs
Recommended Preparation: ANT200Y1, ARH305H1 DR=SOC SCI; BR=2

## ANT419H1 Current Debates in Palaeolithic Archaelogy [24S] <br> Current research in Palaeolithic Archaeology reflecting emerging issues. <br> Prerequisite: ANT200Y1 or ANT203Y1 <br> DR=SOC SCI ; BR=3

ANT420H1 Archaeology of Inequality [24L]
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
DR=SOC SCI; BR=3

## ANT427H1 Language, Ideology, \& Political Economy [24S]

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: ANT253H1
Recommended Preparation: ANT329H1
DR=SOC SCI; BR=3

## ANT435H1 Anthropology of Childhood and Childcare

 [24L]A detailed review of the classic and recently emerging literature on the anthropology of children, childhood, and childcare. Focus is on theories for evolution of human parenting adaptations, challenges in research methodology
and implications for contemporary research, practice and policy in the area of care and nutrition of infants and children. Prerequisite: ANT203Y1
DR=SOC SCI; BR=4

## ANT440H1 Society in Transition [24L]

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.
Prerequisite: ANT207H1, at least one area course in anthropology
Exclusion: ANT440Y1
DR=SOC SCI; BR=3
ANT441H1 Love, Sex, and Marriage [24S]
Beginning with anthropologys early work on kinship, and ending with recent analyses of sex work and the globalization of ideologies of romantic love and companionate marriage, this course will investigate how emotional and sexual relationships are produced, used, conceptualized, and experienced both within particular societies and transnationally.
Prerequisite: ANT207H1 and ANT343H1
DR=SOC SCI; BR=3

## ANT442H1 Anthropology and New Technologies

 [24L]The relationship between technology and culture through a focus on reproductive, genetic and communications technologies.
Prerequisite: ANT204H1, a 300 level, or above, Society, Culture and Language course
DR=SOC SCI; BR=1

## ANT444Y1 Research Methods in Social \& Linguistic Anthropology [48S]

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: ANT207H1
DR=SOC SCI; BR=3
ANT445H1 Science as Culture and Practice [24S]
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: ANT207H1
Recommended Preparation: one science course
DR=SOC SCI; BR=3
ANT446H1 Anthropology of Western Europe: Issues and Ideas (formerly ANT446Y1) [24L] 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.

## Anthropology

Prerequisite: ANT204H1
Exclusion: ANT446Y1
DR=SOC SCI; BR=3

## ANT450H1 Nature, Culture and the City [24S]

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: ANT204H1, a 300-level course or above in
Society, Culture and Language
DR=SOC SCI; BR=3
ANT451H1 History of Anthropological Thought: The Search for Human Universals [24S]
This course concentrates on original late 19th Century to mid-20th Century works by Lewis Henry Morgan, Emile Durkheim, Arnold van Gennep, Marcel Mauss, Claude Levi-Stauss and others who tried to established universal principles of social and cultural life as classificatory kinship, sacred and profane, rites of passage, reciprocity, and structuralism.
Prerequisite: ANT207H1 and at least one full course equivalent in Society, Culture and Language DR=SOC SCI; BR=3

ANT452H1 Anthropology \& Human Rights [24S]
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: ANT204H1, one 300 level course in Society, Culture and Language
DR=SOC SCI; BR=3

## ANT454H1 The Anthropology of Music \& Art (formerly ANT360Y1) [24S]

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 or ANT367H1
Exclusion: ANT360Y1
DR=SOC SCI; BR=1

## ANT456H1 Queer Ethnography [24L]

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.
Prerequisite: ANT207H1 plus any 300-level course in Society,

Culture and Language
Exclusion: ANT343H1/ANT343Y1
DR=SOC SCI; BR=3

## ANT457H1 Anthropology of Material Culture [24L]

The course addresses the cultural and social significance of material culture in specific cultural settings, and the role that artifacts have played in the history of anthropological thought from early typological displays to the most recent developments of material culture studies.
Prerequisite: ANT200Y1 or ANT207H1 and a minimum of 12 FCEs
DR=SOC SCI; BR=1

## ANT460H1 Global Perspectives on Womens Health [24S]

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: ANT343H1/ANT348H1
DR=SOC SCI; BR=3
ANT462H1 Anthropology and the Intimate: Studies in Affect and Action [24S]
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: ANT207H1 plus any 300-level course in Society,
Culture and Language
DR=SOC SCI; BR=2
ANT465H1 Anthropology of Subjectivity [24S]
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: ANT204H1 and at least one other 300+ course in Society, Culture and Language
DR=SOC SCI; BR=2

## ANT467H1 Ethnographies of Contemporary South Asia [24S]

This seminar course explores critical issues in contemporary
South Asia through ethnographies centering on popular culture, globalization, gender and sexuality, activism, and development.
Prerequisite: ANT207H1, and at least one 300+ course in

# Anthropology 

Society, Culture and Language
Exclusion: ANT352Y1
Recommended Preparation: ANT352H1
DR=SOC SCI; BR=3

## ANT468H1 Ethnography of the Papua New Guinea Highlands [24S]

Since "first contact" in the mid-20th Century, Highlands ethnographies have played a central role in debates about kinship, systems of exchange and relations between the sexes in small scale societies. The course examines traditional warfare, sorcery, rites of passage, myths and ideologies of conception and "the person."
Prerequisite: ANT207H1
DR=SOC SCI; BR=3
$\begin{array}{ll}\text { ANT469H1 } & \begin{array}{l}\text { Uncommon Grounds: Inter-Cultural } \\ \text { Interactions in the Contemporary World }\end{array} \\ & {[24 \mathrm{~S}]}\end{array}$
Using historical and contemporary examples, this seminar course explores what happens when people with different cultural backgrounds meet and interact. A variety of anthropological analytics are used to provide students with the conceptual tools to understand such encounters in their own lives.
Prerequisite: ANT204H1
DR=SOC SCI; BR=1

## ANT475H1 Reading Ethnography [24P]

Students read several full-length ethnographies, both classical and contemporary, and debate what makes for sound ethnographic research and writing, as well as what ethnography is and "should" be as a genre of writing and representation.
Prerequisite: ANT207H1, ANT370H1
DR=SOC SCI; BR=3
ANT480H1 Special Topics in Anthropological Research [24S]
Unique opportunity to explore a particular anthropological topic in-depth. Topics vary from year to year.
Prerequisite: A 200+ level ANT course
DR=SOC SCI; BR=None
ARH482H1 Special Topics in Archaeology [24S]
Unique opportunity to explore a particular archaeological
topic in-depth. Topics vary from year to year.
Prerequisite: A 200+ level ANT course
DR=SOC SCI; BR=None
ANT483H1 Special Topics in Linguistic Anthropology [24S]
This course will focus on an advanced topic in Linguistic Anthropology.
Topic will vary from year- to-year.
Prerequisite: ANT204H1/ANT253H1/300 Level course in Society, Culture and Language
DR=SOC SCI; BR=2

## ANT484H1 Special Topics in Social Cultural Anthropology [24S]

Unique opportunity to explore a particular Social Cultural Anthropology topic in-depth. Topics vary from year to year.

Prerequisite: ANT207H1
DR=SOC SCI; BR=3

## ANT490Y1 Field Course in Social and Cultural Anthropology [24L/52P]

An instructor-supervised experiential study project in social and cultural anthropology. Course takes place in an offcampus setting.
Prerequisite: ANT204H1 and two additional Society, Culture and Language courses
DR=SOC SCI; BR=3

## ARH495H1 Archaeology Research Practicum

Laboratory or practical research on an archaeological project that emphasizes methods and research design in archaeology. Students must obtain the consent of a Supervisor before enrolling. Students are required to give an oral presentation of research results to an open meeting of the Archaeology Centre at the conclusion of the course. Application must be made to the Anthropology Department. Prerequisite: A minimum of 14 credits, permission of Supervisor and Undergraduate Coordinator. Exclusion: ANT497Y1
Recommended Preparation: ARH305H1, ARH312Y1
DR=SOC SCI; BR=None

## ANT497Y1 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.
DR=SOC SCI; BR=None

## ANT498H1 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.
DR=SOC SCI; BR=None

## 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

## Anthropology

Supervisor and Undergraduate Coordinator.
DR=SOC SCI; BR=None

## Anthropology Science Courses

ANT203Y1 The Nature of Humans [48L/24P]
This course examines where humans fit in the fabric of the natural world. It explores the history of ideas about humans in nature, humans as primates, the story of human evolution and modern human physical and genetic diversity.
Recommended Preparation: ANT100Y1/BIO120H1,
BIO220H1
DR=SCI; BR=4

## ANT208H1

See description in Social Science courses above.

## ANT330Y1 Paleoanthropology Field School (Offered on an irregular basis) [24L/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
DR=SCI; BR=4

## ANT333Y1 Living Primate Adaptations [48L/24P]

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.
Prerequisite: ANT203Y1
Exclusion: ANT333H1
Recommended Preparation: ANT334H1; BIO120H1, BIO220H1
DR=SCI; $B R=4$

## ANT334H1 Human Skeletal Biology (formerly ANT334Y1) [24L/24P]

Exploration of the development and maintenance of the human skeleton and dentition, with emphasis on application to archaeological, forensic and biomedical sciences.
Prerequisite: ANT203Y1
Exclusion: ANT334Y1
DR=SCI; BR=4

## ANT335Y1 Human Evolution [24L/36P]

This course takes the student on a survey of human evolution from our ape ancestors to modern humans. Students will learn to identify skulls, teeth and limb bones, explore hundreds of casts, and learn how researchers understand human origins and trends in the development of human anatomy and behavior.
Prerequisite: ANT203Y1
Exclusion: ANT429H1, ANT332H5, ANT333H5, ANT434H5,
ANTC17H3
DR=SCI; BR=4

ANT336H1 Evolutionary Anthropology Theory [24L]
This course will explore the foundational and leading concepts in evolutionary anthropology. Historically important readings and current concepts will be presented and discussed in the context of research, especially in areas of human population biology, ecology and the evolution of Homo sapiens. Topics will include behavioral ecology and life history theory, as well as a critique of the adaptationist program.
Prerequisite: ANT203Y1
DR=SCI; BR=4

## ANT371H1

See above (in social science section) for course description.

## ANT415Y1

See above (in social science section) for course description.
ANT430H1 Primate Conservation Biology [24L]
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
DR=SCI; BR=4

## ANT432H1 The Evolving Human Skull [12L/24P]

The comparative and functional anatomy of the human skull from an evolutionary perspective. Foci include cranial anatomy, the face, mastication, diet, brains and cognition. Includes an extensive lab component using a large collection of primate skeletons and fossil human casts.
Prerequisite: ANT335Y1
Exclusion: ANT326Y1
DR=SCI; BR=4
ANT433H1 The Evolving Human Body [12L/24P]
The comparative and functional anatomy of the human body from the neck down from an evolutionary perspective. Foci include body size and proportions, human posture and movement, manual dexterity and bipedalism. Includes an extensive lab component using a large collection of primate skeletons and fossil human casts.
Prerequisite: ANT335Y1
Exclusion: ANT326Y1
DR=SCI; BR=4

## ANT434H1 Health, Diet \& Disease in the Past [24L/12P]

Advanced exploration of the life histories of past populations, through the application of palaeodietary analyses, palaeopathology and other appropriate research methods. Prerequisite: ANT334H1
DR=SCI; BR=4

## ANT435H1

See above (in social science section) for course description.
HAJ453H1 AIDS: A Global Perspective [6L/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 politicaleconomic frameworks. The impact of globalization and

## Anthropology

structural inequality on local cultures and lifestyles provides an essential backdrop to the discussions.
Prerequisite: 4th year status, HMB300H1/HMB301H1/
HMB302H1/HMB303H1/HMB323H1 or 0.5 FCE
300-series ANT course
DR=SOC SCI/SCI; BR=3
ANT436H1 Primate Ecology \& Social Behavior [24L]
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
DR=SCI; BR=4
ANT481H1 Special Topics in Biological Anthropology [24S]
Unique opportunity to explore in-depth a particular topic in Biological Anthropology. Topics vary from year to year.
Prerequisite: A 200+ level ANT course
DR=SCI; BR=4

## 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 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.
Students are encouraged to seek counselling and information about this program from the Anthropology Undergraduate Administrator/Student Counsellor, Anthropology (416-9786414).

## Archaeology Programs

1. Enrolment in the Specialist, Major and Minor Programs is limited. Students must obtain at least the specified mark(s) in the required course(s) as listed in the program requirements to be eligible to enrol.
2. Only ONE Archaeology Program may be selected.

## Archaeology Specialist (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Courses for admission: ANT200Y1 with a final mark of at least 70\%.
(11 full courses or their equivalent, including at least 4 FCE at the $300+$ level and 1 FCE at the 400 level)

First Year:

1. ANT200Y1
2. Statistical Requirement: GGR270H1 (Geography pre- or co-requisites waived for Archaeology and Anthropology students); or 0.5 FCE from STA220H1, STA221H1, STA247H1, STA248H1, STA250H1, STA255H1, STA257H1, STA261H1, or ANTC35H3 (at UTSC)
3. ANT100Y1 or CLA160H1. If CLA160H is taken, students must take an additional 0.5 FCE from the following: CLA230H1, CLA231H1, CLA232H1, CLA233H1; FAH206H1, FAH207H1; GGR100H1, GGR101H1; EAS102Y1, NMC260Y1
Upper Years:
4. ARH305H1, ARH309H1, ARH312Y1, ANT411H1
5. Field Requirement: ANT311Y1 or ARH306Y1 or NMC261Y0 or ARH361H1 or ANT418H5 (at UTM). If ARH361H1 or ANT418H5 is taken, students must take an additional 0.5 FCE from ANT.
6. 1.0 FCE from Group A
7. 4.0 FCE from Groups $B$ and $C$, including 0.5 FCE from each of at least 2 Group C subgroups. Note that students may substitute ARH495H1 (Research Practicum) for 0.5 FCE of this requirement (assignment to Group B or C to be determined by Undergraduate Coordinator).

## Archaeology Major (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Courses for admission: ANT100Y1 with a final mark of at least $67 \%$ or ANT200Y1 with a final mark of at least $70 \%$.
( 7 full courses or their equivalent, including at least 2 FCE at the $300+$ level and 0.5 FCE at the $400-$ level)

First Year:

1. ANT200Y1
2. ANT100Y1 or CLA160H1. If CLA160H1 is taken, students must take an additional 0.5 FCE from the following: CLA230H1, CLA231H1, CLA232H1, CLA233H1;FAH206H1, FAH207H1; GGR100H1, GGR101H1; EAS102Y1; NMC260Y1

## Upper Years:

3. ARH305H1 and ARH309H1
4. 1 FCE from: ARH306Y1, ARH312Y1, ARH361H1, ANT311Y1, NMC261YO, NMC369Y1, NMC465H1, NMC466H1
5. 2.5 FCE from: Groups $A$ and $B$
6. 0.5 FCE from: Group C

## Archaeology Minor (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Courses for admission: ANT200Y1 with a final mark of at least $70 \%$.
( 4 full course equivalents, including at least 1 FCE at the 300- or 400levels)

1. ANT200Y1
2. ARH305H1 and ARH309H1
3. 1.5 FCE from Groups A and B
4. 0.5 FCE from Group C

# Archaeology 

## Archaeology Groups

## Group A: Theoretical

ANT370H1, ANT409H1, ANT410H1, ANT411H1, ANT416H1,
ANT420H1; ARH309H1; HIS425H1

## Group B: Methods

1. Archaeometry: CHM317H1, CHM414H1, CHM416H1; ENV315H1; GGR337H1; NMC369Y1
2. Ceramic and Lithic Analysis: ANT406H1; NMC369Y1, NMC462Y1, NMC465H1, NMC466H1, NMC469Y1
3. Geoarchaeology: ANT409H1; ENV315H1; GGR272H1, GGR273H1, GGR301H1, GGR307H1, GGR337H1, GGR373H1, GGR390H1, GGR413H1; GLG340H1, GLG360H1
4. Osteoarchaeology and Zooarchaeology: ANT334H1, ANT335Y1, ANT415Y1, ANT432H1, ANT433H1, ANT434H1; EEB318H1, EEB323H1, EEB324H1
5. Paleoethnobotany: EEB330H1, EEB337H1, EEB340H1; GGR305H1, GGR390H1; JGE331H1
6. Urbanism and Settlement: ANT318H1

Group C: Area Courses and Cultural History

1. Classical and Aegean Archaeology: CLA230H1, CLA231H1, CLA232H1, CLA233H1, CLA362H1, CLA363H1, CLA364H1, CLA366H1, CLA367H1, CLA368H1, CLA369H1, CLA371H1, CLA389H1, CLA392H1, CLA403H1; FAH206H1, FAH207H1, FAH300H1, FAH303H1, FAH304H1, FAH305H1, FAH309H1, FAH312H1, FAH401H1, FAH407H1, FAH486H1; HIS320H1, HIS482H1
2. Egyptian Archaeology: JAL328H1; NMC343H1, NMC344H1, NMC362Y1, NMC368H1, NMC382Y1, NMC461Y1, NMC467H1, NMC468H1
3. European and Celtic Archaeology: FAH318H1, FAH325H1, FAH327H1, FAH328H1, FAH418H1, FAH420H1, FAH421H1, FAH425H1; HIS321H1, HIS323H1, HIS336H1, HIS357Y1, HIS362H1, HIS403Y1, HIS412Y1, HIS424H1, HIS432H1, HIS482H1; SMC344Y1, SMC337H1, SMC338H1
4. Historical Archaeology: ANT412H1, FAH376H1; GGR240H1, GGR241H1, GGR336H1, GGR421H1; HIS369H1, HIS374H1, HIS384H1, HIS393H1, HIS456Y1
5. Islamic Archaeology: HIS303H1; NMC348Y1, NMC365Y1, NMC366Y1, NMC374H1, NMC376H1, NMC393H1, NMC394H1, NMC396Y1, NMC464H1
6. Near Eastern Archaeology: JAL328H1; NMC346H1, NMC347H1, NMC360H1, NMC361H1, NMC363H1, NMC364H1, NMC370H1, NMC461Y1, NMC466H1
7. North and South American Prehistory: ANT314H1, ANT315H1, ANT316H1, ANT317H1, ANT319Y1, ANT320H1, ANT365H1, ANT407H1; HIS369H1
8. Old World Prehistory: ANT419H1; ARH360H1
9. East Asian Archaeology: EAS406Y1, EAS411H1, EAS412H1, EAS438H1

## Archaeology Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
ARH305H1 Archaeological Interpretation [24L] 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 PostProcessual Archaeology.
Prerequisite: ANT200Y1
DR=SOC SCI; BR=2

## JGA305H1 Environmental and Archaeological Geophysics [24L/12P]

Application of near-surface geophysical methods to investigate environmental and archaeological sites; in particular magnetometry, resistivity, ground-probing radar, and seismic surveys. Course will cover background on the various methods, and allow students to run field surveys and present on case studies.
Prerequisite: GLG216H1 or ANT200Y1 or GGR201H1 DR=SCI; BR=5
ARH306Y1 Archaeological Field Methods [12L/61P] Intensive instruction in archaeological field methods and acquisition of field skills, including archaeological search and survey, site mapping, laying out excavation grids, use of theodolites, total station, and GPS, stratigraphic excavation, stratigraphy, field recording, screening sediment, Ontario license and reporting requirements. Normally this course would take place on campus or at Joker's Hill, in summer. Prerequisite: ANT200Y1/NMC260Y1/NMC261Y0 DR=SOC SCI; BR=None
ARH309H1 Archaeology, Ethics, and the Public [24L] An analysis of ethics in contemporary archaeology that covers reburial and repatriation, interpretation of the archaeological record in the context of historically oppressed groups, ethnic minorities, and non-western societies, the ethics of collecting and managing cultural property, relationships with the media, the debates surrounding looting, and other issues.
Prerequisite: ANT200Y1
DR=SOC SCI; BR=3
ARH312Y1 Archaeological Laboratory [28L/44P] Techniques for making archaeological data meaningful after excavation or survey. Archaeological measurements, compilation of data, database design, archaeological

## Archaeology

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, STA221H1, STA250H1,
STA257H1, STA261H1, ANTC35H3**. Note: *Geography
Pre- or co-requisites waived for Anthropology and
Archaeology students; ** to be taken at the Scarborough
Campus
DR=SOC SCI; BR=5
ARH360H1 Prehistory of the Near East (formerly ANT360Y1) [24L]
From earliest times through the rise of complex huntergatherers, and the food producing revolution to politically complex societies in Southwest Asia.
Prerequisite: ANT200Y1/NMC260Y1
Exclusion: ARH360Y1
DR=SOC SCI; BR=3

## 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
DR=SOC SCI; BR=None
ARH398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None
ARH399Y0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None

## ARH482H1 Special Topics in Archaeology [24S]

Unique opportunity to explore a particular archaeological topic in-depth. Topics vary from year to year.
Prerequisite: A 200+ level ANT course
DR=SOC SCI; BR=None
ARH495H1 Archaeology Research Practicum Laboratory or practical research on an archaeological project that emphasizes methods and research design in archaeology. Students must obtain the consent of a Supervisor before enrolling. Students are required to give an oral presentation of research results to an open meeting of the Archaeology Centre at the conclusion of the course. Application must be made to the Anthropology Department.
Prerequisite: A minimum of 14 credits, permission of Supervisor and Undergraduate Coordinator.
Exclusion: ANT497Y1
Recommended Preparation: ARH305H1, ARH312Y1
DR=SOC SCI; BR=None

## A Program of the Faculty of Arts \& Science and the John H. Daniels Faculty of Architecture, Landscape, and Design

## Faculty

New admissions for a program start on or after September 1, 2012 will be through the John H. Daniels Faculty of Architecture, Landscape, and Design (www. daniels.utoronto.ca).

The Bachelor of Arts, Architecture Studies Major programs have been transferred from the Faculty of Arts and Science to the John H. Daniels Faculty of Architecture, Landscape, and Design effective September 1, 2012. The programs described below apply to students enrolled in the programs before September 2012.

Architecture is both a profession and a discipline of study, offering a broad variety of career opportunities. Architecture, landscape architecture and design play 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, landscape architecture and design 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, landscape architecture and design as part of a liberal arts education. The programs serve as an introduction to the discipline 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. 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, landscape architecture and design are 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.

For further information regarding the BA Architectural Studies programs, contact: enquiry@daniels.utoronto.ca.

## Architecture Programs

NOTE: The Bachelor of Arts, Architecture Studies Major programs have been transferred from the Faculty of Arts and Science to the John H. Daniels Faculty of Architecture, Landscape, and Design effective September 1, 2012. The programs described below apply to students enrolled in the programs before September 2012.
*An orientation session will be held at the beginning of the fall term for all students enrolled in the Architectural Studies Major Programs. Dates and information will be posted on the Daniels website: www.daniels.utoronto.ca.
Architectural Studies Major: Major with
Concentration in Architectural Design (Arts program)

For students enrolled in the Program before September 2012.

New admissions for a start on or after September 2012 will be through the John H. Daniels Faculty of Architecture, Landscape, and Design. Please see the Daniels Faculty web: www.daniels.utoronto.ca

Requirements: 8.0 full course equivalents (FCE), including 2.0 FCEs at the $300+$ series

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 DR=s and co-requisites for courses before registering.
Major programs:
(8 full courses or their equivalent, including 2.0 FCEs at the 300+series)
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 $D R=s$ and co-requisites for courses before registering.
Core Courses for Architectural Studies programs (4.0 FCEs):
First Year:

1. Theory/Criticism: ARC131H1, ARC132H1

Second Year:

1. Design: ARC213H1
2. Visual: ARC221H1
3. Theory/Criticism: ARC 231 H 1 , and one of ARC 232 H 1 , ARC233H1, ARC234H1, ARC235H1, ARC236H1, ARC237H1, ARC238H1 or ARC239H1
4. History: FAH270H1, FAH272H1

Major with Concentration in Architectural Design (4.0 FCEs):

1. Design: ARC313H1, ARC314H1
2. Visual: ARC321H1

## Architectural Studies

3. History: 1.0 FCE from: ARC333H1, ARC337H1, ARC338H1; FAH206H1, FAH207H1, FAH215H1, FAH216H1, FAH230H1, FAH231H1, FAH246H1, FAH300H1, FAH309H1, FAH316H1, FAH328H1, FAH330H1, FAH362H1, FAH364H1, FAH370H1, FAH371H1, FAH372H1, FAH373H1, FAH374H1, FAH375H1, FAH376H1, FAH380H1, FAH391Y0, FAH392Y0, FAH393Y0, FAH394Y0, FAH395Y0, FAH396Y0, FAH397Y0, 400H1, FAH404H1, 405H1, 410H1, 413H1, FAH421H1, 442H1, FAH470H1, FAH471H1, FAH477H1; GGR457H1; NMC366Y1, NMC368H1, NMC393H1, NMC394H1
4. Technics: one of ARC341H1/ARC342H1
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.

## Architectural Studies Major: Major with <br> Concentration in History, Theory, Criticism (Arts program)

For students enrolled in the Program before September 2012.

New admissions for a start on or after September 2012 will be through the John H. Daniels Faculty of Architecture, Landscape, and Design. Please see the Daniels Faculty web: www.daniels.utoronto.ca

Requirements: 8.0 full course equivalents (FCE), including 2.0 FCEs at the $300+$ series

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 DR=s and co-requisites for courses before registering. This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s).
Major programs:
(8 full courses or their equivalent, including 2.0 FCEs at the 300+series)

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 $\mathrm{DR}=\mathrm{s}$ and co-requisites for courses before registering
Core Courses for Architectural Studies programs (4.0 FCEs):
First Year:

1. Theory/Criticism: ARC131H1, ARC132H1

Second Year:

1. Design: ARC213H1
2. Visual: ARC221H1
3. Theory/Criticism: ARC231H1, and one of ARC232H1, ARC233H1, ARC234H1, ARC235H1, ARC236H1, ARC237H1, ARC238H1 or ARC239H1
4. History: FAH270H1, FAH272H1

Major with Concentration in History, Theory, Criticism (4.0 FCEs):
1 Theory/Criticism: one additional of ARC232H1, ARC233H1, ARC234H1, ARC235H1, ARC236H1, ARC237H1, ARC238H1, ARC239H1
2. History: 0.5/1.0 FCE from: FAH206H1, FAH207H1, FAH215H1, FAH216H1, FAH230H1, FAH231H1, FAH246H11.0/1.5 FCEs from: ARC333H1, ARC337H1, ARC338H1, ARC431H1, ARC432H1; FAH300H1, FAH309H1, FAH316H1, FAH328H1, FAH330H1, FAH362H1, FAH364H1, FAH370H1, FAH371H1, FAH372H1, FAH373H1, FAH374H1, FAH375H1, FAH376H1, FAH380H1, FAH391Y0, FAH392Y0, FAH393Y0, FAH394Y0, FAH395Y0, FAH396Y0, FAH397Y0, 400H1, FAH404H1, 405H1, 410H1, 413H1, FAH421H1, 442H1, FAH470H1, FAH471H1, FAH477H1; GGR457H1; NMC366Y1, NMC368H1, NMC393H1, NMC394H1
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.

## Architectural Studies Groups

## Group A (Literary):

ENG150Y1, ENG280H1, ENG285H1, ENG384Y1, ENG389Y1; VIC201Y1, VIC210Y1, VIC300Y1, VIC309H1, VIC310H1, VIC320Y1, VIC410H1, VIC411H1/VIC411Y1; PHL285H1; WLD300Y1

## Group B (Urban):

ARC331Y0, ARC333H1, ARC334H1, ARC335H1, ARC436H1; ENV307H1; FAH391Y0, FAH392Y0, FAH393Y0, FAH394Y0, FAH395Y0, FAH396Y0, FAH397YO; GGR124H1, GGR220H1, GGR339H1, GGR360H1, GGR361H1, GGR363H1, GGR366H1; GGR373H1, GGR462H1; HIS304H1; INI235Y1, 306Y1, 430Y1, 446H1; JGI216H1, JGI346H1; JPF455Y1
Group C (Environ):
ENV200H1, ENV221H1, ENV222H1, ENV335H1,
ENV450H1; GGR107H1, GGR360H1, GGR361H1
Group D (Sci/Tech):
HPS201H1, HPS202H1, HPS306H1, HPS430H1, 431H1
Group E (Media):
INI115Y1, INI322Y1, INI325Y1, INI428H1; VIC22OY1, VIC320Y1, VIC323Y1 (formerly VIC420Y1), VIS120H1

## Architecture Courses

## ARC Courses

All ARC courses listed below, when offered, are open to Faculty of Arts \& Science students regardless of POSt, except where marked as restricted $(\mathrm{R})$ in the course title.
ARC131H1 Introduction to Architecture [24L]
A comprehensive introduction to the discipline, art and profession of architecture using case studies, both historical and contemporary, local and international.

## DR=HUM; BR=1

ARC132H1 Contemporary Architecture [24L]
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

## Architectural Studies

politics of regional and cultural identity.
DR=HUM; BR=1
ARC213H1 Architectural Design I (R) [36P]
An introductory design studio that explores design issues and methods as they relate to constructed spaces and territories. The studio explores concepts of site and place as an introduction to the allied disciplines of architectural design, landscape architecture and urban design. The conventions of representation introduced in ARC221 are carried forward and applied to the set design problems. Prerequisite: ARC221H1; Enrolment in an ARC program DR=HUM; BR=1

ARC221H1 Architectural Representation I (R) [36P]
A studio-based introduction to the conventions and
techniques of graphic communication and visual representation in the design disciplines. The course serves as a hands-on introduction to drawing technique and theory, analytical drawing and diagramming, geometry and composition, and three-dimensional representation in drawing and model.
Prerequisite: Enrolment in an ARC program
DR=HUM; BR=1
ARC231H1 Architecture and Technology [24L]
A selected survey of projects in the history of architecture exemplary for exploring the relationship between architecture and technological change.
DR=HUM; BR=1

## ARC232H1 Architecture, Media and Communication [24L]

An introduction to the interrelationship between architectural theory and studies in media and communications during the twentieth century.
DR=HUM; BR=1

## ARC233H1 Post-Colonial Studies in Architecture [24L]

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.
DR=HUM; BR=1
ARC234H1 Architecture \& Cultural Difference [24L]
An introduction to contemporary issues in architecture pertaining to cultural difference, the politics of cultural identity, and possible structures and strategies for heterogeneity.
DR=HUM; BR=1
ARC235H1 Architectural Criticism [24L]
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. DR=HUM; BR=1
ARC236H1 Design and Cultural Transformation [24L] A survey of the social, economic, technological and cultural factors that have been instrumental in transforming material
culture since the Industrial Revolution.
DR=HUM; BR=3
ARC237H1 Topics in the History and Theory of Landscape Design [24L]
An introduction to the history and theory of urban landscape design.
DR=HUM; BR=1
ARC238H1 Topics in Urban Design History and Theory [24L]
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.
DR=HUM; BR=1
ARC239H1 Introduction to Architectural Theory [24L]
An introduction to the history and current state of architectural theory.
DR=HUM; BR=1
ARC313H1 Architectural Design II (R) [36P]
An intermediate design studio that explores design issues and methods as they relate to tectonics and material assemblies. A critical framework is established through the introduction of theories, precedents and experimental design strategies.
Prerequisite: ARC213H1, ARC221H1; Enrolment in the Major program with Concentration in Architectural Design
DR=HUM; BR=1
ARC314H1 Architectural Design III (R) [36P]
A final design studio that investigates techniques, methods and theories for building design. Students are given an opportunity to create a synthetic architectural design proposal that incorporates ideas and methods developed over the combined studio cycle of the program. Prerequisite: ARC313H1 and ARC321H1; Enrolment in the Major program with Concentration in Architectural Design DR=HUM; BR=1

ARC321H1 Architectural Representation II (R) [36P]
An intermediate studio-based course that explores a range of contemporary techniques and theories in visual representation as they are deployed in the design disciplines. Students are given the opportunity to work in a selection of two-dimensional, three-dimensional and digital media.
Prerequisite: ARC213H1, ARC221H1; Enrolment in the Major program with Concentration in Architectural Design DR=HUM; BR=1
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; or, permission of the instructor
DR=HUM; BR=1

## Architectural Studies

## ARC333H1 Urban Design History, Theory Criticism [24L]

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

## DR=HUM; BR=3

## ARC334H1 Urban Design History, Theory Criticism II

 [24L]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
DR=HUM; BR=3
ARC335H1 History/Theory of Urban Landscape Architecture Design I [24L]
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
DR=HUM; BR=1
ARC337H1 Housing Design: Theory \& Practice [24L] 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

## DR=HUM; BR=1

ARC338H1 Mies van der Rohe [24L]
An in depth examination of the work and thought of GermanAmerican architect Ludwig Mies van der Rohe.
Prerequisite: Enrolment in the ARC Major program with
Concentration in History, Theory, Criticism/Major program
with Concentration in Architectural Design
DR=HUM; BR=1
ARC341H1 Building Technology-Ecology I [24L]
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 $D R=H U M ; B R=3$

ARC342H1 Building Technology-Ecology II [24L]
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
DR=HUM; BR=3
Faculty
Professors Emeriti
K. Andrews, MFA
L.E. Eleen, MA, Ph D
W. McA. Johnson, MA, MFA, Ph D, FRSC
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

## Associate Professor and Chair

## E. M. M. Legge, MA, Ph D

## Associate Chairs, Undergraduate Studies

G. Hawken, BA (Associate Chair of Visual Studies)
J.T. Wollesen, Dr. phil. habil (Associate Chair of History of Art)

## University Professor

P.L. Sohm, MA, Ph D (U)

## Professors

M.A. Cheetham, MA, Ph D, FRSC (U)
L. Kaplan, MA, Ph D (University of Toronto Mississauga)
E.M. Kavaler, MA, Ph D
D. Reid, CM, MA, DFA
L. Steele, Dr. of Arts

## Associate Professors

C. Anderson, MA, PhD
J. Caskey, MA, Ph D (University of Toronto Mississauga)
A. S. Cohen MA, Ph D
E. Harney, MA, Ph D (University of Toronto Scarborough)
C. Knappett, PhD, FSA (Homer Thompson/Walter Graham Chair in Aegean Prehistory)
E.M.M. Legge, MA, Ph D (U)
E. Levy, MA, Ph D (University of Toronto Mississauga)
S. Lloyd, MFA
J. Massey
J. Purtle, MA, M Phil, Ph D (U)
J. Ricco, AM, Ph D (University of Toronto Mississauga)
S. Schelle
A. Syme, MA, Ph D (University of Toronto Mississauga)
J. Tod
K. Tomczak, Dr. of Arts
S. Wiitasalo
J.T. Wollesen, Dr. phil. habil. (V)
Assistant Professors
J.Bear, MA, PhD
B. C. Ewald, MA, Dr. Phil
Y. Gu, MA, Ph D (University of Toronto Scarborough)
Kajri Jain, MA, PhD (UTM)
N. O'Laoghaire, MA, Ph D
G. Periti, MA, PhD
E. Pien, MFA

## Lecturers

M. Hlady BFA . MFA (University of Toronto at Scarborough )
A. Irving BFA, MFA ( University of Toronto at Scarborough )

## 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)

## Adjunct Professor

Y. Hendeles, C.M., O.Ont, Ph.D Amsterdam, LL.D University of Toronto, Nova Scotia College of Art and Design, Ontario College of Art and Design (Hons)

## 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 FAH 102 H 1 serves as a practical and critical introduction to the practice of art history and is a mandatory component of the curriculum; students are encouraged to take this class early in their progress toward an FAH program. 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 architecture. Many of these courses, which are offered on a regular basis, serve as "gateway" Prerequisites 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: VIS120H1, Visual Concepts, a lecturebased 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. VIS130 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 VIS120H1, Visual Concepts. It is offered in the Winter term, and is available only to those students who achieve a grade of $60 \%$ or greater in VIS120 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 (416978-8713).
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 threeyear 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. Louise Kermode, Undergaduate Secretary, Sidney Smith Hall, Room 6036 (416-978-7892)
VIS: George Hawken, Number 1, Spadina Crescent, Room 226 (416946-8153)

## Art Programs

## History of Art (Arts program)

1 course=1 FCE (one full course equivalent); e.g.,
FAH101H1 + FAH102H1 = 1 course or 1 FCE
One half course $=0.5$ FCE; e.g., FAH102H1

## History of Art Specialist (Arts program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.

Required courses:At least four half courses from the Department's art history offerings, with marks of at least 70\% in each course.
1 course=1 FCE (one full course equivalent); e.g.,
FAH101H1 + FAH102H1 = 1 course or 1 FCE
One half course $=0.5$ FCE; e.g., FAH102H1
(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, though an acceptable alternative modern language such as Dutch or Russian (or Chinese and/or another Asian language) may be acceptable. It is strongly recommended that students acquire a reading knowledge of German, Franch, or Italian by the end of the third year. Students specializing in Ancient or Medieval art should also recognize the necessity of studying Greek and/or Latin. Students interested in pursuing Asian art history will need to acquire Chinese and/or Japanese and/or another Asian language.
First Year:
FAH102H1
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. No more than 1.5 FCEs at the $400-$ level will be counted toward fulfilling program requirements.
6. No more than 10 FCEs of FAH courses may be taken in total. No more than 13 FAH and VIS FCEs may be taken in combination.
7. Approved courses in other programs may be substituted for up to two FAH FCEs. See Department web site for details.
In addition, the Faculty of Arts and Science requires Fine
Art History Specialists who do not complete FAH338H1 to complete at least 0.5 FCE in Arts and Science courses in Breadth Category 5: The Physical and Mathematical Universes.

## History of Art Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

1 course=1 FCE (one full course equivalent); e.g.,
FAH101H1 + FAH102H1 = 1 course or 1 FCE
One half course $=0.5$ FCE; e.g., FAH102H1
(6 FCEs)
At least six FAH FCEs fulfilling the following distribution requirements:

First Year:
FAH102H1
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, including at least one halfcourse at the 400-level.
3. No more than 1.0 FCE at the 400 -level will be counted toward fulfilling program requirements. No more than 7.5 FCEs of FAH courses may be taken in total.
4. No more than 13 FAH and VIS FCEs may be taken in combination; of these, no more than 7.5 may be FAH FCEs.
5. Approved courses in other programs may be substituted for up to one FAH FCE. See Department web site for details.
In addition, the Faculty of Arts and Science requires Fine Art History Majors who do not complete FAH338H1 to complete at least 0.5 FCE in Arts and Science courses in Breadth Category 5: The Physical and Mathematical Universes.

## History of Art Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.

1 course=1 FCE (one full course equivalent); e.g.,
FAH101H1 + FAH102H1 = 1 course or 1 FCE
One half course $=0.5$ FCE; e.g., FAH102H1
(4 FCEs)
At least four FAH courses fulfilling the following distribution requirements:

1. FAH 102 H 1
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.

## EAH 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 FAH 101 H 1 , 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 FAH 102 H 1 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 Specialist (Arts program)

This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.

Required courses: completion of at least four full course equivalents including VIS120H1 and VIS130H1 and an average of at least a B in each of VIS120H1 and VIS130H.

## Program requirements

(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:
VIS120H1, FAH102H1 and VIS130H1
Higher Years:

1. 14 half-courses in VIS
2. Thesis Text/Critique VIS401H1; Thesis projectVIS402H1 Notes:
3. A full 400-series course is mandatory
4. Prerequisites for all courses beyond first year will be VIS120H1 and VIS130H1
5. No more than 13 FAS/VIS and FAH full courses may be taken in combination

## Visual Studies Major (Arts Program)

This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.
Required courses: completion of at least four full course equivalents including VIS120H1 and VIS130H1 and an average of at least a B in each of VIS120H1 and VIS130H.

Program requirements
(Six Visual Studies full courses or their equivalent, including at least two 300+ half courses)
First Year:
VIS120H1 and VIS130H1

Higher Years
Ten half-courses in VIS
Notes: No more than 13 FAH and FAS/VIS full courses may be taken in combination

## Visual Studies Minor (Arts Program)

This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.
Required courses: completion of at least four full course equivalents including VIS120H1 and VIS130H1 and an average of at least a B in each of VIS120H1 and VIS130H.
Program requirements
(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. VIS120H1 and VIS130H1
2. Six half-courses in VIS
3. Note: VIS minors are not permitted to take VIS401 and VIS402, or any Independent VIS courses

## Art Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## FAH101H1 Monuments of Art History [24L]

Consideration of the stylistic and contextual significance of representative monuments in the history of art.
Exclusion: FAH100Y/FAH105H5
DR=HUM; BR=1
FAH102H1 The Practice of Art History [24L]
An investigation of the intellectual foundations of the discipline and an introduction to working methods in the study of art history.
Exclusion: FAH105H5/FAH202H5
DR=HUM; BR=None

Note
The Recommended Preparation for ALL 200 level courses is FAH102H1

## FAH206H1 Prehistoric Aegean and East Mediterranean Art and Archaeology [24L]

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/FAH203H5/FAH204H5/FAH205H1 DR=HUM; BR=1

## FAH207H1 Greek and Roman Art and Archaeology [24L]

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/FAH203H5/FAH204H5/FAH205H1 DR=HUM; BR=1

FAH215H1 Early Medieval Art and Architecture [24L]
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/FAH261H1/FAH267H5/FAH271H5 DR=HUM; BR=1

FAH216H1 Later Medieval Art and Architecture [24L]
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/FAH261H1/FAH267H5/FAH271H5 DR=HUM; BR=1

## FAH230H1 Renaissance Art and Architecture (formerly FAH274H1) [24L]

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 midsixteenth. 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/FAH274H/FAH274H5 DR=HUM; BR=1

## FAH231H1 Baroque Art and Architecture (formerly FAH279H1) [24L]

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/FAH279H1/FAH279H5
DR=HUM; BR=1
FAH245H1 Modernism and anti-Modernism, c. 17501900 [24L]
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/FAH287H1/FAH287H5
DR=HUM ; BR=1
FAH246H1 The Rise and Fall of the Modernist Empire c. 1900 to the Present [24L]
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/FAH288H5/FAH289H1/FAH289H5 DR=HUM; BR=1
$\begin{array}{ll}\text { FAH248H1 Canadian Painting and Sculpture (formerly } \\ & \text { FAH286H1) [24L] }\end{array}$
An introductory survey of the history of painting and sculpture in Canada from the 17th to the 20th century.
Exclusion: FAH286H1
DR=HUM; BR=1

## FAH260H1 The Artistic Landscape of East Asia (formerly FAH290H1) [24L]

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
DR=HUM; BR=1
FAH262H1 Art and Visual Experience in Modern and Contemporary East Asia [24L]
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.
DR=HUM; BR=1
FAH270H1 Architecture: Rituals and Monuments [24L]
A survey of architecture from pre-history to the start of modernism, with attention given to the ways in which architecture shapes human experience.
DR=HUM; BR=1
FAH272H1 Modern Architecture from 1750 to the Present [24L]
An introduction to the buildings, issues and ideas from Neoclassicism to the present.
Exclusion: FAH282H1
DR=HUM; BR=1
FAH299Y1 Research Opportunity Program [TBA]
Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM ; BR=None

## NOTE about 300-level courses

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 [24L]An investigation of the major archaeological sites and landscapes of the ancient Greek world, c.750-100BC.
Prerequisite: FAH205H1/FAH207H1
DR=HUM; BR=1
FAH303H1 Emergence of Greek Civilisation [24L]
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: $\mathrm{FAH} 205 \mathrm{H} 1 / \mathrm{FAH} 207 \mathrm{H} 1$
DR=HUM; BR=1

## FAH304H1 Minoan and Mycenaean Art and Archaeology

 [24L]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/FAH206H1
DR=HUM; BR=1
FAH305H1 Art and Archaeology of the Roman Empire [24L]
The art, archaeology and architecture of the Roman empire outside Rome.
Prerequisite: FAH205H1/FAH207H1
Exclusion: FAH302H1
DR=HUM; BR=1
FAH309H1 City of Rome [24L]
The art, architecture and archaeology of the city of Rome to AD476.
Prerequisite: FAH205H1/FAH207H1
Exclusion: FAH302H1
DR=HUM; BR=1
FAH312H1 Art of the Hellenistic Age (formerly FAH317H1) [24L]
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/FAH207H1
Exclusion: FAH317H1
DR=HUM; BR=1
FAH313H1 Greek Myth in Ancient Art [24L]
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. DR=HUM; BR=1

## FAH316H1 Accessing the Sacred [24L]

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/FAH216H1/261H1/343H5
DR=HUM; BR=1
FAH318H1 Monastic Art and Architecture [24L]
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/FAH216H1/261H1/454H5 DR=HUM; BR=1

## FAH319H1 Illuminated Manuscripts [24L]

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/FAH216H1/261H1
Recommended Preparation: SMC358H1
DR=HUM; BR=1
FAH325H1 Church Decoration [24L]
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/FAH216H1/261H1
DR=HUM; BR=1
FAH326H1 Art and Liturgy [24L]
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/FAH216H1/261H1
DR=HUM; BR=1

## FAH327H1 Secular Art and Architecture of the Middle Ages [24L]

A consideration of art and architecture made for the court, the aristocracy, and other patrons outside the realm of the Christian church.
Prerequisite: FAH215H1/FAH216H1/261H1/337H5 DR=HUM; BR=1

FAH328H1 Gothic Cathedral (formerly FAH369H1) [24L]
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/FAH216H1/261H1/351H5
Exclusion: FAH369H1
DR=HUM; BR=1
FAH330H1 German Art and Architecture in the Age of Dürer (formerly FAH306H1) [24L]
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/FAH231H1/274H1/279H1
Exclusion: FAH306H1
DR=HUM; BR=1

## FAH331H1 Netherlandish Renaissance Art and Culture (formerly FAH307H1) [24L]

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/FAH231H1/274H1/279H1
Exclusion: FAH307H1
DR=HUM ; BR=1
FAH333H1 The Altarpiece in Italy ca. 1400-ca. 1600 [24L]
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/FAH231H1/274H1/279H1 DR=HUM; BR=1
FAH335H1 The Art of Love in the Renaissance [24L] 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/FAH231H1/274H1/279H1 DR=HUM; BR=1

## FAH337H1 Rivalry, Imitation and Envy in Italian Renaissance Art [48L/24P]

This course examines works in different art media, including painting, sculpture and prints, produced from 1400 to 1600, discussing how artistic practice of imitation and emulation stimulated the development of individual styles. In addition, this course addresses notions of disruptive rivalry, and the representation of slander and envy.
Prerequisite: FAH230H1/FAH231H1
DR=HUM; BR=1
FAH338H1 Art and Consumers in the Renaissance (1400-1700) [24L]
It has long been said that the material culture of the Renaissance generated the first stir of consumerism with a variety of artifacts produced from 1400 to 1700 in Italy. This course explores the material culture of Renaissance consumerism and discusses the production and function of works in different art media.
Prerequisite: FAH230H1
Art
DR=HUM ; BR=1

## FAH340H1 17th-Century Art of the Netherlands

 (formerly FAH308H1) [24L]Concentration on the major masters of Holland's Golden Age, ca. 1580ca. 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/FAH231H1/274H1/279H1
Exclusion: FAH308H1
DR=HUM; BR=1

## FAH341H1 Venetian Renaissance Art and Architecture [24L]

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/FAH231H1/274H1/279H1
DR=HUM; BR=1
FAH342H1 Mannerism [24L]
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: $\mathrm{FAH} 230 \mathrm{H} 1 / \mathrm{FAH} 231 \mathrm{H} 1 / 274 \mathrm{H} 1 / 279 \mathrm{H} 1$
DR=HUM; BR=1

## FAH344H1 Rembrandt, Rubens and their Age (formerly

 FAH277H1) [24L]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: FAH101H1/FAH102H1 DR=HUM; BR=1

## FAH345H1 The Romantic Movement in French Art (formerly FAH383H1) [24L]

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/FAH246H1/287H1
Exclusion: FAH383H1
DR=HUM; BR=1
FAH346H1 Impressionism (formerly FAH378H1) [24L]
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/FAH246H1/287H1
Exclusion: FAH378H1/378H5
DR=HUM ; BR=1
FAH347H1 Cubism and Related Movements (formerly FAH384H1) [24L]
An investigation of the birth and development of Cubism, Futurism and Orphism in Europe and North America.
Prerequisite: FAH245H1/FAH246H1/287H1/288H1
Exclusion: FAH384H1
DR=HUM; BR=1

## FAH348H1 The Dada and Surrealist Tradition (formerly FAH385H1) [24L]

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/FAH246H1/288H1/289H1
Exclusion: FAH385H1/447H5
DR=HUM; BR=1
FAH349H1 Abstraction in Twentieth-Century Art (formerly FAH387H1) [24L]
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/FAH245H1/
FAH246H1/288H1/289H1/385H1
Exclusion: FAH387H1
DR=HUM; BR=1
FAH350H1 Minimalism (formerly FAH389H1) [24L]
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/FAH245H1/
FAH246H1/288H1/289H1
Exclusion: FAH389H1
DR=HUM; BR=1
FAH351H1 Theory in Art History (formerly FAH388H1) [24L]
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/FAH245H1/
FAH246H1/287H1/288H1/289H1
Exclusion: FAH388H1/388H5
DR=HUM; BR=2
FAH352H1 19th Century Photography [24L]
An introduction to the major artists, movements, and debates in photography in Europe and North America, from its prehistory to the turn of the century. Issues considered include the relationship of social class to aesthetics, the role of illusion, the rise of mass reproduction.
DR=HUM; BR=1
FAH354H1 Recent and Contemporary Canadian Art (formerly FAH386H1) [24L]
An examination 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/FAH245H1/FAH246H1/FAH248H1/
FAH286H1/
FAH288H1/FAH289H1
Exclusion: FAH386H1
DR=HUM; BR=1
FAH361H1 Art and Ritual in East Asia [24L]
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
DR=HUM; BR=1
FAH362H1 Landscape and the Built Environment in East Asia [24L]
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
DR=HUM; $B R=1$
FAH363H1 The Mechanics of the Image in East Asia [24L]
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
DR=HUM; BR=1
FAH364H1 Art and Architecture in South Asia [24L]
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 Preparation: FAH260H1
DR=HUM; $B R=1$

## FAH365H1 Colonialism, Nationalism and Modernity in South Asian Art [24L]

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/FAH262H1/ FAH364H1
DR=HUM; $B R=1$
FAH368H1 Encounters: Art Within and Beyond East Asia [24L]
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
DR=HUM; BR=1

## FAH370H1 European Renaissance Architecture

(formerly FAH324H1) [24L]
Architecture and architectural theory ca. 1400 -ca. 1600.
Prerequisite: FAH270H1/FAH278H1
Exclusion: FAH324H1
DR=HUM; BR=1
FAH371H1 Architecture and Urbanism in Baroque Europe (formerly FAH355H1) [24L]
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
DR=HUM; BR=1
FAH372H1 Architecture in the Age of Historicism ca. 1750-ca. 1900 (formerly FAH281H1) [24L]
Major monuments and key figures in architecture and urbanism in Europe and North America from the Enlightenment to the birth of Modernism.
Prerequisite: $\mathrm{FAH} 270 \mathrm{H} 1 / \mathrm{FAH} 272 \mathrm{H} 1 / 278 \mathrm{H} 1$
Exclusion: FAH281H
DR=HUM; $B R=1$

## FAH373H1 Modern Architecture Since 1890 (formerly FAH282H1) [24L]

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/FAH272H1/278H1/281H1
Exclusion: FAH282H1
DR=HUM; $B R=1$
FAH374H1 Consequences of Modernism: Architecture after 1945 (formerly FAH382H1) [24L]
An examination of architectural theory and practice from the end of Modernism to the present.
Prerequisite: FAH270H1/FAH272H1/278H1/281H1/282H1
DR=HUM; BR=1
FAH375H1 American Architecture: A Survey [24L] 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/FAH272H1
DR=HUM; BR=1
FAH376H1 Canadian Architecture: A Survey [24L] 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/FAH272H1
DR=HUM ; BR=1

## FAH377H1 Dilemmas of Nature and Culture: Landscape Architecture since 1850 [24L]

This course examines landscape architecture in relation to its political and social contexts from the mid-nineteenth century to the present when it emerged as a profession in North America. It looks at how landscape architecture embodies and challenges our understandings of culture's variable, tangled relationship to nature. It discusses specific projects, designers and their writings that shaped popular understandings of society's connection to the environment.
Prerequisite: FAH102H1/FAH246H1
DR=HUM; BR=1

## FAH380H1 Special Topics in Art History (formerly FAH395H1) [24L]

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
DR=HUM; BR=1
FAH380Y1 Special Topics in Art History (formerly FAH395H1) [48L]
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
DR=HUM; $B R=1$

## FAH381H1 Problems in Jewish Art (formerly FAH329H1) [24L]

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.
Exclusion: FAH329H1
Recommended Preparation: FAH102H1, a 200 level FAH half course
DR=HUM; BR=1

## 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.

## FAH391YO Studies Abroad in Ancient Art and Architecture

Studies Abroad in Ancient Art and Architecture
Prerequisite: one FAH half course in ancient art, architecture, and archaeology/permission of instructor
$D R=H U M ; B R=1$

FAH392YO Studies Abroad in Medieval Art and Architecture
Studies Abroad in Medieval Art and Architecture
Prerequisite: one FAH half course in medieval art and architecture/permission of instructor
$D R=H U M ; B R=1$
FAH393Y0 Studies Abroad in Renaissance and Baroque Art and Architecture
Studies Abroad in Renaissance and Baroque Art and Architecture
Prerequisite: one FAH half course in Renaissance or Baroque art and architecture/permission of instructor
DR=HUM; BR=1
FAH394Y0 Studies Abroad in Modern and Contemporary Art and Architecture
Studies Abroad in Modern and Contemporary Art and
Architecture
Prerequisite: one FAH half course in Modern or Contemporary art and architecture/permission of instructor
DR=HUM; BR=1
FAH395YO Studies Abroad in Canadian Art and Architecture
Studies Abroad in Canadian Art and Architecture
Prerequisite: one FAH half course in Canadian art and architecture/permission of instructor
DR=HUM; BR=1
FAH396YO Studies Abroad in Asian Art and Architecture
Studies Abroad in Asian Art and Architecture
Prerequisite: one FAH half course in Asian art and architecture/permission of instructor
DR=HUM; BR=1
FAH397Y0 Studies Abroad in Architectural History
Studies Abroad in Architectural History
Prerequisite: one FAH half course in architectural history/ permission of instructor

## DR=HUM; BR=1

FAH398HO Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
FAH399YO Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

## 400-level courses

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 [24S]

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/FAH206H1
Recommended Preparation: FAH300H1/FAH303H1/ FAH304H1/
DR=HUM ; BR=1

## FAH407H1 Studies in Roman Painting and Sculpture [24S]

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
Recommended Preparation: FAH305H1/FAH309H1/
FAH312H1
DR=HUM; BR=1
FAH418H1 Studies in Early Christian and Byzantine Art and Architecture [24S]
In-depth examination of key monuments and issues in art and architecture from the Early Christian (1st-5th centuries) or Byzantine (6th15th centuries) periods.
Prerequisite: FAH215H1/FAH216H1/FAH261H1
Recommended Preparation: FAH316H1/FAH321H1
DR=HUM; $B R=1$

## FAH420H1 Studies in Western Medieval Art and Architecture [24S]

In -depth examination of monuments and issues in the art and architecture of Western Europe from the sixth to the fifteenth century.
Prerequisite: FAH215H1/FAH216H1/FAH261H1 DR=HUM; BR=1
FAH421H1 Studies in Medieval Cities [ [24S]
A focused examination of urbanism, art and architecture of a specific medieval city, such as Jerusalem, Rome,
Constantinople, or Paris.
Prerequisite: FAH215H1/FAH216H1/FAH261H1
Recommended Preparation: FAH325Y0/FAH327H1/
FAH328H1
DR=HUM; BR=1

## FAH423H1 The Palaces of Minoan Crete [24L]

Around 2000 BC , the island of Crete sees the emergence of what are arguably the earliest towns and states in European prehistory. At the heart of this new social order are the so-called 'palaces', massive architectural complexes usually interpreted as seats of administrative and political authority. However, fresh discoveries over the past two decades, coupled recently with radical new interpretations, require a fundamental rethinking of the nature of the palaces and their role in Minoan society. This course will provide students with an active opportunity to learn about the latest developments in Minoan art, architecture, and archaeology.
DR=HUM; $B R=1$

## FAH424H1 Studies in Medieval Book Illumination [24S]

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/FAH216H1/FAH261H1
Recommended Preparation: FAH319H1/SMC358H1
DR=HUM ; BR=1
FAH425H1 Studies in Medieval Art and Gender [24S]
An investigation of the role played by gender in the creation and use of art and architecture in the Middle Ages.
Prerequisite: FAH215H1/FAH216H1/FAH261H1
Exclusion: FAH435H5
DR=HUM; BR=1
FAH426H1 Medieval Art in Local Collections [24S]
First hand examination of objects of medieval art from local Toronto collections.
Prerequisite: FAH215H1/FAH216H1/FAH261H1
DR=HUM; BR=1
FAH430H1 Pieter Bruegel (formerly FAH428H1) [24S]
The study of Pieter Bruegel's works in the context of
Netherlandish culture. Emphasis on secular works.
Prerequisite: FAH307H1/FAH331H1; permission of instructor
Exclusion: FAH428H1
Recommended Preparation: Reading knowledge of French or German
DR=HUM; $B R=1$
FAH432H1 Caravaggio [24S]
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/FAH231H1/
FAH274H1/FAH279H1/FAH341H1/FAH342H1
DR=HUM; BR=1

## FAH433H1 Leonardo and His Legacy in Renaissance Italy [24S]

This seminar examines major critical developments in the interpretation of High Renaissance art in Italy by looking at key works produced by Leonardo, his contemporaries, and followers (1470-1530).
Prerequisite: FAH230H1
DR=HUM; $B R=1$

## FAH434H1 The First Art Historians [24S]

In Vasari's Lives of the Artists and their "after-lives," painters and humanists explored questions of word and image, art and life, biography and history, the psychology of style, the economics and politics of art and the languages of art. How and why did art history originate?
Prerequisite: FAH230H1/FAH231H1 and permission of instructor
$\mathrm{DR}=\mathrm{HUM} ; \mathrm{BR}=1$
FAH439H1 Art and Reform in the Renaissance [24S] 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
DR=HUM; BR=1

## FAH440H1 Dutch Genre Painting of the 17th Century

 [24S]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/FAH331H1/FAH340H1/
FAH428H1; permission of instructor
Recommended Preparation: Reading knowledge of French or German
DR=HUM; BR=1
FAH445H1 The Paris Salon and French Art of the Nineteenth Century [24S]
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/FAH280H1/FAH287H1
Recommended
Preparation: FAH346H1/FAH345H1/FAH378H1/FAH383H1.
Reading knowledge of French strongly recommended.
DR=HUM; BR=1

## FAH446H1 Realism [24S]

An examination of mid-19th century French Realism with emphasis on Courbet, Millet, the Barbizon School, Daumier and Manet.
Prerequisite: FAH245H1/FAH287H1
Exclusion: FAH315H5
Recommended Preparation: Reading knowledge of French DR=HUM; BR=1
FAH447H1 19th-Century Landscape Painting [24S] Investigation of English, French, German and Swiss landscape painting from the birth of the Romantic movement to Post-Impressionism.
Prerequisite: FAH245H1/FAH287H1
Recommended Preparation: Reading knowledge of French or German
DR=HUM; BR=1

## FAH448H1 International Art Since 1940 (formerly FAH402H1) [24S]

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/FAH288H1/FAH289H1/FAH348H1/
FAH350H1/FAH351H1/FAH385H1/FAH388H1/FAH389H1
Exclusion: FAH402H1
DR=HUM; $B R=1$

## FAH449H1 Contemporary Art Movements (formerly FAH411H1) [24S]

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/FAH289H1
Exclusion: FAH411H1
DR=HUM; BR=1
FAH457H1 Issues in Canadian Art, ca. 1900-1940 (formerly FAH415H1) [24S]
Focused, thematic examinations of the visual arts in Canada in the first half of the twentieth century.
Prerequisite: FAH248H1
Exclusion: FAH415H1/FAH416H1
DR=HUM; BR=1

## FAH458H1 Issues in Recent Canadian Art (formerly FAH416H1) [24S]

Focused, thematic examinations of the visual arts in Canada from 1940 to the present.
Prerequisite: FAH246H1/FAH286H1/FAH352H1/FAH386H1 Exclusion: FAH416H1
DR=HUM; BR=1
FAH461H1 East Asian Art as a Cultural System [24S] Methodologically-focused seminar engaged with recovering and articulating in Western terms indigenous ways of seeing and thinking about East Asian art.
Prerequisite: FAH260H1/FAH262H1/FAH290H1/FAH361H1/ FAH362H1/FAH363H1/FAH364H1/FAH365H1/FAH368H1/
EAS211Y0/EAS227Y/EAS233H1/EAS237Y1/EAS305Y1/
EAS331Y1/EAS418H1
DR=HUM; BR=1
FAH462H1 Outside East Asian Art [24S]
Methodologically- and historiographically-focused seminar that attends to the contiguities and ruptures of approaching East Asian art through Western art historical methods.
Prerequisite: FAH260H1/FAH262H1/FAH290H1/FAH361H1/ FAH362H1/FAH363H1/FAH364H1/FAH365H1/FAH368H1/
EAS211Y0/EAS227Y/EAS233H1/EAS237Y1/EAS305Y1/
EAS331Y1/EAS418H1
DR=HUM; BR=1
FAH463H1 Materiality, Objecthood, Connoisseurship and Collecting in the Arts of East Asia [24S]
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/FAH262H1/FAH290H1/FAH361H1/ FAH362H1/FAH363H1/FAH364H1/FAH365H1/FAH368H1/
EAS211Y0/EAS227Y/EAS233H1/EAS237Y1/EAS305Y1/
EAS331Y1
DR=HUM; BR=1
FAH464H1 Transregional East Asian Art [24S]
In-depth examination of the play of East Asian Art within and beyond East Asia.
Prerequisite: FAH260H1/FAH262H1/FAH290H1/FAH361H1/ FAH362H1/FAH363H1/FAH364H1/FAH365H1/FAH368H1/ EAS211Y0/EAS227Y/EAS233H1/EAS237Y1/EAS305Y1/ EAS331Y1
DR=HUM; BR=1
FAH466H1 Contemporary South Asian Art [24S]
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/FAH364H1/FAH365H1
DR=HUM; BR=1
FAH470H1 Studies in Renaissance and Baroque
Architecture (formerly FAH450H1) [24S]
An in-depth study of themes and problems in architecture in
Renaissance and Baroque Europe.
Prerequisite: FAH324H1/FAH355H1/FAH370H1
Exclusion: FAH450H1
DR=HUM; BR=1
FAH471H1 Major Figures of Twentienth-Century Architecture [24S]
A close study of the major architects, designers and theorists of 20thcentury architecture
Prerequisite: FAH372H1/FAH373H1/FAH374H1/FAH375H1/ FAH376H1
DR=HUM; BR=1
FAH477H1 Toronto Architecture (formerly FAH377H1) [24S]
A first-hand study of the architecture and urban planning of Toronto.
Prerequisite: FAH372H1/FAH373H1/FAH374H1/FAH375H1/ FAH376H1
Exclusion: FAH377H1
DR=HUM; BR=1

## FAH480H1 University Art Centre Exhibition Course (formerly FAH454H1) [24S]

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
DR=HUM; $B R=1$
FAH481H1 Internship (formerly FAH455H1) [24S]
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, an auction house, a public museum, or a private gallery. Students must provide proof of their acceptance as an intern by the Art Centre/auction house/museum/gallery in order to be enrolled in the course. .
Prerequisite: 8 FAH half courses; permission of instructor (application in department)
Exclusion: FAH454H1/FAH455H1
DR=HUM; $B R=1$

## FAH481Y1 Internship (formerly FAH455H1) [48S]

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, an auction house, a public museum, or a private gallery. Students must provide proof of their acceptance as an intern by the Art Centre/auction house/museum/gallery in order to be enrolled in the course. .

Prerequisite: 8 FAH half courses; permission of instructor (application in department)
Exclusion: FAH454H1/FAH455H1
DR=HUM; BR=1

## FAH482H1 Master works of Art at the Art Gallery of Ontario [24S]

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.
DR=HUM
Art ; BR=1
FAH483H1 Introduction to Conservation: Materials, Deterioration, and Preservation in Art and Material Culture (formerly FAH453H1) [24S]
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
DR=HUM; BR=1

## FAH484H1 Fashion, \& Textiles: Culture \& Consumption (formerly FAH459H1) [24S]

This course examines the history, meaning and consumption of Western European textiles (Late Antique - 18th century) and fashionable dress (18th -21 st 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: permission of instructor.
DR=HUM; BR=1

## FAH485H1 Collecting Canada: Art in the Royal Ontario Museum (formerly FAH456H1) [24S]

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 300level; permission of instructor
Exclusion: FAH456H1
Recommended Preparation: FAH352H1/FAH386H1 DR=HUM; BR=1

[^0]Prerequisite: 8 FAH half courses; permission of instructor. DR=HUM ; BR=1

## FAH489H1 Topics in the History of Art and Architecture

 [24S]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 DR=HUM ; BR=1

## 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 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. rerequisite for all independent studies: five FAH courses; permission of instructor

## FAH491H1 Independent Studies in Ancient Art and Architecture

Independent Studies in Ancient Art and Architecture DR=HUM; BR=1

## FAH491Y1 Independent Studies in Ancient Art and Architecture

Independent Studies in Ancient Art and Architecture DR=HUM; $B R=1$

FAH492H1 | Independent Studies in Medieval Art and |
| :--- |
| Architecture |

Independent Studies in Medieval Art and Architecture
DR=HUM; BR=1

FAH492Y1 Independent Studies in Medieval Art and Architecture
Independent Studies in Medieval Art and Architecture DR=HUM; BR=1
FAH493H1 Independent Studies in Renaissance and Baroque Art and Architecture
Independent Studies in Renaissance and Baroque Art and Architecture
DR=HUM; BR=1
FAH493Y1 Independent Studies in Renaissance and
Baroque Art and Architecture

FAH494H1 Independent Studies in Modern and Contemporary Art and Architecture
Independent Studies in Modern and Contemporary Art and
Architecture
DR=HUM; BR=1
FAH494Y1 Independent Studies in Modern and Contemporary Art and Architecture
Independent Studies in Modern and Contemporary Art and Architecture
DR=HUM; BR=1
FAH495H1 Independent Studies in Canadian Art and
Architecture
Independent Studies in Canadian Art and Architecture

FAH495H1 Independent Studies in Canadian Art and Independent Studies in Canadian Art and Architecture

DR=HUM; BR=1

FAH495Y1 | Independent Studies in Canadian Art and |
| :--- |
| Architecture |

Independent Studies in Canadian Art and Architecture
DR=HUM; BR=1
Art
FAH496H1 Independent Studies in Asian Art and
Independent Studies in Asian Art and Architecture
DR=HUM; BR=1

FAH496Y1 Independent Studies in Asian Art and Architecture
Independent Studies in Asian Art and Architecture DR=HUM; BR=1
FAH497H1 Independent Studies in Architectural History Independent Studies in Architectural History DR=HUM; BR=1
FAH497Y1 Independent Studies in Architectural History Independent Studies in Architectural History DR=HUM; BR=1

## 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 VIS120H1 and VIS130H1 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.

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## VIS120H1 Visual Concepts [24L/12T]

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. DR=HUM; BR=3
VIS130H1 Visual Strategies [36L/12T]
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. Prerequisite: VIS120H1 with a grade of $60 \%$ or higher Exclusion: FAS143H1
DR=HUM; BR=1

## VIS201H1 Painting: Methods and Materials [36P]

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, VIS130H1
Exclusion: FAS145H1
DR=HUM; BR=1

## VIS202H1 Video For Artists [36P]

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
DR=HUM; BR=1

## VIS203H1 Time-Based Arts [12L/24P]

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
DR=HUM; BR=1

## VIS204H1 3D Installation [12L/24P]

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, VIS130H1
Exclusion: FAS146H1
DR=HUM; BR=1

## VIS205H1 Drawing [36P]

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, VIS130H1
Exclusion: FAS243H1
DR=HUM; BR=1

## VIS206H1 Print Media One - Relief (formerly VIS203H1) [36P]

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, VIS130H1
Exclusion: FAS232H1, VIS203H1
DR=HUM; BR=1

## VIS207H1 Print Media II - Intaglio (formerly VIS303H1) [36P]

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.)
Prerequisite: VIS120H1, VIS130H1
Exclusion: FAS324H1; VIS303H1
DR=HUM; BR=1

## VIS208H1 Performance Art [12L/24P]

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, VIS130H1
DR=HUM; BR=1
VIS209H1 Women in Visual Art [12L/24P]
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 DR=HUM; BR=1

## VIS211H1 Works on Paper (formerly VIS205H1) [12L/24P]

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, VIS130H1
Exclusion: FAS143H1, FAS243H1
DR=HUM; BR=1
VIS212H1 Colour [12L/24P]
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
DR=HUM; BR=1

## VIS213H1 Drawing and the Body [36P]

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.
Prerequisite: VIS120H1, VIS130H1
Exclusion: FAS243H1
Recommended Preparation: VIS205H1 DR=HUM; BR=1
VIS217H1 Photobased (Chemical) [12L/24P]
Photobased projects in which the fundamentals of optical-chemicalmechanical 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 35 mm camera
that allows full manual control.
Prerequisite: VIS120H1, VIS130H1
Exclusion: FAS147H1
DR=HUM; BR=1

## VIS218H1 Photobased (Digital) [12L/24P]

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, VIS130H1
Exclusion: FAS147H1
DR=HUM; BR=1

## VIS220H1 Painting and the Subject [36P]

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, VIS130H1
DR=HUM; BR=1
VIS301H1 Painting: The Painted Edge [36P]
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, VIS130H1, VIS201H1
Exclusion: FAS245H1
DR=HUM; BR=1
VIS302H1 Video: Advanced Projects [36P]
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/VIS203H1 DR=HUM; BR=1
VIS303H1 Advanced Time-Based Arts [12L/24P]
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, VIS130H1, VIS202H1/VIS203H1 DR=HUM; BR=1

## VIS305H1 Drawing and Painting [36P]

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, VIS201H1 and one of VIS205H1/VIS211H1/VIS213H1
Exclusion: FAS243H1, FAS343H1, FAS345H1
DR=HUM; BR=1

## VIS306H1 Site/Installation and 3-D Construction [12L/24P]

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, VIS130H1, VIS204H1
Exclusion: FAS348H1
DR=HUM; BR=1

## VIS307H1 Art and Context [12L/24P]

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, VIS130H1 and one VIS 200-level course.
DR=HUM ; BR=1
VIS309H1 Advanced Printmaking [12L/24P]
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: VIS120H1, VIS130H1, one of (VIS206H1/ VIS207H1)
Exclusion: FAS334H1
DR=HUM; BR=1
VIS310H1 Imaging the Political [12L/24P]
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
DR=HUM; BR=1
VIS311H1 Independent Projects [TBA]
Students propose and produce projects in media that are offered in Visual Studies.
Prerequisite: Permission of instructor
DR=HUM; $B R=1$
VIS312H1 Collage [12L/24P]
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, VIS130H1 and one VIS 200-level course
DR=HUM; BR=1
VIS313H1 The Body [12L/24P]
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.
Prerequisite: VIS120H1, VIS130H1 and one VIS 200-level course
DR=HUM ; BR=1

## VIS318H1 Integrated Photobased Explorations [12L/24P]

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: (VIS120H1, VIS130H1), and one of VIS217H1/ VIS218H1
Exclusion: FAS347H1
DR=HUM; BR=1
VIS319H1 Defining Landscapes [12L/24P]
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
DR=HUM; BR=1

## VIS320H1 Critical Curatorial Lab [12L/24P]

Projects and seminars develop an understanding of curatorial and critical practice in contemporary visual and media arts.
Prerequisite: (VIS120H1, VIS130H1)/FAH102H1 and one
FAH OR VIS 200-level course
Exclusion: FAH451H1
DR=HUM; $B R=1$

## VIS321H1 Artists' Multiples [12L/24P]

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
DR=HUM; BR=1
VIS322H1 The Constructed Image [12L/24P]
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: VIS120H1 and VIS130H1 and ANY 200 level VIS course
DR=HUM; BR=1
VIS323H1 Painting: Contemporary Practice [36P]
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: VIS201H1
DR=HUM; BR=1
VIS324H1 The Aesthetics of Everyday Life [36P]
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 200level VIS course
DR=HUM; BR=2
VIS325H1 Contemporary Art Issues [36P]
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 200level VIS course
DR=HUM; BR=1

## VIS326H1 Studio Practice [36P]

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
$D R=H U M ; B R=1$
VIS327YO Urban Studio: Hong Kong [30L/24P]
Urban Studio uses the dynamic urban fabric of Hong Kong as a laboratory for art-making. Students will explore the city to develop visual research that examines social, spatial, and urban issues. The course consists of site-research, field trips, guest speakers, art production, and culminates in an informal public exhibition.
Prerequisite: St. George campus Arts \& Science: VIS120H1,
VIS130H1; UTSC: 1 FCE at either B or C level in Studio DR=HUM; BR=1
DRM354Y1 Stage and Costume Design I [48L/24P]
A detailed exploration of theatrical stage and costume
design, historical and contemporary, theatrical and practical.
Prerequisite: DRM100Y1 or an Art Major/Specialist and an interview in April (must submit UC Drama Ballot Form by March 1st) Corequisite: For Drama Majors \& Specialists: DRM230Y1 (or a course from Group A if DRM230Y1 is already completed)
DR=HUM; BR=1
VIS401H1 Thesis Text and Critique [36P]
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, VIS130H1 and at least two 200-level
VIS courses and two 300-level VIS courses or permission of the instructor.
Exclusion: FAS 434-5, FAS 447-8, FAS 450-3
DR=HUM; BR=1

## VIS402H1 Thesis Project [36P]

Students realize projects embarked upon in VIS401H1
Thesis Text and Critique. Class discussions with faculty.
Corequisite: VIS401H1
Exclusion: FAS 434-5H1, FAS 447-8H1, FAS450-3H1
DR=HUM; BR=1

## VIS403H1 Secondary Focus Project [36P]

A variety of projects developed in various media with a strong interdisciplinary focus.
Prerequisite: Permission of instructor
DR=HUM; BR=1

## Independent Studies Courses Note

Only three of VIS311H1, VIS403H1, VIS404H1, VIS405H1 may be taken.
Independent Studies credits (VIS311H1, VIS403H1, VIS404H1, AND405H1 are only open to VIS Specialists and VIS Majors.

VIS404H1 Independent Studies [36P]
Individual advanced projects, including texts, that are subject to group critiques.

Prerequisite: Permission of instructor
DR=HUM; BR=1
VIS405H1 Visual Studies Internship [12L/24P]
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, VIS130H1, permission of Undergraduate Secretary
DR=HUM; BR=1
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
$D R=H U M ; B R=1$

# Asia-Pacific Studies (Dr. David Chu Program) 

Faculty
Zaheer Baber
Ruoyun Bai
Joshua Barker
Jacques Bertrand
Ritu Birla
Marion Bogo
Alana Boland
Loren Brandt
Eric Cazdyn
Li Chen
Francis Cody
Amrita Daniere
Naisargi Dave
Deepali Dewan
Arti Dhand
Wendy Dobson
Christoph Emmrich
Victor Falkenheim
Eric Fong
Takashi Fujitani
Frances Garrett
Kanishka Goonewardena
Ping-Chun Hsiung
William Hurst
Kajri Jain
Chelva Kanaganayakam
Malavika Kasturi
Ken Kawashima
Kundan Kumar
Hui Kian Kwee
Tong Lam
Tania Li
Hy Luong
Ken MacDonald
Virginia Maclaren
Minelle Mahtani
Bonnie McElhinny
C. Thomas McIntire

Heather Miller
Rajashree Narayanareddy
Lynette Ong
Jin Park
Ito Peng
Srilata Raman
Katharine Rankin
Ajay Rao
Karen Ruffle
Izumi Sakamoto
Stella Sandahl
Shiho Satsuka
Andre Schmid
Jayeeta Sharma
Rachel Silvey
Neera Singh
Jesook Song
Andre Sorensen
Wen-Ching Sung
Ashwini Tambe
Nhung Tran
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## Asia-Pacific Studies Programs

The fluid processes of transnationalization and modernization in Asia means that it is increasingly anachronistic to approach the study of contemporary Asia from the perspective of just one country or a singular discipline. The Contemporary Asian Studies (CAS) major and minor programs offered by the Asian Institute at the Munk School of Global Affairs provide a multi-disciplinary lens, though with an emphasis on the social sciences, through which to examine the linkages between Asia's history, its emergence onto the global stage and the challenges and opportunities inherent in its modernity and/or modernities, as well as Asia's future(s) in the global arena.

The CAS program is thematically-driven, reflective of contemporary issues that are of relevance to understanding the complexities of today's Asia. The CAS courses are distinctly pan-Asian in geographic scope, providing empirical and critical coverage of South, Southeast and East Asia. CAS students will gain empirical knowledge of the Asia, inclusive of South, Southeast and East Asia, through multiple disciplinary approaches to the study of the region, including Anthropology, Economics, Geography, History, Political Science and Sociology.

The CAS program is designed to prepare students for careers in or about Asia. In addition, the Asian Institute is committed to facilitating overseas experiential learning opportunities, including field schools, international course modules, professional internships, and study abroad opportunities. Upper-level CAS courses are designed to be researchintensive.CAS majors and minors are required to take a sequence of courses at the 200-, 300-, and 400 -levels. Specifically, majors and minors must complete either CAS 200Y (Global Asia) or POL 215Y (Politics and Transformation of the Asia-Pacific), followed by CAS 310H (Comparative Colonialisms in Asia) and CAS 320H (Comparative Modernities in Asia). CAS majors must also complete CAS 400 (Capstone Seminar -Critical Perspectives on Asian Modernity). Students can fulfill their remaining major and minor degree requirements with courses offered in the CAS program or approved courses offered by collaborating cognate departments. Majors are required to take at least 1 FCE from groups $\mathrm{A}, \mathrm{B}$, and C . There is no language requirement for the CAS major and minor. However, CAS students are strongly encouraged to study an Asian language. One full course equivalent (FCE) in an approved Asian language course can be credited as one FCE towards the major and minor degree.

# Asia-Pacific Studies (Dr. David Chu Program) 

## Contemporary Asian Studies Major (Arts program)

The Contemporary Asian Studies (CAS) program provides a multidisciplinary lens, though with an emphasis on the social sciences, through which to examine the linkages between Asia's history, its emergence onto the global stage and the challenges and opportunities inherent in its modernity and/ or modernities, as well as Asia's future(s) in the global arena. The CAS program is designed to be thematically-driven, reflective of contemporary issues that are of relevance to understanding the complexities of today's Asia. The CAS courses are distinctly pan-Asian in geographic scope, providing empirical and critical coverage of South, Southeast and East Asia.
CAS students will gain empirical knowledge of the Asia, inclusive of South, Southeast and East Asia, through multiple disciplinary approaches to the study of the region, including Anthropology, Economics, Geography, History, Political Science and Sociology. By exposing students to current issues and debates in Asia, the CAS program is designed to prepare students for careers that involve global affairs and those which specifically focus on Asia.
(7.5 full-courses or their equivalent)

1. CAS200Y1 or POL215Y1
2. CAS310H1, CAS320H1
3. CAS400Y1
4. 1 FCE from each of Group A, B, and C
5. 1 additional $\operatorname{FCE}$ at the 300 or 400 level from Group A, $B, C$ or 1 FCE at any level in an Asian Language
6. 0.5 FCE in Arts \& Science courses in Breadth Requirement Category 5: The Physical and Mathematical Universe, or other course approved by the program director to achieve the Quantitative Reasoning competency.

## Contemporary Asian Studies Minor (Arts program)

(4 full-courses or their equivalent)

1. CAS200Y1 or POL215Y1
2. CAS310H1, CAS320H1
3. 2 additional FCEs from CAS or Groups A, B, or C (excluding 100-level courses), or 1 FCE from CAS, groups A, B, or C and 1 FCE in an Asian language

## Contemporary Asian Studies Groups

## Group A: Political Transformation

CAS200Y1, CAS440H1, CAS430H1, EAS251H1, EAS307H1, EAS476Y1, HIS347H1, JMC301Y1, JPA331Y1, JPA411H1, POL215Y1, POL357H1,POL376Y1, POL431Y1, POL441H1, SAS216H1

## Group B: Economic Transformation

CAS420H1, EAS247H1, EAS345Y1, EAS357H1, EAS374H1, ECO435H1, GGR342H1, GGR343H1, JPA411H1

## Group C: Cultural Expression/Exploration

ANT341H1, ANT352H1, ANT354H1, ANT377H1, ANT466H1, ANT467H1, CAS350H1, CAS360H1, EAS105H1, EAS217Y1, EAS271H1/Y1, EAS272H1, EAS289Y1, EAS303H1, EAS318H1, EAS333H1, EAS340Y1, EAS347H1, EAS364H1, EAS369Y1, EAS372H1, EAS375H1, EAS378H1, EAS394H1, EAS431H1, EAS453H1, EAS457H1, EAS462H1, EAS464H1, EAS465H1, EAS473H1, EAS497H1, HIS281Y1, HIS282Y1, HIS283Y1, HIS284Y1, HIS315H1, HIS328H1, HIS385H1/Y1,

HIS409H1, HIS448H1, HIS467H1, HIS470H1, HIS485H1, INI390Y1, RLG205Y1, RLG207Y1, RLG236H1, SAS114H1, SAS318H1, SAS413H1, SAS414H1, SOC218H1 Note: Not all electives are offered every year. Students are responsible for checking co-and prerequisites for all courses in Groups A, B, and C. Some of these courses may not be offered on a regular basis, and/or may only be offered to students enrolled in a POSt sponsored by the department or unit offering the courses.

## Asia-Pacific Studies Courses

CAS200Y1 Global Asia [48L]
This course introduces students to Asia's growing role in the contemporary global community. It provides an interdisciplinary take on key themes and topics in the study of the Asia with a particular emphasis on the dynamic movement of people, ideas, and resources across borders in the region. It provides conceptual and area studies backgrounds for students aiming to take more advanced courses on Asia and for students interested in the Contemporary Asian Studies major and minor. The course also examines the growth and character of economic, political, and cultural connections tying Asia to Canada. Exclusion: ASI200Y1
DR=SOC SCI; BR=3
CAS310H1 Comparative Colonialisms in Asia [24L]
This course analyzes the impact of colonialism in South, East, and Southeast Asia and the various ways in which precolonial traditions intersect with and reshape colonial and postcolonial process across the various regions of Asia. The course will examine the conjunctures of economy, politics, religion, education, ethnicity, gender, and caste, as these have played out over time in the making and re-making of Asia as both idea and place. Attention will be paid to postcolonial and indigenous theories, questions of 'the colonial' from the perspective of Asian Studies, and debates about the meaning of postcolonialism for the study of Asia now and in the future.
Prerequisite: CAS200Y1 or ASI200Y1 DR=HUM/SOC SCI; BR=3

CAS320H1 Comparative Modernities in Asia [24L] Since at least the late 1700s, the effects of capitalism across the globe have profoundly transformed both the rural and urban landscapes of human livelihood, consumption, production and governance in Asia. While colonial empires have declined, new empires have emerged, and a growing number of countries have witnessed the rise of nationalism and independent states, political and technological revolutions, and most recently neoliberal globalization. The varied nature and specificities of these dramatic transformations are only beginning to be understood. This course theorizes and explores "Asian modernities" in a comparative framework. It is aimed at students wishing to better understand the great transformations of 20th and 21st century Asia in a global context.
Prerequisite: CAS200Y1 or ASI200Y1
DR=HUM/SOC SCI; BR=3
CAS350H1 Asian Youth Cultures [24L]
In focusing on youth in Asia, this course brings together two disputed cultural formations of substantial contemporary importance. Both youth and Asia are increasingly invoked

## Asia-Pacific Studies (Dr. David Chu Program)

on the global stage in support of a wide range of interests. Examining practices of young people and the idea of youth in the context of Asia requires critical attention to the promises and fears that attach to the rise of Asian economies, international demographic transitions, the growth of a global middle-class, increasing consumption disparities, changing immigration patterns, expanding technological skills, global/ local environmental concerns, and young people's shifting political priorities and loyalties. The course may consider: youth subcultures, styles, music, and politics.
Prerequisite: Minimum of 4 FCEs
Recommended Preparation: CAS200Y1 or ASI200Y1
DR=HUM/SOC SCI; BR=1
CAS360H1 Asian Genders [24L]
This course will explore ways that gender is mobilized and produced in parts of Asia. It seeks to understand gender in its diversity and in attempts to "fix" or locate it in various bodies and places. Attempts will be made to see how gender is made knowable in terms of sexuality, medicine, nation, class, ethnicity, religion, and other discourses.
Prerequisite: Minimum of 4 FCEs
Recommended Preparation: ASI200Y1 or POL215Y1 DR=SOC SCI; BR=3

## CAS390H1 Special Topics [24L]

2012-13 Topic: Socialism to Post-Socialism. Please contact the program administrator for topic details.
Prerequisite: At least 4 FCEs
Exclusion: EAS357H1
DR=SOC SCI; BR=None

## CAS393H1 Independent Research [TBA]

Supervised independent research on a topic agreed on by the student and supervisor before enrolment in the course. Open to advanced students with a strong background in contemporary Asian studies. A maximum of one year of Independent Research courses is allowed per program. Contact hours with the supervisor may vary, but typically comprise of one hour per week.
Prerequisite: At least IO FCEs, permission from Program Director

## CAS393Y1 Independent Research [TBA]

Supervised independent research on a topic agreed on by the student and supervisor before enrolment in the course. Open to advanced students with a strong background in contemporary Asian studies. A maximum of one year of Independent Research courses is allowed per program. Contact hours with the supervisor may vary, but typically comprise of one hour per week.
Prerequisite: At least 10 FCEs, permission from Program Director
DR=SOC SCI; BR=None
CAS400Y1 Capstone Seminar - Critical Perspectives on Asian Modernity [48S]
This seminar course examines the diverse postwar experiences of countries in East Asia, South Asia, and Southeast Asia. The region comprises a wide range of countries that at once differ, but also share some commonalities in cultural, ethnic, and religious backgrounds, in levels of social and economic development, and in political regimes. To make sense of this diversity, a comparative, multi-disciplinary perspective will be introduced. Highlighting the principal theme of interdependence-of countries but also of fields of enquiry (geography, history, political science)
-the first term will look at the interactions between economic development, political change, and migration. The second term will continue with these themes, but will pay particular attention to environmental issues, and history as memory and politics. The course will critically examine various social science theories that seek to explain socio-economic change in its many manifestations, and aim to find an appropriate balance between the particular and the general or universal. Prerequisite: At least 10 FCEs including POL215Y1 or ASI200Y1 and enrolment in the Contemporary Asian Studies major or minor, or permission from the Program Director.
Exclusion: ASI300Y1, ASI400Y1
DR=HUM/SOC SCI; BR=3

## CAS413H1 Asia and Canada [24S]

This course is an interactive, participatory seminar. It will provide an opportunity to complement theoretical understanding about Asia acquired in other courses through hands-on research and experiential learning. The course will enable students to link studying Asia and Canada to career trajectories in the field of development and research.
Prerequisite: At least 8 FCEs
Exclusion: NEW413H1, SAS413H1
DR=SOC SCI; BR=3
CAS414H1 Public Culture and Media in Asia [24S]
This upper-level seminar will introduce students to the interdisciplinary study of popular culture and mass-mediated cultural forms in Asia. Through readings about popular protest, festivals, cinema, print, television, and music this course provides methodological tools to interpret the politics of representation and the formation of alternative modernities in the Asian continent and among the diaspora. The course will furthermore familiarize students with a range of theoretical lenses for conceptualizing the different meanings of the public from a modern Asian perspective.
Prerequisite: At least 8 FCEs
Exclusion: NEW414H1, SAS414H1
DR=SOC SCI; BR=1

## CAS420H1 Asia and the new Global Economy (formerly JPA420H1) [24S]

Course explores the rise of Asia and its integration into the new global economy (labour, capitalism, knowledge economy, economic nationalism, inequality, gender, the meaning of capitalism, democracy, among others), exposing students to different disciplinary perspectives. Geographical coverage is pan-Asian, including East, Southeast and South Asia.
Exclusion: JPA420H1
DR=HUM/SOC SCI; BR=3
CAS430H1 Nationalism and Revolution in Asia [24L]
This course explores the far-reaching social, political, and cultural transformations in East, Southeast, and South Asia, focusing on the regions; twentieth-century revolutionary histories and struggles to establish modern nation-states. The course adopts a topical approach within a chronological and comparative framework to highlight major historical movements and theoretical issues significant to the Asian experience.

# Asia-Pacific Studies (Dr. David Chu Program) 

Prerequisite: Completion of minimum 4.0 FCEs
Exclusion: HIS382H1, ASI430H1
Recommended Preparation: CAS200Y1/ASI200Y1
DR=HUM/SOC SCI; BR=3
CAS440H1 Critical Asia: Power and Culture [24L]
"Power" is critically examined in Asia from a variety of possible perspectives, times, and locations. Possible topics may include: revolution, states, resistance, colonialism, Orientalism, and mutual aid. "Power" is studied from a cultural and interdisciplinary perspective, so as to integrate and deepen students' previous studies of Asia.
Prerequisite: At least 10 FCEs including ASI200Y1 or
POL215Y1
DR=SOC SCI; BR=3
CAS490H1 Special Topics [24S]
2012-13 Topic: Asian Authoritarianisms - In the wake of Arab Spring, the Asia Pacific has displaced the Middle East in the spotlight as a holdout region whose countries remain significantly resistant to global democratizing tends. Despite notable breakthroughs in Taiwan, Korea and more recently, Indonesia, the region remains home to a remarkably diverse group of functioning authoritarian and semi-authoritarian regimes, including Vietnam, North Korea, Myanmar, Singapore, China and Malaysia. In the light of the growing interest among social scientists in the authoritarian revival, this course will seek to explore the conditions for authoritarian sustainability and prospects for political change in the region.
Prerequisite: At least 10 FCEs including POL215Y1 or ASI200Y1; and enrolment in the Contemporary Asian Studies major or minor or permission from the Program Director
Recommended Preparation: CAS200Y1 or ASI200Y1 DR=HUM/SOC SCI; BR=None

## CAS498H1 Independent Research [TBA]

Supervised independent research on a topic agreed on by the student and supervisor before enrolment in the course. Open to advanced students with a strong background in contemporary Asian studies. A maximum of one year of Independent Research courses is allowed per program. Contact hours with the supervisor may vary, but typically comprise of one hour per week.
Prerequisite: At least 12 FCEs including POL215Y1 or
ASI200Y1; enrolment in the Contemporary Asian Studies major or minor, and permission from the Program Director DR=SOC SCI; BR=None
CAS498Y1 Independent Research [TBA]
Supervised independent research on a topic agreed on by the student and supervisor before enrolment in the course. Open to advanced students with a strong background in contemporary Asian studies. A maximum of one year of Independent Research courses is allowed per program. Contact hours with the supervisor may vary, but typically comprise of one hour per week.
Prerequisite: At least 12 FCEs including POL215Y1 or ASI200Y1; enrolment in the Contemporary Asian Studies major or minor, and permission from the Program Director DR=SOC SCI; BR=None
JPA331Y1 Issues in Contemporary Chinese Politics [48L]
This course covers topics of interest in China from the Communist takeover in 1949 through to the reform period
of the 1980s, 1990s and 2000s. It will also address aspects of China's diplomacy related to its growing economic power. (Given by the Department of Political Science and the Contemporary Asian Studies Program)
Prerequisite: POL201Y1
Exclusion: POL300H1 (F) taken in 2009-10 or 2010-11
DR=HUM/SOC SCI; BR=3
JPA410H1 Democracy and Identity in Asia (formerly ASI410H1) [24S]
The course explores the ways in which identity has been empowered, represented, and institutionalized in Asia's emerging democracies; how identity claims challenge historically notions of state and nation; various ways in which democracy is being shaped and challenged by demands for identity recognition. Thematic, cross-regional approach; pan-Asian (East, Southeast, South Asia). (Given by the Department of Political Science and the Contemporary Asian Studies Program)
Exclusion: ASI410H1
DR=HUM/SOC SCI; BR=3
JPA411H1 The Political Economy of Global Taiwan
[24S]
This course explores the place of Taiwan the new global economy from historical, comparative, and international relations perspectives. (Given by the Department of Political Science and the Contemporary Asian Studies Program) DR=HUM/SOC SCI; BR=3
Courses with priority enrolment
CAS200Y1, CAS310H1, CAS320H1, CAS350H1, CAS360H1, CAS390H1, CAS400Y1, CAS420H1, CAS430H1, CAS440H1, CAS490H1, JPA331Y1, JPA410H1, JPA411H1, SAS216H1, SAS413H1, SAS414H1

## Astronomy \& Astrophysics

## Faculty

Professors Emeriti
C.T. Bolton, MSc, PhD
C.M. Clement, BSc, MA, PhD
M.J. Clement, MSc, PhD
J.D. Fernie, MSc, PhD, FRSC
R.F. Garrison, BA, PhD
P.P. Kronberg, MSc, PhD, DSc
J.R. Percy, BSc, MA, PhD (University of Toronto Mississauga)
S.M. Rucinski, MSc, PhD
E. R. Seaquist, MA, PhD

Professor and Chair
H.K.C. Yee, BASc, PhD, FRSC

Associate Chair, Graduate Studies
R.G. Abraham, BSc, DPhil

Associate Chair, Undergraduate Studies
M.H. van Kerkwijk, MA, PhD

University Professor
J.R. Bond, OC, MS, PhD, FRSC, FRS $\dagger$

## Professors

P. Artymowicz, MSc, PhD (University of Toronto Scarborough)
R.G. Carlberg, MSc, PhD, FRSC
C.C. Dyer, M Sc,PhD (University of Toronto Scarborough)
J. Graham, BSc, PhD, DIC, ARCS (Professor and Director of the Dunlap Institute)
R. Jayawardhana, BS, PhD
J.B. Lester, MS, PhD (University of Toronto Mississauga)
P.G. Martin, MSc, PhD, FRSC $\dagger$
N.W. Murray, BSc, PhD $\dagger$
C.B. Netterfield, BSc, PhD
A.C. Thompson, BSc, PhD $\dagger$

Associate Professors
C.D. Matzner, BA, MA, PhD
S.W. Mochnacki, MSc, PhD

D-S. Moon, PhD
U-L. Pen, MSc, PhD $\dagger$
S. Stanley, MA, PhD $\dagger \dagger$
Y. Wu, PhD

## Assistant Professors

J. P. Lowman, MSc, PhD (University of Toronto Scarborough)
H. Pfeiffer, PhD $\dagger$
G. Srinivasan, PhD $\dagger \dagger$
S. A. Wright, BS, MS, PhD

## Lecturer

M. Reid, MSc, PhD

Status Only Faculty
J. J. Dubinski, BSc, MSc, PhD (Associate Professor)
$\dagger$ Cross-appointed, CITA
$\dagger$ Cross-appointed, PLN
Astronomy studies the exploration of the universe beyond the earth and attempts 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 the heliocentric model of the solar system. Astronomy and astrophysics have 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, stars and galaxies that were forming not long after, ultradense neutron stars and black holes, as well as planets around other stars. 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 (AST101H1, AST201H1) 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. AST121H1 is an introductory astronomy course for all science students, while AST210H1 is intended for science students who do not intend to pursue an astronomy program. AST251H1 is best suited to life science students.

The remaining courses are designed for physical sciences and astronomy program students. For all Astronomy \& Astrophysics programs, the first astronomy courses normally start in the second year, as they require the mathematical and physical grounding provided in the first year. In third year, after further physics and mathematics, follow more advanced theoretical study as well as a lab course that includes the use of the campus telescopes. For the major program, this is complemented by electives in more advanced mathematics, physics or numerical methods, as well as an introduction to astrophysical research. For the Astronomy \& Physics specialist program, intensive training in all aspects of physics is added, allowing supervised, forefront research in fourth year, and preparing for a career in (astro)physical research via graduate studies or otherwise.

The Department works closely with two related academic units, the Canadian Institute for Theoretical Astrophysics (CITA) and the Dunlap Institute for Astronomy and Astrophysics (DI). With a national mandate, CITA fosters research in theoretical aspects of the discipline, including the exploitation of high performance computers in house and in SciNet. Complementary to this, a focus of DI is on the design and development of astronomical instrumentation. Undergraduate students will find diverse research opportunities through the Department and these two cognate units.
Undergraduate Enquiries: ungrad.sec@astro.utoronto.ca (416-946-5243)

Web site: http://www.astro.utoronto.ca

## Astronomy \& Astrophysics

## Astronomy and Astrophysics Programs

## Astronomy \& Physics Specialist (Science program)

Enrolment in this program requires the completion of 4 full courses or their equivalent.

The Astronomy \& Physics Specialist program combines rigorous training in the full spectrum of core physics subfields with their application in astronomy. Lecture courses are complemented by practical courses, and the program culminates in a supervised research project, where all the skills learned are used, and which is intended to be published.
(14 full courses or their equivalent, including at least 4 at the $300+$ level, and at least 1 at the 400 level)

First Year:
MAT137Y1/MAT157Y1, MAT223H1/MAT240H1; PHY151H1, PHY152H1
Second Year:
AST221H1, AST222H1; MAT237Y1, MAT244H1; PHY250H1, PHY252H1, PHY256H1
Third Year:

1. APM346H1; AST320H1, AST325H1/AST326Y1; PHY224H1, PHY254H1, PHY354H1, PHY356H1
2. One of MAT224H1, MAT327H1, MAT334H1, MAT363H1, STA257H1
Fourth Year:
3. AST425Y1; PHY350H1, PHY450H1
4. One half course from PHY324H1, PHY357H1, PHY358H1, PHY385H1, PHY395H1, PHY407H1, PHY408H1, PHY483H1
5. One half course from AST430H1, PHY454H1, PHY456H1, PHY460H1, PHY483H1, PHY484H1, PHY495H1
6. HPS200H1/JPH441H1, or another course with a significant emphasis on Social and Ethical Responsibility approved by the Undergraduate Chair.

## Notes:

1. Second-year students who wish to keep open the option of pursuing a physics specialist degree should consider taking PHY254H1 in 2nd year.
2. Third-year students are invited and fourth-year students are expected to attend the weekly departmental colloquia and G2000 talks.

## Astronomy \& Astrophysics Major (Science program)

Enrolment in this program requires the completion of 4 full courses or their equivalent.
This program is appropriate for students interested in a more flexible and diverse undergraduate program. It may be tailored to be a natural counterpart to a second major in Mathematics, Physics or Computer Science; students should consult the undergraduate chairs of Astronomy \& Astrophysics and the respective departments for advice on course selection.
(8 full courses or their equivalent, including at least 2 at the $300+$ level, and at least 0.5 at the 400 level)

First Year:
(MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year:

1. AST221H1, AST222H1; MAT235Y1/MAT237Y1; PHY252H1
2. One of PHY224H1, PHY250H1, PHY254H1, PHY256H1

Third Year:
AST320H1, AST325H1/AST326Y1
Third or fourth year:

1. HPS200H1/JPH441H1, or another course with a significant emphasis on Social and Ethical Responsibility approved by the Undergraduate Chair.
2. At least one of: CSC336H1, CSC350H1, CSC351H1, CSC456H1; ECE385H1; PHY350H1, PHY354H1, PHY356H1, PHY357H1, PHY358H1, PHY385H1, PHY395H1, PHY407H1/PHY408H1, PHY450H1
3. Any other APM/CSC/MAT/PHY/STA at the 300+ level to make up the total of 8 full-course equivalents.
Fourth Year: AST424H1
Notes:
4. The Astronomy \& Astrophysics Major program is not designed primarily for students intending to pursue graduate studies in Astronomy \& Astrophysics. Such students should consider the Astronomy \& Physics Specialist program, or consult the Undergraduate Chair about their course selections.
5. Students interested in pursuing a research project in fourth year (AST425Y1) should consult the undergraduate chair.
6. Third-year students are invited and fourth-year students are expected to attend the weekly departmental colloquia and G2000 talks.

## Astronomy \& Astrophysics Minor (Science program)

Enrolment in this program requires the completion of 4 full courses or their equivalent.

A program designed for students looking to add breadth to a program in another, perhaps unrelated discipline.
(4 full courses or their equivalent)

1. AST221H1, AST222H1, AST320H1, AST325H1/ AST326Y1
2. (PHY131H1, PHY132H1)//(PHY151H1, PHY152H1)
3. PHY252H1 and one of PHY224H1, PHY250H1, PHY254H1, PHY256H1
Note:
PHY131H1, PHY132H1 and PHY151H1, PHY152H1
require (MAT135H1,MAT136H1)/MAT137Y1/MAT157Y1 and PHY252H1 requires MAT235Y1/MAT237Y1/MAT257Y1.

## Astronomy \& Astrophysics

## Astronomy and Astrophysics Courses

## First Year Seminars

The PMU199Y1 and PMU199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## AST101H1 The Sun and Its Neighbours [24L/12T]

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, AST221H1. Also excluded are
CIV101H1, any 100- or higher-series CHM/PHY
courses taken previously or concurrently (with the
exception of PHY100H1, PHY101H1, PHY201H1,
PHY205H1, CHM101H1)
DR=SCI ; BR=5

## AST121H1 Origin and Evolution of the Universe [24L]

The origin of the Universe and all that it contains, from the chemical elements, stars and galaxies, and life.
The course is intended for students who are enrolling in science and engineering courses.
Prerequisite: SPH4U Physics; MCB4U Calculus
Exclusion: AST101H1, AST201H1, AST210H1. Also excluded are AST221H1, AST222H1 if taken previously or concurrently
DR=SCI; BR=5
AST201H1 Stars and Galaxies [24L/12T]
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, AST210H1. Also excluded are CIV101H1 and any 100- or higher-series CHM or PHY courses taken previously or concurrently (with the exception of PHY100H1, PHY101H1, PHY201H1,
PHY205H1, CHM101H1)
DR=SCI ; BR=5
AST210H1 Great Moments in Astronomy [24L] From the 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 includes an outline of some of the most significant puzzles of our day and an examination of the potential for new revolutions in our knowledge. This course is best suited to science students. Exclusion: AST101H1, AST121H1, AST201H1
DR=SCI; BR=5

AST221H1 Stars and Planets [36L]
Concepts of basic physics applied to a treatment of the solar system and stars. Telescopes and instrumentation are introduced.
Prerequisite: (PHY131H1,PHY132H1)/
(PHY151H1,PHY152H1); (MAT135H1,MAT136H1)/
MAT137Y1/MAT157Y1
Exclusion: AST101H1/AST201H1
DR=SCI; BR=5
AST222H1 Galaxies and Cosmology [36L]
Concepts of basic physics applied to a treatment of stellar systems and the structure of the Universe.
Prerequisite: AST221H1
Exclusion: AST201H1
DR=SCI; BR=5
AST251H1 Life on Other Worlds [24L]
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. Intended for life sciences students. DR=SCI; BR=4

## AST299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI ; BR=None

## AST320H1 Introduction to Astrophysics [24L]

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
DR=SCI ; BR=5

## AST325H1 Introduction to Practical Astronomy [39P]

Through experiment and observation, develop the core skills to collect, reduce, and interpret astronomical data. Develop understanding and usage of telescopes, instruments, and detectors; reduction and analysis methods; simulations and model fitting; data and error analysis.
Prerequisite: AST221H1/AST222H1
Exclusion: AST326Y1
Recommended Preparation: basic programming/scripting,
numerical techniques (e.g., through CSC108H1/
CSC148H1, CSC260H1).
DR=SCI; BR=5

## AST326Y1 Practical Astronomy [78P]

Through experiment and observation, develop the core skills to collect, reduce, and interpret astronomical data. Develop understanding and usage of telescopes, instruments, and detectors; reduction and analysis methods; simulations and model fitting; data and error
analysis. This course is an expanded version of AST325H1
that gives a wider exposure to practical astronomy.
Prerequisite: AST221H1/AST222H1
Exclusion: AST325H1
Recommended Preparation: basic programming/scripting,
numerical techniques (e.g., through CSC108H1/
CSC148H1, CSC260H1)
DR=SCI; BR=5
AST396Y0 Research Topic Abroad [TBA]
Course credit for research, lab work, or field studies abroad under the supervision of a faculty member.
Prerequisite: Completed at least 8.5 FCEs and no more than 14.0 FCEs including courses in AST, or permission of the instructor
DR=SCI; BR=None
AST398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
AST399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
AST424H1 Introduction to Astrophysical Research [24L]
A literature study that develops methods and skills applicable to research in the physical sciences, with an emphasis on communication, including writing proposals and reports, and delivering presentations. This course is intended for students in the final year of the Astronomy \& Astrophysics Major. Students are required to attend the weekly departmental colloquia and G2000 talks.
Prerequisite: AST320H1
Exclusion: AST425Y1
Recommended Preparation: AST325H1/AST326Y1
DR=SCI; BR=None

## AST425Y1 Research Topic in Astronomy

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: AST320H1 and two of AST325H1/AST326Y1, PHY324H1, PHY350H1, PHY354H1, PHY356H1, PHY357H1, PHY358H1, PHY395H1, PHY407H1/ PHY408H1, PHY450H1
DR=SCI; BR=5

## AST430H1 Supervised Study in Astronomy \& Astrophysics

An individual study program chosen by the student with the advice of, and under the direction of, a staff member. Prerequisite: Minimum GPA of 3.5 in Astronomy program courses, Permission of the Undergraduate Chair and the prospective adviser
DR=SCI; BR=5

## Biochemistry

## Faculty

## University Professors Emeriti

D.H. MacLennan, BA, M Sc, Ph D, FRSC, O.C.
M.A. Packham, BA, Ph D, FRSC

Professors Emeriti
R.A. Anwar, M Sc, Ph D
R.R. Baker, B 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.
J.W. Gurd, BA, Ph D
T. Hofmann, Dip Chem, D Sc Tech
C.J. Ingles, B Sc, Ph D
D.E. Isenman, B Sc, Ph D
A.O. Jorgensen, Ph D
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 Phar
H. Schachter, BA, MD, Ph D, FRSC
J.M. Segall, B Sc, Ph D
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.A.F. Reithmeier, B Sc, Ph D

## Professors

K. Adeli, B Sc, M Sc, Ph D
L. Attisano, B Sc, Ph D
D. Bazett-Jones, M Sc, Ph D
C.E. Bear, M Sc, Ph D
G.W. Brown, B Sc, Ph D
J.W. Callahan, M Sc, Ph D
A. Chakrabartty, B Sc, Ph D
H.S. Chan, B Sc, Ph D
D.M. Clarke, B Sc, Ph D
A.R. Davidson, B Sc, Ph D
C.M. Deber, B Sc, Ph D, FRSC
O.P. Ernst, Dipl-Chem, Dr rer nat
J. Forman-Kay, B Sc, Ph D
S. Grinstein, B Sc, Ph D, FRSC
W. Houry, B Sc, Ph D
P.L. Howell, B Sc, Ph D
L. Kay, B Sc, Ph D, FRSC, FRS
F.W. Keeley, B Sc, Ph D
S.O. 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
M.L. Rand, B Sc, Ph D
J. Rini, B Sc, Ph DM.L. Rand, B Sc, Ph D
B.H. Robinson, B Sc, Ph D
D. Rotin, B Sc, Ph D
F. Sicheri , B Sc, Ph D, FRSC
B.H. Robinson, B Sc, Ph D
D. Rotin, B Sc, Ph D
F. Sicheri , B Sc, Ph D, FRSC
C.H. Siu, BA, Ph D
I. Stagljar, B Sc Dipl-Mol Biol, Ph D
W. Trimble, B Sc, Ph D, FRSC
D.B.Williams, M Sc, Ph D
S. Wodak, L.C. Ph D
C.M. Yip, BA Sc, Ph D

## Associate Professors

C. Enenkel, Dipl-Chem, Dr rer nat
J.R. Glover, 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
R. Pomès, $B$ Eng, Ph D
S. Prosser, B Sc, M Sc, D Phil
C.A. Smibert, B Sc, Ph D
B. Steipe, MD, Ph D
A.R. Wilde, B Sc, Ph D

## Assistant Professors

S. Angers, B Sc, Ph D
W. Kahr, MD, PhD, FRCPC
P.K. Kim, B Sc, Ph D
T. F. Moraes, B Sc, M Sc, Ph D
A. F. Palazzo, B Sc, Ph D
J. Rubinstein, B Sc, Ph D
S. Sharpe, B Sc, Ph D
A. Volchuk, B Sc, Ph D

## Senior Lecturers

S. Andreopoulos, M Sc, Ph D
A. Khan-Trottier, B Sc, Ph D

## Lecturer

## S. Patterson, 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.

Students considering choosing either the BCH Specialist or BCH Major program are encouraged to attend program information sessions to be held by the department in February and March. Please note that the Specialist program is the accepted route to graduate studies in Biochemistry and to careers in research.

Undergraduate Coordinator (Acting) Dr. S. Andreopoulos, s.andreopoulos@utoronto.ca

Undergraduate Administrator Jennifer Haughton, jennifer. haughton@utoronto.ca

Enquiries: Medical Sciences Building, Room 5207 (416-9782700)

Web site: www.biochemistry.utoronto.ca

## Biochemistry Programs

## Biochemistry Specialist (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
First Year BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/ CHM151Y1, and 1.0 FCE from (MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1/MAT157Y1/ or (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 80 s ; average $=$ mid 80 s .
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.

Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).
See the departmental web site at www.biochemistry.utoronto. ca for more information
(14 full courses or their equivalent, including at least three 400 series courses)

First Year: BIO120H1, BIO130H1; CHM151Y1/(CHM138H1, CHM139H1); and MAT137Y1/(MAT135H1, MAT136H1 or (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) [PHY131H1, PHY132H1 recommended]
First or Second Year: (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) [PHY131H1, PHY132H1 recommended]
Second Year:

1. $\mathrm{BCH} 242 \mathrm{Y} 1 ; \mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) /$ BIO250Y1; CHM220H1*, CHM247H1/CHM249H1
2. One of: BIO260H1/HMB265H1/CHM221H1*

Third Year: BCH340H1, BCH371H1/ (BCH377H1, BCH378H1); MGY311Y1
Fourth Year:

1. $\mathrm{BCH} 471 \mathrm{Y} 1 / \mathrm{BCH} 478 \mathrm{H} 1$
2. Four half courses from the following list, including at least two BCH courses: $\mathrm{BCH} 422 \mathrm{H} 1 / \mathrm{BCH} 425 \mathrm{H} 1 / \mathrm{BCH} 426 \mathrm{H} 1 /$ $\mathrm{BCH} 440 \mathrm{H} 1 / \mathrm{BCH} 441 \mathrm{H} 1 / \mathrm{BCH} 444 \mathrm{H} 1 / \mathrm{BCH} 445 \mathrm{H} 1 /$ BCH446H1/BCH447H1/BCH448H1/BCH479H1/ BCB420H1/CHM447H1/MGY420H1/MGY425H1/ MGY428H1/MGY451H1/MGY452H1/MGY470H 1
3. BCH372Y1/BCH373H1/BCH375H1/BCH472Y1/ BCH473Y1: One full credit from these optional research project courses may be taken for the Specialist program**.
Note: Some of the MGY courses noted above have BIO 260 H 1 as prerequisite.
Over the course of the Specialist program, additional credits (to bring the program total to 14 full courses or their equivalent) from the following list: $\mathrm{BIO} 220 \mathrm{H} 1 / \mathrm{BIO} 260 \mathrm{H} 1 /$ CHM217H1 (Analytical Chemistry)/CHM221H1* (Physical Chemistry II)/CHM225Y1 (Physical Chemistry)/CHM326H1 (Quantum Mechanics, Spectroscopy)/CHM328H1 (Physical Chemistry) /CHM342H1 (Organic Synthesis)/CHM347H1 (Organic Chemistry of Biological Compounds)/CSC108H1/ CSC148H1/CSC150H1 (Introductory Computer Science, only one CSC course can be chosen)/HMB265H1/MAT235Y1/ MAT237Y1 (Calculus II)/STA220H1/STA221H1/ any suitable 300-level course from CHM/CSB/EEB/HMB/IMM/LMP/MGY/ PCL/PSL (departmental approval required)
*In lieu of CHM220H1 + CHM221H1, CHM225Y1 is an acceptable alternate credit for the Specialist program. CHM225Y1 and CHM221H1 have MAT235Y1/MAT237Y1 (Calculus II) as corequisite.
** Additional BCH research project courses can be taken as part of the 20 full credits needed for your degree, but if you take more than one full credit project course each must be taken with a different research supervisor.

## Biochemistry Major (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:

## Biochemistry

## First Year

(BIO120H1, BIO130H1)/BIO150Y1;(CHM138H1, CHM139H1)/CHM151Y1; and 1.0 FCE from (MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1; or (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.

While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks = high 70s; average = high 70s.

Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.

Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).

For more information, refer to the Biochemistry web site at www.biochemistry.utoronto.ca.

NOTE Students CANNOT combine a Biochemistry Major with a Cell \& Molecular Biology Major.
8 full courses or their equivalent, including two 400-series half-year courses as noted below.

First Year: (BIO120H1, BIO130H1)/BIO150Y1; (CHM138H1, CHM139H1)/CHM151Y1; and (MAT135H1, MAT136H1)/ MAT137Y1 or (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
First Year/Second Year: (MAT135H1, MAT136H1) or (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year: $\mathrm{BCH} 210 \mathrm{H} 1 ; \mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1$, BIO241H1)/BIO250Y1; CHM247H1/CHM249H1
Third Year:

1. BCH311H1
2. BCH 370 H 1
3. 1.5 full-course equivalents from the following list: BIO220H1/BIO260H1/CHM217H1/CHM220H1/ HMB265H1/BCH340H1/A NY 300-level course(s) in CHM/CSB*/EEB/HMB/IMM/LMP/MGY/PCL/PSL (departmental approval required). *CSB349H1 is excluded. Students who have completed BCH304H1 may use the credit to partially fulfill this requirement.
Fourth Year: Two of: BCH422H1/BCH425H1/BCH426H1/ BCH440H1/BCH441H1/BCH444H1/ BCH445H1/ BCH446H1/BCH447H1/BCH448H1/CHM447H1

## Bioinformatics and Computational Biology

 Specialist (Science program)The Bioinformatics and Computational Biology Program is jointly sponsored by the Departments of Biochemistry, Cell \& Systems Biology, Computer Science and Ecology \& Evolutionary Biology. 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:
(BIO120H1, BIO130H1)/BIO150Y1; (CHM138H1, CHM139H1)/CHM151Y1; MAT135Y1/MAT137Y1/ MAT157Y1 or (PHY131H1, PHY132H1)
First Year or Second Year:

MAT135Y1/MAT137Y1/MAT157Y1 or ( PHY131H1, PHY132H1)
Second Year: MAT223H1/MAT240H1; STA247H1; STA248H1;
CSC207H1; CSC236H1/CSC240H1; BCH242Y1; BIO250Y1; BIO240H1; BIO241H1
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 computerscience 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)

## Biochemistry Courses

## Bioinformatics and Computational Biology Courses

The Bioinformatics and Computational Biology Program is currently undergoing curriculum review. Current information on the Specialist Program will be outlined at: biochemistry. utoronto.ca/bcb. Following is the 2010-2011 version of the program requirements.

## BCB410H1 Applied Bioinformatics [24L/24T]

Practical introduction to concepts, standards and tools for the implementation of strategies in bioinformatics and computational biology.
DR=SCI ; BR=5
BCB420H1 Computational Systems Biology [24L/24T] Current approaches to using the computer for analyzing and modeling biology as integrated molecular systems. The course complements an introductory Bioinformatics course such as BCH 441 H 1 . (Enrolment limited.)
DR=SCI ; BR=5
BCB430Y1 Special Project in Bioinformatics and Computational Biology
An opportunity for specialized individual research in bioinformatics and computational biology by arrangement with the course coordinator and a supervisor.
$\mathrm{DR}=\mathrm{SCI}$; $\mathrm{BR}=5$

## Biochemistry Courses

NOTE***Students that do not meet the Subject Post requirements for PE/AE courses must email Dr. Andreopoulos for permission to take the course.

The Department of Biochemistry's former third-year specialist laboratory course BCH 371 H 1 has been replaced
with BCH 377 H 1 and BCH 378 H 1 . The Department of Biochemistry's fourth year laboratory course BCH471Y1 will be replaced by BCH 478 H 1 beginning in 2013-2014.

## BCH210H1 Biochemistry I: Proteins, Lipids and Metabolism [36L/24T]

Proteins, enzymes, membranes and the metabolism of carbohydrates and lipids. This course is intended for students who are NOT taking BCH242Y1 as part of their program.
Prerequisite: (CHM138H1, CHM139H1)/CHM151Y1NOTE: CHM1** WITH COURSE EXCLUSION TO CHM138H1 AND CHM139H1 meet the Prerequisite requirement for BCH210H1. SCI1** DOES NOT COUNT AS A Prerequisite. CHM140Y5 (UTM) is equivalent to CMH139H1 ONLY. CHMA10H3 \& CHMA11H3 (UTSC) are equivalent to CHM139H1 ONLY. CHMB41H3/CHMB42H3 (UTSC) are equivalent to CHM138H1 ONLY. Students that have an SDF in CHM138H1/CHM139H1 are not permitted to take BCH 210 H 1 until a final passing mark appears on the transcript.
Exclusion: BCH242Y1/BCH310H1/BCH320Y1/BCH321Y1/ CHM265H5(UTM)/CHM361H5(UTM)/CHM362H5(UTM)/
BGYC12H3 and BGYC13H3(UTSC)
DR=SCI ; BR=5
BCH242Y1 Introduction to Biochemistry [64L/12T/12P]
An introductory course that will serve as the foundation for BCH courses taken in Third and Fourth years by students specializing in biochemistry and related specialist programs. The major topics include protein structure, enzyme mechanisms, cellular and molecular biology, lipid and membrane structure and function, and carbohydrate, lipid, and amino acid metabolism and bioenenergetics. Please note that there are four laboratories in this course.
Prerequisite: (CHM138H1,CHM139H1)/CHM151Y1
Exclusion: BCH210H1/310H1/320Y1/321Y1/
CHM265H5(UTM)/CHM361H5(UTM)/CHM362H5(UTM)/
BGYC12H3 and BGYC13H3(UTSC)
DR=SCI; BR=4+5
BCH299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI ; BR=None

## BCH311H1 Biochemistry II: Nucleic Acids and Biological Information Flow [24L/24T]

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. Registration in one of the tutorial sessions is mandatory. Note: Students that have a SDF in BCH210H1 are not permitted to take BCH 311 H 1 until a final passing mark appears on the transcript. BCH2** WITH COURSE EXCLUSION TO BCH210H1 meets the Prerequisite requirement for BCH 311 H 1 .
Prerequisite: BCH210H1, BGYC12H3 \& BGYC13H3(UTSC) Exclusion: BIO349H1/CSB349H1, MGY311Y1, PSL350H1 DR=SCI; BR=4

## BCH340H1 Proteins: from Structure to Proteomics [24L/6T]

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 presented. Finally, proteomics approaches to map protein-protein interactions will be discussed.
Prerequisite: BCH210H1/BCH242Y1
Exclusion: BCH421H1
DR=SCI; BR=4
BCH370H1 Laboratory Course in Biochemical Techniques [12L/36P]
This course reinforces theoretical principles through experiments that encompass pH and buffers, spectrophotometry, chromatography, protein electrophoresis, enzyme kinetics and DNA isolation and analysis. 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 Majors and Specialists. This course will be offered in the FALL \& WINTER terms. No enrolment will be permitted after the start of class. (Enrolment limited)
Prerequisite: BCH210H1
Exclusion: BCH371H1, BCH377H1, CHM379H1, DR=SCI; BR=4

## BCH371H1 A Laboratory Course in Biochemistry [72P]

(Replaced with BCH 377 H 1 and BCH 378 H 1 )
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)
Prerequisite: BCH242Y1
Exclusion: BCH370H1, CHM379H1
DR=SCI; BR=4

## BCH372Y1 Summer Research in Biochemistry [144P]

Real-world opportunity to apply theoretical knowledge and hone technical skills through full-time research in an active research laboratory for students who have completed second year. Students are responsible for arranging for supervision by a Department of Biochemistry faculty member in advance of the academic year-end. Participants must have a minimum cGPA of 3.0 and the approval of the course coordinator. Prerequisite: BCH242Y1, and permission of Department DR=SCI; BR=4
BCH373H1 Research Project in Biochemistry [72P] This course is held in the fall term and will provide increased real-world research opportunities to our undergraduates. This course, which will take advantage of the resources and expertise of the over 50 faculty researchers within the department, will enhance our program in several ways. It will give students an appreciation of the scientific method that comes from intensive experimentation. It will also enhance students understanding of theoretical concepts learned in other courses through a better understanding of the experimental approaches upon which those theories are based. It will provide an environment that involves one on one contact with faculty members. In addition, the experience gained in this intermediate research project will enhance the student experience in the advanced level research project course BCH 473 , that our department offers. BCH 373 H 1

## Biochemistry

can be combined with BCH375H1. Students must have a minimum cGPA of 3.0.
Prerequisite: BCH242Y1, and permission of Department DR=SCI; BR=4

BCH375H1 Research Project in Biochemistry [72P]
This course provides an opportunity to perform specialized research in biochemistry under the direct supervision of Biochemistry Department faculty. (See BCH373H1). Students must have a minimum cGPA of 3.0.
Prerequisite: BCH 242 Y 1 , and permission of Department DR=SCI; BR=4

## BCH377H1 Biochemistry Laboratory I [12L/36P]

An introduction to fundamental laboratory techniques in modern biochemistry. Experiments illustrate and develop the concepts described in lecture courses and serve as a foundation for more advanced training in biochemistry laboratory courses.
Prerequisite: BCH242Y1
Exclusion: BCH370H1, BCH371H1, CHM379H1
DR=SCI; BR=4
BCH378H1 Biochemistry Laboratory II [12L/36P]
This course builds upon the fundamental laboratory techniques acquired in BCH 377 H 1 . Students gain handson experience in experimental design and data analysis, exploring numerous modern experimental techniques used in biochemistry research laboratories. (Enrolment limited.)
Prerequisite: BCH377H1
DR=SCI; BR=4

## 400-level courses

Note Students who have completed University of Toronto at Mississauga's CHM361H5 and CHM362H5 may enroll in 400 -series lecture courses if they obtain permission of the Department.

## BCH422H1 Membrane Proteins: Structure, and Function [24L]

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/BCH242Y1, BCH311H1/
MGY311Y1/CSB349H1 (BIO349H1)/PSL350H1 DR=SCI; BR=4
BCH425H1 Structural Biology: Principles and Practice [24L]
Theory of modern biophysical techniques as applied to the study of the structure and function of macromolecules; emphasis on X-ray crystallography, electron cryomicroscopy, NMR spectroscopy, and other spectroscopic methods.
Prerequisite: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{BCH} 242 \mathrm{Y} 1$. This is a problemsolving course and will require use of skills from
introductory physics, math, and/or chemistry courses. DR=SCI; BR=4
BCH426H1 Regulation of Signalling Pathways [24L] 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 proliferation and differentiation? What signaling pathways are triggered by insulin?

Prerequisite: BCH210H1/BCH242Y1,
BCH311H1/MGY311Y1/CSB349H1 (BIO349H1)/PSL350H1 DR=SCI; BR=4
BCH427H1 Advanced Molecular Biophysics [24L]
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/PHY356H1,
CHM328H1
DR=SCI; BR=4
BCH440H1 Protein Biosynthesis [24L]
"The life of proteins: from birth to death." Ribosome structure. Maturation and trafficking of mRNA and tRNA. Regulation of translation initiation, elongation and termination. Antibiotic inhibition of translation. Programmed frameshift. Translationmediated mRNA decay. Molecular chaperones. Translocation across intracellular membranes. Protein aging. Protein misfolding disease. Protein degradation.
Prerequisite: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{BCH} 242 \mathrm{Y} 1, \mathrm{BCH} 311 \mathrm{H} 1 /$
MGY311Y1/CSB349H1 (BIO349H1)/PSL350H1
DR=SCI; BR=4
BCH441H1 Bioinformatics [24L/12T]
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. For curriculum details see: www.biochemistry.utoronto.ca/undergraduates/ courses/BCH441H/wiki/
Prerequisite: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{BCH} 242 \mathrm{Y} 1, \mathrm{BCH} 311 \mathrm{H} 1 /$
MGY311Y1/(CSB349H1/BIO349H1)/PSL350H1 or special permission
Exclusion: CSB472H1,BIO472H1
DR=SCI; BR=4

## BCH444H1 Protein Trafficking in the Secretory \& Endocytic Pathways [24L]

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: BCH242Y1/BCH210H1, BCH311H1/
MGY311Y1/PSL350H1/CSB349H1(BIO349H1) DR=SCI; BR=5

## BCH445H1 Organelles in Cell Function and Death [24L]

Advanced principles and concepts of cell biology are covered including the structure, biogenesis, and dynamic behavior of cell organelles. The specific contributions to the life and death of the cell are highlighted. Signaling events that integrate cellular communication are discussed. Specifically,
the interplay between the Endoplasmic Reticulum, Peroxisomes and Mitochondria is highlighted. Mitochondrial biogenesis and membrane dynamics as they relate to apoptosis and cellular signaling/integration are presented as they relate to human disease. State-of-the-art imaging techniques and the contributions of cell biology to modern day advances in medicine are also presented.
Prerequisite: BIO250Y1/(BIO240H1, BIO241H1),
BCH210H1/BCH242Y1,BCH311H1/MGY311H1/
CSB349H1(BIO349H1)/PSL350H1
Exclusion: ANA304Y1,BCH305H1
DR=SCI; BR=4

## BCH446H1 Membrane Dynamics of the Cell Surface [24L]

Principles and concepts of cell biology are covered including the structure, molecular organization and dynamic interactions of cells with each other and the extracellular matrix during cell migration and cell adhesion. The role of cytoskeletal components and cell surface receptors in these processes and in membrane traffic will be addressed. Signaling pathways initiated by cell-cell interactions during normal and pathological development will be discussed. Prerequisite: $\mathrm{BIO} 240 \mathrm{H} 1 / \mathrm{BIO} 250 \mathrm{Y} 1 / \mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{BCH} 242 \mathrm{Y} 1$, BCH311H1/MGY311Y1/CSB349H1(BIO349H1)/PSL350H1 DR=SCI; BR=4

## BCH447H1 Molecular Evolution [24L]

This course will examine the fundamental concepts of evolution with an emphasis on molecular evolution. We will discuss selected controversial topics such as molecular clocks, alternative splicing, junk DNA, random genetic drift vs. natural selection, the Three Domain Hypothesis and whether humans are evolving. We will examine various evolutionary hypotheses that scientists are proposing as alternatives to the Modern Synthesis.
Prerequisite: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{BCH} 242 \mathrm{Y} 1, \mathrm{BCH} 311 \mathrm{H} 1 /$
MGY311Y1/CSB349H1 (BIO349H1)/PSL350H1 DR=SCI; BR=4

## BCH448H1 Structure and Function of the Nucleus (formerly BCH335H1) [24L]

This course examines the structure and function of the cell nucleus through the lens of biochemistry, molecular biology and cell biology. Topics that will be covered are the structure of DNA, the organization of the genome, the filtering of information found in the genome into biologically relevant molecules such as mRNA, the processing and export of these products from the nucleus into the cytoplasm, and the translation of these into protein. We will also investigate the role of the nucleus in a diverse number of biological processes such as mitosis, cell polarity, muscle and neuronal development, and aging.
Prerequisite: BCH210H1/BCH242Y1,BCH311H1/MGY311Y1/
CSB349H1/BIO349H1/PSL350H1

## Exclusion: BCH335H1

DR=SCI; BR=4
BCH471Y1 Advanced Biochemistry Laboratory [161P]
Experiments demonstrating modern concepts of biochemistry and molecular biology. (Enrolment limited.)
Prerequisite: $\mathrm{BCH} 340 \mathrm{H} 1, \mathrm{BCH} 371 \mathrm{H} 1 /(\mathrm{BCH} 377 \mathrm{H} 1$,
BCH378H1)/(CHM361H5 [UTM] + CHM362H5[UTM] +

CHM371H5[UTM]) + MGY311Y1
DR=SCI; BR=4

## BCH472Y1 Advanced Summer Research Project in Biochemistry [144P]

Real-world opportunity to apply theoretical knowledge and hone technical skills through full-time research in an active research laboratory for students who have completed third year. Students are responsible for arranging for supervision by a Department of Biochemistry faculty member in advance of the academic year-end. Participants must have a minimum cGPA of 3.0 and the approval of the course coordinator.
Prerequisite: $\mathrm{BCH} 340 \mathrm{H} 1, \mathrm{BCH} 371 \mathrm{H} 1$ ( BCH 377 H 1 and
BCH378H1), and permission of Department DR=SCI; BR=4

## BCH473Y1 Advanced Research Project in Biochemistry [144P]

Research in a particular area of biochemistry, by arrangement with the Department and the instructor concerned. Students must have a minimum cGPA of 3.0
Prerequisite: BCH340H1, BCH371H1/(BCH377H1,
BCH378H1), and permission of Department
Corequisite: BCH 471 Y 1
DR=SCI; BR=4
BCH478H1 Advanced Biochemistry Laboratory [72P]
Experiments extend students' technical abilities as well as their knowledge and application of practical theory. This course is designed as an advanced successor in a progression of biochemistry laboratory experiences in $\mathrm{BCH} 242 \mathrm{Y} 1, \mathrm{BCH} 377 \mathrm{H} 1$ and BCH 378 H 1 that will equip students with a spectrum of practical abilities that are of vital importance in scientific research.
NOTE: This course will be offered beginning in 2013-2014.
Prerequisite: $\mathrm{BCH} 340 \mathrm{H} 1, \mathrm{BCH} 371 \mathrm{H} 1 /(\mathrm{BCH} 377 \mathrm{H} 1$,
BCH378H1), MGY311Y1
DR=SCI; BR=5
BCH479H1 Advanced Seminar in Biochemistry [24S] This seminar course will foster close interactions between students and Faculty and encourage in depth discussion not only of results but the ways the results were presented and the rationales for experimental design. Critical thinking skills will be developed, as will presentation skills, as students become presenters of results and take on the role of scientist presenting and analyzing new findings. Writing skills will be developed through an essay assignment. Students within the audience will also have access to the experimental papers and be encouraged to pose thoughtful questions about research and the ways that research can be communicated within the scientific community. Thus the new seminar course will foster an appreciation of scientific writing and give students a venue to develop their communication skills. The goal of the seminar course is to improve both the written and oral scientific communication skills of our Specialist students, as well as to increase their knowledge of key papers in Biochemistry.
Prerequisite: BCH340H1, BCH371H1/
(BCH377H1,BCH378H1) and permission of Department DR=SCI; BR=4

## 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. The biological sciences are experiencing a revolution. Important discoveries occur weekly as scientists and their students around the world develop and use new techniques, theories, and approaches.

The University of Toronto has many faculty members 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; members of the departments of Cell \& Systems Biology and Ecology \& Evolutionary Biology teach biology courses across this broad spectrum. Each of these departments offers its own programs and courses, and jointly offers the Biology programs and, with Molecular Genetics, the Genome Biology Major program. Courses are available in the broad subject areas of cell and molecular biology, developmental biology, ecology, evolutionary biology, genetics, physiology, and genome biology. 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 calculus and chemistry from high school is required for students pursuing some programs in biology and recommended for others.

Students entering their first year in the life sciences take BIO 120 H 1 and BIO 130 H 1 . These courses are taken by students who have successfully completed Grade 12 Biology (or an equivalent course); BIO 130 H 1 also requires students to have successfully completed Grade 12 Chemistry (or an equivalent course). One or both of these half courses is a prerequisite for almost all further courses in the life sciences.

Students in the Biology Specialist and Major programs obtain a foundation in the core areas of cell and molecular biology, ecology, evolutionary biology, physiology and genetics; as well as in calculus, chemistry and statistics (Specialist), or chemistry (Major). In the upper years, students take advanced courses in these areas, and can also include courses in the biological sciences offered by other units. In their final year, students take at least one full-year or two half-year (Specialist) or one half-year (Major) advanced integrative, inquiry-based course in the biological sciences offered by the departments of Cell \& Systems Biology and Ecology \& Evolutionary Biology, including seminar, independent research project, and field courses. Students who wish to focus on either plant and microbal biology or animal biology can take courses within these programs that concentrate in these subject areas.

Genomics, the study of the structure, function and evolution of the genome, is among the newest and most rapidly growing fields of both basic and applied science, and nearly all of the more traditional disciplines in biology are being revolutionized by genomic tools. The growing flood of data on the DNA, RNA, and protein sequences of organisms provides unprecedented opportunities to address fundamental biological questions such as the causes of disease, the genetic basis of development, the extent and causes of adaptive evolution, and the nature of gene regulation. Genome biology is a highly interdisciplinary field, encompassing concepts and practices from such diverse fields as cell and molecular biology, evolutionary genetics, and computer science.
Students in the Genome Biology Major program will receive a uniquely broad training in these concepts and practices, with a key focus on conceptual training in molecular biology, bioinformatics and evolutionary genetics, and practical training in both computational and wet-lab genomics research. A key focus of the program is to train biologists in the breadth of knowledge and skills required to understand, generate, and use results from genomics. The Genome Biology Major program begins with a core set of courses providing a foundation in biology in the first and second years of study. In the upper years, the departments of Cell \& Systems Biology, Ecology \& Evolutionary Biology, and Molecular Genetics offer a range of courses that cover various aspects of genomics. These include advanced lecture, seminar, and laboratory courses in addition to research project courses that take students into active labs to pursue their own research. A critical requirement of this program is a practical laboratory component that provides hands-on experience with the collection and/or analysis of genomic datasets.

The diverse course offerings in the Biology and Genome Biology programs allows students to customize their educational experience to match their personal interests.

## Biology Programs

## Biology Specialist (Science program)

The Biology Specialist, Major, and Minor programs are administered through the Department of Ecology \& Evolutionary Biology. Contact: undergrad.eeb@utoronto.ca
Enrolment in this program requires the completion of 4.0 courses.
(12 full courses or their equivalent including at least 1.0 FCE at the 400 level series)
Students who have taken BIO150Y1, do not take BIO120H1 and BIO 220 H 1 in this program. Students who have taken BIO 240 H 1 and BIO241H1, do not take BIO130H1 and BIO 230 H 1 in this program.
First Year (3.0 FCEs): (BIO120H1, BIO130H1)/BIO150Y1; (CHM138H1, CHM139H1)/CHM151Y1; JMB170Y1/ (MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1/ MAT157Y1
Higher Years:

1. 2.5 FCEs: BIO 220 H 1 ; $\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1$; BIO 251 H 1 ; BIO270H1; BIO260H1/HMB265H1
2. 0.5 FCE statistics from: EEB225H1; PSY201H1; STA220H1, STA250H1, STA257H1; GGR270H1
3. 0.5 FCE from chemistry, physics or statistics: CHM220H1, CHM247H1/CHM249H1; PHY131H1, PHY151H1; PSY202H1; STA221H1, STA255H1, STA261H1
4. 1.5 FCE at the $200+$ series from: BCH ; BIO; CSB (excluding CSB200Y1); EEB (excluding EEB202H1, EEB204H1, EEB214H1); EHJ351H1, EHJ352H1; ENV234H1, ENV334H1; IMM250H1; MGY200H1; NFS284H1; PSY397H1, PSY497H1
5. 0.5 FCE at $300+$ series in plant or microbial biology from: CSB340H1, CSB350H1, CSB351Y1, CSB353H1, CSB450H1, CSB452H1, CSB459H1, CSB460H1, CSB475H1; EEB328H1, EEB330H1, EEB331H1, EEB337H1, EEB340H1, EEB404H1, EEB405H1, EEB428H1, EEB440H1, EEB445H1
6. 0.5 FCE at $300+$ series in animal biology from: CSB325H1, CSB327H1, CSB328H1, CSB330H1, CSB331H1, CSB332H1, CSB343H1, CSB345H1, CSB346H1, CSB347H1, CSB425H1, CSB426H1, CSB428H1, CSB429H1, CSB430H1, CSB431H1, CSB432H1, CSB435H1, CSB445H1, CSB483H1, CSB484H1; EEB322H1, EEB356H1, EEB360H1, EEB382H1, EEB384H1, EEB386H1, EEB388H1, EEB389H1, EEB409H1, EEB440H1; EHJ351H1, EHJ352H1
NOTE: BIO270H1 and BIO271H1 are prerequisites for 300+ series CSB courses in physiology.
7. 2.0 FCEs at $300+$ series from (at least 1.0 FCE must be from Group 1):
Group 1: CSB; EEB; ENV334H1; EHJ351H1, EHJ352H1; NUS; PSY397H1, PSY497H1
Group 2: ANA; ANT333Y1, ANT430H1, ANT436H1; BCH; IMM; NFS; MGY; PSL
8. 1.0 FCE at 400-series from: CSB; EEB; HMB499Y1

NOTE: Students who wish to focus on either plant or microbial biology, or animal biology should take courses in 7 . and 8 . that concentrate in these subject areas as listed in 5 . and 6 ., respectively. BIO 271 H 1 is highly recommended for students concentrating in animal biology and is a prerequisite for $300+$ series CSB courses in physiology.

## Biology Major (Science program)

The Biology Specialist, Major, and Minor programs are administered through the Department of Ecology \& Evolutionary Biology. Contact: undergrad.eeb@utoronto.ca
Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent including at least 1.5 FCEs at the 300+ series level and 0.5 FCE at the 400 series level)
First Year (2.0 FCEs): BIO120H1; BIO130H1; (CHM138H1, CHM139H1)/CHM151Y1
Higher Years:

1. 2.5 FCEs: $\mathrm{BIO} 220 \mathrm{H} 1 ; \mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1 ; \mathrm{BIO} 251 \mathrm{H} 1$; BIO270H1; BIO260H1/HMB265H1
2. 1.5 FCE from: BCH; BIO; CSB (excluding CSB200Y1); EEB (excluding EEB202H1, EEB204H1, EEB214H1); EHJ351H1, EHJ352H1; ENV234H1, ENV334H1; IMM250H1; MGY200H1; NFS284H1; PSY397H1, PSY497H1
3. 1.5 FCEs at 300+ series from: ANA; ANT333Y1, ANT430H1, ANT436H1; BCH; CSB; EEB; EHJ351H1, EHJ352H1; ENV334H1; IMM; MGY; NUS; PSL; PSY397H1, PSY497H1
4. 0.5 FCE at 400 -series from: CSB; EEB; HMB499Y1 NOTE: Students who wish to focus on either plant or microbial biology, or animal biology should take courses in 2., 3., and 4. that concentrate in these subject areas (as listed below).
CSB and EEB courses in plant or microbial biology: CSB340H1, CSB350H1, CSB351Y1, CSB353H1, CSB450H1, CSB452H1, CSB459H1, CSB460H1, CSB475H1; EEB268H1, EEB328H1, EEB330H1, EEB331H1, EEB337H1, EEB340H1, EEB404H1, EEB405H1, EEB428H1, EEB440H1, EEB445H1
CSB and EEB courses in animal biology: BIO271H1; CSB325H1, CSB327H1, CSB328H1, CSB330H1, CSB331H1, CSB332H1, CSB343H1, CSB345H1, CSB346H1, CSB347H1, CSB425H1, CSB426H1, CSB428H1, CSB429H1, CSB430H1, CSB431H1, CSB432H1, CSB435H1, CSB445H1, CSB483H1, CSB484H1; EEB263Y1, EEB266H1, EEB267H1, EEB322H1, EEB356H1, EEB360H1, EEB382H1, EEB384H1, EEB386H1, EEB388H1, EEB389H1, EEB409H1, EEB440H1; EHJ351H1, EHJ352H1. (BIO271H1 is highly recommended for students concentrating in animal biology and is a prerequisite for $300+$ series CSB courses in physiology.)

## Biology Minor (Science program)

The Biology Specialist, Major, and Minor programs are administered through the Department of Ecology \& Evolutionary Biology. Contact: undergrad.eeb@utoronto.ca
Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)
First Year (1.0 FCE): BIO120H1; BIO130H1
Higher Years:

1. 1.0 FCE from: $\mathrm{BIO} 220 \mathrm{H} 1 ; \mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1$; BIO251H1; BIO270H1; BIO271H1; BIO260H1/ HMB265H1
2. 2.0 FCEs ( 1.0 FCE must be at the $300+$ series) from: BIO; CSB (excluding CSB200Y1); EEB (excluding EEB202H1, EEB204H1, EEB214H1); EHJ351H1, EHJ352H1; ENV234H1, ENV334H1; HMB265H1; NUS; PSY397H1, PSY497H1

## Genome Biology Major (Science program)

This program is a joint program of the departments of Cell \& Systems Biology, Ecology \& Evolutionary Biology, and Molecular Genetics. It is administered through the Department of Cell \& Systems Biology.
Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent)
First year: BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1; (MAT135H1, MAT136H1)/MAT137Y1/ MAT157Y1

## Higher years:

1. $\mathrm{BIO} 22 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1 ; \mathrm{BIO} 260 \mathrm{H} 1 /$ HMB265H1; EEB225H1/STA220H1

## Biology

2. Genomics fundamentals: CSB349H1, CSB352H1; EEB323H1
3. 0.5 FCE laboratory course from: CSB472H1, CSB474H1; EEB460H1
4. 1.0 FCE genomics elective from: CSB330H1, CSB350H1, CSB397Y0, CSB435H1, CSB450H1, CSB473H1, CSB490H1, CSB491H1, CSB497H1/ CSB498Y1/CSB499Y1; EEB362H1, EEB459H1, EEB497H1/EEB498Y1/EEB499Y1; EHJ352H1; MGY350H1, MGY428H1, MGY470H1, MGY480Y1
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NOTE: Students taking CSB397Y0, CSB490H1, CSB491H1,
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CSB497H1/CSB498Y1/CSB499Y1, EEB497H1/EEB498Y1/
EEB499Y1 or MGY480Y1 are encouraged to conduct a
genomics-related research project.

## Other Biology Programs:

Animal Physiology: see Cell \& Systems Biology
Biodiversity and Conservation Biology: see Ecology \& Evolutionary Biology

Biology, Human: see Human Biology
Cell and Molecular Biology: see Cell \& Systems Biology
Developmental Biology: see Cell \& Systems Biology
Environmental Biology: see Ecology \& Evolutionary Biology
Ecology \& Evolutionary Biology: see Ecology \& Evolutionary Biology

## Biology Courses

BIO120H1 Adaptation and Biodiversity
See Ecology \& Evolutionary Biology
BIO130H1 Molecular and Cell Biology
See Cell \& Systems Biology
BIO220H1 From Genomes to Ecosystems in a Changing World
See Ecology \& Evolutionary Biology
BIO230H1 From Genes to Organisms
See Cell \& Systems Biology
BIO251H1 Form, Function and Development in Plants
See Ecology \& Evolutionary Biology
BIO255H1 Cell and Molecular Biology with Advanced Laboratory
See Cell \& Systems Biology
BIO260H1 Concepts in Genetics
See Cell \& Systems Biology
BIO270H1 Animal Physiology I
See Cell \& Systems Biology
BIO271H1 Animal Physiology II
See Cell \& Systems Biology

## Canadian Institute for Theoretical Astrophysics

## Faculty

## Professor and Director

N.W. Murray, BSc, PhD

Associate Chair
U-L. Pen, MSc, PhD
University Professor
J.R. Bond, OC, MS, PhD, FRSC, FRS

## Professors

P.G. Martin, MSc, PhD, FRSC
A.C. Thompson, BSc, PhD

## Assistant Professor

H. Pfeiffer, BSc, PhD

The Canadian Institute for Theoretical Astrophysics (CITA) is an incorporated national institute hosted by the University of Toronto, conducting research covering all of modern astrophysical theory and analysis during this remarkable age of cosmic discovery. CITA has firmly established itself as one of the top five places in the world for such research; despite its small size CITA has had a large impact on the world-wide astrophysics community. Research at CITA is carried out by about 30 research fellows, 30 graduate students, and a limited number of undergraduate students, all supervised by full-time faculty members.

Where do elements, planets, solar systems, stars, galaxies, the Universe, and life, come from? Questions like these fascinate everyone. Theorists at CITA analyze, interpret, and explain the astronomical observations that illuminate such questions, using laboratory-tested physical laws, or as recently seen, new physical laws that the observations require but which laboratory experiments have not been able, so far, to detect. The observational data are supplied by the recent and ongoing explosion in astronomical hardware, including current observatories like the 10-meter class Keck telescope, the Hubble space telescope, x-ray, infrared, and ultra-violet space telescopes, and a host of others.
CITA courses are designed for students interested in doing undergraduate research in theoretical astrophysics, and are appropriate for computer science, engineering science, physical sciences and astronomy program students.
CITA works closely with two related academic units, the Department of Astronomy and Astrophysics (DAA) and the Dunlap Institute for Astronomy and Astrophysics (DI). The DAA is engaged in a broad range of research, with an emphasis on observational astronomy. A main focus of Dl is on the design and development of astronomical instrumentation. Undergraduate students will find diverse research opportunities through CITA and these two cognate units.

Undergraduate Enquiries: pen@cita.utoronto.ca (416-9786477)

Web site: http://www.cita.utoronto.ca

## Canadian Institute for Theoretical Astrophysics Courses

CTA200H1 Computational Astrophysics [24L/12T]
Research in theoretical astrophysics encompasses star, planet and galaxy formation. This course introduces students to modern computational techniques using large scale parallel numerical simulations, carried out at CITA and SciNet. This is an intensive two-week course taught in May.
Prerequisite: MAT135Y1/MAT137Y1/MAT157Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) or their equivalent.
Recommended Preparation: Physical science, mathematics and computation, or engineering
DR=SCI; BR=5

## CTA299Y1 Research Opportunity Program [TBA]

Credit course for supervised participation in faculty research projects.
Prerequisite: MAT135Y1/MAT137Y1/MAT157Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) or their equivalent
Recommended Preparation: Physical science, mathematics and computation, or engineering
DR=SCI; BR=5
CTA395YO Research Topic [TBA]
Course credit for research under the supervision of a faculty member.
Prerequisite: Completed at least 8.5 FCEs and no more
than 14.0 FCEs including courses in AST, CTA200H1, or permission
DR=SCI; BR=None
CTA396Y0 Research Topic Abroad [TBA]
Course credit for research or field studies abroad under the supervision of a faculty member.
Prerequisite: At least 8.5 FCEs and no more than 14.0 FCEs including courses in AST, CTA200H1, or permission of the instructor
Recommended Preparation: Physical science, mathematics and computation, or engineering
DR=SCI; BR=5
CTA495Y1 Independent Topics in Astrophysics [TBA] A research project done in consultation with an individual staff member in the Institute leading to a detailed written report and oral presentation. This course is intended primarily for students in the final year of the Astronomy and Physics specialist program, although it is available to students in Engineering Science, Computer Science, or Mathematics. Students must enroll with the Undergraduate Secretary, Prof. Pen.
Prerequisite: 1 FCE from PHY324H1, PHY350H1, PHY354H1, PHY356H1, PHY357H1, PHY358H1, PHY395H1, PHY404H1, PHY408H1, AST325H1/ AST326Y1, or similar courses in Engineering Science or Mathematics.
Recommended Preparation: Physical science, mathematics and computation, or engineering
DR=SCI; BR=5

## Faculty

Professors Emeriti
F.M. Barrett, M Sc, Ph D
D.G. Butler, M Sc, Ph D, D Sc, FRSA (ZOO)
G.M. Clark, M Sc, Ph D (ZOO)
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)
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)
P.A. Romans, M Sc, Ph D
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)
A.M. Zimmerman, MS, Ph D (ZOO)

Professor and Chair of the Department U. Tepass, M Sc, Ph D

## Professors and Associate Chairs

L.T. Buck, B Sc, Ph D
D.S. Guttman, B Sc, Ph D
S.L. Varmuza, MS, Ph D

## Professors

M.G. AbouHaidar, M Sc, Ph D
T. Berleth, Diplom, Ph D
J.R. Coleman, B Sc, Ph D (U)
D.R. Goring, M Sc, Ph D
E.W. Larsen, M Sc, Ph D
D.A. Lovejoy, B Sc, Ph D
P. McCourt, B Sc, Ph D
J.J.B. Smith, MA, Ph D (N)
S.S. Tobe, M Sc, Ph D, FRSC
R. Winklbauer, Dipl in Bio, Ph D

Associate Professors
A. Bruce, BA, Ph D
B. Chang, AB, Ph D
D. Christendat, B Sc, Ph D
D. Desveaux, M Sc, Ph D
D. Godt, Dipl in Bio, Ph D
T.J. Harris, B Sc, Ph D
N.J. Provart, M Sc, Ph D
M.J. Ringuette, B Sc, Ph D
R. Stephenson, B Sc, Ph D
V. Tropepe, B Sc, Ph D
M. Woodin, M Sc, Ph D
K. Yoshioka, MS, Ph D

Assistant Professors
J. Mitchell, BA, Ph D
A. Moses, BA, Ph D
E. Nambara, M Sc, Ph D
J. Peever, M Sc, Ph D
S. Peisajovich, B Sc, Ph D

## Senior Lecturer

M. Neumann, M Sc, Ph D

## Lecturer

C. Garside, M Sc, PhD
$\dagger$ 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. Our undergraduate programs reflect this diversity and research strength. 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 (Cell and Molecular Biology Specialist and Major), developmental biology (Developmental Biology Specialist), genetics and physiology (Animal Physiology Major) 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) (Genome Biology Major).

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 Major (Science program)
Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent)
Students who have taken BIO150Y1, do not take BIO120H1 and BIO 220 H 1 in this program. Students who have taken BIO 240 H 1 and BIO 241 H 1 , do not take BIO 130 H 1 and BIO 230 H 1 in this program.
First Year: BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1; JMB170Y1/ (MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1/MAT157Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Higher Years:

1. $(\mathrm{BIO} 220 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1) / \mathrm{BIO} 255 \mathrm{Y} 1$
2. $\mathrm{BIO} 270 \mathrm{H} 1, \mathrm{BIO} 271 \mathrm{H} 1$
3. CSB325H1
4. 0.5 FCEs from: CSB332H1, CSB343H1, CSB346H1

## Cell \& Systems Biology

5. 1.5 FCEs (at least 0.5 FCE must be at the $300+$ level) from: BCH210H1; BIO260H1/HMB265H1; CSB299Y1, CSB327H1, CSB330H1, CSB331H1, CSB332H1, CSB343H1, CSB345H1, CSB346H1, CSB347H1, CSB352H1, CSB397Y0; EEB263Y1; PSY397H1; STA220H1
6. 0.5 FCE at the 400-level from CSB425H1, CSB426H1, CSB432H1, CSB445H1, CSB497H1, CSB498Y1, CSB499Y1; HMB430H1, HMB472H1, HMB499Y1; PSL432H1, PSL443H1, PSL452H1
Biology: see Biology
Bioinformatics and Computational Biology: see Biochemistry

## Cell \& Molecular Biology Specialist (Science program)

This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined with a minimum grade of $70 \%$ in BIO 130 H 1 . If the student does not achieve $70 \%$ in BIO 130 H 1 , admission can be determined with a minimum grade of $70 \%$ in BIO 230 H 1 . Achieving these marks does not necessarily guarantee admission to the program in any given year. Enrolment also requires the completion of four courses, including $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 130 \mathrm{H} 1$; (CHM138H1, CHM139H1)/ CHM151Y1; JMB170Y1/(MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1/MAT157Y1.
(12.5 full courses or their equivalent, including at least one 400-series course)
Students who have taken BIO150Y1, do not take BIO120H1 and BIO 220 H 1 in this program. Students who have taken BIO 240 H 1 and BIO 241 H 1 , do not take BIO 130 H 1 and BIO 230 H 1 in this program.

First Year:
BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1; JMB170Y1/(MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1/MAT157Y1.
Higher Years:

1. (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
2. (BIO220H1, BIO230H1/BIO255H1)/BIO255Y1, (BIO270H1, BIO271H1), BIO260H1/HMB265H1; BCH210H1
3. CSB330H1/CSB350H1, CSB331H1, CSB349H1, CSB428H1
4. 0.5 FCE from the following: $\mathrm{BCH} 422 \mathrm{H} 1, \mathrm{BCH} 426 \mathrm{H} 1$, BCH445H1, CSB327H1, CSB347H1
5. 3.0 FCEs from the following (at least 0.5 FCE must be at the 400 -level): $\mathrm{BCH} 440 \mathrm{H} 1, \mathrm{BCH} 441 \mathrm{H} 1, \mathrm{BCH} 444 \mathrm{H} 1$, CSB299Y1, CSB327H1, CSB328H1, CSB332H1, CSB340H1, CSB351Y1, CSB352H1, CSB353H1, CSB397Y0, CSB429H1, CSB430H1, CSB435H1, CSB450H1, CSB452H1, CSB458H1, CSB459H1, CSB460H1, CSB472H1, CSB473H1, CSB474H1, CSB475H1, CSB490H1, CSB491H1, CSB497H1, CSB498Y1, CSB499Y1, HMB499Y1, MGY480Y1
Cell \& Molecular Biology Major (Science program)
Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent)

Students who have taken BIO150Y1, do not take BIO120H1 and BIO 220 H 1 in this program. Students who have taken BIO 240 H 1 and BIO 241 H 1 , do not take BIO130H1 and BIO 230 H 1 in this program.
First Year: BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1; JMB170Y1/(MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1/MAT157Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Higher Years:

1. (BIO220H1, BIO230H1/BIO255H1)/ BIO255Y1
2. $\mathrm{BIO} 260 \mathrm{H} 1 / \mathrm{HMB} 265 \mathrm{H} 1 ; \mathrm{BCH} 210 \mathrm{H} 1$
3. CSB349H1
4. 1.0 FCE from: CSB327H1, CSB328H1, CSB331H1, CSB340H1, CSB351Y1
5. 1.5 FCE (at least 0.5 FCE must be at the $300+$ level and 0.5 FCE at the 400-level) from: BCH422H1, BCH426H1, $\mathrm{BCH} 444 \mathrm{H} 1, \mathrm{BCH} 445 \mathrm{H} 1, \mathrm{CSB} 299 \mathrm{Y} 1, \mathrm{CSB} 327 \mathrm{H} 1$, CSB328H1, CSB330H1, CSB331H1, CSB332H1, CSB340H1, CSB347H1, CSB350H1, CSB351Y1, CSB352H1, CSB353H1, CSB397Y0, CSB428H1, CSB429H1, CSB430H1, CSB435H1, CSB450H1, CSB452H1, CSB458H1, CSB459H1, CSB460H1, CSB472H1, CSB473H1, CSB474H1, CSB475H1, CSB490H1, CSB491H1, CSB497H1, CSB498Y1, CSB499Y1, HMB499Y1, MGY480Y1. No more than 0.5 FCE in BCH can be used towards this requirement.

## Developmental Biology Specialist (Science program)

This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined with a minimum grade of $70 \%$ in BIO 130 H 1 . If the student does not achieve $70 \%$ in BIO 130 H 1 , admission can be determined with a minimum grade of $70 \%$ in BIO 230 H 1 . Achieving these marks does not necessarily guarantee admission to the program in any given year. Enrolment also requires the completion of four courses, including BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1; JMB170Y1/(MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1/MAT157Y1.
(12.5 full courses or their equivalent, including at least one 400-series course)
Students who have taken BIO150Y1, do not take BIO120H1 and BIO 220 H 1 in this program. Students who have taken BIO 240 H 1 and BIO 241 H 1 , do not take BIO 130 H 1 and BIO 230 H 1 in this program.
First Year:
BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/
CHM151Y1; JMB170Y1/(MAT135H1, MAT136H1)/
MAT135Y1/MAT137Y1/MAT157Y1

## Higher Years:

1. BCH 210 H 1 ; ( $\mathrm{BIO} 220 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1$ )/ BIO255Y1, BIO260H1; CHM220H1/CHM247H1/ CHM249H1
2. 1.0 FCE from $\mathrm{BIO} 251 \mathrm{H} 1, \mathrm{BIO} 270 \mathrm{H} 1, \mathrm{BIO} 271 \mathrm{H} 1$
3. CSB349H1
4. CSB328H1, CSB340H1
5. 2.5 (or $3.5^{*}$ ) courses from: ANA300Y1, ANA301H1; BCH340H1, BCH370H1, BCH425H1, BCH426H1; CSB327H1, CSB330H1, CSB331H1, CSB350H1, CSB352H1, CSB397Y0, CSB425H1, CSB435H1, CSB450H1, CSB459H1 CSB460H1, CSB472H1,

## Cell \& Systems Biology

CSB473H1, CSB475H1; EEB340H1, EEB460H1; IMM334Y1, IMM428H1; IMM429H1; MGY425H1, MGY428H1, MGY451H1, MGY452H1, MGY470H1; PSL304H1, PSL305H1, PSL420H1
6. 1.0 (or $2.0^{*}$ ) courses from CSB428H1, CSB429H1, CSB430H1, CSB431H1, CSB458H1, CSB483H1, CSB484H1, CSB497H1, CSB498Y1, CSB499Y1; HMB499Y1; MGY480Y1

* Requirements 5. and 6. must include a total of at least 4.5
full courses


## Genome Biology: see Biology

Neuroscience: see Human Biology

## Cell and Systems Biology Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## BIO130H1 Molecular and Cell Biology [36L/15P]

One of the goals of modern biology is to understand how the basic building blocks of life give rise to biological form and function. This course provides students with a common lexicon to understand the key principles and concepts in molecular and cell biology, with a focus on how the building blocks of life lead to functioning cells.
Prerequisite: SBI4U and SCH4U (Grade 12 University
Preparation Biology and Chemistry) or permission of department. Please contact bio130@utoronto.ca for more information.
Exclusion: BIO240H1, BIO241H1, BIO250Y1, BIO255Y1
DR=SCI; BR=4
BIO230H1 From Genes to Organisms [36L/15P]
The genome is the "book of life," providing instructions to construct an organism. This course introduces genome biology and explores how the building blocks of life are networked into functioning organisms. We will investigate how cells perceive internal and external cues, how gene expression is shaped by this perception, and how these events give rise to the myriad of life around us.
Prerequisite: BIO130H1, (CHM138H1, CHM139H1)/ CHM151Y1
Exclusion: $\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1, \mathrm{BIO} 250 \mathrm{Y} 1, \mathrm{BIO} 255 \mathrm{H} 1$, BIO255Y1. Students who have only completed one of
BIO 240 H 1 or BIO 241 H 1 can take BIO 230 H 1 for credit.

## DR=SCI; BR=4

BIO255H1 Cell and Molecular Biology with Advanced Laboratory [36L/33P]
The genome is the "book of life," providing instructions to construct an organism. This course introduces genome biology and explores how the building blocks of life are networked into functioning organisms. We will investigate how cells perceive internal and external cues, how gene expression is shaped by this perception, and how these events give rise to the myriad of life around us. 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.
Prerequisite: BIO130H1, (CHM138H1, CHM139H1)/ CHM151Y1, cGPA 3.0
Exclusion: $\mathrm{BIO} 230 \mathrm{H} 1, \mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1, \mathrm{BIO} 250 \mathrm{Y} 1$, BIO255Y1
Recommended Preparation: BCH210H1 (taken concurrently or previously)
DR=SCI; BR=4
BIO260H1 Concepts in Genetics [36L/12T]
This is a problem based course which discusses classical, molecular, developmental, and population genetics and genomics with emphasis on model organisms for genetic analysis.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 240 \mathrm{H} 1 / \mathrm{BIO} 250 \mathrm{Y} 1 / \mathrm{BIO} 255 \mathrm{H} 1$
Exclusion: HMB265H1
DR=SCI; BR=4
BIO270H1 Animal Physiology I [24L/8P]
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.
Prerequisite: BIO130H1/BIO150Y1
Exclusion: BIO/ZOO252Y1
DR=SCI; BR=4
BIO271H1 Animal Physiology II [24L/8P]
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.
Prerequisite: BIO 270 H 1
Exclusion: BIO/ZOO252Y1
DR=SCI; BR=4

## CSB200Y1 Current Topics in Molecular Biology [48L/24P]

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.
Exclusion: $\mathrm{BIO} 130 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1, \mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1$, BIO250Y1, BIO255H1, BIO255Y1
DR=SCI; BR=4
CSB299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None
CSB325H1 Endocrine Physiology [24L/9T]
The regulation of physiological processes by hormones and other signalling molecules in non-human 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. Students will have the opportunity to research areas of their own interest via group interaction in a series of tutorial sessions.

# Cell \& Systems Biology 

Prerequisite: $\mathrm{BIO} 270 \mathrm{H} 1, \mathrm{BIO} 271 \mathrm{H} 1$
Recommended Preparation: EEB266H1, EEB267H1
DR=SCI; BR=4

## CSB327H1 Extracellular Matrix Dynamics and Associated Pathologies [36L]

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.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$
BIO255H1/BIO255Y1
DR=SCI; BR=4

## CSB328H1 Developmental Biology [24L/24P]

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. Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$

BIO255H1/BIO255Y1, BIO260H1/HMB265H1
DR=SCI; BR=4

## CSB330H1 Techniques in Molecular and Cell Biology

 [24L/36P]Laboratory course on molecular and cell biology research techniques used to study genes and proteins. Topics include plasmid cloning, PCR, bioinformatics, gene expression analyses, protein-protein interactions, and protein subcellular localization.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$
BIO255H1/BIO255Y1, BIO260H1/HMB265H1
Recommended Preparation: BCH311H1/CSB349H1/
MGY311Y1 taken concurrently
DR=SCI; BR=4
CSB331H1 Advanced Cell Biology I: Cellular Dynamics During Development[36L]
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.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$
BIO255H1/BIO255Y1
DR=SCI; BR=4
CSB332H1 Neurobiology of the Synapse [24L]
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.

Prerequisite: BIO271H1/PSL201Y1/PSL300H1/PSL302Y1 DR=SCI; BR=4

CSB340H1 Plant Development [24L]
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.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$
BIO255H1/BIO255Y1, BIO260H1/(HMB265H1 with a
minimum grade of $73 \%$ )
DR=SCI; BR=4

## CSB343H1 Animal Energetics [24L]

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: BIO252Y1/(BIO270H1, BIO271H1)/PSL201Y1/
(PSL300H1, PSL301H1)/PSL302Y1
Recommended Preparation: BCH210H1/BCH242Y1 DR=SCI; BR=4
CSB345H1 Introductory Biology of Sleep [24L]
An introduction to the regulation of sleep-wake states and the functions of sleep - why and how animals sleep. Integrates all levels of biological organization, including molecular biology, cell biology, systems physiology, control theory, behaviour and evolution, with comparisons across phyla.
Prerequisite: ( $\mathrm{BIO} 270 \mathrm{H} 1, \mathrm{BIO} 271 \mathrm{H} 1) /(\mathrm{PSL} 300 \mathrm{H} 1$,
PSL301H1)/PSL302Y1
Exclusion: CSB445H1
DR=SCI; BR=4
CSB346H1 Neurobiology of Respiration [24L/12T]
Integrated control of cardio-respiratory physiology and metabolism in mammals. Topics include exercise, diving, sleep and hibernation.
Prerequisite: (BIO270H1, BIO271H1)/(PSL300H1,
PSL301H1)/PSL302Y1
DR=SCI; BR=4
CSB347H1 Comparative Cellular Physiology [24L]
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.
Prerequisite: (BIO270H1, BIO271H1)/(PSL300H1,
PSL301H1)/PSL302Y1
Exclusion: NUS348H0
Recommended Preparation: BCH210H1
DR=SCI; BR=4
CSB349H1 Eukaryotic Gene Expression [24L/18T]
Genome structure and the regulation of gene expression in eukaryotic cells. Topics include gene duplication, repetitive DNA, transcription, gene silencing and regulation, expression profiling, and nuclear reprogramming. Tutorials emphasize

## Cell \& Systems Biology

problem based learning exercises that relate to recent advances in the broad field of eukaryotic gene expression.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$ BIO255H1/BIO255Y1, BIO260H1/HMB265H1
Exclusion: MGY311Y1, MGY420H1
Recommended Preparation: BCH210H1
DR=SCI; BR=4

## CSB350H1 Laboratory in Molecular Plant Biology [24L/36P]

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.
Prerequisite: BIO230H1/(BIO240H1, BIO241H1)/BIO250Y1/ BIO255H1/BIO255Y1
Recommended Preparation: BIO251H1 or higher level plant biology course; BCH311H1/CSB349H1/MGY311Y1 concurrently
DR=SCI; BR=4

## CSB351Y1 Introductory Virology [48L/96T]

An introduction to basic and medical virology. Attendance in tutorials is optional.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$ BIO255H1/BIO255Y1
DR=SCI; BR=4

## CSB352H1 Bioinformatic Methods [6L/18P]

Use of available programs for analyzing biological data. This is an introductory course with a strong emphasis on handson methods. Some theory is introduced, but the main focus is on using extant bioinformatics tools to analyze data and generate biological hypotheses.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$ BIO255H1/BIO255Y1, BIO260H1/HMB265H1
DR=SCI; BR=4

## CSB353H1 Introduction to Plant-Microbe Interactions [24L]

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, and discusses plant immune systems.
Prerequisite: BIO230H1/(BIO240H1, BIO241H1)/BIO250Y1/ BIO255H1/BIO255Y1
Exclusion: CSB452H1
Recommended Preparation: BIO251H1
DR=SCI; BR=4

## CSB397YO Research Abroad in Cell \& Systems Biology[TBA]

An independent research project conducted in a cell biology, developmental biology, plant biology, neurophysiology, or systems biology research lab in an approved partner university. The laboratory research is supervised by a faculty member at the partner institution.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1 / \mathrm{BIO} 271 \mathrm{H} 1$ with a minimum grade of $73 \%$; permission of the CSB Undergraduate Associate Chair
DR=SCI; BR=4

CSB398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33
DR=SCI: BR=None
CSB399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None

## CSB425H1 Endocrinology of Transformation [24L/12T]

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. (Offered in alternate years.)
Prerequisite: CSB325H1; cGPA 2.7

## DR=SCI; BR=4

CSB426H1 Physiology of Stress and Reproduction [12L/24S]
Students will gain an integrated understanding of how organismal and cellular stress affects the process of reproduction. The focus will be primarily on chordates and will examine genetic, cellular, organismal, behavioural, and social levels of interaction.
Prerequisite: CSB325H1, cGPA 2.7
DR=SCI; BR=4
CSB428H1 Advanced Cell Biology II: Cell Polarity and Cytoskeletal Dynamics [12L/12T/12S]
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: BCH311H1/CSB349H1/MGY311Y1, CSB328H1/
CSB331H1/CSB340H1, cGPA 2.7
DR=SCI; BR=4
CSB429H1 Germ Cell Biology [12L/12T/12S]
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.
Prerequisite: CSB328H1/CSB329H1/CSB340H1/CSB349H1/
MGY311Y1/MGY312H1, cGPA 2.7
DR=SCI; BR=4
CSB430H1 Neurogenesis [24L/12T]
An examination of the molecular and cellular basis of neurogenesis in development and adult nervous systems. Experimental evidence from recent studies in selected invertebrate and vertebrate model systems will be discussed. Topics include neural stem cells, regional specialization of neurogenesis, neuronal and glial differentiation, extrinsic

# Cell \& Systems Biology 

regulation of neurogenesis, adult neurogenesis, and the evolution of neurogenesis. Students are expected to have a basic knowledge of molecular genetics, developmental biology and/or neuroanatomy. Lectures will be complemented by student directed seminars that focus on specialized research studies published in leading scientific journals. Prerequisite: CSB328H1/(HMB200H1, HMB320H1) DR=SCI; BR=4

## CSB431H1 Evolution and Development: Gastrulation [12L/12T/12S]

Gastrulation is used to examine the molecular and cellular mechanisms of a major morphogenetic process and its evolutionary modifications. This course includes small group discussions and presentations. Controversial issues presented in the lectures are debated.
Prerequisite: CSB328H1/(BIO230H1/(BIO240H1, BIO241H1)/
BIO250Y1/BIO255H1/BIO255Y1, BIO260H1/HMB265H1
and permission of instructor)
Recommended Preparation: CSB328H1
DR=SCI; BR=4

## CSB432H1 Advanced Topics in Cellular Neurophysiology [12L/24S]

This course examines cellular neurophysiological processes in the developing and mature nervous systems with a focus on: (1) understanding modern techniques used in neurophysiological research; and (2) interpreting the results from neurophysiological peer-reviewed manuscripts. This course is interactive and requires students to contribute actively during lectures and seminars.
Prerequisite: CSB332H1
DR=SCI; BR=4

## CSB435H1 Regulatory Networks and Systems in Molecular Biology [24L]

This course will expose students to several of the bestunderstood regulatory networks in molecular biology, as well as recent technological and methodological developments. Emphasis is on the mechanistic basis for these systems, methods and models for quantitative analysis of regulatory networks and the biological logic they encode.
Prerequisite: BCH311H1/CSB349H1/MGY311Y1 DR=SCI; BR=4
CSB445H1 Topics in Sleep Research [6L/18S]
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. This course emphasizes student participation in seminar discussion and debates.
Prerequisite: BIO252Y1/(BIO270H1, BIO271H1)/(PSL300H1, PSL301H1)/PSL302Y1
Recommended Preparation: CSB332H1/CSB345H1/ PSY397H1
DR=SCI; BR=4

CSB450H1 Proteomics in Systems Biology [24L]
A discussion on current proteomic approaches to understand biological processes. The role of mass spectrometry, gel electrophoresis, protein-protein interaction and structural biology in understanding how proteins function in pathways and interaction networks will be discussed.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$
BIO255H1/BIO255Y1, BCH210H1
DR=SCI; BR=4

## CSB452H1 Molecular Plant-Microorganism Interactions

 [24L]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.
Prerequisite: BCH311H1/CSB349H1/MGY311Y1
Recommended Preparation: CSB353H1
DR=SCI; BR=4
CSB458H1 Epigenetics[36S]
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.
Prerequisite: BIO260H1/HMB265H1, CSB349H1/MGY311Y1 DR=SCI; BR=4

## CSB459H1 Plant Molecular Biology and Biotechnology [24L]

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.
Prerequisite: BCH311H1/CSB349H1/MGY311Y1 DR=SCI; BR=4
CSB460H1 Plant Signal Transduction [24L]
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.
Prerequisite: BCH311H1/CSB349H1/MGY311Y1 or permission of instructor
DR=SCI; BR=4
CSB472H1 Computational Genomics and Bioinformatics [24L/12T]
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.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$

## Cell \& Systems Biology

BIO255H1/BIO255Y1
Exclusion: BCH441H1
Recommended Preparation: BIO260H1/HMB265H1 DR=SCI; BR=4
CSB473H1 Chemical Genomics [24L]
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.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) / \mathrm{BIO} 250 \mathrm{Y} 1 /$
BIO255H1/BIO255Y1, BIO260H1/HMB265H1, CHM247H1 Recommended Preparation: BCH210H1
DR=SCI; BR=4

## CSB474H1 Methods in Genomics and Proteomics [60P]

This is a hands-on, laboratory based course offered through the Centre for the Analysis of Genome Evolution and Function (CAGEF). It 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: BIO260H1/HMB265H1, BIO255H1/BIO255Y1/
CSB330H1/CSB350H1 or by permission of the instructor
Recommended Preparation: BCH311H1/CSB349H1/
MGY311Y1
DR=SCI; BR=4

## CSB475H1 Plant Metabolomics [24L]

This course introduces students to major features of plant metabolism. The content covers plant physiology, natural product chemistry, genetics, molecular biology, and genomics. Topics also include strategies for designing how we modulate metabolic pathways and how we utilize plants for biotechnology through metabolic engineering.
Prerequisite: BCH311H1/CSB349H1/MGY311Y1
DR=SCI; BR=4
CSB483H1 Seminar in Development I [24S]
Seminars analyzing the major problems in developmental biology from cellular, genetic and molecular perspectives.
Prerequisite: CSB328H1/CSB340H1
DR=SCI; BR=4
CSB484H1 Seminar in Development II [24S]
Students will choose a major issue in contemporary
Developmental Biology and critically analyze present and future prospects in that field.
Prerequisite: CSB483H1
DR=SCI; BR=4

## CSB490H1 Team-Based Learning: Advanced Topics in Cell and Molecular Biology [8L/16S]

A team-based learning course with emphasis on questions in the fields of protein biochemistry, enzymology, structural biology, metabolic engineering and protein-protein interaction. Lectures and seminars will focus on current research topics within these fields and will provide the background knowledge for students to work in teams to explore the primary research literature, and for each team to develop a formal research proposal.

Prerequisite: CSB330H1/CSB349H1/CSB350H1
DR=SCI; BR=4
CSB491H1 Team-Based Research: Research in Cell and Molecular Biology [TBA]
CSB491H1 will build on the team-based learning approaches learned in CSB490H1 to develop the laboratory and teamwork skills needed to succeed in the workplace, particularly the multi-disciplinary environment that characterizes modern biological research. CSB491H1 is a team-based research course with emphasis on questions in the fields of protein biochemistry, enzymology, structural biology, metabolic engineering and protein-protein interaction. Students will form semester-long laboratory research teams to evaluate hypotheses that were developed into a research proposal in CSB490H1.
Prerequisite: CSB490H1 with a minimum grade of $77 \%$ and approval of the instructor
DR=SCI; BR=4

## CSB497H1 Project in Cell and Systems 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 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. Details for enrollment at www.csb.utoronto.ca/undergraduate/courses/400.
DR=SCI; BR=4

## CSB498Y1 Project in Cell and Systems 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 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. Details for enrollment at www.csb.utoronto.ca/undergraduate/ courses/400.
DR=SCI; BR=4
CSB499Y1 Project in Cell and Systems Biology II[TBA]
Allows students to do a second independent project, supervision of which must be different from CSB497H1/ CSB498Y1. Operates in the same manner as CSB497H1/ CSB498Y1.
Prerequisite: CSB497H1/CSB498Y1
DR=SCI; BR=4

## Chemistry

## 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
I.G. Csizmadia, Dip Eng, M Sc, Ph D
A.G. Harrison, M Sc, Ph D, FCIC
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
R.H. Morris, B Sc, Ph D, FRSC, FCIC

Professor and Associate Chair (Graduate)
D.J. Donaldson, B Sc, Ph D (University of Toronto Scarborough)
Professor and Associate Chair

## (Undergraduate)

R.A. Batey, BA, Ph D

Professor and Associate Chair (Research)
M. Lautens, B Sc, Ph D, FCIC, FRSC (T)

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, FCIC

Professors
J.P. Abbatt, B Sc, Ph D
J. Chin, M Sc, Ph D
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
S.A. Mabury, BS, Ph D (U), FRSC
P.M. Macdonald, M Sc, Ph D (University of Toronto Mississauga)
G.D. Scholes, B Sc, Ph D, FRSC
D. Stephan, B Sc, Ph D, FCIC, FRSC
M. Thompson, B Sc, Ph D, D Sc, FRSC, FCIC
G. Walker, BA, Ph D
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
V. Dong, B Sc, Ph D
U. Fekl, M Sc, Ph D (University of Toronto Mississauga)
S.J. Fraser, BA, Ph D (University of Toronto Scarborough)
R.A. Jockusch, BA, Ph D
D. McMillen, MA Sc, Ph D (University of Toronto Mississauga)
M. Nitz, B Sc, Ph D
S. Prosser, M Sc, Ph D (University of Toronto Mississauga)
J. Schofield, BA, Ph D
J. Shin, AB, Ph D (University of Toronto Mississauga)
D. Song, B Sc, Ph D
F. Wania, B Sc, Ph D (University of Toronto Scarborough)
A. Wheeler, B Sc, Ph D
D.B. Zamble, B Sc, Ph D

## Assistant Professors

P. Gunning, B Sc, Ph D (University of Toronto Mississauga)
V. Kanelis, B Sc, Ph D (University of Toronto Mississauga)
K. Kerman, M Sc, Ph D (University of Toronto Scarborough)
J. Murphy, B Sc, Ph D
D. Seferos, B Sc, Ph D
D. Segal, B Sc, Ph D
A. J. Simpson, B Sc, Ph D (University of Toronto Scarborough)
M. Taylor, B Sc, Ph D
X. Zhang, M Sc, Ph D (University of Toronto Scarborough)

## Senior Lecturers

C.S. Browning, M Sc, Ph D (SM)
A.P. Dicks, B Sc, Ph D (SM)
C.M. Kutas, B Sc, MA
D. F. McIntosh, B Sc, Ph D

H, O. Ohorodnyk, M Sc
J. C. Poë, ARCS, M Sc, DIC, FCIC (University of Toronto Mississauga)
W. Restivo, B Sc, (University of Toronto Scarborough)
S. Skonieczny, D Sc, Ph D
D. Stone, B Sc, Ph D

## Lecturers

S. Daliii, M Sc, Ph D, (University of Toronto Scarborough)
J. D'eon, B Sc, Ph D
A. Hadzovic, Ph D. (University of Toronto Scarborough)
L. Mikhaylichenko, M Sc, Ph D, (University of Toronto Scarborough)

## Chemistry

B. Morra, B Sc, Ph D<br>P.A.E. Piunno, M Sc, Ph D, (University of Toronto Mississauga)<br>K. Quinlan, B Sc, Ph D<br>E. Sauer, B Sc, Ph D, (University of Toronto Scarborough)<br>M. Staikova, M Sc, Ph D<br>J. Strautmanis, Ph D (University of Toronto Missisauga)

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 updated specialist programs in Biological Chemistry, Materials Chemistry, and Environmental Chemistry, and brand-new programs in Molecular Biophysics and Synthetic \& Catalytic Chemistry. Opportunity also exists to undertake a Nanoscience minor in collaboration with the National University of Singapore.

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). CHM151Y1 features a unique Course Community which significantly supports and enhances the student learning experience.

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 at www.chem.utoronto.ca/undergrad/courseinfo.php.

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 Specialist (Science program)

Consult Professor G. A. Woolley, Department of Chemistry.
Enrolment in this program requires the completion of 4.0 courses.
(14 full courses or their equivalent, including at least three 400-series courses)
First Year: BIO120H1/BIO150Y1, BIO130H1; CHM151Y1 (strongly recommended)/(CHM138H1, CHM139H1); (MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1
First or Second Year: PHY138Y1/PHY140Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second and Higher Years:
BCH 210 H 1 ; $\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 250 \mathrm{Y} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1)$; CHM217H1, CHM225Y1/(CHM220H1, CHM221H1), CHM238Y1, (CHM249H1 strongly recommended)/ CHM247H1
CHM347H1, CHM348H1, CHM379H1.
At least one of the following: CHM317H1, CHM327H1, CHM338H1, CHM343H1, CHM410H1, CHM499Y1
Further 300/400-series courses in BCH or CHM, including CHM437H1, CHM447H1, and CHM479H1 to make a total of 14 full courses. CSB450H1 is also acceptable.
Chemical Physics Specialist (Science program)
Consult Professor J. Schofield, Department of Chemistry. Chemical Physics aims to explain structure and dynamics of molecular and bulk systems in terms of atomic and molecular interactions. Sub-disciplines and specialized topics include reaction dynamics, spectroscopy, optical control of molecular processes, nanoscale science, surface chemistry, theoretical and experimental studies of soft systems (polymers, liquids, biological systems), quantum control and quantum information sicences. The Chemical Physics program will provide students with a solid grounding in physical chemistry, and will prepare students for careers in experimental and theoretical physical sicences, in academia or in reseach development for companies.
Enrolment in this program requires the completion of 4.0 courses.
(14 full courses or their equivalent, including at least 1.5 400-series courses)
First Year: (CHM151Y1 strongly recommended)/(CHM138H1, CHM139H1), MAT137Y1/MAT157Y1; PHY140Y1/ (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Higher Years:
APM346H1; CHM225Y1, CHM326H1, CHM327H1, CHM328H1; MAT223H1/MAT240H1, MAT235Y1/ MAT237Y1, MAT244H1, MAT334H1; PHY250H1/ PHY251H1, PHY254H1/PHY255H1, PHY354H1/ PHY351H1, PHY350H1/PHY352H1; CHM423H1/ (PHY355H1/PHY356H1, PHY456H1/PHY457H1)

## Chemistry

Two full course equivalents from CHM217H1, CHM238Y1, (CHM249H1 strongly recommended)/CHM247H1, CHM310H1, CHM317H1, CHM338H1, CHM348H1, CHM415H1
Further 400-series half-courses in CHM/PHY to make a total of 14 full courses

## Chemistry Specialist (Science program)

Consult Associate Chair, Undergraduate Studies, Department of Chemistry.
Enrolment in this program requires the completion of 4.0 courses.
(14 full courses or their equivalent, including at least three 400-series courses)
First Year: (CHM151Y1 strongly recommended)/(CHM138H1, CHM139H1); (MAT135H1, MAT136H1)/MAT135Y1/ MAT137Y1; PHY138Y1/PHY140Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year: CHM217H1, CHM225Y1/(CHM220H1 with minimum grade of $\mathrm{B}, \mathrm{CHM} 221 \mathrm{H} 1$ ), CHM238Y1, CHM249H1; MAT235Y1/MAT237Y1
Third and Fourth Years:
BCH210H1, CHM326H1/CHM328H1, CHM327H1
Further 300/400-level full course equivalents in CHM/MAT/ another science, including at least three of CHM 317 H 1 , CHM338H1, CHM343H1, CHM379H1, CHM410H1, CHM499Y1 and at least three 400-level CHM full course equivalents to make a total of 14 full courses.

## Chemistry Major (Science program)

Consult Associate Chair, Undergraduate Studies, Department of Chemistry.

Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent, including at least one CHM half course equivalent at the 400-level)
First Year: (CHM151Y1 strongly recommended)/(CHM138H1, CHM139H1); (MAT135H1, MAT136H1)/MAT135Y1/ MAT137Y1
Second Year: At least two of CHM217H1, CHM220H1/ CHM225Y1, CHM238Y1, (CHM249H1 strongly recommended)/CHM247H1
Third Year: At least two of CHM317H1, CHM327H1, CHM338H1, CHM343H1, CHM348H1, CHM379H1
Fourth Year: Further 200/300/400-level CHM courses to make a total of seven CHM full course equivalents (CHM299Y1 excluded)

## Chemistry Minor (Science program)

Consult Associate Chair, Undergraduate Studies, Department of Chemistry.

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including at least one CHM full-course equivalent at the 300+ level)
First Year: CHM151Y1/(CHM138H1, CHM139H1)
Second Year: At least one of CHM217H1, CHM220H1/ CHM225Y1, CHM238Y1, (CHM249H1 strongly recommended)/CHM247H1

Third Year: At least one of CHM317H1, CHM327H1, CHM338H1, CHM343H1, CHM348H1, CHM379H1
Fourth Year: Further 200/300/400-level CHM courses to make a total of four CHM full course equivalents (CHM299Y1 excluded)

## Environmental Chemistry Specialist (Science

 program)Consult Professor J. Murphy, Department of Chemistry (416-946-0260 or jmurphy@chem.utoronto.ca)
(14 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.
Students must complete at least 4 FCEs before enrolling in this Type 1 program.
First Year: (BIO120H1, BIO130H1/BIO220H1)/BIO150Y1; CHM151Y1 (strongly recommended)/(CHM138H1, CHM139H1); (MAT135H1, MAT136H1)/ MAT135Y1/ MAT137Y1
First or Second Year: PHY138Y1/PHY140Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second and Higher Years:
CHM217H1, CHM225Y1/(CHM220H1, CHM221H1), CHM238Y1, CHM247H1/CHM249H1; (CHM210H1, ENV235H1)/ENV235Y1; STA220H1/GGR272H1
CHM310H1, CHM410H1, CHM415H1; ENV234H1, (ENV221H1,ENV222H1/GGR222H1)/ENV222Y1/ GGR222Y1, ENV334H1/ENV341H1/ENV346H1
One additional FCE from 300/400-series CHM courses
ENV421H1/CHM499Y1/CHM398H0 (in areas relevant to the program, to be approved by the Department)
Further courses from any 300/400 series courses with $D R=S C I, B R=4$ or $B R=5$ such that the total FCE for the specialist is 14.
Note 1: ENV235Y1 counts as both CHM210H1 and ENV235H1

## Environmental Chemistry Minor (Science program)

Consult Professor J. Murphy, Department of Chemistry Enrolment in this program requires the completion of 4.0 courses.
(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.
(CHM138H1, CHM139H1)/CHM151Y1
One full course equivalent from CHM 217 H 1 , ( CHM 220 H 1 , CHM221H1)/CHM225Y1, CHM238Y1, CHM247H1/ CHM249H1
ENV235Y1/CHM210H1
CHM310H1, and any two of CHM317H1, CHM410H1, CHM415H1

## Chemistry

## Synthetic \& Catalytic Chemistry Specialist (Science program)

Consult Professor. R. Batey, Department of Chemistry.
Enrolment in this program requires the completion of 4.0 courses.
(14 full courses or their equivalent)
This program focuses on the fundamentals and practical aspects of modern synthetic organic and inorganic chemistry, and the understanding and applications of catalytic reactions. The program will prepare students for career paths as synthetic / discovery chemists, in the pharmaceutical, biotechnology, biomedical, crop protection, materials and related sectors, or for academic research and teaching positions.
First Year: (CHM151Y1 strongly recommended)/(CHM138H1, CHM139H1); (MAT135H1, MAT136H1)/MAT135Y1/ MAT137Y1; PHY138Y1/140Y1/(PHY131H1, PHY132H1)/ (PHY151H1, PHY152H1)
Second and Higher Years:
BCH210H1, CHM217H1, CHM225Y1/(CHM220H1 with minimum grade of $\mathrm{B}, \mathrm{CHM} 221 \mathrm{H} 1$ ), CHM238Y1, (CHM249H1 strongly recommended)/CHM247H1; MAT235Y1/MAT237Y1
CHM317H1, CHM338H1, CHM342H1, CHM343H1, CHM347H1, CHM348H1.
CHM432H1, CHM440H1, CHM441H1, CHM443H1.
CHM499Y1 and/or CHM398H0 in areas relevant to the program (to be approved by the Department)
Further 300/400-series courses in CHM, including CHM325H1, CHM328H1, CHM379H1, CHM416H1, 421H1, CHM434H1, CHM437H1, CHM447H1 and CHM479H1 to make a total of 14 full courses.

## Nanoscience Minor Program (offered jointly with the National University of Singapore) (Science program)

This Type 3 minor program represents a unique opportunity to study geography in a different cultural environment. For more information, contact the Undergraduate Office (LM 151, 416-978-6033, undergrd@chem.utoronto.ca), and the Centre for International Experience (CIE, www.cie.utoronto.ca).
(4 full courses or their equivalent, including at least one CHM full-course equivalent at the 300+ level)
CHM151Y1/CHM139H1, PHY140Y1/(PHY151H1, PHY152H1)/(PHY131H1, PHY132H1)
NUS227H0, NUS228H0, NUS328HO, NUS398HO*
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 Winter session of second year studies or the Winter session of third year studies.

## Chemistry Courses

## Nanoscience Minor Program Courses (offered jointly with the National University of Singapore)

NUS227H0 Science at the Nanoscale [48L/12T]
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: CHM139H1/CHM151Y1; (PHY151H1,
PHY152H1)/PHY140Y1
DR=SCI; BR=5
NUS228H0 Principles of Spectroscopy [36L/12T/39P]
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: CHM139H1/CHM151Y1; (PHY151H1,
PHY152H1)/PHY140Y1
DR=SCI; BR=5
NUS328H0 Nanochemistry [48L/12T]
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: NUS227H0
DR=SCI; BR=5
NUS398H0 Nanoscience Research [130P]
An experimental or theoretical research problem in nanoscience under the supervision of a faculty member. DR=SCI; BR=None

## Chemistry Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## CHM101H1 The Chemistry and Biology of Organic Molecules: Sex, Drugs and Rock and Roll!

 [30L/6T]An introduction to chemistry and chemical principles for non-scientists, with a focus on the chemistry and biology of organic molecules. The myriad roles these compounds play in our lives are discussed, including their use of pheromones, medicines and weapons, and their effect on colour, taste and smell.
DR=SCI; BR=5
CHM138H1 Introductory Organic Chemistry I [36L/12T/18P]
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 CHM139H1 may be taken in either order, but not both in the same session.
Prerequisite: Chemistry SCH4U, Mathematics MHF4U +

## Chemistry

MCV4U
Corequisite: MAT135H1/MAT135Y1/MAT137Y1/MAT157Y1 recommended, but may be required pre-requisite in 2 nd year Chemistry courses; PHY138Y1/140Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) recommended
Exclusion: CHM151Y1, CHM242H5, CHMB41H3
DR=SCI; BR=5

## CHM139H1 Chemistry: Physical Principles [36L/12T/18P]

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 CHM139H1 may be taken in either order, but not both in the same session.
Prerequisite: Chemistry SCH4U, Mathematics MHF4U + MCV4U
Corequisite: (MAT135H1, MAT136H1)/MAT135Y1/ MAT137Y1/MAT157Y1 recommended, but may be required pre-requisite in 2nd year Chemistry courses; PHY138Y1/PHY140Y1/(PHY131H1, PHY132H1)/ (PHY151H1, PHY152H1) recommended
Exclusion: CHM151Y1, CHMA11H3, CHM140Y5, CHM110H5
DR=SCI; BR=5
CHM151Y1 Chemistry: The Molecular Science [72L/24T/35P]
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: 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 will alternate weeks with the CHM151Y1 lab classes. The lab time is reserved for CHM151Y1 activities every week of each semester.
Prerequisite: Chemistry SCH4U, Mathematics MHF4U + MCV4U; Physics SPH4U recommended
Corequisite: PHY138Y1/140Y1/(PHY131H1, PHY132H1)/ (PHY151H1, PHY152H1) recommended, but may be required pre-requisite in 2nd year courses; (MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1/MAT157Y1
Exclusion: (CHM138H1, CHM139H1), CHMA11H3, CHMB41H3, (CHM110H5, CHM120H5)
DR=SCI; BR=5

## CHM210H1 Chemistry of Environmental Change [24L/12T]

Examines the fundamental chemical processes of the Earth's natural environment, and changes induced by human activity. Topics relate to the atmosphere: urban air pollution, stratospheric ozone depletion, acid rain; the hydrosphere: water resources and pollution, wastewater analysis; biogeochemistry and inorganic metals in the environment.

## Prerequisite: CHM139H1/

CHM151Y1,(MAT135H1,MAT136H1)/MAT135Y1/
MAT137Y1
Exclusion: ENV235Y1
DR=SCI; BR=5

## CHM217H1 Introduction to Analytical Chemistry [30L/6T/48P]

Introduction to the science of chemical measurement, from sampling through analysis to the interpretation of results, including 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 introduces a variety of analytical techniques including volumetric methods, potentiometry, uv/visible and infrared spectrophotometry, flame atomic absorption spectrometry, and chromatography.
Prerequisite: (CHM138H1, CHM139H1)/CHM151Y1 with a minimum grade of $63 \%$ or permission of the department;
(MAT135H1, MAT136H1)/MAT135Y/MAT137Y
Exclusion: CHM211H5, CHMB16H3
DR=SCI; BR=5

## CHM220H1 Physical Chemistry for Life Sciences

 [36L/12T]Introduction to thermodynamics; kinetics; 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 program (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.
Prerequisite: (CHM138H1, CHM139H1)/CHM151Y1; (MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1/ MAT157Y1
Corequisite: Recommended co-requisite: MAT235Y1/ MAT237Y1
Exclusion: CHM225Y1, CHMB20H3, JCP221H5/CHM221H5
DR=SCI; BR=5

## CHM221H1 Physical Chemistry: The Molecular Viewpoint [24L/12T]

A continuation of CHM 220 H 1 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.
Prerequisite: CHM220H1 with a minimum grade of B or permission of the department
Corequisite: MAT235Y1/MAT237Y1 recommended, but may

## Chemistry

be required pre-requisite in 3rd year Chemistry courses Exclusion: CHM225Y1, CHMB21H3
DR=SCI; BR=5

## CHM225Y1 Introduction to Physical Chemistry [48L/24T]

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).
Prerequisite: [(CHM138H1, CHM139H1)/CHM151Y1 with a minimum grade of $63 \%$, or permission of the department ], (MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1/
MAT157Y1, PHY138Y1/PHY140Y1/(PHY131H1,
PHY132H1)/(PHY151H1, PHY152H1)
Corequisite: MAT235Y1/MAT237Y1
Exclusion: CHM220H1, CHM221H1, CHMB20H3,
CHMB21H3, CHM221H5, JCP221H5
DR=SCI; BR=5
CHM238Y1 Introduction to Inorganic Chemistry [48L/44P]
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; chemistry of elements of the $s$ and p blocks; inorganic materials and solid state chemistry with applications in advanced technologies.
Prerequisite: CHM151Y1/(CHM138H1, CHM139H1) with a
minimum grade of $63 \%$ or permission of the department Exclusion: CHM231H5
DR=SCI; BR=5

## CHM247H1 Introductory Organic Chemistry II [36L/12T/22P]

Reactions of organic compounds. Principles of mechanism, synthesis, and spectroscopy, continuing from CHM138H1.
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 program (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.
Prerequisite: (CHM138H1, CHM139H1)/CHM151Y1 Exclusion: CHM249H1, CHM243H5, CHMB42H3
DR=SCI; BR=5

## CHM249H1 Organic Chemistry [36L/50P]

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 CHM151Y1 or CHM138H1 and is designed for students in
the chemistry specialist and major programs. This course is highly recommended for students in the Biological Chemistry program.
Prerequisite: CHM151Y1/(CHM138H1, CHM139H1) with a minimum grade of $63 \%$ or permission of the department
Exclusion: CHM247H1, CHM243H5, CHMB42H3
DR=SCI; BR=5
CHM299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None

## JSC301H1 Principles and Practices in Science Education [24L]

Fundamental principles and practices in education and public outreach in the sciences, mathematics, and engineering, including education research, curriculum, teaching, and assessment. Students will learn and apply effective strategies which engage and educate learners at the K-16 and public level. The course assignments include a project and/or placement experience.
Prerequisite: At least 8.0 credits, and enrolment in a science, mathematics, or engineering program
DR=SOC SCI; BR=3
CHM310H1 Environmental Chemistry [24L]
This course considers carbon-containing molecules in the environment from a variety of perspectives: the carbon cycle, climate change and ocean acidification; fossil fuels and alternative energy sources; and the partitioning and degradation pathways of organic chemicals.
Prerequisite: (CHM138H1, CHM139H1)/CHM151Y1,
(MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1
DR=SCI; BR=5
CHM317H1 Introduction to Instrumental Methods of Analysis [24L/48P]
Scope of instrumental analytical chemistry; Fourier transform IR absorption spectroscopy; molecular luminescence; emission spectroscopy; mass spectrometry; 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; (MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1
Exclusion: CHM391H5, CHMC11H3, CHMC16H3
Recommended Preparation: (CHM220H1, CHM221H1)/ CHM225Y1
DR=SCI; BR=5
CHM325H1 Introduction to Inorganic and Polymer Materials Chemistry [24L]
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/CHM225Y1, CHM238Y1,

# Chemistry 

CHM247H1/CHM249H1
DR=SCI; BR=5

## CHM326H1 Introductory Quantum Mechanics and Spectroscopy [24L]

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/(CHM220H1, CHM221H1), MAT235Y1/MAT237Y1
Exclusion: JCP321H5
DR=SCI; BR=5

## CHM327H1 Experimental Physical Chemistry

 [12L/48P]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, CHM221H1) with a minimum grade of $63 \%$ or permission of the department Corequisite: Recommended: CHM326H1 or CHM328H1
DR=SCI; BR=5
CHM328H1 Modern Physical Chemistry [24L]
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/(CHM220H1, CHM221H1), MAT235Y1/MAT237Y1
Exclusion: JCP322H5, CHMC2OH3
DR=SCI; BR=5

## CHM338H1 Intermediate Inorganic Chemistry [24L/54P]

Further study of the structures, physical properties and reactions of compounds and transition metals. Introductions to spectroscopy and structural analysis, reaction mechanisms, d- block organometallic compounds, catalysis, 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
Exclusion: CHM331H5
Recommended Preparation: CHM217H1, CHM247H1/ CHM249H1
DR=SCI; BR=5
CHM342H1 Modern Organic Synthesis [24L]
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.

Prerequisite: CHM247H1/CHM249H1
Exclusion: CHM345H5
DR=SCI; BR=5
CHM343H1 Organic Synthesis Techniques [24L/54P]
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.
Prerequisite: CHM247H1/CHM249H1 with a minimum grade
of $63 \%$ or permission of the department
Exclusion: CHM393H5
Recommended Preparation: CHM342H1
DR=SCI; BR=5

## CHM347H1 Organic Chemistry of Biological Compounds [24L/12T]

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/CHM249H1
Exclusion: CHM347H5, CHMC47H3
Recommended Preparation: CHM217H1
DR=SCI; BR=5
CHM348H1 Organic Reaction Mechanisms [24L/26P]
Principles and methods of analyzing and predicting organic chemical reactivity: advanced stereochemistry, conformational analysis, molecular orbitals, reaction kinetics, isotope effects, linear free energy relationships, orbital transformations, systematization of mechanisms. The laboratory section is used to illustrate the operation of the principles, including examples of data acquisition for mechanistic analysis and theoretical computations. Regular original reports on methods and outcomes are an important part of the laboratory.
Prerequisite: CHM247H1/CHM249H1 with a minimum grade of $63 \%$ or permission of the department
Exclusion: CHM341H5, CHMC41H3
DR=SCI; BR=5

## CHM379H1 Biomolecular Chemistry [24L/48P]

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.
Prerequisite: (CHM247H1/CHM249H1, with a minimum grade of $63 \%$ or permission of the department), CHM347H1, BCH210H1
Exclusion: BCH370H1, BCH371H1, CHM371H5
Recommended Preparation: CHM217H1
DR=SCI; BR=5

## CHM396Y0 Research Topic Abroad [TBA]

Course credit for research or field studies abroad under the supervision of a faculty member.
Prerequisite: At least 8.5 FCEs including courses and no more than 14.0 FCEs including at least 1.5 FCEs in 2nd

## Chemistry

Year chemistry courses, or permission of the instructor. Recommended Preparation: CHM299Y1
DR=SCI; BR=5
CHM398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
CHM399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None

## CHM410H1 Analytical Environmental Chemistry [24L/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; BR=5
CHM414H1 Biosensors and Chemical Sensors [24L]
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/CHM220H1/CHM225Y1
Exclusion: CHM414H5
Recommended Preparation: CHM317H1
DR=SCI; BR=5

## CHM415H1 Atmospheric Chemistry [24L]

This course considers the chemistry occurring in the Earths 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/CHM225Y1/CHM310H1
Recommended Preparation: (MAT135H1, MAT136H1)/
MAT135Y1/MAT137Y1; PHY138Y1/PHY140Y1/
(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
DR=SCI; BR=5

## CHM416H1 Separation Science [24L]

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
DR=SCI; BR=5
CHM417H1 Laboratory Instrumentation [24L/10P] This course provides an introduction to building and using optics- and electronics-based instrumentation for laboratory research, as well as for implementing custom software control. Lecture topics include passive electronic components, diodes and transistors, operational amplifiers, light sources and detectors, reflectors, refractors, polarizers,
and diffractors, LabView programming and many others. Lectures are supplemented by laboratories in which students work in teams to build fluorescent detection systems for chromatography over the course of several weeks.
Recommended Preparation: CHM317H1, or permission from the instructor
DR=SCI; BR=5
CHM423H1 Applications of Quantum Mechanics [24L]
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
DR=SCI; BR=5

## CHM426H1 Polymer Chemistry [24L/12T]

Scope of polymer chemistry. Classification of polymers. Synthesis and characterization. Polymers in solution.
Thermodynamics of polymer solutions and blends, FloryHuggins theory. Polymers in the solid state. Crystalline and amorphous polymers. Glass transition and melting temperature. Mechanical properties. Polymers as advanced materials.
Prerequisite: CHM220H1/CHM225Y1, CHM247H1/
CHM249H1
Recommended Preparation: CHM325H1;
DR=SCI; BR=5
CHM427H1 Statistical Mechanics [24L]
Ensemble theory in statistical mechanics. Applications, including imperfect gases and liquid theories. Introduction to non-equilibrium problems.
Prerequisite: CHM326H1, CHM328H1
DR=SCI; BR=5

## CHM432H1 Organometallic Chemistry and Catalysis [24L]

Structure, bonding, and reactions of organometallic compounds, with emphasis on basic mechanisms, and industrial processes. Addition, metalation, elimination, important catalytic cycles, electrophilic, and nucleophilic reactions are considered on a mechanistic basis. Topics on modern organometallic chemistry and catalysis are covered. Prerequisite: CHM338H1
Recommended Preparation: CHM348H1
DR=SCI; BR=5

## CHM434H1 Advanced Materials Chemistry [24L]

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

# Chemistry 

recent highlights in the field of materials chemistry - an emerging sub-discipline of chemistry.
Prerequisite: CHM325H1, CHM338H1
DR=SCI; BR=5

## CHM437H1 Bioinorganic Chemistry [24L]

This course examines the use of metals in biology. Topics include naturally occurring and medicinal ligands; transport, uptake and control of concentration of metal ions; and physical methods of characterization of metal binding sites.
The roles of metal ions in nature are discussed, including 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; and as sources of biominerals; as radiopharmaceuticals.
Prerequisite: CHM238Y1
Exclusion: CHM333H5, CHMD69H3
Recommended Preparation: CHM338H1 (strongly
recommended), CHM347H1/CHM379H1
DR=SCI; BR=5

## CHM440H1 The Synthesis of Modern Pharmaceutical Agents [24L]

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
DR=SCI; BR=5

## CHM441H1 Spectroscopic Analysis in Organic Chemistry [24L/20P]

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,CHM343H1
DR=SCI; BR=5
CHM443H1 Physical Organic Chemistry [24L]
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/CHM225Y1, CHM348H1 DR=SCI; BR=5
CHM446H1 Organic Materials Chemistry [24L]
This course covers design, synthesis, characterization and application of organic materials. Emphasis is placed on classic examples of organic materials including semiconducting polymers, molecular devices, self-assembled systems, and bioconjugates, as well as recent advances from the literature.
Prerequisite: CHM247H1/CHM249H1, CHM220H1/ CHM225Y1
Recommended Preparation: CHM325H1, CHM342H1/

CHM343H1

## DR=SCl; BR=5

## CHM447H1 Bio-organic Chemistry [24L]

Mechanisms in biochemical systems: acceleration and specificity, pH-profiles, catalytic properties of active sites, stress and strain, stereochemical considerations, principles of enzyme kinetics, mechanisms of inhibition, cofactors, mechanistic case studies, ribozymes. The course includes readings from a text and research publications, as well as original critical essays.
Prerequisite: CHM347H1, CHM348H1 or permission of the insructor
DR=SCI; BR=5

## CHM479H1 Biological Chemistry [24L]

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: BCH210H1/BCH242Y1
DR=SCI; BR=5

## CHM499Y1 Introduction to Chemistry Research [240P]

An experimental or theoretical research problem under the supervision of a faculty member in the Department of Chemistry. 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. Minimum CGPA of 2.7. Research positions are limited. Students with strong background in courses in the sub-discipline of research interest will be given preference.
Exclusion: CHM489Y5
DR=SCI; BR=5

Cinema Studies Institute: see Innis College

## Classics

## 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
R.E. Fantham, Ph D
J.N. Grant, MA, Ph D

Rev. M.O. Lee, MA, Ph D
H.J. Mason, AM, 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
T.M. Robinson, B Litt, D Litt
C.I. Rubincam, BA, Ph D (University of Toronto Mississauga)
R.M.H. Shepherd, 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
V. Wohl, MA, Ph D

## Undergraduate Coordinator and Assistant

Professor
B. Akrigg, MA, Ph D

## University Professors

B.C. Inwood, MA, Ph D, FRSC (Canada Research Chair)
E.J. Weinrib, AM, Ph D (Cecil A. Wright Professor of Law)
Professors
R. Barney, BA, Ph D (Canada Research Chair)
C.F.M. Bruun, MA, Ph D
J.S. Burgess, MA, Ph D
M.J. Dewar, MA, D Phil
E. Gunderson, MA, Ph D
J.C. Magee, MA, Ph D

## Associate Professors

A.E. Bendlin, MA, D Phil (University of Toronto Mississauga)
R. Höschele, MA, Ph D
M. Revermann, MA, D Phil (University of Toronto Mississauga)

## Assistant Professors

K. Blouin, MA, Ph D (Unversity of Toronto Scarborough)
M. Cottier, L ès L, D Phil
E. Lytle, BA, Ph D
D. Nakassis, MA, Ph D
J. Welsh, MA, Ph D

Classics is the study of the civilizations of ancient Greece and Rome. This includes their literature, religion, mythology, history, philosophy and art, and also their physical settings, their interactions with surrounding societies, and their influence on later cultures to the present day. The scope of the discipline is vast both in space (not just the territories of the modern states of Greece and Italy but most of western

Europe, the Middle East and North Africa) and time (a period of at least two thousand years, from the start of the Bronze Age in Europe in the second millennium B.C. to the dawn of the Middle Ages). Classics at the University of Toronto is not just looking at the past but engaging with issues of compelling and enduring relevance, including: gender and sexuality; the nature of freedom and the basis of political power and legitimacy; how relationships should and do work between parents and children; whether democracy is compatible with imperialism; what it means to be in love; how people cope with the fear of death; and when, if ever, it is right to go to war.

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:// classics.chass.utoronto.ca/

Undergraduate Coordinator: Ben Akrigg
125 Queens Park, room 110 (undergrad.classics@utoronto. ca; 416-978-4848)
Enquiries: 125 Queens Park, room 108 (416-978-5698)

## Classics Programs

## Classical Civilization Major (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Required courses: 2 CLA half-courses with a final mark of at least $65 \%$ in each. (CLA160H1 is recommended, but not required)
There are no specific requirements for first year. Students are recommended to take CLA160H1 and at least one other CLA course at the 200 level.
7.0 FCEs

1. CLA160H1
2. CLA260H1
3. 5.5 additional FCEs in CLA, including 2.0 FCEs at the 300+ level
4. CLA402H1/CLA403H1

## Substitutions:

1. Up to 3.0 FCEs from approved courses involving the ancient Greek and Roman civilizations taught by other departments, notably Art (e.g., FAH206H1, FAH207H1,

FAH300H1-FAH313H1) and Philosophy (e.g.,
PHL200Y1, PHL301H1-PHL304H1), may be substituted for the 5.5 CLA courses listed under 3 . above.
2. Up to 2.0 FCEs in GRK or LAT may be substituted for the 5.5 CLA courses listed under 3. above.

## Classical Civilization Minor (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Required courses: 2 CLA half-courses with a final mark of at least $65 \%$ in each. (CLA160H1 is recommended, but not required).
There are no specific requirements for first year. Students are recommended to take CLA160H1 and one other CLA course at the 200 level.
(4 FCEs)

1. CLA160H1
2. 3.5 FCEs of CLA courses at the $200+$ level, including 1 FCE at the 300+ level

## Substitutions:

1. Up to 2.0 FCEs from approved courses involving the ancient Greek and Roman civilizations taught by other departments, notably Art (e.g., FAH 206H1, FAH207H1, FAH300H1-FAH313H1) and Philosophy (e.g., PHL 200Y1, PHL301H1-PHL304H1), may be substituted for the 3.5. CLA courses listed under 2 above.
2. Up to 1.0 FCEs in GRK or LAT may be substituted for the 3.5 CLA courses listed under 2.above.

## Classics (Greek and Latin) Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.

There are no specific requirements for first year. Students are recommended to take CLA160H1, and in addition GRK101H1 and GRK102H1, and/or LAT101H1 and LAT102H1.
(7 FCEs)

1. CLA160H1, CLA260H1
2. 6 FCEs of GRK/LAT courses, including 2 FCEs in each of GRK and LAT
3. GRK430H1/LAT430H1
4. 1 additional half-course at 400 -level in either GRK or LAT

## Greek Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
There are no specific requirements for first year. Students are recommended to take CLA160H1, GRK101H1 and GRK102H1.
(6 FCEs)

1. CLA160H1, CLA260H1
2. 4 FCEs of GRK courses, of which 1 FCE must be 300+ level, 1 FCE 400-level, including GRK430H1
3. 1 additional FCE of CLA/GRK/LAT

## Greek Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
There are no specific requirements for first year. Students are recommended to take CLA160H1, GRK101H1 and GRK102H1.
(4 FCEs)

1. 1 FCE of CLA courses, including CLA160H1
2. 3 FCEs of GRK courses, of which at least 1 FCE must be GRK 300+ level

## Latin Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
There are no specific requirements for first year. Students are recommended to take CLA160H1, LAT101H1 and LAT102H1.
( 6 FCEs)

1. CLA160H1, CLA260H1
2. 4 FCEs of LAT courses, of which 1 FCE must be at 300+ level, 1 FCE at 400 -level, including LAT430H1
3. 1 additional FCE of CLA/GRK/LAT

## Latin Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
There are no specific requirements for first year. Students are recommended to take CLA160H1, LAT101H1 and LAT102H1.
(4 FCEs)

1. 1 FCE of CLA courses, including CLA160H1
2. 3 FCEs of LAT courses, of which at least 1 FCE must be LAT 300+ level

## Medieval Latin Courses in Classics, Greek and Latin programs

Courses in Mediaeval Latin (i.e. SMC222H1, SMC323H1, SMC436H1) count as LAT courses in all language-based programs (Classics, Greek, Latin).

## 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 LAT101H1 and LAT102H1 (or the equivalent prerequisite training) and earn a grade of at least B- in LAT201H1,

## Classics

LAT202H1 and any two LAT half-courses at the 300 level.
The Citation in Ancient Greek is available to students who complete GRK101H1 and GRK102H1 (or the equivalent prerequisite training) and earn a grade of at least B - in GRK201H1, GRK202H1 and any two GRK half-courses at the 300 level.

Students should note that, as explained on page 26 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.

## Classics Courses

## NOTE

CLA courses are taught in English; all readings are in English. CLA courses do not require knowledge of Greek or Latin.

## CLA160H1 Introduction to Classical Studies [36L/10T]

An introduction to major themes in the development of Greek and Roman civilization, literature and culture. DR=HUM; BR=1

## CLA201H1 Latin \& Greek in Scientific Terminology [36L]

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.
DR=HUM; BR=2
CLA203H1 Science in Antiquity [36L]
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. DR=HUM; BR=2
CLA204H1 Introduction to Classical Mythology [36L] 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. DR=HUM; BR=2
CLA219H1 Women in Antiquity [36L]
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.

## DR=HUM; BR=3

CLA230H1 Introduction to Greek History [36L] 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.E. DR=HUM; BR=3
CLA231H1 Introduction to Roman History [36L] 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 C.E. DR=HUM; BR=3

## CLA232H1 Introduction to Greek Society and Culture [36L]

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.).
DR=HUM; BR=1

## CLA233H1 Introduction to Roman Society and Culture [36L]

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.).
DR=HUM; BR=1
CLA236H1 Greek and Roman Epic [36L]
A study of one or more of the epic poems of Greek and Roman antiquity (e. g. The lliad and Odyssey of Homer and the Aeneid of Virgil).
DR=HUM; BR=1
CLA260H1 Method and Theory in Classics [36L]
An introduction to key issues in methodology and theory in the study of the classical world.
DR=HUM; BR=None
CLA299Y1 Research Opportunity Program [TBA]
Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## 300-Series Courses

Most 300-series courses have specific Prerequisites, which are enforced. Students seeking exemption from these Prerequisites should contact the undergraduate coordinator before attempting to enroll in them on ROSI.
Students enrolled in the Major and Minor Programs in Classical Civilization have priority access to these courses.

Only 8 to 10 half-courses at the 300 -level are offered in a typical Fall-Winter Session.

## CLA303H1 The Ancient Novel [36S]

An introduction to the Greek romances of love and adventure (Chariton, Longus, Heliodorus), and the more ironical and socially conscious works of the Roman writers Petronius and Apuleius.
Prerequisite: CLA160H1 + 1 of CLA204H1/CLA219H1/

## CLA232H1/CLA233H1/CLA236H1/CLA260H1

DR=HUM; BR=1
CLA305H1 Theories of Myth [36S]
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 + 1 OF CLA160H1/CLA260H1 DR=HUM; BR=2

CLA308H1 Religion in the Greek World [36S]
A study of the religious cults and forms of worship in the ancient Greek world.
Prerequisite: CLA160H1 + 1 of CLA204H1/CLA230H1/
CLA232H1/CLA236H1/CLA260H1
DR=HUM; BR=2
CLA310H1 Religion in the Roman World [36S]
A study of the religious cults and forms of worship in the Roman world, including the pagan cults, Judaism, and early Christianity.
Prerequisite: CLA160H1 + 1 of CLA204H1/CLA231H1/ CLA233H1/CLA236H1/CLA260H1
DR=HUM; BR=2
CLA319H1 Sexuality and Gender in Classical Literature [36S]
Detailed study of the representation of sexuality and gender in Greek and/or Roman literary texts from one or more genres.
Prerequisite: CLA160H1 + 1 of CLA219H1/CLA232H1/ CLA233H1/CLA260H1
DR=HUM; BR=1

## CLA321H1 Sport and Festival [36S]

An examination of various aspects of athletic competition in the ancient Greco-Roman world, employing literary and archaeological evidence.
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA231H1/ CLA232H1/CLA233H1/CLA236H1/CLA260H1

## DR=HUM; BR=3

## CLA322H1 Classical Reception [36S]

Modern reception of the classical world in a variety of media, such as art, literature, music, popular culture, etc.
Prerequisite: CLA160H1 + 1 of CLA204H1/CLA219H1/
CLA230H1/CLA231H1/CLA232H1/CLA233H1/CLA236H1/ CLA260H1
DR=HUM; BR=1
CLA336H1 Roman Law [36S]
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.
DR=HUM; BR=3
CLA362H1 Early Greece [36S]
The Greek world from the second millennium B.C.E. to the emergence of the polis
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA260H1 DR=HUM; BR=3
CLA363H1 Archaic and Classical Greece [36S]
The Greek world from the eighth to the fourth centuries
B.C.E., with an emphasis on political events and development.
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA260H1 DR=HUM; BR=3
CLA364H1 The Hellenistic World [36S]
The Greek world in the age of Alexander the Great and his successors (336 B.C.E. to 31 B.C.E.)
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA260H1 DR=HUM; BR=3

CLA366H1 Topics in the Study of Greek History [36S] Topics vary from year to year.
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA260H1
DR=HUM; BR=3
CLA367H1 The Roman Republic [36S]
The Roman world from 510 B.C.E. to 44 B.C.E.
Prerequisite: CLA160H1 + 1 of CLA231H1/CLA260H1
DR=HUM; BR=3
CLA368H1 Augustus and the Julio-Claudians [36S]
The Roman world in the age of Augustus and his dynasty
(44 B.C.E. to 68 C.E.)
Prerequisite: CLA160H1 + 1 of CLA231H1/CLA260H1
DR=HUM; BR=3
CLA369H1 The Roman Empire [36S]
The Roman world from 68 C.E. to 378 C.E.
Prerequisite: CLA160H1 + 1 of CLA231H1/CLA260H1
DR=HUM; BR=3
CLA371H1 Topics in the Study of Roman History [36S]
Topics vary from year to year.
Prerequisite: CLA160H1 + 1 of CLA231H1/CLA260H1
DR=HUM; BR=3
CLA372H1 The Economic History of the Classical World [36S]
The structure and performance of economies in the Greek and/or Roman worlds, and their modern interpretation.
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA231H1/ CLA260H1
DR=HUM; BR=3
CLA373H1 The Environment in the Greco-Roman World [36S]
An exploration of the ecology and environment of the ancient Mediterranean basin in classical antiquity.
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA231H1/ CLA260H1
DR=HUM; BR=4
CLA378H1 Late Antiquity [36S]
The history and culture of the Greco-Roman world during the fourth through seventh centuries C.E., with particular emphasis on the decline of the Roman state and emergence of Christianity.
Prerequisite: CLA160H1 + 1 of CLA231H1/CLA233H1/ CLA260H1
DR=HUM; BR=3
CLA382H1 Tragedy [36S]
The study of classical tragedy as a literary genre, dramatic production, and social institution, with analysis of representative plays.
Prerequisite: CLA160H1 + 1 of CLA204H1/CLA219H1/
CLA230H1/CLA232H1/CLA236H1/CLA260H1
DR=HUM; BR=1

## Classics

CLA383H1 Comedy [36S]
The origin and development of Greek and Roman comedy,
based on a study of representative plays.
Prerequisite: CLA160H1 + 1 of CLA219H1/CLA230H1/
CLA231H1/CLA232H1/CLA233H1/CLA236H1/CLA260H1 DR=HUM; BR=1
CLA386H1 Classical Literature in Translation [36S]
Study of a selection of Greek and Roman literary texts from one or more genres.
Prerequisite: CLA160H1 + 1 of CLA204H1/CLA219H1/ CLA232H1/CLA233H1/CLA236H1/CLA260H1
DR=HUM; BR=1
CLA387H1 Spectacle in the Roman World [36S]
The role in Roman society and culture of public spectacles, including the chariot-races, the gladiatorial games, executions, and triumphal processions.
Prerequisite: CLA160H1 + 1 of CLA231H1/CLA233H1/ CLA260H1
DR=HUM; BR=1
CLA388H1 Classical Antiquity and the Cinema [36S]
A study of the representation of ancient Greece and/ or
Rome in cinema.
Prerequisite: CLA160H1 + 1 of CLA219H1/CLA232H1/
CLA233H1/CLA260H1; or INI115Y1
DR=HUM; BR=1
CLA389H1 Classical Spaces: Sites and Monuments [36S]
A close study of one or more sites in the ancient world and the cultural significance of the site(s) in question.
Prerequisite: CLA160H1 + 1 of CLA230H1/CLA231H1/ CLA232H1/CLA233H1/CLA260H1
DR=HUM; BR=1
CLA392H1 Topics in the study of Classical Culture and Society [36S]
Topics vary from year to year.
Prerequisite: CLA160H1 + 1 of CLA219H1/CLA232H1/ CLA233H1/CLA260H1
DR=HUM; BR=1
CLA398H0 Independent Experiential Study Project [TBA]
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
CLA399Y0 Independent Experiential Study Project [TBA]
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
CLA400H1 Independent Studies (formerly CLA400Y1) [TBA]
Independent Studies
Prerequisite: Permission of Department
Exclusion: CLA400Y1
Recommended Preparation: Preferably 1 FCE in the CLA 300-series
DR=HUM; BR=None
CLA401H1 Independent Studies [TBA]
Independent Studies
Prerequisite: Permission of Department
Recommended Preparation: Preferably 1 FCE in the CLA

300 series
DR=HUM; BR=None

## CLA402H1 Advanced Seminar in Greek Civilization

 [36S]An advanced research seminar devoted to critical issues relating to Greek civilization. Course requirements include a research essay. Topics vary from year to year.
Prerequisite: Enrolment in Major Program in Classical Civilization; 14.0 FCEs completed including 1.0 in CLA 300-series
Exclusion: CLA403H1
DR=HUM; BR=None

## CLA403H1 Advanced Seminar in Roman Civilization [36S]

An advanced research seminar devoted to critical issues relating to Roman civilization. Course requirements include a research essay.Topics vary from year to year.
Prerequisite: Enrolment in Major Program in Classical Civilization; 14.0 FCEs completed including 1.0 in CLA 300-series
Exclusion: CLA402H1
DR=HUM; BR=None

## Greek Courses

These courses teach reading in ancient Greek. Prerequisites will be enforced. GRK101H1 requires no prior knowledge in ancient Greek. Courses in Greek taught by the Department of Classics involve the study of the form of the language employed in antiquity from about 800 B.C.E. to 400 C.E. The Department of Classics does not offer instruction in Medieval or Modern Greek.

## GRK101H1 Introductory Ancient Greek I (formerly GRK 100Y1) [48S]

An intensive introduction to Ancient Greek for students who have no knowledge of the language; preparation for the reading of Ancient Greek literature.
Exclusion: GRK100Y1 Students who have studied Ancient Greek previously must obtain permission from the
Undergraduate Coordinator before enrolling.
DR=HUM; BR=1
GRK102H1 Introductory Ancient Greek II [48S]
A continuation of the intensive introduction to Ancient Greek in GRK 101H1. Also appropriate for students who have some training in Ancient Greek, but have not completed a whole credit course at University or a final-year (Grade 12) course in secondary school.
Prerequisite: GRK101H1/some background in Ancient Greek Exclusion: GRK100Y1
DR=HUM; BR=1
GRK201H1 Intermediate Ancient Greek I [48S]
Reading of selections of Ancient Greek prose works with systematic language study.
Prerequisite: GRK100Y1/GRK102H1. Grade 12 in Ancient Greek may be accepted, but students should consult the Undergraduate Coordinator before enrolling.
DR=HUM; BR=1
GRK202H1 Intermediate Ancient Greek II [48S]
Continued language training with readings in Ancient Greek prose and verse.

## Classics

Prerequisite: GRK201H1
DR=HUM; BR=1

## 300/400 series courses

Note:
Frequency of Offering: in each fall-winter session, GRK430H1 will be offered and a minimum of 3 half-courses in each of the GRK 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.

GRK340H1 Greek Philosophy I [36S]
Readings from one or more philosophical texts.
Prerequisite: GRK202H1
DR=HUM; BR=1
GRK341H1 Greek Historians I [36S]
Readings from one or more Greek Historians.
Prerequisite: GRK202H1
DR=HUM; BR=1

## GRK342H1 Greek Orators I [36S]

Readings from from one or more oratorical texts.
Prerequisite: GRK202H1
DR=HUM; BR=1
GRK343H1 Greek Prose Authors I [36S]
Readings from Greek prose authors (e.g., biography, novels,
essays, texts in koine).
Prerequisite: GRK202H1
DR=HUM; BR=1

## GRK350H1 Greek Epic I [36S]

Readings from Greek epics, including Homer.
Prerequisite: GRK202H1
DR=HUM; BR=1
GRK351H1 Greek Comedy I [36S]
Readings from Aristophanes and Menander.
Prerequisite: GRK202H1
DR=HUM; BR=1
GRK352H1 Greek Tragedy I [36S]
Readings from Aeschylus, Sophocles and Euripides.
Prerequisite: GRK202H1
DR=HUM; BR=1
GRK353H1 Greek Verse Authors I [36S]
Readings from Greek verse (e.g., elegy, iambics, lyric).
Prerequisite: GRK202H1
DR=HUM; BR=1
GRK428H1 Independent Studies (formerly GRK428Y1) [TBA]
Independent Studies
Prerequisite: Permission of Department
Exclusion: GRK428Y1
Recommended Preparation: Usually 1 FCE from GRK 300level courses
DR=HUM; BR=1
GRK429H1 Independent Studies [TBA]
Independent Studies
Prerequisite: Permission of Department
Recommended Preparation: Usually 1 FCE from GRK 300-series courses
DR=HUM; BR=1

GRK430H1 Advanced Greek Language Study [36S]
A course designed to enhance language skills. Prose composition, sight translation, stylistic analysis of classical Greek prose.
Prerequisite: GRK340H1/GRK341H1/GRK342H1/GRK343H1
Exclusion: GRK330H1
DR=HUM; BR=1

## Courses numbered GRK440H1 to GRK453H1

Courses numbered GRK440H1 to GRK453H1 are advanced versions of the courses with the same titles at the 300-level (GRK340H1 - GRK353H1). They differ from the 300-level versions in meeting for an extra hour, studying more texts, and including a component of integrative, inquiry-based research.

GRK440H1 Greek Philiosophy II [48S]
Advanced readings from one or more philosophical texts.
Prerequisite: One FCE in the GRK 300-series DR=HUM; BR=1

GRK441H1 Greek Historians II [48S]
Advanced readings from one or more Greek historians.
Prerequisite: One FCE in the GRK 300-series DR=HUM; BR=1
GRK442H1 Greek Orators II [48S]
Advanced readings from one or more oratorical texts.
Prerequisite: One FCE in the GRK 300-series
DR=HUM; BR=1
GRK443H1 Greek Prose Authors II [48S]
Advanced readings from Greek prose authors (e.g.,
biography, novels, essays, texts in koine).
Prerequisite: One FCE in the GRK 300-series DR=HUM; BR=1
GRK450H1 Greek Epic II [48S]
Advanced readings from Greek epics, including Homer.
Prerequisite: One FCE in the GRK 300-series
DR=HUM; BR=1

## GRK451H1 Greek Comedy II [48S]

Advanced readings from Aristophanes and Menander.
Prerequisite: One FCE in the GRK 300-series
DR=HUM; BR=1
GRK452H1 Greek Tragedy II [48S]
Advanced readings from Aeschylus, Sophocles and
Euripides.
Prerequisite: One FCE in the GRK 300-series DR=HUM; BR=1
GRK453H1 Greek Verse Authors II [48S]
Advanced readings from Greek verse (e.g., elegy, iambic, lyric).
Prerequisite: One FCE in the GRK 300-series
DR=HUM; BR=1

## Latin Courses

These courses teach reading in Latin. Prerequisites will be enforced. LAT101H1 requires no prior knowledge of Latin.

## LAT101H1 Introductory Latin I (formerly LAT 100Y1) [48S]

An intensive introduction to Latin for students who have no knowledge of the language; preparation for the reading of Latin literature.
Exclusion: LAT100Y1. Students who have studied

## Classics

Latin previously must obtain permission from the
Undergraduate Coordinator before enrolling.
DR=HUM; $B R=1$
LAT102H1 Introductory Latin II [48S]
A continuation of the intensive introduction to Latin in LAT 101 H 1 . Also appropriate for students who have some training in Latin, but have not completed a whole credit course at University or a final-year (Grade 12) course in secondary school.
Prerequisite: LAT101H1/some background in Latin
Exclusion: LAT100Y1
DR=HUM; BR=1
LAT201H1 Intermediate Latin I [48S]
Reading of selections of Latin prose works with systematic language study.
Prerequisite: LAT100Y1/LAT102H1. Grade 12 in Latin
may be accepted, but students should consult the
Undergraduate Coordinator before enrolling.
DR=HUM; BR=1
LAT202H1 Intermediate Latin II [48S]
Continued language training with readings in Latin prose and verse.
Prerequisite: LAT201H1
DR=HUM; BR=1
SMC222H1 Medieval Latin I
SMC222H1 Medieval Latin I
See St. Michael's College

## 300/400 -Series Courses

## Notes

Frequency of Offering: in each fall-winter session, LAT430H1 will be offered and a minimum of 3 half-courses in each of the LAT 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.

## SMC323H1 Mediaeval Latin II

SMC323H1 Mediaeval Latin II
See St. Michael's College
LAT340H1 Latin Novelists I [36S]
Readings from one or more Latin novelists.
Prerequisite: LAT202H1
DR=HUM; BR=1
LAT341H1 Latin Historians I [36S]
Readings from one or more Latin historians.
Prerequisite: LAT202H1
DR=HUM; BR=1
LAT342H1 Latin Orators I [36S]
Readings from Latin orators, including Cicero.
Prerequisite: LAT202H1
DR=HUM; BR=1
LAT343H1 Latin Prose Authors I [36S]
Readings from Latin prose authors (e. g. biography, letters, philosophy).
Prerequisite: LAT202H1
DR=HUM; BR=1

## LAT350H1 Latin Epic I [36S]

Readings from one or more Latin epics, including Virgil.
Prerequisite: LAT202H1
DR=HUM; BR=1
LAT351H1 Latin Drama I [36S]
Readings from Latin comedy and/or tragedy.
Prerequisite: LAT202H1
DR=HUM; BR=1
LAT352H1 Latin Satire I [36S]
Readings from one or more Latin satirists.
Prerequisite: LAT202H1
DR=HUM; BR=1
LAT353H1 Latin Verse Authors I [36S]
Readings from Latin verse (e. g. elegy, lyric, bucolic).
Prerequisite: LAT202H1
DR=HUM; BR=1
LAT428H1 Independent Studies (formerly LAT428Y1) [TBA]
Independent Studies
Prerequisite: Permission of Department
Exclusion: LAT428Y1
Recommended Preparation: Usually 1 FCE from LAT 300-series
DR=HUM; BR=1
LAT429H1 Independent Studies [TBA]
Independent Studies
Prerequisite: Permission of Department
Recommended Preparation: Usually 1 FCE from LAT 300-series
DR=HUM; BR=1
LAT430H1 Advanced Latin Language Study (formerly LAT330H1) [36S]
A course designed to enhance language skills. Prose composition, sight translation, stylistic analysis of Latin prose.
Prerequisite: LAT340H1/LAT341H1/LAT342H1/LAT343H1
Exclusion: LAT330H1
DR=HUM; BR=1

## Courses numbered LAT440H1 to LAT453H1

Courses numbered LAT 440H1 to LAT453H1 are advanced versions of the courses with the same titles at the 300-level (LAT340H1 - LAT353H1). They differ from the 300-level versions in meeting for an extra hour, studying more texts, and including a component of integrative, inquiry-based research.

## LAT440H1 Latin Novelists II [48S]

Advanced readings from one or more Latin novelists.
Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
LAT441H1 Latin Historians II [48S]
Advanced readings from one or more Latin historians.
Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
LAT442H1 Latin Orators II [48S]
Advanced readings from Latin orators, including Cicero.
Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
LAT443H1 Latin Prose Authors II [48S]
Advanced readings from Latin prose authors (e. g. biography, letters, philosophy).

Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
LAT450H1 Latin Epic II [48S]
Advanced readings from one or more Latin epics, including
Virgil.
Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
LAT451H1 Latin Drama II [48S]
Advanced readings from Latin comedy and/or tragedy.
Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
LAT452H1 Latin Satire II [48S]
Advanced readings from one or more Latin satirists.
Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
LAT453H1 Latin Verse Authors II [48S]
Advanced readings from Latin verse (e. g. elegy, lyric, bucolic).
Prerequisite: One FCE in the LAT 300-series
DR=HUM; BR=1
SMC436H1 Advanced Mediaeval Latin Seminar
SMC436H1 Advanced Mediaeval Latin Seminar
See St. Michael's College

## Cognitive Science

Cognitive science is the interdisciplinary study of intelligence in humans and machines. It encompasses work done in computer science, linguistics, neuroscience, philosophy, and psychology. Drawing on the concepts, theories, and methodologies of these disciplines, cognitive scientists seek an understanding of such mental phenomena as perception, language, learning, and reasoning in information-processing terms, and they aim to integrate this understanding with a neurophysiological account of how the human brain implements these information-processing phenomena. With its origins in the mid-20th century birth of computers and subsequent computationalist revolution in linguistics and psychology, as well as a now decades-long history of discovery, cognitive science is one of the most exciting areas of contemporary research into the nature of mind.

Since cognitive science is an interdisciplinary field, cognitive science programs appeal to many different students. Those pursuing studies in computer science, linguistics, neuroscience, philosophy, and psychology who wish to explore connections between these areas and broader questions about human and machine intelligence will all find a natural home in Cognitive Science. The program aims to appeal to students by offering an academically rigorous curriculum comprising a blend of intelligence-related courses in Computer Science, Linguistics, Philosophy, and Psychology, as well as special intelligence-dedicated Cognitive Science courses (COG250H1 Introduction to Cognitive Science and COG401H1/402H1 Cognitive Science Seminar). But precisely because students drawn to cognitive science have such diverse academic interests and backgrounds, the program offers students a choice of course stream after the second year. The arts major has a "Perception and Attention" stream, a "Language and Cognition" stream, and a "Thinking and Reasoning" stream; the science major has a "Computational Cognition" stream and a "Cognition and the Brain" stream. The Cognitive Science program equips all participating students, regardless of background, with the knowledge and skills necessary for an understanding of cognitive science while also allowing them freedom to tailor their course selection to meet their own intellectual and career interests.

## Cognitive Science Programs

## Cognitive Science (Arts Program) Major

Enrolment in this program requires the completion of 4.0 courses.

## (8 FCEs)

Where noted below, please consult the Faculty of Arts \& Science Course Calendar on prerequisites.

First Year:
CSC108H1; LIN100Y1; COG250Y1
Second Year:
STA220H1/STA250H1/PSY201H1; PSY270H1
Second Year and Higher:
PHL342H1; PSY493H1; and 3 FCEs from one of Stream 1, 2, or 3:
Stream 1: Perception and Attention
PHL232H1; PSY280H1; and 2.5 FCEs of any of the
following: PSY380H1; PSY475H1; PHL340H1; PHL405H1; LIN228H1; LIN323H1; NEW232Y1; NEW303H1; NEW333H1; NEW339H1; NEW438H1
COG499H1
For those with the appropriate prerequisites: CSC207H1; CSC320H1; CSC420H1
Stream 2: Language and Cognition
1.5 FCEs of any of the following: LIN232H1; LIN241H1; LIN315H; LIN331H1; LIN341H1; LIN374H1
1.5 FCEs of any of the following: LIN471H1; PHL245H1; PHL340H1; PHL345H1; PHL351H1; PHL451H1; NEW232Y1; NEW303H1; NEW333H1; NEW339H1; NEW438H1
COG499H1
For those with the appropriate prerequisites: CSC 401 H 1 ; CSC485H1
Stream 3: Thinking and Reasoning
PHL245H1; PSY260H1; and 2.5 FCEs of any of the following: PSY370H1; PSY371H1; PSY372H1; PHL246H1; PHL340H1; PHL347H1; LIN374H1; LIN471H1; NEW232Y1; NEW303H1; NEW333H1; NEW339H1; NEW438H1
COG499H1
For those with the appropriate prerequisites: CSC 207 H 1 ; CSC321H1; CSC384H1; CSC486H1
Fourth Year: COG401H1

## Cognitive Science (Science Program) Major

Enrolment in this program requires the completion of 4.0 courses.
(8 FCE)
Note that some Computer Science courses included below under Streams 1 and 2 have unlisted co- or prerequisites. Please consult the Faculty of Arts and Science Course Calendar. Those interested in the Science Major are advised to consider also registering for a Computer Science Specialist, Major, or Minor (for Stream 1) or a Human Biology Neuroscience Specialist or Major (for Stream 2).
First Year:
CSC108H1; CSC148H1; MAT135H1 and MAT136H1 (or MAT137Y1); COG250Y1 (may be taken as a corequisite in Year 2)
Second Year:
STA220H1/STA250H1/PSY201H1
Second Year and Higher:
PHL342H1; PSY493H1; and 3 FCEs from one of Stream 1 or 2 :
Stream 1: Computational Cognition
Computational cognition is the interdisciplinary study of the information-processing underpinnings of cognitive mental processes. It seeks an understanding of cognition in mathematical terms and to apply this understanding to debates in artificial intelligence, cognitive psychology, and beyond.
No more than 1.5 FCEs of the 3 FCEs required from this list of options may come from any single 3-letter course

## Cognitive Science



## Cognitive Science Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## COG250Y1 Introduction to Cognitive Science (formerly JUP250Y1, UNI250Y1) [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.
Exclusion: JUP250Y1, UNI250Y1
DR=HUM; BR=2

## Comparative Literature

## Faculty

## Professors Emeriti

J.E. Chamberlin, BA, Ph D. FRSC, D.Litt (hon.)
N. Davis, BA, MA, PhD, FAmAcAs, CFBrAc
L. Dolezel, MA, Ph D, FRSC
J.A.Fleming, MA, Ph D
L.A.M. Hutcheon, MA, Ph D, FRSC, D.Litt (hon.)
E. Kushner, MA, Ph D, FRSC
P.W. Nesselroth, MA, Ph D, Ch PA
B. Stock, AM,, Ph D
M.J. Valdes, MA, Ph D, FRSC, Miembro

Correspondiente de la Academia Mexicana

## Associate Professor and Director of the

 CentreN. ten Kortenaar, BA, MA, PhD

Associate Professor and Co-ordinator of Graduate Studies
J. Ross, BA, MA,PhD

## Professors

P. Kleber, MA, Ph D
T. Lahusen, MA, Ph D
R. J. Le Huenen, L s L, DES, DenPh, ChPA, FRSC, D.Litt. (hon)
J. LeBlanc, MA, Ph D
N. ten Kortenaar, BA, MA, PhD

Associate Professors
V. Ambros, MA, Ph D
E. Cazdyn, MA, Ph D
R. Comay, MA, Ph D
U. Esonwanne, MA, Ph.D
B. Havercroft, MA, Ph D
E.-L. Jagoe, MA, Ph.D
V. Li, MA, Ph.D
Y. Meng, MA, Ph.D
M. Nyquist, BA, MA, PhD
J. Ross, BA, MA, PhD
S.J. Rupp, MA, Ph D
A. Sakaki, MA, PhD
J. Zilcosky, MA, Ph D

## Assistant Professors

R. Bai, BA, MA, Ph D
A. Budde, MA, Ph.D
A. Komaromi, MA, Ph D

## Northrop Frye Visiting Professor

 TBAThe 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.In addition, the Centre offers many undergraduate courses.

Enquiries:Isabel Bader Theatre, 93 Charles Street. 3rd Floor (416-813-4041)

## Comparative Literature Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## JDC299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33. Offered by the Centre for Comparative Literature in collaboration with the University College Drama Program.
DR=HUM; BR=None

## JUC299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33. Offered by the Centre for Comparative Literature in collaboration with University College
DR=HUM; BR=None
JDC400Y1 Redefining Security through Art[48L/48T] Articulates a cultural approach to achieving Human Security. This course examines human security issues in which there is a significant cultural dimension to a security threat, and in which culture occupies an essential place in any realistic and effective solution. The work of artists to be analyzed include: Ariane Mnouchkine; Robert Lepage; Bertolt Brecht; John Greyson, Mohsen Makhmalbaf, Terry George and Daniel Barenboim.
Prerequisite: For undergraduate: need to be 4th year/ senior students; DRM230Y1 and permission of the instructor. $D R=H U M ; B R=1$

## JIA400H1 Interdisciplinary Practice for the Arts[144P]

While examining the interconnectedness of the arts, students are required to meet between sessions and develop projects connected to their study. These projects involve a range of media, including theatre, film, music and visual art (installation). Limited to fourth-year students.
DR=HUM; BR=1

## COL490H1 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 Comparative Literature

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DR=HUM; BR=None
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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.
DR=HUM; BR=None

## Computer Science

## Faculty

University Professor Emeritus
S.A. Cook, AM, Ph D, DM, FRS, FRSC (T)

Professors Emeriti
D.G. Corneil, MA, Ph D
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, M Sc, PhD (University of Toronto Mississauga)
J. Mylopoulos, M Sc, Ph D
D.B. Wortman, M Sc, Ph D

## University Professors

A.B. Borodin, M Sc, Ph D, FRSC
G.E. Hinton, Ph D, FRS, FRSC

Professor and Chair of the Department S. Dickinson, MS, PhD

## Associate Professor and Vice Chair of the

 DepartmentS. Mcllraith, PhD

Associate Professor and Associate Chair Graduate Studies
A. Hertzmann, MS, PhD

## Senior Lecturer and Associate Chair Undergraduate Studies

K. Reid, M Sc

Professors
T.S. Abdelrahman, M Sc, Ph D
F. Bacchus, M Sc, Ph D
R.M. Baecker, M Sc, Ph D
R. Balakrishnan, M Sc, Ph D
C. Boutilier, M Sc, Ph D
M. Chechik, MS, PhD
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, MS, 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
N. Koudas, M Sc, Ph D (University of Toronto Scarborough)
K. Kutulakos, M Sc, Ph D
H. Levesque, M Sc, Ph D, FRSC
R. Miller, MS, Ph D, FRSC
M. Molloy, M Math, Ph D (University of Toronto Scarborough)
R. Neal, B Sc, Ph D
T. Pitassi, M Sc, Ph D
C.W. Rackoff, SM, Ph D (University of Toronto Mississauga)
S. Stevenson, MS, Ph D
S. Toueg, MA, Ph D
R. Zemel, M Sc, Ph D

Associate Professors
A.J. Bonner, M Sc, Ph D (University of Toronto Mississauga)
M. Brudno, M.Sc. Ph.D
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
P. J. Marbach, M Sc, Ph D
S. Mcllraith, Ph D
G. Penn, MS, Ph D
K. Singh, MS, Ph D
K.N. Truong, Ph D

Assistant Professors
M. Braverman , M Sc, Ph D
A. Demke-Brown, M Sc, Ph D
A. Farzan, Ph D
Y. Ganjali, Ph D
R. Johnson, M.S, Ph D (University of Toronto Scarborough)
B. Schroeder, Ph D (University of Toronto Scarborough)
V. Vaikuntanathan, PhD (University of Toronto Mississauga)
D. Wigdor, Ph D (University of Toronto Mississauga)

## Senior Lecturers

G. Baumgartner, M Sc
J. Campbell, M Math
J. Clarke, M Sc, PhD
M. Craig, M Sc
S. Engels, M Math
T. Fairgrieve, M Sc, Ph D
P. Gries, M Eng
D. Heap, B Sc, M Sc
D. Horton, M Sc
F. Pitt, M Sc, Ph D
K. Reid, M Sc

Cross Appointed
C. Amza, Ph D
G. Bader, Ph D
C. Beck, Ph D
M. Chignell, MS, Ph D
M. Consens, Ph D
M.S. Fox, Ph D
B. Frey, Ph D
A. Goel, Ph D
M. Gruninger, Ph D
A. Jacobsen, MS, Ph D
P. Kim, Ph D
B. Li, M Sc, Ph D
D. Lie, Ph D
J. Liebeherr, Ph D
K. Lyons, M Sc Ph D
S. Mann, M Eng, Ph D
E. Mendelsohn, M Sc, Ph D (University of Toronto Scarborough)
A. Mihailidis, Ph D

## Computer Science

Q. Morris, Ph D
A. Moses, Ph D
A. Moshovos, M Sc, Ph D
R. Salakhutdinov, Ph D
G. Steffan, MA Sc, Ph D
M. Stumm, MS (Math), Ph D
A.I.F. Urquhart, MA, Ph D
A. Veneris, M Sc, Ph D
E. Yu, M Sc, Ph D
Z. Zhang, Ph D

## Status Only Faculty

J. Birnholtz, Ph D
A. Borgida, Ph D
B. Buxton, M Sc
J. Glasgow, Ph D
I. Jurisica, M Sc, Ph D
A. Kreinin, MSc, Ph D
A. LaMarca, MS, Ph D
Y. Lesperance, MSc, Ph D
R. Lilien, Ph D
J. MacLean, Ph D
C. Munteanu, Ph D
D. Penny, Ph D
D. Reilly, Ph D
S. Saroiu, Ph D
T. Savor, MASc, Ph D
B. Selic, Magister Ing
F. Shein, Ph D, P Eng
C. Sminchiesescu, MS, Ph D
J. Stam, Ph D

Topalouqlou, Thodoros, Ph D
R. Trefler, Ph D
J. Tsotsos, 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 grandmasterlevel 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.

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 Student Services \& Resources chapter of this Calendar.

Associate Chair - Undergraduate Studies: Professor K. Reid
Student Counsellors, Undergraduate Office: Bahen Building, 40 St. George Street, Room 4252/4254, M5S 2E4 (416-9786360, email: ug@cs.utoronto.ca.

Web site: http://web.cs.toronto.edu/home.html

## Computer Science Programs

Tuition fees for students enrolled in Computer Science Specialist and Major programs are higher than for other Arts and Science programs.For more information visit www.fees. utoronto.ca

## Computer Science Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(12 full course equivalents [FCEs])
First year (2.5 FCEs)

1. (CSC108H1, CSC148H1)/CSC150H1, CSC165H1/ CSC240H1; (MAT135H1, MAT136H1)/MAT137Y1/ MAT157Y1
Second year (3.5 FCEs):
2. CSC207H1, CSC209H1, CSC236H1/CSC240H1, CSC258H1, CSC263H1/CSC265H1; MAT223H1/ MAT240H1; STA247H1/STA255H1/STA257H1 Notes:
3. Students with a strong background in an objectoriented language such as Python, Java or C++ may omit CSC108H1 and proceed directly with CSC148H1. There is no need to replace the missing half-credit; however, please base your course choice on what you are ready to take, not on "saving" a half-credit.
4. CSC 150 H 1 is an accelerated alternative to CSC108H1 and CSC148H1, intended for students with previous programming experience in a procedural language. If you take CSC 150 H 1

## Computer Science

instead of CSC108H1 and CSC148H1, you do not need to replace the missing half-credit; but please see Note 1.
3. CSC 240 H 1 is an accelerated and enriched version of CSC165H1 plus CSC236H1, intended for students with a strong mathematical background, or who develop an interest after taking CSC165H1. If you take CSC240H1 without CSC165H1, there is no need to replace the missing half-credit; but please see Note 1.
4. Students may not omit CSC165H1 and proceed directly to CSC236H1. Either (CSC165H1 and CSC236H1), or CSC240H1 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.
Later years (6 FCEs):
3. CSC369H1, CSC373H1/CSC375H1
4. 1.5 FCEs from the following: any 400 -level CSC course; BCB410H1, BCB420H1, BCB430Y1, with not more than 1.0 FCE from CSC490H1, CSC491H1, CSC494H1, CSC495H1, BCB430Y1
5. 1.5 additional FCEs from the following: any $300+$ level CSC course; BCB410H1, BCB420H1, BCB430Y1; ECE385H1, ECE489H1
6. 2 additional FCEs from the following list: CSC: any 300-/400-level BCB410H1, BCB420H1, BCB430Y1 ECE385H1, ECE489H1 MAT224H1, MAT235Y1/MAT237Y1/MAT257Y1, any 300-/400-level except MAT329H1, MAT390H1, MAT391H1 STA248H1/STA261H1, any 300-/400-level
The choices in 4,5 and 6 must satisfy the requirement for an integrative, inquiry-based activity by completing one of the following half-courses: CSC301H1, CSC318H1, CSC404H1, CSC411H1, CSC418H1, CSC420H1, CSC428H1, CSC454H1, CSC485H1, CSC490H1, CSC491H1, CSC494H1, CSC495H1

This requirement may also be met by participating in the PEY (Professional Experience Year) program.

## Choosing courses

This program offers considerable freedom to choose courses at the $300+$ level, and you are free to make those choices on your own. We are eager to offer guidance, however, and both our Undergraduate Office and individual faculty members are a rich source of advice.
We have also created a collection of what we call "concentrations": sets of courses that direct you toward expertise in particular areas of Computer Science, such as game design, theory of computation, human-computer interaction, and many more. These concentrations are meant to help your choice, not to constrain it, and each concentration has at least one faculty member who would be happy to discuss it with you.
To read more about the concentrations, please consult our web site at http://web.cs.toronto.edu/program/ugrad.htm

## Preparing for graduate study in Computer Science

Strong students should consider the option of further study in graduate school (where the degrees offered are typically M.Sc. and Ph.D.).If you find yourself frequently receiving marks in the B+ range or better, you should consult with faculty members to learn more about graduate school and whether it would be a good option for you. You will want to ask for advice on your particular interests - and you will find faculty members are happy to talk to you - but there are also some course choices that should be considered by all students thinking of graduate study in Computer Science.

Here are some courses that any CS graduate student should have taken, even if their interests lie in other areas of Computer Science: CSC324H1, CSC336H1/CSC350H1, CSC343H1, CSC373H1, CSC369H1, and CSC463H1. (Some of those courses are required in the Specialist program.)
The research areas of CS can be grouped in different ways, but commonly used groupings include: systems, theory, networks, software engineering, artificial intelligence, numerical analysis, human-computer interaction, and graphics. Your course work will probably have given you an idea of where your own interests lie, but you should not take courses exclusively in one area. You will benefit by having taken an advanced course requiring considerable software development and a theoretical course.
It will be especially beneficial to have done a project course (CSC494H1/CSC495H1), a capstone course (CSC490H1/ CSC491H1), and/or a summer research project. It is good if this individual work is in the area where you eventually decide you'd like to do your own research, but that is not essential; what you need most is some experience doing work on your own, under the mentorship of an experienced researcher.

## Computer Science Major (Science program)

Enrolment in this program requires the completion of 4.0 courses.

## (8 credits)

First year ( 2.5 FCEs):

1. (CSC108H1, CSC148H1)/CSC150H1, CSC165H1/ CSC240H1; (MAT135H1, MAT136H1)/MAT137Y1/ MAT157Y1
Second year (2.5 FCEs):
2. CSC207H1, CSC236H1/CSC240H1, CSC258H1, CSC263H1/CSC265H1; STA247H1/STA255H1/ STA257H1
Notes:
3. Students with a strong background in an objectoriented language such as Python, Java or C++ may omit CSC108H1 and proceed directly with CSC148H1. There is no need to replace the missing half-credit; however, please base your course choice on what you are ready to take, not on "saving" a half-credit.
4. CSC 150 H 1 is an accelerated alternative to CSC108H1 and CSC148H1, intended for students with previous programming experience in a procedural language. If you take CSC 150 H 1

## Computer Science

instead of CSC108H1 and 148H1, you do not need to replace the missing half-credit; but please see Note 1.
3. CSC 240 H 1 is an accelerated and enriched version of CSC165H1 plus CSC236H1, intended for students with a strong mathematical background, or who develop an interest after taking CSC165H1. If you take CSC240H without CSC165H1, there is no need to replace the missing half-credit; but please see Note 1.
4. Students may not omit CSC165H1 and proceed directly to CSC236H1. Either (CSC165H1 and CSC236H1), or CSC240H1 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.
Later years (3 FCEs).
3. 0.5 FCE from the following: any 400-level CSCcourse; BCB410H1, BCB420H1, BCB430Y1
4. 1.0 additional $\operatorname{FCE}$ from the following: any $300+$ level CSC course; BCB410H1, BCB420H1, BCB430Y1; ECE385H1, ECE489H1
5. 1.5 additional FCEs from the following list, of which at least 0.5 FCE must be at the $300-/ 400-$ level:
CSC: any 200-/300-/400-level
BCB410H1, BCB420H1, BCB430Y1
ECE385H1, ECE489H1
MAT223H1MAT/240H1, MAT235Y1/MAT237Y1/ MAT257Y1, any 300-/400-level except MAT329H1, MAT390H1, MAT391H1
The choices in 3, 4 and 5 must satisfy the requirement for an integrative, inquiry-based activity by completing one of the following half-courses: CSC301H1, CSC318H1, CSC404H1, CSC411H1, CSC418H1, CSC420H1, CSC428H1, CSC454H1, CSC485H1, CSC490H1, CSC491H1, CSC494H1, CSC495H1

This requirement may also be met by participating in the PEY (Professional Experience Year) program.

## Advice on choosing courses towards a Major in CSC

A Major program in any discipline may form part (but not the whole) of your degree requirements. The Major program in Computer Science is designed to include a solid grounding in the essentials of CS, followed by options that let you explore one or a few topics more deeply. You will also realize what areas you have not studied, and be ready to explore them if your interests change after completing the Major.
To give you freedom to choose your path through Computer Science, we have designed the Major to include a minimal set of required courses. There are some courses that we think you ought to consider carefully as you make those choices. CSC 373 H 1 is fundamental to many more advanced CSCtopics, where designing appropriate algorithms is central. CSC209H1 is a prerequisite to effective work in many application areas..
We have designed "packages" of related courses that are intended to accompany the Specialist program in Computer Science, and you may find them helpful in completing your

Major too. Please see our web site at http://web.cs.toronto. edu/program/ugrad.htm
A significant role of the Major is to allow you to integrate your studies in CS and another discipline. For example, many CS students are also interested in statistics, economics, physics or mathematics. In those cases, it makes sense to enrol in a Major in one discipline and either a Major or a Specialist in the other. If your interests are evenly balanced, the obvious choice is to do two Majors, and that is what we assume here.

If you are doing a double Major (two Majors in related disciplines), you might want to consult your college registrar's office for advice on satisfying the degree requirements with overlapping Majors.

A Major program is generally not enough to prepare you for graduate study in Computer Science, though a complete Specialist is not required. Please consult the advice about graduate study included with the description of the Specialist program in Computer Science.

## CSC and Mathematics

The theoretical foundations of Computer Science are essentially a branch of mathematics, and numerical analysis (the area of CS that studies efficient, reliable and accurate algorithms for the numerical solution of continuous mathematical problems) is also a topic in applied mathematics. If you are interested in both CS and mathematics, a double major is a good choice.
In this double major, you should choose all the theoretical courses in the first three years: CSC165H1, CSC236H1, CSC263H1, CSC373H1 and CSC463H1. If the "enriched" versions are available as alternatives, you should prefer them: CSC240H1 in place of CSC165H1 and CSC236H1, and CSC265H1 and CSC375H1 in place of CSC263H1 and CSC373H1 respectively. If you come to realize that your interests are mathematical after taking some of the nonenriched courses, it's not too late; you should ask us for advice. You should also take at least one of CSC438H1, CSC448H1 and CSC465H1.
You should also make sure you take courses in numerical analysis -- CSC336H1 and CSC351H1, and possibly CSC446H1.
In the Major in Mathematics, you should prefer courses that are also in the Specialist program in Mathematics: MAT157Y1, MAT240H1, MAT247H1 and so on. Ask the advisors in the Department of Mathematics which courses they would recommend if you're planning a career in mathematics. Don't be afraid to admit your interest in CS.

## CSCand Bioinformatics/Computational Biology

Bioinformatics is a field that came into existence only in the 1990s but has become an extremely fruitful interaction between biological scientists and computer scientists. Deciphering the genome requires not just extremely clever biology but extremely clever computer science, drawing from the study of algorithms and data structures and from data mining.
To study bioinformatics, you should enrol in the Major program in Bioinformatics and Computational Biology sponsored by the Department of Biochemistry, and also

## Computer Science

in the Major in Computer Science. Your CSCMajor should include a selection of courses something like this:

```
CSC373H1/CSC375H1
CSC321H1/CSC343H1
CSC336H1/CSC350H1
BCB410H1, BCB420H1
CSC411H1
Some of CSC324H1, CSC463H1, CSC310H1,
    CSC412H1, CSC456H1
You should seek advice from both the Department of Biochemistry and the Department of Computer Science on how to distribute your courses across the two Majors.
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## CSC and Statistics

Here your CS course choices should be somewhat similar to those for CSC and Mathematics: take the theoretical CSC courses up to the 300 level, and prefer the higher-level MAT and STA courses. For example, take STA 257H1 and 261H1 rather than STA 247 H 1 and 248 H 1 .
Within Computer Science, take courses in numerical analysis (CSC336H1 and CSC351H1). Choose also from among information theory (CSC310H), machine learning (CSC321H1 and CSC411H1), and natural language processing (CSC401H).

## CSC and Economics

There is considerable opportunity for mutually supporting interests in CS and economics in the area of economic modelling, econometrics and numerical analysis. In CS, you might choose courses such as CSC343H1 (databases), CSC 358H1 (networks) and CSC369H1 (operating systems) to acquire the technical background for working with large systems and data sets, and CSC350H1 and CSC351H1 (numerical analysis) to understand the difficulties of large numerical models.
If you are interested in financial modelling, you will also want to take CSC446H1 to learn how to handle partial differential equations; to do that, you would want to have taken the necessary mathematical courses.

Applying ideas from economics to CS is a little harder, but certainly economic principles apply to databases (CSC443H1) and networks (CSC458H1). CSC358H1 discusses how to model the processes involved in computer networks and in other customer-server systems. CSC454H1 (business of software) would also benefit from your background in economics.

## CSC and Linguistics

If you are interested in both CS and Linguistics, you should consider doing a Major in both. Your Major in Computer Science should focus on computational linguistics (CL), the sub-area of AI concerned with human languages ("natural languages"); researchers in this area are interested in developing programs that can "understand" and generate natural language. You should take our CL courses, CSC401H1 and CSC485H1. (They can be taken in either order.) As preparation, you should also take CSC324H1 (programming languages). Other courses you might find valuable are CSC384H1 (AI), CSC343H1 (databases), and the theoretical courses CSC373H1/CSC375H1 and CSC463H1.

## CSC and Physics

If you want to study CS and physics, then as a physicist, you will be interested in how natural processes and human design can take us from the materials and laws of nature to useful computational machinery, and you will want to study CSC258H1 (computer organization -- the way solid-state devices can be combined to build a machine that repeatedly executes instructions) and CSC369H1 (operating systems -- the large software systems that organize the programs people write and run to present the appearance of a well-run self-policing machine).
As a computer scientist, you will wonder how accurately you can compute the results of calculations needed in simulating or predicting physical processes. CSC350H1 and CSC351H1 introduce you to numerical analysis, and CSC446H1 applies it to partial differential equations, used to model many physical systems.
Both a computer scientist and a physicist will wonder how to write effective programs. CSC263H1 and CSC373H1 teach you to choose appropriate data structures and algorithms, and CSC463H1 helps you to understand whether a problem is computable, and if so, whether the computation takes a reasonable amount of time.
In fourth year, you may choose CSC 418 H 1 , which depends on and also simulates the behaviour of light and mechanical systems. CSC456H1 deals with high-performance computing of the kind used in scientific computing. CSC420H1 might also be a good choice, though some preparation in artificial intelligence would be helpful.

## Computer Science Minor (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(4 credits)
(CSC108H1, CSC148H1)/CSC150H1, CSC165H1/ CSC240H1, CSC207H1, CSC236H1/CSC240H1 Notes:

1. Students with a strong background in Java or C++ may omit CSC108H1 and proceed directly with CSC148H1.
2. CSC 150 H 1 is an accelerated alternative to CSC108H1 and CSC148H1, intended for students with previous programming experience in a procedural language.
3. CSC 240 H 1 is an accelerated and enriched version of CSC165H1 plus CSC236H1, intended for students with a strong mathematical background, or who develop an interest after taking CSC165H1.
4. Students may not omit CSC165H1 and proceed directly to CSC236H1. Either (CSC165H1 and CSC 236 H 1 ), or CSC 240 H 1 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.
(Total of above: 2.5 credits. If you take fewer than 2.5 credits, you must take more than 1.5 from the next list, so that the total is 4 credits.)

## Computer Science

1.5 credits from the following list, of which at least 1 credit must be at the 300-/400-level:

CSC209H1, CSC258H1, CSC263H1/CSC265H1 CSC: any 300-/400-level
Note:

1. Computer Science Minors are limited to three 300+ level CSC/ECE half-courses

## Computer Science Courses

## Enrolment notes

NOTE: The University of Toronto Mississauga and University of Toronto Scarborough 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 MAY BE 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 2011-2012 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 CSC165H1(or to CSC236H1 if you have already passed CSC165H1), from CSC265H1 to CSC263H1, and from CSC375H1 to CSC373H1. Please refer to the 2011-2012 Registration Handbook and Timetable for drop down deadlines.

## Drop down deadlines:

20129, Fall session: October 5, 2012
20131, Winter session February 1, 2013

## 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. Also ask for advice 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.

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## CSC104H1 The Why and How of Computing

 [24L/12T]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.
Note: you may not take this course concurrently with any CSC course, but you may take CSC108H1/CSC148H1/ CSC150H1 after CSC104H1.
Exclusion: SMC104H1 (as taught before 1990); VIC104H1
(as taught before 1990); any CSC course.
DR=SCI; BR=5

## Choosing first year courses

To help you select the programming course that is right for you, see www.cs.toronto.edu/dcs, Choose Programs \& Courses > Undergraduate Courses > Choosing Your First Year Courses.

## CSC108H1 Introduction to Computer Programming

 [36L/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.
NOTE: You may not take this course after or concurrently with CSC148H1, but you may take CSC148H1 after CSC108H1.
Exclusion: CSC107H1, CSC120H1, CSC139H1, CSC148H1, CSC149H1, CSC150H1.
DR=SCI; BR=5
CSC120H1 Computer Science for the Sciences [24L/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.
DR=SCI; BR=5
CSC148H1 Introduction to Computer Science [24L/12T/12P]
Abstract data types and data structures for implementing them. Linked data structures. Encapsulation and informationhiding. 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. NOTE: Students may go to their college to drop

## Computer Science

down from CSC148H1 to CSC108H1. See above for the drop down deadline.
Prerequisite: CSC108H1; MHF4U(advanced functions)/ MCV4U(calculus and vectors)
Exclusion: CSC139H1, CSC149H1, CSC150H1; you may not take this course after taking more than two CSC courses at the 200-level or higher.
DR=SCI; BR=5
CSC150H1 Accelerated Introduction to Computer Science [36L/12T/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. NOTE: Students may go to their college to drop down from CSC150H1 to CSC108H1. See above for the drop down deadline.
Prerequisite: MHF4U(advanced functions)/MCV4U(calculus
and vectors). Students should thoroughly understand arrays, searching, sorting, functions/procedures/ subprograms, arguments and parameters, and modular design.
Exclusion: CSC107H1, CSC108H1, CSC139H1, CSC148H1, CSC149H1; you may not take this course after taking more than two CSC courses at the 200-level or higher.
DR=SCI; BR=5
CSC165H1 Mathematical Expression and Reasoning for Computer Science [36L/24T]
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 problemsolving techniques. Diagonalization, the Halting Problem, and some reductions. Unified approaches to programming and theoretical problems.
Prerequisite: MHF4U (advanced functions)/MCV4U (calculus and vectors)
Corequisite: CSC108H1/CSC148H1/CSC150H1
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
DR=SCI; BR=5

## 200-level courses

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 Mississauga Computer Science Minor and the University of Toronto at Scarborough Minor are not restricted subject POSts. If you are in your first year of studies at the University, the GPA requirement does not apply.

CSC200Y1 Economic and Social Networks: Models and Applications [48L/24T]
The course will provide an informal, but rigourous treatment of a variety of topics, introducing students to the relevant background in graph theory, social network formation,
incentives and game theory, and providing exposure to the relevant mathematical and computational tools required to analyze relevant phenomenon. Topics may include: structural analysis of social networks, matching markets, trading networks, web search, information cascades, prediction markets, and online advertising, among others.
Prerequisite: one OAC/U math
DR=SCI; BR=3 + 5

## CSC207H1 Software Design [24L/12T]

An introduction to software design and development concepts, methods, and tools using a statically-typed objectoriented 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.Representation of floating-point numbers and introduction to numerical computation.
Prerequisite: CSC148H1/CSC150H1; CGPA 1.5/enrolment in
a CSC subject POSt.
DR=SCI; BR=5

## CSC209H1 Software Tools and Systems Programming

 [24L/12T]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.
Prerequisite: CSC207H1/enrolment in Bioinformatics and Computational Biology (BCB) subject POSt; CGPA 1.5/ enrolment in a CSC subject POSt.
Exclusion: CSC372H1, CSC408H1, CSC369H1, CSC468H1, CSC469H1.
DR=SCI; BR=5
CSC236H1 Introduction to the Theory of Computation [24L/12T]
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.
Prerequisite: CSC148H1/CSC150H1, CSC165H1/
(CSC148H1 as given before Fall 2003); CGPA 1.5/
enrolment in a CSC subject POSt.
Exclusion: CSC238H1, CSC240H1.
DR=SCI; BR=5

## CSC240H1 Enriched Introduction to the Theory of Computation [24L/12T]

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

## Computer Science

covered in more detail in this course, and some additional topics may also be covered.
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.
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; CGPA 1.5/enrolment in a
CSC subject POSt
Corequisite: CSC148H1/CSC150H1
Exclusion: CSC236H1, CSC238H1
Recommended Preparation: first term of MAT137Y1/ MAT157Y1.
DR=SCI; BR=5
CSC258H1 Computer Organization [24L/12T/13P]
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.
Prerequisite: CSC148H1/CSC150H1, CSC165H1/
CSC240H1/(CSC148H1 as given before Fall 2003);
CGPA 1.5/enrolment in a CSC subject POSt.
Exclusion: CSC257H1 as given before 1985.
DR=SCI; BR=5
CSC260H1 Introduction to Scientific, Symbolic, and Graphical Computation [24L/12T]
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.
Prerequisite: CSC108H1/computing experience, as from a good high school programming course; CGPA 1.5/ enrolment in a CSC subject POSt.
Corequisite: (MAT135H1, MAT136H1)/MAT135Y1/
MAT137Y1/MAT157Y1, MAT223H1/MAT240H1
Exclusion: CSC160H1 as taught in Spring 1992; after taking CSC270H1/CSC263H1/CSC265H1 and any 300-/400level CSC course, you may not take CSC260H1 without Departmental permission in writing.

## DR=SCI; BR=5

CSC263H1 Data Structures and Analysis [24L/12T]
Algorithm analysis: worst-case, average-case, and amortized complexity. Expected worst-case complexity, randomized quicksort and selection.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 and comparison of data structures. Introduction to lower bounds.
Prerequisite: CSC207H1, CSC236H1/CSC238H1/
CSC240H1; STA247H1/STA255H1/STA257H1; CGPA 1.5/
enrolment in a CSC subject POSt.
Exclusion: CSC265H1, CSC378H1.
DR=SCI; BR=5

## CSC265H1 Enriched Data Structures and Analysis [24L/12T]

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 problemsolving. 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.
NOTE: Students may go to their college to drop down from CSC265H1 to CSC263H1. See above for the drop down deadline.
Prerequisite: CSC240H1 or an A- in CSC236H1; CGPA 1.5/ enrolment in a CSC subject POSt.
Corequisite: STA247H1/STA255H1/STA257H1.
Exclusion: CSC263H1, CSC378H1.
DR=SCI; BR=5

## CSC290H1 Communication Skills for Computer Scientists [36L]

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 in year 2, 3, or 4.
DR=SCI; BR=None

## Note

If you are not in our Major or Specialist program, you are limited to three 300+ level CSC/ECE half-courses. In addition, you must have a CGPA of 3.00 , unless you are in our Minor.

## CSC300H1 Computers and Society [24L/12T]

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. Prerequisite: Any half-course on computing; CGPA 3.0/

## Computer Science

enrolment in a CSC subject POSt.
Exclusion: PSCD03H (University of Toronto Scarborough)
DR=SCI; BR=3
CSC301H1 Introduction to Software Engineering [24L/12T]
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/CSC265H1/

CSC378H1; CGPA 3.0/enrolment in a CSC subject POSt DR=SCI; BR=5

## CSC302H1 Engineering Large Software Systems [24L/12T]

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
DR=SCI; BR=5
CSC309H1 Programming on the Web [24L/12T]
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, CSC343H1/CSC228H1; CGPA 3.0/ enrolment in a CSC subject POSt.
DR=SCI; BR=5
CSC310H1 Information Theory [24L/12T]
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/CSC150H1/CSC260H1;
STA247H1/STA255H1/STA257H1/STA107H1;
(MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1/
MAT157Y1, MAT223H1/MAT240H1; CGPA 3.0/enrolment
in a CSC subject POSt.
DR=SCI; BR=5
CSC318H1 The Design of Interactive Computational Media [24L/12T]
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.
DR=SCI; BR=None

## CSC320H1 Introduction to Visual Computing

 [24L/12P]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, antialiasing); (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/(CSC207H1,proficiency in C or C++); MAT(135H1,136H1)/MAT135Y1/MAT137Y1/ MAT157Y1, MAT223H1/MAT240H1; CGPA 3.0/enrolment in a CSC subject POSt.
DR=SCI; BR=None

## CSC321H1 Introduction to Neural Networks and

 Machine Learning [24L/12P]The first half of the course is about supervised learning for regression and classification problems and will include the perceptron learning procedure, backpropagation, and methods for ensuring good generalisation to new data. The second half of the course is about unsupervised learning methods that discover hidden causes and will include K-means, the EM algorithm, Boltzmann machines, and deep belief nets.
Prerequisite: (MAT135H1, MAT136H1)/MAT135Y1/
MAT137Y1/MAT157Y1, MAT223H1/MAT240H1;
STA247H1/STA255H1/STA257H1; CGPA 3.0/enrolment in a CSC subject POSt

## DR=SCI; BR=5

## CSC324H1 Principles of Programming Languages

 [24L/12T]Programming principles common in modern languages; details of commonly used paradigms. The structure and meaning of code. Scope, control flow, datatypes and parameter passing. Two non-procedural, non-object-oriented programming paradigms: functional programming (illustrated by languages such as Lisp/Scheme, ML or Haskell) and logic programming (typically illustrated in Prolog).
Prerequisite: CSC207H1, CSC236H1/CSC238H1/
CSC240H1; CGPA 3.0/enrolment in a CSC subject POSt. Exclusion: CSC248H1.
DR=SCI; BR=5
CSC330H1 Logical Specifications [24L/12T]
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

## Computer Science

intelligence, software engineering. Computational tools, including Prolog. Other logics.
Prerequisite: CSC236H1/CSC238H1/CSC240H1; CGPA 3.0/
enrolment in a CSC subject POSt.
Exclusion: CSC230H1.
DR=SCI; BR=5
CSC336H1 Numerical Methods [24L/12T]
The study of computational methods for solving problems in linear algebra, non-linear equations, approximation, and integration. The aim is to give students a basic understanding of both floating-point arithmetic and the implementation of algorithms used to solve numerical problems, as well as a familiarity with current numerical computing environments.
Prerequisite: CSC148H1/CSC150H1; MAT133Y1(70\%)/
(MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1/
MAT157Y1, MAT223H1/MAT240H1; CGPA 3.0/enrolment
in a CSC subject POSt.
Exclusion: CSC350H1, CSC351H1.
DR=SCI; BR=5
CSC343H1 Introduction to Databases [24L/12T]
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. Prerequisite: CSC165H1/CSC240H1/MAT(135H1,136H1)/ MAT135Y1/MAT137Y1/MAT157Y1; CSC207H1; CGPA 3.0/enrolment in a CSC subject POSt. Prerequisite for

Engineering students only: ECE345/CSC190/CSC192
Exclusion: CSC434H1.
DR=SCI; BR=5

## CSC350H1 Numerical Algebra and Optimization [24L/12T]

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.
Prerequisite: CSC148H1/CSC150H1; MAT223H1/ MAT240H1, MAT235Y1/MAT237Y1/MAT257Y1; CGPA 3.0/enrolment in a CSC subject POSt.

Exclusion: CSC336H1.
DR=SCI; BR=5
CSC351H1 Numerical Approximation, Integration and Ordinary Differential Equations [24L/12T]
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.
Prerequisite: CSC350H1; CGPA 3.0/enrolment in a CSC subject POSt.
Exclusion: CSC336H1.
DR=SCI; BR=5

## CSC358H1 Principles of Computer Networks

 [24L/12T]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.
Prerequisite: CSC209H1, CSC258H1, CSC263H1/
CSC265H1/CSC378H1, STA247H1/STA255H1/
STA257H1/ECO227Y1; CGPA 3.0/enrolment in a CSC
subject POSt.
DR=SCI; BR=5

## CSC369H1 Operating Systems [24L/12T]

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.
Prerequisite: CSC258H1, CSC209H1, CSC207H1; CGPA
3.0/enrolment in a CSC subject POSt.

Exclusion: CSC468H1
DR=SCI; BR=5
CSC372H1 Microprocessor Software [24L/12T/36P]
Development of embedded software for control and monitoring. Techniques for efficient running of multiple real-time, critical multiple processes and for device control. Methods of working on small systems, such as microcontroller-based systems. Projects use microprocessors to control equipment with feedback from sensors. Design, implementation and testing of software using a language such as C.
Prerequisite: CSC209H1; CSC258H1; CGPA 3.0/enrolment in a CSC subject POSt.
DR=SCI; BR=5
CSC373H1 Algorithm Design, Analysis \& Complexity [36L/12T]
Standard algorithm design techniques: divide-andconquer, greedy strategies, dynamic programming, linear programming, randomization, network flows, approximation algorithms.Brief introduction to NP-completeness: polynomial time reductions, examples of various NP-complete problems, self-reducibility. Students will be expected to show good design principles and adequate skills at reasoning about the correctness and complexity of algorithms.
NOTE: Although the courses CSC373H1 and CSC363H1 can be taken in any order, we recommend that CSC373H1 be taken first.
Prerequisite: CSC263H1/CSC265H1/CSC378H1; CGPA 3.0/ enrolment in a CSC subject POSt.
Exclusion: CSC375H1, CSC364H1.
DR=SCI; BR=5
CSC375H1 Enriched Algorithm Design, Analysis, and Complexity [24L/12T]
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 problemsolving. 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.

## Computer Science

NOTE: Students may go to their college to drop down from CSC375H1 to CSC373H1. See above for the drop down deadline.
Prerequisite: CSC265H1 or an A-in CSC263H1; CGPA 3.0/ enrolment in a CSC subject POSt.
Exclusion: CSC373H1, CSC364H1.
DR=SCI; BR=5

## CSC384H1 Introduction to Artificial Intelligence

 [24L/12T]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.
Prerequisite: CSC324H1; STA247H1/STA255H1/STA257H1;
CGPA 3.0/enrolment in a CSC subject POSt.
Exclusion: CSC484H1.
DR=SCI; BR=5

## ECE385H1 Microprocessor Systems [24L/36P]

A hardware-oriented course dealing with microprocessor and embedded systems. Microprocessor structures, memory and cache structures, input/output techniques, peripheral device control, hardware system and programming considerations. Laboratory experiments provide "hands-on" experience.
Prerequisite: CSC258H1; CSC209H1/proficiency in C; CGPA
3.0/enrolment in a CSC subject POSt.
$\mathrm{DR}=\mathrm{SCl} ; \mathrm{BR}=5$

## Note

If you are not in our Major or Specialist program, you are limited to three 300+ level CSC/ECE half-courses. In addition, you must have a CGPA of 3.00 , unless you are in our Minor.

CSC401H1 Natural Language Computing [24L/12T] 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/CSC209H1/CSC228H1; STA247H1/STA255H1/STA257H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended Preparation: MAT223H1/MAT240H1 is strongly recommended.
DR=SCI; BR=5

## CSC404H1 Introduction to Video Game Design

 [24L/12T]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.
Prerequisite: One of CSC301H1, CSC318H1, CSC384H1,

CSC418H1; CGPA 3.0/enrolment in a CSC subject POSt. DR=SCI; BR=1
CSC410H1 Software Testing and Verification [24L/12T]
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: CSC207H1, CSC236H1/CSC240H1; CGPA 3.0/ enrolment in a CSC subject POSt
Recommended Preparation: CSC330H1
DR=SCI; BR=5

## CSC411H1 Machine Learning and Data Mining [24L/12T]

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/CSC265H1; MAT(135H1,136H1)/
MAT137Y1/MAT137Y1/MAT157Y1, STA247H1/
STA255H1/STA257H1, STA248H1/STA250H1/STA261H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended Preparation: CSC336H1/CSC350H1.
DR=SCI; BR=5

## CSC412H1 Probabilistic Learning and Reasoning

 [24L/12T]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.
DR=SCI; BR=5
CSC418H1 Computer Graphics [24L/12T]
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/CSC350H1/CSC351H1/CSC363H1/
CSC364H1/CSC365H1/CSC373H1/CSC375H1/
CSC378HI/CSC 463 H 1, MAT(135H1,136H1)/MAT135Y1/
MAT137Y1/MAT157, CSC209H1/proficiency in C or C++ ;
CGPA 3.0/enrolment in a CSC subject POSt. Prerequisite
for Engineering students only: ECE345 or ECE352
Recommended Preparation: MAT237Y1, MAT244H1.
DR=SCI; BR=5

## CSC420H1 Introduction to Image Understanding [24L/12P]

Introduction to basic concepts in computer vision. Extraction of image features at multiple scales. Robust estimation of

## Computer Science

model parameters. Multiview geometry and reconstruction. Image motion estimation and tracking. Object recognition.
Topics in scene understanding as time permits.
Prerequisite: CSC260H1/CSC263H1/
CSC265H1,(MAT135H1, MAT136H1)/MAT135Y1/
MAT136Y1/MAT137Y1/MAT157Y1, MAT223H1/
MAT240H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended Preparation: CSC320H1.
DR=SCI; BR=5
CSC428H1 Human-Computer Interaction [24L/12T]
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/STA255H1/
STA257H1,(STA248H1/STA250H1/STA261H1)/
(PSY201H1, PSY202H1)/(SOC202H1, SOC300H1);
CSC209H1/proficiency C++ or Java; CGPA 3.0/enrolment
in a CSC subject POSt.
Recommended Preparation: A course in PSY; CSC209H1.
DR=SCI; BR=5

## CSC438H1 Computability and Logic [24L/12T]

Computable functions, Churchs thesis, unsolvable problems, recursively enumerable sets. Predicate calculus, including the completeness, compactness, and Lowenheim-Skolem theorems. Formal theories and the Gdel Incompleteness Theorem.
Prerequisite: (CSC363H1/CSC463H1)/CSC364H1/
CSC365H1/CSC373H1/CSC375H1/MAT247H1; CGPA
3.0/enrolment in a CSC subject POSt.

Exclusion: MAT309H1; PHL344H1.
DR=SCI; BR=5
CSC443H1 Database System Technology [24L/12T]
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/CSC434H1, CSC369H1/
CSC468H1, CSC364H1/CSC373H1/CSC375H1; CGPA
3.0/enrolment in a CSC subject POSt.

DR=SCI; BR=5
CSC446H1 Computational Methods for Partial Differential Equations [24L/12T]
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.
Prerequisite: CSC351H1/(CSC336H1 (75\%))/equivalent mathematical background; MAT237Y1/MAT257Y1; APM346H1/APM351Y1/(MAT244H1/2MAT67H1 and exposure to PDEs); CGPA 3.0/enrolment in a CSC
subject POSt.
DR=SCI; BR=5

## CSC448H1 Formal Languages and Automata [24L/12T]

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/CSC238H1/CSC240H1,
CSC363H1/CSC364H1/CSC365H1/CSC463H1/
MAT247H1; CGPA 3.0/enrolment in a CSC subject POSt. DR=SCI; BR=5

## CSC454H1 The Business of Software [24L/12T]

The software and internet industries; principles of operation for successful software enterprises; innovation and entrepreneurship; software business definition and planning; business models, market and product planning; product development, marketing, sales, and and support; financial management and financing of high-technology ventures; management, leadership, and partnerships. Students will all write business plans in teams.
Prerequisite: Five CSC half-courses at the 200-level or
higher; CGPA 3.0/enrolment in a CSC subject POSt. DR=SCI; BR=5

## CSC456H1 High-Performance Scientific Computing [24L/12T]

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/(CSC336H1 (75\%))/equivalent mathematical background; CSC209H1/proficiency in C, C++ or Fortran; CGPA 3.0/enrolment in a CSC subject POSt.
DR=SCI; BR=5
CSC458H1 Computer Networking Systems [24L/12T]
Computer networks with an emphasis on systems programming of real networks and applications. An overview of networking basics; layering, packet switching fundamentals, socket programming, protocols, congestion control, routing, network security, wireless networks, multimedia, web 2.0, and online social networks. Prerequisite: CSC209H1, CSC258H1, CSC263H1/ $265 \mathrm{H} 1 / 378 \mathrm{H} 1$, STA $247 \mathrm{H} 1 / 255 \mathrm{H} 1 / 257 \mathrm{H} 1 / \mathrm{ECO} 227 \mathrm{Y} 1$; CGPA 3.0/enrolment in a CSC subject POSt. DR=SCI; BR=5

## CSC463H1 Computational Complexity and Computability [24L/12P]

Introduction to the theory of computability: Turing machines and other models of computation, Church's thesis, computable and noncomputable functions, recursive and recursively enumerable sets, many-one reductions. Introduction to complexity theory: P, NP, polynomial time reducibility, NP-completeness, self-reducibility, space

## Computer Science

complexity (L, NL, PSPACE and completeness for those classes), hierarchy theorems and provably intractable problems.
Prerequisite: CSC236H1/CSC238H1/CSC240H1; CGPA 3.0/ enrolment in a CSC subject POSt
Exclusion: CSC363H1, CSC364H1, CSC365H1
DR=SCI; BR=5

## CSC465H1 Formal Methods in Software Design

 [24L/12T]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/CSC238H1/CSC240H1/MAT309H1;
CGPA 3.0/enrolment in a CSC subject POSt.
Recommended Preparation: (CSC363H1/CSC463H1)/
CSC364H1/CSC365H1.
DR=SCI; BR=5
CSC469H1 Operating Systems Design and Implementation [24L/12T]
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.
Prerequisite: CSC369H1; CGPA 3.0/enrolment in a CSC subject POSt.
Exclusion: CSC468H1.
DR=SCI; BR=5
CSC485H1 Computational Linguistics [24L/12T]
Computational linguistics and the understanding of language by computer. Possible topics include: augmented contextfree 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: STA247H1/STA255H1/STA257H1 or familiarity with basic probability theory; CSC209H1 or proficiency in C++, Java, or Python; CGPA 3.0/enrolment in a CSC. subject POSt. Suggested preparation: CSC324H1/ CSC330H1/CSC384H1.
DR=SCI; BR=5

## CSC486H1 Knowledge Representation and Reasoning

 [24L/12T]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/CSC463H1)/
CSC365H1/CSC373H1/CSC375H1; CGPA 3.0/enrolment
in a CSC subject POSt.
Recommended Preparation: CSC330H1
DR=SCI; BR=5
CSC488H1 Compilers and Interpreters [24L/12T]
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, CSC324H1, CSC263H1/
CSC265H1/CSC378H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended Preparation: Proficiency in C such as from CSC209H1.
DR=SCI; BR=5

## ECE489H1 Compilers II [24L/36P]

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: CSC236H1/238H1/240H1; CGPA 3.0/enrolment in a CSC subject POSt.
Recommended Preparation: ECE385H1, proficiency in C. DR=SCI; BR=5

## CSC490H1 Capstone Design Project [48L]

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. At the time of printing, the theme for 2010/11 had not been chosen but see www.cs.utoronto.ca/~CSC490H1 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. Consult the 20102011 Registration Handbook and Timetable for course enrolment procedures.
DR=SCI; BR=5

## CSC491H1 Capstone Design Project [48L]

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. At the time of printing, the theme FOR 2010/11 had not been chosen but see www.cs.utoronto.ca/~CSC490H1 for information about this year's topic themes and required preparation. (Not offered in 2011-2012)
Prerequisite: Permission of the instructor; CGPA 3.0/
enrolment in a CSC subject POSt. Consult the 2010-

## Computer Science

2011 Registration Handbook and Timetable for course enrolment procedures.
DR=SCI; BR=5
CSC494H1 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 Associate Chair,
Undergraduate Studies. Consult the 2011-2012
Registration Handbook and Timetable for course enrolment procedures.
DR=SCI; BR=5
CSC495H1 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 Associate Chair, Undergraduate Studies. Consult the 2011-2012
Registration Handbook and Timetable for course enrolment procedures.
DR=SCI; BR=5

## Diaspora \& Transnational Studies

## Interdisciplinary program

## Faculty

## Professor

A. Quayson, Ph D

Associate Professor
A. Shternshis, MA, Ph D

## Assistant Professors

H.K. Kwee, MA, Ph D (University of Toronto Mississauga)
K. MacDonald, MA, Ph D (University of Toronto Scarborough)
K. O'Neill, MA, Ph D

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 a year long course that offers 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

## Diaspora \& Transnational Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent, including at least two 300+ series courses)

DTS200Y1
JQR360H1
3. 4.5 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.
4. Any of the two DTS 400-level courses

## Diaspora \& Transnational Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including at least one 300+ series course)

1. DTS200Y1
2. JQR360H1
3. 2 full-course equivalents (FCEs) from Group $A$ and $B$ courses, with at least one FCE from each group.
4. Any one DTS 400-level course

## Diaspora and Transnational Studies Course

 Groups
## 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

EAS105H1 Modern East-Asian History
EAS251H1 Aesthetics and Politics in 20th Century Korea
EAS271H1 20th Century Korean History
EAS318H1 Rethinking Modernism: The Perspectives of Mainland China,Taiwan and Hong Kong
EAS333H1 Modernism and Colonial Korea
EAS374H1 Modern Japan and Colonialism
EAS439H1 The Global Bildungsroman: Narratives of Development, Time and Colonialism
English
ENG268H1 Asian North American Literature
ENG270Y1 Colonial and Postcolonial Writing
ENG275Y1 Jewish Literature in English
ENG277Y1 African Canadian Literature
ENG285H1 The English Language in the World
ENG370H1 Postcolonial and Transnational Discourses
ENG375H1 Studies in Jewish Literature and Culture
Finnish
FIN320H1 The Finnish Canadian Immigrant Experience

## French

FRE438H1 Advanced Topics in Francophone Literatures: Black Blanc Beur: Ecrire la banlieue

## German

GER361H1 Yiddish Literature and Culture in Translation
GER362H1 Soviet and Kosher: Jewish Culture in the Soviet Union
GER365H1 Knights, Dybbuks, and Fairies: Yiddish \& German Story-Telling Before 1700

History
HIS202H1 Gender, Race and Science
HIS208Y1 History of the Jewish People
HIS263Y1 Introduction to Canadian History
HIS282Y1 History of South Asia
HIS284Y1 Viet Nam: Crossroads of Asia
HIS291Y1 Latin America: The Colonial Period
HIS294Y1 Caribbean History \& Culture: Indigenous Era to 1886
HIS303H1 The Mediterranean, 600-1300: Crusade, Colonialism, Diaspora
HIS305H1 Popular Culture and Politics in the Modern Caribbean
HIS312H1 Immigration to Canada
HIS330H1 Germany from Frederick the Great to the First World War
HIS336H1 Medieval Spain
HIS338H1 The Holocaust, to 1942
HIS352H1 Secularism and Strife: Modern Jewish Politics and Culture
HIS356H1 Zionism and Israel

## Diaspora \& Transnational Studies

HIS359H1 Regional Politics and Radical Movements in the 20th Century Caribbean
HIS360H1 African-Canadian History, 1606-Present
HIS361H1 The Holocaust, from 1942
HIS369H1 Aboriginal Peoples of the Great Lakes from 1500
HIS370H1 The Black Experience in the United States Since the Civil War
HIS383H1 African Women from Colonial Conquest to the Era of Structural Adjustment
HIS384H1 Colonial Canada
HIS385H1/Y1 The History of Hong Kong
HIS393H1 Slavery and the American South
HIS403H1 Jews and Christians in Medieval and Renaissance Europe
HIS408Y1 History of Race Relations in America
HIS412Y1 Crusades, Conversions and Colonization in the Medieval Baltic
HIS413H1 Slave Emancipation in the Atlantic World
HIS414H1 The Third Reich
HIS431H1 Gender and the Holocaust
HIS433H1 Polish Jews Since the Partition of Poland
HIS439H1 Russia's Empire
HIS444H1 Topics in Jewish History: Jewish Identity in the Modern World
HIS446H1 Gender and Slavery in the Atlantic World
HIS456Y1 Black Slavery in Latin America
HIS467H1 French Colonial Indochina: History, Cultures, Texts, Film
HIS472H1 Indigenous-Newcomer Relations in Canadian History
HIS476H1 Voices From Black America
HIS478H1 Hellhound on my Trail: Living the Blues in the Mississippi Delta
HIS480H1 Modernity and its Others: History and Postcolonial Critique
Innis College
INI315Y1 Film Cultures II: Politics and Global Media
INI327Y1 Screening Race
INI380Y1 Contemporary World Cinema
Innis College - Urban Studies
JGI216H1 Urbanization and Global Change
INI308H1 The City of Toronto

## Italian Studies

ITA334H1 Italian-Canadian Literature I: Life in a New World
ITA493H1 Italian-Canadian Literature II: Identity and Voice

## Near and Middle Eastern Civilizations

NMC252H1 Hebrew Bible and Ancient Jewish Literature in Translation
NMC351H1 Dead Sea Scrolls
NMC274Y1 Steppe Frontier in Islamic History
NMC275H1 Muslims and Jews: The Medieval Encounter
NMC284H1 Judaism And Feminism
NMC370Y1 Ancient Israel
NMC384H1 Life Cycle and Personal Status in Judeism
NMC473H1 Intellectuals of the Modern Arab World
NMC475H1 Orientalism and Occidentalism
New College - African Studies
NEW250Y1 Africa in the 21st Century: Challenges and Opportunities
NEW351Y1 African Systems of Thought

## New College - Caribbean Studies

NEW223Y1 Caribbean Literature and Society
NEW224Y1 Caribbean Thought
NEW325H1 Caribbean Women Thinkers
NEW326Y1 Indenture, Survival, Change

## New College - Equity Studies

NEW341H1 Theories and Histories in Equity Studies
NEW449H1 Contemporary Theories in Disability Studies

## Portuguese

PRT252H1 Portuguese Island Culture
PRT255H1 The Brazilian Puzzle: Culture and Identity

## Religion

RLG202Y1 The Jewish Religious Tradition
RLG220H1 Philosophical Responses to the Holocaust
RLG221H1 Religious Ethics: the Jewish Tradition
RLG243H1 Diasporic Religions
RLG280Y1 World Religions: A Comparative Study
RLG319H1 Reconception of Biblical Figures in Early Jewish and Christian Sources
RLG326H1 Judaism and the Roots of Christianity
RLG340Y1 Classical Jewish Theology
RLG341H1 Dreaming of Zion: Exile and Return in Jewish
Thought
RLG342Y1 Judaism in the Modern Age
RLG345H1 Social Ecology and Judaism
RLG346H1 Time and Place in Judaism
RLG434H1 Modern Jewish Thought
RLG453H1 Christianity and Judaism in Colonial Context

## Slavic Languages and Literature

SLA202H1 Jewish Communities in Slavic Countries
SLA222H1 Roma (Gypsies) and Slavs
SLA238H1 Literature of the Ukrainian-Canadian Experience
SLA302H1 The Imaginary Jew
SLA303H1 Literary Imagination and Jewish Identity in
Modern Europe
SLA312H1 Nabokov
SLA318H1 City of Saints and Sinners: Kyiv through the
CenturiesSLA325H1 Magic Prague
SLA357H1 Yugoslavia's Literary Émigrés and Exiles
SLA380H1 Language, Politics and Identity

## South Asian Studies

SAS114H1 Introduction to South Asian Studies
SAS212Y1 Introduction to Hindi
SAS216H1 South Asia: Perspectives on Politics and Society
SAS318H1 Colonialism and Tradition
SAS413H1 Asia and Canada
SAS414H1 Public culture and Media in Asia

## St. Michael's College

SMC413H1 The Irish and Scots in Canada
SMC416H1 Irish Nationalism in Canada and the United States
SMC421H1 Jews and Judaism in Christian Traditions Spanish
Spanish
SPA254H0 Mexican Culture
SPA258H1 Introduction to Hispanic Literary Studies
SPA259H1 Introduction to Hispanic Cultural Studies
SPA281Y0 Art and Politics in Contemporary Mexico
SPA375H1 Latin American Cinema
SPA385H1 Literature and Social Change in Spanish America

## Diaspora \& Transnational Studies

SPA467H1 Topics in Spanish-American Culture
SPA471H1 The Historical Novel in Spanish America
SPA480H1 Theories of Culture in Latin America
SPA487H1 The Culture of Revolution
SPA488H1 Central America Postwar Narrative
University College - Canadian Studies
UNI101Y1 Citizenship in the Canadian City
UNI103Y1 Gradients of Health in an Urban Mosaic
UNI218H1 Voices of Canadian Writing
UNI230H1 Asian Canadian History
UNI280H1 Canadian Jewish History
UNI307Y1 Asian Cultures in Canada
UNI367H1 Canadian Pluralism
UNI380H1 Socio-Cultural Perspective of the Canadian Jewish Community

## Victoria College

VIC350Y1 Creative Writing: A Multicultural Approach

## Women and Gender Studies

WGS366H1 Gender and Disability
WGS369H1 Studies in Post-Colonialism
WGS375H1 Colonialism, Sexuality, Spirituality and the Law
WGS380H1 Aboriginal, Black and Immigrant Women in the Land of Dollars
WGS426H1 Gender and Globalization: Transnational Perspectives
WGS430H1 Queer Diasporas
WGS445H1 Migrations and the Sacred

## Group B (Social Sciences) courses

## Anthropology

ANT204H1 Anthropology of the Contemporary World
ANT318H1 The Preindustrial City and Urban Social Theory
ANT324H1 Tourism \& Globalization
ANT341H1 China in Transition
ANT345H1 Global Health: Anthropological Perspectives
ANT346H1 Anthropology of Food
ANT347Y1 Metropolis: Global Cities
ANT348H1 Anthropology of Health
ANT350H1 Globalization and the Changing World of Work
ANT351H1 Contested Environments
ANT354H1 Japan in Global Context: Anthropological Perspectives
JAL355H1 Language and Gender
ANT356H1 Anthropology of Religion
ANT364Y1 Environment \& Globalization
ANT366H1 Anthropology of Social Movements: Theory and Method
ANT370H1 Introduction to Social Anthropological Theory
ANT427H1 Language, Ideology, \& Political Economy
ANT440H1 Society in Transition
ANT446H1 Anthropology of Western Europe: Issues and Ideas
ANT450H1 Nature, Culture and the City
ANT452H1 Anthropology \& Human Rights
ANT456H1 Queer Ethnography
ANT460H1 Global Perspectives on Womens Health
ANT467H1 Ethnographies of Contemporary South Asia
ANT475H1 Reading Ethnography: Contemporary Ethnographies

## Geography

GGR216H1 Global Cities

JGI216H1 Urbanization \& Global Change
GGR241H1 Historical Geographies of Urban Exclusion and Segregation
GGR246H1 Geography of Canada
GGR320H1 Geographies of Transnationalism, Migration, and Gender
GGR336H1 Urban Historical Geography of North America
GGR339H1 Urban Geography, Planning and Political Processes
GGR341H1 Changing Geography of Latin America
GGR342H1 The Changing Geography of Southeast Asia
GGR343H1 The Changing Geography of China
JGI346H1 The Urban Planning Process
GGR358H1 Geography, Political Economy and Religion
GGR360H1 Culture, History, and Landscape
GGR361H1 Understanding the Urban Landscape
GGR363H1 Critical Geographies: An Introduction to Radical Ideas on Space, Society and Culture
GGR452H1 Space, Power, Geography: Understanding Spatiality
GGR454H1 The Role of the Planner: Making a Difference
GGR457H1 The Post-War Suburbs
NUS251H0 Southeast Asia
NUS252H0 Rice, Spice \& Trees: Peasants in Southeast Asia
NUS253H0 Economy and Space
NUS254H0 Geographies of Social Life
NUS255H0 Cities and Urgan Life in Southeast Asia
NUS256H0 Changing Landscape of Singapore
NUS351Y0 Field Studies in Geography: SE Asia
NUS352H0 East Asia
NUS353H0 Globalization and Asian Cities
GGR112H1 Geographies of Globalization, Development and Inequality

## New College - Equity Studies

NEW342H1 Theory and Praxis in Food Security

## Political Science

POL201Y1 Politics of Development: Issues and Controversies
POL207Y1 Politics in Europe
POL215Y1 Politics and Transformation of Asia-Pacific
POL224Y1 Canada in Comparative Perspective
POL301Y1 Government and Politics in Africa
POL305Y1 Politics and Society in Latin America
POL321H1 Ethnic Politics in Comparative Perspective
POL343Y1 Politics of Global Governance
POL344Y1 Social Movements in Europe and North America
POL345Y1 Becoming Israel: War, Peace, and the Politics of Israel's Identity
JPR364Y1 Religion and Politics
POL368Y0 Returning to Europe: Bringing South East Europe Into the European Union
POL370H1 International Political Economy
JPR374H1 Religion and Power in the Postcolony
POL376Y1 Transforming Global Politics: Comparative and Chinese Perspectives
POL409H1 Political Economy of Technology: From the AutoIndustrial to the Information Age
JPA410H1 Democracy and Identity in Asia
JPA411H1 The Political Economy of Global Taiwan
POL413H1 Global Environmental Politics
POL417Y1 The Third World in International Politics
JPR419H1 Secularism and Religion
JPA420H1 Asia and the new Global Economy

# Diaspora \& Transnational Studies 

POL421H1 Maimonides and His Modern Interpreters
POL422H1 Ethnonationalism and State-Building: The Communist and Postcommunist Experience
POL425Y1 Multiculturalism in Canada
POL429H1 Nationalism, Ethnic Conflict and Democracy
POL430Y1 Comparative Studies in Jewish and non-Jewish Political Thought
POL442H1 Topics in Latin American Politics
JPF455Y1 Cities
POL480H1 Pluralism, Justice, and Equality: Political Imaginaries of Global Justice and Global Democracy
POL483H1 Cosmopolitanism

## Sociology

SOC210H1 Ethnicity in Social Organization
SOC214H1 Family Patterns
SOC218H1 Asian Communities in Canada
SOC220H1 Social Inequality in Canada
SOC244H1 Sociology of Health Care
SOC246H1 The Sociology of Aging
SOC250Y1 Sociology of Religion
SOC256H1 Lives and Societies
SOC279H1 Contentious Politics
SOC281H1 Culture and Inequality
SOC301Y1 Theories of Inequality
SOC304H1 Status Attainment
SOC306Y1 Sociology of Crime and Delinquency
SOC314H1 Family Relations
SOC315H1 Domestic Violence
SOC336H1 Immigration and Race Relations in Canada
SOC341Y1 The Jewish Community in Europe and North America
SOC355H1 Introduction to Social Network Analysis
SOC356Y1 Technology and Society
SOC358H1 Cities and Social Pathology
SOC364H1 Urban Health
SOC367H1 Race, Class, and Gender
SOC381Y1 Culture and Social Structure
SOC383H1 The Sociology of Women and International Migration
SOC388H1 Sociology of Everyday Life
SOC483Y1 Methods and Models of Demography
University College - Canadian Studies
UNI101Y1 Citizenship in the Canadian City
UNI103Y1 Gradients of Health in an Urban Mosaic
UNI268H1 Canada and Globalization
UNI280H1 Canadian Jewish History
UNI307Y1 Asian Cultures in Canada
UNI320Y1 Canadian Quesitions: Issues and Debates
UNI368H1 Canada's Borders
UNI380H1 Socio-Cultural Perspective of the Canadian Jewish Community

Victoria College
VIC183H1 Individuals and the Public Sphere: Shaping Memory
VIC184H1 Individuals and the Public Sphere: History, Historiography and Making Cultural Memory
Woodsworth College - Criminology
WDW383H1 Immigration and Crime
Women and Gender Studies
WGS425H1 Women and Issues of International Development

## University of Toronto Scarborough courses that can be applied to the program

Please visit http://www.utsc.utoronto.ca/~socsci/dt_studies. html

## University of Toronto Mississauga courses that can be applied to the program

Please visit http://www.utm.utoronto.ca/historical-studies/ students/programs/transnational-diaspora-studies

## Diaspora and Transnational Studies

 CoursesFirst Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
DTS200Y1 Introduction to Diaspora and Transnational Studies I (formerly DTS201H1, 202H1) [48L]
What is the relationship between place and belonging, between territory and memory? How have the experiences of migration and dislocation challenged the modern assumption that the nation-state should be the limit of identification? What effect has the emergence of new media of communication had upon the coherence of cultural and political boundaries? All of these questions and many more form part of the subject matter of Diaspora and Transnational Studies. This introductory course ex-amines the historical and contemporary movements of peoples and the complex issues of identity and experience to which these processes give rise as well as the creative possibilities that flow from movement and being moved. The area of study is comparative and interdisciplinary, drawing from the social sciences, history, the arts and humanities. Accordingly, this course provides the background to the subject area from diverse perspectives and introduces students to a range of key debates in the field, with particular attention to questions of history, globalization, cultural production and the creative imagination.
Exclusion: DTS201H1, DTS202H1
DR=HUM/SOC SCI; BR=1+3

## DTS300H1 Research Design for Diaspora and Transnational Studies [24L]

Focuses on research design and training in methods from history, geography, anthropology, literary and cultural studies, and other disciplines appropriate to Diaspora and Transnational Studies. Prepares students to undertake primary research required in senior seminars.
Prerequisite: DTS200Y1 or permission of course instructor DR=HUM/SOC SCI; BR=3
JQR360H1 The Canadian Census: Populations, Migrations and Demographics [24L/12T] Examines the Canadian population census through the experience of diasporic groups in Canada. Approaches the census as a statistical tool, an historical source and an ideological project of citizenship and nationalism. Uses

## Diaspora \& Transnational Studies

census data to explore mathematical and statistical concepts and to integrate numerical ways of thinking with qualitative analysis. (Jointly sponsored by African Studies, Diaspora and Transnational Studies, Caribbean Studies, Equity Studies and Latin American Studies).
Prerequisite: DTS200Y1/NEW150Y1/NEW224Y1/
NEW240Y1/LAS200Y1
DR=SOC SCI; BR=3

## DTS390H1 Independent Study[TBA]

A scholarly project chosen by the student, approved by the Department, and supervised by one of its instructors. Consult with the Diaspora and Transnational Studies Program Office for more information.
Prerequisite: DTS200Y1
DR=HUM/SOC SCI; BR=Nonel
DTS390Y1 Independent Study[TBA]
A scholarly project chosen by the student, approved by the Department, and supervised by one of its instructors. Consult with the Diaspora and Transnational Studies Program Office for more information.
Prerequisite: DTS200Y1
DR=HUM/SOC SCI; BR=None

## DTS401H1 Advanced Topics in Diaspora and Transnationalism (Cosmopolitanism, Diaspora, Literature)[24S]

How much serious diversity can any society really tolerate?
Postcolonial migrancy and the resulting diasporas/ dispersions present not only a new cultural diversity and richness but also problematic differences that challenge social, political and epistemological categories. This advanced interdisciplinary class explores the co-constitutive relationship between Cosmopolitanism, Diaspora and Literature and will pay particular attention to questions of identity, home, citizenship, colonialism, migration, culture, the transnational conditions of diasporic existence and various other topics at the intersection of the three key concepts. Prerequisite: DTS200Y1
DR=HUM/SOC SCI; BR=3

## DTS402H1 Advanced Topics in Diaspora and Transnationalism (Citizenship, Diaspora, Delinquency)[24S]

Who belongs? Who does not? What are the mechanisms by which individuals become included and excluded? Once bounded by the sovereign nation-state, these questions have taken on new significance in a world now organized by proc-esses of disapora and transnationalism. This course, in response, explores new coordinates for membership.
Prerequisite: DTS200Y1
DR=HUM/SOC SCI; BR=3

## DTS403H1 Advanced Topics in Diaspora and Transnationalism (The Diasporic Lives of Objects) [24S]

As they travel through space and time, material objects play an important role in the production of diasporic identity. This course focuses on the culturally defined and socially regulated processes of circulation, transaction, and use to examine the ways in which diasporic communities identify value and meaning in objects and how those objects give value to the social relations that define communities. Through readings, guest lectures and discussions, we will address questions such as: What roles do objects play in the constitution and reproduction of diasporic
communities? What qualities are read into objects, through what mechanisms, and how does their meaning vary across space? What is the relationship between object, narrative, affect and identity? What conditions affect the durability of the relation between object and diasporic identity?
Prerequisite: DTS200Y1
DR=HUM/SOC SCI; BR=3

## DTS404H1 Advanced Topics in Diaspora and Transnationalism (Jewish Storytelling from around the World) [24S]

The course examines patterns of Jewish stories popular in the countries of the Jewish Diaspora. We will start with biblical stories, then move on to the moralistic tales of the Talmud, medieval Ladino and Hebrew ballads and legends, tales of Dybbuks, Golems and other supernatural beings, Hassidic tales, Yiddish wonder stories, immigration folklore of the 20th and 21st century.
Prerequisite: DTS200Y1
DR=HUM/SOC SCI; BR=3

## Drama

## Faculty

## Director

TBA
Professor
P. Kleber, MA, Ph D

## Associate Professors

A. Ackerman, MA, Ph D
A. Budde, MA, Ph D

## Assistant Professor

T. N. Cesare-Schotzko, MA, Ph D

## Senior Lecturers

S. Bush
K. Gass, BA

## Lecturers

S. Lyons, BA
J. Thompson

The UC 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. It offers courses in dramatic literature, dramaturgy, theatre and performance theory and history, acting, production, design, and directing, and playwriting and puts a strong emphasis on the interrelation between the academic and the practical aspects of theatre studies. Working towards an Honours Bachelor of Arts degree, students are required to take a complementary combination of courses resulting in broad knowledge of the field as a whole. 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 and other departments and programs such as Anthropology, Canadian Studies, Cinema Studies, Classics, Commerce, Art, History, Music, Political Science, Psychology, Religion, Sociology, and Women's Studies.

The UC 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 UC Drama Program, including application and ballot forms, can be found on the web site at: www.uc.utoronto.ca/drama.The Program Director and Program Coordinator are also available for consultation. For enquiries or an appointment call the UC Drama Program Coordinator at 416-978-8099 or send an e-mail to uc.drama@utoronto.ca

UC Drama courses are taught 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 Minor program; some are open to all students of the University.

## Drama Programs

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 either DRM200Y1 (with DRM201H1 and DRM211H1), DRM228H1 or DRM254Y1, and to the Specialist only after they have been admitted to an additional course from Group B. Enrolment in the Minor program is unrestricted. Students in the Minor program may only take academic courses and not the practical theatre courses.

## Drama Specialist (Arts program)

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 either DRM200Y1 (with DRM201H1 and DRM211H1), DRM228H1 or DRM254Y1, and to the Specialist only after they have been admitted to an additional course from Group B.
(12 full courses or their equivalent, including at least four $300+$ series with at least one 400 level)

1. DRM100Y1 (to be taken in first year)
2. DRM 230 Y 1
3. From Group A: 1 course equivalent
4. From Group B: 2 full-course equivalents (entry points: DRM200Y1 or DRM254Y1 or DRM228H1)
5. From Group C: 1.5 full-course equivalents
6. From Group D: 0.5 full-course equivalents
7. From Group A, B, C, D or Other: 5 full-course equivalents to make up the total of 12 courses

## Drama Major (Arts program)

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 either DRM200Y1 (with DRM201H1 and DRM211H1), DRM228H1 or DRM254Y1, and to the Specialist only after they have been admitted to an additional course from Group B.
(8 full courses or their equivalent including at least two 300+ series courses with at least 0.5 at the 400 level)

1. DRM100Y1 (to be taken in first year)
2. DRM230Y1
3. From Group A: 1 full-course equivalent
4. From Group B: 2 full-course equivalents (entry points: DRM200Y1 or DRM254Y1 or DRM228H1)
5. From Group C: 1 full-course equivalent
6. From Group A, B, C, D or Other: 2 full-course equivalents to make up the total of 8 courses

## Note:

Students taking DRM200Y1, DRM300Y1, DRM400Y1 and DRM403Y1 must take the appropriate Voice co-requisite (DRM201H1, DRM301H1 and DRM401H1), Movement co-requisite (DRM211H1, DRM311H1 and DRM411H1) and academic co-requisite (DRM100Y1, DRM230Y1 or a course from Group A or D)

## Drama Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Students in the Minor program may only take academic courses.
(4 full courses or their equivalent including at least one 300+ series course)

1. DRM100Y1 (to be taken in first year)
2. From Group A: 1 full-course equivalent
3. From Group C: 1 full-course equivalent
4. From Groups A, C, D or Other (when eligible): 1 fullcourse equivalent

## Note:

Students in the Minor program are not eligible for
DRM230Y1 and practical courses

## Drama Course Groups

Group A:
DRM264H1, DRM268H1, DRM310H1, DRM342H1, DRM362H1, DRM430H1, DRM462H1, DRM468Y1; JDC400Y1, JDC410H1; JIA400H1

## Group B:

DRM200Y1, DRM201H1, DRM211H1, DRM228H1, DRM254Y1, DRM300Y1, DRM301H1, DRM302H1, DRM311H1, DRM328H1, DRM354Y1, DRM368H1, DRM400Y1, DRM401H1, DRM402H1, DRM403Y1, DRM411H1, DRM454Y1

Note: Students taking a practical course (Group B) are required to take an academic co-requisite (Groups A, C, D or Other)

## Group C:

ABS341H1; CLA382H1, CLA383H1; EAS233H1;
ENG220Y1, ENG330H1, ENG331H1, ENG335H1,
ENG336H1, ENG337H1, ENG340H1, ENG341H1,
ENG352H1, ENG448H1; FRE372Y0; GER240H1, GER340H1; GRK351H1, GRK352H1, GRK451H1, GRK452H1; ITA390H1, ITA409H1, ITA410H1, ITA415H1; LAT351H1/LAT451H1; MUS206H1, MUS209H1; SLA367H1, SLA406H1, SLA418H1, SLA424H1, SLA475H1, SLA476H1, SLA477H1; SPA452H1: UNI202H1; VIC347H1

## Group D:

DRM231H1, DRM331H1, DRM431H1, DRM432H1
Other:
DRM286H1, DRM386H1, DRM390Y1/DRM391H1, DRM486H1, DRM490Y1/DRM491H1

## Drama Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
DRM100Y1 Drama: Form and Style [72L]
An introduction to the study of dramatic literature, with particular reference to its staging history and practices. This course brings to life diverse texts from different periods and traditions and invites students to analyze them in terms of theatrical space, plot and generic structure, characterization, theme, and language.
DR=HUM; BR=1

## DRM200Y1 Introduction to Performance [96P]

Emphasis is initially placed on ensemble, non-verbal, and improvisational work. Students proceed to the application of their acquired skills to scripted material. Students may apply in their first or second year of University.
Prerequisite: An audition in April or in August (must submit
UC Drama Application Form by March 1st or in July)
Corequisite: DRM201H1, DRM211H1; and DRM100Y1(or
DRM230Y1 if DRM100Y1 is already completed).
DR=HUM; BR=1

## DRM201H1 Introduction to Voice for the Actor [2T/48P]

An introduction to the dynamics of voice and effective communication as they relate to the development of the actor. Work brings theory into physical practice. Taken in conjunction with DRM200Y1: Introduction to Performance and DRM211H1: Introduction to Movement for the Actor. Corequisite: DRM200Y1 and DRM211H1
DR=HUM; BR=1

## DRM211H1 Introduction to Movement for the Actor [2T/48P]

An introduction to movement for the actor focusing on body awareness and skill development, ensemble sensibility and stagecraft as it pertains to actor training. Taken in conjunction with DRM200Y1: Introduction to Performance and DRM201H1: Introduction to Voice for the Actor. Corequisite: DRM200Y1 and DRM201H1 DR=HUM; BR=1
DRM228H1 Introduction to Playwriting [36L]
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 story-making. Attention is given to the development of students own work through written assignments and in-class exercises.
Prerequisite: DRM100Y and a portfolio of writing samples due in May
Corequisite: DRM230Y1 (or a course from Group A if DRM230Y1 is already completed)
DR=HUM; BR=1
DRM230Y1 Concepts of Twentieth-Century Theatre [72L]
An introduction to the shifting landscapes of European theatre theory, history and practice in the late 19th century and their repercussions throughout the 20th and 21st centuries. The course focuses on the developments of modern and postdramatic theatre. It also includes critical analysis of the annual UC Drama Resource Show and current Canadian theatre.
Prerequisite: DRM100Y1 and must be registered as a Drama

## Drama

## Major or Specialist

DR=HUM; BR=1

## DRM231H1 Theatre Criticism [36L]

Introduction to the history, theory, and practice of theatre criticism. The course examines the role of criticism in the relationship between theatrical production and reception, paying particular attention to the power dynamics between critics, artists, and audiences and the contexts in which they are embedded. Students develop their individual critical voices through regular attendance of chosen productions and practice writing criticism in a variety of forms.
Prerequisite: DRM100Y1
DR=HUM; BR=1

## DRM254Y1 Production [72L/72P]

A practical introduction to various areas of theatre production including lighting, sound, projections, stage management, and set construction. Working extensively in the Helen Gardiner Phelan Playhouse, the students form the core of the production team for UC Drama productions. By the completion of the course, the students should have a comprehensive overview of the organization, skills, and discipline necessary to mount a theatrical production in a professional manner.
Prerequisite: DRM100Y1 and an interview in April (must submit UC Drama Ballot Form by March 1st)
Corequisite: DRM230Y1 (or a course from Group A if
DRM230Y1 is already completed)
DR=HUM; BR=1

## DRM264H1 History of Western Theatre from the Renaissance to 1900 [36L]

An exploration of themes, forms, and historical conditions that characterize Early Modern European drama and theatre from the Renaissance to approximately 1900. Studying plays in a variety of European contexts, we will consider how theatre theory, criticism, and dramaturgy inform diverse kinds of playwriting, critical reception, and contemporary interpretation.
Prerequisite: DRM100Y1
DR=HUM; BR=1

## DRM268H1 Canadian Theatre History [36L]

A survey of Canadian theatre history with an emphasis on developments since the 1950s including the regional and alternative theatre movements; trends in Canadian playwriting and their relationship to theatre history; cultural diversity and native voices in contemporary Canadian theatre.
Prerequisite: DRM100Y1 or a Canadian Studies Major/ Specialist
DR=HUM; BR=1
DRM286H1 Topics in Drama: An Introduction to Effective Communication [1T/36P]
A dynamic, hands-on, physical course, applying methods of professional actor training to personal and professional communication goals. Voice training geared toward teachers, students, business people, clergy, presenters or any person wanting to meet the demands of speaking in public. Participants will be able to explore their individual challenges
of communication and gain practical tools to proceed with confidence.
DR=HUM; BR=1

## JDC299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33. Offered by the Centre for Comparative Literature in collaboration with the University College Drama Program.
DR=HUM; BR=None

## DRM300Y1 Performance I [144P]

Building upon the work of DRM200Y1, students concentrate on scene study and the development of ensemble work. Active practices include analysis of text and sub-text, the establishing of scene objectives, improvisation, storytelling and self-scripting and dynamic explorations of physical space.
Prerequisite: DRM200Y1 and an audition in April (must submit UC Drama Ballot Form by March 1st)
Corequisite: DRM301H1, DRM311H1; and DRM230Y1 (or a course from Group A if DRM230Y1 is already completed) DR=HUM; BR=1

## DRM301H1 Voice for the Actor I [3T/48P]

Builds on skills learned in DRM201H1 (Intro to Voice) as they relate to the development of acting abilities. The course investigates the relationship between theory and physical practice of voice training. Taken in conjunction with DRM300Y1: Performance I and DRM311H1: Movement for the Actor I.
Prerequisite: DRM200Y1, DRM201H1, DRM211H1 (previously DRM201Y1)
Corequisite: DRM300Y1 and DRM311H1
Exclusion: DRM301Y1
DR=HUM; BR=1

## DRM302H1 Introduction to Directing [36P]

An introduction to major concepts and artistic practices in directing. The course focuses on different styles, ideas, and goals of theatre directors in their relations to actors, audiences, and broad cultural and political contexts. A major component will be the practical application of basic directing techniques.
Prerequisite: DRM230Y1 and DRM331H1
Corequisite: DRM331H1 (if not completed as a Prerequisite) and 1 course from Group A
DR=HUM; BR=1
DRM310H1 American Drama [36L]
American drama since World War II. Structural, historical, and thematic approaches to self-consciously theatrical works and to the idea of America itself. Authors may include Miller, Williams, Albee, Baraka, Hansberry, Shepard, Fornes, Mamet, Kushner, and performance artists such as Karen Finley and Laurie Anderson.
Prerequisite: DRM100Y1
DR=HUM; BR=1
DRM311H1 Movement for the Actor I [3T/48P]
A continuation of previous training through a more concentrated study of the relationship between objective, impulse and action using the principles of Viewpoints,

Laban, and Contact Improvisation. Taken in conjunction with DRM300Y1: Performance I and DRM301H1: Voice for the Actor I.
Prerequisite: DRM200Y1, DRM201H1, DRM211H1 (previously DRM201Y1)
Corequisite: DRM300Y1 and DRM301H1
Exclusion: DRM301Y1
DR=HUM; BR=1

## DRM328H1 Playwriting [36L]

A continuation of DRM228H1, concentrating upon the in-depth knowledge and practice of playwriting with an emphasis on style and technique of writing for the stage. Students develop their own work through written assignments, in-class exercises, and the final public presentation.
Prerequisite: DRM100Y, DRM228H1 and a portfolio of writing samples due in November
Corequisite: DRM230Y (or a course from Group A if DRM230Y is already complete)
DR=HUM; BR=1
DRM331H1 Introduction to Dramaturgy [36L]
An introduction to applied dramaturgical theory and to historical and contemporary interpretations of the dramaturges function in the creation of theatre. Using examples from Canada and beyond, students apply this knowledge to theatre practice in the program.
Prerequisite: Pre or Co-requisite: DRM230Y1
Corequisite: Pre or Co-requisite: DRM230Y1
DR=HUM; BR=1
DRM342H1 The Avant-Garde [24L]
This course chronicles the development of historical avant-garde theatre from the late 19th-century through 20th-century and 21st-century innovations, paying particular attention to resonances between the historical and contemporary. Offering a critical engagement with foundational artists, works, and theorists from Symbolism, Expressionism, Futurism, Dada, Surrealism, Happenings, Environmental Theatre, and Performance Art, this course also considers parallel shifts in other performing arts, like music, visual art, and dance, situating theatre's aesthetic development within a broader interdisciplinary and historical context.
Prerequisite: DRM100Y1
DR=HUM; BR=1
DRM354Y1 Stage and Costume Design I [48L/24P]
A detailed exploration of theatrical stage and costume design, historical and contemporary, theatrical and practical. Prerequisite: DRM100Y1 or an Art Major/Specialist and an interview in April (must submit UC Drama Ballot Form by March 1st)
Corequisite: For Drama Majors \& Specialists: DRM230Y1 (or a course from Group A if DRM230Y1 is already completed)
DR=HUM; BR=1

## DRM362H1 Theatre and the World. Innovation and Experimentation [36L]

An intercultural, post-colonial and comparative analysis of innovative processes in the national and cross-cultural theatre around the world. Focusing on selected periods and cultures, the course explores the cultural backgrounds of key turning points in pre-modern and modern theatre and their
impact on the developments of the post-modern theatre in a globalizing world.
Prerequisite: DRM100Y1
Recommended Preparation: DRM264H1
DR=HUM; BR=1

## DRM368H1 Collective Creations [36L]

A hands-on exploration of fundamental building blocks of collective creation, or 'devised theatre,' examining techniques and exercises by its leading practitioners. Combining research, improvisation and design elements, students define a topic of investigation and shape the resulting discoveries into a workshop presentation at the end of the course.
Prerequisite: DRM100Y1
Exclusion: DRM386H1 (Summer 2008 and 2009)
DR=HUM; BR=1

## DRM385Y1 Topics in Drama [TBA]

An in-depth examination of selected issues in the theatre. Content may vary depending on instructor and therefore may be counted towards different Groups (A, B, C, D or Other).
Please consult the UC Drama office and check the program's website for more details.
DR=HUM; BR=None

## DRM386H1 Topics in Drama [TBA]

An in-depth examination of selected issues in the theatre. Content may vary depending on instructor and therefore may be counted towards different Groups (A, B, C, D or Other).
Please consult the UC Drama office and check the program's website for more details.
DR=HUM; BR=None
DRM390Y1 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.
Prerequisite: A written proposal, signed by both student and instructor, must be submitted for approval to the Drama Program Director before registration and normally by May 31 of the preceding academic year. Open to advanced Specialist and Major students in the program.
DR=HUM; BR=None
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.
Prerequisite: A written proposal, signed by both student and instructor, must be submitted for approval to the Drama Program Director before registration and normally by May 31 of the preceding academic year. Open to advanced Specialist and Major students in the program.
DR=HUM; BR=None
DRM399Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## DRM400Y1 Performance II [216P]

Continuation of DRM300Y1, concentrating on advanced performance techniques.
Prerequisite: DRM300Y1 and an audition in April (must

## Drama

submit UC Drama Ballot Form by March 1st)
Corequisite: DRM401H1 and 411H1
DR=HUM; BR=1

## DRM401H1 Voice for the Actor II [4T/48P]

The final year of voice training refines the skills and concepts developed thus far, focusing on performance. Techniques of articulation, speech and rhetoric are studied. Taken in conjunction with DRM400Y1: Performance II and DRM411H1: Movement for the Actor II.
Prerequisite: DRM300Y1, 301H1, 311H1 (previously 301Y1)
Corequisite: DRM400Y1 and 411H1
DR=HUM; BR=1

## DRM402H1 Directing and Applied Production/Design [144P]

An exploration of advanced directing for the theatre. The class is centered on student directed productions, which are publically presented at the end of term. Students work in one of three areas: directing, design, or production. Emphasis is placed on the development of strong central concepts and realizing the production with imagination, collaboration and creativity.
Prerequisite: Prerequisite for all: DRM230Y1 (must submit UC Drama Ballot Form by March 1st); Pre-requisite for the directors: 1 FCE from Group B, DRM302H1, DRM331H1, a written Directors' Show proposal and participate in an interview in April; Pre-requisite for the production team: DRM254Y1 or DRM354Y1 and participate in an interview in April
Corequisite: Co-requisite for the directors: DRM431H1 DR=HUM; BR=1

## DRM403Y1 Performance III [192P]

An in-depth study on theoretical and practical levels 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: DRM230Y1, DRM300Y1 and an audition in April (must submit UC Drama Ballot Form in March); Pre- or co-requisite: DRM400Y1 and DRM401H1
Corequisite: DRM431H1; Pre- or co-requisite: DRM400Y1 and DRM401H1
DR=HUM; BR=1

## DRM411H1 Movement for the Actor II (previously DRM401H1Y) [2T/48P]

The final year of movement training refines the skills and concepts developed thus far, focusing on performance. Techniques of folk, period and social dance are studied. Taken in conjunction with DRM400Y1: Performance II and DRM401H1: Voice for the Actor II.
Prerequisite: DRM300Y1, 301H1, 311H1 (previously 301Y1)
Corequisite: DRM400Y1 and 401H1
DR=HUM; BR=1
DRM430Y1 Intercultural Ibsen: Nora or How to Slam the Door [48L]
Intercultural readings of Ibsen's "A Doll's House" (1879) and related plays. Students analyze the impact of the stagings of Ibsen's play on social and cultural change. This cross-cultural inquiry involves historical conditions of production, political and/or feminist interpretations and aesthetic approaches in divers western and non-western cultural contexts as well as
in different media (literature/drama, theatre, movie, TV, comic books, computer games).
Prerequisite: Students must be fourth-year/senior students;
DRM230Y1 and permission of the instructor.
Recommended Preparation: DRM362H1
DR=HUM; BR=1
DRM431H1 Dramaturgy I [36L]
Following Introduction to Dramaturgy, students apply theoretical and historical knowledge to theatre practice with an emphasis on research, reflection and experimentation. Students are involved in the practice of performance dramaturgy and its conceptionalizing potential through wellinformed creative processes while working directly on the annual UC Drama Directors' Shows and Resource Show. Prerequisite: DRM230Y1 and DRM331H1 DR=HUM; BR=1

## DRM432H1 Dramaturgy II [36L]

A hands-on practice of performance dramaturgy involving production related research, analysis, communication and reflection. The focus is on dramaturgical work related to the rehearsal process of the annual UC Drama Resource Show and on providing critical feedback for the creative team. The course also develops creative and interactive communication strategies with the audience.
Prerequisite: DRM431H1
DR=HUM; BR=1

## DRM454H1 Advanced Theatre Production and Design [48L/24P]

Continues the exploration of design and production techniques. Students are given an opportunity to use their knowledge and skills from previous production courses on an advanced level. Students are expected to participate in UC Drama productions in senior creative and leadership roles. Focus also includes the integration of digital technology into theatrical performance.
Prerequisite: DRM254Y1 and DRM354Y1
DR=HUM; BR=1

## DRM462H1 Epic Theatre in an Intercultural and Feminist Perspectives [36L]

This course explores the problem of Mimesis/ Unmaking Mimesis in regard to creative and theoretical feminist criticism of Brecht's ideas of epic theatre, the estrangement effect and Gestus. It looks at the politics of representation/ theatricality/ performativity in regard to gender, class, nation and ethnicity and explores the feminist, post-colonial performance history of theatre as laboratory for socio-political possibilities of change. (Also given as COL5068H)
Prerequisite: For undergraduate: need to be 4th year/ senior
students; DRM230Y1 and permission of the instructor.
Recommended Preparation: DRM362H1
DR=HUM; BR=1

## DRM468Y1 Images of Women in Modern Chinese Literature, Drama and Film [72L] <br> A seminar on the dominant social constructions of gender and gender relationships as well as on counter discourses in the 20th century performing arts in China. It provides insights into shifting identities of women in modern Chinese society and into the portrayal of women in literature, drama/ performance and film. Themes include conflicts of tradition

and modernity, colonialism, urban and rural, nationalism/ patriotism and globalisation, individuality and the social collective.
Prerequisite: For undergraduate: need to be 4th year/ senior
students; DRM230Y1 and permission of the instructor.
Recommended Preparation: DRM362H1
DR=HUM; BR=1

## DRM485H1 Topics in Drama [TBA]

An in-depth examination of selected issues in the theatre at the 400 level. Content may vary depending on instructor and therefore may be counted towards different Groups (A, B, C, D or Other). Please consult the UC Drama office and check the program's website for more details.
DR=HUM; BR=1

## DRM485Y1 Topics in Drama[TBA]

An in-depth examination of selected issues in the theatre at the 400 level. Content may vary depending on instructor and therefore may be counted towards different Groups (A, B, C, D or Other). Please consult the UC Drama office and check the program's website for more details.
DR=HUM; BR=1

## DRM486H1 Topics in Drama: Queering Performance Artaud. Fassbinder. A Feminist Investigation [36L]

This course will provide a comparative perspective on two cross-media, innovative and controversial artists of the male western canon of modern literature/performance. Recent discourses (1990s onwards) in feminist, queer and performance theory will provide the framework for analysis.
Prerequisite: For undergraduate: need to be 4th year/ senior students; DRM230Y1 and permission of the instructor. DR=HUM; $B R=1$

## DRM490Y1 Independent Studies in Drama [TBA]

A scholarly project at the 400 level chosen by the individual student. The student must work out details with a member of faculty who is willing to act as supervisor.
Prerequisite: A written proposal, signed by both student and
instructor, must be submitted for approval to the Drama Program Director before registration and normally by May
31 of the preceding academic year. Open to advanced
Specialist and Major students in the program. DR=HUM; $B R=1$

## DRM491H1 Independent Studies in Drama [TBA]

A scholarly project at the 400 level chosen by the individual student. The student must work out details with a member of faculty who is willing to act as supervisor.
Prerequisite: A written proposal, signed by both student and instructor, must be submitted for approval to the Drama Program Director before registration and normally by May 31 of the preceding academic year. Open to advanced Specialist and Major students in the program. DR=HUM; BR=1

## JDC400Y1 Redefining Security through Art [48L/48T]

Articulates a cultural approach to achieving Human Security. This course examines human security issues in which there is a significant cultural dimension to a security threat, and in which culture occupies an essential place in any realistic and effective solution. The work of artists to be analyzed include: Ariane Mnouchkine; Robert Lepage; Bertolt Brecht; John

Greyson, Mohsen Makhmalbaf, Terry George and Daniel Barenboim
Prerequisite: For undergraduate: need to be 4th year/ senior students; DRM230Y1 and permission of the instructor. DR=HUM; $B R=1$
$\begin{array}{ll}\text { JDC410H1 } & \begin{array}{l}\text { The Brechtian Legacy: Sign, Gestus and } \\ \\ \text { Feminist Theory [36L] }\end{array}\end{array}$
The main focus of the course will be the study of Bertolt Brecht's theory and practice and their relationship to theatre semiotics and feminist theory. We will investigate if Brecht can be seen as one of the first semioticians of theatre and how valid Brecht's theatre is as a model for "ways of feminist seeing".
Prerequisite: For undergraduate: need to be 4th year/ senior students; DRM230Y1 and permission of the instructor. DR=HUM; BR=1

JIA400H1 Interdisciplinary Practice for the Arts [144P]
While examining the interconnectedness of the arts, students are required to meet between sessions and develop projects connected to their study. These projects involve a range of media, including theatre, film, music and visual art (installation). Limited to fourth-year students.
DR=HUM; BR=1

## East Asian Studies

## 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
V.C. Falkenheim, MA, Ph D
R. Guisso, BA, D Phil
F.P. Hoff, MA, Ph D (V)
A.V. Liman, MA
R.J. Lynn, MA, Ph D
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)
S. Sandahl, MA, Ph D

Chair of the Department
T. Keirstead, BA, MA, Ph D

Graduate Coordinator
A.Sakaki, BA, MA, PhD

## Undergraduate Coordinator

Y. Meng, BA, MA, MA, PhD

Professors
E. Cazdyn, BA, MA, Ph D
J. Liu, BA, MA, MA, Ph D
A. Sakaki, BA, MA, Ph D
V.T. Shen, MA, M Phil, Ph D
L. Yoneyama, BA, MA, Ph D

## Associate Professors

K. Kawashima, BA, MA, Ph D
T. Keirstead, BA, MA, Ph D
Y. Meng, BA, MA, MA, Ph D
G. Sanders, BA, Ph D
A. Schmid, BA, MA, Ph D

## Assistant Professors

L.R. Feng, BA, MA, M Phil, Ph D
J. Poole, BA, MA, M Phil, Ph D
C. Virag, BA, MA, Ph D
Y. Wu, BA, MA, Ph D

## Senior Lecturers

J. Arimori, MA
I. Komuro-Lee, MA
H. Rupprecht, BA, MA, Ph D

## Lecturer

K. Ko, BA, MA, Ph D

The Department of East Asian Studies provides students the opportunity to develop a deeper understanding of the languages, cultures, and societies of the region. The department's course offerings engage the diversity of East Asian cultures, from contemporary film and politics to ancient philosophy, and they critically examine the structures that define the area and render it an object of study. We offer Chinese, Japanese, and Korean from beginning to
advanced levels, and a full range of courses on East Asian literature, history, thought, religion, and society. In a time of globalization, a degree in East Asian Studies can be an excellent springboard from which to launch a career in fields where bilingualism, critical analytical skills, and in-depth knowledge of the socio-historical and cultural contexts of East Asian texts and ideas are essential. Our Major and Specialist Programs thus build the foundation for careers in teaching and research, international business and law, foreign service, and cultural institutions.

Students seeking counseling should contact the Undergraduate Coordinator, but all members of the Department will be happy to provide advice and information about their course offerings. In conjunction with Woodsworth College, the Department offers courses during June and July at the University of Hong Kong and through the International Student Exchange Office, participates in exchange programs with universities in China, Korea, Japan, Taiwan and Singapore.
General Enquiries: Robarts Research Library, 14th Floor, (416-946-3625), www.eas.utoronto.ca

## East Asian Studies Programs

The Department of East Asian Studies offers three undergraduate Programs of Study. The Specialist is the most intensive and comprehensive program, requiring a minimum of 11 full-course equivalents (FCE) in a 20-FCE degree. The Major requires 7.0 FCEs while the Minor requires 4.0 FCEs.

Students may enroll in the Major or Specialist Programs in East Asian Studies after having completed 4 FCEs. Students who were enrolled in any EAS program prior to 2010-11 may elect to switch to the new program or follow the criteria in place for the year in which they enrolled.
Language Requirement:
Both the Major and Specialist Programs require a certain proficiency in an East Asian language: second year (i.e. EAS200Y1/EAS210Y1/EAS220Y1) for Majors and third year (i.e. EAS300Y1/EAS310Y1/EAS320Y1) for Specialists. Students' language abilities will be assessed by the department prior to enrolling in the language courses. The department reserves the right to place students in language courses appropriate to their language abilities.
Students in the Major and Specialist Programs should be careful in fulfilling the Faculty of Arts \& Science's breadth requirement to satisfy area 5 (The Physical and Mathematical Universe).

East Asian Studies Specialist (Arts program)
Enrolment in this program requires the completion of 4.0 FCEs.

Completion of the program requires 11.0 FCEs, meeting the below requirements:
The first and second years are dedicated to achieving a certain level of oral and written facility in Chinese, Japanese or Korean, as well as a basic understanding of East Asian cultures and of the methodological and theoretical underpinnings of the field of East Asian Studies.

First year:

## East Asian Studies

EAS103H1, EAS105H1; an EAS language course.
Students in the Specialist program are required to attain third-year proficiency, either by completing an appropriate language course (e.g., EAS300Y1/ EAS310Y1/EAS320Y1) or by demonstrating the required proficiency in the initial placement. Students without sufficient background may need to start in a lower-level language course ( $100-$ level courses do not count towards the Specialist; they may, however, fulfill a breadth requirement). Students whose placement assessment exempts them from the requirement must substitute a Society-Culture course or higher-level course in the appropriate language.
Second Year:
EAS209H1; one additional 200-series Society-Culture full course equivalent (1.0 FCE); EAS300Y1/EAS310Y1/ EAS320Y1 or other appropriate EAS language course.
Third and Fourth Years:
Additional courses to a total of 11.0 FCEs. A minumum of 5.0 FCEs must be 300/400-series Society-Culture courses, with at least 1.0 FCE at the 400 level.

## East Asian Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 FCEs.
Completion of the program requires 7.0 FCEs, meeting the below requirements:
The first and second years are dedicated to achieving a certain level of oral and written facility in Chinese, Japanese or Korean, as well as a basic understanding of East Asian cultures and of the methodological and theoretical underpinnings of the field of East Asian Studies.
First year:
EAS103H1, EAS105H1; EAS200Y1/EAS210Y1/EAS220Y1/ EAS290Y1. Students' language abilities will be assessed on entering language courses. Students without sufficient background may need to start in a 100 -series language course (100-level courses do not count towards the Major; they may, however, fulfill a breadth requirement). Students whose placement assessment exempts them from the requirement must substitute a Society-Culture course or higher-level course in the appropriate language.
Second Year:
EAS209H1; an additional 200-series Society-Culture course (0.5 FCE).

The first and second years are dedicated to achieving a certain level of oral and written facility in Chinese, Japanese or Korean, as well as a basic understanding of East Asian cultures and of the methodological and theoretical underpinnings of the field of East Asian Studies.
Third and Fourth Years:
Additional courses to a total of 7 FCEs. A minimum of 2.0 FCEs must be 300/400-series Society-Culture courses, with at least one half course ( 0.5 FCE) at the 400 level.

## East Asian Studies Minor (Arts program)

Completion of the program requires 4.0 FCEs, meeting the below requirements:

[^1]2. Three Society-Culture FCEs, one of which must be 300/400-level.
Language courses cannot be used to fulfill the requirements of the Minor program.

## EAS Course Groups

## EAS Language Courses

EAS100Y1, EAS101Y1, EAS110Y1, EAS120Y1, EAS121H1, EAS122Y0, EAS200Y1, EAS201Y1, EAS210Y1, EAS216Y1, EAS220Y1, EAS222Y0, EAS222Y1, EAS223Y0, EAS282Y1, EAS290Y1, EAS300Y1, EAS310Y1, EAS320Y1, EAS320Y0, EAS321Y0, EAS322Y0, EAS322Y1, EAS381H1/EAS381Y1, EAS383H1, EAS390Y1, EAS400Y1, EAS410Y1, EAS415Y1, EAS460H1, EAS461H1, EAS462YO, EAS462Y1, EAS463Y0, EAS480Y1/EAS480H1, EAS482Y1/EAS482H1

## EAS Society-Culture Courses

EAS102Y1, EAS103H1, EAS105H1, EAS206Y1, EAS209H1, EAS209Y1, EAS211Y0, EAS215H1, EAS217Y/EAS217H1, EAS233H1, EAS235H1, EAS237Y1, EAS241H1, EAS245H1, EAS246H1, EAS247H1, EAS251H1,
EAS256H1, EAS257H1, EAS271H1, EAS271Y1, EAS272H1, EAS284H1, EAS285H1, EAS289Y1, EAS295Y0, EAS297H1, EAS299Y1, EAS303H1, EAS306Y1, EAS307H1, EAS309H1, EAS311H1, EAS318H1, EAS324H1, EAS325H1, EAS327H1, EAS330H1, EAS333H1, EAS334Y1, EAS338H1, EAS340Y1, EAS344H1, EAS345Y1, EAS346H1, EAS347H1, EAS357H1, EAS358Y1, EAS361Y1, EAS362Y1, EAS364H1, EAS366H1, EAS368Y1, EAS369Y1, EAS372H1, EAS373H1, EAS374H1, EAS375H1, EAS378H1, EAS389Y1, EAS393Y/ EAS393H1, EAS394H1, EAS395Y0, EAS396H1, EAS397H1, EAS398H0, EAS399Y0, EAS403Y1, EAS406Y1, EAS407H1, EAS408H1, EAS409H1, EAS411H1, EAS412H1, EAS413H1, EAS418H1, EAS420H1, EAS431H1, EAS432H1, EAS434Y1/ EAS434H1, EAS435Y/EAS435H1, EAS436Y/EAS436H1, EAS437Y/EAS437H1, EAS438H1, EAS439H1, EAS444H1, EAS448H1, EAS453H1, EAS456H1, EAS457H1, EAS462H1, EAS464H1, EAS465H1, EAS467H1, EAS473H1, EAS475Y1, EAS476Y1, EAS478Y1, EAS484Y1, EAS485H1, EAS486H1, EAS488Y/EAS488H1, EAS490H1, EAS495Y1, EAS496H1, EAS497H1

## Society-Culture Courses on East Asia Offered by

 Other DepartmentsA number of courses that focus on East Asia offered by other departments can be counted as Society-Culture courses. Please see the EAS website (www.eas.utoronto.ca) for a list of such courses.

## 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 earn a grade of at least B - in EAS 200Y1 or EAS201Y1 and EAS300Y1. The Citation

## East Asian Studies

in Japanese is available to students who earn a grade of at least B- in EAS220Y1 and EAS 320Y1. The citation in Korean is available to students who earn a B - in EAS210Y1 and EAS310Y1.

Students should note that 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. Students interested in this program should apply to the EAS office.

## East Asian Studies Courses

## EAS Language Courses:

EAS Language Courses: The Department reserves the right to place students in the language course appropriate to their level of language skill. 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 [48T/48S]
This introductory course is intended for students with no background in Mandarin or any Chinese dialect. The course consists of mandatory lectures and tutorials. Students study a minimum of 550 Chinese characters. Interviews are required of all students who wish to enrol in the course.
Exclusion: EAS101Y1
DR=HUM; BR=1

## EAS101Y1 Modern Chinese I for Students with Prior Background [24T/48S]

This course is designed for students who can understand elementary Mandarin or any Chinese dialect because of their cultural or family backgrounds. The course consists of mandatory lectures and tutorials. Students will learn a minimum of 650 characters. Interviews are required of all students who wish to enrol in the course.
Exclusion: EAS100Y1, EAS290Y1
DR=HUM; BR=1
EAS200Y1 Modern Standard Chinese II [48T/48S]
This course is a continuation of EAS100Y. Those students who are suitable for this course but are not familiar with some of the content covered in EAS100Y, especially Hanyu Pinyin, must make an effort to catch up on their own. The course consists of mandatory lectures and tutorials. Interviews are required of all students who wish to enrol in the course.
Prerequisite: EAS100Y1 (minimum grade 67\%)
Exclusion: EAS101Y1
DR=HUM; BR=1
EAS201Y1 Modern Chinese II for Students with Prior Background [24T/48S]
This course is a continuation of EAS101Y. Those students who are suitable for this course but are not familiar with some of the content of EAS101Y, especially Hanyu Pinyin, must make an effort to catch up on their own. The course consists of mandatory lectures and tutorials. Interviews are required of all students who wish to enroll in the course.

Prerequisite: EAS101Y1 (minimum 70\%)
Exclusion: EAS200Y1, EAS290Y1
DR=HUM; BR=1

## EAS290Y1 Chinese Language for Non-Mandarin Speakers I [72S]

This course is for students who speak a Chinese dialect and have acquired basic knowledge of written Chinese. It teaches students to speak Mandarin and helps students develop their skills in reading both literary and modern texts. Exclusion: EAS101Y1, EAS201Y1, EAS300Y1, EAS400Y1 DR=HUM; BR=1

## EAS300Y1 Modern Standard Chinese III [48S]

This intermediate-level language course is a continuation of EAS200Y1. It aims at further developing students' language abilities and preparing students for studying Chinese at an advanced level. By the end of this course, students should be able to converse in paragraph-length discourse and write expository essays in Chinese. Interviews are required of all students who wish to enrol in the course.
Prerequisite: EAS200Y1 (minimum 70 \%)
Exclusion: EAS201Y1, EAS290Y1
DR=HUM; BR=1

## EAS400Y1 Modern Standard Chinese IV [72S]

This fourth-year Chinese course aims to develop students' language abilities further at an advanced level. The course focuses on reading essatsm advertisements, news and stories. In this course, students will improve their reading comprehension, strengthen their writing skills and advance their speaking and listening skills through class discussions and oral presentations. Interviews are required of all students who wish to enrol in the course.
Prerequisite: EAS300Y1(minimum 73\%), EAS201Y1
(minimum 78\%)
Exclusion: EAS290Y1, EAS390Y1
DR=HUM; BR=1

## Japanese

## EAS120Y1 Modern Standard Japanese I [48L/72T]

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 conversations. The course consists of mandatory lectures and tutorials. Newly admitted students must attend the mandatory interview to enroll in the course. Returning students with no background do not attend the interview or take the placement test. Returning students who have formally or informally studied Japanese must take the placement test.
Exclusion: EAS121H1, EAS122Y1
DR=HUM; BR=1

## EAS121H1 Japanese I for Students with Prior Background [24L/36T]

This course is for those with some 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

## East Asian Studies

ability to describe the locations of objects 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 pass the placement test to enroll in the course. Exclusion: EAS120Y1, EAS222Y1
DR=HUM; BR=1
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 EAS220Y1 based on the result of a placement test.
Prerequisite: passing the placement test prepared by the host school
Exclusion: EAS120Y1
Recommended Preparation: Hiragana and Katakana characters
DR=HUM; BR=1
EAS220Y1 Modern Standard Japanese II [72L/48T]
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 N5 of Japanese Language Proficiency test and/or to those who have successfully completed a full-year Japanese language course at another academic institution. Those who have not taken EAS120Y1/ EAS121H1 must pass the placement test to take this course. Prerequisite: EAS120Y1/EAS121H1 (minimum 67\%).
Exclusion: EAS223Y1
DR=HUM; BR=1

## EAS222Y0 Summer Japanese in Japan Ila [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, depending on the result of an interview and/or placement test.
Prerequisite: Passing the placement test prepared by the host school
Exclusion: EAS120Y1, EAS121H1
Recommended Preparation: Two-thirds of the content covered in EAS120Y1
DR=HUM; BR=1
EAS223Y0 Summer Japanese in Japan Ilb [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 a placement test.
Prerequisite: Passing the placement test prepared by the host school
Exclusion: EAS220Y1Y
Recommended Preparation: One-third of the content covered in EAS220Y1Y
DR=HUM; BR=1

## EAS320Y1 Modern Standard Japanese III (formerly EAS348H1, 349H1) [120S]

This is a lower intermediate level course. Appropriate for those who have learned Japanese for two years in an academic institution and/or who have passed N4 of the Japanese Language Proficiency Test. A strong foundation in beginners' level grammar and knowledge of 500 basic kanji are required. The course stresses equal development of all four skills (speaking, listening, reading and writing). All the classes are conducted in a seminar setting. Those who have not taken EAS220Y1or do not have the appropriate Prerequisite need to pass the placement test.
Prerequisite: EAS220Y1 (70\% minimum)
Exclusion: EAS349H1,EAS322Y1
DR=HUM; BR=1
EAS321Y0 Summer Japanese in Japan Illa [TBA] Lower intermediate Japanese for those who have completed a course equivalent to EAS220Y1 or passed Level 3 of the JLPT. Those who have successfully completed this course are able to take EAS320Y1,EAS460H1, or EAS461H1 based on the result of a placement test; for EAS460H1 an interview will also be required.
Prerequisite: Passing the placement test prepared by the host school
Recommended Preparation: The contents covered in EAS220Y1
DR=HUM; BR=1
EAS322Y0 Summer Japanese in Japan IIIb [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, EAS460H1, or EAS461H1 based on the result of the interview and/or the placement test.
Prerequisite: Passing the placement test prepared by the host school
Exclusion: EAS320Y1
DR=HUM; BR=1

## EAS460H1 Modern Standard Japanese IVa (formerly EAS460Y1) [72S]

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 EAS320Y1and/or do not have appropriate Prerequisite must take the placement test which is followed by an interview.
Prerequisite: EAS320Y1Y
Exclusion: EAS460Y1, EAS463Y1
DR=HUM; BR=1

## EAS461H1 Modern Standard Japanese IVb (formerly EAS461Y1) [72S]

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.

## East Asian Studies

Native or near-native speakers are not permitted to take this course. Those who have not taken EAS320Y1 and/or do not have appropriate Prerequisite must take the placement test to take the course.
Prerequisite: EAS320Y
Exclusion: EAS461Y1, EAS463Y1
DR=HUM; BR=1
EAS462YO Summer Japanese in Japan IVa [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 depending on the result of a placement test; for EAS460H1 an interview will also be required.
Prerequisite: Passing the placement test prepared by the host school

## DR=HUM; BR=1

EAS463Y0 Summer Japanese in Japan IVb [TBA]
Advanced Japanese for those who have completed a course equivalent to EAS460H1 or EAS461H1 or passed Level 2 of the JLPT.
Prerequisite: Passing the placement test prepared by the host school
Exclusion: EAS460Y1, EAS461Y1
DR=HUM; BR=1

## Korean

EAS110Y1 Modern Standard Korean I [96S]
This course is designed to help students build communication skills in the Korean language. Through an integration of listening, speaking, reading and writing, this course aims to provide a solid foundation in beginning level Korean. This course assumes that students do not have any prior knowledge of Korean. All students who wish to enrolin the course are subject to a placement interview. For details about the placement interview, refer to the Registration Handbook and Timetable.

## DR=HUM; BR=1

## EAS210Y1 Modern Standard Korean II [48S]

As a continuation of EAS110Y1Y, this course is designed to help students increase their communication skills in the Korean language. Students in this course are expected to perform basic communicative functions, read and write paragraph-level texts, and conjugate verbs/adjectives accurately. All students who wish to enrol in the course are subject to a a placement interview regardless of fulfillment of Prerequisite requirement. For details about the placement interview, refer to the Registration Handbook and Timetable. Prerequisite: EAS110Y1 (67\% minimum)
DR=HUM; BR=1

## EAS216Y1 Modern Standard Korean for Students with

 Prior Background [48S]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.
Prerequisite: Placement test
Exclusion: EAS210Y1, EAS110Y1
Recommended Preparation: Limited prior background in
spoken/or written Korean
DR=HUM; BR=1
EAS310Y1 Modern Standard Korean III [96S]
As a continuation of EAS210Y1Y, this course is designed to help students improve their Korean competence at an intermediate level. The class focuses not only on oral fluency and grammar but also on reading comprehension and discussions on various issues related to contemporary Korea. Basic Hanja will be introduced. All students who wish to enrol in the course are subject to a placement interview regardless of fulfillment of Prerequisite requirement.
For details about the placement interview, refer to the Registration Handbook and Timetable.
Prerequisite: EAS210Y1 (67\% minimum)
DR=HUM; BR=1

## EAS410Y1 Modern Standard Korean IV [48S]

As a continuation of EAS310Y1Y, this course is designed for advanced-level learners of Korean. By reading short essays/ articles and watching films, this course aims to improve students' proficiency in speaking, writing, listening, and reading. All classroom and online discussions are conducted entirely in Korean. All students who wish to enrol in the course are subject to a placement interview regardless of fulfillment of Prerequisite requirement. For details aout the placement interview, refer to the Registraion Handbook and Timetable.
Prerequisite: EAS310Y1 (70\% minimum)
DR=HUM; BR=1

## EAS415H1 Advanced Readings in Korean (formerly EAS415Y1) [48L]

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
Exclusion: EAS415Y1
DR=HUM; $B R=1$

## Sanskrit

EAS282Y1 Elementary Sanskrit (formerly EAS180Y1) [96S]
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.
Prerequisite: Adequate knowledge of English grammatical terminology
Exclusion: EAS180Y1
DR=HUM; BR=1

EAS379H1 | The History, Structure and Politics of the |
| :--- |
| Hindi Language [24P] |

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

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 elthent in the late 19th and the 20th centuries is intimately linked to the emerging Indian, especially Hindu, Hindi and Urdu will be highlighted. Knowledge of the Recommended Preparation: 1 year of Hindi, Urdu, Sanskrit

## East Asian Studies

## or other Indo-Aryan language

DR=HUM; BR=2

## EAS381H1 Sanskrit Narrative Literature [24S]

Ethics and worldly wisdom was taught in classical and medieval India through animal fables like the Hitopadea and the Pacatantra. Along with the later tales of the Kathsaritsgara these stories provide suitable readings for beginning Sanskritists and serve as an introduction to ancient Indian social and cultural life.
Prerequisite: EAS282Y1 or equivalent
Exclusion: EAS382H1/Y1
DR=HUM; BR=1

## EAS383H1 Sanskrit Epic Literature [24S]

The Mahbhptrata and the Rmyana 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 or equivalent
DR=HUM; BR=1
EAS480H1 Advanced Sanskrit I [24S]
Reading in classical Sanskrit poetry and prose.
Prerequisite: EAS382Y
DR=HUM; BR=1

## EAS482H1 Advanced Sanskrit II (formerly EAS482Y) [24S]

Technical Sanskrit: readings from alamkarastra, dharmastra, darana and other non-literary texts.
Prerequisite: EAS382Y1
Exclusion: EAS482Y1
DR=HUM; BR=1
EAS Society-Culture Courses
All Society-Culture courses are instructed in English.

## 100-series courses

EAS103H1 Premodern East Asian History [24L/12T]
Examines how various histories of East Asia can be written by examining specific themes in the histories of China, Japan and Korea to roughly 1600. Required of EAS specialists and majors.
DR=HUM; BR=3
EAS105H1 Modern East Asian History (formerly EAS202Y,H and 204Y) [24L/12T]
Examines how various histories of East Asia can be written by examining specific themes in the histories of China, Japan and Korea from roughly 1600 to the outbreak of the Cold War. Required of EAS specialists and majors. Prerequisite: EAS103H1
Exclusion: EAS202Y1/H1,EAS204Y1, HIS107Y1, not open
to students who took EAS102Y1 in 2001-2002
DR=HUM; BR=3

## 200-series courses

## EAS209H1 Approaches to East Asia (formerly EAS209Y1) [24L/12T]

Intended for EAS specialists and majors, this course introduces various approaches, theories, and methodologies for the advanced study of East Asian society and culture. Required of EAS specialists and majors.

Prerequisite: EAS105H1
Exclusion: EAS209Y1
DR=HUM; BR=None

## EAS211Y0 Chinese Art [48L]

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. DR=HUM; BR=1

## EAS215H1 History of Chinese Thought: Tang through Ming Periods [24L/24P]

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.
DR=HUM; BR=2

## EAS217Y1 Major Aspects of Contemporary Korea

 [48L]A range of perspectives on contemporary Korea will be addressed. The focus is on the last four decades of political economic and socio-historical change on the Korean peninsula. Focus on South Korea with some consideration of North Korea. Subjects include the developmental state, democratization, neoliberalism, transnationalism, and multiculturalism.
DR=HUM; BR=3

## EAS230H1 Critical Approaches to Chinese Literature [24L]

Examines key questions in Chinese literature from the earliest times to 1800 . Texts will include poety and narratives in English translation. It is designed to introduce important themes, approaches and theories to help students understand the "how" and "why" of writing and literary form in China.
DR=HUM; BR=1

EAS235H1 | Perceptions of China in Japanese Literature |
| :--- |
| [24L] |

Lectures 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 ex-otic/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).
DR=HUM; BR=2

EAS237Y1 Japanese Cinema: Film Form and the Problems of Japanese Modernity [48S]
How film aesthetics relate to the most profound sociohistorical problems of Japanese modernity. How various film makers employ cinematic form to engage the social problems of their moment.

## East Asian Studies

## DR=HUM; BR=1

EAS241H1 History of Chinese Philosophy [39L] This is an introductory course, both historical and systematic, to the major philosophical traditions in China, such as Confucianism, Daoism, Buddhism, and their historical development from ancient to modern times in four periods: the emergence of Confucianism, Daoism, and other minor schools; the introduction of Buddhism and the development of various sects of Chinese Mahayana Buddhism; the development of modern Chinese Philosophy. Major thinkers, basic concepts and texts, and their historical contexts will be the focus of discussion.
Exclusion: PHL237H1
DR=HUM; BR=2
EAS245H1 Pre-Modern Japanese History [24L]
A survey of the history of pre-modern Japan from earliest recorded histories to the establishment of the Tokugawa regime in the seventeenth century. Uses a wide range of translated primary Japanese texts to illuminate the emergence of cultural forms and their conjunction with social, economic, religious and political trends.
Prerequisite: EAS103H1
Exclusion: EAS246H1 taken prior to 2010-11.

## DR=HUM; BR=3

EAS246H1 Early Modern Japanese History [24L]
A survey of the history of Japan from about 1600 until the disintegration of the Tokugawa regime in the mid-19th century. Uses a wide range of translated primary Japanese texts to illuminate the emergence of cultural forms and their conjunction with social, economic, religious and political trends.
Recommended Preparation: EAS102Y1/EAS103H1/ EAS105H1
DR=HUM; BR=3
EAS247H1 History of Capitalism in Modern Japan [24L]
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.
DR=HUM; BR=3

## EAS251H1 Aesthetics and Politics in 20th Century Korea [24L]

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.
DR=HUM; BR=1

## EAS256H1 Chinese Literature (Pre-Qin to Tang) (formerly EAS336H1) [24L]

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
DR=HUM; BR=1
EAS257H1 Chinese Literature (Song to Qing) (formerly EAS337H1) [24L]
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/H1
DR=HUM; BR=1
EAS271H1 20th Century Korean History [24L]
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
DR=HUM; BR=3

## EAS271Y1 20th Century Korean History [48L]

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: EAS271H1
DR=HUM; BR=3
EAS272H1 Post-War Korean Society \& Culture [24L]
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.
Prerequisite: EAS271Y1/EAS271H1
DR=HUM; BR=3
EAS284H1 Modern Chinese Literature [24L]
This course offers a critical examination of twentiethcentury 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.
DR=HUM; BR=1
EAS289Y1 Environment and East Asia [48L]
A course about the general issue of environmental crisis, with a special focus on its representations in the media, film, and writing about East Asia.
DR=HUM; BR=1 + 3

EAS295Y0 Selected Topics in East Asian Studies, 200level [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.
DR=HUM; BR=None; BR=None

## EAS297H1 Texts, Images and Objects in East Asia [24P]

Understanding East Asian Civilizations through Texts, Images and Objects exhibited in ROM. With lectures on the theoretical and historical background, students will study various types of texts, paintings, bronzes, architectures, sculptures, porcelains and other objects, pending on the focus of each year, and explore their historical, aesthetic and critical meanings.
DR=HUM; BR=1

## EAS299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## 300-series courses

JMC301Y1 State \& Society in 20th Century China [48L]
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: EAS102Y1/EAS105H1/HIS280Y1/HIS328Y1/ JMC201Y1/POL215Y1
DR=HUM/SOC SCI; BR=3
EAS307H1 Chinese Political Philosophy [24S]
The course analyses both historically and systematically the development of Chinese political philosophy from ancient times to the present day.
Prerequisite: PHL237H1
DR=HUM; BR=2

## EAS309H1 Modern Chinese Prose [24S]

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.
DR=HUM; BR=1
EAS311H1 A History of Japanese Monsters [24L] 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: EAS209Y1/EAS209H1
DR=HUM; BR=1
EAS314H1 Culture \& World After Hiroshima \& Nagasaki [24L]
Exploration of literature, film and other cultural production related to the atomic bombing and other nuclear catastrophes from transnational, inter-Asia and transpacific perpectives. Primarily focuses on but necessarily limited to the cultural texts, intellectual concepts and social thoughts generated out of the history of Hiroshima nd Nagasaki atomic destruction.
Prerequisite: Completion of 8.0 FCEs
DR=HUM; BR=3
EAS315H1 The "Yellow Peril": Past \& Present [24L]
Beginning with the Chinese Exclusion Acts, the Asian presence in North America has often been considered a serious social menace. This course explores the Asian/ North American response to the past and present "Yellow Peril" constituted as a gendered, sexualized, classed, and racialized epistemological and affective structure of knowledge.
Prerequisite: Completion of 8.0 FCEs
DR=HUM; BR=3

## EAS318H1 Rethinking Modernism: The Perspectives of Mainland China, Taiwan and Hong Kong [24L]

Modernism is one of the important cultural heritages of the last century that call for critical reflection in light of novel perspectives and new methodologies. Postmodern critical thinking and postcolonial scholarship 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 will include refashioned methodological possibilities. Readings of major modernistic writings, cinema and arts from the above 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.
DR=HUM; BR=3
EAS327H1 Japanese Fiction and the Nation [24L/4T]
The focus is on modern Japanese literature, with special attention given to literatures 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
DR=HUM; BR=1

## EAS330H1 Narrative Strategies in Modern Japanese

 Fiction [24L]Discussion of narratives by Natsume Soseki, Mori Ogai, Tanizaki Junichiro, 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.

## East Asian Studies

## DR=HUM; BR=1

EAS333H1 Modernism and Colonial Korea [24L]
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. DR=HUM; BR=1

## EAS334Y1 The Chinese Novel (formerly EAS334H1) [24L]

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.
Exclusion: EAS334H1
DR=HUM; BR=1

## EAS338H1 Classical Daoism [48L/24P]

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
DR=HUM; BR=2

## EAS340Y1 The Chinese: Society \& Culture (formerly EAS340H1) [48L]

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/EAS103H1/ EAS105H1
DR=HUM; BR=3

## EAS344H1 Topics in Chinese Society and Culture [24S]

This course examines, through philosophical, religious and literary texts, the various ways in which pre-modern Chinese thinkers, from antiquity to the seventeenth century, conceived and represented the emotions, and the role that emotions played in the evolving conception of selfhood.
Recommended Preparation: One course on modern China or
East Asia or equivalent
DR=HUM; BR=3

## EAS345Y1 The Rise of Greater China: Issues \& Topics (formerly EAS345H1) [48S]

This course looks at China in regional perspective, including issues of Taiwan, Hong Kong and Peoples 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
DR=HUM; BR=3

## EAS346H1 Self and Imagination in Pre-Modern China [48L]

In this course 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. DR=HUM; BR=2

EAS347H1 Everyday Life in Modern Japan [24L]
The history of modern Japan as revealed by 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, Japanese colonialism, imperialism and fascism, the course explores ways to specify and critique what is called everyday life.
Recommended Preparation: EAS247H1
DR=HUM; BR=3
EAS357H1 Mao's China and Beyond [24L]
This course introduces major issues and events in contemporary Chinese history from the success of the Communist revolution in 1949 to Chinas postsocialist transitions toward a capitalist modernity in the 1980s and early 1990s. It examines Chinas multifaceted transformations both chronologically and thematically, in its socioeconomic, political, and cultural aspects. Topics include the development and victory of the Chinese Communist revolution; the rule and legacy of Mao Zedong, particularly the Hundred Flowers movement, the Great Leap Forward, and the Cultural Revolution; economic reform and political repression (especially the Tiananmen crisis in 1989) in the era of Deng Xiaoping. Close attention will also be paid to the impact of global factors on Chinas domestic development. Readings are assigned from both secondary literature and English translations of primary materials.
Exclusion: EAS364
DR=HUM; BR=3

## EAS358Y1 Classical Chinese (formerly EAS206Y1) [48S]

An introduction to the Classical Chinese language with emphasis on grammatical analysis and translation into English. Open only to students enrolled in an EAS major or specialist subject POSt.
Prerequisite: at least 4 EAS half courses
Exclusion: EAS206Y1, EAS306Y1, EAS335Y1
Recommended Preparation: two or more years of Modern
Standard Chinese
DR=HUM; BR=1

## EAS361Y1 Zen Buddhism [48L]

This course serves as an introduction to the Zen Buddhist traditions of China, Korea, and Japan. A heavy emphasis is placed on the radical views of history, language, ritual, self, and enlightenment espoused by these traditions. The course also examines issues related to Zen monasticism,

## East Asian Studies

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 include both primary material in translation and secondary scholarship.
DR=HUM; BR=2

## EAS362Y1 Classical Japanese [48S]

Introduction to classical Japanese, followed by readings of various short works by classical authors.
Prerequisite: EAS220Y1
DR=HUM; BR=1

## EAS364H1 China's Cultural Revolution: History and Memory [24L]

No understanding of contemporary Chinese is possible without understanding the ramifications of the Great Proletarian Cultural Revolution (1966-1976). This course seeks to consider this tumultuous episode as a field of historical research and conceptual inquiry: What was the meaning of culture in the Cultural Revolution? To what extent was it revolutionary? What did really it mean to talk about class and class struggle during the movement? How is the Cultural Revolution remembered and represented? And, how do we understand Chinas globalizing present in the historical context of the Cultural Revolution? This course invites you to explore such questions by critically examining a wide variety of sources, including scholarly accounts, official documents, personal memoirs, oral histories, and literary works.
Exclusion: EAS357H
DR=HUM; BR=3

## EAS366H1 Lovers \& Madmen in Chinese Literature [24L]

A thematic introduction to some of Chinas major literary texts by taking as our guide the lover and the madman as both writer and subject. We will use the idea of lover and madman to explore issues such as social and behavioral boundaries, desire, violence, narrative compulsion, and the re-imagination of tradition.
Prerequisite: EAS209Y1/EAS209H1
DR=HUM; BR=1

## EAS368Y1 The Philosophy of the Buddha (formerly EAS260Y1) [48S]

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
DR=HUM; BR=2
EAS372H1 Postwar Korean History [24L]
This heavy writing course offers a selective introduction to debates and problems in the writing of north and south Korean history.
Prerequisite: EAS272H1, EAS209H1
DR=HUM; BR=3

## EAS373H1 Choson History [24L]

This course examines various approaches economic, social, gender, political, international, and cultural to the history of Choson Korea.

Prerequisite: EAS271H1/EAS272H1
DR=HUM; BR=3
EAS374H1 Modern Japan and Colonialism [48L]
This course interrogates the history of Modern Japan from the perspective of Japans 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.
DR=HUM; BR=3
EAS375H1 Postwar Japan: Crisis, Apocalypse [24L]
This writing and reading intensive course explores the history of the postwar period in Japan and its former colo-nies in order to delineate a way to think of the idea of apocalypse in relation to the phenomenon of crisis in ad-vanced capitalism Through an examination of the history of capitalist crisis in postwar Japan, the course will in-vestigate themes of apocalypse in atomic-bomb literature, television and Godzilla, radical students movements of the 1960s, ecologicalindustrial disasters, worker art movements, debates on modernity and fascism, avant-garde theatre, popular music, the phenomenon of the "freeter", religious movements, nationalism and populism, and the so-called "ageing population" problem. The course will revolve around texts by philosophers, economics, novelists, essayists, artists and critics, as well as some films and audio recordings.
Exclusion: EAS347H1, EAS374H1
Recommended Preparation: EAS247H1
DR=HUM; BR=3

## EAS378H1 Edo, Osaka, and Kyoto: Urban Life in Early Modern Japan [24L]

An exploration of most important cities of Tokugawa Japan. Among the largest cities of the early modern world, the three were home to a vibrant urban culture and remarkable economic activity. The framework is historical, but the texts will be divers buildings, maps, screen paintings, prints, film, and novels will be studied.
Prerequisite: EAS209Y1/EAS209H1
DR=HUM; BR=3

## EAS389Y1 History of Korean Religion [48L]

This course offers a broad overview of Korean religious tradition.
DR=HUM; BR=3

## EAS393H1 Topics in Buddhism [24L]

Topics will vary according to the instructor's interest. A subtitle will be provided to indicate topic to be discussed for the academic session.
DR=HUM; BR=2
EAS393Y1 Topics in Buddhism [48L]
Topics will vary according to the instructors interest. A subtitle will be provided to indicate topic to be discussed for the academic session.
DR=HUM; BR=2
EAS394H1 Film Culture in Contemporary China [24L] This course discusses variations of documentary film and DV culture in contemporary China as forms of cultural, communal, and political practices. We will be focusing on those films and videos that seek to address important global issues such as peace and climate change in cross-media

## East Asian Studies

approach and in personal tone. We will be asking what new tendencies are there in the films and videos, where can we trace them back to, and what fresh possibilities are they to bring forth to our aesthetic and public life.
DR=HUM; BR=1

## EAS395Y0 Selected Topics in East Asian Studies, 300-

 levelThis 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.
DR=HUM; BR=None

## EAS396H1 Practical Learning in East Asia [24L]

This course explores the development of Practical Learning and its ramification in East Asia. We focus on how it originates from late Ming China as shixue and ramified to Korea as silhak and Japan as jitsugaku, and mediates between classical and modern East Asia and lays the foundation for Asian theories of modernity. DR=HUM; BR=2
EAS397H1 Literary Lives in Late Imperial China [24L] In-depth examination of five to six selected men and women through close reading of their literary repertoire and through biography and autobiography. The material will introduce concepts such as memory, literati identity, aesthetic theories, gender, and social transformations in the Ming and Qing period. Prerequisite: EAS209Y1/H1
Prerequisite: EAS209Y1/EAS209H1 DR=HUM; BR=1

EAS398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
EAS399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

## 400-series courses

## EAS403Y1 Specialist Research Seminar [48S]

Students will work on their own research projects with the goal of completing a polished, original research paper of 25-30 pages. The first semester focuses on research methodology, while the second half is conducted as a writing course, focusing on (re)writing, editing and peer review.
Prerequisite: EAS209Y1/EAS209H1 and permission of the instructor
DR=HUM; BR=None
EAS406Y1 Thinking about things: Material Culture in East Asia [48S]
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.

DR=HUM; BR=1

## EAS407H1 Textual Analysis of Classical Chinese

 Philosophy [24S]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, Or EAS241H1 DR=HUM; BR=2
EAS408H1 Modern Taiwanese Literature [24S]
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.
DR=HUM; BR=1

## EAS409H1 The Cosmopolitan City in Premodern China:

 Changan (formerly EAS367H1) [24S]This research-intensive course will introduce multiple ways of looking at the ancient capital of Changan (present-day Xian). Focus will be on the rich literary, cultural and material tradition associated with it from the onset of the dynastic era to the Golden Age of the Tang dynasty (618-907 AD).
Prerequisite: EAS209Y1/H1
Exclusion: EAS367H1
Recommended Preparation: Some familiarity with Chinese history in the middle period
$D R=H U M ; B R=1$
EAS411H1 Art and Archaelogy of Early China I [24P]
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 year Arts \& Science students.
DR=HUM; BR=1

## EAS412H1 Technology and Material Cultures of Ancient

 China [24P]This course introduces students to the technology and material culture of prehistoric and Bronze-Age 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
DR=HUM; BR=3
EAS413H1 Medieval Chinese Civilization [24S]
This course explores the intellectual culture of the Six Dynasties in China (3rd through 6th centuries C.E.), a vibrant period in which many new forms of thought and expression flourished. Texts studied include historical anecdotes, Buddhist and Daoist scriptures, self-cultivation manuals, philosophical exegeses, and treatises on music, art, and poetics.

## East Asian Studies

Prerequisite: EAS209Y1/H1
DR=HUM; BR=1

## EAS414H1 Body/Mind Health in Chinese Philosophy [24S]

Textual and conceptual analysis of theories and practices related to physical health and mental sanity in Chinese philosophical schools such as Confucianism, Daoism and Chinese Mahayana Buddhism.
Prerequisite: EAS241H1/PHL237H1
DR=HUM; BR=1
EAS418H1 Topics in Chinese Art Theories [24S]
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, EAS458H1
DR=HUM; BR=1

## EAS420H1 Travels, Travelers and Travel Accounts in Asia [24S]

This intensive seminar focuses on the circulation of people (and as consequence, words and ideas) throughout East Asia and Central Asia in the premodern era. Texts include the diaries of the Japanese monk Ennin, as we try to understand the world such travellors searched for or encountered. Prerequisite: EAS209Y1/H1
DR=HUM; BR=3

## EAS431H1 Advanced Topics in Japanese Cinema [24S]

The focus ranges from the examination of cross-cultural theoretical problems (such as Orientalism) to a directorbased 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
DR=HUM; BR=1
EAS432H1 Korean Cultural Studies Seminar [24S]
The Korean Cultural Studies Seminar provides the opportunity for in-depth reading and research into a specific topic in the cultural and intellectual history of Korea. Topics will vary each semester but might include colonial period print culture, the New Woman, the history of photography, and modernism.
Prerequisite: Permission of the instructor
DR=HUM; BR=1
EAS438H1 Architecture in Pre-modern China [24S] Survey of Chinas architecture from the Song dynasty. Subjects include design (including fengshui); the role of architects and craftsmen; building techniques and materials; and the logistics and financing of building projects. Seminar format, with readings (Yingzao fashi, Lu Ban jing, geomantic treatises), and visits to the Royal Ontario Museum. Prerequisite: Knowledge of Chinese preferred DR=HUM; BR=1

## EAS439H1 The Global Bildungsroman: Narratives of <br> Development, Time and Colonialism [24S]

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. Authors may include Yi Kwangsu, Wu Zhouliu, Pramoedya Ananta Toer, Kang Younghill, Tsitsi Dangarembga, Camara Laye, amongst others.
DR=HUM; BR=1

## EAS444H1 The City, Body and Text in Modern Japanese Literature [24S]

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: at least one course in literature, cinema, or visual art successfully completed.
DR=HUM; BR=1

## EAS448H1 East Asian Studies Archive: Language, Number, Money [24S]

This course inquires into salient problems of the historical archive in relation to the experience of modernity in East Asian societies. What is the meaning of the modern archive in East Asia? How is the knowledge of the modern archive produced in relation to the production of quantitative knowledge (e.g., in demographic or economic statistics)? How should we approach the relationship between number and language? How is this knowledge transformed into state knowledge as well as into what we call common sense? A seminar with a research component; students will be required to submit a substantial research paper at the end of the course.
DR=HUM; BR=3
EAS456H1 Japan as seen by ?: Reference, Apparatus, Operation [24S]
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.
DR=HUM; BR=1

## EAS457H1 Special Topics in Modern Japanese History

 [24S]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
DR=HUM; BR=3

## EAS458H1 Classical Chinese II (formerly EAS306Y1)

 [24S]As a continuation of EAS358Y1 (formerly EAS206Y1), this course helps students to gain more in-depth control of grammatical structures and to read longer texts in classical Chinese with greater ease. Requirements include a major research/translation project. Open only to students enrolled in an EAS Major or Specialist subject POSt.
Prerequisite: EAS206Y1 (minimum 79\%)
Exclusion: EAS306Y1, EAS335Y1
Recommended Preparation: three or more years of Modern

## East Asian Studies

Standard Chinese, EAS206Y1
DR=HUM; BR=1
EAS462H1 Ethnographic Literature on Korea: Class, Gender \& Family [24S]
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 peoples 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/H1 for EAS students
DR=HUM; BR=3
EAS464H1 The Korean War [24S]
An advanced research seminar on the Korean War.
Prerequisite: EAS271Y1/EAS271H1
Recommended Preparation: EAS209Y1/EAS209H1
DR=HUM; BR=3

## EAS465H1 Domesticity and Family in 20th Century East

 Asia [24S]A comparative approach to issues in the modern history of domesticity and family in East Asia.
Prerequisite: EAS209Y1/EAS209H1
Recommended Preparation: EAS209Y1/H1
DR=HUM; BR=3
EAS467H1 Photographic Narratives of Japan [24S]
Reads and discusses seminal theoretical literature, photo roman (by, e.g., Abe, Nakagami), and narratives about photography (by, e.g., Tanizaki, Kanai, Horie), to examine the rhetorical complicity and coercion of the two modes of representation which both emerged in the modern and nationalistic age, and persist, in the wake of the newer media, as dominant registers of everyday life and departures from there.
Prerequisite: At least one course in humanities (literature, art
history, philosophy); or reading proficiency in Japanese
DR=HUM; $B R=1$

## EAS466H1 History, Everyday Life, and North Korea [24S]

This essay driven course explores the difficulty of examining North Korean history by using comparative methods developed through the study of other socialist societies and theories of everyday life.
Prerequisite: EAS271H1, EAS209H1
DR=HUM; BR=3
EAS473H1 Modern Korean History Seminar [24S]
An examination of recent research results in the modern Korean history field, focusing especially on the late 19th and 20th centuries.
Prerequisite: EAS271Y1/EAS271H1
DR=HUM; BR=3

## EAS475Y1 Issues in East Asian Historiography [48L/48T]

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/EAS209H1 DR=HUM; BR=3
EAS478Y1 Samurai Culture [48S]
Intensive seminar exploring one of Japan's most recognizable figures, the samurai. This course investigates the historical reality of warrior life along with the legends, with focus on the ways in the warrior's world found expression in religion, art, and literature. The seminar leads to the preparation of a significant research paper ( $25-30 \mathrm{pp}$ )
Prerequisite: EAS209Y1/H1, EAS245H1/EAS246H1/
EAS247H1
DR=HUM; BR=3
EAS484Y1 The Japanese Empire [48S]
Course surveys historical literature on the Japanese Empire. A heavy reading and writing course intended for majors and specialists in East Asian Studies. The second semester will require a major research paper.
Prerequisite: EAS209Y1/EAS209H1
Recommended Preparation: Courses in modern East Asian history.
DR=HUM; BR=3

## EAS485H1 Buddhist Hybrid Sanskrit [24S]

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 Mahvastu, the Sukhvativyha, the Saddharmapundarika and the Jtakas belongs mainly to Mahyana Buddhism.
Prerequisite: EAS282Y1, EAS381H1 and EAS383H1 or equivalent
DR=HUM; BR=1
EAS486H1 Aspects of Classical and Medieval Indian Culture Through Sanskrit Texts [24S]
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 EAS383H1 or equivalent.
DR=HUM; BR=1

## EAS490H1 Introduction to Japanese Linguistics:

 Syntax and Semantics [72L]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
DR=HUM; BR=2
EAS495Y1 Topics in East Asian Studies [48S]
A guided research course on a common topic of the students choice. Students are required to produce a 20-30 page paper based on the selected topic.
DR=HUM; BR=None

## East Asian Studies

EAS496H1 Topics in East Asian Studies [24S]
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 DR=HUM; BR=None

## EAS497H1 Beyond Orientalism [24S]

This course will confront the Orientalist view of the world by looking at one Asian nation regularly exempted from that paradigmJapan. By examining, among other topics, Japans 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/
EAS209H1/247Y1/EAS374H1
DR=HUM

## Independent Studies

## EAS434H1 Independent Studies [TBA]

A scholarly project chosen by the student, approved by the Department, and supervised by one of its instructors. Consult the website (eas.utoronto.ca) for more information.
Prerequisite: Five EAS courses
DR=HUM; BR=None
EAS434Y1 Independent Studies [TBA]
A scholarly project chosen by the student, approved by the Department, and supervised by one of its instructors. Consult the website (eas.utoronto.ca) for more information.
Prerequisite: Five EAS courses
DR=HUM; BR=None

## EAS435H1 Independent Studies [TBA]

A scholarly project chosen by the student, approved by the Department, and supervised by one of its instructors. Consult the website (eas.utoronto.ca) for more information.
Prerequisite: Five EAS courses
DR=HUM; BR=None

## EAS435Y1 Independent Studies [TBA]

A scholarly project chosen by the student, approved by the
Department, and supervised by one of its instructors. Consult the website (eas.utoronto.ca) for more information.
Prerequisite: Five EAS courses
DR=HUM; BR=None

## EAS436H1 Independent Studies [TBA]

A scholarly project chosen by the student, approved by the Department, and supervised by one of its instructors. Consult the website (eas.utoronto.ca) for more information.
Prerequisite: Five EAS courses
DR=HUM; BR=None

## EAS436Y1 Independent Studies [TBA]

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Prerequisite: Five EAS courses
DR=HUM; BR=None

## EAS437H1 Independent Studies [TBA]

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Prerequisite: Five EAS courses
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EAS437Y1 Independent Studies [TBA]
A scholarly project chosen by the student, approved by the
Department, and supervised by one of its instructors. Consult the website (eas.utoronto.ca) for more information.
Prerequisite: Five EAS courses
DR=HUM; BR=None

## Ecology \& Evolutionary Biology

## Faculty

## Professors Emeriti

P.A. Abrams, BS, Ph D, FRSC
P.W. Ball, B Sc, Ph D (University of Toronto Mississauga, BOT)
D.R. Brooks, MS, Ph D, FRSC
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)
D.W. Malloch, MA, Ph D (BOT)
P.F. Maycock, M Sc, Ph D (University of Toronto Mississauga, BOT)
G.K. Morris, MS, Ph D (University of Toronto Mississauga, ZOO)
N. Mrosovsky, BA, Ph D (ZOO)
C. Nalewajko, B Sc, Ph D (University of Toronto Scarborough, BOT)
T.S. Parsons, AM, Ph D (ZOO)
Z.A. Patrick, B Sc, Ph D (BOT)
R.C. Plowright, MA, Ph D (ZOO)
H.A. Regier, MS, Ph D (ZOO)
J.D. Rising, BA, Ph D
J.C. Ritchie, Ph D, D Sc (University of Toronto Scarborough, BOT)
J. Svoboda, B Sc, Ph D (University of Toronto Mississauga, BOT)
G.M. Telford, B Sc, Ph D (ZOO)
D.D. Williams, M Sc, Ph D (University of Toronto Scarborough)
A.P. Zimmerman, BA, Ph D

Professor and Chair of the Department
L. Rowe, B Sc, Ph D

## Associate Professor and Associate Chair

(Graduate Studies)
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## Senior Lecturer and Associate Chair

 (Undergraduate Studies)C.A. Goldman, M Sc

## Professors

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R.L. Baker, M Sc, Ph D
S.C.H. Barrett, B Sc, Ph D, FRSC, FRS
R. Boonstra, B Sc, Ph D (University of Toronto Scarborough)
M.-J. Fortin, M Sc, Ph D
M.R. Gross, B Sc, Ph D
D.S. Guttman, B Sc, Ph D
D.T. Gwynne, B Sc, Ph D (University of Toronto Mississauga)
D.A. Jackson, M Sc, Ph D
L.M. Kohn, B Sc, Ph D (University of Toronto Mississauga)
H.J. Kronzucker, B Sc, Ph D (University of Toronto

Scarborough)
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F.H. Rodd, M Sc, Ph D
R.F. Sage, MS, Ph D
M.B. Sokolowski, B Sc, Ph D, FRSC
J.D. Thomson, MS, Ph D
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## Associate Professors

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B. Chang, AB, Ph D
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H. Cyr, M Sc, Ph D
J.E. Eckenwalder, M Sc, Ph D
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P.M. Kotanen, M Sc, Ph D (University of Toronto Mississauga)
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N.R. Lovejoy, M Sc, Ph D (University of Toronto Scarborough)
A.C. Mason, M Sc, Ph D (University of Toronto Scarborough)
D.A. McLennan, M Sc, Ph D
T.L. Sage, MS, Ph D
S. Stefanovic, M Sc, Ph D (University of Toronto Mississauga)
J.R. Stinchcombe, BA, Ph D
S.I. Wright, M Sc, Ph D

## Assistant Professors

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M.J. Fitzpatrick, M Sc, Ph D (University of Toronto Scarborough)
M.E. Frederickson, AB, Ph D
B. Gilbert, M Sc, Ph D
J. Head, M Sc, Ph D (University of Toronto Mississauga)
M. Johnson, B Sc, Ph D (University of Toronto Mississauga)
S.M. Short, B Sc, Ph D (University of Toronto Mississauga)
H.H. Wagner, M Sc, Ph D (University of Toronto Mississauga)
J. Weir, B Sc, Ph D (University of Toronto Scarborough)

Ecologists and evolutionary biologists recognize that all life has evolved and that an understanding of the factors influencing the origin and maintenance of biological diversity - from genomes to ecosystems - underlies all life sciences and is critical to our stewardship of life on this planet. 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.
These are fundamentally evolutionary and ecological problems.

Ecology and Evolutionary Biology is a broad discipline that seeks to understand the origins, diversity, and distribution of organisms. The Department offers a very wide range

## Ecology \& Evolutionary Biology

of courses that deal with biological diversity, conservation biology, molecular evolution, population and quantitative genetics, genomics, animal behaviour, population, community, and ecosystem ecology, evolutionary and ecological theory, environmental 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.

The Department offers six programs: a Specialist program in Ecology and Evolutionary Biology; Major programs in Biodiversity and Conservation Biology, Ecology \& Evolutionary Biology, and Environmental Biology; and two Minor programs in Environmental Biology. The Department also jointly offers programs with other departments: Specialist, Major, and Minor programs in Biology (with Cell \& Systems Biology), and a Major program in Genome Biology (with Cell \& Systems Biology and Molecular Genetics \& Microbiology).

The EEB Specialist program (12 FCEs) provides an in-depth understanding of ecological and evolutionary patterns and processes, as well as the diversity of life forms (microbes, fungi, plants, animals). Concepts are taught using a broad array of approaches, including molecular studies, laboratory experiments, computer and mathematical modeling, and field studies. An integral part of the experience is to conduct independent research projects in the laboratory and/or field. There is a strong emphasis within the program on hands-on laboratory and fieldwork that complement the conceptual framework developed in lectures. Students in this program have the opportunity to concentrate in ecology, evolutionary biology, or behaviour. The EEB Major program (8 FCEs) provides a comprehensive understanding of ecology and evolution, also with concepts taught using a broad array of approaches - including opportunities to conduct independent research projects - and with an emphasis on hands-on laboratory and fieldwork.

Today, in an era of unprecedented global change, natural ecosystems are under attack and thousands of species are threatened with extinction and many more have experienced unprecedented declines. Students in the Biodiversity and Conservation Biology Major program (8 FCEs) will be equipped to aid in the response to what is perhaps humanity's most pressing challenge, the conservation of biological diversity. Students in this program will take courses in their first and second years that provide foundations in ecology, evolutionary biology, biodiversity and conservation biology, environmental biology, mathematics, and statistics. In their upper years students will obtain in-depth knowledge about the diversity of living organisms and take advanced courses in ecology, evolution, and biodiversity and conservation biology, including a capstone course at the 400level.

Environmental science is an interdisciplinary field that integrates biological, chemical, and physical sciences to study human interactions with their environment. The Environmental Biology Major (8 FCEs) provides a broad background in biology that is essential to understand the impact of humans on other organisms and their environments. It provides students with an understanding of ecology, the diversity and function of living organisms, the
physical and chemical environment, and the ways organisms interact with, and affect, ecosystem processes. Students are exposed to ecosystem management, issues related to environmental change, and the consequences of interactions between humans and the environment.

The two Environmental Biology Minor programs (4 FCEs) offer students an introduction to ecology, evolution, environmental biology, and organismal diversity. One Environmental Biology Minor program is offered jointly with the National University of Singapore): students complete 2.0 FCEs at the University of Toronto and 2.0 FCEs on exchange in Singapore, including a field course (NUS342HO) in tropical conservation biology. The courses at the National University of Singapore that are available to students in all EEB programs are listed below in this section of the Calendar, and are given NUS course descriptors (and not EEB).

Students entering their first year in the life sciences take $\mathrm{BIO120H} 1$ (offered by EEB) and BIO130H1 (offered by CSB). These courses are taken by students who have successfully completed Grade 12 Biology, SBI4U (or an equivalent course). BIO 130 H 1 also requires Grade 12 Chemistry, SCH4U. One or both of these half courses are a prerequisite for almost all further courses in the life sciences.

Students requiring more information about BIO 120 H 1 please contact the BIO120 Office, Earth Sciences Centre (25 Willcocks St.), Room 3045A, bio120@utoronto.ca

Note: The Department of Ecology \& Evolutionary Biology's former first-year course BIO150Y1 has been replaced with BIO120H1 and BIO220H1. The Department of Cell \& System Biology's courses BIO 240 H 1 and BIO 241 H 1 have been replaced with BIO 130 H 1 and BIO 230 H 1 .

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 3055B, undergrad.eeb@utoronto.ca, 416-978-2084. Associate Chair (Undergraduate): C. A. Goldman, ES3045C, 416-978-7163, corey.goldman@utoronto.ca.

Website: www.eeb.utoronto.ca/undergraduate

## Ecology and Evolutionary Biology Programs

## Biodiversity and Conservation Biology Major

 (Science program)Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent including at least 2.0 FCEs at $300+$ series with at least 0.5 FCE at the 400 level series)
First Year (2.0 FCEs): BIO120H1; BIO130H1; MAT135Y1/ MAT137Y1/JMB170Y1
Higher Years:

1. 2.0 FCEs: BIO220H1 (ecology and evolutionary biology); EEB225H1/STA220H1 (statistics); EEB255H1 (intro to biodiversity and conservation biology); ENV234H1 (environmental biology)
2. 1.5 FCE in organismal biology (with at least 0.5 FCE from Group 1 and 0.5 FCE from Group 2) from:

## Ecology \& Evolutionary Biology

Group 1 (plant or microbial): BIO251H1; EEB268H1, EEB330H1, EEB331H1, EEB337H1, EEB340H1, EEB445H1
Group 2 (animal): EEB263Y1, EEB266H1, EEB267H1, EEB356H1, EEB360H1, EEB382H1, EEB384H1, EEB386H1, EEB388H1, EEB389H1
3. 0.5 FCE in evolution: EEB318H1, EEB323H1, EEB362H1
4. 0.5 FCE in ecology from: EEB319H1, EEB321H1, EEB328H1, EEB370H1; EHJ351H1
5. 0.5 FCE: EEB365H1 (biology of conservation)
6. 0.5 FCE from: BIO251H1; EEB263Y1, EEB266H1, EEB267H1, EEB268H1, EEB318H1, EEB319H1, EEB321H1, EEB322H1, EEB323H1, EEB324H1, EEB328H1, EEB330H1, EEB331H1, EEB337H1, EEB340H1, EEB356H1, EEB360H1, EEB362H1, EEB370H1, EEB375H1, EEB382H1, EEB384H1, EEB386H1, EEB388H1, EEB389H1, EEB397Y1, EEB398H1, EEB399Y1, EEB428H1, EEB440H1, EEB445H1, EEB459H1, EEB497H1/EEB498Y1, EEB499Y1; ENV334H1; EHJ351H1; FOR306H1, FOR307H1, FOR413H1; NUS
7. 0.5 FCE at 400 series from: EEB465H1, EEB466H1; field course, EEB401H1, EEB403H1, EEB404H1, EEB405H1, EEB406H1, EEB407H1, EEB409H1, EEB410H1; seminar, EEB495H1; research project (in biodiversity and/or conservation biology), EEB497H1/EEB498Y1/EEB499Y1
NOTE: BIO260H1/HMB265H1 (genetics) is recommended.
Note that both BIO 260 H 1 and HMB 265 H 1 require BIO 130 H 1 and $\mathrm{BIO} 230 \mathrm{H} 1 ; \mathrm{BIO} 230 \mathrm{H} 1$ requires both CHM 138 H 1 and CHM139H1.

Students interested in law, economics, policy, or environmental studies may choose to pair their Biodiversity and Conservation Biology Major with another Major, such as Economics, Environmental Ethics, or Environmental Studies (all three are Arts program), or Science programs (e.g., Environment programs).

## Ecology and Evolutionary Biology Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(12 full courses or their equivalent including at least 4.0 FCEs at the 300+ series level, 1.0 of which must be at the 400 series level)
First Year (3.0 FCEs): BIO120H1; BIO130H1; CHM138H1; CHM139H1; CHM151Y1; MAT135Y1/MAT137H1/ MAT157H1

1. 2.0 FCEs: BIO220H1 (ecology and evolutionary biology); BIO230H1 (molecular and cell biology); BIO260H1/ HMB265H1 (genetics); BIO251H1/BIO270H1 (plant/ animal form and function)
2. 0.5 FCE in statistics from: EEB225H1 (recommended); PSY201H1; STA220H1/STA250H1/STA257H1; GGR270H1
3. 0.5 FCE in core evolution from: EEB318H1, EEB323H1, EEB362H1
4. 0.5 FCE in core ecology from: EEB319H1, EEB321H1, EEB328H1, EEB370H1
5. 0.5 FCE in organismal biology from: EEB263Y1, EEB266H1, EEB267H1, EEB268H1, EEB330H1, EEB331H1, EEB337H1, EEB340H1, EEB356H1, EEB360H1, EEB382H1, EEB384H1, EEB386H1, EEB388H1, EEB389H1, EEB445H1
6. 0.5 FCE in environmental biology: ENV234H1
7. 1.0 FCE at $300+$ series, from: EEB318H1, EEB319H1, EEB321H1, EEB322H1, EEB323H1, EEB324H1, EEB328H1, EEB330H1, EEB331H1, EEB337H1, EEB340H1, EEB356H1, EEB360H1, EEB362H1, EEB365H1, EEB370H1, EEB375H1, EEB382H1, EEB384H1, EEB386H1, EEB388H1, EEB389H1, EEB428H1, EEB440H1, EEB445H1, EEB459H1, EEB460H1, EEB465H1, EEB466H1, EEB494H1, EEB495H1, EEB496H1; EHJ351H1, EHJ352H1; ENV334H1; NUS
Sub-total $=8.5$ FCEs
8. 1.0 to 2.5 FCEs in at least two of the three following categories: ( 1 ) one field course ( 0.5 FCE ) from EEB401H1, EEB403H1, EEB404H1, EEB405H1, EEB406H1, EEB407H1, EEB409H1, EEB410H1/ FOR306H1; (2) one seminar (0.5 FCE) from EEB494H1, EEB495H1, EEB496H1; and/or (3) one independent research project course (1.0 FCE) from EEB498Y1/ EEB499Y1 and concurrent research issues course EEB488H1 ( 0.5 FCE).
Sub-total $=9.5$ or 11 FCEs (depending on options chosen in \#8)
9. Select the remaining FCEs for a total of 12.0 FCEs (at least 1.0 must be $300+$ series if 1.0 FCE is completed in \#8 above) from: BIO271H1; all EEB courses (excluding EEB202H1/EEB204H1/EEB214H1); EHJ351H1, EHJ352H1; ENV334H1; JHE353H1, JHE355H1; and no more than 1.0 FCE from the following (note that some courses may require prerequisites that are not listed within this program): ANT336H1, ANT333Y1, ANT335Y1, ANT430H1, ANT436H1; CSB328H1, CSB340H1, CSB349H1, CSB350H1, CSB352H1, CSB353H1, CSB430H1, CSB431H1, CSB452H1, CSB458H1, CSB472H1, CSB474H1; ENV315H1, ENV346H1; FOR200H1, FOR307H1, FOR413H1, FOR416H1, FOR417H1; GGR201H1, GGR203H1, GGR205H1, GGR206H1, GGR305H1, GGR307H1, GGR308H1, GGR403H1, GGR409H1; GLG202H1, GLG351H1, GLG436H1; JGE347H1, JGE348H1; NUS; PSY100H1, PSY260H1, PSY270H1, PSY280H1, PSY290H1, PSY390H1, PSY397H1, PSY492H1, PSY497H1 (note that many PSY courses have limited enrolment)
Total $=12$ FCEs
NOTE: Students may wish to concentrate in ecology, evolutionary biology, or behaviour. Recommended EEB, EHJ and JHE courses for these concentrations are as follows:

Ecology: EEB255H1, EEB319H1, EEB321H1, EEB328H1, EEB365H1, EEB370H1, EEB375H1, EEB428H1, EEB440H1, EEB465H1, EEB495H1; EHJ351H1

Evolutionary Biology: EEB323H1, EEB324H1, EEB362H1, EEB440H1, EEB459H1, EEB460H1, EEB466H1, EEB494H1; EHJ352H1; JHE353H1, JHE355H1

Behaviour: EEB322H1, EEB496H1

## Ecology \& Evolutionary Biology

## Ecology \& Evolutionary Biology Major (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent including at least 2.0 FCEs at $300+$ series with at least 0.5 FCE at the 400 series level)
First Year (2.0 FCEs): BIO120H1; BIO130H1; (CHM138H1, CHM139H1)/CHM151Y1
Higher Years:

1. 2.0 FCEs: $\mathrm{BIO} 220 \mathrm{H} 1 ; \mathrm{BIO} 230 \mathrm{H} 1 ; \mathrm{BIO} 260 \mathrm{H} 1 /$ HMB265H1; EEB225H1/ STA220H1/STA250H1/ STA257H1/ GGR270H1
2. 1.0 FCE from: $\mathrm{BIO} 251 \mathrm{Y} 1, \mathrm{BIO} 270 \mathrm{H} 1, \mathrm{BIO} 271 \mathrm{H} 1$, EEB266H1, EEB267H1, EEB268H1, ENV234H1
3. 2.0 FCEs from: EEB318H1, EEB319H1, EEB321H1, EEB322H1, EEB323H1, EEB324H1, EEB328H1, EEB362H1, EEB365H1, EEB370H1, EEB375H1, EEB397Y1, EEB398H0, EEB399Y0, EEB 428H1, EEB440H1, EEB459H1, EEB460H1, EEB465H1, EEB466H1; EHJ351H1, EHJ352H1; NUS
4. 0.5 FCE from: $\mathrm{BIO} 251 \mathrm{H} 1, \mathrm{BIO} 270 \mathrm{H} 1, \mathrm{BIO} 271 \mathrm{H} 1$; EEB (excluding EEB202H1, EEB204H1, EEB214H1); ENV234H1, ENV334H1; EHJ351H1, EHJ352H1; JHE353H1, JHE355H1; JMB170Y1/ MAT135H1/ MAT136H1/MAT135Y1/MAT137Y1/MAT157Y; NUS
5. 0.5 FCE at the 400 -series from: field course, EEB 401 H 1 , EEB403H1, EEB404H1, EEB405H1, EEB406H1, EEB407H1, EEB409H1, EEB410H1/ FOR306H1; seminar, EEB494H1, EEB495H1, EEB496H1; independent research project course, EEB497H1/ EEB498Y1/EEB499Y1; advanced lecture/discussion course, EEB428H1, EEB440H1, EEB459H1, EEB460H1, EEB465H1, EEB466H1

## Environmental Biology Major (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent including at least 2.0 FCEs at $300+$ series with at least 0.5 FCE at the 400 level series)

First Year (3.0 FCEs): BIO120H1; (CHM138H1, CHM139H1)/ CHM151Y1; MAT135Y1/MAT137Y1/JMB170Y1; PHY131H1/PHY151H1 or BIO130H1

1. 2.0 FCEs: BIO220H1 (ecology and evolutionary biology); ENV234H1, ENV334H1 (environmental biology); EEB225H1/STA220H1/GGR270H1 (statistics)
2. 0.5 FCE in biological diversity and function from: BIO251H1, BIO270H1; EEB266H1, EEB267H1, EEB268H1, EEB340H1; BIO260H1/HMB265H1 (note that both require BIO 130 H 1 and BIO 230 H 1 )
3. 0.5 FCE in physical environment from: CHM 210 H 1 GGR201H1, GGR203H1, GGR205H1, GGR206H1; GLG202H1; PHY235H1 (requires MAT135Y1/MAT137Y1 and PHY131H1/PHY151H1)
4. 0.5 in core ecology from: EEB319H1, EEB321H1, EEB328H1
5. 1.0 FCE from: EEB319H1, EEB321H1, EEB328H1, EEB365H1, EEB370H1, EEB375H1; EHJ351H1; FOR305H1, FOR307H1; GGR305H1, GGR307H1, GGR308H1; GLG351H1; ENV315H1
6. 0.5 FCE at the 400 -series from: field course, EEB401H1 EEB403H1, EEB405H1, EEB406H1, EEB407H1, EEB409H1, EEB410H1/FOR418H1/GGR490H1/ GLG445H1, GLG448H1; seminar/lecture course, EEB428H1, EEB495H1/JFG470H1/GGR403H1, GGR409H1/GLG436H1; independent research project, EEB497H1, EEB498Y1, EEB499Y1.
This program can be combined with other Environmental programs (see Centre for Environment) as well as Science (e.g., Chemistry, Geology) and Social Science (e.g. Economics) programs.

## Environmental Biology Minor (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+ series)

1. 1.5 FCEs: $(\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1) * / \mathrm{BIO} 150 \mathrm{Y} 1$, *1.0 FCE taken in first year; ENV234H1
Higher Years:
2. 0.5 FCE in organismal biology: EEB266H1, EEB267H1, EEB268H1
3. 2.0 FCEs (courses in both ecology and evolution are recommended) from: EEB318H1, EEB319H1 EEB321H1, EEB322H1, EEB323H1, EEB324H1, EEB362H1, EEB370H1, EEB375H1; EHJ351H1, EHJ352H1; ENV334H1 (recommended); NUS; no more than one field course from EEB401H1, EEB403H1, EEB405H1, EEB406H1, EEB407H1, EEB409H1, EEB410H1; FOR306H1; NUS343H0

## Environmental Biology Minor (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 Centre for International Experience (cie.utoronto.ca).
Minor program:
(4 full courses or their equivalent)

1. 1.5 FCEs (at U of T): ( $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1)^{* /}$ BIO150Y1, *1.0 FCE taken in first year; ENV234H1 Higher Years:
2. $0.5 \mathrm{FCE}($ at U of T) from: EEB266H1, EEB267H1 EEB268H1, EEB318H1, EEB319H1, EEB321H1, EEB322H1, EEB362H1, EEB370H1, EEB375H1; EHJ351H1, EHJ352H1; ENV334H1 (recommended)
3. 1.5 FCEs (at National University of Singapore) from: NUS341H0, NUS342H0, NUS344H0, NUS346HO, NUS348H0, NUS349H0 (see course descriptions below)
4. 0.5 FCE field course (at National University of Singapore): NUS343H0

## Ecology and Evolutionary Biology Courses

NUS341HO Marine Biology [24L/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

# Ecology \& Evolutionary Biology 

management systems. (Co-listed as LSM 4261 at National University of Singapore)
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1, ENV234H1/ ENV234Y1
Exclusion: EEB301H1
DR=SCI; BR=4
NUS342H0 Tropical Conservation Biology [24L/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 LSM 4262 at National University of Singapore)
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1, ENV234H1/ ENV234Y1
Exclusion: EEB215H1/EEB255H1/EEB365H1
DR=SCI; BR=4
NUS343H0 Field Studies in Biodiversity [12L/8P]
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 LSM 4263 at National University of Singapore)
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1, ENV234Y1/
ENV234H1
DR=SCI; BR=4

## NUS344HO Behavioural Biology [24L/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 LSM 4253 at National University of Singapore)
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1,ENV234H1/ ENV234Y1
Exclusion: EEB322H1
DR=SCI; BR=4
NUS346HO Global Change Biology [24L/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 LSM 3272 at National University of Singapore)
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1,ENV234H1/

## ENV234Y1

Exclusion: EEB428H1
DR=SCI; BR=4

## NUS348HO Environmental Animal Physiology [24L/4T/20P]

An examination of the physiological and biochemical adaptations of animals which permit them to thrive in diverse environments. Focuses on how animals adapt to natural (e.g., oxygen availability, salinity changes, water availability) and anthropogenic (e.g., greenhouse effect, UV radiation and oxidative stresses, xenobiotics) environmental challenges. Includes applications to biomedicine, agriculture, ecology,
and environmental conservation. (Co-listed as LSM 3262 at
National University of Singapore)
Prerequisite: BIO270H1
Exclusion: CSB347H1
DR=SCI; BR=4

## NUS349H0 Freshwater Biology [24L/24P]

An introduction to the study of inland waters. Lectures, directed readings and discussions, field trips, and project work focus on aquatic biodiversity and ecology, aquatic conservation, freshwater ecosystem services, threats to freshwaters, anthropogenic effects, sustainable water use, invasive species, and policies, regulation and management of freshwater resources in local and international contexts. (Co-listed as LSM 4264 at National University of Singapore)
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1,ENV234H1/ ENV234Y1
Exclusion: EEB468H1
DR=SCI; BR=4

## All students regardless of campus or Faculty must abide by the stated course prerequisites and Exclusions.

## First Year Seminars

The 199Y1and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## 100-SERIES COURSES

BIO120H1 Adaptation and Biodiversity [24L/15P] Principles and concepts of evolution and ecology related to origins of adaptation and biodiversity. Mechanisms and processes driving biological diversification illustrated from various perspectives using empirical and theoretical approaches. Topics include: genetic diversity, natural selection, speciation, physiological, population, and community ecology, maintenance of species diversity, conservation, species extinction, global environmental change, and invasion biology.
Prerequisite: Grade 12 Biology or equivalent. Students without high school Biology must consult the BIO120
Office (BIO120@utoronto.ca)
Exclusion: BIO150Y1
DR=SCI; BR=4

## JEP100H1 Natural History of Sex and Sexual Health [24L/5T]

An introduction to the evolution and sociobiology of the sexes and the consequence of these for sexual and reproductive health of individuals and populations. Topics include: sociobiology of sexual interactions, sexual selection, reproductive biology of the sexes, sexual behaviours, sexually transmitted diseases, sexual and reproductive health, and public health intervention. A joint course offered by the Department of Ecology and Evolutionary Biology and Dalla Lana School of Public Health.

# Ecology \& Evolutionary Biology 

## DR=SCI; BR=4

## JMB170Y1 Biology, Models, and Mathematics [48L/24T]

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.
Corequisite: BIO120H1
DR=SCI; BR=5

## 200-SERIES COURSES

## BIO220H1 From Genomes to Ecosystems in a Changing World [24L/15P]

Dynamics of genetic and ecological change in biological systems, from genomes to ecosystems. Evolutionary genetic and ecological perspectives on wide-ranging topics including disease, aging, sexual conflict, genetics of human differences, conservation, and global climate change. Applications of evolutionary, ecological, and moleculargenetic principles and processes. Responsibilities of human societies in a changing world.
Prerequisite: BIO 120 H 1
Exclusion: BIO150Y1
Recommended Preparation: BIO130H1, BIO230H1 DR=SCI; BR=4

## BIO251H1 Form, Function and Development in Plants (formerly BIO251Y1) [24L/18P]

Introduction to structure, function, and ecology of vegetative and reproductive processes in plants with a focus on flowering plants and gymnosperms. Lectures and labs emphasize photosynthesis, respiration, mineral nutrition, transport processes, patterns of plant growth and development, the role of hormones in development, photomorphogenesis, and plant reproduction.
Prerequisite: BIO120H1/BIO150Y1
Exclusion: BIO251Y1
DR=SCI; BR=4

## EEB202H1 Plants and Society [24L]

The importance of plants to society. Topics include: plant biology, domestication of crop plants, plant breeding and genetic engineering, biological invasions, conservation, biodiversity and genetic resources, ecological implications of advances in modern plant science, macroevolution of plants, forest utilization.
Exclusion: BIO120H1/BIO150Y/BOT202Y1
DR=SCI; BR=4
EEB204H1 Diversity of Living Organisms [24L/12T]
Introduction to the diversity of living organisms, including microorganisms, fungi, plants and animals, with an emphasis on
evolution, ecology and conservation.
A course for non-science students in all years and disciplines.

## Exclusion: Grade 11 Biology/BIO120H1/BIO150Y1 <br> DR=SCI; BR=4 <br> EEB214H1 Evolution and Adaptation [24L/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 Ffor non-science students in all years and disciplines. Exclusion: BIO120H1/BIO150Y1/ZOO214Y1/ZOO324Y1 DR=SCI; BR=4

## EEB225H1 Biostatistics for Biological Sciences [36L/12P]

A statistics course designed especially for life science students, using examples from ecology and evolution 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: BIO120H1/BIO150Y1
Exclusion: BIO225H1/ECO220Y1/ECO227Y1/GGR270H1/
HMB325H1/ JBS229H1/PCL376H1/PSY201H1/
SOC300Y1/STA220H1/STA250H1
DR=SCI; BR=None

## ENV234H1 Environmental Biology: Structure and Function of Ecosystems (formerly ENV234Y1) [24L/18P]

This multidisciplinary course draws on elements from geology, soil science, biology and ecology to understand past and present environments and human impacts on landscapes and ecosystems. Emphasis on the structure, functioning and connectivity of aquatic and terrestrial ecosystems. Field trips and labs. Mandatory weekend daylong field trip (total cost about $\$ 20$ ).
Prerequisite: BIO120H1/GLG102H1/GGR100H1/FOR200H1/
FOR201H1 or permission of department
Exclusion: ENV234Y1
DR=SCI; BR=4
EEB255H1 Introduction to Biodiversity and Conservation Biology [24L/24T]
Introduction to the study biological diversity and its conservation. Topics include: valuing life on Earth, defining and measuring biodiversity, conservation strategies and tactics, identifying threats, quantifying risk, extinction, population genetics and demographic theory, protection and recovery. Active participation in lectures and tutorials, class presentations, and local field trips required.
Prerequisite: BIO120H1/BIO150Y1
Exclusion: EEB215H1/EEB365H1
DR=SCI; BR=4

## EEB263Y1 Comparative Vertebrate Anatomy [24L/24T/72P]

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.

## Ecology \& Evolutionary Biology

Prerequisite: BIO120H1/BIO150Y1
Exclusion: ZOO263Y1
DR=SCI; BR=4
EEB266H1 Animal Diversity: Invertebrates [24L/18P]
This course explores the diversity of invertebrate animals (e.g., sponges, jellyfish, flatworms, molluscs, annelids, nematodes, arthropods, and echinoderms), focusing on the special attributes and biological requirements of different groups, how they function in their natural environments, and what makes each group vulnerable to human-based exploitation. Labs emphasize recognition of major groups, and use living organisms where possible, but involve no invasive procedures.
Prerequisite: BIO120H1/BIO150Y1
Exclusion: EEB265Y1/ZOO265Y1
DR=SCI; BR=4
EEB267H1 Animal Diversity: Vertebrates [24L/18P]
This course explores the diversity of chordate animals (vertebrates, tunicates, and lancelets), focusing on morphological, physiological, ecological and behavioural traits that make each group special and how those traits increase vulnerability to human-based exploitation. Labs involve living organisms whenever possible, but only for display purposes.
Prerequisite: BIO120H1/BIO150Y1
Exclusion: EEB265Y1/ZOO265Y1
DR=SCI; BR=4
EEB268H1 Plant and Microbial Diversity [24L/15P]
Introduction to the biology of algae, fungi, and land plants. Lectures and labs emphasize the diversity of organisms with a focus on life cycles, ecology, and evolution.
Prerequisite: BIO120H1/150Y1
Exclusion: BIO251Y1
DR=SCI; BR=4

## EEB299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None

## 300-SERIES COURSES

EEB318H1 Principles of Evolution [24L]
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: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: Students who have taken EEB323H1/EEB324H1 cannot take (or concurrently take) EEB318H1. Students who have completed EEB318H1 may take EEB323H1/ EEB324H1/EEB362H1.
Recommended Preparation: BIO260H1/HMB265H1
DR=SCI; BR=4

## EEB319H1 Population Ecology [24L/36P]

Distribution of species; population growth and regulation; interactions within and among species; harvesting of natural resources; diseases; pest control. Basic ecological principles and applied issues discussed. Labs include experiments and computer simulations.
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1; JMB170Y1/
(MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1/

MAT157Y1; and a course in statistics from EEB225H1
(recommended); PSY201H1; STA220H1/STA250H1/
STA257H1; GGR270H1; HMB325H1; PCL376H1
Exclusion: BIO319H1/BIO320Y1
Recommended Preparation: ENV234H1/ENV234Y1 DR=SCI; BR=4

## EEB321H1 Community Ecology [24L/36P]

A comprehensive survey of community ecology: nature and analysis of community structure; disturbance and community development; species interactions; community assembly processes. As part of the course requirements there will be two day field trips held on weekends. A fee of approximately $\$ 15$ will be charged for each field trip. Both the field trips and computer exercises in weekly labs provide training in sampling, simulation, and data analysis.
Prerequisite: (BIO120H1, BIO220H1)/ BIO150Y1, and a course in statistics from EEB225H1 (recommended);
PSY201H1; STA220H1/STA250H1/STA257H1; GGR270H1
Exclusion: BIO320Y1/BIO321H1
Recommended Preparation: ENV234H1/ENV234Y1
DR=SCI; BR=4

## EEB322H1 Behaviour and Behavioural Ecology [24L/36P]

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: ( $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1$ )/BIO150Y1, and a course in statistics from EEB225H1 (recommended); PSY201H1; STA220H1/STA250H1/STA257H1; GGR270H1
Exclusion: ZOO322H1
DR=SCI; BR=4

## EEB323H1 Evolutionary Genetics [24L/24T]

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: (BIO120H1, BIO220H1)/BIO150Y, BIO260H1/ HMB265H1
Exclusion: BIO323H1
Recommended Preparation: (MAT135H1, MAT136H1)/
MAT135Y1/MAT136Y1/MAT137Y1/MAT157Y1

## DR=SCI; BR=4

EEB324H1 Evolutionary Ecology [24L/12T]
Empirical and theoretical approaches to key areas of research including natural selection, sexual selection, and life histories. Other topics may include phenotypic plasticity, speciation, co-evolution, and quantitative genetics.
Prerequisite: EEB318H1/EEB323H1
Exclusion: BIO324H1/ZOO324Y1
DR=SCI; BR=4
EEB328H1 Physiological Ecology [24L/24T]
An advanced treatment of the physiological mechanisms controlling plant and animal distribution and ecological

## Ecology \& Evolutionary Biology

success. Topics of focus include photosynthesis and resource balance, water and nutrient relations, temperature effects, and adaptations to abiotic stress.
Prerequisite: BIO251H1/BIO251Y1/BIO270H1/BIO252Y1 or an equivalent course in physiology
Exclusion: BIO328H1
DR=SCI; BR=4

## EEB330H1 Systematic Botany [24L/36P]

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: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: BOT300H1
Recommended Preparation: EEB337H1
DR=SCI; BR=4

## EEB331H1 Introduction to the Fungi [24L/36P]

Topics include fungal systematics, morphology, physiology, and ecology. The roles of fungi in the environment and their importance to man. A weekend 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: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: BOT301H1
Recommended Preparation: EEB268H1
DR=SCI; BR=4

## ENV334H1 Environmental Biology: Applied Ecology [24L/36P]

Applied issues in aquatic and terrestrial ecosystems. Topics include: ecology of agro-ecosystems and other humanmanaged ecosystems, bio-indicators of anthropogenic impacts, ecosystem restoration, and adaptive management. Field trips and laboratory exercises. Group projects address local management/restoration issues.
Prerequisite: ENV234H1
Exclusion: ENV234Y1
Recommended Preparation: a course in statistics
(EEB225H1 recommended)
DR=SCI; BR=4
EEB337H1 Families of Vascular Plants [24L/36P]
This course examines variation in morphology, predominant breeding systems, dispersal syndromes, and other features families of vascular plants in the Ontario flora. Students learn key characteristics for identification of important groups of free-sporing and seed-producing plants in the context of green plant evolution and phylogeny.
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: BOT307H1
DR=SCI; BR=4
EEB340H1 Comparative Plant Morphology [24L/36P]
This course focuses on land plant origins and subsequent diversification of land plant vegetative and reproductive form and function. Discussions synthesize morphological and anatomical knowledge from living organisms and fossil records with cellular, physiological, and molecular information on the developmental tool kit of land plants and their ancestors throughout geological time. Topics address the evolution of vegetative and reproductive meristems; stem, leaf, and root architecture; vascular tissue; the ovule habit; fertilization processes; and pollination biology.

Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: BOT310H1
DR=SCI; BR=4

## EHJ352H1 Evolution of the Human Genome [24L/12T]

Human genome diversity and evolution with a focus on current research. The course integrates applications of human evolutionary genomics to the understanding of human history and adaptation, the causes of disease, and genome structure and function. Topics include: comparative genomics, population genomics of adaptation, association mapping, repetitive/selfish DNA, and gene duplication.
Prerequisite: (BIO120H1, BIO220H1)/150Y, BIO260H1/
HMB265H1
DR=SCI; BR=4

## JHE353H1 History of Evolutionary Biology I [24L/12T]

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
(BIO120H1,BIO220H1)/150Y1
Exclusion: EEB353H1/HPS323H1/353H1
DR=HUM/SCI; BR=3

## JHE355H1 History of Evolutionary Biology II <br> [24L/12T]

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
(BIO120H1,BIO220H1)/150Y1
Exclusion: EEB355H1/HPS333H1/355H1
Recommended Preparation: JHE353H1, EEB353H1/
HPS353H1
DR=HUM/SCI; BR=3
EEB356H1 Insect Biology [24L/24P]
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; next offered in 2013-2014).
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: EEB/ZOO360H1, ZOO356H1
DR=SCI; BR=4

## EEB360H1 Entomology [24L/36P]

Introduction to the morphology, physiology, development, behaviour, ecology, evolutionary history, and biological significance of insects. Labs include making an insect collection and learning the major groups of insects. Mandatory one week of fieldwork in southern Ontario at the end of August. EEB360H1can fulfill a programs field course requirement. (Offered in alternate years; offered in 2012-13).

# Ecology \& Evolutionary Biology 

Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: EEB356H1/ ZOO356H1/ZOO360H1
DR=SCI; BR=4

## EEB362H1 Macroevolution [24L/12T]

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, community 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: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: ZOO362H1
DR=SCI; BR=4
EEB365H1 The Biology of Conservation [24L/24P]
An in-depth look at the biological pillars of conservation biology: taxonomy and systematics, genetics, and ecology. Biodiversity is considered at the level of species, populations, habitats, and ecosystem function. Topics include: levels and rates of loss of biodiversity, processes that generate biodiversity, modern approaches to studying biodiversity, conservation genetics, and ecosystem modelling.
Prerequisite: BIO 220 H 1 , EEB255H1
Exclusion: BIO365H1/ EEB215H1
DR=SCI; BR=4
EEB375H1 Environmental Factors [36L]
A lecture and seminar course dealing with the effects of physical and chemical environments on animals.
Prerequisite: ( $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1) / \mathrm{BIO} 150 \mathrm{Y} 1$
Exclusion: ZOO200Y1, ZOO375H1
Recommended Preparation: (BIO270H1, BIO271H1) DR=SCI; BR=4

## EEB382H1 Diversity of Fishes [24L/24P]

The systematics, morphology, ecology, behaviour biogeography, and conservation of fishes. Identification of major groups of fish; what makes each group biologically special and how those unique traits might contribute to conservation concerns. Laboratories focus on exercises designed to highlight how ichthyologists actually do research.
Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1
DR=SCI; BR=4

## EEB384H1 Biology of Amphibians [12L/36P]

Introduction to the natural history, evolution, and diversity of amphibians.
Exclusion: ZOO384H1
Recommended Preparation: EEB323H1, EEB362H1
DR=SCI; BR=4

## EEB386H1 Avian Biology [24L/12P]

The anatomy, physiology, evolution, ecology, behaviour, biogeography, and conservation of birds. Students work on an independent research project in tutorials. Labs include opportunities to examine museum specimens.

Prerequisite: (BIO120H1, BIO220H1)/BIO150Y1
Exclusion: ZOO386H1
DR=SCI; BR=4

## EEB388H1 Biology of Mammals [24L/36P]

Natural history, evolution, form and function, diversity, and conservation of mammals.
Prerequisite: $\mathrm{BIO}(120 \mathrm{H} 1,220 \mathrm{H} 1) / 150 \mathrm{Y} 1$
Exclusion: EEB389H1/ZOO388H1
DR=SCI; BR=4

## EEB397Y1 Research Project in Ecology and Evolutionary Biology [TBA]

An intermediate research project 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 open to highly self-motivated students who are in their Third Year and have a strong interest in ecology and/or evolutionary biology. Students are required to write up the results of their research in a formal paper, often in the format of a research article, and may be required to present the results at a poster session and/or participate in an oral presentation. Students should contact their potential supervisors over the summer before classes begin in September. Information regarding how to register for the course is available on the EEB website.
Prerequisite: Permission of department
DR=SCI; BR=4

## EEB398H0 Independent Experiential Study Project

An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
EEB399Y0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33
DR=SCI; BR=None

## 400-SERIES COURSES

NOTE: Not all field courses (EEB401H1 to EEB410H1) are offered each year; check the EEB website (field course page) to determine which courses are offered in a given year. EEB494H1, EEB495H1, EEB496H1 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.

## EEB403H1 Tropical Field Biology [TBA]

A two-week field course introducing 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. Student research projects included. Next offered in August 2012 (location: Peru).
Prerequisite: $(\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1) / 150 \mathrm{Y} 1$ and permission

# Ecology \& Evolutionary Biology 

of department
Exclusion: EEB303H1/BIO303H1
DR=SCI; BR=4

## EEB403H0 Tropical Field Biology [TBA]

A two-week field course introducing 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. Student research projects included. Next offered in August 2012 (location: Peru).
Prerequisite: (BIO120H1, BIO220H1)/150Y1 and permission of department
Exclusion: EEB303H1/BIO303H1
DR=SCI; BR=4

## EEB405H1 Temperate Field Biology [TBA]

A two-week field course offered in May or August at U of T's Koffler Scientific Reserve, King City, Ontario. Students learn the natural history of the region and conduct a field-based research project in ecology or evolutionary biology. Course next offered May 2012.
Prerequisite: (BIO120H1, BIO220H1)/150Y1 and permission of department
Exclusion: EEB305H1/BIO305H1
Recommended Preparation: a second- or third-year ecology, evolution or environmental biology course
DR=SCI; BR=4

## EEB405H0 Temperate Field Biology [TBA]

A two-week field course offered in May or August at U of T's Koffler Scientific Reserve, King City, Ontario. Students learn the natural history of the region and conduct a field-based research project in ecology or evolutionary biology. Course next offered May 2012.
Prerequisite: (BIO120H1, BIO220H1)/150Y1 and permission of department
Exclusion: EEB305H1/BIO305H1
Recommended Preparation: a second- or third-year ecology, evolution or environmental biology course
DR=SCI; BR=4

## EEB406H1 Inter-University Field Course [TBA]

A two-week field course offered May to August by another Ontario university (to various locations) as part of the Ontario Universities Program in Field Biology (OUPFB) The selection of field course modules are announced in January. For registration information consult the Ecology \& Evolutionary Biology Undergraduate Office or EEB's field course web page.
Prerequisite: Varies on module selected
DR=SCI; BR=4

## EEB407H1 Alpine Ecosystems [TBA]

A two-week field course at a high mountain field station 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.
Prerequisite: (BIO120H1, BIO220H1)/150Y1,
$\mathrm{BIO} 251 \mathrm{H} 1 / 251 \mathrm{Y} 1$ or (BIO270H1, BIO271H1)/252Y1 and
permission of department
Exclusion: EEB/BIO307H1
DR=SCI; BR=4

## EEB407HO Alpine Ecosystems [TBA]

A two-week field course at a high mountain field station 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.
Prerequisite: ( $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1) / 150 \mathrm{Y} 1$,
BIO251H1/251Y1 or (BIO270H1, BIO271H1)/252Y1 and permission of department
Exclusion: EEB307H1/BIO307H1
DR=SCI; BR=4
EEB409H1 Field Ornithology [TBA]
A two-week field course in May at the Wildlife Research Station in Algonquin Park, Ontario. Lectures on the biology of birds with daily field work emphasizing field identification (visual and acoustic), field research methodologies, analysis of census data, habitat relationships, and behaviour of territoriality, reproduction and migration. Student research projects included.
Prerequisite: (BIO120H1, BIO220H1)/150Y1 and permission of department
Exclusion: EEB309H1/ZOO304H1
DR=SCI; BR=4
EEB409HO Field Ornithology [TBA]
A two-week field course in May at the Wildlife Research Station in Algonquin Park, Ontario. Lectures on the biology of birds with daily field work emphasizing field identification (visual and acoustic), field research methodologies, analysis of census data, habitat relationships, and behaviour of territoriality, reproduction and migration. Student research projects included.
Prerequisite: (BIO120H1, BIO220H1)/150Y1 and permission of department
Exclusion: EEB309H1/ZOO304H1
PrerequisiteSCI; BR=4
EEB410H1 Lake Ecosystem Dynamics [TBA]
A two-week field course in August. The location alternates each summer: either the Harkness Fisheries Research Laboratory in Algonquin Park, Ontario or the coastal waters of the Greater Toronto region. Field and laboratory exercises demonstrate how interactions between physical, chemical, and biological parameters are crucial in understanding lake ecosystems. Fundamental and applied issues are discussed. Students collect, analyse, and interpret data, and complete a class project and an individual project.
Prerequisite: An introductory biology or introductory physical geography course, and permission of department
Exclusion: EEB310H1
Recommended Preparation: 200+ series course in ecology, environmental biology, or physical geography
DR=SCI; BR=4
EEB410H0 Lake Ecosystem Dynamics [TBA]
A two-week field course in August. The location alternates each summer: either the Harkness Fisheries Research Laboratory in Algonquin Park, Ontario or the coastal waters of the Greater Toronto region. Field and laboratory exercises demonstrate how interactions between physical, chemical,

## Ecology \& Evolutionary Biology

and biological parameters are crucial in understanding lake ecosystems. Fundamental and applied issues are discussed. Students collect, analyse, and interpret data, and complete a class project and an individual project.
Prerequisite: An introductory biology or introductory physical geography course, and permission of department
Exclusion: EEB310H1
Recommended Preparation: Recommended Preparation: 200+ series course in ecology, environmental biology, or physical geography
DR=SCI; BR=4

## EEB428H1 Global Change Ecology [36L]

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 FCEs from EEB at 300+ series or permission of department
Exclusion: BIO428H1
Recommended Preparation: ENV234H1/ENV234Y1 DR=SCI; BR=4

## EEB440H1 Ecology and Evolution of Plant-Animal

 Interactions [24L/12T]Major concepts in ecology and evolution from the perspective of plant-animal interactions. The richness of interactions between plants and animals is explored including antagonistic interactions (e.g., herbivory, carnivorous plants), mutualistic interactions (e.g., pollination, seed dispersal, ant-plant associations), and interactions involving multiple species across trophic levels.
Prerequisite: EEB318H1/EEB319H1/EEB321H1/EEB323H1/
EEB324H1/EEB328H1/EEB401H1/EEB403H1/
EEB404H1/EEB405H1/EEB406H1/EEB407H1/
EEB409H1/EEB410H1
Exclusion: BIO440H1
DR=SCI; BR=4

## EEB445H1 Ethnobotany [12L/24S]

The roles of plants in human societies, including modern ethnobotanical research and its methods. Possible topics: plant products, cultural uses and perceptions of plants, folk taxonomy, and scientific plant taxonomy. Students will deliver oral presentations and research and write a major paper, and are encouraged to draw upon experiences in their family and community.
Prerequisite: One or more of EEB268H1, EEB330H1, EEB331H1, EEB337H1, EEB340H1 or permission of department.
Recommended Preparation: none
DR=SCI; BR=4
EEB459H1 Population Genetics [24L/12T]
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, next offered in 2013-2014)
Prerequisite: BIO260H1/HMB265H1, EEB323H1
Exclusion: BIO459H1
Recommended Preparation: a solid understanding of basic
algebra and calculus

## DR=SCI; BR=4

## EEB460H1 Molecular Evolution and Genomics [24L/12T]

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: BIO240H1/BIO250Y1/BIO255Y1, BIO260H1/
HMB265H1
Exclusion: $\mathrm{BIO} 460 \mathrm{H} 1 / \mathrm{BIO} 461 \mathrm{H} 1$
DR=SCI; BR=4

## EEB465H1 Conservation Biology in Theory and Practice [36L]

Conservation biology from a Canadian and global perspective including targets for conservation, methods of assessment, tools for recovery, key philosophical issues, policy, and legislation. This course teaches the theory and practice of real-world conservation.
Prerequisite: EEB365H1
Exclusion: BIO465H1
Recommended Preparation: BIO120H1, BIO220H1)/
BIO150Y1 and courses in ecology, evolution, diversity,
behaviour, and genetics
DR=SCI; BR=4
EEB466H1 Approaches to the Study of Biodiversity [24L/24P]
This course uses the collections, research, and public gallery areas of the Royal Ontario Museum to expose students to the ways in which biodiversity is discovered, analyzed, and interpreted in a museum setting. Topics include: morphological and molecular approaches, taxonomy, classification, bioinformatics and e-taxonomy, and the interpretation of biodiversity for the public. Labs include student projects and a one-day field trip on a weekend (cost about \$20).
Prerequisite: Prerequisite for 2011-12: EEB362H1/EEB365H1
and at least one organismal course from EEB266H1,
EEB267H1, EEB268H1, EEB330H1, EEB331H1,
EEB337H1, EEB356H1, EEB360H1, EEB382H1,
EEB384H1, EEB386H1, EEB388H1, EEB389H1
Prerequisite for 2012-13: EEB365H1 and at least one organismal course from EEB266H1, EEB267H1, EEB268H1, EEB330H1, EEB331H1, EEB337H1, EEB356H1, EEB360H1, EEB382H1, EEB384H1,
EEB386H1, EEB388H1, EEB389H1
DR=SCI; BR=4

## EEB488H1 Research Issues in Ecology and Evolutionary Biology [36S]

This course is taken concurrently by students who are enrolled in EEB498Y1 Advanced Research Project in Ecology and Evolutionary Biology, and uses a combination of seminars, discussions, and presentations (including presentations by students) designed to cover issues commonly encountered when conducting research in ecology and evolutionary biology. Topics may include experimental design, effective use of statistics, scientific writing and publishing, public communication, ethics, and career development. Students will be required to attend departmental seminars. This half-course runs from September to April and meets in alternate weeks. Students

## Ecology \& Evolutionary Biology

who apply to EEB497H1 in the fall session can also apply to enrol concurrently in EEB488H1Y.
Prerequisite: Permission of the department
Corequisite: EEB497H1F/EEB498Y1
Exclusion: EEB499Y1
DR=SCI; BR=4

## EEB494H1 Seminar in Evolutionary Biology[24S]

Topics include evolutionary ecology and genetics, biodiversity, and behavioural ecology. Primary literature and research seminars form the basis for class discussion and short seminars. Student-led discussions.
Prerequisite: EEB323H1, EEB324H1; and permission of department
Exclusion: EEB494Y1/BIO494Y1
DR=SCI; BR=4

## EEB495H1 Seminar in Ecology [24S]

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: EEB319H1/EEB321H1; one of EEB319H1/
EEB321H1/EEB324H1/EEB365H1/ ENV234H1/
ENV234Y1; and permission of department
Exclusion: EEB495Y1/BIO495Y1
DR=SCI; BR=4

## EEB496H1 Seminar in Behaviour and Behavioural Ecology [24S]

Topics in behavioural ecology including predator-prey interactions, host-parasite interactions, mate choice, and foraging. Other topics for general discussions may include animal emotions, consciousness, culture and welfare. Evaluation based on presentations, participation in class discussions, and written assignments.
Prerequisite: EEB322H1; one of EEB318H1/EEB323H1/
EEB324H1/EEB362H1; PSY397H1/PSY362H1/
PSY390H1/PSY392H1, or an EEB field course; and
permission of department
Exclusion: EEB496Y1/BIO496Y1
DR=SCI; BR=4

## EEB497H1 Research Studies in Ecology \& Evolutionary Biology [TBA]

An independent studies half-course allowing students to conduct research which is supervised by a faculty member in the Department of Ecology and Evolutionary Biology. Highly motivated fourth-year students will work closely with a supervisor, and will be required to write up the results of their research in a final research paper. Students should contact a potential supervisor well before classes begin in the fall, winter, or summer session. Information on how to apply for the course is available on the EEB website. Students cannot take more than two independent research courses of EEB 497H1, 498Y1, and 499Y1, and the second project must be with a different supervisor. Students who apply to EEB497H1 in the fall session can also apply to enrol concurrently in EEB488H1Y.
Prerequisite: Permission of department
DR=SCI; BR=4

## EEB498Y1 Advanced Research Project in Ecology and Evolutionary Biology [TBA]

An advanced 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 highly self-motivated students who are in their Fourth-Year and have adequate background in ecology and/or evolutionary biology. Students are required to write up the results of their research in a formal paper, often in the format of a research article, and are also required to present the results at a poster session and/or oral presentation. Students should contact their potential supervisors over the summer before classes begin in September. Information regarding how to register for the course is available on the EEB website. Students in this course are also concurrently enrolled in EEB488H1Y Research Issues in Ecology and Evolutionary Biology. Prerequisite: Permission of department
Corequisite: EEB488H1Y
Exclusion: BOT460Y1/461H1/462Y1; ZOO498Y1/499Y1 DR=SCI; BR=4

EEB499Y1 Advanced Research Project in Ecology and Evolutionary Biology II [TBA]
Allows students to do another independent project, supervision of which must be different from EEB497H1/ EEB498Y1. Operates in the same manner as EEB498Y1.
Prerequisite: EEB497H1/EEB498Y1 and permission of department
Exclusion: BOT462Y1; ZOO499Y1
$\mathrm{DR}=\mathrm{SCI} ; \mathrm{BR}=4$

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
F.R. Casas, MSc, Ph D
J.S. Cohen, MA, Ph D
M.G.S. Denny, B Sc, Ph D
D.N. Dewees, B Sc, LL B, Ph D
S.M. Eddie, B Sc, Ph D
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G.V. Jump, BA, Ph D
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A.M. Kruger, BA, Ph D
G.F. Mathewson, B Com, Ph D
D.E. Moggridge, MA, Ph D
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Professor and Chair of the Department
A.J. Hosios, M Eng, MA, Ph D

Professor and Associate Chair, Graduate

## Studies

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Professor and Associate Chair,
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## University Professor

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J.L. Carr, MA, Ph D
G. Duranton, MA, M Sc, Ph D
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C. Gourieroux, Ph D
M. Gunderson, MA, Ph D, FRSC
I. Horstmann, BA, Ph D +
S. Howson, MA, Ph D
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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
A.J. Yatchew, MA, Ph D
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## Associate Professors

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E. Damiano, MA, Ph D
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G. Hamilton, MA, Ph D
G. Kambourov, MA, Ph D (University of Toronto Mississauga)
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M. Peski, MA, Ph D
P. Oreopoulos, MA, Ph D (University of Toronto Mississauga)
M.B. Stabile, MA, Ph D +

## Assistant Professors

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R. Deb, MA, M Phil, (University of Toronto Mississauga)
J. di Giovanni, BA, Ph D
S. Eli, (ABD)
K. Freitas, B Sc, PhD
Y. Halberstam, MA,, Ph D
K. Kroft, MA, Ph D
N. Li, (ABD) (University of Toronto Mississauga)
E. Malinova, MA, Ph D
J. Mondria, MA, Ph D
P. Morrow, MA, Ph D
C. Serrano, MS, MA , Ph D
X. Shi, MA, Ph D (University of Toronto Mississauga)
C. Stewart, MA, M Phil, M Sc, Ph D
J. Suzuki, MA , Ph D
M. Tanaka, MA, Ph D
L.M.F. Turner, M Sc, Ph D (University of Toronto Mississauga)
R. Wolthoff, MSc, Ph D (University of Toronto Mississauga)
Y. Wan, MA, Ph D

## Status Only Faculty <br> Avi J. Cohen <br> Adjunct Professor <br> D.P. Dungan, MA, Ph D <br> Senior Lecturers

L. Bailey, BA, MA (University of Toronto Mississauga)
G. Indart, MA, Ph D
J. Murdock, M Phil, Ph D

## Lecturers

S.A. Hussain, MA, Ph D
K. Wong, BA, MA , Ph D (University of Toronto

Mississauga)

## Sessional Lecturers

M. Anjomshoa, MA, M Phil
K. Furlong, MA, Ph D
G. Georgopoulos, MA, Ph D
R. Ghaeli, MA, Ph D
J. Kantarevic, MA, Ph D
P. Tomlinson, BA, Ph D
S. Wald, MA, MIR, Ph D
W.G. Wolfson, B Com, MA
A. Yang, MBA, MS, PhD
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 - whatever its 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 makes considerable use of mathematics in its enquiries. All economics programs require at least one course in mathematics.

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. The Economics Specialist program and the Economics and Mathematics program, with their greater emphasis on mathematics, are designed to prepare students for graduate study, and are an excellent starting place.

Undergraduate Administrator: R. Innes
Undergraduate Assistant: D. Navarro
Commerce Assistant: J. Fan
Enquiries: 150 St.George Street (416-978-4603)

## Economics Programs

These are limited enrolment programs. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol (please read entry requirements for each program carefully). Consult the Registration Handbook \& Timetable for details.
NOTE: Please read prerequisites and exclusions carefully. Course prerequisites are strictly enforced and are not just "recommended preparation." For all mathematics and statistics course prerequisites, the level of the course is also important. For all third and fourth year economics courses, FULL YEAR intermediate course prerequisites are mandatory: a similar "half course" version is not acceptable. All prerequisites must be fully completed before a course can be taken. Courses that are prerequisites cannot be taken simultaneously with the courses for which they are a prerequisite (i.e., they are not "co-requisites"). Students from other institutions must show their transcripts to the department if they are using prior courses as prerequisites. The same rules apply.

## Economics Specialist (Arts program)

The Economics Specialist program is a limited enrolment program. All students who request the program and obtain at least the specified marks in the required courses will be eligible to enroll.
Students interested in the Specialist program apply and enter from the Major program, after having completed the Year 2 requirements of the program as described below.
Entry Requirements (from the Major program):
A minimum of $70 \%$ in each course in the trio of intermediate courses:

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ECO206Y1(70%), and
ECO208Y1(70%), and
ECO22OY1(70%)/STA257H1(70%),ECO206Y1,
ECO227Y1(70%)/(STA261H1(70%)).
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Note: In order to meet the pre-requisites for the specialistoriented second-year courses (ECO206Y1, ECO208Y1, and ECO227Y1), students must obtain a mark of at least 70\% in ECO100Y1, and earn a minimum of $60 \%$ in (MAT135H1, MAT136H1) or $55 \%$ in MAT137Y1.

Program Course Requirements: 12 full courses or their equivalent
First Year (2.0 FCE):
ECO100Y1;

## Economics

(MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1
Note: MAT133Y1 is not a suitable substitute for (MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1.
Second Year (Core Courses, 3.0 FCE):
ECO208Y1, ECO220Y1/ECO227Y1/(STA257H1, STA261H1) Third Year (Core Courses, 1.5 FCE):
ECO325H1, ECO200Y1/ECO326H1, ECO204Y1/ECO375H1 Third Year and Higher (Electives, 5.5 FCE):
4.5 300-level or higher
1.0400 -level

## Notes:

While 200-level or higher math or statistics courses may complement the Economics Specialist courses, they cannot be used as substitutes for economics courses in this program.
Students are nevertheless encouraged to take more math if they plan on pursuing graduate studies. Students should especially consider MAT223H1/MAT240H1 (Algebra), and MAT235Y1/MAT237Y1 (Multivariate Calculus), or even consider doing a Minor program in Mathematics.
ECO475H1 is strongly recommended
STA302H1/STA303H1 are not accepted in lieu of ECO375H1
(STA250H1,STA255H1) are not accepted in lieu of ECO220Y1/ECO227Y1/(STA257H1,STA261H1).

## Economics Major (Arts program)

This is a limited enrolment program. Space permitting, students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol. Achieving these markes does not necessarily guarantee admission to the program in a given year.
Required courses and grades for program enrolment:
(ECO100Y1 with a final mark of at least $67 \%$, or ECO105Y1 with a final mark of at least $80 \%$ ), AND

MAT133Y1 with a final mark of at least $63 \%$, or
(MAT135H1 with a final mark of at least $60 \%$ and MAT136H1 with a final mark of at least $60 \%$ ), or
MAT137Y1 with a final mark of at least $55 \%$, or
MAT157Y1 with a final mark of at least $55 \%$.
Program Course Requirements: 7 full courses or their equivalent
First Year (2.0 FCE):
ECO100Y1/ECO105Y1;
MAT133Y1/(MAT123H1,MAT124H1)/
(MAT135H1,MAT136H1)/MAT137Y1/MAT157Y1
Second Year (Core courses, 3.0 FCE):
ECO200Y1/ECO204Y1/ECO206Y1,
ECO202Y1/ECO208Y1/ECO209Y1,
ECO220Y1/ECO227Y1/(STA250H1, STA255H1)/(STA257H1,
STA261H1)
Third and Higher Years (Electives, 2.0 FCE):
1.5 FCE 300+ series ECO courses

At least 0.5 FCE at the 400 -level

## NOTE:

Students in the Major program in Economics cannot be
enrolled in the Minor program in Environmental Economics.

## Economics Minor (Arts program)

Required courses and grades for program enrolment:
(ECO100Y1 with a final mark of at least $67 \%$, or ECO105Y1 with a final mark of at least $80 \%$ ), AND

MAT133Y1 with a final mark of at least $63 \%$, or
(MAT135H1 with a final mark of at least $60 \%$ and MAT136H1 with a final mark of at least $60 \%$ ), or

MAT137Y1 with a final mark of at least $55 \%$, or
MAT157Y1 with a final mark of at least $55 \%$.
Program Course Requirements: 4 full courses or their equivalent
First Year (2.0 FCE):
ECO100Y1/ECO105Y1;
MAT133Y1/(MAT123H1,MAT124H1)/
(MAT135H1,MAT136H1)/MAT137Y1/MAT157Y1
Second Year (Core courses, 1.0 FCE):
ECO206Y1
Third and Higher Years (Electives, 1.0 FCE):
1.0 FCE 300+ series ECO courses

## NOTES:

Students enrolled in the Minor Program in Economics cannot be enrolled in any other Minor, Major, Specialist or Joint Specialist Economics program;
Many 300-level and higher courses in economics require ECO220Y1. While not a formal part of the Economics Minor program, students MUST meet the specified prerequisites for 300+ economics courses, and should seriously consider taking ECO220Y1.

## Financial Economics Specialist (Science program)

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.
This is a Type 2L limited program and so meeting the minimum course marks specified above will not necessarily guarantee admission.
Students interested in the Specialist program apply and enter from the Major program, after having completed the Year 2 requirements of the program as described below.

Entry Requirements (from the Major program):
A minimum of $80 \%$ in each course in the trio of intermediate courses:
ECO208Y1(80\%), and
ECO206Y1, ECO208Y1, ECO227Y1(80\%)/(ECO227Y1/
(STA257H1(80\%),STA257H1, ECO206Y1(80\%), and
STA261H1(80\%)).
Note: In order to meet the pre-requisites for the specialistoriented second-year courses (ECO206Y1, ECO208Y1, and ECO227Y1), students must obtain a mark of at least 70\% in ECO100Y1, and earn a minimum of $60 \%$ in (MAT135H1,

MAT136H1) or 55\% in MAT137Y1.
Program Course Requirements: 13 full courses or their equivalent

First Year (2.0 FCE):
ECO100Y1;
(MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1
Note: MAT133Y1 is not a suitable substitute for (MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1.
Second Year (Core Courses, 3.0 FCE):
STA261H1)
Third Year (Core Courses, 2.5 FCE):
ECO325H1, ECO326H1, ECO375H1
ECO358H1, ECO359H1
Third Year and Higher (Electives, 5.5 FCE, at least 1.0 at the 400-level):
1.0 FCE from ECO349H1, ECO356H1, ECO357H1, ECO456H1, ECO461H1/ECO460H5, ECO462H1/ ECO434H5, ECO463H5, ECO475H1
4.5 additional 300+ ECO credits

## Notes:

Some required courses at upper-year levels 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.
MAT223H1/ MAT240H1 is recommended as preparation for ECO375H1. Students taking one of these MAT courses can have it count in lieu of a 0.5300 -level ECO credit required for this program.
(MAT235Y1/MAT237Y1)/ECO210H1 is strongly recommended for this program. Students taking one of these courses can have it count in lieu of 0.5 300-level credit required for this program.
ECO475H1 is strongly recommended
STA302H1/STA303H1 are not accepted in lieu of ECO375H1
(STA250H1,STA255H1) are not accepted in lieu of ECO220Y1/ECO227Y1/(STA257H1,STA261H1).

## Economics \& Mathematics Specialist (Science program)

The Economics \& Mathematics Specialist program is a limited enrolment program. All students who request the program and obtain at least the specified marks in the required courses will be eligible to enroll.
Students interested in the Economics \& Mathematics Specialist program apply and enter from either the Economics Major or Mathematics Major program, after having completed the Year 2 requirements of the program as described below.

Entry Requirements (from the Economics or Mathematics Major program):

## MAT137Y1.

Note: In order to meet the pre-requisites for the specialistoriented second-year courses (ECO206Y1, ECO208Y1, and ECO227Y1), students must obtain a mark of at least 70\% in ECO100Y1, and earn a minimum of $60 \%$ in (MAT135H1, MAT136H1) or 55\% in MAT137Y1.

Program Course Requirements: 13 full courses or their
equivalent
First Year (2.0 FCE):
ECO100Y1;
MAT137Y1
Second Year and Higher (Core Courses, 8.5 FCE):
ECO206Y1, ECO208Y1, ECO220Y1/ECO227Y1/
(STA257H1, STA261H1)
MAT223H1/MAT240H1, MAT224H1/MAT247H1, MAT237Y1,
MAT246H1, MAT244H1/MAT267H1
ECO325H1, ECO326H1, ECO375H1
MAT336H1/MAT337H1, APM462H1
Third Year and Higher (Elective Courses, 2.5 FCE):
$0.5300+$ ECO course
1.0 400-level ECO course
1.0 300-level or higher MAT (or APM) courses (in addition to APM462H1).

## Notes:

Students must meet all prerequisites for upper-year math and economics courses, and should choose their sequencing of courses accordingly.
MAT223H1/MAT240H1 may be taken in First Year ECO 475 H 1 is strongly recommended.
STA302H1/STA303H1 are not accepted in lieu of ECO375H1
MAT157Y1 may substitute for MAT137Y1, in which case MAT246H1 can no longer be taken, and students may substitute MAT224H1, MAT247H1, or any 300-level MAT or APM course. Similarly, MAT257Y1 may be substituted for MAT137Y1, and MAT357H1 may substitute for MAT337H1.

## Other Programs

Finance \& Economics (BCom) - See Rotman Commerce

## Environmental Economics - See Centre for Environment

## Economics Courses

## ECO100Y1 Introduction to Economics [48L/24T]

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: ECO105Y1
Recommended Preparation: MCV4U (Calculus \& Vectors) and MHF4U (Advanced Functions), or equivalent secondary school mathematics credits
DR=SOC SCI; BR=3

## ECO105Y1 Principles of Economics for Non-Specialists

 [48L/24T]Fundamentals for consumers, businesses, citizens. Microeconomics focuses on cost/benefit analysis: gains from trade, price coordination, competition/monopoly, efficiency/ equity tradeoffs, government/market failures, environmental policies, income/wealth distributions. Macroeconomics focuses on: GDP growth, unemployment, inflation, monetary/ fiscal policies, business cycles, exchange rates, government

## Economics

deficits/debt, globalization. Emphasizes economic literacy, fewer mathematical tools than ECO100Y1
Exclusion: ECO100Y1
DR=SOC SCI; BR=3

## ECO200Y1 Microeconomic Theory [48L/24T]

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.
Prerequisite: ECO100Y1(67\%)/ECO105Y1(80\%);
MAT133Y1/(MAT123H1, MAT124H1)/(MAT135H1,
MAT136H1)/MAT137Y1/MAT157Y1
Exclusion: ECO204Y1,ECO206Y1
DR=SOC SCI; BR=3

## ECO202Y1 Macroeconomic Theory and Policy [48L/24T]

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 BCom program; please see ECO209Y1.
Prerequisite: ECO100Y1(67\%)/ECO105Y1(80\%);
MAT133Y1/(MAT123H1, MAT124H1)/(MAT135H1,
MAT136H1)/MAT137Y1/MAT157Y1
Exclusion: ECO208Y1, ECO209Y1
DR=SOC SCI; BR=3

## ECO204Y1 Microeconomic Theory and Applications (for Commerce) [48L/24T]

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 Commerce programs.
Prerequisite: ECO100Y1(67\%), MAT133Y1/
(MAT123H1,MAT124H1)/(MAT135H1, MAT136H1)/
MAT137Y1/MAT157Y1
Exclusion: ECO200Y1, ECO206Y1
DR=SOC SCI; BR=3

## ECO206Y1 Microeconomic Theory [48L/24T]

This course deals more rigorously and more mathematically with the topics included in ECO200Y1and is intended primarily for students in certain Economics Specialist programs.
Prerequisite: ECO100Y1(70\%); MAT133Y1(63\%)/
(MAT123H1(63\%),MAT124H1(63\%))/(MAT135H1(60\%),
MAT136H1(60\%))/MAT137Y1(55\%)/MAT157Y1(55\%)
Exclusion: ECO200Y1, ECO204Y1
DR=SOC SCI; BR=3
ECO208Y1 Macroeconomic Theory [48L/24T]
This course deals more rigorously and more mathematically with the topics included in ECO202Y and is intended primarily for students in certain Economics Specialist programs.

Prerequisite: ECO100Y1(70\%); MAT133Y1(63\%)/ (MAT123H1(63\%),MAT124H1(63\%))/(MAT135H1(60\%),
MAT136H1(60\%))/MAT137Y1(55\%)/MAT157Y1(55\%)
Exclusion: ECO202Y1, ECO209Y1
DR=SOC SCI; BR=3

## ECO209Y1 Macroeconomic Theory and Policy (for

 Commerce) [48L/24T]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 Commerce programs.
Prerequisite: ECO100Y1(67\%); MAT133Y1/
(MAT123H1,MAT124H1)/(MAT135H1,MAT136H1)/
MAT137Y1/MAT157Y1
Exclusion: ECO202Y1, ECO208Y1
DR=SOC SCI; BR=3

## ECO210H1 Mathematical Methods for Economic Theory

 [24L/12T]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.
Prerequisite: ECO100Y1(67\%)/ECO105Y1(80\%); MAT133Y1(63\%)/(MAT123H1(63\%),MAT124H1(63\%))/
(MAT135H1(60\%), MAT136H1(60\%))/ MAT137Y1(55\%)/
MAT157Y1(55\%)
Corequisite: ECO200Y1/ECO204Y1/ECO206Y1
DR=SOC SCI; BR=None

## ECO220Y1 Quantitative Methods in Economics [48L/24T]

Numerical and graphical data description techniques; data collection and sampling; probability; sampling distributions; statistical inference; hypothesis testing and estimation; 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 explain results.
Note that for Rotman Commerce students there is no Breadth Requirement status for this course (and courses deemed equivalent in the program requirements in the Calendar).
Prerequisite: ECO100Y1(67\%)/ECO105Y1(80\%); MAT133Y1/(MAT123H1, MAT124H1)/(MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1
Exclusion: ECO227Y1, GGR270Y, GGR270H1, PSY201H1, PSY202H1, SOC300Y, SOC300H1, STA107H,
STA220H1, STA221H1, STA247H1, STA248H1,
STA250H1, STA255H1, STA257H1, STA261H1
DR=SOC SCI; BR=3 + 5

## ECO227Y1 Quantitative Methods in Economics

 [48L/24T]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.
Prerequisite: ECO100Y1(70\%); MAT133Y1(63\%)/ (MAT123H1(63\%),MAT124(63\%))/(MAT135H1(60\%), MAT136H1(60\%))/MAT137Y1(55\%)/MAT157Y1(55\%)
Corequisite: Recommended Co-requisite: MAT223H1/

MAT240H1, MAT235Y1/MAT237Y1/ECO210H1
Exclusion: ECO220Y1, GGR270Y, GGR270H1, PSY201H1, PSY202H1, SOC300Y, SOC300H1, STA107H, STA247H1, STA248H1, STA250H1, STA255H1, STA257H1, STA261H1
DR=SOC SCI; BR=5
ECO230Y1 International Economic Institutions and Policy [48L/24T]
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. Prerequisite: ECO100Y1(67\%)/ECO105Y1(80\%)/enrolment in the International Relations Specialist or Major
Programs, or the IR/Peace and Conflict Studies joint
Specialist Program
Exclusion: ECO328Y1/ECO364H1/ECO365H1/ECO364H5/ ECO365H5
DR=SOC SCI; BR=3
ECO239Y1 Labour Markets and Policies [48L/24T] 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.
Prerequisite: ECO100Y1(67\%)/ECO105Y1(80\%)
Exclusion: ECO339Y1
DR=SOC SCI; BR=3

## WDW244H Labour Relations

See Woodsworth College

## ECO250Y1 Special Topics in Economics [48L]

Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=None
ECO251H1 Special Topics in Economics [24L]
Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=None

## ECO252H1 Special Topics in Economics [24L]

Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=None

## ECO299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.

## DR=SOC SCI; BR=None

ECO301Y1 European Economic History, 12501750 [48L/24T]
The development of the West European economy from the apogee of the Commercial Revolution in the mid-12th 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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1
Exclusion: ECO201Y1
DR=SOC SCI; BR=3

## ECO302H1 Comparative Economic Institutions in History [24L]

The changing relations of economies to societies from primitive tribes to modern times. Origins of trade, money and markets following the work of Karl Polanyi.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1
Exclusion: ECO302Y, ECO354H1(2001-02 and 2002-03) DR=SOC SCI; BR=3

## ECO303Y1 The Economic History of Modern Europe to

 1914 [48L/24T]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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1
Exclusion: ECO203Y1
DR=SOC SCI; BR=3

## ECO306H1 American Economic History [24L/12T]

A survey of American economic history from the ante-bellum period to the present. Potential topics include the the rapid growth of the American economy in the late 19th and early 20th century; Causes of the onset of the Great Depression; The economic impact of slavery and its aftermath; Health and demographic trends; and 20th century trends in inequality.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO202Y1/ECO208Y1/ECO209Y1; ECO220Y1/ ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
DR=SOC SCI; BR=3

## ECO408H1 The Economics of Life: A Historical Perspective (Formerly ECO308H1) [24L]

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

## Economics

fertility in the nineteenth century and the puzzling intertemporal divergence between height and wealth during the early nineteenth century.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1;
ECO202Y1/ECO208Y1/ECO209Y1; ECO220Y1/
ECO227Y1/(STA250H1,STA255H1)/
(STA257H1,STA261H1); At least one FCE in ECO at the 300 level or higher.
Exclusion: ECO355H1 (The Economics of Life: A Historical
Perspective), ECO308H1
DR=SOC SCI; BR=3
ECO310Y1 Industrial Organization and Public Policy [48L/24T]
A study of how firms compete and structure of markets. Emphasize oligopoly markets and use of game theory. In addition to theory, study empirical industrial organization including estimation of demand. Applications to competition policy with a focus on evaluating antitrust implications of horizontal mergers.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1,
ECO220Y1/ECO227Y1/(STA247H1, STA248H1)/
(STA250H1, STA255H1)/(STA257H1, STA261H1) DR=SOC SCI; BR=3

## ECO313H1 Environmental Economics and Policies [24L]

This course demonstrates how 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: ECO200Y1/ECO204Y1/ECO206Y1,

ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1) DR=SOC SCI; BR=3
ECO314H1 Energy and Resource Economics [24L]
This course surveys important features of energy markets and key challenges such as global warming and other environmental externalities. Microeconomic tools, like energy demand and supply analysis are used. Topics include renewable energy, feed-in-tariffs, conservation, carbon taxes, 'cap-and-trade' and incentive regulation.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1, ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1) DR=SOC SCI; BR=3
ECO316H1 Applied Game Theory [24L]
Focuses on core ideas and concepts and on applications in various fields such as economics, political science, evolutionary biology. Topics may include voting theory, electoral competition, theory of public goods, free rider problem, oligopoly, repeated interaction, bargaining, evolutionary equilibrium, matching, and auctions.
Note: This course cannot be taken as a substitute in programs that require ECO 326 H 1 .
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1
Exclusion: ECO326H1, ECO326H5
DR=SOC SCI; BR=3
ECO320H1 Economic Analysis of Law [24L]
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: ECO200Y1/ECO204Y1/ECO206Y1,
MAT133Y1/(MAT123H1,MAT124H1)/(MAT135H1,
MAT136H1)/MAT137Y1/MAT157Y1
DR=SOC SCI; BR=3
ECO321Y1 Canadian Economic History since 1500 [48L]
Canadian economic growth and development as viewed through the staples thesis of Harold Innis. Reference to United States economic history throughout the course.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1 Exclusion: ECO221Y1, ECO307H1, ECO323Y5
DR=SOC SCI; BR=3

## ECO324Y1 Economic Development [48L]

Economic development theory, policy, and evidence related to the economic transformation of developing countries, including industrial and agricultural sector strategies, international trade policy, public sector activities and the importance of productivity growth and human development programs.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1, ECO202Y1/ECO208Y1/ECO209Y1, ECO220Y1/
ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
DR=SOC SCI; BR=3

## ECO325H1 Advanced Economic Theory - Macro

 [24L/12T]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: ECO208Y1/ECO202Y1(70\%)/
ECO209Y1(70\%), ECO220Y1(70\%)/ECO227Y1/
(STA247H1(70\%),STA248H1(70\%))/(STA250H1(70\%), STA255H1(70\%))/(STA257H1,STA261H1)
Recommended Preparation: MAT223H1/MAT240H1, MAT235Y1/MAT237Y1/ECO210H1
DR=SOC SCI; BR=3

## ECO326H1 Advanced Economic Theory - Micro [24L/12T]

Game theory and applications. Topics include: strategic and extensive games, with applications to economics.
Prerequisite: ECO200Y1(70\%)/ECO204Y1(70\%)/ ECO206Y1, ECO220Y1(70\%)/ECO227Y1/ (STA247H1(70\%),STA248H1(70\%))/(STA250H1(70\%), STA255H1(70\%))/(STA257H1,STA261H1)
Exclusion: ECO316H1, ECO326H5
Recommended Preparation: MAT223H1/MAT240H1,
MAT235Y1/MAT237Y1/ECO210H1
DR=SOC SCI; BR=3
ECO332H1 Economics of the Family [24L]
A use of microeconomics to study the behaviour of the family, including marriage, divorce, intra-family allocations, investment in children and gender roles.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
DR=SOC SCI; BR=3

## ECO333Y1 Urban Economics [48L/24T]

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: ECO200Y1/ECO204Y1/ECO206Y1;
MAT133Y1/(MAT123H1,MAT124H1)/(MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1
DR=SOC SCI; BR=3

## ECO336Y1 Public Economics [48L]

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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1;
ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)

## Exclusion: ECO236Y1

DR=SOC SCI; BR=3

## ECO339Y1 Economics of Labour [48L/24T]

The operation of labour markets; determinants of supply and demand for labour; wage differentials; discrimination; investment in schooling and training; unemployment; economics of unions.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
Exclusion: ECO239Y1, 361Y5
DR=SOC SCI; BR=3
ECO340H1 Economics of Income Distribution [24L] 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: ECO200Y1/ECO204Y1/ECO206Y1;
ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
DR=SOC SCI; BR=3
ECO342Y1 Twentieth Century Economic History [48L]
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 1930s, the period since 1945, international trade, the balance of payments and exchange rate mechanisms, growth performance of the major industrial countries.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1/
(ECO230Y1, POL208Y1)
DR=SOC SCI; BR=3

## ECO349H1 Money, Banking and Financial Markets [24L]

This course studies the interaction of the monetary and banking sectors with financial markets and the broader economy. It builds especially on tools developed in intermediate macroeconomics, but also focuses on the institutional structure of the Canadian monetary sector, including the role and operation of the Bank of Canada. Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1,

ECO202Y1/ECO208Y1/ECO209Y1, ECO220Y1/
ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
Exclusion: ECO349H5
DR=SOC SCI; BR=3
ECO350Y1 Special Topics in Economics [48L]
Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=3
ECO351H1 Special Topics in Economics [24L]
Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=3
ECO352H1 Special Topics in Economics [24L]
Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=3

## ECO356H1 Special Topics in Financial Economics

 [24L]Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=3
ECO357H1 Islamic Banking and Finance [24L]
What makes Islamic Banking and Finance distinct? This course provides an overview of Islamic Economics, Finance and Banking. Students will develop basic understanding and principles governing Islamic Economics \& Finance, its history, growth and place in the world economy.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/ (STA250H1,STA255H1)/(STA257H1,STA261H1)

## Exclusion: ECO356H1

DR=SOC SCI; BR=3

## ECO358H1 Financial Economics I [24L]

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: ECO200Y1/ECO204Y1/ECO206Y1,
ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
Exclusion: ACT349H1, MGT331Y1, MGT337Y1, RSM332H1
DR=SOC SCI; BR=3

## ECO359H1 Financial Economics II: Corporate Finance [24L]

Agency and incomplete information problems inherent in financial transactions; the role of contractual arrangements

## Economics

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: ECO358H1
Exclusion: ACT349H1, MGT331Y1, MGT337Y1, RSM333H1
DR=SOC SCI; BR=3

## ECO362H1 Economic Growth [24L]

The course considers a broad range of issues that underlie economic growth, including technical progress and the accumulation of human and physical capital. Beyond these factors, the course also investigates the efficiency with which capital is used, the role of foreign trade, and the possible roles for government and culture.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1,
ECO202Y1/ECO208Y1/ECO209Y1, ECO220Y1/
ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
Exclusion: ECO352H1, ECO360Y1, ECO362H5
DR=SOC SCI; BR=3
ECO364H1 International Trade Theory [24L/12T]
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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1, ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
Exclusion: ECO230Y1/ECO328Y1
DR=SOC SCI; BR=3

## ECO365H1 International Monetary Economics [24L/12T]

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, Chinas exchange rate policy and the Euro.
Prerequisite: ECO202Y1/ECO208Y1/ECO209Y1
Exclusion: ECO230Y1/ECO328Y1
DR=SOC SCI; BR=3

## ECO369Y1 Health Economics [48L]

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: ECO200Y1/ECO204Y1/ECO206Y1, ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/ (STA250H1,STA255H1)/(STA257H1,STA261H1) DR=SOC SCI; BR=3
ECO370Y1 Economics of Organizations [48L]
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.

Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
Exclusion: ECO381H1, ECO426H1
DR=SOC SCI; BR=3

## ECO374H1 Applied Econometrics (for Commerce) [24L/12T]

An introduction to econometrics similar to ECO375H1, 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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1,
ECO220Y1(70\%)/ECO227Y1/(STA257H1,STA261H1)
Exclusion: ECO327Y1/ECO375H1, STA302H1
Recommended Preparation: MAT223H1/MAT240H1
DR=SOC SCI; BR=3
ECO375H1 Applied Econometrics I [24L/12T]
Introduction to econometrics. Statistical foundations and the interpretation of multiple regression models, with an emphasis on cross-sectional data. Application of regressions to a wide variety of economic questions and data sources, including the use of statistical software. Problems in the identification of causality, and an introduction to methods of addressing common statistical issues
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1,
ECO220Y1(70\%)/ECO227Y1/(STA257H1,STA261H1)
Exclusion: ECO327Y1/ECO374H1, STA302H1
Recommended Preparation: MAT223H1/MAT240H1
DR=SOC SCI; BR=3

## ECO475H1 Applied Econometrics II (Formerly ECO376H1) [24L/12T]

A research-oriented course continuing from ECO 375 H . 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: ECO375H1(70\%)/ECO374H1(80\%), NOTE: STA302H1 is not accepted preparation. Exclusion: ECO376H1, ECO327Y1, ECO327Y5, STA302H1 DR=SOC SCI; BR=3

## ECO380H1 Managerial Economics I: Competitive Strategy [24L]

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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1) DR=SOC SCI; BR=3

## ECO381H1 Managerial Economics II: Personnel Economics [24L]

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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
Exclusion: ECO370Y1, ECO426H1
DR=SOC SCI; BR=3
ECO398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None
ECO399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None

## 400-level courses

## 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.

ECO401H1 Topics in Economic Policy [24L/12T]
This course covers basic issues in the theoretical and empirical evaluation of public policy. Sample topics include income redistribution through taxation and the provision of social insurance and public goods, the mitigation of externalities, and welfare analysis in behavioral models.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1;
ECO202Y1/ECO208Y1/ECO209Y1; ECO220Y1/
ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1); At least
one FCE in ECO at the 300 level or higher.
DR=SOC SCI; BR=3
ECO402H1 Topics in Health Economics [24L/12T]
This course explores a variety of topics in health economics, providing students with an overview of current and historical institutional characteristics of the market for, and public policy towards, health care. Students will apply theoretical and empirical tools to current domestic and international issues in health policy. No previous background in health economics is required.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1;
ECO202Y1/ECO208Y1/ECO209Y1; ECO220Y1/
ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1); At least
one FCE in ECO at the 300 level or higher.
DR=SOC SCI; BR=3

## ECO404H1 Topics in Managerial Economics

 [24L/12T]Applies quantitative economic methods to real world business-oriented cases. Sample topics include: New product design, Decision making under uncertainty, Market segmentation and price discrimination, Inventory analysis, Game theoretic analysis of price wars, Financial portfolio
design, and optimal pricing. Involves substantial modeling in Excel, regression analysis, optimization methods, and financial reports.
Prerequisite: ECO200Y1(75\%)/ECO204Y1/ECO206Y1;
ECO220Y1/ECO227Y1/(STA250H1,STA255H1)/
(STA257H1,STA261H1); At least one FCE in ECO at the 300 level or higher.
Recommended Preparation: ECO374H1/ECO375H1
DR=SOC SCI; BR=3

## ECO405H1 Topics in Productivity Theory and Measurement [24L]

This course considers the economic theory of production and its application to the measurement of productivity levels and growth. Included will be discussions of index numbers, stochastic frontiers and data envelopment analysis. An effort will be made to investigate the data problems that arise when applying the theory to evidence at the firm and country level. These problems include the inclusion of new goods, quality changes measuring capital inputs and service output levels.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1;
ECO202Y1/ECO208Y1/ECO209Y1; ECO220Y1/
ECO227Y1/(STA250H1,STA255H1)/
(STA257H1,STA261H1); At least one FCE in ECO at the 300 level or higher.
DR=SOC SCI; BR=3
ECO407H1 Competing Views in Macroeconomic Theory and Policy [24L]
Provides students with a systematic analysis of competing perspectives on key areas of macroeconomic theory and policy. Special attention paid to competing views regarding key fiscal, monetary, and trade policy issues as applied to Canada.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1; ECO202Y1/ECO208Y1/ECO209Y1; ECO220Y1/ ECO227Y1/(STA250H1,STA255H1)/ (STA257H1,STA261H1); At least one FCE in ECO at the 300 level or higher.
DR=SOC SCI; BR=3
ECO409H1 Topics in Money, Banking, and Finance [24L]
This course examines the foundations of money and financial institutions using tools mastered in micro and macroeconomics. The goal is a set of principles valid for the analysis of monetary policy and institutional regulation in a variety of real world settings.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1;
ECO202Y1/ECO208Y1/ECO209Y1;ECO220Y1/
ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1); At least
one FCE in ECO at the 300 level or higher.
DR=SOC SCI; BR=3
ECO416H1 Macroeconometric Models for Policy Analysis and Forecasting [24L/12T]
The construction and operation of macroeconometric models. The use of models for conducting policy simulations and for generating quantitative forecasts of economic activity. Prerequisite: ECO325H1, ECO327Y1/ECO374H1/

## Economics

ECO375H1
DR=SOC SCI; BR=3
ECO418H1 Empirical Applications of Economic Theory [24L]
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/ECO374H1/ECO375H1
DR=SOC SCI; BR=3
ECO419H1 International Macroeconomics [24L]
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: ECO200Y1/ECO204Y1/ECO206Y1,
ECO202Y1/ECO208Y1/ECO209Y1, ECO220Y1/
ECO227Y1/(STA247H1,STA248H1)/
(STA250H1,STA255H1)/(STA257H1,STA261H1)
permission of instructor
DR=SOC SCI; BR=3
ECO420Y1 Special Topics in Economics [48S]
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 Administrator for details.)
Prerequisite: TBA, permission of instructor
DR=SOC SCI; BR=3
ECO421H1 Special Topics in Economics [24S]
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 Administrator for details.)
Prerequisite: TBA; permission of instructor
DR=SOC SCI; BR=3
ECO422H1 Special Topics in Economics [24S]
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 Administrator for details.)
Prerequisite: TBA, permission of instructor
DR=SOC SCI; BR=3

## ECO423H1 Topics in North American Economic History

 [24L]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: ECO206Y1(70\%),ECO220Y1(70\%)/
ECO227Y1(70\%)/STA257H1(70\%),STA261H1(70\%), or
permission of the instructor
Exclusion: ECO307H1
DR=SOC SCI; BR=3

## ECO429Y1 History of Economic Thought [48L]

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.
Prerequisite: ECO200Y1/ECO204Y1/ECO206Y1;
ECO202Y1/ECO208Y1/ECO209Y1
Exclusion: ECO322Y1, ECO322Y5
DR=SOC SCI; BR=3

## ECO430Y1 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.
DR=SOC SCI; BR=3
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.

## DR=SOC SCI; BR=3

ECO432H1 Topics in Economics of the Family [24L] Economics bring an analytic and quantitative approach to the study of the family. The course will discuss analytic and empirical models of family behaviour, including nature versus nurture, parental investments, quantity and quality tradeoff in children, marital matching, resource allocation within the household, and gender roles.
Prerequisite: ECO204Y1/ECO206Y1, ECO326H1,
ECO374H1/ECO375H1
DR=SOC SCI; BR=3

## ECO433H1 The Economics of Cities and Regions [24L/12T]

Broad introduction to modern regional and urban economics. In the first part, we study how and why cities grow and develop. In the second part, we explore how cities interact and why they differ in size and perform different activities. The last part looks at regional development and attempts to understand the determinants of regional inequalities.
Corequisite: ECO327Y1/ECO374H1/ECO375H1
DR=SOC SCI; BR=3

## ECO434H1 Political Economy [24L]

The tools of economic analysis, like rational choice and optimizing behavior, as well as strategic interaction that can be modeled using game theory, are increasingly applied in the domain of politics. This course introduces students to the theoretical applications, and empirical evaluation, of economic models to political behavior.
Prerequisite: ECO326H1, ECO374H1/ECO375H1 DR=SOC SCI; BR=3

## ECO435H1 The Economics of Modern China (formerly ECO335Y1) [24L]

A focus on post-1949 Chinese economy, and the PRCs 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 is a limited enrolment seminar requiring extensive reading.
Prerequisite: ECO200Y1(70\%)/ECO204Y1(70\%)/
ECO206Y1(60\%); ECO220Y1/ECO227Y1/
(STA247H1,STA248H1)/(STA250H1,STA255H1)/
(STA257H1,STA261H1)
Exclusion: ECO335Y1
DR=SOC SCI; BR=3

## ECO437H1 Quantitative Macroeconomics [24L]

In order to capture the complexity of economic behavior and interactions, especially with a significant time dimension, modern models of the macroeconomy make considerable use of computer simulation. This course teaches students both how to develop the economic models, and how to solve and work with them computationally.
Prerequisite: ECO325H1
DR=SOC SCI; BR=3

## ECO438H1 Topics in the Economics of Business Cycles [24L]

This course will review the stylized empirical facts, introduce the basic Real Business Cycle model, and discuss the current extensions of the model in a Dynamic General Equilibrium framework. Students will learn some basic methods used to solve these types of models and work with common data need to calibrate and/or estimate the models.
Prerequisite: EO325H1(80\%), ECO374H1(80\%)/
ECO375H1(80\%)
DR=SOC SCI; BR=3
ECO451H1 Macroeconomic Growth [24L]
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: ECO325H1, ECO327Y/ECO375H1,ECO376H1 DR=SOC SCI; BR=3

## ECO456H1 Special Topics in Financial Economics

 [24L]Courses may be offered in one or more subjects each year. Students must meet the Prerequisites announced by the Department (see the Undergraduate Administrator for details).
Prerequisite: TBA
DR=SOC SCI; BR=3

## ECO457Y1 The International Economy since 1870 [48S]

Topics vary with the interest and backgrounds of the participants; subjects normally include international monetary arrangements; patterns of international trade, competition and payments; migration and capital flows; imperialism and dependency; international fluctuations; the effects of the world wars on the international economy and the evolution of international economic institutions.
Prerequisite: grade of " B " in at least one of ECO 364 H 1 , ECO365H1, or ECO342Y1
DR=SOC SCI; BR=3
ECO459H1 International Trade Regulation [24L]
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, traderelated intellectual property, trade and environment, trade and developing countries.
Prerequisite: ECO328Y/ECO364H1, permission of instructor DR=SOC SCI; BR=3

## ECO461H1 The Economics of Financial Risk Management [24L]

This course is intended primarily for students in the Financial Economics specialist program and is not open to students in the BCom 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-atRisk measures); how derivative securities can be used for financial risk management.
Prerequisite: ECO 358 H 1 (70\%)/ECO460H5(70\%)
Exclusion: ACT349H1, MGT331Y1, 337Y1, 438H1,
RSM332H1, RSM333H1, RSM435H1
DR=SOC SCI; BR=3
ECO462H1 Financial Econometrics [24L]
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: $\mathrm{ECO} 358 \mathrm{H} 1(70 \%), 327 \mathrm{Y}(70 \%) /$
ECO375H1(70\%),ECO376H1(70\%)
DR=SOC SCI; BR=3

## English

## Faculty

University Professors Emeriti
J.E. Chamberlin, Ph D, FRSC (N)
R. Frank, MA, Ph D, FRSC (U)
L.A. Hutcheon, MA, Ph D, FRSC (N)
J.R. de J. Jackson, MA, Ph D, FRSC (V) (obiit)
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)
J.D. Baird, MA, Ph D (V)
G.E. Bentley, B Litt, D Phil, FRSC (U)
C.R. Blake, MA, Ph D (U)
W.F. Blissett, MA, Ph D, FRSC (U)
R.M. Brown, MA, Ph D (University of Toronto Scarborough)
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)
A.H. de Quehen, Ph D (U)
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)
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)
E.R. Harvey, M Phil, Ph D
B.S. Hayne, AM, Ph D (SM)
F.D. Hoeniger, MA, Ph D (V)
P. Howard, MA, Ph D (I)
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)
N.R. Lindheim, MA, Ph D
J.F. Lynen, 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)
M. Redekop, MA, Ph D (V)
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)
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) (obiit)
S.Z. Solecki, MA, Ph D (U)
C. Visser, B Litt, Ph D (U)
G.T. Warkentin, MA, Ph D (V) (FRSC)
F.W. Watt, MA, B Litt, Ph D (U)
M. Wilson, MA, Ph D, FRSC (T)

## Associate Professors Emeriti

H.B. de Groot, MA, Ph D (U)
J.M. Heath, MA, Ph D (V)

Rev. R.J. Madden, MA, Ph D (SM)
C.A. Silber, MA, Ph D (V)
E.P. Vicari, MA, Ph D (University of Toronto at Scarborough)
Professor and Chair of the Department
A.J. Bewell, MA, Ph D, FRSC (U)

Associate Professor and Associate Chair
N. Mount, MA, Ph D

Professors
S.C. Akbari, MA, Ph D (U)
J.H. Astington, MA, Ph D
M. Cobb, MA, Ph D (U)
B. Corman, AM, Ph D (T), Dean, School of Graduate Studies, and Vice-Provost, Graduate Education
M. Cuddy-Keane, MA, Ph D (University of Toronto Scarborough)
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E.D. Harvey, MA, Ph D (U)
A. diP. Healey, MA, Ph D (U)
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A. Jaffe, Ph D
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S.B. MacLean, MA, Ph D
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J.L. Matus, MA, Ph D, FRSC (U), Vice-Provost, Students
H. Murray, MA, Ph D (V)
M. Nyquist, MA, Ph D (N)
A.P.M. Orchard, MA, Ph D (T), Provost and ViceChancellor, Trinity College
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J.M. Reibetanz, MA, Ph D (T)
C. Schmitt, MA, Ph D
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)

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Associate Professors
    A. Ackerman, MA, Ph D (U)
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    C. Columpar, Ph D (I)
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    K. Weisman, MA, Ph D
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    S. Wilson, MA, Ph D
    M. Woodland, MA, Ph D
    M. Xie, Ph D
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    C. Balot, MA, Ph D
    C. Campbell, M Phil, Ph D
    K.R. Larson, M Phil, Ph D (University of Toronto
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    A. Maurice, MA, Ph D (University of Toronto
        Scarborough)
    R. McGill, M Phil, Ph D
    S. Radović, MA, Ph D (University of Toronto
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    M. Rubright, MA, Ph D (University of Toronto
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## Associate Professors

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S. Wilson, MA, Ph D
M. Woodland, MA, Ph D
M. Xie, Ph D
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## Assistant Professors

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A. Maurice, MA, Ph D (University of Toronto Scarborough)
R. McGill, M Phil, Ph D
S. Radović, MA, Ph D (University of Toronto Mississauga)
M. Rubright, MA, Ph D (University of Toronto
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Scarborough)
S. Stern, JD, Ph D
C. Suzack, MA, Ph D
L. Switzky, MA, Ph D (University of Toronto Mississauga)
D.F. Taylor, MA, Ph D (University of Toronto

Mississauga)
K. Vernon, MA, Ph D (University of Toronto Scarborough)

## Senior Lecturer

J. Levine, MA, Ph D (V)

Literature in English has a long and rich history and is now written around the world. From the Anglo-Saxon bards of over a thousand years ago up to contemporary writers, literature presents us with the verbal artistry and the imaginative creations of people responding to, and shaping, many cultures: British, Canadian, American, African, West Indian, Aboriginal, to name a few. Works of literature are the verbal embodiment of the imaginative play of gifted writers as they explore the philosophical, historical, psychological, scientific, religious, and political realities of their times.
The Department of English offers a wide range of courses that engage many aspects of this vast subject: courses in theory, language, and critical methods, 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. As well as enlarging their cultural horizons, students of English gain a rigorous training in the skills of critical thinking: reading and interpreting texts, analyzing complex data, making judgments, marshalling evidence and presenting arguments of their own. Students who undertake the study of English are simultaneously learning to think clearly and critically and to write with grace, precision, and force. International organizations, governments of all kinds, professionals, large and small businesses all depend on these skills. Besides many professors and authors of English literature, we count among our alumni publishers and editors, radio and television producers, journalists, business executives, filmmakers, lawyers, judges, and many other professions.
English courses are arranged in four series, each of which indicates the nature and level of work expected. The courses in our 100 series introduce students to the study of English literature at the university level through broad courses that introduce the major literary forms via examples drawn from different times and places. These courses aim to develop writing, reading, and critical skills: essays at the 100 level typically do not require research or secondary sources. Courses in the 200 series introduce specific aspects of the discipline: literature in a specific genre, or literature from a specific place or people. Coursework at the 200 level may require some research and the beginnings of familiarity with scholarship on the subject. At the 300 level, courses advance into a particular period or subject within a literature or literary genre: contemporary American fiction, for instance, or a particular topic in Shakespeare studies. Courses at this level introduce students to research skills and typically require essays that incorporate some secondary sources. Courses in the 400 series are both advanced and focused, unique courses created by Department faculty that often relate to their own research. Courses at the 400 level require a substantial research essay for which the student has

## English

significant input into framing the research question.
The Department of English offers several Programs of Study. The Specialist is the most intensive and comprehensive program, requiring a minimum of ten full-course equivalents (FCE) in a 20-FCE degree. The Major is the Department's most popular program, combined with Majors or Minors in a wide variety of other fields. The program provides both depth and breadth to students who wish to focus in English studies but also wish to leave room in their degrees for other programs and interests. The Minor is the Department's second most popular program, combined with Majors and Specialists in a wide variety of other fields. On the principle that the Minor is a curiosity-driven program, Minors are exempt from the distribution requirements of the Specialist and Major Programs. Students should note that neither the Specialist nor the Major Program are designed to meet the requirements for admission to any particular graduate program: students interested in graduate school should seek advice on course selection from their professors and academic counsellors. Similarly, students considering a teaching career in Ontario should consult the admission counsellors at the Ontario Institute for Studies in Education/ UT. Students with questions about English Programs should consult the Office of the Associate Chair or the Undergraduate Counsellor.

The Department of English publishes our course descriptions online, usually by mid-April. Online descriptions include 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 these course descriptions at www.english.utoronto.ca before enrolment begins.
Associate Chair: Professor N. Mount, Room 608, 170 St. George Street
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

Enrolment in the English Specialist program requires a final grade of at least 73\% in ENG110Y, ENG140Y, or ENG150Y; or, after second year, a final grade of at least $\mathbf{7 7 \%}$ in 2.0 ENG $\mathbf{2 0 0}$-series FCE. Students are responsible for completing all the requirements of an English program from the Calendar of the year in which they enrolled in the program. Completion of a firstyear ENG course is not a requirement for any of our programs.

## English Specialist (Arts program)

Enrolment in the English Specialist program requires a final grade of at least 73\% in ENG110Y, ENG140Y, or ENG150Y. Students applying to enrol in the Specialist after second year require a final grade of at least 77\% in 2.0 ENG 200-series FCE. Students are responsible for completing all the requirements of an English program
from the Calendar of the year in which they enrolled in the program.
Ten FCE (including at least 7.0 ENG FCE) from the courses listed below, including $3.0300+$ series FCE and 1.0 400-series ENG FCE.
Only 1.0 100-series ENG FCE may be counted. ENG100H1 and ENG185Y1 may not be counted.
Courses must fulfill the following requirements:

1. At least 1.0 FCE from Group 1 (Theory, Language, Methods)
2. At least 1.0 FCE from Group 2 (Canadian and Indigenous North American Literatures)
3. At least 1.0 FCE from Group 3 (American and Transnational Literatures)
4. At least 3.0 FCE from Group 4 (British Literature to the 19th Century)
5. At least 1.5 FCE from Group 5 (Literature since the 18 th Century)
In addition, the Faculty of Arts \& Science requires English Specialists who do not complete ENG287H1 to complete at least 0.5 FCE in Arts \& Science courses in Breadth Requirement Category 5: The Physical and Mathematical Universes.

## English Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Seven FCE (including at least 5.0 ENG FCE) from the courses listed below, including $1.5300+$ series FCE and 0.5 400-level ENG FCE.
Only 1.0 100-series ENG FCE may be counted. ENG100H1 and ENG185Y1 may not be counted.
Courses must fulfill the following requirements:

1. At least 0.5 FCE from Group 1 (Theory, Language, Methods)
2. At least 1.0 FCE from Group 2 (Canadian and Indigenous North American Literatures)
3. At least 1.0 FCE from Group 3 (American and Transnational Literatures)
4. At least 2.0 FCE from Group 4 (British Literature to the 19th Century)
5. At least 1.0 FCE from Group 5 (Literature since the 18th Century)
In addition, the Faculty of Arts \& Science requires English Majors who do not complete ENG287H1 to complete at least 0.5 FCE in Arts \& Science courses in Breadth Requirement Category 5: The Physical and Mathematical Universes.

## English Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Four FCE (including at least 3.0 ENG FCE) from the courses listed below, including $1.0300+$ series FCE.
Only 1.0 100-series ENG FCE may be counted. ENG100H1 and ENG185Y1 may not be counted.

## Courses that may be counted toward English programs:

ENG110Y1 OR ENG140Y1 OR ENG150Y1; ENG299Y1, ENG389Y1, ENG390Y1, ENG391Y1, ENG392H1, ENG393H1, ENG394Y1, ENG398H0, ENG399Y0

Group 1: Theory, Language, Methods
ENG201Y1, ENG205H1, ENG207H1, ENG280H1, ENG285H1, ENG287H1, ENG380H1, ENG382Y1, ENG383H1, ENG384Y1 (OR ENG290Y1), ENG385H1, ENG414H1, ENG415H1, ENG416Y1, ENG417Y1, ENG418H1, ENG419Y1, JEI206H1; DRM231H1, JFV323H1, PHL285H1, PHL388H1, SMC229H1

Group 2: Canadian and Indigenous North American Literatures
ENG215H1, ENG252Y1, ENG254Y1, ENG277Y1, ENG350H1, ENG352H1, ENG353Y1, ENG354Y1, ENG355H1, ENG357H1, ENG424H1, ENG425H1, ENG426Y1, ENG427Y1, ENG428H1, ENG429Y1; ABS341H1, DRM268H1, ITA233H1, SLA238H1, UNI218H1, UNI325H1

Group 3: American and Transnational Literatures ENG250Y1, ENG264H1, ENG268H1, ENG269H1, ENG270Y1, ENG273Y1, ENG275Y1, ENG278Y1, ENG360H1, ENG363Y1, ENG364Y1, ENG365H1, ENG368H1, ENG370H1, ENG375H1, ENG434H1, ENG435H1, ENG436Y1, ENG437Y1, ENG438H1, ENG439Y1; DRM310H1, NEW322H1

Group 4: British Literature to the 19th Century ENG202Y1, ENG220Y1, ENG240Y1, ENG300Y1, ENG301H1, ENG302Y1, ENG303H1, ENG304Y1, ENG305H1, ENG306Y1, ENG307H1, ENG308Y1, ENG311H1, ENG322Y1, ENG323H1, ENG330H1, ENG331H1, ENG335H1, ENG336H1, ENG337H1, ENG444H1, ENG445H1, ENG446Y1, ENG447Y1, ENG448H1, ENG449Y1; CLA204H1, CLA236H1, ITA200H1, SMC360H1, VIC342H1, VIC344H1

Group 5: Literature since the 18th Century
ENG210Y1, ENG213H1, ENG214H1, ENG232H1, ENG234H1, ENG235H1, ENG236H1, ENG237H1, ENG239H1, ENG324Y1, ENG325H1, ENG328Y1, ENG329H1, ENG340H1, ENG341H1, ENG347Y1, ENG348Y1, ENG349H1, ENG454H1, ENG455H1, ENG456Y1, ENG457Y1, ENG458H1, ENG459Y1; DRM342H1, FIN240H1, GER220H1, GER240H1, SLA212H1, SLA252H1, SMC336H1, SMC342Y1, SMC349H1, SMC353Y1

## Asian Literatures and Cultures Minor

Consult the Undergraduate Counsellor, Department of English
This humanities-based Type 3 Minor program represents a unique opportunity to study Asian Literatures and Cultures within a Southasian location. Students take core subjects at the first-year or second-year level in Toronto and then spend the fall semester of their second, third or fourth year at the National University of Singapore where they are enrolled in lecture courses. For more information, contact the Undergraduate Office and the Centre for International

Experience (CIE, www.cie.utoronto.ca).
Four FCE, including ENG270Y1 (or ENG370H1 and NUS339H0) and one other ENG FCE from the list above and two NUS FCE from NUS231H0, NUS332H0, NUS333H0, NUS334H0, NUS338H0, NUS339H0, including at least one 300-series NUS FCE.

## English Courses

## Asian Literatures and Cultures Courses

## NUS231H0 Singapore Film: Performance of Identity

 [36L]This module introduces students to the history and development of film production in Singapore and its relationship with television, theatre and the internet. Prerequisite: Course offered at NUS DR=HUM; BR=1

## NUS332H0 Singapore English-Language Theatre [36L]

This module provides an overview of Singapore EnglishLanguage Theatre as well as an in-depth analysis of its canonical texts. It traces the development of Singapore's cultural identity through her theatre's shifting strategies of representation.
Prerequisite: Course offered at NUS
DR=HUM; BR=1
NUS333H0 Studies in Southeast Asian Arts [36L]
The module explores in depth a particular Southeast Asian art (visual or performing arts, music, or literature). The specific focus of the module varies.
Prerequisite: Course offered at NUS
DR=HUM; BR=1

## NUS334H0 Southeast Asian Literatures in English [36L]

This module introduces students to the contextual study of texts from Singapore, Malaysia and the Philippines and other parts of Southeast Asia. Topics discussed include the possibilities and problematics of a regional literary canon, and the manner in which literary texts from the region negotiate with the societies in which they are written and read.
Prerequisite: Course offered at NUS
DR=HUM; BR=1
NUS338H0 South Asian Literatures in English [36L]
This module introduces students to the conceptual study of texts by leading writers from South Asia, from countries such as Sri Lanka, India, Pakistan, Bangladesh.
Prerequisite: Course offered at NUS
Exclusion: ENG269H1
DR=HUM; BR=1
NUS339H0 Postcolonial / Postmodern Writing [36L]
This module provides an introduction to interactions between postcolonial literatures and "postmodern" writing strategies.

# English 

Prerequisite: Course offered at NUS
Exclusion: ENG270Y1
DR=HUM; $B R=1$

## English Courses

## Please note: Not all courses are offered every year.

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
100-Series Courses
Only ONE of ENG110Y1, ENG140Y1 or ENG150Y1 may be counted toward English program requirements. ENG100H1 and ENG185Y1 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 ENG110Y1, ENG140Y1 or ENG150Y1.

## ENG100H1 Effective Writing [36L]

Practical tools for writing in university and beyond. Students will gain experience in generating ideas, clarifying insights, structuring arguments, composing paragraphs and sentences, critiquing and revising their writing, and communicating effectively to diverse audiences. This course may not count toward any English program.
DR=HUM; BR=None
ENG110Y1 Narrative [72L]
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 judgments, travel writing, histories, songs, diaries, biographies.
DR=HUM; BR=1
ENG140Y1 Literature for our Time [48L/24T]
An exploration of how recent literature in English responds to our world. Includes poetry, prose, and drama by major writers of the twentieth century (such as Eliot, Woolf, Beckett, Plath, Morrison, Munro, Coetzee, Rushdie) and emerging writers of the current century.
DR=HUM; BR=1
ENG150Y1 The Literary Tradition [48L/24T]
An introduction to major authors, ideas, and texts that shaped and continue to inform the ever-evolving traditions of literature in English. Includes works and authors from antiquity to the nineteenth century such as the Bible, the Qur'an, Plato, Homer, Sappho, Virgil, Dante, Christine de Pizan, Shakespeare, Cervantes, Montaigne, Austen, Dostoevski.
DR=HUM; BR=1

## ENG185Y1 Introduction to the Study of Literature [72L]

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 course may not count toward any English program.
DR=HUM; BR=1

## 200-Series Courses

English 200-series courses are open to students who have obtained standing in 1.0 ENG FCE or in any 4.0 FCE. Students without these Prerequisites may enrol in a 200 -series course if they are concurrently enrolled in ENG110Y1, ENG140Y1 or ENG150Y1. Please note that Prerequisites and exclusions will be strictly enforced.

## ENG201Y1 Reading Poetry [72L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

## ENG202Y1 British Literature: Medieval to Romantic [72L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG205H1 Rhetoric [36L]
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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=2

## ENG207H1 Law and Literature [36L]

A critical and historical exploration of the interrelations between law and literature, especially their use of and response to each other's structures, styles, themes, narratives, and rhetorical strategies.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

## ENG210Y1 The Novel [72L]

An introduction to the novel through a reading of ten to twelve texts, representing a range of periods, techniques, regions, and themes.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

## ENG213H1 The Short Story [36L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1

## ENG214H1 The Short-Story Collection [36L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1

## ENG215H1 The Canadian Short Story [36L]

An introduction to the Canadian short story, this course emphasizes its rich variety of settings, subjects, and styles.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1

## ENG220Y1 Shakespeare [72L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

ENG232H1 Biography and Autobiography [36L]
An introduction to biography and autobiography, with a sampling of important examples in English.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG234H1 Children's Literature [36L]
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, Fitzhugh.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1

## ENG235H1 The Graphic Novel [36L]

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, Seth.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG236H1 Detective Fiction [36L]
At least twelve works by such authors as Poe, Dickens, Collins, Doyle, Chesterton, Christie, Sayers, Van Dine, Hammett, Chandler, Faulkner, P.D. James, Rendell.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG237H1 Science Fiction [36L]
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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1

## ENG239H1 Fantasy and Horror [36L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG240Y1 Old English Language \& Literature [72L]
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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1

## ENG250Y1 American Literature [72L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

## ENG252Y1 Canadian Literature [72L]

An introductory survey of major Canadian works in poetry, prose, and drama from early to recent times.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1

## ENG254Y1 Indigenous Literatures of North America

 [72L]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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG264H1 Caribbean Literature [36L]
An introduction to the literatures and cultures of the Caribbean and the diaspora, including fiction, poetry, theory, drama, film, and other media.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG268H1 Asian North American Literature [36L] 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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG269H1 South Asian Literatures in English [36L]
An introduction to the major authors and literary traditions of South Asia, paying specific attention to literatures in English from India, Sri Lanka, Pakistan, Bangladesh, and the

## English

diaspora. The focus will be on fiction and poetry with some reference to drama.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
Exclusion: NUS338H0
DR=HUM; $B R=1$
ENG270Y1 Colonial and Postcolonial Writing [72L]
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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
Exclusion: NUS339H0
DR=HUM; BR=1

## ENG273Y1 Queer Writing [72L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1
ENG275Y1 Jewish Literature in English [72L] 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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

## ENG277Y1 African Canadian Literature [72L]

 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.Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

## ENG278Y1 African Literatures in English [72L]

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.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG280H1 Critical Approaches to Literature [36L]
A practical introduction to literary theory and its central questions, such as the notion of literature itself, its political underpinnings, the relation between literature and reality, the making of literary canons, and the roles of the author and the reader.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; BR=1
ENG285H1 The English Language in the World [36L] 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. Prerequisite: 1.0 ENG FCE or any 4.0 FCE
DR=HUM; B4=2

## ENG287H1 The Digital Text [24L/12T]

Explores the relations between digital technology and literary studies. Students will use such tools as computer-assisted analysis, digital editions, and visualization to ask new questions about literature. Readings may include born-digital fiction. Students will gain hands-on experience with digital technology, but no programming experience is required.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE DR=HUM; BR=1

## ENG299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None
JEI206H1 Writing English Essays [24L/12T]
This course teaches students who already write effectively how to write clear, compelling, research-informed English essays. The course aims to help students recognize the function of grammar and rhetoric, the importance of audience, and the persuasive role of style.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE. English students have priority.

## DR=HUM; BR=1

## 300-Series Courses

English 300-series courses are open to students who have obtained standing in 4.0 FCE, including 2.0 ENG FCE. Students should note the special Prerequisites for ENG389Y1, ENG390Y1, ENG391Y1, ENG392H1, ENG393H1 and ENG394Y1: consult the descriptions online before the May 15 deadline for instructions on applying for these courses. Please note that Prerequisites and exclusions will be strictly enforced.

## ENG300Y1 Chaucer [72L]

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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG301H1 Spenser [36L]
Selections from The Faerie Queene and other works.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG302Y1 Poetry and Prose, 1500-1600 [72L] 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, Machiavelli.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG303H1 Milton [36L]
Selections from Paradise Lost and other works.

Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG304Y1 Poetry and Prose, 1600-1660 [72L]
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, Marvell, and such prose writers as Bacon, Clifford, Donne, Wroth, Burton, Cary, Browne, Hobbes, Milton, Cavendish.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

## ENG305H1 Swift, Pope, and Their Contemporaries

 [36L]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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG306Y1 Poetry and Prose, 1660-1800 [72L]
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. Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG307H1 Women Writers, 1660-1800 [36L]
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, Wollstonecraft. Topics may include patronage and publishing; nationality, class, and gender; and generic conventions. Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; $B R=1$
ENG308Y1 Romantic Poetry and Prose [72L]
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.

Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG311H1 Medieval Literature [36L]
This course explores a selection of writings in early English, excluding those by Chaucer.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG322Y1 Fiction before 1832 [72L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG323H1 Austen and Her Contemporaries [36L]
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.

Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG324Y1 Fiction, 1832-1900 [72L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG325H1 Victorian Realist Novels [36L]
This course explores forms of realism in Victorian fiction and includes at least six novels by such authors as Dickens, Thackeray, George Eliot, Charlotte Brontë, Gaskell, Collins, Trollope, Hardy.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG328Y1 Modern Fiction to 1960 [72L]
This course explores ten to twelve works by such writers as
James, Conrad, Cather, Forster, Joyce, Woolf, Lawrence, Faulkner, Rhys, Hemingway, Achebe, Ellison, Spark, Lessing.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG329H1 Contemporary British Fiction [36L]
This course explores six or more works by at least four British contemporary writers of fiction.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

## ENG330H1 Early Drama [36L]

Texts and performances preceding and underlying the plays of Shakespeare and his contemporaries, including creation-to-doomsday play cycles; plays performed in parishes, inns, great halls, outdoor arenas, and at court; religious and political propaganda plays; political pageants. Attention to social, political, and theatrical contexts.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG331H1 Drama to 1603 [36L]
This course explores English drama to the end of the reign of Queen Elizabeth I, with attention to such playwrights as Lyly, Kyd, Marlowe, Shakespeare.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1

## ENG335H1 Drama 1603 to 1642 [36L]

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, Webster.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1

## ENG336H1 Topics in Shakespeare [36L]

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.
Prerequisite: 2.0 ENG FCE including ENG220Y1, and any

## English

### 4.0 FCE

DR=HUM; BR=1
ENG337H1 Drama, 1660-1800 [36L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG340H1 Modern Drama to World War II [36L]
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, Pirandello.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG341H1 Modern Drama since World War II [36L]
A study of plays by such dramatists as Beckett, Miller, Williams, Pinter, Soyinka, Churchill, with background readings from other dramatic literatures.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG347Y1 Victorian Poetry and Prose [72L]
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-Arts-Sake, Fin de siècle, and "Decadence."
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG348Y1 Modern Poetry to 1960 [72L]
Special study of Yeats, Pound, Eliot, Auden, Stevens;
selections from other poets.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG349H1 Contemporary Poetry [36L]
Works by at least six contemporary poets, such as Ammons,
Ashbery, Heaney, Hughes, Lowell, Muldoon, Plath.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG350H1 Early Canadian Literature [36L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG352H1 Canadian Drama [36L]
A study of major Canadian playwrights and developments since 1940, with some attention to the history of the theatre in Canada.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1

## ENG353Y1 Canadian Fiction [72L]

A study of twelve or more Canadian works of fiction, primarily novels.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1

## ENG354Y1 Canadian Poetry [72L]

A study of major Canadian poets, modern and contemporary. Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG355H1 Indigenous Women's Literature [36L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

## ENG357H1 New Writing in Canada [36L]

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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1
ENG360H1 Early American Literature [36L]
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, court transcripts.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

## ENG363Y1 Nineteenth-Century American Literature [72L]

This course explores American writing in a variety of genres from the end of the Revolution to the beginning of the twentieth century.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG364Y1 $\begin{aligned} & \text { Twentieth-Century American Literature } \\ & \text { [72L] }\end{aligned}$
This course explores twentieth-century American writing in a variety of genres.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1
ENG365H1 Contemporary American Fiction [36L]
This course explores six or more works by at least four contemporary American writers of fiction.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1

## ENG368H1 Asian North American Poetry and Prose [36L]

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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

## ENG370H1 Postcolonial and Transnational Discourses [36L]

This course focuses on recent theorizations of postcoloniality and transnationality through readings of fictional and nonfictional texts, along with analyses of contemporary films and media representations.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

## ENG375H1 Studies in Jewish Literature and Culture [36L]

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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

ENG380H1 History of Literary Theory [36L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE DR=HUM; BR=1

ENG382Y1 Contemporary Literary Theory [72L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1 + 2

## ENG383H1 Critical Methods [36L]

Sustained study of one school, movement, or approach in literary theory, history, or criticism. Content varies with instructors.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=1

## ENG384Y1 Literature and Psychoanalysis (formerly ENG290Y1) [72L]

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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
Exclusion: ENG290Y1
DR=HUM; BR=1+2

ENG385H1 History of the English Language [36L]
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.
Prerequisite: 2.0 ENG FCE and any 4.0 FCE
DR=HUM; BR=2

## ENG389Y1 Creative Writing [48S]

Restricted to students who in the opinion of the Department show special aptitude for writing poetry, fiction, or drama. For application procedure, see the descriptions online and submit an application by May 15.
Prerequisite: 2.0 ENG FCE, any 4.0 FCE and permission of the instructor and the Associate Chair DR=HUM; BR=1

## ENG390Y1 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 online and from the Department.
Prerequisite: 3.0 ENG FCE, any 4.0 FCE and permission of the instructor and the Associate Chair
DR=HUM; BR=None
ENG392H1 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 online and from the Department.
Prerequisite: 3.0 ENG FCE, any 4.0 FCE and permission of the instructor and the Associate Chair
DR=HUM; BR=None
ENG393H1 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 online and from the Department.
Prerequisite: 3.0 ENG FCE, any 4.0 FCE and permission of the instructor and the Associate Chair
DR=HUM; BR=None
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 online and from the Department.
Prerequisite: 3.0 ENG FCE, any 4.0 FCE and permission of the instructor and the Associate Chair
DR=HUM; BR=None

## English

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 online and from the Department.
Prerequisite: 3.0 ENG FCE, including ENG389Y1, any 4.0
FCE and permission of the instructor and the Associate Chair
DR=HUM; BR=1
ENG398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
ENG399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

## 400-Series Courses

English 400-series courses are open to students who have obtained standing in 9.0 FCE, including 4.0 ENG FCE. Students who require a 400 -series course to satisfy their program requirements have enrolment priority in the first round of course enrolment. Individual topics to be specified by instructors. Seminars are designed to provide students with the opportunity to practice their skills of research and interpretation at a particularly advanced level. Please note that Prerequisites and exclusions will be strictly enforced.

ENG402H1 Special Studies in Old English Poetry [24S]
An undergraduate/graduate seminar devoted to a close reading of selected Old English texts.
Prerequisite: 4.0 ENG FCE including ENG240Y1, any 9.0
FCE and permission of the instructor and the Associate
Chair
DR=HUM; BR=None
ENG414H1 Advanced Studies: Theory, Language, Methods [24S]
Advanced Studies: Theory, Language, Methods
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG415H1 Advanced Studies: Theory, Language, Methods [24S]
Advanced Studies: Theory, Language, Methods
Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None
ENG416Y1 Advanced Studies: Theory, Language, Methods [48S]
Advanced Studies: Theory, Language, Methods
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG417Y1 Advanced Studies: Theory, Language, Methods [48S]
Advanced Studies: Theory, Language, Methods

Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None
ENG418H1 Advanced Studies Seminar: Theory, Language, Methods [24S]
Advanced Studies Seminar: Theory, Language, Methods
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG419Y1 Advanced Studies Seminar: Theory, Language, Methods [48S]
Advanced Studies Seminar: Theory, Language, Methods
Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None
ENG424H1 Advanced Studies: Canadian and Indigenous North American Literatures [24S]
Advanced Studies: Canadian and Indigenous North American Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None

ENG425H1 Advanced Studies: Canadian and Indigenous North American Literatures [24S]
Advanced Studies: Canadian and Indigenous North American Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG426Y1 Advanced Studies: Canadian and Indigenous North American Literatures [48S]
Advanced Studies: Canadian and Indigenous North American
Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG427Y1 Advanced Studies: Canadian and Indigenous North American Literatures [48S]
Advanced Studies: Canadian and Indigenous North American Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG428H1 Advanced Studies Seminar: Canadian and Indigenous North American Literatures [24S]
Advanced Studies: Canadian and Indigenous North American Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG429Y1 Advanced Studies Seminar: Canadian and Indigenous North American Literatures [48S]
Advanced Studies Seminar: Canadian and Indigenous North
American Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG434H1 Advanced Studies: American and
Transnational Literatures [24S]
Advanced Studies: American and Transnational Literatures

Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None
ENG435H1 Advanced Studies: American and Transnational Literatures [24S]
Advanced Studies: American and Transnational Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG436Y1 Advanced Studies: American and Transnational Literatures [48S]
Advanced Studies: American and Transnational Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG437Y1 Advanced Studies: American and Transnational Literatures [48S]
Advanced Studies: American and Transnational Literatures Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None

ENG438H1 Advanced Studies Seminar: American and Transnational Literature [24S]
Advanced Studies Seminar: American and Transnational Literature
Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None
ENG439Y1 Advanced Studies Seminar: American and Transnational Literatures [48S]
Advanced Studies Seminar: American and Transnational Literatures
Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None
ENG444H1 Advanced Studies: British Literature to the 19th Century [24S]
Advanced Studies: British Literature to the 19th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG445H1 Advanced Studies: British Literature to the 19th Century [24S]
Advanced Studies: British Literature to the 19th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG446Y1 Advanced Studies: British Literature to the 19th Century [48S]
Advanced Studies: British Literature to the 19th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG447Y1 Advanced Studies: British Literature to the 19th Century [48S]
Advanced Studies: British Literature to the 19th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG448H1 Advanced Studies Seminar: British
Literature to the 19th Century [24S]
Advanced Studies Seminar: British Literature to the 19th
Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None

## ENG449Y1 Advanced Studies Seminar: British

Literature to the 19th Century [48S]
Advanced Studies Seminar: British Literature to the 19th
Century

Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None

ENG454H1 Advanced Studies: Literature since the 18th Century [24S]
Advanced Studies: Literature since the 18th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG455H1 Advanced Studies: Literature since the 18th Century [24S]
Advanced Studies: Literature since the 18th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG456Y1 Advanced Studies: Literature since the 18th Century [48S]
Advanced Studies: Literature since the 18th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG457Y1 Advanced Studies: Literature since the 18th Century [48S]
Advanced Studies: Literature since the 18th Century
Prerequisite: 4.0 ENG FCE and any 9.0 FCE
DR=HUM; BR=None
ENG458H1 Advanced Studies Seminar: Literature since the 18th Century [24S]
Advanced Studies Seminar: Literature since the 18th Century Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None
ENG459Y1 Advanced Studies Seminar: Literature since the 18th Century [48S]
Advanced Studies Seminar: Literature since the 18th Century Prerequisite: 4.0 ENG FCE and any 9.0 FCE DR=HUM; BR=None

## Centre for Environment

## Faculty

## Cross-Appointed Full Professors

D. A. Jackson, MSc,PhD
W.S. Prudham, BA, BSc, MA, PhD
W.H. Vanderburg, BASc, MASc, PhD, PEng

Cross-Appointed Associate Professor S.B. Scharper, BA, MA, Ph D

Cross-Appointed Assistant Professors
C. Abizaid, MA, Ph D
C. Wiseman, BES, M. Nat.Res.Mgmt., Dr. Phil. Nat.

## Senior Lecturers

K. Ing, M Sc
D. Macdonald, BA, MA, Ph D

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 Centre for Environment (www.environment.utoronto.ca). See below.

## Environmental Geography (Arts program):

(See program details under Geography or at http://www. geog.utoronto.ca/)

Formerly called "Environment and Resource Management", these Specialist, Major and Minor 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 maintenance, ecological sustainability, protection of wildlife and their habitats, 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.

## Centre for Environment Programs:

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 the Environment and Science BSc major and minor programs, and the Environment Studies BA major and minor programs. These are recommended to be taken in conjunction with another program(s) in a traditional cognate academic field (e.g. Physics, Sociology). 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, Physical Geography, Mathematics and Physics. This foundation is necessary to give students the degree of cross-disciplinary scientific literacy necessary for our 200/300-level science courses; ENV234H1 (Environmental Biology: Structure and Function of Ecosystems), ENV334H1 (Environmental Biology: Applied Ecology), CHM210H1 (Environmental Chemistry), ENV235H1 (Physics of Planet Earth) or JGE236H1 (Human Interactions with the Environment). Students must combine the Environment and Science major with another science option (a Specialist, Major or Minor - a Specialist or Major is recommended) in order to obtain an Honours B.Sc. degree program.

The Centre's B.A. program in Environmental Studies is an interdisciplinary program intended for students interested in studying and working in an environmental area, primarily within the social sciences or humanities. This program offers rigorous academic study of the economic, social, cultural and political forces that drive issues such as species extinction, loss of biodiversity, air and water pollution, and climate change. The interdisciplinary structure of the program provides grounding in scientific literacy while advancing critical thinking skills that will help students to evaluate complex environmental problems and sustainable solutions for improved environmental health and well-being.

## Collaborative Specialist, Major and Minor Programs:

The Centre collaborates with other disciplines to offer four collaborative Science specialist programs: Environment \& Health; Environmental Chemistry; Environmental Geosciences; and Environment \& Toxicology. Other collaborative offerings include major programs in Environment and Health, and Environmental Ethics, as well as collaborative minor programs in Environmental Ethics, 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 the Degree Requirements section of the Calendar for program requirement details).

## General Program Information:

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 among (BIO120H1, BIO130H1), (CHM138H1, CHM139H1)/CHM151Y1, MAT135H1/MAT136H1/MAT135Y1/ MAT137Y1/MAT157Y1/JMB170Y1, (PHY131H1,PHY132H1)/ (PHY151H1,PHY152H1), and (GGR100H1, GGR101H1). Students should identify specific program requirements as well as the prerequisites for ENV234H1, 235H1, 334H1; JGE 236H1; CHM 210H1 when selecting specific first year science courses.

Arts programs in the Centre build on a base of social science and humanities courses. Environmental Studies, as well as Environmental Ethics, do not require specific First Year courses. Students intending to follow arts programs in the environment are recommended to take ENV100H1, and might find it helpful to take ENV200H1 in first year, as well as 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/Undergraduate/Scholarships.aspx)

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, Biodiversity and Conservation Biology, Environmental Biology). 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 Major (Science 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 is designed as a cognate program for students also studying another science program. Students enrolling in the Environment \& Science major program must also be
enrolled in a specialist, major or minor program designated as a "Science program" in the Calendar in order to obtain a BSc - another science Specialist or Major is recommended.
Note that the six full course equivalents that constitute the Major Program are those listed below under "Higher Years." This is a Type 1 program. Information on application timelines is available in the Registration Handbook and Timetable. Consult David Powell, Undergraduate Student Advisor at david.powell@utoronto.ca
First Year:
Students must complete (BIO120H1, BIO130H1)/BIO150Y1 and at two least FCE from among: CHM138H1, CHM139H1, CHM151Y1; GGR100H1, GGR101H1; MAT135H1, MAT136H1, MAT135Y1, MAT137Y1, MAT157Y1, JMB170Y1; PHY131H1, PHY132H1, PHY151H1, PHY152H1 (PHY131H1,PHY132H1 recommended) but note that these courses do not count towards the Major program.
Higher Years

1. (ENV221H1, ENV222H1/GGR222H1)/ENV222Y1/ GGR222Y1, (ENV234H1, ENV334H1)/ENV234Y1 (see Note 1 below)
2. One FCE from among CHM210H1, ENV235H1, JGE236H1, ENV235Y1, ENV236Y1 (see Note 2 below)
3. 0.5 FCE from among ECO220Y1/EEB225H1/ GGR270H1/PSY201H1/PSY202H1/SOC202H1/ SOC300H1/STA220H1/STA221H1/STA250H1/ STA255H1/STA257H1/STA261H1 or an approved alternative (see Note 3 below)
4. 2 FCE from Group A and B below, one FCE of which must be from Group A (the one FCE from Group B can include one or both of ENV421H, ENV440H, ENV451H not taken in 5 below)
5. 0.5 FCE from ENV421H1, ENV440H1, ENV451H1 Note 1: Students may substitute another approved environmental science course for ENV334H1 if necessary. Consult David Powell, Undergraduate Student Advisor at david.powell@utoronto.ca.
Note 2: CHM210H1 requires CHM139H1/CHM151Y1; (MAT131H1,132H1)/MAT 135Y1/MAT137Y1. ENV235H1 requires PHY131H1
Note 3: Students who have already taken 1 FCE under requirement 3 above only need to take 1.5 FCE from Groups $A$ and $B$ (at least one FCE of which must be from Group $A$ ), under requirement 4 above.

## Environment \& Science Minor (Science 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)

Note that the four courses that constitute the Minor Program are those listed below under "Higher Years." This is a Type 1 program. Information on application timelines is available in the Registration Handbook and Timetable. Consult David Powell, Undergraduate Student Advisor at david.powell@ utoronto.ca

First Year:
Students must complete (BIO120H1, BIO130H1)/ BIO150Y1 and at two least FCE from among: CHM138H1, CHM139H1, CHM151Y1; GGR100Y1, GGR100H1, GGR101H1; MAT135H1, MAT136H1,

## Centre for Environment

MAT135Y1, MAT137Y1, MAT157Y1, JMB170Y1; PHY131H1, PHY132H1, PHY151H1, PHY152H1 (PHY131H1,PHY132H1 recommended) but note that these courses do not count towards the Minor program.
Higher Years

1. (ENV221H1, ENV222H1/GGR222H1)/222Y1/GGR222Y1, (ENV234H1, ENV334H1)/ENV234Y1
2. One FCE from among CHM210H1, ENV235H1, JGE236H1
3. One FCE from Group A and B below, 0.5 FCE of which must be from Group A
Note 1: CHM210H1 requires CHM139H1/CHM151Y1;
(MAT131H1,132H1)/MAT 135Y1/MAT137Y1. ENV235H1
requires PHY131H1

## Environment \& Science Course Groups

Group A: the other 0.5 FCE of CHM210H1, ENV235H1, JGE236H1 not taken in 2 above, the other of ENV235Y1, ENV236Y1 not taken in 2. above; ENV336H1, ENV341H1, ENV346H1, ENV395Y1, ENV430H1, ENV431H1, ENV450H1; GGR347H1/JGE347H1, GGR348H1/JGE348H1; JEH455H1; 0.5 FCE of another environmental science course approved by the Undergraduate coordinator.
Group B: ENV307H1, ENV320H1, ENV322H1, ENV32OY1, ENV321Y1, ENV323H1, ENV333H1, ENV335H1, ENV347H1/ENV447H1, ENV350H1; JGE321H1, JGE331H1

## Environmental Studies Major (Arts Program)

Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca
(7 FCE or their equivalent, including at least three FCE at the 300+ level)

First Year
Students must complete at least 4 FCE before applying to this type 1 major. ENV100H1 is recommended but not required.
Higher Years:

1. ENV221H1; ENV222H1/GGR222H1; ENV223H1.
2. ENV200H1 or another 0.5 FCE Life Science course approved by the Undergraduate Coordinator.
3. An additional 4.5 FCE, a maximum 1.0 of which may be environmental courses offered by academic units other than the CFE (from Group A below). The remainder must be selected from the following: ENV307H1; ENV320H1; ENV322H1; ENV323H1; JGE321H1; JGE331H1; ENV333H1; ENV335H1; ENV341H1; ENV347H1; ENV350H1; ENV395Y1; ENV421H1*; ENV422H1; ENV430H1; ENV431H1; ENV440H1*; PHL273H1
4. ENV421H1/ENV440H1/ENV451H1 or another fourth year environmental course approved by the Undergraduate Coordinator
*Note: if not taken to satisfy requirement 4 above

## Environmental Studies Minor (Arts Program)

Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca
(4 FCE or their equivalent, including at least 1.5 FCE at the 300+ level)

First Year

Students must complete at least 4 FCE before applying to this type 1 minor. ENV100H1 is recommended but not required.
Higher Years:
1, ENV221H1; ENV222H1/GGR222H1.
2. ENV200H1 or another 0.5 FCE Life Science course approved by the Undergraduate Coordinator.
3. An additional 2.5 FCE, a maximum 1.0 of which may be environmental courses offered by academic units other than the CFE (from Group A below). The remainder must be selected from the following: ENV307H1; ENV320H1; ENV322H1; ENV323H1; JGE321H1; JGE331H1; ENV333H1; ENV335H1; ENV341H1; ENV347H1; ENV350H1; ENV395Y1; ENV421H1*; ENV422H1*; ENV430H1*; ENV431H1*; ENV440H1*; PHL273H1
*Note: with permission of Undergraduate Coordinator

## Environmental Studies Course Groups

Group A:
ABS250H1, ABS402H1; ANT351H1; ANT353H1, ANT364Y1,
ANT450H1; APS203H1, APS302H1 (App. Sci. \& Eng.);
CHM210H1; CLA373H1; ECO313H1, ECO314H1; ENV234H1, ENV235H1, ENV334H1; FOR200H1, FOR201H1, FOR302H1, FOR303H1, FOR400Y1, FOR401H1; GGR272H1, GGR273H1, GGR314H1, GGR321H1/JAG321H1, GGR332H1, GGR334H1, GGR335H1, GGR338H1, GGR416H1, GGR418H1, GGR419H1, GGR438H1, GGR473H1; HIS404H1; HPS307H1, HPS313H1, HPS324H1; JGE236H1; PHL373H1; POL413H1; PSY435H1/PSY335H1; RLG228H1, RLG345H1, RLG484H1; SOC385H1; WGS273Y1; 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 Group A above.

## Collaborative Programs

## Environmental Chemistry Specialist (Science program)

Consult Professor J. Murphy, Department of Chemistry (416-946-0260 or jmurphy@chem.utoronto.ca)
(14 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.
Students must complete at least 4 FCEs before enrolling in this Type 1 program.
First Year: (BIO120H1, BIO130H1/BIO220H1)/BIO150Y1; CHM151Y1 (strongly recommended)/(CHM138H1, CHM139H1); (MAT135H1, MAT136H1)/ MAT135Y1/ MAT137Y1
First or Second Year: PHY138Y1/PHY140Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second and Higher Years:
CHM217H1, CHM225Y1/(CHM220H1, CHM221H1), CHM238Y1, CHM247H1/CHM249H1; (CHM210H1, ENV235H1)/ENV235Y1; STA220H1/GGR272H1

## Centre for Environment

CHM310H1, CHM410H1, CHM415H1; ENV234H1, (ENV221H1,ENV222H1/GGR222H1)/ENV222Y1/ GGR222Y1, ENV334H1/ENV341H1/ENV346H1
One additional FCE from 300/400-series CHM courses
ENV421H1/CHM499Y1/CHM398H0 (in areas relevant to the program, to be approved by the Department)
Further courses from any 300/400 series courses with $D R=S C I, B R=4$ or $B R=5$ such that the total $F C E$ for the specialist is 14.
Note 1: ENV235Y1 counts as both CHM210H1 and ENV235H1

## Environmental Chemistry Minor (Science Program)

Consult Professor J. Murphy, Department of Chemistry (416-946-0260 or jmurphy@chem.utoronto.ca)
(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 (CHM138H1,CHM139H1)/CHM151Y1
2. One full course equivalent from CHM 217 H 1 , (CHM220H1, CHM221H1)/CHM225Y1, CHM238Y1, CHM247H1/CHM249H1
3. CHM210H1/ENV235Y1
4. Any three of CHM310H1, CHM317H1, CHM410H1, CHM415H1

## Environmental Geosciences Specialist (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 Dr. C. Bank, Department of Geology, undergradchair@ geology.utoronto.ca. Students should note that under the Professional Geoscientists Act of 2000, individuals practicing Environmental Geoscience in Ontario require education equivalent to the Specialist Program listed below or a P.Eng.
(14 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 1 program. Information on application timelines is available in the Registration Handbook and Timetable.

First Year: CHM151Y1/(CHM138H1, CHM139H1); (MAT136H1, MAT136H1)/MAT135Y1/ MAT137Y1; PHY131H1, PHY132H1
First or Second Year: BIO120H1
Second to Fourth Years:
GLG202H1, GLG206H1, GLG207H1, GLG216H1; GGR201H1; ENV234Y1/ENV234H1/GLG217H1/ EEB214H; (CHM210H1, ENV235H1)/ENV235Y; MAT235Y1/(MAT223H1, GLG204H1); STA220H1; GLG345H1, GLG351H1, GLG360H1; ENV315H1; GLG436H1, GLG448H1, GLG450H1, GLG470Y1
0.5 FCE from: JGP438H1; GLG430H1, GLG441H1, GLG442H1, GLG465H1 (Note: All five of these 4th year courses are recommended to satisfy APGO knowledge requirements in Groups 2A, 2B and 2C in the Geology Calendar entry.)
Environmental Geosciences Major (Science Program)
(8.5 full courses or their equivalent; must include at least two full-course equivalents at the 300+-level)
(CHM138H1, CHM139H1)/CHM151Y1; (MAT135H1, MAT136H1)/MAT135Y1/MAT137Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year:
ENV235Y1/(CHM210H1, ENV235H1); GLG202H1, GLG206H1, GLG207H1, GLG216H1, GLG217H1
Third and Fourth Years:
ENV315H1; GLG351H1, GLG436H1, GLG448H1

## Environmental Geosciences Minor (Science Program)

(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. ENV235Y1/(CHM 210H1, ENV235H1)
2. GLG202H1, GLG206H1, GLG207H1, GLG216H1, GLG351H1; ENV315H1

## Environment \& Behaviour Minor (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 behaviour changes. Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca Information on application and acceptance timelines is available in the Registration Handbook and Timetable.
(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. (ENV221H1,ENV222H1/GGR222H1)/222Y1/GGR222Y1; PSY220H1, PSY335H1/435H1
2. One FCE from ENV333H1, ENV335H1; JGE321H1; JGE331H1; SOC385H1
3. One FCE from PSY320H1, PSY321H1, PSY327H1, PSY336H1

## Environment \& Energy Minor (Science 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) FCEs towards both programs.
Jointly sponsored by the Centre for Environment and the Department of Geography, this interdisciplinary program addresses the scientific, technological, environmental and policy aspects of energy use and supply, with a focus on the

## Centre for Environment

reduction of environmental impacts.
Minor Entry Requirements: Note that the four full course equivalents that constitute the Minor Program are those listed below under "Higher Years." Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca

| Number of <br> half courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: First Year: <br> At least 2 FCE <br> from among | (MAT135H1, MAT136H1)/ <br> MAT135Y1/MAT137Y1 and <br> at least one FCE from among <br> CHM138H1, CHM139H1, <br> CHM151Y1; PHY131H1, <br> PHY132H1, PHY151H1, <br> PHY152H1 |  |
| B: All | ENV221H1, ENV222H1/ <br> GGR222H1/GGR223H1 | 1.0 |
| C: All | ENV346H1, ENV350H1, <br> ENV450H1 | 1.5 |
| D: All | (GGR314H1, GGR333H1)/ <br> (GGR347H1/JGE347H1, <br> GGR348H1/JGE348H1) | 1.0 |
| E: Any | CHM210H1, CHM310H1, <br> CHM415H1; ENV235H1/ <br> ENV235Y1; FOR310H1, <br> FOR410H1; GGR203H1, <br> GGR303H1, GGR314H1 <br> (if not taken for section D), <br> GGR403H1; HPS313H1; <br> PHY231H1, PHY250H1 | 0.5 |
| Total | \begin{tabular}{l}
\end{tabular} |  |

## Environment \& Health Specialist (Science Program)

Jointly sponsored by the Centre for Environment and the Human Biology Program, a collaborative program of the Faculty of Arts \& Science and 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. For the specialist, consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Human Biology Program Office, Wetmore Hall, Room 105, New College, 300 Huron Street, 416-946-7609

This is a Type 1 program. Information on application and acceptance timelines is available in the Registration Handbook and Timetable.
(14 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)

First Year:
Students must complete (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1 and one FCE from among: GGR100H1/GGR101H1/MAT135H1/ MAT136H1/JMB170Y1/PHY131H1/PHY132H1/ PHY151H1/PHY152H1/PHY131H1/PHY132H1 recommended)/PSY100H1. Students should consider selecting an FCE from ECO/GGR/HIS/SOC to maximize elective course choice in later years.
Second Year (see note 1 below):
(BCH210H1, CHM247H1), (BIO220H1+BIO230H1/ BIO255H1), (ENV221H1+ENV222H1/GGR222H1), ENV234H1, JGE236H1, PHL273H1, BIO260H1/ HMB265H1 (see Note 2 below)
Third Year (see note 1 below):
CSB349H1, LMP363H1/NFS284H1/(PSL300H1+PSL301H1),
JGE321H1/ENV321Y1, ENV341H1, STA220H1, STA221H1 (see Note 3 below), one FCE from among CHM210H1/ENV235H1/ENV334H1 (see Note 4 below)
Fourth Year:

1. ENV421H1/HMB396Y0/HMB496Y1/HMB498Y1/ HMB499Y1 or a minimum of 0.5 FCE from any approved departmental or college independent research project
2. JEH455H1

Elective1:
1.5 FCE, approved by the Undergraduate Coordinator of the Centre, including at least one 300+-series course from: HMB302H1/HMB303H1/HMB304H1/HMB305H1/ HMB314H1/HMB322H1/HMB390H1/HMB496Y1/ HMB498Y1/HMB499Y1/ANA300Y1/ANA301H1/ BCH311H1/CSB349H1/PSL350H1/BCH370H1/ CHM310H1/CSB325H1/CSB327H1/CSB328H1/ CSB331H1/CSB346H1/CSB347H1/CSB350H1/ CSB351Y1/EEB318H1/EEB319H1/EEB321H1/ EEB328H1/EEB362H1/EEB375H1/EEB428H1/ ECO369Y1/ENV315H1/ENV336H1/ENV430H1/ GGR303H1/GGR305H1/GGR333H1/GGR409H1/ HIS423H1/JGE347H1/JGE348H1/GLG351H1/ GLG450H1/IMM334Y1/LMP301H1/LMP363H1/ MGY377H1/NFS382H1/NFS386H1/NFS488H1/ PCL362H1/PCL389H1/PSL372H1/PSL420H1/ PSY435H1/SOC243H1/SOC244H1/SOC256H1/ SOC309Y1/SOC312H1/SOC363H1 or any other approved course for which the student has appropriate prerequisites. The 1.5 FCE should reflect the particular academic interests of each student.

## E\&H Specialist Program Notes:

1. Many second, third and fourth 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, and on through higher years
2. Students who have taken one of ENV234Y1 or ENV235Y1 need only take 0.5 FCE of CHM210H1, ENV235H1, ENV334H1; students who have taken both of ENV234Y1 and ENV235Y1 need not take any of CHM210H1, ENV235H1, ENV334H1.
3. EEB225H is no longer equivalent to STA221H, as of the 2011-12 academic year.
4. In choosing among CHM210H1, ENV235H1 and ENV334H1, students should pay particular attention to their respective prerequisites.

## Centre for Environment

## Environment \& Health Major (Science program)

(8.0 FCE):

First Year (2.5 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1), GGR100H1/GGR101H1/ GLG102H1/MAT135H1/PHY131H1/PSY100H1
Higher Years:

1. 2.0 FCE: BCH210H1/CHM247H1, (BIO220H1+BIO230H1/BIO255H1), HMB265H1/ BIO260H1
2. 1 FCE: E\&H core courses from among: ENV221H1/

ENV222H1/GGR222H1/ENV234H1/JGE236H1
300- \& 400-level:
3. 0.5 FCE: E\&H course ENV341H1
4. 1.0 FCE: (PSL300H1+PSL301H1)
5. 0.5 FCE from E\&H-relevant course HMB302H1/ HMB303H1/HMB304H1/HMB305H1/HMB314H1/ HMB322H1/HMB390H1/HMB496Y1/HMB498Y1*/ HMB499Y1*/ANA300Y1/ANA301H1/BCH311H1*/ CSB349H1/PSL350H1/BCH370H1/CHM310H1/ CSB325H1/CSB327H1/CSB328H1/CSB331H1/ CSB346H1/CSB347H1/CSB350H1/CSB351Y1/ EEB318H1/EEB319H1/EEB321H1*/EEB328H1/ EEB362H1/EEB375H1/EEB428H1/ENV315H1/ ENV336H1/GGR303H1/GGR305H1/GGR409H1/ JGE347H1/JGE348H1/GLG351H1/GLG450H1/ IMM334Y1/LMP301H1/LMP363H1/MGY377H1/ NFS382H1*/NFS386H1/NFS488H1*/PSL372H1/ PSL420H1/PSY435H1*
6. 0.5 FCE: E\&H depth course JEH455H1
*Some courses require additional prerequisites. Check course listings.

## Environment \& Toxicology Specialist (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" (www.environment.utoronto.ca) or consult our website: www.pharmtox@utoronto.ca

The Environment and Toxicology Specialist program is an interdisciplinary program which spans the social, physical and life sciences and integrates study of the effects of chemicals not only on the health and behaviour of human beings but on whole ecosystems as the adverse effects associated with therapeutic and environmental chemicals are discussed. This program emphasizes the application of knowledge of environmental toxicology and risk assessment and prepares students for a variety of job opportunities following its completion. Graduates of the Environment and Toxicology program may pursue careers in scientific research, environmental science, conservation science, governmental agencies, consulting agencies, and within chemical, manufacturing or agriculture industries.Students learn to integrate basic environmental and life science with particular aspects of clinical toxicology and related areas through lectures, tutorials, and laboratory and independent research project experience. The senior independent research project course enables students to gain valuable research experience while working under the supervision of an individual faculty member in either a laboratory-based or a non-laboratory-based setting.

Students may choose to participate in the Professional Experience Year internship. The PEY internship is an elective 12-16 month paid employment placement within pharmaceutical/biotechnology/chemical companies, university research laboratories, university-affiliated organizations, consulting companies or government research agencies. The PEY takes place between the 3rd and 4th years of undergraduate study and is open to Specialists in Environment and Toxicology who have a cGPA of at least 3.0. The PEY internship provides an excellent opportunity for real-world experience in drug development, project management, client relations, basic and clinical research, information management and regulatory affairs.

The Environment and Toxicology Specialist is a Type 2L program and can only accommodate a limited number of students. Admission into this program is determined by a student's average in the following courses: BIO 120 H 1 , BIO130H1, CHM138H1, CHM139H1, and one of PHY131H1, MAT135H1, or GGR100H1. It is expected that a cumulative average $70 \%$ in the selected courses will be required for admission; however, achieving that mark does not necessarily guarantee admission to the program in any given year. Entry into the program requires completion of BIO120H1, BIO130H1; CHM138H1, CHM139H1, one of PHY131H1, MAT135H1, or GGR100H1 and 0.5 FCE from among the other first year course requirements. Completion of the program requires completion of all 4 FCE of the first year required courses.
Students who wish to enroll in the program after their second year will be considered on a case-by-case basis. Successful completion of required prerequisite courses is required to enroll in further upper-level program courses.
(15 full courses or their equivalent, including $4.0300+-l e v e l$ courses, 1.0 of which must be at the 400-level).

First Year: BIO120H1; BIO130H1; CHM138H1; CHM139H1; and at least 0.5 FCE from PHY131H1; MAT135H1; GGR100H1
First or Second Year: At least 1.5 FCE from GGR100H1 (if not counted in First Year, 2 above); GGR101H1; MAT135H1 (if not counted in First Year, 2 above); MAT136H1/JMB170Y1; PHY131H1 (if not counted in First Year, 2 above); PHY132H1
Second Year: BCH210H1; BIO230H1/(BIO240H1, 241H1); ENV221H1; ENV222H1, PCL201H1 and CHM247H1. One FCE from (BIO270H1,BIO271H1)/ (PSL300H1, PSL301H1)/PSL302Y1 (see NOTE 1)
Third and Fourth Years: BIO220H1; ENV234H1; JGE321H1; ENV334H1; CHM210H1; PCL302H1; PCL362H1; PCL473Y1.
One from PCL376H1/STA220H1/STA221H1/EEB225H1 (see NOTE 2).
One from ENV421H1/PCL365Y1/PCL474Y1 (see NOTE 2).
At least 1.0 FCE from: ENV341H1; ENV235H1; JGE236H1; CHM310H1; GGR409H1; PCL477H1; PCL481H1; LMP301H1; LMP363H1 (see NOTE 3)

## NOTES:

1. PSL300H1 and PSL301H1 require MAT100 /PHY100 -series courses.
2. PCL302H1 is a required co-requisite of PCL365Y1, PCL201H1, PCL302H1 and PCL376H1 are prerequisites for students intending to take PCL474Y1.

## Centre for Environment

Students intending to take PCL474Y1 must obtain permission from the Undergraduate Student Advisor of the Centre for Environment 3 months prior to the intended date of enrolment. Students must also consult with the Department of Pharmacology and Toxicology at least 3 months prior to the intended date of enrolment as the student is responsible for arranging for a supervisor.
3. Students taking PCL481H1 must take BCH210H1, PCL302H1 and PCL362H1 as prerequisites. Students taking PCL477H must take BCH210H prior. Students taking ENV421H must take 1.5 FCE from group 7 to have 15 FCE program credits

## Environmental_Ethics Major (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 ).

## (6.0 full courses or their equivalent)

This is a Type 1 program. Information on application timelines is available in the Registration Handbook and Timetable.

1. (ENV221H1, ENV222H1/GGR222H1)/ENV222Y1/ GGR222Y1; PHL273H1; (JGE321H1, 0.5 FCE from Group A below)/ENV321Y1
2. One FCE from PHL373H1; ENV333H1; JGE331H1
3. 0.5 FCE from among ENV421H1/ENV492H1/ENV493H1, ENV440H1, ENV451H1
4. 2 FCE's from Group A below.

## Group A:

ABS402H1; ANT450H1; ECO105Y1; ENV335H1, ENV347H1/ENV447H1; FOR302H1; GGR321H1/JAG321H1; HIS318Y1/HIS404H1; HPS202H1, HPS307H1; PHL275H1, PHL295H1, PHL375H1, PHL394H1, PHL395H1, PHL413H1; PSY335H1/PSY435H1; RLG228H1, 311H1, RLG345H1, RLG484H1; WGS273Y1

## Environmental Ethics Minor (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 )
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. PHL273H1
2. One of PHL373H1, ENV333H1; JGE321H1, JGE331H1
3. (ENV221H1, ENV222H1/GGR222H1)/ENV222Y1/ GGR222Y1
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 Minor (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 (416-9786614).
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)

1. ANT100Y1/(ENV221H1,ENV222H1/GGR222H1)/ ENV222Y1/GGR222Y1
2. ANT200Y1/ (ANT204H1 +0.5300 level Social Anthropology course)
3. Two FCE's from: ABS250H1, ABS402H1; ANT315H1, ANT351H1, ANT353H1, ANT364Y1, ANT365H1, ANT371H1, ANT420H1, ANT450H1

## Environmental Biology Minor (Science program)

Enrolment in this program requires the completion of 4.0 courses.

Consult the Undergraduate Office in the Department of Ecology and Evolutionary Biology
(4 full courses or their equivalent; must include at least one full-course equivalent at the 300+-level)
Students who have taken BIO150Y1, do not take BIO120H1 and BIO 220 H 1 in this program.

1. 1.5 FCEs: ( $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1$ )/BIO150Y1; ENV234H1
2. 0.5 FCE in organismal biology: EEB266H1, EEB267H1, EEB268H1
3. 2.0 FCEs (courses in both ecology and evolution are recommended) from: EEB318H1, EEB319H1, EEB321H1, EEB322H1, EEB323H1, EEB324H1, EEB362H1, EEB370H1, EEB375H1; EHJ351H1, EHJ352H1; ENV334H1 (recommended); NUS; no more than one field course from EEB401H1, EEB403H1, EEB405H1, EEB406H1, EEB407H1, EEB409H1, EEB410H1; FOR306H1; NUS343H0

## Environmental Chemistry (Science program)

See Environmental Chemistry Minor under Collaborative Programs above.

## Environmental Economics Minor (Arts Program)

Consult Ms. R. Innes, Undergraduate Administrator, Department of Economics (416-978-8616)
This is a limited enrolment (Type 2) program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.

Required courses: ECO100Y1 with a final mark of at least $67 \%$, OR

ECO105Y1 with a final mark of at least $80 \%$, and
MAT133Y1 with a final mark of at least $63 \%$, OR
MAT135H1 with a final mark of at least $60 \%$ and
MAT136H1 with a final mark of at least $60 \%$, OR
MAT137Y1 with a final mark of at least $55 \%$, OR

## Centre for Environment

MAT157Y1 with a final mark of at least $55 \%$.
(4 full courses or their equivalent)
ECO100Y1/ECO105Y1
2. MAT133Y1/MAT135Y1/MAT137Y1
3. ECO200Y1/ECO206Y1
4. One full ECO course at the $300+$ level, including at least one of ECO313H1 and/or ECO314H1

## Note:

Students enrolled in this Minor program cannot be enrolled in any other program in Economics.

## Environmental Geography Minor (Arts program)

Minor Entry Requirements: There are no entry requirements for this program

| Number of half courses | Courses | FCEs |
| :---: | :---: | :---: |
| A: Any 1: | GGR107H1 (recommended), GGR100H1, GGR101H1, GGR112H1, GGR124H1 (or other GGR course with permission of the Department) | 0.5 |
| B: Mandatory: | GGR223H1(formerly GGR222H1) | 0.5 |
| C. Any 1: | GGR201H1, GGR203H1, GGR205H1, GGR206H1, GGR314H1, GGR333H1, GGR347H1/JGE347H1, GGR348H1/JGE348H1, JGE236H1, ENV200H1, ENV234H1 | 0.5 |
| D. | Up to 2.5 FCE from Group A; up to 1.0 FCE from Group B (below) | 2.5 |
| Note: <br> At least 1.0 FCE must be 300/400 series courses. |  |  |
| Total |  | 4.0 |

## Environmental Geography Groups

GROUP A (Geography Courses)
GGR201H1, GGR203H1, GGR205H1, GGR206H1,
GGR222H1, GGR223H1, GGR272H1, GGR273H1,
GGR301H1, GGR303H1, GGR314H1, GGR321H1,
GGR329H1, GGR333H1, GGR334H1, GGR337H1,
GGR340H1, GGR341H1, GGR347H1, GGR348H1,
GGR373H1, GGR381H1, GGR398H1, GGR399Y1,
GGR403H1, GGR409H1, GGR413H1, GGR416H1,
GGR418H1, GGR419H1, GGR434H1, GGR438H1,
GGR491Y1, GGR492H1, GGR498H1, GGR499H1;
JFG470H1, JFG475H1; JGE236H1, JGE321H1, JGE331H1,
JGE347H1, JGE348H1; JUG320H1

GROUP B (Centre for Environment courses)
ENV200H1, ENV234H1, ENV235H1, ENV307H1,
ENV323H1, ENV333H1, ENV335H1, ENV350H1, ENV422H1

## GROUP C

Any other geography courses at the 200/300/400 level not listed in Group A

## Environmental Geosciences Minor (Science program)

See Environmental Geosciences Minor under Collaborative Programs above

## Geographic Information Systems Minor (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) FCEs towards both programs.

Minor Entry Requirements: There are no entry requirements for this program

| Number of <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any 2 half <br> courses | GGR100H1, GGR101H1, <br> GGR107H1, GGR112H1, <br> GGR124H1 (or 1.0 other GGR <br> courses with the permission of the <br> Department) | 1.0 |
| B: All 4 | GGR270H1, GGR272H1, <br> GGR273H1, GGR373H1 | 2.0 |
| C: Any 1 half <br> course | GGR462H1, GGR473H1 | 0.5 |
| D: Any 1 half <br> course | GGR337H1, GGR375H1, <br> GGR413H1, GGR462H1, <br> GGR473H1, GGR491Y1, <br> GGR492H1, GGR498H1, <br> GGR499H1, JFG470H1, <br> JFG475H1 | 0.5 |
| Total | ( |  |

## Physics "Life and Environmental" Minor (Science Program)

Enrolment in this program requires the completion of 4.0 courses.
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)
(4 full courses or their equivalent)
First Year: (2.0 FCE)
(MAT135H1, MAT136H1)/MAT137Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year: (1.0 FCE)
Any other 1.0 full course equivalent from PHY courses at the 200+ level, including ENV235H1

## Centre for Environment

## Third Year: (1.0 FCE)

One full course equivalent from: Any 300 or 400 level PHY course, BIO472H1, JPA305H1, JPA405H1/JPA310H1; JGP438H1; BME595H1; PSL454H1

## Physical \& Environmental Geography Minor

 (Science program)Minor Entry Requirements: There are no entry requirements for this program

| Number <br> of <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any 2 | GGR100H1, GGR101H1, <br> GGR107H1, GGR112H1, GGR124H1 | 1.0 |
| B: Any 2 | GGR201H1, GGR203H1, <br> GGR205H1, GGR206H1 | 1.0 |
| C: 3 | GGR390H1; (GGR301H1/ <br> GGR303H1/GGR305H1); <br> (GGR272H1/GGR337H1/ <br> GGR308H1) | 1.5 |
| D: Any 1 | A half course from GGR201H1, <br> GGR203H1, GGR205H1, <br> GGR206H1, GGR301H1, <br> GGR303H1, GGR305H1, <br> GGR307H1, GGR308H1, <br> GGR314H1, GGR333H1, <br> GGR34711/JGE347H1, GGR348H1/ <br> JGE348H1, GGR403H1, <br> GGR409H1, GGR413H1; JGE236H1 | 0.5 |
| Total | \begin{tabular}{\|l|}
\hline
\end{tabular} |  |

## Centre for Environment Courses

NOTE: Many ENV courses are limited in enrolment and require specific prerequisites. Preference is given to students meeting the ROSI deadlines.

## ENV100H1 Introduction to Environmental Studies [24L]

An investigation of the relationship between human beings and their natural and built environments. This interdisciplinary course will draw from the sciences, social sciences and the humanities to explore major social, cultural, economic, regulatory, ethical, ecological and technological aspects of environmental issues.
DR=SOC SCI; BR=3
ENV200H1 Assessing Global Change: Science and the Environment (formerly ENV200Y1) [24L/4T]
The perspective which scientists bring to the understanding and resolution of environmental concerns having global implications: atmospheric systems and climate change, the biosphere and conservation of biodiversity.
This living things and their environment breadth course is intended to fulfill the environmental literacy requirement for students in the BA programs of the Centre for Environment or the living things and their environment breadth course
requirement for Commerce, Humanities and Social Science students
Exclusion: BIO120H1,BIO150Y1 (applies only to students in Arts \& Science); ENV200Y1
DR=SCI; BR=4

## ENV221H1 Multidisciplinary Perspectives on Environment (formerly ENV222Y1) [24L/4T]

One of two foundation courses for the Centre's undergraduate program. Introduces students to ways in which different disciplines contribute to our understanding of environment. Instructors and guest lecturers are drawn from the sciences, social sciences and the humanities and will present subject matter, assumptions, conceptualizations and methodologies of their disciplines.
Exclusion: ENV222Y1/GGR222Y1/JGE221Y1 DR=SOC SCI; BR=None

## ENV222H1 Interdisciplinary Environmental Studies (formerly ENV222Y1) [24L/4T]

Building upon ENV221H1, shows how environmental studies is working to knit different disciplinary perspectives into one interdisciplinary body of knowledge; interplay of science and values in definition and framing of issues; roles of markets, politics and ethics in developing solutions; local to global scale; historical and current timeframes.
Exclusion: ENV222Y1/GGR222H1/GGR222Y1/JGE221Y1/
JIE222Y1 Note: GGR222H1 as an Exclusion for
ENV222H1 does not apply for the Winter 2011 offering of
the ENV222H1/GGR222H1 combined course.

## DR=SOC SCI; BR=3

ENV223H1 Fundamental Environmental Skills [24L]
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. Corequisite: ENV221H1 and enrolment in a Centre Major program, or permission of Undergraduate Coordinator. Exclusion: INI223H1
DR=SOC SCI; BR=None

## ENV234H1 Environmental Biology: Structure and

 Function of Ecosystems (formerly ENV234Y1) [24L/18P]This multidisciplinary course draws on elements from geology, soil science, biology and ecology to understand past and present environments and human impacts on landscapes and ecosystems. Emphasis on the structure, functioning and connectivity of aquatic and terrestrial ecosystems. Field trips and labs. Mandatory weekend daylong field trip (total cost about \$20).
Prerequisite: BIO120H1/GLG102H1/GGR100H1/FOR200H1/
FOR201H1 or permission of department
Exclusion: ENV234Y1
DR=SCI; BR=4
ENV235H1 Physics and the Environment [24L/12T]
The nature of physical processes in the Earth's environment the global energy budget, sustainable energy source, wind, solar, geothermal, waves and tidal energy. Hazards, such as earthquakes, tsunamis and volcanoes. The physical principles of remote sensing and environmental monitoring of temperature, radioactivity, and ice cover.

## Centre for Environment

Prerequisite: PHY131H1/PHY151H1, MAT135H1/MAT137Y1/ MAT157Y1
Exclusion: ENV235Y1
DR=SCl; BR=5
JGE236H1 Human Interactions with the Environment (formerly ENV236Y1) [24L/4P]
Will our society survive a future with population growth, increasing demands for energy, food and water, and fouling from pollution? This course explores the current stresses caused by human activities on the environment and global systems, ans what this bodes for the future. Most importantly, we explore solutions! Discussions blend science, engineering, policy and behavioural aspects of broad issues and current events.
Prerequisite: (BIO120H1, BIO130H1)/BIO150Y1/
(GGR100H1, GGR101H1)/GGR100Y1 or permission of instructor.
Exclusion: ENV236Y1
DR=SCI; BR=4

## ENV299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None

## ENV307H1 Urban Sustainability (formerly JIE307Y1) [24L/12P]

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: (ENV221H1, ENV222H1/ GGR222H1)/ENV222Y1/GGR222Y1/JGE221Y1 and enrolment in a Centre program OR INI235Y1 OR permission of the instructor (particularly for students who have completed POL209Y1/SOC205Y1/SOC260Y1)
Exclusion: INI307Y1/JIE307Y1
DR=SOC SCI; BR=3

## ENV315H1 Chemical Analysis of Environmental Samples [24L/36P]

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.
Prerequisite: SCH4U and any second year ENV or GLG courses
Exclusion: CHM217H1, CHM314Y1; GLG335H1
DR=SCI; BR=5

## ENV320H1 National Environmental Policy (formerly ENV320Y1) [24L]

Examines ways in which governments develop and implement policy to protect the environment within their
borders. Primarily Canada, plus comparisons with other countries. The focus is upon the politics of environmental policy making, which is understood by examining the interests and powers of the relevant state and non-state actors.
Prerequisite: (ENV221H1, ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1
Exclusion: ENV320Y1
DR=SOC SCI; BR=3

## JGE321H1 Multicultural Perspectives on Environmental Management [24L]

Diverse approaches to environmental issues from a variety of multicultural perspectives are introduced, compared and analyzed, using case studies. Perspectives on environmental management will be discussed as they emerge from contexts such as South America, Asia, or Africa.
Prerequisite: ENV221H1/ENV222H1/GGR222H1/GGR223H1 Exclusion: ENV321Y1
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3
ENV322H1 International Environmental Policy (formerly ENV320Y1) [24L]
Examines the ways in which states negotiate and implement international agreements addressing global environmental issues, such as the United Nations Framework Convention on Climate Change. Focus is upon factors which determine the efficacy of multilateral environmental agreements and the prospects for stronger global environmental governance.
Prerequisite: (ENV221H1, ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1
Exclusion: ENV320Y1
DR=SOC SCI; BR=3

## ENV323H1 Ontario Environmental Policy (formerly

 ENV423H1) [24S]Introduces students to public policy and institutional foundations of public policy in Canada, with an emphasis on environmental policy in Ontario. Provides an insiders perspective on how environmental policy has been developed in Ontario.
Prerequisite: (ENV221H1, ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1 and enrolment in
a Centre program, or permission of Undergraduate
Coordinator
Exclusion: ENV423H1
DR=SOC SCI; BR=3
JGE331H1 Resource and Environmental Theory (formerly GGR331H1) [24L]
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/GGR107H1/ENV221H1/
ENV222H1/GGR222H1/GGR223H1
Exclusion: GGR331H1
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3
ENV333H1 Ecological Worldviews [24S]
Approaches to environmental concerns are often marked by assumptions that reflect distinct worldviews positing

## Centre for Environment

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
Exclusion: INI333H1
Recommended Preparation: (ENV221H1,ENV222H1/
GGR222H1)/ENV222Y1/GGR222Y1/JGE221Y1
DR=HUM/SOC SCI; BR=2

## ENV334H1 Environmental Biology: Applied Ecology [24L/36P]

Applied issues in aquatic and terrestrial ecosystems. Topics include: ecology of agro-ecosystems and other humanmanaged ecosystems, bio-indicators of anthropogenic impacts, ecosystem restoration, and adaptive management. Field trips and laboratory exercises. Group projects address local management/restoration issues.
Prerequisite: ENV234H1
Exclusion: ENV234Y1
Recommended Preparation: a course in statistics
(EEB225H1 recommended)
DR=SCI; BR=4
ENV335H1 Environmental Design [24S]
Introduction to understanding the complexity of relationships among people, built forms, and natural systems; systematic review of examples of environmental design at various scales.
Exclusion: INI335H1
Recommended Preparation: (ENV221H1,ENV222H1/
GGR222H1//ENV222Y1/GGR222Y1/JGE221Y1

## DR=SOC SCI; BR=3

## 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
DR=SCI; BR=4
ENV341H1 Environment and Human Health [24L/24T]
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: (ENV221H1,ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1 and enrolment in a
Centre program; or $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1) /$
BIO250Y1/BIO255Y1 and enrolment in a Human Biology
program; or permission of the Undergraduate Coordinator
Exclusion: INI341H1
DR=SCI/SOC SCI; BR=4

## ENV346H1 Terrestrial Energy Systems [36L/24T]

Various earth systems for energy transformation, storage and transport are explored. Geological, hydrological, 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 important role of energy storage processes in physical and biological systems, including the accumulation of fossil fuel reserves.
Prerequisite: MAT135Y1/MAT137Y1/JMB170Y1;BIO120H1/ BIO150Y1/CHM138H1/ CHM139H1/CHM151Y1/
PHY138Y1/PHY140Y1/PHY131H1/PHY132H1/
PHY151H1/PHY152H1
DR=SCI; BR=5
ENV347H1 The Power of Economic Ideas (formerly ENV447H1) [24S]
This course examines the power of economic ideas in effecting environmental change. Topics include the relation of ecological economics to mainstream economics, as well as the role of financial incentives to move the environmental agenda forward.
Prerequisite: (ENV221H1, ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1
Exclusion: ENV447H1
DR=SOC SCI; BR=3

## GGR347H1 Efficient Use of Energy (formerly JGE347H1)

 [24L/6T]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 energy use in buildings, transportation, industry, and agriculture.
Exclusion: GGR333H1, JGE347H1
Recommended Preparation: 8.0 FCE's including first year Math and/or Physics
DR=SCI; BR=5
GGR348H1 Carbon-Free Energy (formerly JGE348H1) [24L/6T]
Examines the options available for providing energy from carbon-free energy sources: solar, wind, biomass, nuclear, and fossil fuels with capture and sequestration of CO2. The hydrogen economy is also discussed.
Exclusion: GGR333H1, JGE348H1
Recommended Preparation: 8.0 FCE's including first year Math and/or Physics
DR=SCI; BR=5

## Centre for Environment

ENV350H1 Energy Policy and Environment [24L]
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: (ENV221H1,ENV222H1/GGR222H1)/

ENV222Y1/GGR222Y1/JGE221Y1 or permission of
Undergraduate Coordinator
DR=SOC SCI; BR=3
ENV395Y1 Special Topics Field Course [48S]
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: ENV200H1/ENV200Y1 or BIO120H1/BIO150Y1
DR=SOC SCI; BR=3+4
ENV421H1 Environmental Research [24S]
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: (ENV221H1,ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1,
(ENV320H1,ENV322H1)/ ENV320Y1/ENV321Y1/
JGE321H1 or permission of the Undergraduate
Coordinator
DR=HUM/SOC SCI; BR=3
ENV422H1 Environmental Law [24S]
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: (ENV221H1,ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1 and enrolment in a Centre program, or permission of Undergraduate Coordinator
DR=SOC SCI; BR=3

## ENV430H1 Environment and Health in Vulnerable Populations [24S]

The seminar introduces students to a wide range of topics and issues as they relate to the environment and health of vulnerable populations. Through readings and discussion, students will explore the potential health effects of exposures in children and other vulnerable populations to a variety of chemical and physical agents in both the indoor and outdoor environments. A number of case studies or topics will be examined to exemplify why certain populations may be especially vulnerable to various environmental hazards. Issues related to equity and justice will also be examined. Prerequisite: ENV341H1, or permission of the instructor. DR=SOC SCI/SCI; BR=4

ENV431H1 Urban Sustainability \& Ecological Technology [24L]
Ecological technology or green infrastructure encompasses those technologies that incorporate ecosystems to replace mechanical or non-living components in a machine or a piece of infrastructure. Complex systems theory and second-law thermodynamics are used as a template to explore concepts of urban sustainability, and the role of ecological technology in this context.
Prerequisite: ENV221H1, ENV222H1/GGR222H1/
ENV222Y1/GGR222Y1/JGE221Y1 or permission of the
undergraduate coordinator
DR=SCI; BR=4

## ENV440H1 Professional Experience Course (formerly ENV440Y1) [10S]

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).
Eligible students who wish to do a work placement in the Summer Session or Fall Term of 2012, must submit an application to the Placement Coordinator electronically by January 18, 2012. Work placements for the Summer Session and Fall Term of 2011 have already been allocated. The application form is available at: http://www.environment. utoronto.ca/Upload/undergradsyllabus/440ApplicationForm. doc
Prerequisite: 10 full courses or their equivalent, including three environmental courses in the students environmental program completed before ENV440H1 taken; permission of Undergraduate Coordinator
Exclusion: ENV440Y1
DR=SOC SCI; BR=3

## ENV450H1 Energy and Environment Solutions

 [12T/24S]This is an interdisciplinary course in which students address current energy problems while incorporating technical, environmental, economic, social, and political concerns.
Prerequisite: ENV346H1, ENV350H1; (JGE347H1,
JGE348H1)/GGR314H1, GGR333H1)
DR=SCI; BR=3
ENV451H1 Current Environmental Topics [24S]
This capstone course for the Centre's core programs will explore current environmental topics, with the goal of integrating the multi- and interdisciplinary strands of each student's learning to date.
Prerequisite: (ENV221H1, ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1; ; completion of 10
FCE or their equivalent, and enrolment in one of the
Centre's core major programs; ; or permission of the
Undergraduate Coordinator.
DR=SOC SCI; BR=3

## Centre for Environment

## JEH455H1 Current Issues in Environment and Health [16L/8S]

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: 4th year status, ENV341H1/HMB302H1/
HMB312H1/HMB314H1/HMB322H1
DR=SCI; BR=4

## ENV481H1 Special Topics in the Environment [24S]

Special topics course designed for advanced Specialist and Major students in Centre for Environment programs.
Prerequisite: (ENV221H1,ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1 and completion of at least 10 FCE and enrolment in a Centre Environmental program, or permission of Undergraduate Coordinator.
DR=SOC SCI; BR=None
ENV482H1 Special Topics in the Environment[24S]
Special topics course designed for advanced Specialist and Major students in Centre for Environment programs.
Prerequisite: (ENV221H1,ENV222H1/GGR222H1)/
ENV222Y1/GGR222Y1/JGE221Y1 and completion of at least 10 FCE and enrolment in a Centre Environmental program, or permission of Undergraduate Coordinator. DR=SOC SCI; BR=None

## ENV492H1 Independent Studies Project (formerly IN1492H1)

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: (ENV222H1, ENV222H1/GGR222H1)/222Y1/ GGR222Y1/JGE221Y1 completion of at least 14 FCE, and enrolment in a Centre for Environment program DR=SOC SCI; BR=None

## 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: (ENV222H1, ENV222H1/GGR222H1)/222Y1/ GGR222Y1/JGE221Y1 completion of at least 14 FCE, and enrolment in a Centre for Environment program DR=SOC SCI; BR=None

## Given by the Department of Slavic Languages and Literatures

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.

## Estonian Programs

## Estonian Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 FCEs or equivalent, including at least one at the 300+ level)
Four FCEs from: EST100Y1, EST200Y1, EST210H1, EST300Y1, EST400Y1, EST420Y1, FIN220H1

## Estonian Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Note

The Department reserves the right to assign students to courses appropriate to their level of competence in Estonian.

## EST100Y1 Elementary Estonian[120P]

The basics of Estonian: elementary phonology, morphology, and syntax. Emphasis on reading and speaking as well as writing skills. (Offered in alternate years)
DR=HUM; BR=1

## EST200Y1 Intermediate Estonian[96P]

Continued emphasis on basic language skills, on acquisition of both active and passive vocabulary. (Offered in alternate years)
Prerequisite: EST100Y1or permission of instructor DR=HUM; BR=1
EST210H1 Introduction to Baltic Folklore[24L]
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. DR=HUM; BR=1

## EST300Y1 Advanced Estonian[72P]

Advanced grammar and stylistics through study of a variety of texts; problems of composition; translation; oral and written practice. (Offered in alternate years)
Prerequisite: EST200Y1or permission of instructor DR=HUM; BR=1
EST400Y1 Estonian Literature from 1700[24L/24S]
A survey of the major writers and literary periods in Estonian literature. From Ksu 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: EST300Y1
DR=HUM; BR=1
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: EST300Y1/EST400Y1; permission of instructor DR=HUM; BR=None
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
DR=HUM; BR=None

## Ethics, Centre for

The Centre for Ethics at the University of Toronto fosters research, teaching and public discussion of the moral dimensions of contemporary individual, social and political life. We are committed to the proposition that universities have a distinctive capacity and responsibility to shed light on questions of the moral life, as well as to educate students for reflective citizenship. Fulfilling this responsibility requires that we promote and engage in dialogue about the theory and practice of ethics across disciplinary, cultural, religious and social divides. For information or to make an appointment for consultation contact the Assistant to the Director, 416-9786288 or e-mail: ethics@utoronto.ca.

## Centre for Ethics Courses

## ETH201H1 Contemporary Moral Problems [36L]

An introductory course in applied ethics. A study of selected moral problems that arise in contemporary society, along with some of the theories that have been developed in order to clarify, and possibly resolve, these problems.
DR=HUM; BR=2
ETH210H1 Rationality and Action [36L]
An introductory survey of attempts that have been made to develop a formal model of practical rationality, with particular emphasis on the way moral considerations enter into those deliberations. Topics may include: utility-maximization theory, introductory game theory, consequentialism, and deontic reasoning, as well as the limitations of rationality. DR=HUM; BR=2

## ETH220H1 Moral Psychology [36L]

A study of issues that arise at the intersection of psychology and moral philosophy. Why do people act morally? What role do reason and emotion play? Can we know what is right, yet not be motivated to do it? What role can science play in advancing our understanding of morality?
DR=HUM; BR=2

## ETH230H1 Morality in Cross-Cultural Perspective [36L]

Is morality universal, or does it vary by time and place? This course will examine cultural differences in moral codes from both empirical and philosophical perspectives.
DR=HUM; BR=2
ETH350H1 Topics in Value Theory [36L]
Selected topics in value theory, broadly construed (ethics, political theory, law).
Prerequisite: Completion of 4.0 FCEs.
DR=HUM; BR=2

## ETH401H1 Seminar in Ethics [36S]

A senior seminar in ethics, interdisciplinary in content. Running for a full year for a half-course credit, the seminar will expose senior undergraduates to cutting edge research in ethics broadly conceived. Students will attend between six and eight presentations in the Centre for Ethics's Seminar Series, given by eminent ethics scholars from both outside and inside the university and meet with the instructor (who will be the Centre's Director) to discuss these presentations.
(Note that this is an "H1Y" course -- a half-credit course taught throughout both Fall and Winter terms.)
Prerequisite: One of PHL365H1, PHL375H1, POL320Y1, POL330Y1. Preference for enrolment will be given to students of the Department of Philosophy, the Department of Political Science, and Trinity College's program in Ethics, Society, and Law.
DR=HUM/SOC SCI; BR=2

## European Studies

The European Studies Program is designed to develop an interdisciplinary expertise on modern Europe, combining rigorous language training with in-depth knowledge of Europe's history, politics, and culture. For students who desire the linguistic competence, the cultural comprehension, and the specialized knowledge necessary to operate effectively in the "new" Europe, the major program provides undergraduate students with the opportunity to focus on Europe through a wide variety of courses and disciplines with a focus on economics, history, language and politics. A major in European Studies offers preparation either for further specialized or professional study at the graduate level or for work either in Europe itself or within a Canadian-based organization/business dealing with Europe.

Language competence is at the centre of the European Studies Program. Students majoring in European Studies are expected to acquire, in the course of their Program, a working fluency in one or more of the following designated languages: Croatian, Czech, Estonian, Finnish, French, German, Hungarian, Italian, Polish, Portuguese, Russian, Serbian, Slovak, Spanish, or Ukrainian. European Studies majors may want to consider working toward a language citation. 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. Students who choose to minor in European Studies will acquire in-depth knowledge of modern Europe.

## European Studies Programs

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 Major (Arts 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 and who also successfully complete at least 4 full courses in first year. Students who are exempted from a first-year language course (i.e. those with some prior language skills) should begin studies at the second-year level and must complete a three-year sequence of langaue study.
Visit the European Studies Program web site for updated information about requirements, course offerings, and events: www.utoronto.ca/esp or consult Robert Austin, Undergraduate Coordinator, Room 128N, Munk School of Global Affairs (416-946-8942) for general program requirements.

European Studies Majors must complete 7.0 FCEs, including at least two 300+-level FCEs, 0.5 of which must be at the 400 -level. The mandatory EUR498H - Special Topics in

European Studies fulfils the 400 -level requirement. The distribution of the 7.0 FCEs is as follows:

* Three FCEs in language (a three-year progressive sequence of courses in a single language).
* Two FCEs in the required core courses offered by the Departments of History (EUR200Y) and Political Science (POL207Y or POL359Y or POL321H/POL324H).
* The . 5 FCE EUR498H - Special Topics in European Studies.
* The remaining 1.5 FCE in elective courses chosen from the list of eligible electives below.
Students are expected to consult with the Coordinator for assistance with and advice on course selection.

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: EST100Y1; FIN100Y1; FSL100H1 and FSL102H1/FS;121Y1; GER100Y1; HUN100Y1; ITA100Y1/ITA101Y1; PRT100Y1/PRT110Y1; SLA100Y1, SLA105Y1, SLA106Y1, SLA107Y1, SLA108Y1, SLA109Y1,; SPA100Y1
Second Year:

1. EUR $200 Y 1$
2. One full course equivalent from: EST200Y1; FIN200Y1; FSL221Y1; GER200Y1/GER300Y1/GER370H1; HUN200Y1; ITA 250Y1/ITA251Y1/ITA252Y1; PRT220Y1; SLA204Y1, SLA206Y1, SLA207Y1, SLA208Y1, SLA209Y1, SLA220Y1, SLA237Y1; SPA $220 Y 1$
Third Year:
3. POL207Y1 or POL359Y1 or POL321H and POL324H
4. One full course equivalent from: EST300Y1; FIN300H1 plus half course in literature; FSL321Y1, FSL421Y1, FSL442H1 and FSL443H1; GER300Y1/GER370H1/ GER372H1, GER400H1; HUN320Y1; ITA343H1 and ITA344H1, ITA354H1 and ITA355H1, ITA364H1 and ITA365H1; PRT320Y1/PRT420Y1; SLA305H1, SLA306H1 and SLA336H1, SLA307Y1, SLA308Y1, SLA316Y1, SLA320Y1, SLA321Y1, SLA351H1, SLA402H1 and SLA403H1; SPA320Y1/SPA323H1/ SPA325H1/SPA420H1 and SPA421H1
Fourth Year:
5. EUR 498 H 1
6. Remaining courses to be selected from the list of eligible electives below. The most up-todate list of electives is on the program website.

## Current Eligible Electives (for approval on courses outside the list, please consult the Program Coordinator):

One full course equivalent from: ANT446H1; ECO230Y1, ECO301Y1, ECO303Y1, ECO342Y1; ENG329H1, ENG340H1, ENG341H1; EST400Y1; FCS195H1, FCS297H1, FCS310Y1, FCS331H1, FCS395H1; FIN230H1, FIN235H1, FIN240H1, FIN250H1, FIN260H1, FIN340H1, FIN350H1, FIN415H1; FRE320H1, FRE324H1, FRE326H1; GGR339H1, GGR344H1, GGR361H1; GER150H1, GER204H1, GER205H1, GER232H1, GER150H1, GER261H1, GER321H1, GER322H1, GER323H1, GER326H1, GER336H1, GER350H1, GER362H1,

## European Studies

GER410H1, GER421H1, GER425H1; HIS208Y1, HIS245Y1, HIS251Y1, HIS302H1, HIS309H1, HIS317H1, HIS325H1, HIS330H1, HIS331H1, HIS334Y1, HIS335H1, HIS337Y1, HIS338H1, HIS339Y1, HIS344Y1, HIS349H1, HIS351Y1, HIS353Y1, HIS354Y1, HIS355H1, HIS361H1, HIS371H1, HIS388H1, HIS401H1, HIS407H1, HIS414H1, HIS415H1, HIS416H1, HIS418H1, HIS421Y1, HIS422H1, HIS431H1, HIS433H1, HIS439H1, HIS442H1, HIS445H1, HIS449Y1, HIS451H1, HIS453H1, HIS455H1, HIS458Y1, HIS459H1, HIS460H1, HIS461H1, HIS477H1, HIS488H1, HIS490H1; HUN335H1, HUN345H1, HUN355H1, HUN356H1; INI381H1, INI382H1; ITA210Y1, ITA240Y1, ITA245Y1, ITA301H1, ITA310H1, ITA326H1, ITA340H1, ITA341H1, ITA346H1, ITA347H1, ITA381H1, ITA405H1, ITA410H1, ITA415H1, ITA421H1, ITA441H1, ITA455H1, ITA491H1, ITA492H1; JHP304Y1, JHP435Y1, JHP454Y1; JPD439Y1; JPP343Y1; PHL210Y1, PHL217H1, PHL265H1, PHL310H1, PHL311H1, PHL312H1, PHL315H1, PHL316H1, PHL317H1, PHL320H1, PHL321H1, PHL322H1, PHL326H1, PHL338H1, PHL365H1, PHL388H1; POL200Y1, POL207Y1, POL317Y1, POL320Y1, POL321H1, POL324Y1, POL332H1, POL344H1, POL354H1, POL359Y1, POL366YO, POL368Y0, POL372H1, POL405Y1, POL414H1, POL415H1, POL422Y1, POL437H1, POL440Y1, POL452Y1, POL453Y1; PRT250H1; SLA202H1, SLA205H1, SLA215H1, SLA216Y1, SLA217H1, SLA218Y1, SLA222H1, SLA225H1, SLA226H1, SLA228H1, SLA234H1, SLA241H1, SLA242H1, SLA244H1, SLA247H1, SLA248H1, SLA252H1, SLA302H1, SLA303H1, SLA315H1, SLA318H1, SLA322H1, SLA327H1, SLA328H1, SLA331H1, SLA337H1, SLA339H1, SLA340H1, SLA343H1, SLA344H1, SLA346H1, SLA356H1, SLA380H1, SLA404H1, SLA405Y1, SLA406H1, SLA407H1, SLA414H1, SLA417H1, SLA424H1, SLA425Y1, SLA434Y1, SLA436H1, SLA441H1, SLA442H1, SLA449H1, SLA453H1, SLA458H1, SLA460H1, SLA463H1, SLA465H1, SLA475H1, SLA476H1, SLA485H1, SOC341Y1, SOC350Y1; SPA325H1, SPA341H1, SPA345H1, SPA435H1.

## European Union Studies Minor (Arts program)

This is a limited enrolment program open only to those who earn a mark of at least $70 \%$ in a first-year history or political science course 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 .
( 4 full courses or their equivalent, including at least one 300/400 full-course equivalent)

1. EUR200Y1
2. POL207Y1/(POL321H1, POL324H1)/POL359Y1
3. Two full credits or their equivalent in eligible elective courses (see European Studies Major above)

## European Studies Courses

## EUR200Y1 Europe: Nation-State to Supranational Union[48L/24T]

An analysis of the development of European political regimes from 1789 until the 2004 and 2007 enlargements of the European Union to include the countries of the former Soviet bloc. 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.
DR=HUM/SOC SCI; BR=3

## EUR495H1 Independent Studies[2P]

An in-depth of an issue of relevance to the European Union.
Content depends on the instructor.
Prerequisite: Open only to students enrolled in the European Studies Major Program. Third and Fourth year students only.
Recommended Preparation: Varies year to year.
EUR498H1 Special Topics - Europe[24L]
The course looks at issues of central significance to Europe and the European Union in that academic year. These issues might include immigration, integration, migration, fiscal/monetary union, common foreign and security policies, peacekeeping/peacebuilding and EU enlargement/ deepening.
Prerequisite: EUR200Y1 + POL207Y1/
(POL321H1,POL324H1)/POL359Y1 and completion of 12.0 FCEs

DR=SOC SCI; BR=3

## Faculty

## Professors Emeriti

G. Bisztray, MA, Ph D
B. Vahamaki, MA, Ph Lic, Ph D

## Assistant Professor

## Pia Paivio, MA, Ph D

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.

## Finnish Programs

Enrolment in Finnish programs requires the completion of 4.0 courses.

## Finnish Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(6 FCEs or their equivalent, with at least 2 FCEs at the 300+ level, including 0.5 FCE at the 400 -level)

FIN100H1, FIN110H1
FIN200H1, FIN210H1
FIN300H1
4. 4 FCEs from the following: FIN230H1, FIN235H1, FIN240H1, FIN250H1, FIN260H1, FIN305H11, FIN310H1, FIN320H1, FIN330H1, FIN 340H1, FIN350H1, FIN360H1, FIN400H1, FIN410H1, FIN415H1, FIN420Y1, FIN430H1
5. To insure exposure to quantitative skills, all Majors must take 0.5 FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.

## Finnish Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 FCEs or equivalent, including at least one at the 300+ level)
Four FCEs from FIN-designated courses

## Finnish Courses

## FIN100H1 Elementary Finnish I [48P]

The Department reserves the right to assign students to courses appropriate to their level of competence in Finnish. 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.
DR=HUM; BR=1
FIN110H1 Elementary Finnish II [48P]
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.
Prerequisite: FIN100H1 or permission of instructor DR=HUM; BR=1
FIN200H1 Intermediate Finnish I [48P]
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.
Prerequisite: FIN110H1 or permission of instructor
Exclusion: FIN200Y1
DR=HUM; BR=1
FIN210H1 Intermediate Finnish II [48P]
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.
Prerequisite: FIN200H1 or permission of instructor DR=HUM; BR=1

## FIN220H1 Introduction to Finnish Linguistics <br> [12L/12S]

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. DR=HUM; BR=2
FIN230H1 Finnish Culture 1800 to Present [12L/12P] FIN230H1offers 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

## Finnish

social institutions, its economic structures, its demographics, as well as the nations bilingual status.
DR=HUM; BR=3

## FIN235H1 Finnish Literature 1800 to Present [12L/12P]

FIN235H1 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.
Recommended Preparation: FIN230H1
DR=HUM; BR=1

## FIN240H1 Masterpieces of Scandinavian Literature [12L/12S]

Introduction to the greatest authors of Scandinavian literature and their greatest works, particularly August Strinberg, Henrik Ibsen, H.C. Anderssen, Knut Hamsun, Selma Lagerlof, Pr 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 DR=HUM; BR=1

## FIN250H1 Finnish Cinema [12P/24S]

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 Kaurismaki). Readings and subtitles in English. (Offered in alternate years)

## DR=HUM; BR=1

## FIN260H1 Scandinavian Cinema [12P/24S]

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 Sjostrom, Mauritz Stiller, Alf Sjoberg, Ingmar Bergman, August Bille, Carl Th. Dreyer, Gabriel Axel, Nils Gaupe, Aki and Mika Kaurismaki. (Offered in alternate years)
DR=HUM; BR=1

## FIN300H1 Advanced Finnish I [12P/24S]

Advanced Finnish provides a continuation of FIN210H1 Intermediate Finnish.
Prerequisite: FIN210H1 or permission of instructor DR=HUM; BR=1

FIN305H1 Finnish Morphology and Syntax [12L/12S]
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 FIN110H1 DR=HUM; BR=2

FIN310H1 Finnish Folklore: The Kalevala [12L/12S] 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 Finlands nation
building in the 19th and 20th centuries. Readings in English. (Offered at least every alternate year)
DR=HUM; BR=1

## FIN320H1 The Finnish Canadian Immigrant Experience [12L/12S]

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, womens lives, religious and social attitudes and values. Readings in English. (Offered every three or four years)
DR=HUM; BR=3

## FIN330H1 Regional Origins of Finnish Culture [12L/12S]

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.
DR=HUM; BR=1

## FIN340H1 Advanced Finnish II [12P/24S]

Advanced Finnish II provides a continuation of FIN300H1 Advanced Finnish I.
Prerequisite: FIN300H1 or permission of instructor DR=HUM; BR=1

FIN350H1 The Finnish Short Story [24S]
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, Sillanpaa, Haanpaa, Meri, Hyry, Salama, Mukka, Liksom, and others. Readings in English. (Offered in alternate years)
DR=HUM; BR=1

## FIN360H1 Bilingualism in Finland [12L/12S]

Bilingualism in Finland as a case study in the sociology of language. A critical survey of the historical development of language politics in Finland as a bilingual society from 1800 until present.
Exclusion: FIN340H1
DR=HUM; BR=3
FIN400H1 Translation: Finnish-English [24S]
Written translation from Finnish to English. Students will apply their textual analysis skills in translating texts drawn from diverse sources and genres, while exploring the general theory of translation. Translation exercises will serve as the basis for training in comparative Finnish-English stylistics. Prerequisite: FIN300H1 or permission of instructor Recommended Preparation: FIN305H1 DR=HUM; BR=2

## FIN410H1 Finnish Literature 1700-1900 (in Finnish) [24S]

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. All readings in Finnish. (Offered as needed)

Prerequisite: Permission of instructor
Recommended Preparation: FIN300Y1
DR=HUM; BR=1
FIN415H1 Finnish Literature in the 20th Century [24S]
This course examines the main literary works and genres of 20th Century Finland, especially Jotuni, Sillanpaa, Haanpaa, Meri, Manner, Linna, Tuuri and a sample of contemporary writers. All readings in Finnish.
Prerequisite: Permission of instructor
Recommended Preparation: FIN410H1
DR=HUM; BR=1
FIN420Y1 Independent Study [TBA]
A reading and research project
DR=HUM; BR=None
FIN421H1 Independent Study [TBA]
A reading and research project.
DR=HUM; BR=None
FIN430Y1 Independent Study [TBA]
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
DR=HUM; BR=None

## Forest Conservation

## Faculty

## Professor and Dean of the Faculty

S.M. Smith, M Sc, Ph D

## Professors

P.A. Cooper, M Sc, Ph D
S. Kant, MA, Ph D
D.L. Martell, MA Sc, Ph D
M. Sain, MTech, Ph D
C.T. Smith, BA, MS, Ph D
S.C. Thomas, BA, Ph D

Associate Professors
T.J. Carleton, M Sc, Ph D
J. Caspersen, BA, Ph D
J.R. Malcolm, M Sc, Ph D
N. Yan, BA Sc, Ph D

## Assistant Professors

S. Krigstin, M Sc F, Ph D
N. Singh, PhD

## 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.

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 students interest in forestry and related issues. Students should consider combining these programs with a major in another related discipline such as environment, geography, biology, 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.

## Forest Biomaterials Science

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. Wise and innovative use of forest biomaterials is a mandatory component of global forest conservation. It is recognized that right and proper use of forest-based materials can help resolve global environmental problems as they are renewable, have low life cycle costs and contribute to carbon sequestration. Traditionally, forest materials have been used in wood construction and paper products. Today, new and exciting technologies are transforming the forest resource into biodegradable polymers, specialty chemicals and carbon neutral fuels. Students in this program will acquire a thorough understanding of forest sustainability; material science of wood and other forest based materials; bioconversion technologies related to forest and agricultural materials and optimal use and maintenance of natural fibre based materials. The program is highly interdisciplinary, combining aspects of forestry, biology, chemistry, chemical and mechanical engineering and building sciences.
The major and minor in Forest Biomaterials Science will be of interest to students that recognize the value of conserving the forest through good design, application and utilization of forest based products. Graduates from this program can pursue careers in private industry, research and government organizations where knowledge of new and changing technologies will be required to lead the transformation from petro-chemical based industries to ones established on renewable biomaterials.

Undergraduate Co-ordinator: Professor John Caspersen, Room 3011 , Earth Sciences Centre (416-946-8506)

Undergraduate Administrator: Ms. A. Veneziano, Room 1016E, Earth Sciences Centre (416-978-5480)

## Forest Conservation and Forest Biomaterials Science Programs

## Forest Conservation Science Specialist (Science program)

Enrolment in the specialist program is open to students who have completed four first-year courses.
(12 full courses or their equivalent, including at least four 300-series courses and 2.5400 -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:

BIO120H1; 2.5 Science FCEs (GGR100H1, GGR101H1; CHM138H1, CHM139H1 recommended)
Second Year:

1. ENV234H1; FOR200H1, FOR201H1
2. 1.0 FCE from ECO220Y1, ECO227Y1; GGR270H1, GGR271H1; STA221H1, STA220H1
3. 1.0 FCE from $\mathrm{BIO} 220 \mathrm{H} 1, \mathrm{BIO} 251 \mathrm{H} 1, \mathrm{BIO} 260 \mathrm{H} 1 ;$ GGR205H1, GGR206H1, GGR272H1, GGR273H1; PHL273H1; ENV221H1, ENV222H1, ENV236H1
Third Year:
4. FOR301H1, FOR305H1. 1.0 FCE from FOR300H1, FOR302H1, FOR303H1, FOR306H1, FOR307H1, FOR310H1; ENV334H1
5. 0.5 FCE from: EEB319H1, EEB321H1, EEB323H1, EEB328H1; CSB340H1
6. 1.0 FCE from EEB324H1, EEB360H1, EEB365H1, EEB386H1, EEB388H1, EEB389H1; GGR303H1, GGR305H1, GGR314H1; ENV320H1, ENV322H1, ENV323H1

## Fourth Year:

1. FOR400Y1, FOR401H1
2. 0.5 FCE from: FOR403H1, FOR405H1, FOR410H1, FOR413H1, FOR416H1, FOR417H1, FOR418H1, FOR419H1, FOR420H1, FOR423H1; GGR403H1; ENV347H1; JFG470H1, JFG475H1; EEB403H1, EEB406H1, EEB407H1

## Forest Conservation Science Major (Science program)

Enrolment in the major program is open to students who have completed four first-year courses.
(8 full courses or their equivalent, including at least 2.0 300-series courses and 1.0400 -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:
BIO120H1; 2.5 Science FCEs (GGR100H1, GGR101H1; CHM138H1, CHM139H1 recommended)
Second Year:
FOR200H1, FOR201H1; 1.0 FCE from ENV234H1, JGE236H1; BIO220H1
Third Year:
FOR305H1; 1.5 FCE from FOR300H1, FOR301H1, FOR302H1, FOR303H1, FOR306H1, FOR307H1, FOR310H1; EEB321H1
Fourth Year:
FOR400Y1

## Forest Conservation Science Minor (Science program)

Enrolment in the minor program is open to students who have completed four first-year courses.
(4 full courses or their equivalent, including at least 1.0 300-series course and 1.0 400-series course)
First Year: 1.0 FCE from: BIO120H1; GGR100H1, GGR101H1; CHM138H1, CHM139H1
Second Year: FOR200H1, FOR201H1
Third Year: 1.0 FCE from: FOR300H1, FOR301H1, FOR302H1, FOR303H1, FOR305H1, FOR306H1, FOR307H1, FOR310H1
Fourth Year: FOR400Y1

## Forest Conservation Specialist (Arts program)

Enrolment in the specialist program is open to students who have completed four first-year courses.
(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:
BIO120H1; 1.5 Social Science FCE
Second Year:

1. ENV234H1; FOR200H1, FOR201H1
2. 1.0 FCE from ECO220Y1, ECO227Y1; GGR270H1; STA220H1, STA221H1, STA250H1, STA255H1
3. 1.0 FCE from ABS201Y1; ANT204Y1; ENV221H1, ENV222H1/GGR222H1; PHL273H1
Third Year:
4. FOR301H1, FOR305H1; At least 1.0 FCE from FOR300H1, FOR302H1, FOR303H1, FOR306H1, FOR307H1, FOR310H1; EEB321H1
5. At least 1.0 FCE from: ANT365H1; JGE331H1; HIS318Y1; ENV320H1, ENV321H1, ENV323H1, ENV347H1; UNI302H1; JAG321H1
Fourth Year:
6. FOR400Y1, FOR401H1
7. 1.0 FCE from: ANT450H1; FOR403H1, FOR416H1, FOR417H1, FOR418H1; ENV421H1, ENV422H1, ENV440H1; JFG470H1, JFG475H1; GGR416H1

## Forest Conservation Major (Arts program)

Enrolment in the major program is open to students who have completed four first-year courses.
(8 full courses or their equivalent, including at least 2.0 300 -series courses and 1.0400 -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:
BIO120H1; 1.5 Social Science FCE's
Second Year:

1. ENV234H1; FOR200H1, FOR201H1
2. 1.0 FCE from: ABS201Y1; ANT204Y1; ECO220Y1, ECO227Y1; GGR270H1; STA221H1; ENV221H1, ENV222H1; PHL273H1; STA220H1/STA250H1/ STA255H1
Third Year:

## Forest Conservation

FOR305H1; 1.0 FCE from FOR300H1, FOR301H1, FOR302H1, FOR303H1, FOR306H1, FOR307H1, FOR310H1; EEB321H1
Fourth Year:
FOR400Y1

## Forest Conservation Minor (Arts program)

Enrolment in the minor program is open to students who have completed four first-year courses.
(4 full courses or their equivalent)
First Year: 1.0 of ANT100Y1, ECO100Y1, ENV200H1, GGR100H1, GGR101H1
Higher Years: 3.0 FCEs from FOR200H1, FOR201H1, FOR300H1, FOR301H1, FOR302H1, FOR303H1, FOR305H1, FOR306H1, FOR307H1, FOR310H1, FOR400Y1, FOR401H1

## Forest Biomaterials Science Major (Science program)

The Forest Biomaterials major or minor may be strengthened by an 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 \& Science (major, minor).
Consult the Program Coordinator, Professor Sally Krigstin, Room 3029; Earth Sciences Centre (416-946-8507) Enrolment in the major program is open to students who have completed four first-year courses.
(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. BIO120H1; 1.0 FCE from MSE101H1; ECO100Y1/ ECO105Y1; CHM138H1, CHM139H1; ARC132H1; MAT135Y1
2. FOR200H1, STA220H1; 1.0 FCE from CHM220H1, ENV221H1, ENV234H1; MSE219H1; BCH210H1/ BCH242H1; STA221H1/EEB225H1; MGT201H1/ RSM100Y1; BIO220H1, BIO251H1
3. FOR300H1; FOR310H1; 1.0 FCE from FOR302H1, FOR305H1; ENV315H1, ENV350H1; MSE316H1; ARC341H1, 342H1; BCH370H1; JGE348H1
4. FOR401H1; FOR410H1; 1.0 FCE from FOR403H1, FOR405H1, FOR420H1, FOR423H1; CHE575H1

## Forest Biomaterials Science Minor (Science program)

The Forest Biomaterials major or minor may be strengthened by an 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 \& Science (major, minor).
Consult the Program Coordinator, Professor Sally Krigstin, Room 3029; Earth Sciences Centre (416-946-8507)
Enrolment in the minor program is open to students who have completed four first-year courses.
(4 full courses or their equivalent, including at least 1.5 FCE 300 -series course and 1.0 FCE 400 -series courses)

1. 1.5 FCE from BIO 120 H 1 ; MSE101H1; ECO105Y1; CHM138H1 CHM139H1, CHM220H1; ARC132H1; FOR200H1; ENV234H1; MGT201H1
2. FOR300H1; FOR310H1; 0.5 FCE from: ENV315H1, ENV350H1; MSE219H1, MSE316H1, FOR305H1, ARC341H1, ARC342H1; BCH370H1; JGE348H1
3. 1.0 FCE from: FOR401H1, FOR405H1, FOR410H1, FOR420H1, FOR423H1

## Forest Conservation Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

FOR200H1 Conservation of Canada's Forests [24L]
Forest conservation issues in Canada; development of forest management philosophy in Canadian and temperate forest regions; and concepts of sustainability. Techniques for more sustainable forest management: structural retention; forest certification; old growth; value-added and non-traditional forest products.
Recommended Preparation: BIO120H1/ GGR100H1 +
GGR101H1
DR=SCI; BR=4

## FOR201H1 Conservation of Tropical and Subtropical Forests [24L]

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; agroforestry; biodiversity and non-timber forest products; the fuelwood crisis; large carnivore conservation; ecological, economic and social perspectives.
Recommended Preparation: BIO120H1 / GGR100H1 + GGR101H1
DR=SOC SCI/SCI; BR=4
FOR300H1 Forest Products in Sustainable Forestry [24L/24P]
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; underutilized species; wood protection. Forest product certification; eco-labelling; life cycle analysis.
Recommended Preparation: FOR200H1, FOR201H1 DR=SCI; BR=5

## 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 August 30 September 8 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: ENV234H1; FOR200H1,
FOR201H1, GGR205H1
DR=SCI; BR=4

## FOR302H1 Societal Values and Forest Management

 [24L]The course will provide diverse perspectives about societal values and forests, such as Aboriginal perspective, ecosystem services and human well-being, climate change and carbon sequestration, and forest management systems, such as community-based forest management and adaptive management systems; and will develop an understanding of the need of integrative approach to address the social, cultural, economic, and scientific issues associated with forest management.
Recommended Preparation: FOR200H1, FOR201H1
DR=SOC SCI; BR=3

## FOR303H1 Human Dimensions of Global Forests [24L]

Global forest resources; relationships between societies and forests, consumption, trade and valuation of timber and nontimber products; ecosystem services, climate change and forestry, tropical deforestation and softwood lumber dispute. Recommended Preparation: FOR200H1, FOR201H1 DR=SOC SCI; BR=3
FOR305H1 Biology of Trees and Forests [24L/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/FOR201H1, BIO120H1/BIO220H1/ENV234H1
DR=SCI; BR=4
FOR306H1 Tropical Forest Ecology and Conservation Field Course [24P]
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 will be field-based in the country of Dominica, West Indies.
Prerequisite: FOR201H1, FOR301H1 or FOR305H1 DR=SCI; BR=4
FOR307H1 Forest Insect Ecology \& Management [24L/24P]
Insect identification and ecology, biodiversity and conservation, invasive species, insect-tree interaction, biological control, pesticide use, and integrated pest management.
Recommended Preparation: FOR301H1 or FOR305H1, EEB360H1 or EEB361H1
DR=SCI; BR=4

## FOR310H1 Bioenergy from Sustainable Forest Management [24L/12T]

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: Completion of at least 6
Science FCE's
DR=SCI; BR=3

## FOR400Y1 Advanced Seminar in Forest Conservation

 [48S]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, FOR301H1, FOR302H1, FOR303H1, FOR305H1, FOR306H1, FOR307H1
DR=SOC SCI/SCI; BR=3+4
FOR401H1 Research Paper/Thesis in Forest Conservation [TBA]
Individual in-depth student research projects on significant forest conservation and forest biomaterial issues, based on field and/or laboratory research, or literature survey. Prerequisite: At least 2 of FOR300H1, FOR301H1, FOR302H1, FOR303H1, FOR305H1, FOR306H1,
FOR307H1, FOR310H1 (minimum of 15 FCEs)

## DR=SOC SCI/SCI; BR=None

FOR403H1 Directed Readings [24S]
Provides opportunities for students to carry out individual in-depth study of current forest conservation and forest biomaterials issues, under the direction of a faculty member. Prerequisite: At least 2 of FOR300H1, FOR301H1,

FOR302H1, FOR303H1, FOR305H1, FOR306H1
FOR307H1, FOR310H1 (minimum of 15 FCEs)
DR=SOC SCI/SCI; BR=None
FOR405H1 Forest Products, Processing and Water
Relations [24L/12P]
Processing of wood into commercial products focusing on products produced in conjunction with water. Also includes composite manufacturing; specifications and testing; bending; wood drying; spalting and decay protection; life cycle analysis of wood-based products.
Prerequisite: None
DR=SCI; BR=5

## FOR410H1 Bioenergy and Biorefinery Technology [24L/24T]

Technological advances and approaches in deriving biofuels and chemical feedstocks from forest and other biomass. 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 will be discussed.
Recommended Preparation: Completion of at least 10 Science FCE's
DR=SCI; BR=5
FOR413H1 Wildlife Ecology \& Conservation [24L]
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.

## Forest Conservation

Prerequisite: EEB319H1/EEB321H1/EEB323H1/EEB324H1/
ENV234H1/FOR200H1/FOR201H1 (minimum of 15 FCEs) DR=SCI; BR=4
FOR416H1 Urban Forest Conservation [24L]
Current research and practice in the conservation and enhancement of urban forests. Reviews the role of trees and woodlands in providing environmental, social and economic benefits to urban and peri-urban residents and to the broader environment. Examines approaches to the characterization of urban forest ecosystems, and their planning and management.
Prerequisite: FOR200H1/FOR201H1/permission of instructor DR=SCI; BR=4

## FOR417H1 Ecological Principles of Agroforestry [24L]

The roles of trees and forests in agricultural land-use systems primarily in the third world. An examination of the biological and management aspects of agroforestry, within the socio-economic constraints of the developing world. The sustainability of particular agroforestry systems is a theme throughout.
DR=SCI; BR=4

## FOR418H1 Urban Forest Conservation Field Camp [45L/15P]

A ten day field course 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.
DR=SCI; $\mathrm{BR}=4$
FOR419H1 Forest Fire Behaviour and Management [24L/24P]
Understanding forest fire activity is important for predicting fire's impact on forests and the wildland-urban interface, as well as understanding the impacts of climate change. Basic principles of forest fuel moisture exchange, fire occurrence and fire behaviour are explored. Emphasis is placed on application of these models to real fire management problems.
Prerequisite: One course in quantitative methods, linear algebra or calculus
Recommended Preparation: ECO220Y1/ECO227Y1/ GGR270H1/MAT133Y1/MAT135Y1/MAT137Y1
DR=SCI; BR=4
FOR420H1 Green Process Chemistry [24L/12T]
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: Completion of at least 10 Science FCE's
DR=SCI; BR=5
FOR423H1 Design and Manufacturing of Biomaterials [24L/24T]
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, and the practical use of these products in design.
Recommended Preparation: Completion of at least 10

## Science FCE's

DR=SCI; BR=4

## JFG470H1 Forest Management [24L]

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: ECO220Y1/ECO227Y1/
GGR270H1/MAT133Y1/MAT223H1

## DR=SCI; BR=3

JFG475H1 Forest Fire Management Systems [24L] Use of operational research and information technology to develop mathematical models and decision support systems to design and evaluate the performance of forest fire and other 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/ECO227Y1/

GGR270H1/MAT133Y1/MAT135Y1/MAT137Y1
DR=SCI; BR=3

## Faculty

## University Professor Emeritus

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## Assistant Professors

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Senior Lecturers
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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)
M.-A. Visoi, MA, Ph D (SM)

## Lecturers

J. English, MA, Ph D (University of Toronto Scarborough)
M. Tsimenis, MA, Ph D (University of Toronto Scarborough)
J. Papillon, MA, PhD (OH)
S. Sacré, MA, PhD ( OH )

French is not only one of the official languages of Canada: it is also one of the world's major international languages. Courses in French studies provide a varied, flexible and in-depth examination of the French language and the multitude of cultures it expresses. 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. In the Canadian job market, command of the French language is a definite asset. The department offers students an integrated curriculum, which brings together courses in language, linguistics, literature, French Culture and didactics. Unless specified otherwise, the language of instruction is French.
Literature (FRE): 200-level mandatory courses introduce students to concepts, methodologies and critical tools which will be elaborated through further literature and theory and serve as basis for other literature courses dedicated to

## French

the History of French Literature and Cultural and Socia context streams. 300-level courses encourage students to explore sophisticated primary and secondary sources from disciplinary and interdisciplinary perspectives. 400-level courses initiate students to research. The actual content of most 400-level courses varies considerably according to the instructor. Students should consult the French Studies web site (www.french.utoronto.ca/undergraduate) for content specific to a given year.

Linguistics (FRE): 200-level mandatory courses initiate students into the 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).
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 Department reserves the right to place students in the language course appropriate to their level of linguistic competence, based on the results of a placement test. Since 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 higher level than his/her year of study. The placement test, available at www.lang.utoronto.ca/placement/french is mandatory for all students who wish to register in an FRE or FSL course for the first time (except true beginners who have no knowledge of French). The placement test can be taken only ONCE and the results of the first test will prevail in the event of several attempts. Ideally, the placement test should be taken in the preceding term of the course students intend to register in, (e.g. for a Fall term or Y course, students should take the placement test in the summer term, prior to their registration date on ROSI and before the beginning of classes). 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 Department of French.
Students are reminded that they must NOT take FSL courses in reverse order.
French Cultural Studies (FCS): Courses on French and Francophone culture, taught in English, may be used to fulfil distribution/breadth requirements.

French Language Learning: The Major in French Language Learning can be taken with a similar Major program in Italian studies. The core course for this program is JFI 225Y1 which instructs students in the methodology of second, third or other 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. Students enrolled in this course must submit all written work, tests and assignments in French.

Study Elsewhere: To be entitled to participate in the 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 french.utoronto.ca/undergraduate/information/ study_elsewhere.

Transfer Credits for FSL Courses: Students may receive transfer credits, by means of a request placed through their College Registrar, for language courses taken at any accredited or degree-granting university in Canada or abroad. In order to be recommended for transfer credits, students should arrange, before returning to Toronto, for the other university to send an official transcript of their results. The transcript should be sent directly to the address indicated on their Letter of Permission (if they have one) or to their College Registrar.
As soon as possible after completion of the course, students must take and pass a placement test with the Department of French, qualifying for entry into the next language course above the level of the one for which they desire credit. Students who cannot meet this deadline must contact the Department to arrange for special permission to postpone the date of their test. Students should call 416-926-2302 to book an appointment for writing the test at the Department of French.

Students may request credit for any level of language studies offered by the Department of French, subject to the general rules for eligibility.

Transfer Credits for FRE Courses: Transfer credits for studies in areas other than language may be requested directly upon return through the College Registrar and will be processed in the normal way. It is recommended that a Letter of Permission be requested through the College Registrar well in advance of departure from Toronto. Students are reminded that only courses taken at accredited universities or degree-granting institutions will be considered for credit.

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 French Studies Undergraduate Brochure, available online at www.french.utoronto.ca/ undergraduate, contains more detailed information about all the courses and programs listed below.
Counselling:
50 St. Joseph St., Rm. 226, Odette Hall (416-926-2333), Counselling hours: Tuesdays and Thursdays 10:00a.m. to 12:00p.m. or by appointment. email: french.undergraduate@ utoronto.ca

Enquiries:
50 St. Joseph St., Rm. 210, Odette Hall (416-926-2302), email: french.secretary@utoronto.ca; website:www.french. utoronto.ca

Undergraduate enquiries: french.undergraduate@utoronto.ca
Online brochure: www.french.utoronto.ca/undergraduate

## French Programs

Enrolment in all French programs requires the completion of 4.0 courses.

Note:
The Placement Test, available at www.lang.utoronto. ca/placement/french, is mandatory for all students who register in any French course for the first time (except true beginners who have no knowledge of French). The test must be taken prior to registration and before the beginning of classes in any given term, in order to ensure enrolment in the appropriate course. Students not having access to a computer capable of playing sound files should write to french.placement@utoronto. ca and arrange to take the test at the Department of French.

FSL 100H, FSL 102H and FSL 121Y do not count towards any Specialist, Major or Minor programs in French.
Students not placed in FSL 221Y or higher by the placement test must first complete FSL 121Y before starting any program in French.

FSL 271H1 provides useful basics for further studies in Linguistics and French Language Learning, and for students who feel they would benefit from a better understanding of the grammatical structure of the language. It must be taken before any higher level FSL course, if exempted from FSL 221 Y by the placement test.
Students are reminded that they must NOT take FSL courses in reverse order.

Exemptions from any required FSL or FRE courses do not reduce the total number of courses required for a program.

No auditing is allowed in FSL courses.
Students who are not enrolled in a program in French may enroll in a FRE course of their choice as an elective with the Department's permission, if they can demonstrate adequate competence in French. These students may submit their written assignments in English.

Students must satisfy the subject post requirements as outlined the year in which they registered in the program. Students having registered in these subject posts in previous year should consult the brochure from their year of registration.

## French Language and Literature Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(11 full courses or their equivalent)

1. FSL221Y1, FSL321Y1, FSL 442H, FSL 443H. (Students not placed in FSL221Y1 or higher by the Placement test must first complete FSL121Y1 before starting this program. Students exempted from FSL221Y1 may replace it with any FRE 200+ or 300+ level course. Students exempted from FSL321Y1 may replace it with two FRE half-courses at the 300+ level. Students with $77 \%$ in FSL321Y1 may replace FSL 442H, FSL 443H with a 300+ series FRE course).
. FRE240H1, FRE241H1, FRE210H1, FRE250H1
2. FRE272H1, FRE273H1
3. FRE344H1
4. 1.5 full course equivalents in the History of French Literature stream: FRE318H1, FRE319H1, FRE320H1, FRE324H1, FRE326H1; 1.0 full-course equivalent in the Problematics and Media Studies stream: FRE304H1, FRE308H1, FRE310H1, FRE334H1, FRE336H1, FRE345H1; 0.5 full-course equivalent in the Cultural and Social Contexts stream: FRE314H1, FRE332H1.
5. 1.0 full-course equivalent in FRE literary courses at the 400-level
6. 0.5 additional full-course equivalent at the $300+$ level among the Department's literary course offerings.
Please note that students must complete FRE240H1, FRE241H1 and FRE344H1 before taking any FRE 400-level literary courses.

## French Language and Literature Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent)

1. FSL221Y1, FSL321Y1 (Students not placed in FSL221Y1 or higher by the Placement test must first complete FSL121Y1 before starting this program. Students exempted from FSL221Y1 may replace it with any FRE 200+ or 300+level course. Students exempted from FSL321Y1 may replace it with two FRE halfcourses at the 300+ level).
2. FRE240H1, FRE241H1, FRE210H1/FRE250H1
3. FRE272H1/FRE273H1
4. FRE344H1
5. 1.0 full-course equivalent in the History of French Literature stream as follows: 0.5 full-course equivalent from FRE318H1/FRE319H1/FRE320H1 and 0.5 fullcourse equivalent from FRE324H1/FRE326H1; 1.0 full-course equivalent in the Problematics and Media Studies stream from FRE304H1, FRE308H1, FRE310H1, FRE334H1, FRE336H1, FRE345H1; 0.5 full-course equivalent in the Cultural and Social Contexts stream from FRE314H1/FRE332H1.
6. 1.0 full-course equivalent in FRE literary courses at the 400-level.
Please note that students must complete FRE240H1, FRE241H1 and FRE344H1 before taking any FRE 400-level literary courses.

## French Language and French Linguistics Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent)

1. FSL221Y1 (Students not placed in FSL221Y1 or higher by the Placement test must first complete FSL121Y1 before starting this program. Students exempted from FSL221Y1 must replace it with FSL271H1 and any FSL or FRE half-course. FSL271H1 must be completed before enrolling in any higher-level FSL course.)
2. FRE272H1, FRE273H1, FRE274H1; 1.0 full-course equivalent among FRE210H1/FRE240H1/ FRE250H1; FSL321Y1 (Students exempted from FSL321Y1 may replace it with any FRE course)
3. FRE376H1, FRE378H1 and 1.0 full-course equivalent in Stream A at the 300-level; FRE383H1 and 1.0 full-course equivalent in Stream B at the 300-level
4. 2.0 full-course equivalents in French Linguistics at the 400-level
Stream A - Structure of French: FRE376H1 (mandatory), FRE378H1 (mandatory), FRE386H1, FRE387H1, FRE488H1, FRE489H1, FRE490Y1, FRE491H1, FRE492H1
Stream B - Use, acquisition and history of French: FRE379H1, FRE383H1 (mandatory), FRE388H1, FRE471H1, FRE487H1, FRE490Y1, FRE491H1, FRE492H1, JFL477H1, JFL478H1

## French Language and French Linguistics Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent)

1. FSL221Y1 (Students not placed in FSL221Y1 or higher by the Placement test must first complete FSL121Y1 before starting this program. Students exempted from FSL221Y1 must replace it with FSL271H1 and any FSL or FRE half-course. FSL271H1 must be completed before enrolling in any higher-level FSL course.)
2. FRE272H1, FRE273H1, FRE274H1; 1.0 full-course equivalent among FRE210H1/FRE240H1/ FRE250H1; FSL321Y1 (Students exempted from FSL321Y1 may replace it with any FRE course)
3. FRE376H1, FRE378H1; FRE383H1 and 0.5 full-course equivalent in Stream B at the 300-level; ANY 300+ halfcourse in French linguistics
4. 1.0 full course equivalent French linguistics at the 400level
Stream A - Structure of French: FRE376H1 (mandatory), FRE378H1 (mandatory), FRE386H1, FRE387H1, FRE488H1, FRE489H1, FRE490Y1, FRE491H1, FRE492H1
Stream B - Use, acquisition and history of French: FRE379H1, FRE383H1 (mandatory), FRE388H1, FRE471H1, FRE487H1, FRE490Y1, FRE491H1, FRE492H1, JFL477H1, JFL478H1

## Erench Language Learning_Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
( 8 full courses or their equivalent including at least 2 F.C.E.s FRE courses at the 300+ level)

1. FSL221Y1 (Students not placed in FSL221Y1 or higher by the Placement test must first complete FSL121Y1 before starting this program. Students exempted from FSL221Y1 must replace it with FSL271H1 and any FSL or FRE half-course. FSL271H1 must be completed before enrolling in any higher-level FSL course.)
2. FRE240H1, FRE272H1, FSL321Y1 (Students exempted from FSL321Y1 may replace it with any FRE course), JFI225Y1
3. FRE379H1, FRE383H1, FRE384H1, FSL421Y1/ FSL375Y1
4. FRE388H1, FRE483H1, FRE485H1

## French as a Second Language Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. FSL221Y1 (Students not placed in FSL221Y1 or higher by the Placement test must first complete FSL121Y1 before starting this program. Students exempted from FSL221Y1 must replace it with FSL271H1 and any halfcourse listed in 4. below. FSL271H1 must be completed before enrolling in any higher-level FSL course.)
2. FSL321Y1
3. FSL421Y1
4. 1.0 full course equivalent among the following: FSL375Y1, FSL442H1, FSL443H1, ANY 200+ FRE course, except FRE480Y1

## French Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. FSL221Y1 (Students not placed in FSL221Y1 or higher by the Placement test must first complete FSL121Y1 before starting this program. Students exempted from FSL221Y1 must replace it with FSL271H1 and any FRE half-course)
2. Three FRE courses at the 200+ level including one full course equivalent at the 300/400-level

## 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 French Studies, students should have completed two FSL courses at the 300+ level or two FRE courses at the 200+ level with a minimum mark of B-.
Students should note that, as explained on page 26 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.

## French Courses

Note: STUDENTS ENROLLED SIMULTANEOUSLY IN TWO OR MORE FRENCH PROGRAMS ARE ALLOWED TO DOUBLE-COUNT ONLY ONE COURSE (1 F.C.E.) TOWARDS THEIR FRENCH PROGRAMS.

## Courses Taught in English (see also all FCS courses)

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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.

## JFI225Y1 Second Language Learning

See French Language Learning Courses at the end of the French Studies listing.
JFL477H1 Issues in French and Linguistics I See French Linguistics Courses below
JFL478H1 Issues in French and Linguistics II
See French Linguistics Courses below

## JFV323H1 Semotics and Literature

See French Literature Courses below
SMC228H1 Books and Readers
See St. Michael's College

## UNI202H1 Aspects of Québec Culture

See University College
VIC300H1 Special Topics: Literary Studies
See Victoria College
VIC301H1 Special Topics: Literary Studies
See Victoria College

## French Courses

NOTE: FCS, JFI, JFL, JFV and College courses are taught in English with reading and written assignments in English. However, students can count these courses with the exception of FCS 195H towards a program in French (Major or Specialist ONLY) 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.

## 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-level have variable content and may not be offered every year. Please consult the Department website (www. french.utoronto.ca) or the French Studies Undergraduate brochure (www.french.utoronto.ca/undergraduate) for more details.

## FCS195H1 French Culture from Napoléon to Astérix

 [24L]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.
Prerequisite: None
DR=HUM; BR=1

## FCS290H1 Special Topics in French Cultural Studies I

 [24L]The relation of French popular culture to society. (Not offered in 2012-13).
DR=HUM; BR=None
FCS291H1 Special Topics in French Cultural Studies I: [24L]
The relation of French popular culture to society. (Not offered in 2012-13).
DR=HUM; BR=3
FCS292H1 Special Topics in French Cultural Studies I: [24L]
The relation of French popular culture to society. (Not offered in 2012-13)
DR=HUM; BR=1
FCS297H1 Comic Books and French Culture [24L]
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 2012-13)
DR=HUM; BR=1
FCS298H1 French Culture and Asia [24L]
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. (Not offered in 2012-13).
DR=HUM; BR=1

## FCS310Y1 French Cinema [48L/48P]

Cinema in France with emphasis on theory and practical criticism, on auteurs and movements such as the avantgarde 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: INI115Y1
DR=HUM; BR=1
FCS331H1 Cinema and Literature in France [36L]
Film adaptations of plays and fiction from the origins of cinema to the present time. (Not offered in 2012-13) Prerequisite: At least 5 course credits in any subject DR=HUM; BR=1

## FCS369Y0 The Culture of Touraine [48L]

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 DR=HUM; BR=1

## FCS390H1 Special Topics in French Cultural Studies II: Cultural Studies in France: Foucault and after [24L]

An 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.). This course deals with the French influence on this paradigm:
its own tradition, different cultural context, ideological assumptions and theoretical foundations.
Prerequisite: At least 5 courses in any subject
DR=HUM; BR=1

## FCS391H1 Special Topics in French Cultural Studies II [24L]

Studies on an individual writer or a specific area of literature. (Not offered in 2012-13).
Prerequisite: At least 5 course credits in any subject
DR=HUM; BR=1
FCS392H1 Special Topics in French Cultural Studies II:
Studies on an individual writer or a specific area of literature. (Not offered in 2012-13)
Prerequisite: At least 5 courses in any subject
DR=HUM; BR=1
FCS395H1 Sensuality and the French [36L]
An investigation of the French reputation for the systematic indulgence of all the senses, from the growth of sensualitybased 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. (Not offered in 2012-13).
Prerequisite: At least 5 course credits in any subject DR=HUM; BR=1

## FRE: French Literature Courses

Please note that students must complete FRE240H1, FRE241H1 and FRE344H1 before taking ANY 400-level 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.french.utoronto.ca) or the French Studies Undergraduate brochure (www.french. utoronto.ca/undergraduate) for more details.

## FRE210H1 Introduction to Quebec Literature and Culture [36L]

An introduction to various aspects of Québec literature and culture through the study of literary texts, cinema, and artistic productions, and their role in the evolution of a distinct Québec society. The course also familiarizes students with important socio-cultural and political events, which participated in the evolution of Québec society and provide a better understanding of Québec literature.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test

## Exclusion: FRE210Y1

DR=HUM; BR=1
FRE240H1 Introduction to Literary Analysis [24L/24T]
A practical introduction to concepts, methods and problems of literary analysis, based on a detailed study of selected French and Francophone literary texts from various genres and periods. Students master the basic techniques of literary analysis and use them in short essays. Students must enrol in one two-hour lecture and two tutorials for a total of four hours per week.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test Exclusion: FRE240Y1
DR=HUM; $B R=1$

## FRE241H1 Introduction to Research and Writing in Literary Studies [24L/12T]

Survey and practical applications of literary research tools, printed and digitalized, with training sessions at the library. Topics covered include rules and conventions of scholarly writing, organizing a paper, choice of appropriate style, developing arguments, proper usage of footnotes and bibliographical references, and material presentation of papers and dissertations.
Students must enrol in one two-hour lecture and one tutorial for a total of three hours per week.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test
Exclusion: FRE240Y1
DR=HUM; BR=None

## FRE250H1 French Literature: From its Beginnings to the Twenty-First Century [36L]

The evolution and major trends of French literature from the Middle Ages to the 21st century placed in their historical background and studied through representative texts from a variety of genres (narrative, poetry, drama, essay), selected both for their historical importance and their relevance to modern readers.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test Exclusion: FRE250Y1
DR=HUM; BR=1

## FRE299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. See Section on "Research Opportunity Program" for details. (Not offered in 2012-13)
DR=HUM; BR=None

## FRE304H1 Contemporary French Women's Prose Fiction [24L]

An analysis of selected prose texts of the last hundred years written by major French women authors, emphasizing themes and textual strategies used to represent the female subject, her relationship to language, and the role of ethnicity, class, and gender in the construction of identity. Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE308H1 Reading, Writing, and Publishing in France (1200-2000) [24L]

From the medieval manuscript to the E-book, with a view to understand how and why one writes, reads and/or publishes, a study of the impact of various technical innovations, the industrialization of book production and the role of intermediaries, in the context of the emergence of mass culture and global markets. (Not offered in 2012-13). Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE310H1 Relations between Text and Other Media [24L]

Literary texts and other forms of media (photographs, cinematographic images, paintings) have been associated in a fascinating relation in hundreds of works of French literature. An exploration of this inextricable weaving together of verbal and visual experiences as it pertains to literature
through the study of interdisciplinary theoretical texts focused on photography, painting, and cinema.
Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE314H1 Quebec and French-Canadian Literature

 [24L]Literature of the 20th and 21st centuries speaks of contesting social and literary figures of authority, of challenging traditional literary structures and of accentuating creativity and subjectivity. An exploration of the thematic and formal structures that challenge traditional forms of thinking and writing in contemporary literature from Québec and other French-speaking parts of Canada.
Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=2
FRE318H1 Medieval French Literature [24L]
Religious fervour, chivalry, romance and ribald humour, heroic deeds, marvellous adventures, and exotic travels as found in selected texts from the French Middle Ages. Readings in modern French translations with appropriate reference to the original language.
Prerequisite: FRE240H1/FRE240Y1
Exclusion: FRE321H1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE319H1 French Literature during Reformation

 [24L]An overview of the fascinating literary diversity, prose, theatre and poetry essential to the changing humanistic discourse of the French Renaissance and Baroque periods.
The underscoring of important historical events Reformation, Great Discoveries, Printing to explain the philosophical and literary values produced by such violent times.
Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE320H1 French Literature of Classicism and Enlightenment [24L]

An introduction to French literature between Classicism and the French Revolution with particular emphasis on its relationship to philosophical, cultural, and political movements of the Enlightenment, providing historical depth to philosophical and socio-political foundations of today's life. A privileged access to, and critique of, modernity in the postmodern age. (Not offered in 2012-13).
Prerequisite: FRE240H1/FRE240Y1
Exclusion: FRE320Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1
JFV323H1 Semiotics and Literature I [24S]
The study of readings from major French literary
semioticians are combined with the practical application of theory to the analysis of selected literary texts. This course is taught in English. (Not offered in 2012-13).
Prerequisite: At least 5 course credits in any subject.
Recommended Preparation: FRE240H1, FRE241H1/
FRE240Y1/VIC120Y1
DR=HUM; $B R=1$

## FRE324H1 French Literature in the Time of Revolutions and Industrialization [24L]

The long 19th century (1789-1914) is characterized by change: from political upheavals to literary, scientific, and media revolutions, the spread of literacy, and the rapid development of industrialization and colonization. A study of the evolution of literature (genres, forms, movements), as influenced by these changing socio-political and economic contexts.
Prerequisite: FRE240H1/FRE240Y1
Exclusion: FRE324Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1
FRE326H1 Contemporary French Literature [24L]
Characterized by experimentation and the crisis of representation, French literature of the 20th and 21st centuries has undergone numerous transformations in form, content, and generic boundaries. A study of these literary movements, trends, and transgressions in poetry, prose, and theatre.
Prerequisite: FRE240H1/FRE240Y1
Exclusion: FRE326Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE332H1 Francophone Literatures [24L]

A comprehensive introduction to Francophone literatures and cultures, examining the linguistic, aesthetic and discursive specificities as represented by authors of the Francophone world. Focus on the concepts of colonialism, representation, alienation, emigration, and nationalism. (Not offered in 201213).

Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE334H1 Francophone Cinema [24L]

Through films from across the spectrum of the Francophone world, a study of the diversity of the French colonial empire as well as the different aesthetic, historical, and cultural effects of colonialism and post-independence experience on various cinematic representations. (Not offered in 2012-13). Prerequisite: FRE240H1
Exclusion: FRE412H1
Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE336H1 Postcolonialism: Francophone Literatures [24L]

The fundamentals of postcolonial theories, with emphasis on how they relate to the francophone world. The dialogue between fiction and theory, as well as the modalities of a coherent Francophone postcolonial identity in a global world. (Not offered in 2012-13).
Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=2

## FRE344H1 Literary Theory [24L]

An introduction to literary theory through the study of particular theories underlying specific approaches to the literary text. Concepts and problems central to literary theory, and the writings of major critics and theoreticians.
Prerequisite: FRE240H1/FRE240Y1
Exclusion: FRE444H1

## French

Recommended Preparation: FRE241H1
DR=HUM; BR=1

## FRE345H1 Literary Genres [24L]

Survey of the main literary genres and analysis of their features, with in-depth study of two of the genres: narrative (epic poem, novel, short narrative), lyric poetry, drama (tragedy, comedy, farce, mystery play), essay. Readings of selected texts, chosen for their representative potential and their historical relevance.
Prerequisite: FRE240H1/FRE240Y1
Recommended Preparation: FRE241H1
DR=HUM; BR=1
FRE398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. See Section on "Independent Experiential Study Program" for details. (Not offered in 2012-13) DR=HUM; BR=None

FRE399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. See Section on "Independent Experiential Study Program" for details. (Not offered in 2012-13)
DR=HUM; BR=None

## FRE410H1 Advanced Topics in Québec Literature:

 [24S]An advanced interdisciplinary research seminar devoted to specific issues of Québécois literature and culture. Focus on a literary genre, a particular subject matter, a literary movement, or based on a multidisciplinary approach to cinema, arts, and music. (Not offered in 2012-13).
Prerequisite: FRE210Y1/FRE240Y1/FRE240H1 and
FRE241H1, FRE344H1
Exclusion: FRE311H1
DR=HUM; BR=1

## FRE438H1 Advanced Topics in Francophone

 Literatures [24S]An advanced seminar using theoretical, comparative, and interdisciplinary approaches to critically interrogate representations, discourses, cultures, and aesthetics in various settings of the Francophone world.
Prerequisite: FRE240Y1/FRE240H1 and FRE241H1, FRE344H1
DR=HUM; BR=1
FRE441H1 Advanced Topics in French Literature: [24S]
An advanced, research-oriented seminar devoted to specific issues of French literature and culture. Focus on a literary genre, a particular subject or literary movement, or based on a multidisciplinary approach involving cinema, arts, and music.
Prerequisite: FRE240Y1/FRE240H1 and FRE241H1, FRE344H1
$D R=H U M ; B R=1$
FRE443H1 Advanced Topics: Authors: Molière [24S]
An advanced, research-oriented seminar devoted to questions concerning the authors practice, originality, and oeuvre. Production, performance and prominence, characteristic genres, religious and philosophical thought, theoretical reflection on literature, language, and belonging as aspects of the analysis of one single authors body of writing.

Prerequisite: FRE240Y1/FRE240H1 and FRE241H1, FRE344H1
DR=HUM; BR=1

## FRE446H1 Advanced Studies in Literary Theory [24S]

An advanced, research-oriented course devoted to specific issues in French literary theory. Focus on particular theoretical concepts, paradigms, schools, trends, movements or major thinkers. (Not offered in 2012-13).
Prerequisite: FRE240Y1/FRE240H1 and FRE241H1, FRE344H1
DR=HUM; BR=1
French Linguistics Courses

## FRE272H1 The Structure of Modern French: An Introduction [24L/12T]

A general interest course on the structure of the French language including a descriptive study of meaning, sound, word, and sentence structure. Students must enrol in one two-hour lecture and one tutorial for a total of three hours per week.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test Exclusion: FRE272Y1
DR=HUM; BR=2

## FRE273H1 Introduction to the History of the French Language [36L]

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 includes 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: FRE272H1/FRE272Y1
Exclusion: FRE273Y1
DR=HUM; BR=2

## FRE274H1 Introduction to the Linguistic Analysis of French [24L/12T]

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: FRE272H1
Exclusion: FRE272Y1
DR=HUM; BR=2
FRE376H1 French Phonology and Phonetics [24L]
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 and FRE274H1/ FRE272Y1
DR=HUM; BR=2
FRE378H1 French Syntax [24L]
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 and FRE274H1/ FRE272Y1
DR=HUM; BR=2

## FRE379H1 Sociolinguistics of French [24L]

The relationship between language use and social factors such as socio-economic status, social context 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: FRE272H1/272Y1, FRE383H1
Exclusion: FRE479H1
DR=HUM; BR=3
FRE383H1 Experimental and Quantitative Methods for the Study of French [24L]
An introduction to the foundations of quantitative analysis and experimental research on French. Topics include differences between quantitative and qualitative analyses; hypothesis formulation; experimental design; and data collection and analysis including basic statistical methods. Phenomena investigated come from Canadian and European varieties as well as studies of second language learners.
Prerequisite: FRE272H1/FRE272Y1
DR=HUM; BR=3
FRE386H1 French Semantics [24L]
Various approaches to the notion of meaning; its functioning at all levels of representation. (Not offered in 2012-13)
Prerequisite: FRE272H1/ FRE272Y1
DR=HUM; BR=2
FRE387H1 French Morphology [24L]
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 and FRE274H1/ FRE272Y1 DR=HUM; BR=2

## FRE388H1 Bilingualism and second language acquisition of French [24L]

An overview of the cognitive aspects of bilingualism and language acquisition among early and late bilingual French speakers. Topics will include psycholinguistic processing and representation in the multilingual mind; the role and analysis of input in second language acquisition; patterns of interlanguage grammatical development; the nature and sources of intra and interlearner variation; and the effect of instruction on learning.
Prerequisite: FRE272H1/FRE272Y1, FRE383H1
Exclusion: FRE473H1
DR=HUM; BR=2
FRE471H1 Medieval French Language [24S]
This course aims to assure an understanding of Old French, to read most of the medieval texts. From a selection of texts, it explores the form of the language in various centuries and regions and provide a basis for understanding the history of French language.
Prerequisite: FRE272H1/FRE272Y1/FRE273H1/FRE273Y1 DR=HUM; BR=1
JFL477H1 Issues in French and Linguistics I [24S]
An advanced seminar on issues of current theoretical relevance in linguistics with special reference to French. This course is taught in English.
Prerequisite: ANY 300+ series LIN or FRE Linguistics course and/or specific Prerequisites depending on course topic. DR=HUM; BR=2

JFL478H1 Issues in French and Linguistics II [24S]
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 2012-13).
Prerequisite: ANY 300+ series LIN or FRE Linguistics course DR=HUM; BR=2

## FRE487H1 Advanced Topics in Bilingualism and L2

 acquisition [24S]This course examines how theories of linguistic competence, speech perception/ processing and production can contribute to our understanding of the acquisition of French by nonnative speakers. It also provides indepth, practical training in methodological design and quantitative analysis culminating in students' undertaking of individual experimental studies.
Prerequisite: FRE376H1, FRE378H1, FRE383H1,
FRE388H1
DR=HUM; BR=2

## FRE488H1 Special Topics in Advanced Linguistics I:

 [24S]An advanced seminar on a specific aspect of French linguistics. (Not offered in 2012-13).
Prerequisite: Varies according to particular course offering; consult the Department website (www.french.utoronto.
ca) or the French Studies Undergraduate brochure (www.
french.utoronto.ca/undergraduate) for exact Prerequisites.
DR=HUM; BR=2

## FRE489H1 Special Topics in Advanced Linguistics II [24S]

An advanced seminar on a specific aspect of French linguistics. (Not offered in 2012-13).
Prerequisite: Varies according to particular course offering; consult the Department website (www.french.utoronto.
ca) or the French Studies Undergraduate brochure (www. french.utoronto.ca/undergraduate) for exact Prerequisites
DR=HUM; BR=2

## 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: ANY 300+ FRE Linguistics/Literature course.
Permission of Department
DR=HUM; BR=None

## FRE491H1 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: ANY 300+ FRE Linguistics/Literature course.
Permission of Department
DR=HUM; BR=None
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: ANY 300+ FRE Linguistics/Literature course.
Permission of Department
DR=HUM; BR=None

## French as a Second Language Courses (FSL)

The following is a guide for beginners in French.

1. No knowledge of French: FSL100H1. Students enrolled in FSL100H1, 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): FSL102H1
Please note that FSL100H, 102H and 121Y do not count towards any of the French programs but can be used as breadth requirements.
The Department reserves the right to place students in the language course appropriate to their level of language skills, based on the results of a placement test. Since 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 higher level than his/her year of study.
The placement test, available at www.lang.utoronto. ca/placement/french, is mandatory for all students who register in an FRE or FSL course for the first time (except true beginners who have no knowledge of French). The placement test can be taken only ONCE and the results of the first test will prevail in the event of several attempts. Ideally, the placement test should be taken in the term preceding the course students intend to register in (e.g. for a Fall term or Y course, students should take the placement test in the summer term, prior to their registration date on ROSI and before the beginning of classes in any given term). 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 Department of French. Please allow three to five working days to obtain the test results.

FSL100H1 French for Beginners [24L/12T]
An intensive basic course in spoken and written French for students who have no knowledge of French: comprehension, speaking, reading, and writing.
Exclusion: FSL102H1 and higher.
DR=HUM; BR=1
FSL102H1 Introductory French [24L/12T]
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 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.

## Exclusion: FSL121Y1 and higher.

DR=HUM; BR=1
FSL121Y1 French Language I[96L]
Intended for students having some knowledge of French but wishing to increase their proficiency to that of normal University entrance. Offers training in written and spoken French; reinforcement of reading comprehension and aural abilities; and an introduction to French-Canadian and Québécois cultures.
Prerequisite: FSL102H1, or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test. Exclusion: FSL221Y1 and higher.
DR=HUM; BR=1

## FSL221Y1 French Language II[72L]

Focuses on developping greater complexity in student's production (sentence structure including subordination; verb tense and agreement; difficult sounds and prosodic fluency), and comprehension (analysis of word order-meaning relations; understanding temporal relations and thematic elements). Overview of francophone media and cultural institutions including cinema and festivals.
Prerequisite: FSL121Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test. Exclusion: FSL321Y1 and higher
DR=HUM; BR=1
FSL271H1 French Grammar, within Reason[36L] An introduction to basic concepts of the French grammar from an analytic and descriptive point of view. Exploration of traditional grammar concepts such as subject, predicate, complement. This course provides understanding of the logic that is often hidden by the apparent complexity of grammatical rules.
Prerequisite: FSL121Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test Exclusion: FRE172H1, FRE271H1
DR=HUM; BR=1

## FSL321Y1 French Language III [72L]

Develops further students' written/speaking and comprehension/listening abilities by focussing on greater sentential and lexical complexity. Particular attention is paid to norms (contextually-appropriate (in)formality; particularities of French spelling and punctuation; differences between Canadian and European varieties). Investigation of linguistic, political and cultural aspects of the francophonie.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test Exclusion: FSL331Y1/FSL341Y1 and higher
DR=HUM; BR=1
FSL375Y1 Comparative Stylistics[48L]
A comparative study of the characteristics of French and English expression and how they pertain to the problems of translation.
Prerequisite: FSL321Y1/FSL341Y1/any FRE200-series course
Exclusion: FRE375Y1
DR=HUM; BR=1

## FSL421Y1 French Language IV[72L]

An advanced course in French including the reading and discussion of texts focussing on the francophone presence and influence in the international context. Emphasis is placed on mastery of complex linguistic skills via use of a variety of reference tools and self-correction.
Prerequisite: FSL321Y1/331Y1/341Y1 or, upon first FRE/
FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL431Y1 and higher
DR=HUM; BR=1
FSL442H1 French Language V: Written French[36L] Designed for students who wish to consolidate and perfect their writing abilities. Skills developped include the mastery of register-based differences; use of rhetorical and stylistic techniques; systematic self-correction; and the advanced use of reference tools including on-line dictionaries. (Not offered in 2012-13; offered in alternate years).

Prerequisite: FSL421Y1/FSL461Y1 or, upon first FRE/
FSL enrolment, equivalent as determined by the French Placement Test
DR=HUM; BR=1
FSL443H1 French Language V: Oral French[36L]
Designed for students who wish to consolidate and perfect their speaking abilities. This is accomplished through the preparation of longer oral productions involving a rich vocabulary and contextually-appropriate speech registers. Focus on overall pronunciation including fine phonetic detail and fluency.
Prerequisite: FSL421Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test.
Exclusion: FSL461Y1. Not open to fluent or native speakers of French.
DR=HUM; BR=1

## Second Language Learning Courses

## JFI225Y1 Second Language Learning [48L]

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. Students enrolled in the Major in French language learning, must submit all assignments and tests in French.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment, equivalent as determined by the French Placement Test/ ITA100Y1/101Y $1 / 102 \mathrm{Y} 1 / 110 \mathrm{Y} 1 /(133 \mathrm{H} 1,134 \mathrm{H} 1)$ (all with a minimum of $73 \%$ )/152Y1
DR=HUM; $B R=2$

## FRE384H1 Teaching French as a Second Language[24L]

This course provides an introduction to the communicative approach in recent methods and pedagogical materials published in France and in North America. Emphasis is put on the various interpretations of the communicative approach in teaching FSL, with reference to theoretical issues and historical background.
Prerequisite: FRE272H1/FRE272Y1, FSL321Y1/FSL341Y1
Recommended Preparation: JFI 225Y1Y
DR=HUM; BR=1

## FRE483H1 Teaching French in Context: Language, Culture, and Society[24L]

The course investigates the relation between language, society and culture and study in depth various aspects of French and Francophone civilization, with particular focus on the development and integration of materials for use in the classroom by using contemporary texts and audio-visual documents.
Prerequisite: FRE384H1
DR=HUM; BR=1
FRE485H1 Teaching Young People's Literature[24L] 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 useful for the Experiential Learning component: students participate in a school internship. Prerequisite: FRE384H1

Exclusion: FRE385H1
DR=HUM; BR=1

## Faculty

## Professors Emeriti

L.S. Bourne, MA, Ph D, FRSC, DES Hons
J.N.H. Britton, MA, Ph D
R.B. Bryan, BA Ph D (Forestry)
I. Burton, Ph D, FRSC
A.J. Dakin, Ph D, ARIBA, FRTPI
G.H.K. Gad, Dr Phil, Ph D (UTM)
J.H. Galloway, MA, Ph D (V)
G. Gracie, BA Sc, Ph D (UTM)
B. Greenwood, B Sc, Ph D, Ph D Hons (UTSC)
R. Jaakson, M Sc (PI), Ph D (UTM)
A.V. Jopling, MA, Ph D
J.T. Lemon, MS, Ph D (U)
T.F. Mcllwraith, MA, Ph D (UTM)
S.T. Roweis, M Sc (PI), Ph D (I)
J.W. Simmons, MA, Ph D
A. Waterhouse, M Sc (PI), Ph D
R.R. White, M Sc, Ph D
J.B.R. Whitney, MA, Ph D

Associate Professors Emeriti
M.F. Bunce, BA, Ph D (UTSC)
A. M. Davis, PhD
D. A. McQuillan, PhD

Associate Professor and Chair of the
Department, Graduate Chair
V.W. Maclaren, M PI, MS, PhD

Professors
J.M. Chen, B Sc, Ph D, FRSC
A.G. Daniere, MPP, Ph D (UTM)
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
D. Leslie, MA, Ph D
R.D. Lewis, MA, Ph D
J.R. Miron, MA, M Sc, Ph D (UTSC)
D.S. Munro, M Sc, Ph D (UTM)
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E.C. Relph, M Phil, Ph D, Chair, Social Sciences (UTSC)

## Associate Professors

G. Arhonditsis, M Sc, Ph D (UTSC)
A. Boland, MAIS, Ph D
R. Buliung, MA, Ph D (UTM)
T. Conway, MS, Ph D (UTM)
S.A. Cowling, M Sc, Ph D
P. Desrochers, Ph D (UTM)
R.J. DiFrancesco, MA, Ph D
M. Farish, BA. Ph D
S. Finkelstein, M PHL, Ph D
E. Gilbert, MA, Ph D
K. Goonewardena, M PI, Ph D
W. Gough, M Sc, Ph D (UTSC)
J. Hackworth, MA, MEP, Ph D
P. Hess, MEP, Ph D
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D. McGregor, MES, Ph D
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S. Ruddick, MA, Ph D
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S. Wakefield, MA, Ph D
A. Walks, MA, Ph D (UTM)
M. Wells, B Sc, Ph D (UTSC)
K. Wilson, MA, Ph D (Chair, UTM)

## Assistant Professors

C. Abizaid, MA, PhD
N. Basiliko, B Sc, Ph D (UTM)
S. Bunce, M Sc,Ph D (UTSC)
D. Cowen, MScPI, PhD
T. Duval, M Sc, Ph D (UTM)
Y. He B Sc, M Sc, Ph D (UTM)
M. Hunter, MA, Ph D (UTSC)
M. Isaac, M Sc, Ph D (UTSC)
R. Isakson, BA, Ph D (UTSC)
K. Kumar, PGDFM
K. MacDonald, MA, Ph D (UTSC)
C. Mitchell, M Sc, Ph D (UTSC)
R. Narayanareddy, Ph D (UTSC)
M. Siemiatycki M Sc, Ph D
D. Wilson, Ph D (UTM)

## Senior Lecturers

D. Boyes, M Sc, Ph D
B. Murck, BA, Ph D (UTM)

## Lecturer

J. Leydon, MA, Ph D (UTM \& St. George)

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; urban and regional development planning; trade promotion; community social services; 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. They often also find work in the non-profit sector as policy analysts, cartographers and geographic information science specialists, community organizers, and educators.
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 Specialist, Major and

Minor Programs in Geography, 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; Urban Studies; Ethics, Society and Law and International Relations; and European Studies. Counselling and advice may be obtained from the Associate Chair, Undergraduate or the Undergraduate Counsellor.

Associate Chair, Undergraduate:
Professor A. Boland, Sidney Smith Hall, Room 5006 (416-978-1587)
Undergraduate Counsellor:
K. Giesbrecht, Sidney Smith Hall, Room 5044 (416-9786455)

General Enquiries:416-978-3375

## Geography Programs

For 2012-13
These are limited enrolment programs that can only accommodate a limited number of students. Admission will be determined by a student's mark in 1.0 GGR FCEs at the 100 and/or 200 level. It is expected that a mark of $70 \%$ in each course will be required for admission in the coming cycle for a Specialist and $67 \%$ in each course for a Major. Achieving that mark does not necessarily guarantee admission to the program in any given year.
Double majors in Geography may only overlap 1.0 FCE. Students combining any of our Minor programs with a Specialist/Major program would normally be allowed to overlap only 1.5 FCEs towards both programs. Students that choose to specialize or major in one of the three Geography programs cannot minor in the same program but may do so in another Geography program. Double minors can overlap 1.0 FCE.

Generally, students may only take 1.0 Independent Research Project FCE toward their program requirements.

## Environment \& Energy Minor (Science 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) FCEs towards both programs.
Jointly sponsored by the Centre for Environment and the Department of Geography, this interdisciplinary program addresses the scientific, technological, environmental and policy aspects of energy use and supply, with a focus on the reduction of environmental impacts.
Minor Entry Requirements: Note that the four full course equivalents that constitute the Minor Program are those listed below under "Higher Years." Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca

| Number <br> of half <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: First Year: <br> At least 2 <br> FCE from <br> among | (MAT135H1, MAT136H1)/ <br> MAT135Y1/MAT137Y1 and <br> at least one FCE from among <br> CHM138H1, CHM139H1, <br> CHM151Y1; PHY131H1, <br> PHY132H1, PHY151H1, <br> PHY152H1 |  |
| B: All | ENV221H1, ENV222H1/ <br> GGR222H1/GGR223H1 | 1.0 |
| C: All | ENV346H1, ENV350H1, <br> ENV450H1 | 1.5 |
| E: Any | (GGR314H1, GGR333H1)/ <br> (GGR347H1/JGE347H1, <br> GGR348H1/JGE348H1) | 1.0 |
| CHM210H1, CHM310H1, <br> CHM415H1; ENV235H1/ <br> ENV235Y1; FOR310H1, <br> FOR410H1; GGR203H1, <br> GGR303H1, GGR314H1 <br> (if not taken for section D), <br> GGR403H1; HPS313H1; <br> PHY231H1, PHY250H1 | 0.5 |  |
| Total |  |  |

## Environmental Geography Specialist (Arts program)

Specialist Entry Requirements:
This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined by a student's mark in 1.0 GGR FCEs at the 100 and/or 200 level. It is expected that a mark of $70 \%$ in each course will be required for admission in the coming cycle. Achieving that mark does not necessarily guarantee admission to the program in any given year.

| Number <br> of half <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any 2 | GGR107H1 (recommended), <br> GGR100H1, GGR101H1, <br> GGR112H1, GGR124H1 <br> (or other GGR course with <br> permission of the Department) | 1.0 |
| B: Any 2 | GGR201H1, GGR203H1, <br> GGR205H1, GGR206H1, <br> GGR308H1, GGR314H1, <br> GGR333H1, GGR347H1/ <br> JGE347H1, GGR348H1/ <br> JGE348H1, JGE236H1, <br> ENV200H1, ENV234H1 | 1.0 |


| C: All | GGR223H1(formerly <br> GGR222H1), GGR270H1, <br> GGR271H1, GGR272H1, <br> JGE331H1 | 2.5 |
| :--- | :--- | :--- |
| D: Any 1 | GGR240H1, GGR246H1, <br> GGR254H1, GGR341H1, <br> GGR342H1, GGR343H1, | 0.5 |
| E. Either | GGR491Y1 or one of <br> GGR416H1, GGR492H1, <br> GGR499H1 and one additional <br> $0.5 ~ F C E ~ 400 ~ l e v e l ~ c o u r s e ~ f r o m ~$ |  |
| Group A or Group B (below) |  |  |$\quad 1.1 .0$

Note:
At least 4.0 FCEs must be 300/400 series courses. Of these, at least 1.0 FCE must be 400 series.

| Total |  | 10.0 |
| :--- | :--- | :--- |

## Environmental Geography Major (Arts program)

Major Entry Requirements:
This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined by a student's mark in 1.0 GGR FCEs at the 100 and/or 200 level. It is expected that a mark of $67 \%$ in each course will be required for admission in the coming cycle. Achieving that mark does not necessarily guarantee admission to the program in any given year.

| Number <br> of half <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any 2 | GGR107H1 (recommended), <br> GGR100H1, GGR101H1, <br> GGR112H1, GGR124H1 <br> (or other GGR course with <br> permission of the Department) | 1.0 |
| B: Any 2 | GGR201H1, GGR203H1, <br> GGR205H1, GGR206H1, <br> GGR308H1, GGR314H1, <br> GGR333H1, GGR347H1/ <br> JGE347H1, GGR348H1/ <br> JGE348H1, JGE236H1, <br> ENV200H1, ENV234H1 | 1.0 |
| C: All | GGR223H1(formerly <br> GGR222H1), GGR270H1, <br> GGR271H1, | 1.5 |
| D: Any 1 | GGR240H1, GGR246H1, <br> GGR254H1, GGR341H1, <br> GGR342H1, GGR343H1 | 0.5 |
| E. Any 1 | 0.5 FCE at the 400 level from <br> Group A OR Group B (below) <br> (excluding ENV422H1) | 0.5 |


| F: Any | Up to 2.5 FCE from Group A; | 2.5 |
| :--- | :--- | :--- |
| 5 half |  |  |
| courses or |  |  |
| equivalent | up to 1.0 FCE from Group B; <br> (below) |  |
| Note: At least 2.0 FCEs must be 300/400 series <br> courses. Of these, at least 0.5 FCE must be 400 <br> series. |  |  |
| Total | 7.0 |  |

Environmental Geography Minor (Arts program)
Minor Entry Requirements: There are no entry requirements for this program

| Number <br> of half <br> courses | Courses | FCEs |  |
| :--- | :--- | :--- | :---: |
| A: Any 1: | GGR107H1 (recommended), <br> GGR100H1, GGR101H1, <br> GGR112H1, GGR124H1 <br> (or other GGR course with <br> permission of the Department) | 0.5 |  |
| B: |  |  |  |
| Mandatory: | GGR223H1(formerly <br> GGR222H1) | 0.5 |  |
| C. Any 1: | GGR201H1, GGR203H1, <br> GGR205H1, GGR206H1, <br> GGR314H1, GGR333H1, <br> GGR347H1/JGE347H1, <br> GGR348H1/JGE348H1, <br> JGE236H1, ENV200H1, <br> ENV234H1 | 0.5 |  |
| D. | Up to 2.5 FCE from Group A; <br> up to 1.0 FCE from Group B <br> (below) | 2.5 |  |
| Note: |  |  |  |
| At least 1.0 FCE must be 300/400 series courses. |  |  |  |
| Total |  |  |  |

## Environmental Geography Groups

GROUP A (Geography Courses)
GGR201H1, GGR203H1, GGR205H1, GGR206H1, GGR222H1, GGR223H1, GGR272H1, GGR273H1, GGR301H1, GGR303H1, GGR314H1, GGR321H1, GGR329H1, GGR333H1, GGR334H1, GGR337H1, GGR340H1, GGR341H1, GGR347H1, GGR348H1, GGR373H1, GGR381H1, GGR398H1, GGR399Y1, GGR403H1, GGR409H1, GGR413H1, GGR416H1, GGR418H1, GGR419H1, GGR434H1, GGR438H1, GGR491Y1, GGR492H1, GGR498H1, GGR499H1; JFG470H1, JFG475H1; JGE236H1, JGE321H1, JGE331H1, JGE347H1, JGE348H1; JUG320H1

GROUP B (Centre for Environment courses)
ENV200H1, ENV234H1, ENV235H1, ENV307H1, ENV323H1, ENV333H1, ENV335H1, ENV350H1, ENV422H1

Geography

## GROUP C

Any other geography courses at the 200/300/400 level not listed in Group A

## Geographic Information Systems Minor (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) FCEs towards both programs.
Minor Entry Requirements: There are no entry requirements for this program

| Number <br> of <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any <br> 2 half <br> courses | GGR100H1, GGR101H1, <br> GGR107H1, GGR112H1, <br> GGR124H1 (or 1.0 other GGR <br> courses with the permission of <br> the Department) | 1.0 |
| B: All 4 | GGR270H1, GGR272H1, <br> GGR273H1, GGR373H1 | 2.0 |
| C: Any <br> 1 half <br> course | GGR462H1, GGR473H1 | 0.5 |
| D: Any <br> 1 half <br> course | GGR337H1, GGR375H1, <br> GGR413H1, GGR462H1, <br> GGR473H1, GGR491Y1, <br> GGR492H1, GGR498H1, <br> GGR499H1, JFG470H1, <br> JFG475H1 | 0.5 |
| Total |  |  |

## Human Geography Specialist (Arts program)

## Specialist Entry Requirements:

This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined by a student's mark in 1.0 GGR FCEs at the 100 and/or 200 level. It is expected that a mark of $70 \%$ in each course will be required for admission in the coming cycle. Achieving that mark does not necessarily guarantee admission to the program in any given year.

| Number <br> of <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any 2 | GGR100H1, GGR101H1, <br> GGR107H1, GGR112H1, <br> GGR124H1 (or 1.0 other GGR <br> courses with permission of <br> Department) | 1.0 |


| B: Any 1 <br> not used to <br> satisfy A | GGR100H1, GGR101H1, <br> GGR201H1, GGR203H1, <br> GGR205H1, GGR206H1, <br> JGE236H1 | 0.5 |
| :--- | :--- | :--- |
| C: All 3 | GGR270H1, GGR271H1, <br> GGR272H1 | 1.5 |
| D: Any 1 | GGR240H1, GGR246H1, <br> GGR254H1, GGR341H1, <br> GGR342H1, GGR343H1 | 0.5 |
| E: Any 1 | Any 400 series course from <br> Group E (below) | 0.5 |
| F: Any <br> 12 half <br> courses or <br> equivalent <br> not used <br> to satisfy E <br> or D | Up to 6.0 FCE's from Group E <br> (below); Up to 1.5 FCE's may <br> be from Group F | 6.0 |
| Note: <br> At least 4.0 FCEs must be 300/400 series courses. Of <br> these, at least 1.0 FCE must be 400 series. |  |  |
| Total |  |  |

## Human Geography Major (Arts program)

Major Entry Requirements:
This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined by a student's mark in 1.0 GGR FCEs at the 100 and/or 200 level. It is expected that a mark of $67 \%$ in each course will be required for admission in the coming cycle. Achieving that mark does not necessarily guarantee admission to the program in any given year.

| Number <br> of <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any 2 | GGR100H1, GGR101H1, <br> GGR107H1, GGR112H1, <br> GGR124H1 (or 1.0 other GGR <br> courses with permission of <br> Department) | 1.0 |
| B: Any 1 <br> not used to <br> satisfy A | GGR100H1, GGR101H1, <br> GGR201H1, GGR203H1, <br> GGR205H1, GGR206H1, <br> JGE236H1 | 0.5 |
| C: All | GGR270H1, GGR271H1 | 1.0 |
| D: Any 1 | GGR240H1, GGR246H1, <br> GGR254H1, GGR341H1, <br> GGR342H1, GGR343H1 | 0.5 |
| E: Any 1 | Any 400 series course from <br> Group E (below) | 0.5 |


| F: Any <br> 7 half <br> courses or <br> equivalent <br> not used <br> to satisfy E <br> or D | Up to 3.5 FCE's from Group E <br> (below); Up to 1.0 FCE's may be <br> from Group F | 3.5 |
| :--- | :--- | :--- |
| Note: <br> At least 2.0 FCEs must be 300/400 series courses. Of <br> these, at least 0.5 must be 400 series. <br> Total$\quad$( |  |  |

## Human Geography Minor (Arts program)

Minor Entry Requirements: There are no entry requirements for this program

| Number <br> of <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any 2 | GGR100H1, GGR101H1, <br> GGR107H1, GGR112H1, <br> GGR124H1 (or 1.0 other GGR <br> courses with permission of <br> Department) | 1.0 |
|  | Three other higher level GGR/ <br> JFG/JGE/JGI/JUG social <br> science or humanities courses, <br> including at least 1.0 FCEs of <br> $300 / 400$-series courses <br> Up to 0.5 FCE may be from <br> Group F | 3.0 |
| Total | ( |  |

## Human Geography Groups

GROUP E Optional courses for Human Geography: GGR216H1, GGR220H1, GGR221H1, GGR222H1, GGR223H1, GGR240H1, GGR241H1, GGR246H1, GGR252H1, GGR254H1, GGR272H1, GGR273H1, GGR299Y1, GGR300H1, GGR314H1, GGR320H1, GGR321H1, GGR323H1, GGR327H1, GGR328H1, GGR329H1, GGR334H1, GGR336H1, GGR339H1, GGR340H1, GGR341H1, GGR342H1, GGR343H1, GGR352H1, GGR356H1, GGR357H1, GGR358H1, GGR360H1, GGR361H1, GGR363H1, GGR366H1, GGR373H1, GGR374H1, GGR375H1, GGR381H1, GGR382H1, GGR398H1/399H1, GGR400H1, GGR416H1, GGR418H1, GGR419H1, GGR421H1, GGR424H1, GGR431H1, GGR434H1, GGR438H1, GGR439H1, GGR452H1, GGR457H1, GGR458H1, GGR462H1, GGR473H1, GGR491Y1, GGR492H1, GGR499H1; JGE321H1, JGE331H1; JUG320H1; JGI216H1, JGI346H1, JGI454H1; JFG470H1, JFG475H1

## Group F (Optional science courses)

GGR201H1, GGR203H1, GGR205H1, GGR206H1, GGR301H1, GGR303H1, GGR305H1, GGR308H1,

GGR333H1, GGR337H1, GGR347H1, GGR348H1, GGR403H1, GGR409H1, GGR413H1, GGR498H1; JGE236H1

## Streams

Students may wish to choose courses from among one or more of the following streams if they want to concentrate in a particular area within Human Geography, while fulfilling the overall requirements given above. These are not POSt requirements, but rather suggestions for students seeking guidance on how to navigate our course offerings.

Cultural and Historical Geography: GGR216H1, GGR240H1, GGR241H1, GGR246H1, GGR254H1, GGR321H1, GGR336H1, GGR342H1, GGR343H1, GGR360H1, GGR366H1, GGR382H1, GGR421H1, GGR431H1, GGR439H1; JGI331H1, JGI346H1; JUG320H1
Urban Geography: GGR112H1, GGR124H1, GGR216H1, GGR240H1, GGR241H1, GGR246H1, GGR252H1, GGR254H1, GGR323H1, GGR336H1, GGR339H1, GGR342H1, GGR343H1, GGR357H1, GGR358H1, GGR360H1, GGR361H1, GGR366H1, GGR374H1, GGR382H1, GGR424H1, GGR457H1, GGR458H1; JGI216H1, JGI346H1, JGI454H1
Social and Economic Geography: GGR112H1, GGR124H1, GGR216H1, GGR220H1, GGR221H1, GGR240H1, GGR241H1, GGR246H1, GGR252H1, GGR254H1, GGR320H1, GGR323H1, GGR327H1, GGR328H1, GGR329H1, GGR340H1, GGR342H1, GGR343H1, GGR352H1, GGR356H1, GGR357H1, GGR358H1, GGR360H1, GGR361H1, GGR363H1, GGR366H1, GGR374H1, GGR421H1, GGR424H1, GGR431H1, GGR438H1, GGR452H1; JGE331H1; JGI216H1

Political Geography: GGR112H1, GGR124H1, GGR216H1, GGR221H1, GGR241H1, GGR320H1, GGR327H1, GGR328H1, GGR339H1, GGR352H1, GGR358H1, GGR363H1, GGR418H1, GGR421H1, GGR439H1, GGR452H1; JGE331H1; JGI216H1, JGI346H1; JUG320H1
Geography of Canada: GGR240H1, GGR246H1,
GGR321H1, GGR336H1, GGR366H1, GGR457H1; JUG320H1
Environment: GGR107H1, GGR222H1, GGR223H1, GGR240H1, GGR314H1, GGR321H1, GGR323H1, GGR329H1, GGR333H1, GGR334H1, GGR336H1, GGR337H1, GGR340H1, GGR341H1, GGR360H1, GGR381H1, GGR416H1, GGR418H1, GGR419H1, GGR421H1, GGR434H1, GGR438H1, GGR462H1, GGR473H1; JFG470H1, JFG475H1; JGE331H1, JGE321H1; JUG320H1
Planning: GGR334H1, GGR336H1, GGR339H1, GGR357H1, GGR358H1, GGR361H1, GGR363H1, GGR382H1, GGR424H1, GGR434H1, GGR457H1, GGR452H1; JGI216H1, JGI346H1, JGI454H1

## Physical and Environmental Geography Specialist

 (Science program)Specialist Entry Requirements:
This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined by a student's mark in 1.0 GGR FCEs at the 100 and/or 200 level. It is expected that a mark of $70 \%$ in

## Geography

each course will be required for admission in the coming cycle. Achieving that mark does not necessarily guarantee admission to the program in any given year.

| Number of courses | Courses | FCEs |
| :---: | :---: | :---: |
| A: Any 6 half courses or the equivalent | GGR100H1; MAT123H1/ MAT125H1, MAT124H1/ MAT126H1, MAT133Y1/ MAT135Y1/MAT137Y1/ MAT157Y1, MAT223H1/ MAT240H1, MAT224H1/ MAT247H1; PHY131H1/ PHY151H1, PHY132H1/ PHY152H1; CME119H1 (Faculty of Engineering); CHM138H1, CHM139H1, CHM151Y1; $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 130 \mathrm{H} 1$, at least two of which must be Math or Phys half courses. | 3.0 |
| B: Any 4 | GGR201H1, GGR203H1, GGR205H1, GGR206H1, up to one half course from Group H (below) | 2.0 |
| C: Any 1 | GGR101H1, GGR240H1, GGR246H1, GGR254H1, GGR341H1, GGR342H1, GGR343H1 | 0.5 |
| D: All 4 | GGR270H1, GGR272H1, GGR337H1, GGR390H1 | 2.0 |
| E: Any 7 | GGR273H1, GGR301H1, <br> GGR303H1, GGR305H1, <br> GGR307H1, GGR308H1, <br> GGR314H1, GGR373H1, <br> GGR347H1/JGE347H1, <br> GGR348H1/JGE348H1, <br> GGR416H1, JGE236H1, (but no more than one of GGR273H1, <br> GGR373H1); any GGR course from the list for requirement $B$ not already used; up to three half courses from Group I (below) | 3.5 |
| F: Any 2 | GGR403H1, GGR409H1, GGR413H1, GGR491Y1, GGR498H1, fourth-year courses in Group I, but the total number of half courses from Group I (including 3rd-year courses) must not exceed 3 | 1.0 |
| Total |  | 12.0 |

## Physical and Environmental Geography Major (Science program)

Major Entry Requirements:
This is a limited enrolment program that can only accommodate a limited number of students. Admission will
be determined by a student's mark in 1.0 GGR FCEs at the 100 and/or 200 level. It is expected that a mark of $67 \%$ in each course will be required for admission in the coming cycle. Achieving that mark does not necessarily guarantee admission to the program in any given year.

| Number of courses | Courses | FCEs |
| :---: | :---: | :---: |
| A: Any <br> 4 half courses or the equivalent | GGR100H1; MAT123H1/ MAT125H1, MAT124H1/ MAT126H1, MAT133Y1/ MAT135Y1/MAT137Y1/ MAT157Y1, MAT223H1/ MAT240H1, MAT224H1/ MAT247H1; PHY131H1/ PHY151H1, PHY132H1/ PHY152H1; CME119H1 (Faculty of Engineering); CHM138H1, CHM139H1, CHM151Y1; BIO120H1, BIO130H1, at least two of which must be Math or Phys half courses. | 2.0 |
| B: Any 3 | GGR201H1, GGR203H1, GGR205H1, GGR206H1 | 1.5 |
| C: Any 1 | GGR101H1, GGR240H1, GGR246H1, GGR254H1, GGR341H1, GGR342H1, GGR343H1 | 0.5 |
| D: All 3 | GGR270H1, GGR272H1, GGR390H1 | 1.5 |
| E: Any 4 | GGR273H1, GGR301H1, GGR303H1, GGR305H1, GGR307H1, GGR308H1, GGR314H1, GGR337H1, GGR373H1, GGR347H1/ JGE347H1, GGR348H1/ JGE348H1, GGR416H1, JGE236H1, (but no more than one from GGR273H1, GGR337H1, GGR373H1); the course from the list for requirement B not already used; any one half course from Group I (below) | 2.0 |
| F: From | $\begin{aligned} & \text { GGR403H1, GGR409H1, } \\ & \text { GGR413H1, GGR491Y1, } \\ & \text { GGR498H1 } \end{aligned}$ | 0.5 |
| Total |  | 8.0 |

Physical \& Environmental Geography Minor (Science program)
Minor Entry Requirements: There are no entry requirements for this program

## Geography

| Number of courses | Courses | FCEs |
| :---: | :---: | :---: |
| A: Any 2 | GGR100H1, GGR101H1, GGR107H1, GGR112H1, GGR124H1 | 1.0 |
| B: Any 2 | GGR201H1, GGR203H1, GGR205H1, GGR206H1 | 1.0 |
| C: 3 | ```GGR390H1; (GGR301H1/ GGR303H1/GGR305H1); (GGR272H1/GGR337H1/ GGR308H1)``` | 1.5 |
| D: Any 1 | A half course from GGR201H1, GGR203H1, GGR205H1, GGR206H1, GGR301H1, GGR303H1, GGR305H1, GGR307H1, GGR308H1, GGR314H1, GGR333H1, GGR347H1/JGE347H1, GGR348H1/JGE348H1, GGR403H1, GGR409H1, GGR413H1; JGE236H1 | 0.5 |
| Total |  | 4.0 |

## Physical Geography Groups/Streams

Five possible streams within the Physical Geography Major or Specialist, which can be combined with other courses to fulfill the overall requirements given above, are:
Climate System and Climatic Change: GGR203H1,
GGR303H1, GGR314H1, GGR403H1, ENV346H1
Land Surface Processes: GGR100H1, GGR201H1, GGR205H1, GGR206H1, GGR301H1, GGR305H1, GGR409H1, GGR413H1
Biogeography and Paleoclimates: GGR101H1, GGR201H1, GGR302H1, GGR305H1
Biogeochemistry and Contaminants: GGR100H1, GGR205H1, GGR303H1, GGR403H1, GGR409H1

Environmental Physical Geography: GGR101H1, GGR201H1, GGR203H1, GGR205H1, GGR206H1, GGR301H1, GGR308H1, GGR314H1, GGR409H1, GGR413H1
Students contemplating graduate studies are strongly urged to combine their Physical Geography Major or Specialist with a Minor in Mathematics (involving calculus, linear algebra, and differential equations) and a Minor in a field of science related to their particular interests in physical geography (biology, chemistry, geology, or physics).
Below are courses from outside the Geography Department that can be applied to the requirements for the Physical and Environmental Geography Major (one course only) or the Specialist (up to 3 courses only); these courses are an option only for students that have the required pre-requisites.

Group H: Faculty of Arts \& Science courses CHM217H1, CHM310H1; GLG206H1, GLG216H1, GLG217H1; PHY251H1, PHY255H1. Faculty of Engineering
courses: CHE210H1; EDV250H1
Group I
EEB301H1, EEB302H1, EEB303H1, EEB304H1, EEB305H1, EEB310H1, EEB311H1, EEB319H1, EEB321H1, EEB324H1, EEB328H1, EEB330H1, EEB428H1;
ENV346H1; FOR301H1, FOR305H1, FOR306H1,
FOR417H1; GLG351H1, GLG436H1; PHY392H1,
PHY408H1

## Asian Geographies (offered jointly with the National University of Singapore) Minor

This Type 3 minor program represents a unique opportunity to study geography in a different cultural environment. For more information, contact the Undergraduate Office and the Centre for International Experience (CIE, www.cie.utoronto. ca). Students are advised to contact the $U$ of $T$ Geography Department in advance of going abroad to discuss course selection at NUS.

| Number <br> of <br> courses | Courses | FCEs |
| :--- | :--- | :--- |
| A: Any half <br> course: | GGR100H1, GGR101H1, <br> GGR107H1, GGR112H1, <br> GGR124H1 | 0.5 |
| B: Any <br> 3 half <br> courses (U <br> of T): | Other higher level GGR/JGE/JGI/ <br> JFG/JUG courses | 1.5 |
| C: Any <br> 4 half <br> courses <br> (NUS): | NUS250H0, NUS251H0, <br> NUS252HO, NUS253H0, <br> NUS254HO, NUS255H0, <br> NUS256HO, NUS350H0, <br> NUS351Y0, NUS352H0, <br> NUS353HO, NUS354H0 (or other <br> NUS course with permission of <br> the department) | 2.0 |

## Geography Courses

## Prerequisites

NOTE
Prerequisites: In some cases Prerequisites may be waived if equivalent background exists. Please consult the Associate Chair, Undergraduate or the course instructor.

## First-Year Seminar

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## GGR100H1 Introduction to Physical Geography [24L/4P]

Introduction to Physical Geography using an Earth systems approach. We examine the atmosphere, lithosphere, hydrosphere, cryosphere and biosphere, emphasizing processes, energy flows, cycles and scale. Specific topics include weather and climate, geomorphic processes and the genesis of landforms, river systems, glaciers, soils, and biomes. Laboratory sessions and a field trip provide practical experience with the lecture topics.
Exclusion: GGR100Y1
DR=SCI; BR=5

## GGR101H1 Ancient Civilizations and their Environments [24L]

The course will focus on the processes that drive environmental change and how past societies have responded to the constraints that these impose. The emphasis is on the current interglacial, the Holocene, and how increasing population and technology has affected human-environment interactions.
Exclusion: JGE236H1 (taken in 2007-2008, 2008-2009) DR=SCI; BR=4
GGR107H1 Environment, Food and People [24L/5T] Examines the relations between food, nature, and society. Food is fundamental to human existence, and central to most cultures; it also has significant and widespread effects on the physical environment. This course uses food as a lens to explore human-environment interactions locally and globally. It serves as an introduction to environmental geography.
Exclusion: GGR107Y1
DR=SOC SCI; BR=3
GGR112H1 Geographies of Globalization, Development and Inequality [24L/8T]
Economic development and underdevelopment are taking shape in an increasingly interconnected global context. This course examines geographic approaches to "Third World" development, economic globalization, poverty, and inequality. It pays particular attention to the roles of rural-urban and international migration in shaping specific landscapes of development.
DR=SOC SCI; BR=3

## GGR124H1 Urbanization, Contemporary Cities and

 Urban Life [24L/6T]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

## DR=SOC SCI; BR=3

## GGR201H1 Geomorphology [24L/4P]

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

## DR=SCI; BR=5

## GGR203H1 Introduction to Climatology [34L]

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; MAT123H1/125H1,
124H1/126H1, 133Y1/135Y1/137Y1/157Y1;
PHY131H1/151H1, 132H1/152H1
DR=SCI; BR=5
GGR205H1 Introduction to Soil Science [24L/4P]
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
DR=SCI; BR=5
GGR206H1 Introduction to Hydrology [30L/4T]
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 practiced.
Recommended Preparation: GGR100H1; MAT135H1 DR=SCI; BR=5

## GGR216H1 Global Cities [24L]

Most urban courses taught in the English-speaking world implicitly or explicitly focus on large North American, European, or Australian cities. While these places are interesting in their own right, studying them as the sole model of urbanization is misleading. To a great extent, the societies of the westernized, developed world are already highly-urbanized and have been so for decades. Cities outside of this sphere, by contrast, are generally growing much faster, and experiencing greater social and economic upheaval as a result. Understanding non-North American urbanization is a vital part of understanding cities in general. This course is an attempt to introduce students to processes of urbanization that are occurring in places other than North America. There will be a particular focus on comparing the urban form, economies, and social life in cities around the world.
DR=SOC SCI; BR=3
JGI216H1 Urbanization \& Global Change [24L]
Examines 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 locational and economic shifts 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
DR=SOC SCI; BR=3

## GGR220H1 The Spatial Organization of Economic Activity [24L/2T]

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

## Geography

in space, the empirical definition of regional economic systems, and the measurement of economic growth and structural change.
Exclusion: GGR220Y1
DR=SOC SCI; BR=3

## GGR221H1 New Economic Spaces [24L]

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
DR=SOC SCI; BR=3
GGR223H1 Environment, Society and Res.1667ources (formerly GGR222H1) [24L/6T]
Focuses on society-environment relations and different approaches to resource governance and management.
This includes exploration of the spatial, social, and political economic origins and implications of humans' changing relations to nature. Drawing on debates from environmental governance and political ecology literatures, the course also investigates the ways that different actors and institutions have framed and sought solutions to environmental and resource challenges.
Exclusion: GGR222H1/GGR222Y1/GGR233Y1/JGE221Y1/
ENV222Y1/ENV222H1 (if ENV222H1 was taken before 2012-13)
Recommended Preparation: One of GGR100H1/GGR101H1/ GGR107H1/GGR112H1/GGR124H1
DR=SOC SCI; BR=3
JGE236H1 Human Interactions with the Environment (formerly ENV236Y1) [24L/4P]
Will our society survive a future with population growth, increasing demands for energy, food and water, and fouling from pollution? This course explores the current stresses caused by human activities on the environment and global systems, ans what this bodes for the future. Most importantly, we explore solutions! Discussions blend science, engineering, policy and behavioural aspects of broad issues and current events.
Prerequisite: (BIO120H1, BIO130H1)/BIO150Y1/
(GGR100H1, GGR101H1)/GGR100Y1 or permission of instructor.
Exclusion: ENV236Y1
DR=SCI; BR=4

## GGR240H1 Historical Geography of North America

 [24L]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, environmental and agricultural change, modernism and militarism, and struggles over land.
DR=HUM; BR=3

GGR241H1 Historical Geographies of Urban Exclusion and Segregation [24L]
Introduction to the historical geography of urban social Exclusion and segregation after 1750. Using a selection of cities from around the world (such as Lagos, Pittsburgh, Hamburg, Mumbai and Nairobi), the course examines the impacts and implications of urban social inequalities.
DR=HUM/SOC SCI; BR=3
GGR246H1 Geography of Canada [24L]
Social and economic differences have been, and continue to be, a prominent feature of Canada's geography. In this course these differences are examined at a regional and local scale. The course adopts a thematic approach and considers issues such as historical development, urbanization, industrialization, immigration and population change, Canada's cultural mosaic and native issues. Emphasis will be placed on the evolution of social and economic policies and Canada's incorporation into a global economy.
Recommended Preparation: GGR107H1, GGR124H1 DR=SOC SCI; BR=3

## GGR252H1 Marketing Geography [24L/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.

## DR=SOC SCI; BR=3

## GGR254H1 Geography USA [24L]

After a short historical overview, this course focuses on contemporary issues in American society, economy, politics, race, regional distinctions and disparities, urban development and the U.S. as world power.
DR=HUM/SOC SCI; BR=3
GGR270H1 Introductory Analytical Methods [36L/12T]
Theory and practical application of elementary quantitative techniques in geography emphasizing descriptive, inferential and spatial statistical analysis, probability, and sampling.
Exclusion: ECO220Y1/ECO227Y1/GGR270Y1/LIN305H1/
PSY201H1/SOC202H1/SOC200Y1/STA220H1/
POL242Y1/STA250H1/ STA248H1/STA261H1
Recommended Preparation: 0.5 FCE in Geography
DR=SOC SCI; BR=None
GGR271H1 Social Research Methods [24L]
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.
Exclusion: SOC200H1/SOC204H1/WDW350H1/
ENV223H1(2010-11, 2011-12)
DR=SOC SCI; BR=None

## GGR272H1 Geographic Information and Mapping I [24L/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.

## DR=SOC SCI; BR=5

GGR273H1 Geographic Information and Mapping II [24L/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
DR=SOC SCI; BR=5

## GGR299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.

## DR=SOC SCI; BR=None

## GGR300H1 Special Topics in Geography I [24L]

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 [24L/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: GGR270H1 (or equivalent)
Recommended Preparation: 10.0 FCE's including
GGR100H1 or GGR201H1
DR=SCI; BR=5

## GGR303H1 Climate-Biosphere Interactions [24L]

Discussion of the exchange of energy and matter (carbon, water) between the Earths 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: 8.0 FCE`s Recommended Preparation: 2.0 FCE`s from PHY131H1/
PHY132H1/CHM138H1/CHM139H1/MAT135H1/
MAT136H1
DR=SCI; BR=4

## GGR305H1 Biogeography [24L]

Identifies patterns in and explains processes behind plant and animal distributions through space and time. Topics covered include ecological and evolutionary dynamics, disturbance, dispersal, migration, continental drift, speciation, extinction, paleoenvironments and island biogeography. We also examine terrestrial and marine biomes, the meaning of biodiversity, conservation challenges, and recent biogeographic changes associated with human impact.
Recommended Preparation: 8.0 FCE's including GGR100H1
or (BIO120H1, BIO130H1)
DR=SCI; BR=4
GGR307H1 Soil and Water: Landscape Processes [24L/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: 8.0 FCE's including GGR205H1 and GGR206H1
DR=SCI; BR=5
GGR308H1 Physical Aspects of the Canadian Arctic and Subarctic [24L]
We will explore the climate geomorphology, soils, hydrology, biogeochemical cycling, limnology and food web structures of the Arctic and Subarctic. Current stresses of climate change and pollution are discussed along with scientific and political solutions.
Prerequisite: Equivalent of one full-year science course at
the 200-level or permission from the instructor.
DR=SCI; BR=5
GGR314H1 Global Warming [32L/7T]
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.
Recommended Preparation: 8.0 FCE's
DR=SOC SCI/SCI; BR=5
GGR320H1 Geographies of Transnationalism, Migration, and Gender [24L]
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.
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3

## JUG320H1 The Canadian Wilderness [24L]

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. DR=SOC SCI; BR=2
GGR321H1 Aboriginal People and Environmental Issues in Canada (formerly JAG321H1) [24L]
Indigenous views of environment, resource management and governance from pre-European contact times through to the present will be explored in this course. Emphasis will be placed on the emerging role of Indigenous peoples in environmental and resource management in Canada. Topics to be covered include: history of Aboriginal/nonAboriginal relations, Aboriginal and treaty rights, Aboriginal world view and philosophy, traditional knowledge, Aboriginal environmental ethics and principles and current

## Geography

environmental issues confronting Indigenous peoples in Canada.
Exclusion: JAG321H1
Recommended Preparation: 8.0 FCE's including 1.0 FCE in
Geography and/or Aboriginal Studies (SOC SCI/BR=3)
DR=SOC SCI; BR=3
JGE321H1 Multicultural Perspectives on Environmental Management [24L]
Diverse approaches to environmental issues from a variety of multicultural perspectives are introduced, compared and analyzed, using case studies. Perspectives on environmental management will be discussed as they emerge from
contexts such as South America, Asia, or Africa.
Prerequisite: ENV221H1/ENV222H1/GGR222H1/GGR223H1
Exclusion: ENV321Y1
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3
GGR323H1 Issues in Population Geography [24L]
Explores issues in the geographies of population at a variety of scales from global to local. Topics include an investigation of the mechanics of population growth, theories of population, population growth through time, migration, the impact of population growth on the environment and the social and economic consequences of population change.
Exclusion: GGR208H5
Recommended Preparation: 8.0 FCE's including GGR107H1,
GGR124H1, GGR246H1
DR=SOC SCI; BR=3
GGR327H1 Geography and Gender [24L]
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.
Recommended Preparation: 8.0 FCE's including 1.0 FCE in
Geography (SOC SCI)
DR=SOC SCI; BR=3

## GGR328H1 Labour Geographies [24L]

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: 8.0 FCE's including 1.0 FCE in Geography
(SOC SCI/BR=3)
DR=SOC SCI; BR=3

## GGR329H1 The Global Food System [24L]

Explores the changing global geographies of food by tracing international movements of food through both mainstream and 'alternative' supply chains. The implications for sustainability, food security, community autonomy and health are investigated.
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3
JGE331H1 Resource and Environmental Theory (formerly GGR331H1) [24L]
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/GGR107H1/ENV221H1/
ENV222H1/GGR222H1/GGR223H1
Exclusion: GGR331H1
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3
GGR333H1 Energy Supply and Use [24L/7T]
Examines the technical options and costs of achieving significant reductions in the energy demands of new buildings through better design and in the energy use of existing buildings through retrofits, and of the possibilities of sustainably supplying the reduced energy demands through wind and solar energy.
Exclusion: GGR347H1/JGE347H1, GGR348H1/JGE348H1 Recommended Preparation: First year Math and/or Physics DR=SCI; BR=5

## GGR334H1 Water Resource Management [24L]

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: 8.0 FCE's including one of
GGR100H1, GGR107H1, GGR222H1, GGR223H1
DR=SOC SCI; BR=3

## GGR336H1 Urban Historical Geography of North America [24L]

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: 8.0 FCE's including GGR124H1/
GGR241H1/GGR254H1
DR=HUM/SOC SCI; BR=3
GGR337H1 Environmental Remote Sensing [24L/24P]
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.
Recommended Preparation: GGR100H1, GGR272H1 DR=SCI; BR=5

## GGR338H1 Environmental Problems in Developing Countries [24L] <br> 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.Recommended Preparation: 8.0 FCE's including one of GGR107H1, GGR223H1, GGR222H1
DR=SOC SCI; BR=3
GGR339H1 Urban Geography, Planning and Political Processes [24L]
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.
Recommended Preparation: 8.0 FCE's including GGR124H1,
GGR246H1/GGR254H1
DR=SOC SCI; BR=3
GGR340H1 Health Geography [24L]
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: 2 of GGR270H1, GGR271H1 or GGR272H1 Exclusion: GGR330H1, GGR450H1, GGR451H1 Recommended Preparation: 8.0 FCE's including one of

GGR222H1/GGR223H1 or ENV236H1/JGE236H1 DR=SOC SCI; BR=3
GGR341H1 Changing Geography of Latin America [24L]
Seeks to develop a general understanding of presentday Latin America by focusing on human-environment interactions, past and present. Case studies are used to understand the diversity of Latin American landscapes (physical and cultural), and how they are changing within the context of globalization.
Exclusion: GGR249H
Recommended Preparation: 8.0 FCE's including 1.0 in
Geography (SOC SCI/BR=3)
DR=SOC SCI; BR=3
GGR342H1 The Changing Geography of Southeast Asia [24L]
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: 8.0 FCE's including 1.0 FCE in
Geography (SOC SCI/BR=3)
DR=SOC SCI; BR=3
GGR343H1 The Changing Geography of China [36L]
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 Chinas on-going transition from a planned to market economy.
Recommended Preparation: 8.0 FCE's including 1.0 FCE in
Geography (SOC SCI/BR=3)
DR=SOC SCI; BR=3
JGI346H1 The Urban Planning Process [24L]
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 contexts. 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, INI235Y1
DR=SOC SCI; BR=3

## GGR347H1 Efficient Use of Energy (formerly JGE347H1) [24L/6T]

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 energy use in buildings, transportation, industry, and agriculture.
Exclusion: GGR333H1, JGE347H1
Recommended Preparation: 8.0 FCE's including first year
Math and/or Physics
DR=SCI; BR=5
GGR348H1 Carbon-Free Energy (formerly JGE348H1) [24L/6T]
Examines the options available for providing energy from carbon-free energy sources: solar, wind, biomass, nuclear, and fossil fuels with capture and sequestration of CO 2 . The hydrogen economy is also discussed.
Exclusion: GGR333H1, JGE348H1
Recommended Preparation: 8.0 FCE's including first year
Math and/or Physics
DR=SCI; BR=5
GGR352H1 Understanding Spatiality [24L]
Investigates the changing nature of space and our thinking about it, introducing students to a wide range of contemporary geographers and spatial theorists such as Lefebvre, Soja, Gregory, Harvey, Massey and others as well as challenges to this thinking - voices from the margins or peripheries. It will explore changing conceptions of spatiality that inform geographic thought and that help us understand the ways in which political, economic and social power is constituted and contested at a range of spatial scales.
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3
GGR356H1 Recreation and Tourism [24L]
This course explores recreation, tourism and leisure from a number of perspectives. It examines the relationship between choice, and demographic and lifestyle correlates, technology, and faddism. It evaluates recreational and touristic environments and the role of nature areas. It explores many of the social and environmental costs and benefits associated with recreation, tourism and leisure.
Exclusion: GGR256H1
Recommended Preparation: 8.0 FCE's including GGR107H1,
GGR124H1, GGR221H1, GGR246H1
DR=SOC SCI; BR=3
GGR357H1 Housing and Community Development [24L]
Focuses on the importance of adequate housing and the challenge of achieving this for all residents. It will root theoretical explanations in realities using Canada and Toronto as examples. Topics covered include public policies relating to social housing, rental housing, homeownership, neighborhoods, and homelessness.
Prerequisite: Completion of a minimum of 8 FCEs
Recommended Preparation: GGR124H1
DR=SOC SCI; BR=3

## Geography

## GGR358H1 Geography, Political Economy and Religion [24L]

Focuses on the interaction between political economy and religion, with a particular focus on how this plays out in cities. In the theoretical realm, most political economists have written extensively on religion at one point or another. It is important to consider what they have said about religion and how it might have affected their ostensibly secular ideas about politics and economy. In the practical realm, religion, as belief system invented by humans, structures a great deal of political and economic activity at a variety of spatial scales. Religion, for example, influences relationships between countries, urban politics, city form, and social class among many other spheres. This course is an introduction to both the theoretical and practical applications of the intersection of political economy and religion.
Prerequisite: 8.0 FCE's
DR=SOC SCI; BR=3
GGR360H1 Culture, History, and Landscape [24L] 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.
Recommended Preparation: 8.0 FCE's including 1.0 FCE in
Geography (HUM/BR=1 or SOC SCI/BR=3)
DR=HUM; BR=1

## GGR361H1 Understanding the Urban Landscape [24L]

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: 8.0 FCE's including GGR124H1
and one of GGR216H1, GGR240H1, or GGR246H1
DR=SOC SCI; BR=3
GGR363H1 Critical Geographies: An Introduction to Radical Ideas on Space, Society and Culture [36L]
Introduces a diversity of critical perspectives for geographers and others, including anarchism, Marxism, feminism, sexual politics, postcolonialism, anti-imperialism and anti-racism. In so doing it illustrates how such radical ideas about space, society and culture have contributed to our political thought and action.
Recommended Preparation: 8.0 FCE's
DR=HUM/SOC SCI; BR=3

## GGR373H1 Advanced Geographic Information Systems

 [24L/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
DR=SCI; BR=3

GGR374H1 Urban Dynamics [24L]
Investigates the theory and methods available to help identify and measure the social and economic impacts of specific policies and/or exogenous changes at the urban and regional scales. Emphasis will be placed on understanding the potential of policy mechanisms for promoting the revitalization of urban areas through the re-use of former industrial/commercial/institutional properties.
Prerequisite: 2.0 FCE's in Goegraphy (SOC SCI/BR=3)
Recommended Preparation: 8.0 FCE's including 2.0 FCE's in
Geography (SOC SCI/BR=3)
DR=SOC SCI; BR=3

## GGR375H1 The Evolution of Geographic Information [24L/24P]

Examines the great moments and issues surrounding the constant evolution, revolution and demand for geographic information. The emphasis will be put on the exploration of geographic informations progression from paper to digital through an examination of societal changes brought on by information technologies over time. The focus will be placed on the demand for geographic information within an historical, political, and intellectual context. The range of topics examined throughout the course will include the migration of geographic information from paper mapping to digital mapping; interoperability; open source and open access; evolving data cultures; government control of data and information; and geospatial analysis.
Recommended Preparation: 8.0 FCE's
DR=SOC SCl; BR=3

## GGR381H1 Field Course in Environmental Geography [TBA]

Introduction to field studies in environmental geography. The course includes exercises and a project during a one-week field study in late August or early September, some 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: Permission of instructor
Recommended Preparation: 8.0 FCE's including 3.0 FCE's in
Geography (SOC SCI/BR=3)

## DR=SOC SCI; BR=3

GGR382H1 Field Course in Human Geography [TBA] Introduction to field studies in human geography. The course includes exercises and a project during a one-week field study in late August or early September, some 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 is limited by size. Preference given to Geography SPE/MAJ/MIN. Applications open to all students. Prerequisite: Permission of instructor.
Recommended Preparation: 8.0 FCE's
DR=SOC SCI; BR=3

## GGR390H1 Field Methods [TBA]

Introduction to field methods in vegetation mapping/analysis, soils, hydrology, climatology and geomorphology. The course includes exercises and a project during a one-week field camp just before the start of classes, 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 1.0 from GGR201H1,
GGR203H1, GGR205H1, GGR206H1, GGR305H1
Recommended Preparation: 8.0 FCE's
DR=SCI; BR=None
GGR398HO Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None
GGR399YO Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33 .
DR=SOC SCI; BR=None
GGR400H1 Special Topics in Geography II [TBA]
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.
Prerequisite: 10.0 FCE's
DR=TBA; BR=None
GGR403H1 Global Ecology and Biogeochemical Cycles [24L]
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. Seminar course on biogeochemical cycling of carbon, water, nitrogen, phosphorus, sulfur, and iron between the Earths atmosphere, oceans, and biosphere. Examples and case studies will be taken from research on contemporary as well as paleoclimate systems.
Prerequisite: 10.0 FCE's
Recommended Preparation: 2.0 FCE's in any of GGR/GLG/
PHY/CHM/MAT/EEB
DR=SCI; BR=4

## GGR409H1 Contaminants in the Environment [24L/11T]

Are we experiencing a subclinical epidemic of subtle health effects due to chemical contaminants in our bodies? The environmental behaviour and toxicology of inorganic and organic chemical contaminants is discussed in order to understand the scientific basis of this question and to answer this question. Facility is gained with simple and complex mathematical models. The interface between science and policy is discussed throughout.
Prerequisite: 10.0 FCE's including CHM137Y1/(CHM138H1,
CHM139H1)/CHM151Y1/GGR205H1, First-year Math DR=SCI; BR=4
GGR413H1 Watershed Hydroecology [24L]
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: 10.0 FCE's
Recommended Preparation: GGR201H1, GGR206H1, GGR270H1, GGR272H1 or GGR337H1
DR=SCI; BR=5

GGR416H1 Environmental Impact Assessment (formerly GGR393H1) [24L/4T]
Environmental impact assessment (EIA) as a mechanism for avoiding or mediating the potential costs of development. The course focuses on the theory and practice of EIA in Canada in general and Ontario in particular. Using a broad definition of environment, various components of EIA are addressed, with an emphasis on principles, legal and institutional frameworks, stages in the process, and specific analytical techniques.
Prerequisite: 10.0 FCE's, 2.0 FCE's in Geography including
GGR270H1, GGR271H1
Exclusion: GGR393H1
Recommended Preparation: One of GGR222H1/GGR223H1 or ENV236H1/JGE236H1
DR=SOC SCI; BR=3
GGR418H1 Political Economy of Natural Resources [24S]
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: 10.0 FCE's including GGR222H1/GGR233H1
DR=SOC SCI; BR=3
GGR419H1 Environmental Justice [24S]
Examines how environmental problems affect people, communities and societies differentially and how marginalized communities and people often bear the brunt of environmental costs, while contributing little to their creation. It uses readings and case studies from across the globe to address the production of environmental injustice and the struggle for environmental justice.
Prerequisite: 10.0 FCE's
DR=SOC SCI; BR=3
GGR421H1 History \& Philosophy of Geography [24S] 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: 10.0 FCE's
Recommended Preparation: 2.0 FCE's in Geography (HUM/
$B R=1$ or $S O C S C I / B R=3$ )
DR=HUM; BR=3
GGR424H1 Transportation Geography and Planning (formerly GGR324H1) [24L]
Introductory overview of major issues in interurban and intraurban transportation at the local, national and international scale. Topics include urban transportation, land use patterns and the environment, causes of and cures for congestion, public transit, infrastructure finance, and transport planning and policy setting.
Prerequisite: 10.0 FCE's including one of GGR124H1/
GGR220H1/GGR221H1
Exclusion: GGR324H1
Recommended Preparation: GGR270H1
DR=SOC SCI; BR=3

## Geography

## GGR431H1 Regional Dynamics [24L]

Theory and analysis of regional economic change with emphasis on North America and Western Europe. Exportbase, 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: 10.0 FCE's including GGR220H1, GGR221H1,
GGR270H1
DR=SOC SCI; BR=3
GGR434H1 Building Community Resilience [24S]
Examines concepts of resilience as a way of building the capacity of communities to (a) respond to predicted disruptions/shocks associated with climate change, global pandemics, anticipated disruptions in global food supply, energy insecurity, and environmental degradation; and (b) nurture the development of alternative spaces that support the emergence of more life-sustaining structures and practices.
Prerequisite: 10 FCEs
Exclusion: GGR400H1 (2011-12)
Recommended Preparation: 1.0 FCEs in Geography DR=SOC SCI; BR=3
GGR438H1 Environment and Development [36S] Examines the implications of development - as an economic and social project - for how the environment is used, by whom, and to what ends. Topics include: interpretations of scarcity and degradation, questions of consumption, the greening of development, and formations of social movements at the interface of development and the environment by whom, and to what ends. Draws on literatures in political ecology and critical development geography. Topics include: interpretations of scarcity and degradation, questions of consumption, the greening of development, and formation of social movements and participatory initiatives at the interface of development and the environment.
Prerequisite: 10 FCE's
Recommended Preparation: 1.0 FCE in Geography (SOC SCI/BR=3)
DR=SOC SCI; BR=3

## GGR439H1 Global Political Geography [36S]

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: 10.0 FCE's
Recommended Preparation: 1.0 FCE in Geography DR=SOC SCI; BR=3

## GGR452H1 Space, Power, Geography: Understanding Spatiality [24S]

Our understanding of space and power has shifted radically in the past half century. Space no longer implies only regions, nations or territory; power is not simply a question of domination, control, or forms of political representation.

Space and power are intricately related. This course explores a shift in our ways of thinking about space and power, focusing specifically on the works of Michel Foucault and Gilles Deleuze. Through the works of Deleuze and Foucault, students are introduced to a variety of ways that space and power are organized and contested. The course begins with the maps in our heads: what kinds of spatial systems organize dominant world-views, how have these changed over time? What spatial metaphors do we use to think about power - as hidden and operating at a depth, or as a surface effect? How does the social organization of space figure in the development of different technologies and techniques of power? How do technologies of power become organized, serialized, dispersed, transformed and contested?
Prerequisite: 10.0 FCE's including at least one (or an
equivalent) of GGR327H1, GGR328H1, GGR339H1,
GGR352H1, GGR360H1, GGR363H1
DR=SOC SCI; BR=3

## JGI454H1 The Role of the Planner: Making a Difference [24L]

Focuses 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 FCEs, 5.0 of which must be GGR/INI Urban
Studies
DR=SOC SCI; BR=3
GGR457H1 The Post-War Suburbs [24L]
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
DR=HUM/SOC SCI; BR=3

## GGR458H1 Advanced Topics in Urban Geography [24L]

This course focuses on original works that have been influential to the field of urban geography. The first third of the course consists of extensive reading and discussion of pre-selected "classical" urban pieces. The second third consists of student-led reviews of important urban books. The final third consists of student-led projects devoted to a particular theme (announced on the first day of class). It is designed for students who have taken urban courses in the
past who are interested in extending this interest in a nontextbook, more interactive environment.
Prerequisite: 10.0 FCE`s
DR=SOC SCI; BR=3

## 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: GGR373H1
DR=SCI; BR=None

## JFG470H1 Forest Management [24L]

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: ECO220Y1/ECO227Y1/
GGR270H1/MAT133Y1/MAT223H1
DR=SCI; BR=3
GGR473H1 Cartographic Design [12L/24P]
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: 10.0 FCE's including GGR272H1, GGR273H1 DR=SOC SCI; BR=None

## JFG475H1 Forest Fire Management Systems [24L]

Use of operational research and information technology to develop mathematical models and decision support systems to design and evaluate the performance of forest fire and other 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/ECO227Y1/

GGR270H1/MAT133Y1/MAT135Y1/MAT137Y1

## DR=SCI; BR=3

## GGR491Y1 Research Project

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 FCEs
DR=TBA; BR=None

## GGR492H1 Senior Practicum

Students design and implement an independent applied geography/planning project in consultation with an employer (paid or volunteer), 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.
DR=TBA; BR=None

## GGR492Y1 Senior Practicum

Students design and implement an independent applied geography/planning/GIS project in consultation with an employer (paid or volunteer), who will act as their "client". Enrolment required written permission from a staff supervisor and Undergraduate Coordinator. Only open to students who have completed 10 FCEs and who are enrolled in a Specialist, Major or GIS minor program sponsored by the Department of Geography
DR=TBA; BR=None

## GGR498H1 Independent Research I

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 FCEs and who are enrolled in a Specialist or Major program sponsored by the Department of Geography. DR=SCI; BR=None

## GGR499H1 Independent Research II

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 FCEs and who are enrolled in a Specialist or Major program sponsored by the Department of Geography.
DR=HUM/SOC SCI; BR=None

## Asian Geographies Courses

## NUS250H0 Cities in Transition

This module is concerned with the changing roles of cities in an age of globalization. The first part examines cities as part of urban networks at the national, regional and international levels, and focuses on the implications arising from the rise of mega-cities and global cities. The second half of the module investigates the challenges facing cities on the ground, including issues of the revitalization and re-imaging of city cores, changing retail landscapes, and the impact of telecommunications on the location of urban activities and peoples' mobility. The module is targeted at students with an interest in urban issues. (Co-listed as GE2204 National University of Singapore)
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3

## NUS251H0 Southeast Asia

This module deals with a multi-disciplinary approach to understanding the regional geography of Southeast Asia. Students are expected not only to critically analyze their readings but also to be able to synthesize materials to provide a holistic understanding of the region. Specifically, it looks at the region through historical, cultural, social and political-economic perspectives. The module also discusses sustainable development issues. This is a module that is
open to all students in the Faculty of Arts \& Social Sciences, Engineering, Law, Science, School of Design \& Environment and School of Business. (Co-listed as GE2226 National University of Singapore)
Exclusion: GGR342H1
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3
NUS252H0 Rice, Spice \& Trees: Peasants in Southeast Asia
Southeast Asia has been, and still is comprised of predominantly rural and agrarian societies. This module seeks to develop an understanding of peasant life in the region. Topics to be studied include the village as a construct, the "moral economy" of the peasantry, land and man relations, economic output, and peasant beliefs, consciousness, and cultural expressions. With the peasants' increasing involvement in the world market and the nationstate, it is also important to consider the penetration of capitalism into the rural economy, as well as the demand for supra-village identification and loyalties. Notions of "development" as they pertain to the peasants, and as postulated by the state, non-governmental organizations and the peasants themselves are also discussed. (Co-listed as SE3213 National University of Singapore)
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3

## NUS253H0 Economy and Space

This module examines relationships between economy and space through a focus on 'development'. Through interrogating theories, strategies and trajectories of 'development', students will develop an understanding of the past and contemporary global political economy and its geographies. The course will emphasize the geopolitical and cultural backdrops to 'development' and attendant economic geographies amidst debates about 'globalization', international trade and investment. (Co-listed as GE2202 National University of Singapore)
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3

## NUS254H0 Geographies of Social Life

This module explores debates in geography about social issues. It emphasizes the relationship between social identity and social space, and how different places reflect and shape diverse ways of life. The module examines the role of space in the interplay of different social groups (e.g. ethnic groups, men/women), and in relation to different aspects of daily life (e.g. housing, leisure). Its emphasis, however, is on how to think about these issues in different scales/contexts (streets, public spaces, global cities). The course is intended for geography majors, and students throughout NUS with an interest in the relationship between society and space. (Co-listed as SE2224 National University of Singapore) Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3
NUS255H0 Cities and Urban Life in Southeast Asia Are Southeast Asian urban models unique from those of the West? This module uses historical and emerging developments to re-evaluate debates on Southeast Asian urbanization. The particularities of Southeast Asian urbanisation will be examined both in terms of its intertwined history with the rest of the world as well as the politics of time and space. The module aims at developing a critical
understanding of the interaction between historical, politicaleconomic and cultural processes that constitute urbanization in Southeast Asia. (Co-listed as SE2212 National University of Singapore)
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3

## NUS256HO Changing Landscape of Singapore

This module attempts to understand the rationale of changes in Singapore's urban landscape. It places these changes within a framework that considers Singapore's efforts to globalize and examines how policies are formulated with the idea of sustaining an economy that has integral links subregionally with Southeast Asia while developing new spatial linkages that will strengthen its position in the global network. Emphasis is also given to recent discussions about how diversity and difference in the perception and use of space pose a challenge to the utilitarian and functional definition adopted by the state. (Co-listed as GEK2001/SSA2202
National University of Singapore)
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3
NUS350H0 Natural Resources: Policy and Practice
This module examines important geographical, ecological and political concepts and approaches to natural resources management. In particular, we focus on ownership regimes, access, exploitation and conservation in different social, economic and cultural contexts. Detailed cases of fisheries, forestry, freshwater and agriculture conflicts and problems are discussed. (Co-listed as GE3210 National University of Singapore)
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3
NUS351Y0 Field Studies in Geography: SE Asia
The module exposes students to different geographical methods, both human and physical, and as such it is an ideal preparation for any student wishing to undertake further primary research at higher levels in geography, and other social science disciplines. After a series of lectures/ seminars on fieldwork methods, fieldwork ethics, and health and safety issues in the field (which may include some basic introductory language classes), students then undertake a $2-5$ week period of field study overseas, depending on logistical and other constraints. Previous field studies have been for periods of 4-5 weeks overseas in Thailand and Malaysia. While overseas, students undergo orientation workshops, meet peers in host universities, and visit potential field sites before conducting an intensive period of fieldwork in small groups of 3-5 students. (Co-listed as GE3230A at the National University of Singapore)
Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=None

## NUS352H0 East Asia

This module examines aspects of the geography of East Asia, which includes China, Hong Kong, Taiwan, Japan and Korea. Emphasis is placed on the developmental processes and the underlying physical, political, socio-cultural and economic factors that account for their development. It evaluates various discourses on East Asian development and also assesses the impact of East Asian development on regional conflicts, patterns of social change, urbanization and sub-regional integration. (Co-listed as GE3209 at the National University of Singapore)

Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3

## NUS353HO Globalization and Asian Cities

This module aims to provide students with an in-depth understanding of the social, political, and economic changes at various geographical scales with respect to globalization. More specifically, the module focuses on developing understandings of the complex forces driving globalization and the related urban and regional changes and the relationship between globalization and regionalization. This module is not just for geography students, but for all students who are interested in the urban and regional changes in the Asia-Pacific with respect to globalization and regionalization and the driving forces of the changes. (Co-listed as GE3219 at the National University of Singapore) Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3

## NUS354H0 South Asia: Development, Issues, Debates

This module is concerned with understanding and assessing the development experiences of the South Asian countries. Students are expected to grapple with concrete case studies of development programs in their work. The coursework covers issues pertaining to rural, agricultural, urban, industrial and human development, as well as their impact upon people and the environment. Particular attention is given to the situation of the poor and the weak, including disadvantaged children, women, and ethnic minorities. (Co-listed as SN3232 at the National University of Singapore) Recommended Preparation: 4.0 FCEs
DR=SOC SCI; BR=3

## 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)
D.H. Gorman, B Sc, Ph D
H.C. Halls, M Sc, PhD (University of Toronto Mississauga)
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)
P.H. von Bitter, MA, Ph D

## University Professor

B. Sherwood-Lollar, BA, Ph D, FRSC

## Associate Professor and Chair of the

## Department

R. Pysklywec, M Sc, Ph D

Professor and Associate Chair (Graduate Studies)
E. T. C. Spooner, MA, Ph D (U)

## Senior Lecturer and Associate Chair (Undergraduate Studies)

C-G. Bank, Dip Geophys, 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
K.W.F. Howard, M Sc, Ph D (UTS)
A.D. Miall, B Sc, Ph D, D Sc, FRSC

Associate Professors
J. Bollmann, Dip Geol, Ph D
J. Brenan, B Sc, Ph D
D. Davis, M.Sc, Ph D
M.P. Gorton, B Sc, Ph D
J. Halfar, Dip Geol, Ph D (University of Toronto Mississauga)
M.A. Hamilton, M Sc, Ph D
G.S. Henderson, M Sc, Ph D
J.E. Mungall, M Sc, Ph D
D.J. Schulze, M Sc, Ph D (University of Toronto Mississauga)
U. Wortmann, Dip Geol, Dr Rer Nat

## Assistant Professors

B.A. Bergquist, B Sc, Ph D
R. Ghent, M Sc, Ph D
L. Schoehnbohm, B Sc, Ph D (University of Toronto Mississauga)

Geologists (Earth scientists) investigate Earth, other planetary bodies, moons, and meteorites. They think in a wide range of spatial (atomic to planetary) and temporal (seconds to billions of years) scales. They work in an interdisciplinary dialogue with other scientists and policymakers. They contribute to the wealth and well-being of society by finding mineral resources, locating safe drinking water, assisting with waste disposal, understanding the causes of natural disasters, dealing with environmental problems including groundwater remediation, and searching the geologic record for climate change. They can do all this because they have been trained to solve problems by considering other sciences (e.g., biology, chemistry, physics), combining distinct and often incomplete data sets, thinking in 3 dimensions, considering long time spans, and making careful observations in the field and in the laboratory. Thus they gain an understanding of how the Earth works and can contribute to the discussion of issues important to society. Geologists are in huge demand worldwide and can find rewarding careers working in diverse occupations in industry, governments, and academia.
Our department offers various programs. All three specialist programs provide sufficient depth of knowledge to allow students to enter a career as a professional geoscientist or to pursue research at the graduate level. The Geology Specialist program focuses on processes of the solid Earth, and is particularly suited for students considering the resource industry. The Environmental Geosciences Specialist program explores processes at the interface of hydrosphere, atmosphere, biosphere, and lithosphere, including human impacts connected to pollution, remediation, and sustainable development. The Geology and Physics Specialist program focuses on methods of imaging the subsurface in non-invasive ways and physical processes in and on Earth. The Geology Major program allows students to combine Earth science with another subject of their choice; logical complements are not just other sciences (e.g., chemistry, biology, computer science), but also other programs like archaeology, commerce, or architecture given the importance of Earth materials and processes in these fields. The Geoscience Minor program provides an introduction to geologic topics and thinking. 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 (ESC1066). Additional courses with geological content are listed in the Calendar of the Faculty of Applied Science and Engineering.

Undergraduate Coordinator: Charly Bank (416-978-4381) email: undergradchair@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.

## Geology Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
Consult the Undergraduate Coordinator, Department of Geology, Earth Sciences Centre
(14 full courses or their equivalent)
First Year:
CHM151Y1/(CHM138H1, CHM139H1); MAT135Y1/ MAT137Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) recommended: BIO120H1I, GLG102H1
Second Year:
GLG202H1, GLG204H1, GLG206H1, GLG207H1, GLG216H1, GLG217H1; MAT223H1; GGR201H1 recommended: STA220H1
Third Year:
GLG318H1, GLG319H1, GLG340H1, GLG345H1, GLG351H1, GLG360H1; ENV315H1
Fourth Year

1. GLG445H1/GLG448H1, GLG470Y1
2. 2.0 FCE full 400-series GLG courses or JGA305H1

Note: Students need an additional 0.5 FCE in Phys/Bio/ Comp Sci/Stat to statisfy APGO Foundations Science knowledge requirements ( $\mathrm{BIO120H} 1$ or STA220H1 are recommended). The following 4th year courses are recommended to satisfy APGO knowledge requirements in Groups 2A, 2B and 2C: JGA305; GLG430; GLG 436; GLG441; GLG442; GLG 450; GLG465.

## Environmental Geosciences Specialist (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 Dr. C. Bank, Department of Geology, undergradchair@ geology.utoronto.ca. Students should note that under the Professional Geoscientists Act of 2000, individuals practicing Environmental Geoscience in Ontario require education equivalent to the Specialist Program listed below or a P.Eng.
(14 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 1 program. Information on application timelines is available in the Registration Handbook and Timetable.
First Year: CHM151Y1/(CHM138H1, CHM139H1); (MAT136H1, MAT136H1)/MAT135Y1/ MAT137Y1; PHY131H1, PHY132H1
First or Second Year: BIO120H1
Second to Fourth Years:

GLG202H1, GLG206H1, GLG207H1, GLG216H1; GGR201H1; ENV234Y1/ENV234H1/GLG217H1/ EEB214H; (CHM210H1, ENV235H1)/ENV235Y; MAT235Y1/(MAT223H1, GLG204H1); STA220H1;
GLG345H1, GLG351H1, GLG360H1; ENV315H1; GLG436H1, GLG448H1, GLG450H1, GLG470Y1
0.5 FCE from: JGP438H1; GLG430H1, GLG441H1, GLG442H1, GLG465H1 (Note: All five of these 4th year courses are recommended to satisfy APGO knowledge requirements in Groups 2A, 2B and 2C in the Geology Calendar entry.)

## Geophysics Specialist (Science Program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Departments of Geology and Physics
( 13.5 to 14 full courses or their equivalent with at least one course at the 400 -level)
9.0 FCEs core courses:

First year: PHY131H1/PHY151H1, PHY132H1/PHY152H1; MAT135Y1/MAT137Y1
Second year: PHY250H1, PHY254H1; MAT235Y1/ MAT237Y1; GLG204H1, GLG216H1
Third year: PHY395H1; GLG330H1, GLG345H1
Fourth year: PHY408H1, PHY493H1, PHY494H1; GLG441H1, GLG465H1
0.5 to 1.0 FCEs ethics course chosen from the following list: JPH441H1, ENV333H1, PHL273H1, PHL275H1, ABS201Y1
4.0 to 4.5 additional FCEs from 200-400 level courses chosen from Groups A, B, and/or C:
Group A -- courses required for professional registration (APGO):
CHM139H1; GLG206H1, GLG207H1, GLG360H1; MAT223H1, MAT224H1; APM346H1
Group B -- physics courses suitable for graduate school preparation:
PHY252H1, PHY350H1, PHY354H1, PHY392H1, PHY454H1, PHY495H1
Group C -- other relevant courses:
STA220H1, PHY224H1, MAT244H1, ENV315H1, GLG318H1, GLG319H1, MAT335H1, GLG351H1, GLG423H1, GLG430H1, GLG442H1, GLG448H1, GLG450H1

## Geoscience Major (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(8 full courses or their equivalent)
First Year:
2.0 to 2.5 FCE chosen from BIO 120 H 1 ; CHM138H1, CHM139H1; MAT135Y1/MAT137Y1; PHY131H1, PHY132H1; GLG102H1;
Second Year:
GLG206H1, GLG207H1, GLG216H1, GLG217H1
Higher Years:

1. 0.5 FCE field course GLG340H1/GLG445H1/GLG448H1
2. Additional 3.0 to 3.5 FCE chosen from 300/400 series GLG courses/ENV315H1/JGA305H1, of which at least 0.5 FCE must be from the 400 series.

We suggest students consider the following logical course

## Geology

progressions in their higher years:
(a) Earth/planetary materials and mineral resources stream: GLG318H1, GLG319H1, GLG360H1, GLG430H1, GLG442H1
(b) tectonics and remote sensing stream: GLG340H1, GLG345H1, JGP438H1, GLG441H1, GLG465H1
(c) environmental and biogeochemistry stream: ENV315H1, GLG351H1, GLG436H1, GLG448H1, GLG450H1
(d) geoarchaeology stream: ENV315H1, GLG340H1, GLG436H1, JGA305H1, GLG441H1

## Geoscience Minor (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. 2.0 FCE chosen from $100 / 200$ series GLG courses, including no more than 1.0 FCE at the 100 level; GLG102H1 is recommended.
2. 1.0 FCE of 100 -series CHM, BIO, or PHY courses.
3. 1.0 FCE from $300 / 400$ series GLG courses/ENV315H1/ JPA305H1
Note that some GLG courses have CHM/MAT/PHY prerequisites.

## Geology Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## GLG102H1 Earth Science [24L/24P]

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.
Prerequisite: Grade 12 Chemistry SCH4U, Physics SPH4U, and Functions MCB4U or equivalent
DR=SCI; BR=5
GLG103H1 Geology in Public Issues [24L]
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. DR=SCI; BR=5
GLG105H1 Evolution of the Earth: Controversy over the Last 2300 Years [24L]
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.
DR=SCI; BR=5
GLG110H1 Introductory Geology [24L]
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

## DR=SCI; BR=5

GLG130H1 Exploration of the Solar System [24L]
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
DR=SCI; BR=5
GLG202H1 Introductory Geochemistry [24L/36P]
An introduction to thermodynamics, phase diagrams and solution chemistry, with application to geological and environmental processes.
Prerequisite: CHM151Y1/(CHM138H1, CHM139H1);
MAT135Y1/MAT137Y1
DR=SCI; BR=5

## GLG204H1 Quantitative Methods in Geology [24L/36P]

Application of computer programming to geological questions that require manipulation and visualizations of data sets and the solution of mathematical/physical problems. Students learn Matlab, report writing, oral presentations, and team skills.
Prerequisite: MAT135Y1/MAT137Y1; MAT223H1;
(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
DR=SCI; BR=5
GLG205H1 Confronting Global Change [24L/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
DR=SCI; BR=4

## GLG206H1 Materials of the Earth [24L/36P]

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.
DR=SCI; BR=5
Prerequisite: (CHM138H1, CHM139H1)/CHM151Y1 is recommended
DR=SCI; BR=5
GLG207H1 Rock-forming Processes [24L/36P]
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
DR=SCI; BR=5
GLG216H1 Dynamic Geology [24L/36P]
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, including reading of topographic and geologic maps. Prerequisite: PHY132H/152H is recommended.
DR=SCI; BR=5
GLG217H1 Earth Evolution [24L/36P]
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.
Recommended Preparation: BIO120H1
DR=SCI; BR=5
ENV234H1 Environmental Biology: Structure and Function of Ecosystems (formerly ENV234Y1) [24L/18P]
This multidisciplinary course draws on elements from geology, soil science, biology and ecology to understand past and present environments and human impacts on landscapes and ecosystems. Emphasis on the structure, functioning and connectivity of aquatic and terrestrial ecosystems. Field trips and labs. Mandatory weekend daylong field trip (total cost about \$20).
Prerequisite: BIO120H1/GLG102H1/GGR100H1/FOR200H1/
FOR201H1 or permission of department
Exclusion: ENV234Y1
DR=SCI; BR=4
GLG299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None
JGA305H1 $\begin{aligned} & \text { Environmental and Archaeological } \\ & \text { Geophysics [24L/12P] }\end{aligned}$ Geophysics [24L/12P]
Application of near-surface geophysical methods to investigate environmental and archaeological sites; in particular magnetometry, resistivity, ground-probing radar, and seismic surveys. Course will cover background on the various methods, and allow students to run field surveys and present on case studies.
Prerequisite: GLG216H1 or ANT200Y1 or GGR201H1 DR=SCI; BR=5

## ENV315H1 Chemical Analysis of Environmental Samples

See "Centre for Environment"

## GLG318H1 Igneous Processes [24L/36P]

An overview of the nature and origin of igneous 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 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: GLG202H1, GLG206H1, GLG207H1
DR=SCI; BR=5
GLG319H1 Metamorphic Processes [24L/36P]
Descriptive petrography and classification of metamorphic rocks; metamorphic processes and evolution of metamorphic rocks; interpretation of metamorphic rocks.
Prerequisite: GLG202H1, GLG206H1, GLG207H1
DR=SCI; BR=5
GLG330H1 Geophysical Field Techniques [TBA]
A ten-day field course in late August. Students get handson experience using geophysical instrumentation, applying various data collection techniques, and performing data analysis in gravity, magnetic, seismic, electrical, electromagnetic, and radar surveys.
Prerequisite: GLG216H1, PHY250H1, PHY254H1 DR=SCI; BR=5
GLG340H1 Introduction to Geological Field Methods 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 (for example 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: GLG207H1, GLG216H1, GLG217H1 or
permission of instructor
DR=SCI; BR=5
GLG345H1 Structural Geology [24L/36P]
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: GLG216H1 or CME185HI
DR=SCI; BR=5
GLG351H1 Applied Hydrogeology [24L/24P]
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: (CHM138H1, CHM139H1)/CHM151Y1; and any 2nd year science course. GLG202H1 is recommended. DR=SCI; BR=5

## GLG360H1 Sedimentary Geology [24L/36P]

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: GLG207H1, GLG216H1/MIN 185HI
DR=SCI; BR=5

## GLG371H1 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

## Geology

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.
DR=SCI; BR=None

## GLG372Y1 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.

## DR=SCI; BR=None

GLG398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
GLG399Y0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
GLG420H1 Geological Capstone Fieldtrip [TBA]
A two-week excursion in late summer/early fall to a challenging field setting. Students will integrate field observations with their accumulated knowledge of rockforming processes, structural geology, and landscape evolution to understand large-scale geological events.
Prerequisite: GLG207H1, GLG318H1, GLG345H1,
GLG360H1
DR=SCI; BR=5

## GLG423H1 Mineralogy [36L]

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: GLG206H1
DR=SCI; BR=5

## GLG430H1 Basin Analysis [36L/12P]

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: GLG360H1
DR=SCI; BR=5

## GLG436H1 Paleoecological Assessment of Environmental Change [24L/36P]

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: GLG217H1
DR=SCI; BR=4

## GLG440H1 Advanced Petrology[24L/36P]

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
DR=SCI; BR=5

## GLG441H1 Remote Sensing of Earth and the Terrestrial Planets [24L/36P]

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: PHY132H1/PHY152H1, GLG216H1, GLG345H1
Recommended Preparation: GLG204H1
DR=SCI; BR=5
GLG442H1 Mineral Deposits [24L/36P]
Geology and geochemistry of ore deposits. Origin and interpretation; systematic ore mineralogy, in hand specimen and reflected light microscopy.
Prerequisite: GLG207H1
DR=SCI; BR=5

## GLG443H1 Ore Genesis and Exploration Geochemistry [24L/36P]

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: GLG442H1

## DR=SCI; BR=5

## GLG445H1 Advanced Geological Field Methods [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 the 14-day field trip.
This is a summer session course and students must also register with the Department during the preceding term.
Prerequisite: GLG207H1, GLG340H1, GLG345H1 or permission of instructor
DR=SCI; BR=5

## GLG448H1 Field Techniques in Hydrogeochemistry [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
DR=SCI; BR=5

## GLG450H1 Hydrogeology and Contaminant Transport [24L/24P]

This course examines groundwater flow, the role of groundwater in geologic processes, and explores physical, chemical and isotopic constraints on contaminant source transport and attenuation.
Prerequisite: GLG351H1 or permission of instructor DR=SCI; BR=5

## GLG465H1 Geodynamics [24L/36P]

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
DR=SCI; BR=5
GLG470Y1 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.
Prerequisite: Completion of the required 300 -level courses in a specialist program involving Geology and permission of the Department
Exclusion: GLG471H1
DR=SCI; BR=5

## GLG471H1 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.
Prerequisite: Completion of the required 300 -level courses in a specialist program involving Geology and permission of the Department
Exclusion: GLG470Y1
DR=SCI; BR=5

## Faculty

University Professor Emeritus<br>H. Eichner, BA, Ph D, LL D, FRSC<br>Professors Emeriti<br>E. Catholy, Dr Phil (SM)<br>A.P. Dierick, MA, Ph D (V)<br>R.H. Farquharson, MA, Ph D (V)<br>H. Froeschle, MA, Dr Phil (SM)<br>C.N. Genno, MA, Ph D (V)<br>W. Hempel, Dr Phil (SM)<br>D.A. Joyce, MA, Ph D (T)<br>H.L.M. Mayer, Dr Phil (V)<br>H.W. Seliger, M.A. Ph D (V)<br>D. W.J. Vincent, MA, Ph D (T)<br>H. Wetzel, Dr Phil (U)<br>H. Wittmann, MA, Ph D (UTSC)

## Associate Professor and Chair of the

## Department

J. Zilcosky, MA, Ph D

## Assistant Professor and Associate Chair for

 Graduate Studies> M. Stock, Dr. Phil

## Senior Lecturer and Associate Chair

 (Undergraduate Studies)E. Boran, MA, Ph D

## Full Professors

W. Goetschel, Ph D
J. Noyes, Ph D

## Associate Professors

A. Fenner, Ph D
M. Hager, Dr phil
S. Soldovieri, MA, Ph D
A. Shternshis, Dr. Phil

## Assistant Professor

C. Lehleiter, MA, 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, zdamar, 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 Facultys 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 fouryear 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 are required to contact the department 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. Please check the department's web site at www.german. utoronto.ca for more information.
Information on studies in German Language and/or Literature can be obtained from the Associate Chair for Undergraduate Studies at german.undergrad@utoronto.ca.

Enquiries: Department of Germanic Languages and Literatures

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## German Programs

The German Department offers a Specialist or a Major program in German Studies, as well as Minor programs in German Studies, Business German, Yiddish Studies and German Studies in English. Enrolment in the Specialist and Major programs in German is open to students who have successfully completed their first year. Please consult the Faculty of Arts and Science Calendar and/or the German Department website for more general program requirements and a list of courses offered.

## German Studies Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent)

1. GER100Y1, GER200Y1, GER300Y1, GER400H1
2. GER150H1 (to be taken within the first two years of studies)
3. GER205H1, GER305H1
4. At least 3.5 additional F.C.E. in GER courses on the 300level
5. At least 1.5 additional F.C.E. in GER courses on the 400level
6. No more than 2 F.C.E. courses taught in English
7. Preapproved cognate courses may count toward the program
Please note: (a) GER150H1 must be taken within the first two year of study; (b) students must complete GER205H1 before taking ANY 300-level topic courses taught in German (i.e. typically in the second year, concurrently with GER200Y1); (c) students must complete GER305H1 before taking ANY 400-level topic courses taught in German; (d) 300-level courses may be replaced by 400-level courses (inquire in advance); (e) all specialists should schedule an appointment with the Undergraduate Coordinator for personalized counselling as early in their studies as possible.

## German Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent)

1. GER100Y1, GER200Y1, GER300Y1, GER400H1
2. GER150H1 (to be taken within the first two years of studies)
3. GER205H1, GER305H1
4. At least 1.5 additional F.C.E. in GER courses on the 300level
5. At least 0.5 additional F.C.E. in GER courses on the 400level
6. No more than 1.5 F.C.E. courses taught in English
7. Preapproved cognate courses may count toward the program
Please note: (a) GER150H1 must be taken within the first two year of study; (b) students must complete GER205H1 before taking ANY 300-level topic courses taught in German (i.e. typically in the second year, concurrently with GER200Y1); (c) students must complete GER305H1 before taking ANY 400-level topic courses taught in German; (d) 300-level courses may be replaced by 400 -level courses (inquire in advance); (e) all majors should schedule an appointment with the Undergraduate Coordinator for personalized counselling as early in their studies as possible.

## German Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. GER100Y1, GER200Y1, GER300Y1
2. At least 0.5 additional F.C.E. in GER courses on the 300level
3. The remainder of the four courses or equivalent must have a GER designator
4. No more than 0.5 F.C.E. may be taken in English

Note: Students registered for a German Specialist or Major may not simultaneously be registered for a German Minor program.

## German Studies in English (Arts Program)

The Minor "German Studies in English Translation" gives students the opportunity to embark on the study of German culture without first having to master a foreign language. A progression of courses leading from an "Introduction to German Culture" to "Intellectual History" and "Critical Theory" allows students to acquire skills of analytical understanding, critical judgment, and scholarly writing through the in-depth reading and discussion of literary and cultural texts, as well as of films and dramatic performances. At the end of the minor, the student will have a sense of the most fascinating aspects of German culture, including its unrivaled contribution to the Western tradition-in literature (Goethe, Mann, Kafka), thought (Marx, Nietzsche, Freud), cinema (Fritz Lang, Wim Wenders, Werner Herzog)—and its connections to Germany's tumultuous modern political era (the Weimar Republic, Nazism, and the Cold War and Berlin Wall).
Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. The Minor Program requires 4 full courses (FCE), three of which have to have a GER denominator;
2. Required courses are GER 150H (German Cultural Studies; first year) and either GER 410H (German Intellectual History) or GER 411 (Critical Theory);
3. Optional courses are GER 220Y (German Literature), GER 240H (German Drama), GER 250H (German Film), GER 261H (Yiddish Cinema), GER 338H (Narratives of the Body), GER 361H (Yiddish Literature) and GER 429H (Medieval German);
4. A maximum of 1.0 FCE in cognate courses is allowed (i.e. courses offered by other departments containing a relevant Germanic component and a final paper on a Germanic topic); please inquire at the Department and get approved in advance.
For a list of courses taught in English, please check the German Department website.
Note: Students registered for a German Specialist or Major may not simultaneously be registered for a German Minor program.

## Business German Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. GER100Y1, GER200Y1, GER300Y1
2. GER370H1, GER372H1
3. The remainder of the four courses or equivalent must have a GER designator
4. No courses may be taken in English.

Note: Students enrolled in the German Studies Specialist of Major Program may not simultaneously enroll for a Business German Minor Program.

## AI and Malka Green Yiddish Program Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. GER260Y1, GER360H1, GER462H1
2. The remaining courses should be taken from GER261H1, GER361H1, GER362H1, GER365H1; or GER100Y1, GER490H1/490Y1, ENG256Y1, HIS208Y1/ HIS433H1, SLA202H1, DTS 200 and other pre-approved cognate courses

## German Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Note

Notes: (a) All students with previous knowledge of the German language, as well as students returning from extended stays in German-speaking countries, are REQUIRED to take a placement test offered at the Department. (b) The Department reserves the right to place students in the language course appropriate to their level of language skill. (c) More detailed course descriptions and reading lists for the various courses are available from the instructor.

## GER100Y1 Introduction to German I [96P]

This is the language course to take if you have had no previous experience of the German language before. The emphasis is on comprehension, speaking, reading, writing, vocabulary and basic grammar. This course can be counted towards all programs in German.
Note: Students with any previous knowledge of German are REQUIRED to take a placement test offered at the department.
Exclusion: Senior high school German or equivalent. Note: Students with any previous knowledge of German are required to take a placement test offered at the department.
DR=HUM; BR=1
GER101H1 Introduction to German [48P]
This course is intended for students with some prior knowledge of German. It is equivalent to the Spring Term of GER100Y1. The emphasis is on comprehension, speaking, reading, writing, vocabulary and basic grammar.
Exclusion: Senior high school German or equivalent DR=HUM; BR=1
GER150H1 Introduction to German Culture (E) [36S] This course taught in English is intended for students who are unfamiliar with German culture. It examines historical, political and cultural developments in Germany from about 1871 to the present focusing on literary and non-literary texts.

Note: This course is required for the major and specialist program, and can only be taken within the first two years. In later years it may be substituted with GER310H1.
DR=HUM; BR=1
GER200Y1 Introduction to German II [96P]
This course continues the work done in GER100Y1 /
GER101H1. It further expands on basic grammar and vocabulary, practice in comprehension, composition, and conversation.
Prerequisite: GER100Y1/GER101H1 or German placement
test, Senior high school German or equivalent
DR=HUM; BR=1
GER205H1 German Literature I [36S]
This course offers a transition from the language courses to the topic courses on the 300 -level. It introduces students to German literature and provides them with working methods and analytical tools relevant for the study of German literary texts in the original German.
Note: This course is required for the major and specialist program
Prerequisite: GER100Y1
Corequisite: GER200Y1
DR=HUM; BR=1
GER220H1 German Literature in Translation (E) (formerly GER204H1) [36S]
This course taught in English offers a survey of German literature focusing on key works or introducing a relevant main topic. It is suited for students with little or no prior knowledge of German literature and culture.
Exclusion: GER204H1
DR=HUM; $B R=1$

## GER240H1 German Drama in Translation (E) (formerly GER232H1) [36S]

This course taught in English offers a general survey of German drama from the period of Bourgeois Realism in the middle of the 19th century to the contemporary scene based on representative plays from the German speaking countries. Cross-listed with the Drama Department.
Exclusion: GER232H1
DR=HUM; BR=1
GER250H1 Topics in German Film History (E) [24P/24S]
Focusing on a specific era of film production (e.g.Weimar cinema, Nazi era and postwar, feminist filmmaking, New German Cinema or Postwall), this course explores the relationship between social movements and film form and style. Taught in English. Cross-listed with the Cinema Studies Program Innis College.
Exclusion: GER351H1
DR=HUM; BR=1

## GER260Y1 Elementary Yiddish [72P]

This course introduces Yiddish language, literature, music, theater, and cinema through interactive multi-media seminars, designed to build proficiency in reading, writing and comprehending. No prior knowledge of Yiddish is required.
DR=HUM; $B R=1$

## GER261H1 History of Yiddish Cinema (E) (formerly GER364H1) [24P/24S]

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.
Exclusion: GER364H1
DR=HUM; BR=1

## GER299Y1 Research Opportunity Program

This is a credit course for supervised participation in faculty research project. Details on page 33.

## DR=HUM; BR=None

## GER300Y1 Intermediate German [96P]

Continuing the work done in GER100Y1 and GER200Y1, this course offers German at the intermediate level focusing on extension of vocabulary, specific problems of grammar, essay-writing, reading and conversation. The Department reserves the right to place students in the appropriate course in the series GER200Y1 and 300Y1.
Prerequisite: GER200Y1 or German placement test DR=HUM; BR=1

## GER305H1 German Literature II [24S]

Building on the work of GER205H1, this course offers a survey of German literature and culture from the eighteenth to the twentieth century. Within a chronological framework, students read and analyze excerpts from representative works of major German writers.
Note: This course is required for the major and specialist program, and should be taken concurrently with GER300Y1
Prerequisite: GER205H1
DR=HUM; BR=1
GER310H1 Contemporary German Culture and Media [24S]
This course focuses on contemporary German culture as expressed through a variety of media. It approaches Germany and Germanys position within Europe and the world mainly (but not exclusively) through non-literary texts. Note: This course may count as a substitute course for the required GER150H1; please inquire in advance.
Prerequisite: GER200Y1
DR=HUM; BR=1
GER320H1 The Age of Goethe (formerly GER420H1) [24S]
Goethe and his contemporaries saw themselves faced with a rapidly changing world. This course examines the innovative literary experiments they developed in response to these changing times.
Prerequisite: GER205H1
Exclusion: GER420H1
DR=HUM; BR=1
GER321H1 19th Century German Literature (formerly GER325H1) [24S]
This course focuses on German authors of the nineteenth century. Literary, political and philosophical texts are analyzed as a discussion of political uprisings, the industrial revolution and the emergence of German nationalism.
Prerequisite: GER205H1
Exclusion: GER325H1
DR=HUM; BR=1
GER322H1 Kafka in Context (formerly GER331H1) [24S]
Franz Kafkas texts are read in the literary, historical, and philosophical context of fin-de-sicle Prague and central Europe.
Prerequisite: GER205H1

Exclusion: GER331H1
DR=HUM; BR=1
GER323H1 Weimar Culture and Beyond (formerly GER334H1) [24S]
This course focusing roughly on the period from 1918 to 1945 examines literary and artistic movements like Dada, Bauhaus, the Golden Age in German film in the decades between World War I and Nazism.
Prerequisite: GER205H1
Exclusion: GER334H1
DR=HUM; BR=1

## GER326H1 Writing Memory: Post 1945 (formerly GER335H1) [24S]

An examination of post-World War II German literature and culture from Zero Hour through to present-day debates about the Holocaust and its memorialization within a German context.
Prerequisite: GER205H1
Exclusion: GER335H1
DR=HUM; BR=1
GER330H1 Introduction to German Poetry (formerly GER424H1) [24S]
This course offers an introduction and exploration of German poetry from all ages. The focus lies on poems which pick as a central topic the self in its relation to itself, others, and society.
Prerequisite: GER205H1
Exclusion: GER424H1
DR=HUM; BR=1

## GER332H1 Deviance - Madness - Outsiders (formerly

 GER327H1) [24S]An analysis of the artistic confrontation with deviance, madness, and outsiders. The course covers expressions of this confrontation in a variety of genres.
Prerequisite: GER205H1
Exclusion: GER327H1
DR=HUM; BR=1
GER336H1 Focus On Berlin (formerly GER422H1) [24S]
This course offers an exploration of the cultural developments of one of the most exciting capitals of the world, from the Bismarckian era to German reunification and beyond.
Prerequisite: GER205H1
Exclusion: GER422H1
DR=HUM; BR=1
GER338H1 Narratives of the Body [24L/12T]
There is a rich history of engaging with bioethical issues in the German tradition. We examine key literary and visual explorations of how modern culture approaches problems such as normality, madness and biopower. Readings in English translation could include texts by Buechner, Kleist, Hoffmann, Kafka, and Mann, among others.
Prerequisite: Permission of Department
Exclusion: GER332H1
DR=HUM; BR=1

## GER340H1 German Theater Production (formerly GER380H1) [48S]

The course offers close reading, rehearsing and staging of a play. Students will become familiar with the different steps of a theater production, be introduced to basic acting and

## German

staging techniques and get acquainted to leading theories of theater.
Prerequisite: GER200Y1
Exclusion: GER380H1
DR=HUM; BR=1

## GER350H1 German Visual Cultures (formerly GER351H1) [24P/24S]

This course presents students with a survey of the history and development of the German cinema. It examines major trends of German cinematography focusing on thematic and formal aspects.
Prerequisite: GER205H1
Exclusion: GER351H1
DR=HUM; BR=1
GER354Y0 Special Topics Summer Course in Berlin (E)

The topics of this course taught in English and open to students from other disciplines vary from year to year. Interested students can address questions to Woodsworth College.
Recommended Preparation: 100-level HIS/POL/GER course/ International or European Studies
DR=HUM/SOC SCI; BR=1

## GER355YO 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.
DR=HUM; BR=1
GER360H1 Intermediate Yiddish [36P]
The course conducted in Yiddish offers a review of basic grammar, stylistics, study of short literary texts.
Prerequisite: GER260Y1
Exclusion: GER360Y1
DR=HUM; BR=1
GER361H1 Yiddish Literature in Translation (E) [24S]
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.
DR=HUM; BR=1

## GER362H1 Jewish Culture in the Soviet Union (E) [24S]

The course focuses on Soviet Jewish culture between 1917 and 1991. 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, HIS242H1,
HIS250Y1
DR=HUM; BR=1
GER365H1 Yiddish \& German Story-Telling Before 1700
(E) [24P]

The course examines the pre-modern cultural contacts (and conflicts) between Jews and Germans by analyzing important Yiddish and German narrative traditions from the 12th-17th centuries.
DR=HUM; BR=1

GER367H1 Topics in Yiddish or German Jewish
Literature and Culture [24S]
Topics in modern Yiddish or German Jewish literature and culture from the beginning of the 19th century to the present, featuring a selection of readings of modern Yiddish prose, poetry, drama and cinema. Taught in English and open to students across disciplines.
Prerequisite: Completion of a minimum of 4.0 FCEs DR=HUM; BR=1

## GER370H1 Business German I [36P]

The course offers an in introduction to the use of German in the professional/business context and has been designed to provide students with practical experience applying to jobs in German-speaking countries. The emphasis lies on oral and written communication.
Note: This course is required for the minor program in
Business German
Prerequisite: GER200Y1
DR=HUM; BR=1

## GER371HO Berlin Summer Internship

An intensive internship in Berlin, focusing on work/study and intercultural learning.
DR=HUM; BR=None

## GER372H1 Business German II (formerly GER470H1)

 [36P]Intensive development of the linguistic skills needed in the context of a German business environment.
Prerequisite: GER370H1
Exclusion: GER470H1
DR=HUM; BR=1
GER398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
GER399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

## GER400H1 Advanced German [48P]

This is a course for advanced learners of German reviewing complex features of the language and introducing to aspects of German stylistics. The emphasis lies on oral and written communication.
Prerequisite: GER300Y1
Exclusion: GER400Y1
DR=HUM; BR=1
GER410H1 Topics in German Intellectual History (E) [24S]
This course taught in English offers an examination of key moments and themes in German intellectual history from the Enlightenment to the present.
Prerequisite: Advanced status
DR=HUM; BR=2
GER411H1 Critical Theory [24S]
The course familiarizes students with some of the key issues in critical theory today. Focusing on current debates, it will provide the background to these debates.
Prerequisite: Advanced status
DR=HUM; BR=2

## German

## GER421H1 Gender and Identity [24S]

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
DR=HUM; BR=1
GER423H1 Transnational Literatures [24S]
This course investigates contemporary German culture by paying attention to its other or alternate voices and perspectives, i.e. those not usually prevalent in mainstream cultural and sociopolitical discourses.
Prerequisite: GER305H1
DR=HUM; BR=1

## GER425H1 Dreams-Desires-Delusions (formerly GER324H1) [24S]

This course introduces to the literature and some philosophical tenets of Romanticism (roughly 1798-1830) as an occasionally thorough and challenging critique of Enlightenment, modern science, and modernity. Prerequisite: GER305H1
Exclusion: GER324H1
DR=HUM; BR=1
GER426H1 Medieval Language and Culture [36S]
This course offers an introduction to the language, literature and culture of Medieval Germany. The reading and translation of exemplary medieval German texts will introduce to Middle High German and provide an insight into epochal concepts like courtly love and chivalry as well as courtly and monastic designs of identity.
Prerequisite: GER300Y1, GER205H1
DR=HUM; BR=1

## GER429H1 Topics in Medieval German Literature (E)

 [24S]An open course which explores specific topics in Medieval literature and culture. It serves to introduce to seminal premodern texts and discourses.
DR=HUM; BR=1

## GER430H1 Topics in German Literature and Culture

 [24S]An open course which explores specific aspects of German literature and culture.
Prerequisite: GER305H1

## DR=HUM; BR=1

## GER462H1 Advanced Yiddish [24P]

This course conducted entirely in Yiddish focuses on advanced reading, writing, vocabulary and conversation, the study of poetry, short fiction, and memoir literature by leading authors. Selected advanced grammatical topics are presented in conjunction with the study of texts.
Prerequisite: GER360H1
DR=HUM; BR=1

## GER490H1 Independent Study [24S]

A reading \& research project in Germanic literature and/or culture involving a substantive research component.
Prerequisite: Advanced status and permission of department. Note: permission needs to be obtained by May 1st for the Fall Term and by Nov. 1st for the Spring Term
DR=HUM; BR=None

## GER491Y1 Individual Studies [48S]

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.
Prerequisite: Prerequisite: Advanced status and permission of department. Note: project proposals need to be submitted by June 1st
DR=HUM; BR=None

## Faculty

University Professors Emeriti
J.M. Beattie, MA, Ph D, FRSC (U)
J.M. Bliss, MA, Ph D, FRSC

Professors Emeriti
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M.A. Klein, MA, Ph D (N)
J. Kornberg, AM, Ph D (N)
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N.P. Zacour, MBE, MA, Ph D

Professor and Chair of the Department
K. Mills, MA, D Phil

Professor and Associate Chair (Omnibus)
D. Bergen, MA, Ph D

Associate Professor and Associate Chair (Graduate Studies)
R. Kazal, MA, Ph D
Associate Professor and Associate Chair
(Undergraduate)
C. Chin, MA, Ph D
University Professor
L. Viola, MA Ph D
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D. Smyth, BA, Ph D, FRHS (T)
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D.A. Wilson, MA, Ph D, FRHS (SM)
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R. Birla, M Phil, Ph D
E. Brown, MA, M Phil, Ph D (University of Toronto
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C. Chin, MA, Ph D
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P. Cohen, Ph D
N. Everett, BA, Ph D
J. Hanssen, D Phil (University of Toronto Mississauga)
S. Hawkins, MA, Ph D
J. Jenkins, MA, Ph D
M. Kasturi, MA, M Phil, Ph D (University of Toronto
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R. Kazal, MA, Ph D (University of Toronto Scarborough)
C. Keil, MA, Ph D (I)
T. Lam, Ph D (University of Toronto Mississauga)
L. Loeb, M MST, Ph D
A
(Undergraduate)
C. Chin, MA, Ph D

## University Professor

L. Viola, MA Ph D

Professors
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J. English, MA, Ph D (Adjunct)
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acovetta, MA, Ph D (University of Toronto carborough)
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D
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. N. Terpstra, MA, Ph D
D.A. Wilson, MA, Ph D, FRHS (SM)

## Associate Professors

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R. Birla, M Phil, Ph D

Brown, MA, M Phil, Ph D (University of Toronto Mississauga)
C. Con, MA, MA Dh
. Cochelin, MA, Ph D
n, Ph D
J. Hanssen, D Phil (University of Toronto Mississauga)
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R. Kazal, MA, Ph D (University of Toronto Scarborough)
. Keil, MA, Ph D (I)
L. Loeb, M MST, Ph D
J. Mori, BA, Ph D
M. Murphy, BA, Ph D
N. Musisi, MA, Ph D (N)
M.J. Newton, BA, D Phil
J. Noel, MA, Ph D (University of Toronto Mississauga)
S. Penfold, MA, Ph D
S. Rockel, MA, Ph D (University of Toronto Scarborough)
J. Ross, MA, Ph D
A. Smith, MA, Ph D
A. Tambe, MS, Ph D
N. Tran, BA, Ph D
S. Varani, MA, Ph D (University of Toronto Mississauga)
W. Wark, MA, Ph D
R. Wittmann, MA, Ph D (University of Toronto Mississauga)
P. Wrobel, MA, Ph D

## Assistant Professors

H. Bohaker, MA, Ph D
L. Chen, MA, JD, Ph D (University of Toronto Scarborough)
Y. Eyal, MA, Ph D (University of Toronto Mississauga)
P. Hastings, MA, Ph D (University of Toronto Scarborough)
R. King, MA, Ph D
H.K. Kwee, MA, Ph D (University of Toronto Mississauga)
M. MacDonald, MA, LLB, Ph D (Trinity College)
S. Mills, MA, PhD
M. Morgan, MPhil, Ph D (Trinity College)
W. Nelson, MA, Ph D (University of Toronto Scarborough)
N. Rothman, MA, Ph D (University of Toronto Scarborough)
J. Sharma, Ph D (University of Toronto Scarborough)

Historians study the past to understand it on its own terms, to gain insight into how our world has developed, and in order to influence the present. The study of History covers a wide and diverse range of topics, from the history of aboriginal societies, conquistadors, ethnicity, fascism, labour, psychiatry, patterns of settlement and migration, politics, the Renaissance, revolution, to the automobile, slavery, international relations, trade unions, women studies, and more.
The study of history is the core of any liberal arts education. In order to make sense of political, social, economic, and cultural development, it is essential to understand historical change and continuities. History is also integral to most area studies (East Asian Studies, Near and Middle Eastern Civilizations, Canadian or American Studies, etc.) and is a crucial part of the study of political science, economics, sociology, international relations, Religion, Art, Englishnearly every discipline in the humanities and social sciences. History as a discipline partakes of both the humanities and social sciences: it is a social science because it studies societies and the processes of change, but the method and analytical approach are those of the humanities. Close analysis of problems, critical examination of evidence, and persuasive oral and written communication are all hallmarks of historical inquiry.
History graduates will gain both a broad overview of the contours of history and in-depth knowledge of one or more
specific regions, time periods, or thematic specializations. They will understand how social processes, political ideologies, economic trends, and environmental changes have intersected with individual and collective human actions to shape historical change and, ultimately, the world we live in today. History graduates will comprehend how history is written, including the skills and methods of historical research, the use and interpretation of textual and other evidence, and the choices involved in various theoretical and analytical frameworks. They will be able to critically read and assimilate large amounts of information, weigh evidence, draw well-informed conclusions, and present cogent, analytical arguments.

The analytical and communication skills one develops by studying History are critical to a great variety of careers. History graduates put their training directly to use in such fields as law, politics, business, government service, museums, libraries and archives, documentary filmmaking, journalism, international relations, urban planning, teaching, and many other areas. With emphasis on how to analyze issues, read critically, do productive research, delineate a case, and present evidence in support of that case, studying history equips one with both the skills and knowledge for an ever-changing workplace and society.

## Curriculum

The History curriculum is designed to give students a solid grounding in a variety of interpretive and methodological approaches, while allowing them a great deal of flexibility to follow their own particular interests. Breadth requirements (detailed below) ensure that students achieve chronological depth and geographic range. There are courses at most levels in American, Asian, African, Latin American and Caribbean, British, Canadian, European, Russian and East European history. Thematic clusters such as medieval history, gender, international relations, and colonialism/postcolonialism help students pursue areas of particular interest.
The 100-series courses are designed for students who are new to the University. They cover a wide chronological period or a wide geographical area and introduce students to the craft and tools of historical research and writing. The 200 -series courses survey specific national, geographic or thematic histories over a broad period of time. Although they are designated as 200 -series courses they are open to first-year students and have no Prerequisites, and students without previous university experience should be able to complete them without difficulty. The 300 -series courses enable students to pursue topics in greater depth and methodological sophistication. They are not open to first-year students and frequently have Prerequisites. The 400 -series courses represent the culmination of an undergraduate's study of history. They are taught as small-group seminars in which students draw upon the skills they have developed through the course of their History program in research, analysis, and oral and written presentation.

## Courses in other departments:

a) Equivalent Courses: the History Department website lists a number of history courses offered by other departments, such as East Asian Studies, Near and Middle Eastern Civilizations, and Classics which can be taken for program credit. Typically these courses are taught by faculty members

## History

who are trained as historians but whose primary appointment is in another department; they may include subjects not covered by HIS offerings. These are considered equivalent to HIS courses for the purpose of all program requirements except the 100-level requirement, and there is no limit on the number of these courses that can be included in a student's program.
b) Related Courses: the History Department website also lists a number of courses in other departments that may be substantially historical in content but that differ in methodology or approach from an HIS course. A limited number of these may be taken for program credit: Specialists may use up to 2.0 FCEs and Majors up to 1 FCE of these related courses as part of their History program.

More detailed information concerning the department, history programs and particular courses can be found on our website: www.history.utoronto.ca. There is a History Students' Association in the Department and there is student participation in the Department meetings and major standing committees.

## Undergraduate Administrator:

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3362)
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## History Programs

Students may also use certain history courses offered by CLA, EAS, and NMC to fulfill Department of History program requirements (see History website).

## History Specialist (Arts program)

This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's marks in the required courses. The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those marks does not necessarily guarantee admission to the POSt in any given year.
Required courses: 2.0 HIS FCE, one of which must be at the 100 -level. A final mark of at least $73 \%$ in 2.0 HIS FCE is required.
(10 full courses or their equivalent)
First Year: 1.0 HIS FCE at the 100-level; in addition, students may take 1.0 HIS FCE at the 200-level.
Higher Years: Additional HIS courses to a total of 10 FCEs overall, meeting the following requirements:

1. At least 5 FCEs at the 300 -level or above, including 1.5 FCEs at the 400-level
2. 1 FCE from each of the following Divisions*: I. Asia/Africa/Middle East
II. Canada/United States/Latin America/Caribbean III. Europe
3. 1 FCE in pre-modern (before 1800) history*.

* Courses that satisfy the Pre-modern and Divisional requirements are listed on the History website. Specialists
may draw up to 2 FCEs from the list of Related Courses offered in other departments (see above) to fulfill items 1 through 3 of the Specialist program. A 100-level related course may be applied toward the Divisional or Pre-modern requirements but does not take the place of the required 100-series HIS course.


## History Major (Arts program)

This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.
Required courses: 1.0 HIS FCE at the 100-level; students must achieve a final mark of at least $65 \%$ in this or another 1.0 HIS FCE.
(7 full courses or their equivalent)
First Year: 1.0 HIS FCE at the 100-level; in addition, students may take 1.0 HIS FCE at the 200-level.
Higher Years:
Additional HIS courses to a total of seven*, meeting the following requirements:

1. At least 2.0 FCEs at the 300-level or above, including 0.5 FCE at the 400-level
2. 1 FCE from each of the following divisions*: I. Asia/Africa/Middle East II. Canada/United States/Latin America/Caribbean III. Europe.
3. 1 FCE in pre-modern (pre-1800) history*.

* Courses that satisfy the Pre-modern and Divisional requirements are listed on the History website. Majors may draw up to 1 FCE from the list of Related Courses offered in other departments (see above) to fulfill items 1 through 3 of the Major program. A 100-level related course may be applied toward the Divisional or Pre-modern requirements but does not take the place of the requirement for a 100-series HIS course.


## History Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)
First Year:
1.0 HIS FCE at the 100 -level is required. It is recommended that students complete this requirement prior to enrolling in the minor program.
Higher Years:
Additional HIS courses to a total of 1.0 FCE*, including at least 1.0 FCE at the 300 - or 400 -level.

* Minor may draw up to 1.0 FCE from the list of Related courses offered in other departments (see above). A 100-level Related course does not take the place of the requirement for a 100-series HIS course.


## History Courses

Note: Many of these courses are not taught every year
Please check the Arts \& Science timetable or the HIS
Department website for the list of courses offered in 2012 13.

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## 100-Series Courses

All 100-series HIS courses are mutually exclusive. Students may enrol in only one 100-series History course. Students enrolled in more than one of these courses (or who have completed one of these courses or a previous HIS 100-series course with a mark of $50 \%$ or greater) will be removed at any time. First-Year students may take 200-series courses.

## HIS101Y1 Histories of Violence [48L/24T]

Ranging widely chronologically and geographically, this course explores the phenomenon of violence in history. It examines the role and meanings of violence in particular societies (such as ancient Greece and samurai Japan), the ideological foundations and use of violence in the clash of cultures (as in slavery, holy wars, colonization, and genocide), and the effects and memorialization of violence. Prerequisite: None
Exclusion: Any 100-level HIS course
DR=HUM; BR=2+3
HIS102Y1 Empires, Encounters and Exchanges: From the Silk Road to the Present [48L/20T]
Interactions among peoples, empires, and cultures, with particular attention to the non-European world. Can we speak of "international relations" before the modern concept of nation-states was established? What forms did globalization take in the pre-modern era? Covering a broad chronological sweep from before the Silk Road to the present day, we will look at exchanges of goods and technologies; dissemination of ideas and religions; voyages of migration and exploration; and episodes of conquest and colonization.
Exclusion: any 100-level HIS course
DR=HUM; BR=2+3
HIS103Y1 Statecraft and Strategy: An Introduction to the History of International Relations [48L/20T]
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: any 100-level HIS course
DR=None; BR=3

HIS104Y1 Ten Days that Shook the World [48L/20T]
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 inter-connectedness of the past.
Exclusion: any 100-level HIS course
DR=HUM; BR=3
HIS106Y1 Natives, Settlers and Slaves: Colonizing the Americas, 1492-1804 [48L/20T]
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: any 100-level HIS course
DR=HUM; BR=3
HIS107Y1 Approaches to East Asian History [48L/20T]
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: any 100-level HIS course
DR=HUM; BR=3

## HIS109Y1 The Development of European Civilization, 1350-1945 [48L/20T]

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, 19141945.

Exclusion: any 100-level HIS course
DR=HUM; BR=1+3

## 200-Series Courses

HIS202H1 Gender, Race and Science [24L/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.
DR=HUM; BR=3
HIS205Y1 Topics in Women's History [48L/12T] This course introduces students to the diverse experiences of women from a comparative perspective. Students will study how women's strategies have shaped the major cultural, economic, political and social processes in the world and how these processes have affected women's experiences in their particular societies. By studying women's history from both local and global perspectives, students will engage critically with claims that women's history is universal. The local focus of the course will rotate
between Africa, Asia, Europe, and North America, depending on the expertise of the instructors.
Exclusion: HIS245Y1
DR=HUM; BR=2+3
HIS208Y1 History of the Jewish People [48L/20T]
An introduction to the history of the Jews throughout the world over the past two thousand years.
Recommended Preparation: HIS103Y1/HIS108Y1/
HIS109Y1
DR=HUM; BR=3
HIS220Y1 The Shape of Medieval Society [48L/20T]
Economic, political, religious, and educational ideas and institutions of
the Middle Ages, from the late Roman period to the fifteenth century.
DR=HUM; BR=3
HIS241H1 Europe in the Nineteenth Century, 18151914 [24L/10T]
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, AustriaHungary, 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.
Exclusion: EUR200Y1
Recommended Preparation: HIS103Y1/HIS109Y1

## DR=HUM; BR=3

## HIS242H1 Europe in the 20th Century [24L/10T]

The evolution of European politics, culture, and society from 1914: the two world wars, Fascism and Nazism, the post1945 reconstruction and the movement towards European integration.
Exclusion: EUR200Y1
DR=HUM; BR=3

## HIS243H1 Early Modern Europe, 1450-1648

[24L/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.
DR=HUM; BR=3

## HIS244H1 Early Modern Europe, 1648-1815

 [24L/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. DR=HUM; BR=3

## HIS250H1 History of Russia, 860-1991 (formerly HIS250Y1) [24L/10T]

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 Soviet Union in 1991.
Exclusion: HIS250Y1
DR=HUM; BR=3
HIS251Y1 History of East Central Europe [48L/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.
DR=HUM; BR=3

## HIS263Y1 Introduction to Canadian History

[48L/15T]
An introductory survey to the major events and trends that have shaped the political, social and economic history of Canada, including the challenges of indigenous-newcomer and French-English relations over more than four centuries of interactions.
Exclusion: HIS262Y1
DR=HUM; BR=3
HIS271Y1 American History Since 1607 [48L/20T]
A survey of the economic, social, cultural, and political history of the
United States from the colonial era to present times.
DR=HUM; BR=3

## HIS280Y1 History of China [48L/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. DR=HUM; BR=3

## HIS281Y1 History of Modern Japan [48L/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/EAS223Y1/HIS281H1 DR=HUM; BR=3

## HIS282Y1 History of South Asia [48L/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.
DR=HUM; BR=3

## HIS283Y1 Southeast Asian Crossroads [48L/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. DR=HUM; BR=3
HIS284Y1 Viet Nam: Crossroads of Asia [48L/20T] Examines the history of Viet Nam from its mythical origins to the contemporary period, exploring the countrys long experience with Chinese and South Asian cultural influence. Themes include Sinicization and Indianization; constructions of gender; state formation; the introduction and impact of the world religions; colonization and nationalism; and the impact of globalization.
DR=HUM; BR=3

## HIS291Y1 Latin America: The Colonial Period [48L/20T]

The evolution of Spanish and Portuguese America from preColumbian civilizations to the wars of independence. DR=HUM; BR=3

## HIS292Y1 Latin America: The National Period <br> [48L/20T]

A survey of Latin American history from the wars of independence to the
present day.
DR=HUM; BR=3
HIS294Y1 Caribbean History \& Culture: Indigenous Era to 1886 [48L/20T]
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.
DR=HUM; BR=3
HIS297Y1 History of Africa from a Gender Perspective [48L/20T]
This survey of African history is analytical rather than narrative in its approach. It rethinks the way that African history has hitherto been conceptualized and taught by placing the question of gender at the center of the story of Africa.
DR=HUM; BR=3

## HIS299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## 300-Series Courses

## Note:

First-year students are not permitted to enrol in 300-series HIS courses.

HIS300H1 Energy Cultures in North American History [24L/6T]
This course examines the history of energy in North America from the perspective of political economy, environment and social-cultural history. Particular attention is paid to twentiethcentury developments and to the relationship between energy and social power. Examples are drawn from both Canada and the United States.
Prerequisite: HIS263Y/271Y1
DR=HUM; BR=3
JSH300H1 Literature and History in Russia [24L]
History and Literature were always interconnected in Russia. Writers not only sought to reflect the society around them, but were themselves often social critics and political figures. The course examines key texts in Russian literary tradition both as works of art and as primary sources for the historian. All readings in English.
Recommended Preparation: HIS250Y1 or SLA240H1/
SLA241H1
DR=HUM; BR=1
HIS301H1 Imperial Spain (formerly HIS301Y1) [48L]
This course treats the political, social, and religious history of Spain and its empire ca.1450-1714, including the history of colonial Latin America.

Exclusion: HIS301Y1
Recommended Preparation: HIS243H1
DR=HUM; BR=3

## HIS302H1 Material Culture in Victorian Britain (formerly HIS302Y1) [24L]

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/HIS339Y1
DR=HUM; BR=3
HIS303H1 The Mediterranean, 600-1300: Crusade, Colonialism, Diaspora [36L]
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: HIS220Y1 or NMC273Y1 or some medieval
history
DR=HUM; BR=3
HIS304H1 Topics in Middle East History [24L]
An in-depth examination of Middle East historical issues. Content in any
given year depends on instructor. See History Website for more details.
DR=HUM; BR=3

## JHP304Y1 Ukraine: Politics, Economy and Society [48L]

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)
DR=HUM/SOC SCI; BR=3

## HIS305H1 Popular Culture and Politics in the Modern Caribbean [24L]

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
DR=HUM; BR=3
HIS306H1 Culture, Society and Gender in England, 1560-1730 (formerly HIS306Y1) [24L]
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

## History

## DR=HUM; BR=3

HIS307H1 Canadian Political Issues [36L]
Ten key issues in Canadian politics from the 1850s to the 1990s: background, partisan divisions, debates, mobilization of support and opposition, outcomes.
Prerequisite: HIS263Y1
DR=HUM; BR=3
HIS308H1 The Mediterranean, 1300-1700 [36L]
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.
Prerequisite: HIS303H1
Exclusion: HIS303Y1
Recommended Preparation: HIS220Y1/HIS243H1/
NMC273Y1
DR=HUM; BR=3
HIS309H1 The European Reformations [36L]
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: HIS243H1 / VIC240Y1 or permission of the instructor
DR=HUM; BR=3
HIS310H1 Histories of North American Consumer Culture [24L/6T]
This course examines the emergence of a modern 'consumer society' in North America from about 1850 to recent times. The aim is to combine political, social, economic and cultural history to chart changing relationships between North Americans, consumer commodities, and identities.
Prerequisite: HIS263Y1 or HIS271Y1
DR=HUM; BR=3
HIS311Y1 Introduction to Canadian International Relations [48L/10T]
Canadian international affairs in a broader context. AngloAmerican 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
$D R=H U M ; B R=3$
HIS312H1 Immigration to Canada [24L/5T]
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
DR=HUM; BR=3
HIS313H1 Canadian Labour and the Left (formerly HIS313Y1) [24L]
Canadian labour history from political action to collective bargaining in the period from Confederation to the present.
Prerequisite: ECO244Y1/HIS262Y1/HIS263Y1/WDW244H1/ WDW244Y1

Exclusion: HIS313Y1
DR=HUM; BR=3
HIS314H1 Quebec and French Canada (formerly
HIS314Y1) [24L]
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.
Exclusion: HIS314Y1
DR=HUM; BR=3
HIS315H1 Narratives of Viet Nam [24L]
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.
DR=HUM; BR=3

## HIS316H1 History of Advertising [48L]

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/HIS263Y1/

HIS271Y1
DR=HUM; BR=3
HIS317H1 20th Century Germany (formerly HIS317Y1) [24L]
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, HIS242H1 or HIS103Y/EUR200Y
Exclusion: HIS317Y1
DR=HUM; BR=3
HIS318H1 Histories of the West in Canada [24L/7T] Focused study of the western Canadian provinces from the 1850s to the present. Topics include the idea of the west as a site of colonial expansion, colonial and territorial beginnings, indigenous-newcomer relations, entering Confederation, the provinces in Confederation, western politics and western alienation.
Prerequisite: HIS263Y1
DR=HUM; BR=3

## HIS319H1 Renaissance France and the Wars of Religion, 1483-1610 [24L]

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/HIS309H1/HIS388H1/HIS443H1 or permission
of instructor
DR=HUM; BR=3

## HIS320H1 Barbarian Invasions and the Fall of the

 Roman Empire [24L/5T]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, Justinians reconquests.
Recommended Preparation: HIS220Y1
DR=HUM; BR=3

## HIS321H1 Dark Age Europe, 7th 10th Centuries

 [24L/5T]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.
DR=HUM; BR=3
HIS322Y1 The High Middle Ages [48L/10T]
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
DR=HUM; BR=3

## HIS323H1 Rites of Passage and Daily Life in the Middle Ages (formerly HIS323Y1) [24L/5T]

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

DR=HUM; BR=3
HIS325H1 Imperial Russia (formerly HIS325Y1) [24L] This course focuses on the history of imperial 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. Prerequisite: HIS250Y1/permission of instructor
Exclusion: HIS325Y1
DR=HUM; BR=3

## HIS326H1 Topics in Chinese History [24L]

Selected topics on a specific period in Chinese history. Topics in any given year depend on the instructor. DR=HUM; BR=3
HIS328H1 Modern China (formerly HIS328Y1) [24L]
An examination of political, social and economic
developments in modern Chinese history fto the present day. Main topics may include the decline of the Imperial order and the challenge of Western imperialism; the Republican period; the rise of the Communist movement; the Peoples Republic of China.
Prerequisite: HIS280Y1/EAS102Y1

Exclusion: JMC201Y1, HIS328Y1, ASI430H1
Recommended Preparation: HIS380Y1
DR=HUM; BR=3

## HIS329H1 Globalization and History [24L]

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: HIS103Y1
DR=HUM; BR=3
HIS330H1 Germany from Frederick the Great to the
First World War (formerly HIS317Y1) [24L]
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, avantgarde culture, nationalism, anti-Semitism, colonialism, and the Great War of 1914-18.
Prerequisite: EUR200Y1/HIS241H1
Exclusion: HIS317Y1
DR=HUM; BR=3
HIS331H1 Modern Baltic History (formerly HIS331Y1) [24L]
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.
Exclusion: HIS331Y1
Recommended Preparation: HIS250Y1/HIS251Y1
DR=HUM; BR=3
HIS332H1 Crime and Society in England, 1500-1800
(formerly HIS332Y1) [24L]
The changing nature of crime and criminal justice in earlymodern England; the emergence of modern forms of policing, trial and punishment.
Prerequisite: Successful completion of 8 full credits, including
one full HIS credit
Exclusion: HIS332Y1
Recommended Preparation: HIS238H1
DR=HUM; BR=3
HIS334H1 East Central Europe and the Great Powers
in the Short 20th Century, 1914-1991
(formerly HIS334Y1) [24L]
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
Exclusion: HIS334Y1
DR=HUM; BR=3

## HIS335H1 Soviet Cultural History [24L]

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 Krushchevs thaw to examples of Soviet postmodernism.
Prerequisite: HIS250Y1
DR=HUM; BR=1
HIS336H1 Medieval Spain [36L]
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.
DR=HUM; BR=3
HIS337H1 Culture, Politics and Society in 18th Century Britain (formerly HIS337Y1) [48L]
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: EUR200Y1/HIS109Y1/238H1/2
$39 \mathrm{H} 1 / 243 \mathrm{H} 1 / 244 \mathrm{H} 1 / 368 \mathrm{H} 1$
DR=HUM; BR=3
HIS338H1 The Holocaust, to 1942 (formerly HIS338Y1/398Y1) [24L/5T]
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.
Prerequisite: Completion of six undergraduate full-course equivalents
Exclusion: HIS388Y1/398Y1
Recommended Preparation: A course in modern European history
DR=HUM; BR=3
HIS339Y1 English History in the 19th Century [48L]
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, HIS239H1
DR=HUM; BR=3
HIS340H1 A Survey of Australian History [24L]
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 repossession 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 DR=HUM; BR=3

## HIS341Y1 Germany Among the Global Empires 1840-

 2010 [48L/12T]This course places German history in a transnational and global context, exploring Germany's place among the global empires starting in the mid-nineteenth century. The central events of its political, social and cultural development are analyzed through a framework focused on the development of the world economy after 1850. Particular attention is paid to the interplay between strategies for global expansion and transformations in national culture.
Prerequisite: Two HIS courses from the following: HIS102Y/1
03Y/109Y/241H/242H/243H/244H/EUR200Y
Recommended Preparation: HIS102Y/109Y/241H/242H
DR=HUM; BR=1+3

## HIS342H1 Pre-Petrine Russia: Russia Before 1700 [24L]

This course examines modern Russias political
predecessors, their contacts with Byzantium, Western
Europe, and the Mongol Empire, and resulting cultural, religious, and social changes.
Prerequisite: HIS250Y1
DR=HUM; BR=3
HIS343Y1 History of Modern Espionage [48L]
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 DR=HUM; BR=3

## HIS344Y1 Conflict and Co-operation in the International System Since 1945 [48L]

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/
HIS241H1, HIS242H1
DR=HUM; BR=3

## HIS345H1 History and Film [24L/12P]

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 nonfictional forms in film.
Prerequisite: 2 full courses in history or permission of instructor
Recommended Preparation: INI212Y1
DR=HUM; BR=3
$\begin{array}{ll}\text { HIS346H1 } & \text { Rice and Spice in Southeast Asia: a } \\ & \text { Regional Food History [24L] }\end{array}$
This course examines the importance of food products in the livelihoods of the inhabitants of Southeast and in the world economy. It traces the circulation of these products within the Southeast Asian region in the premodern period, into the
spice trade of the early modern era, and the establishment of coffee and sugar plantations in the late colonial period, and the role of these exports in the contemporary global economy
Recommended Preparation: HIS283Y1
DR=HUM; BR=1
HIS348H1 Topics in Gender History [24L]
An in-depth examination of issues in gender history. Content in any given
year depends on instructor. See History website for more details.
DR=HUM; BR=3
HIS349H1 The British Search for Identity: 1800 to the Present (formerly HIS239H1) [24L/5T]
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
DR=HUM; BR=3
HIS351Y1 History of Twentieth-Century Russia [48L]
A survey of the history of Twentieth-Century Russia. The social, economic, and political development of TwentiethCentury Russia, with an emphasis on the Russian Revolution and Stalinism. Stress is placed on modern historiographical issues.
Prerequisite: HIS250Y1/250H1/242H1, POL204Y
DR=HUM; BR=3
HIS352H1 Secularism and Strife: Modern Jewish Politics and Culture [24L]
A survey of the relationship between Jewish identity, politics and culture in the modern age.
Exclusion: HIS356Y1
Recommended Preparation: one course in European,
Middle Eastern or Jewish history
DR=HUM; BR=3
HIS353Y1 Poland: A Crossroads of Europe [48L]
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 DR=HUM; BR=3

## HIS354H1 Men, Gender and Power in Europe from the Renaissance to the French Revolution (formerly HIS354Y1, 399H1, 399Y1) [24L]

An investigation of how ideas of masculinity and gender roles shaped the exercise of private and public power in early modern Europe.
Exclusion: HIS354Y1, HIS399H1, HIS399Y1
DR=HUM; BR=3

## HIS356H1 Zionism and Israel (formerly HIS356Y1)

 [24L]A survey of the history of Jewish nationalism, the Zionist movement, and the state of Israel from the 1880s to the present, with particular focus on continuity and rupture between Palestines pre-1948 Jewish community and the Israeli state.
Exclusion: HIS356Y1

Recommended Preparation: A course in modern European, Jewish or Middle Eastern history
DR=HUM; BR=3

## HIS357Y1 A Social History of Renaissance Europe (formerly HIS357H1) [48L]

A social history of the 15 th and 16 th 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.
Exclusion: HIS357H1
Recommended Preparation: A course in Renaissance or Early Modern European history
DR=HUM; BR=3
HIS358H1 Political Culture in Early Modern Europe [24L]
Deals with negotiations of authority in political arenas from c. 1500 to 1750 . Topics to be covered include court culture, legal ceremony, diplomatic etiquette, urban ritual and riot. Some background in medieval or early modern history recommended.
DR=HUM; BR=3

## HIS359H1 Regional Politics and Radical Movements in the 20th Century Caribbean [24L]

The role of nationalism, race and ethnicity, class conflict and ideologies in the recent development of Caribbean societies; Europes 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
DR=HUM; BR=3

## HIS360H1 African Canadian History, 1606 Present (formerly HIS360Y1) [24L]

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, settlement, community and institutional building and survival will be examined within the framework of other Canadian historical developments.
Exclusion: HIS360Y1
Recommended Preparation: HIS263Y1
DR=HUM; BR=3

## HIS361H1 The Holocaust, from 1942 [24L/5T]

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.
Prerequisite: completion of 6 undergraduate full-course equivalents and HIS 338 H 1
Exclusion: HIS338Y
Recommended Preparation: a course in modern European history
DR=HUM; BR=3
HIS362H1 The Hansa: The World of Merchants [24L]
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
DR=HUM; BR=3
HIS363H1 Dynamics of Gender in Canadian History [24L]
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/HIS263Y1
DR=HUM; BR=3

## HIS365H1 History of the Great Lakes Region [24L/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/HIS271Y1
DR=HUM; BR=3
HIS366H1 Aboriginal Peoples of the Great Lakes from 1815 to the Present [24L/5T]
Explores the history of Aboriginal peoples (Indigenous and Mtis) living in the Great Lakes Region after the Great Lakes were effectively split between British North America (later Canada) to the north and the united States to the south, when a rapidly increasing newcomer population on both sides of the border marginalized Indigenous peoples and settled on their land. Topics include a comparative examination of Indigenous experiences of colonialism, including treaties and land surrenders as well as the development of government policies aimed at removing and/ or assimilating Great Lakes peoples. This course will also study resistance by First National and Tribal Councils to those programs over nearly two centuries and assess local strategies used for economic and cultural survival.
Prerequisite: HIS263Y1/HIS271Y1
Exclusion: HIS369Y1
DR=HUM; BR=3
HIS368H1 Early Modern Britain, 1485-1660 (formerly HIS238H1) [24L/5T]
An introduction to the history of early modern England with reference to politics, religion and social structure.
Exclusion: HIS238H1
Recommended Preparation: EUR200Y1,
HIS109Y1/239H1/243H1/244H1
DR=HUM; BR=3
HIS369H1 Aboriginal Peoples of the Great Lakes from 1500 to 1830 [24L/5T]
Explores the history of Aboriginal peoples (Indigenous and Mtis) living in the Great Lakes Region from the 16th century to the aftermath of the war of 1812. Weaving together interdisciplinary sources, this course examines central events in Great Lakes history including the formation of the Wendat and Haudenosaunee Confederacies and key Anishinaabek alliances, the arrival of European newcomers into an Indigenous landscape, the social-political impact of new diseases, reactions to European missionaries, the fur trade, major conflicts and peace processes including the Great Peace of Montreal, the Treaty of Niagara and the 60 Years War for the Great Lakes; and ending with the period
of significant encroachment of new settlers on Indigenous lands. Tutorials, primary source analysis, essay, exam.
Prerequisite: HIS263Y1/HIS271Y1/ABS201Y1
Exclusion: HIS369Y1
DR=HUM; BR=3
HIS370H1 The Black Experience in the United States Since the Civil War [24L]
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
DR=HUM; BR=3

## HIS371H1 19th Century Imperial Russia (formerly HIS325Y1) [24L]

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: HIS325Y1
DR=HUM; BR=3
HIS373H1 United States \& Great Depression [24L]
U.S. experiences during the global economic crisis of THE 1930s -set against the broader historical context within which the crisis unfolded. What factors caused the Great Depression? What social, political, and cultural impact did it have on the U.S.? How did the domestic crisis intertwine with the escalating international problems that led to World War II?
Prerequisite: HIS271Y1
Recommended Preparation: previous work in US history DR=HUM; BR=3

## HIS374H1 American Consumerism - The Beginnings

 [24L/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 and at least 6 completed
undergraduate courses.
DR=HUM; BR=3

## HIS375H1 Politics and Protest in Postwar North

 America [24L]This course will explore the background, experience, and legacy of protest movements in North America during the post-1945 era. The course will draw on cutting edge historical literature, and will compare and contrast the American and Canadian contexts. Topics will include the Cold War, the Civil Rights Movement, feminism, nationalism, environmentalism, labour, and the New Left. Prerequisite: Completion of a minimum of 4.0 FCEs Recommended Preparation: HIS263Y1/271Y1
DR=HUM; BR=3

HIS376H1 The United States: Now and Then [24L] 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: HIS271Y1
DR=HUM; BR=3
HIS377H1 20th-Century American Foreign Relations (formerly HIS377Y1) [24L]
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 Americas relations with the world.
Prerequisite: HIS271Y1/POL208Y1
Exclusion: HIS377Y1
DR=HUM; BR=3
HIS378H1 America in the 1960s [24L]
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
DR=HUM; BR=3

## HIS380H1 Late Imperial China (formerly HIS380Y1)

 [24L/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
DR=HUM; BR=3
HIS381H1 African Historiography: Knowledge and Identity [24L]
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 DR=HUM; BR=3

## HIS382H1 African Historiography: Time and Space [24L]

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 DR=HUM; BR=3

## HIS383H1 Women in African History (formerly HIS383Y1) [24L]

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.
Prerequisite: NEW150Y1/HIS295Y1
Exclusion: HIS383Y1
DR=HUM; BR=3

## HIS384H1 Colonial Canada [24L]

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.
Prerequisite: HIS106Y1/HIS262Y1/HIS263Y1 or permission of the instructor
Exclusion: HIS362Y1
DR=HUM; BR=3

## HIS385H1 The History of Hong Kong [24L]

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/HIS232Y1/ JMC201Y1
DR=HUM; BR=3

## HIS385Y1 The History of Hong Kong [48L]

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/HIS232Y1/
JMC201Y1
DR=HUM; BR=3

## HIS386H1 Islamic Culture(s) in South Asia (formerly HIS386Y1) [24L]

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. Exclusion: HIS386Y1
Recommended Preparation: HIS101Y1/HIS282Y1
DR=HUM; BR=3

## HIS387H1 France, 1610-1848 (formerly HIS388Y1) [24L]

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.
Prerequisite: one HIS/FRE course
Exclusion: HIS388Y1
DR=HUM; BR=3

## HIS388H1 France Since 1848 (formerly HIS388Y1) [24L]

A study of French society, politics and culture from the Paris Commune to the 1990s. Special attention is paid to watersheds like the Dreyfus Affair and the Vichy regime, to issues of regionalism/nationalism, cultural pluralism, womens rights, intellectual and cultural trends, and decolonization. Prerequisite: EUR200Y1/one course in HIS/FRE Exclusion: HIS388Y1

## History

## DR=HUM; BR=3

## HIS389H1 Topics in History [24L]

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. DR=HUM; BR=None

## HIS389Y1 Topics in History [48L]

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.
DR=HUM; BR=None

## HIS390Y1 Latin American in the Age of Revolution [48L]

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: HIS291Y1/292Y1/294Y1/
LAS200Y1/GGR240Y1
DR=HUM; BR=3
HIS391Y1 Black Freedom in the Atlantic World [72L]
Black writers and historical actors were at the vanguard of re-conceiving, implementing, and realizing much of the Enlightenment project of freedom. Africans and people of African descent significantly affected its meaning in the Atlantic world. The course sets out to explore this history as well as the contemporary practice of freedom.
Prerequisite: A course in African or European history Exclusion: HIS296Y1
DR=HUM; BR=3
HIS393H1 Slavery and the American South [24L]
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
DR=HUM; BR=3
JHA394H1 The Asia Pacific War [24L]
This course examines the Second World War in the Asia Pacific region and highlights: (1) how imperialism and colonialism of both the Euro-American and Japanese varieties were central to the War's outbreak, conduct, and "resolution"; (2) various "local" rather than simply national experiences and memories of the War, including those of marginalized groups in Japan and its colonies, "comfort women," victims of war atrocities, Asian North Americans, African Americans, and Pacific Islanders.
Prerequisite: HIS107Y1/HIS242H1/HIS250H1/HIS251H1/ HIS263Y1/HIS271Y1/HIS280Y1/HIS281Y1/HIS282Y1/ HIS283Y1/HIS284Y1/HIS29 2Y1/HIS311Y1/HIS317H1/ HIS328H1/HIS338H1/HIS343Y1/HIS344Y 1/HIS351Y1/ HIS361Y1/HIS377H1/HIS385H1/HIS385Y1
Recommended Preparation: One or more courses on Japan, China, Korea, or Southeast Asia in any department.
DR=HUM; BR=3

HIS398HO Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
HIS399YO Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

## 400-Series Courses

## Note

Enrolment in 400 -level HIS courses is limited, and demand for these courses is high. The Department of History reserves the right to REMOVE STUDENTS who enrol in more than the required number for program completion (Specialists: 1.5, Majors: .5).
Students in 400-level seminars MUST ATTEND THE FIRST CLASS or contact the professor to explain their absence. Failure to do so may result in the Department withdrawing the student from the seminar in order to free up space for other interested students.

HIS400H1 The American War in Vietnam [24S]
This course examines the French and American Wars (1945-75) in Vietnam and its effects on the population of Vietnam and Southeast Asia. It begins with a brief overview of pre-colonial Vietnamese history and moves into a study of the impact and legacies of colonial rule and centres on the impact of the Wars on the cultures, economies, and societies of Southeast Asia.
Prerequisite: By permission of the Instructor
Exclusion: HIS315H1
DR=HUM; BR=3

## HIS401H1 History of the Cold War (formerly HIS401Y1) [24S]

This course covers international relations from World War Il 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/HIS344Y1/HIS377Y1
Exclusion: HIS401Y1
DR=HUM; BR=3

## HIS402H1 Canada and Decolonization[24S]

This course will explore the multi-faceted ways in which Canada was shaped by and was an active participant in global decolonization following the Second World War. An emphasis will be placed on the larger global context in which post-war Canadian history unfolded. Topics will include Aboriginal politics, changing migration patterns, Quebec nationalism, diasporic politics, anti-colonial thought and oppositional social movements.
Prerequisite: HIS263Y
Recommended Preparation: HIS307H1/312H1/314H1 DR=HUM; BR=3

## HIS403H1 Jews and Christians in Medieval and Renaissance Europe (formerly HIS403Y1) [24S]

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: HIS403Y1
Recommended Preparation: HIS206Y1/HIS220Y1/
HIS243H1/HIS322Y1/ HIS357Y1
DR=HUM; BR=3

## HIS404H1 Topics in North American Environmental

 History[24S]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)

## Prerequisite: 8 full courses

Exclusion: HIS318Y1
DR=HUM; BR=3

## HIS405Y1 Canadian Foreign Relations[48S]

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
DR=HUM; BR=3
HIS406H1 Advanced Topics in Gender History [24S] An in-depth examination of issues in gender history. Content in any given year depends on instructor. See History website for more details.
DR=HUM; BR=3

## HIS407H1 Imperial Germany, 1871-1918 (formerly HIS407Y1)[24S]

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)
Prerequisite: HIS317Y1 or permission of the instructor Exclusion: HIS407Y1
DR=HUM; BR=3
HIS408Y1 History of Race Relations in America[48S]
Relations between blacks and whites in the United States
from the colonial period to recent times with emphasis on slavery.
Prerequisite: HIS271Y1
DR=HUM; BR=3
HIS409H1 One Day in Vietnamese Religious History: the Meeting of the Four Religions[24S]
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
DR=HUM; BR=3

HIS410H1 Spectacle, Crowds, and Parades in Canada[24S]
Social and cultural approaches to understanding spectacles, crowd behaviour, and parades in the Canadian past, 1660s

- 1980s.

Prerequisite: HIS262Y1/HIS263Y1/HIS367H1
DR=HUM; BR=3

## HIS411H1 Great Trials in History[24S]

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.
DR=HUM; BR=3
HIS412Y1 Crusades, Conversions and Colonialization in the Medieval Baltic (formerly HIS412H1) [48S]
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
DR=HUM; BR=3

## HIS413H1 Slave Emancipation in the Atlantic

 World[24S]Examines the process and consequences of slave emancipation in the Atlantic World, beginning with the French and Haitian Revolutions and concluding with slavery and abolition in West Africa in the early 20th century.Students are introduced to the major literature and historiographical debates surrounding emancipation.
DR=HUM; BR=3
HIS414H1 Down and Out in Medieval Europe[24S]
Explores the life conditions of individuals on the lower echelons of medieval society (the poor, servants and apprentices, the exiled, prisoners, slaves, foreigners and lepers). In parallel, we will discuss the various conceptions of poverty that prevailed in the Middle Ages. These objectives will allow us to glimpse the European Middle Ages from an unusual angle as well as reflect on important socio-economic and religious changes.
Prerequisite: HIS220Y1 or a course on the Middle Ages DR=HUM; BR=3

## HIS415Y1 Nationalism \& Memory in Modern Europe (formerly HIS415H1)[48S]

Investigates the modern concept of the nation and its connections to the idea of collective memory in twentiethcentury 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
Exclusion: HIS415H1
DR=HUM; BR=3

## HIS416H1 Orientalism and Nationalism in Nineteenth-

 Century Germany[24S]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
DR=HUM; BR=3

## HIS418H1 Women and Gender in Russian History (formerly HIS418Y1)[24S]

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 womens lives; the resurrection of conservative gender conventions during Stalins regime; the experience of women during perestroika.
Prerequisite: HIS250Y1/HIS351Y1/HIS325H1/HIS325Y1 Exclusion: HIS418Y1
DR=HUM; BR=3
HIS419H1 Canada By Treaty: Alliances, Title Transfers and Land Claims[24S]
A detailed study of the treaty process between indigenous peoples and newcomers in Canadian history, with examination of the shift between alliance treaties to land surrender agreements from the colonial period through to the signing of recent treaties including the Nunavut Land Claims Agreement and the Nisga'a Final Agreement.
Prerequisite: HIS263Y
DR=HUM; BR=3

## HIS420H1 Russia's Great Patriotic Wars [24S]

The course examines Russia's wars with Napoleon and Hitler, both as military campaigns and as important nationbuilding events, largely through memoir literature.
Prerequisite: HIS250Y1/HIS325H1/HIS351Y1
DR=HUM; BR=3
HIS421Y1 Soviet History Seminar (formerly HIS421H1) [48S]
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)
Prerequisite: HIS351Y1 (with a mark of at least 80\%)
Exclusion: HIS421H1
DR=HUM; BR=3
HIS422H1 Vichy France, 1940-1944 [24S]
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 antiSemitism, issues of memory and amnesia, and socio-cultural shifts.
Recommended Preparation: HIS242H1
DR=HUM; BR=3

HIS423H1 Social History of Medicine in the 19th\& 20th Centuries (formerly HIS423Y1) [24S]
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 doctorpatient relationship, changes in physicians social status, changing attitudes towards the body, and the history of obstetrics and gynaecology. (Joint undergraduate-graduate) Prerequisite: A minimum of one course in HIS/PSY/SOC Exclusion: HIS423Y1
DR=HUM; BR=3

## HIS424H1 Violence in Medieval Society (formerly HIS424Y1) [24S]

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/HIS304Y1/HIS320Y1/HIS322Y1 Exclusion: HIS424Y1
DR=HUM; BR=3

## HIS425H1 Historiography [24S]

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 DR=HUM; BR=3

## HIS426H1 Medieval Italy, 400-1000 [24S]

This course surveys the major developments and figures of Italian history by focusing on key primary texts (in translation) with a particular view to urban and legal history which will form the backdrop to understanding artistic and literary achievements in context.
DR=HUM; BR=3
HIS427H1 History and Historiography in the Golden Legend [24S]
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
DR=HUM; BR=3
HIS428H1 Medieval Institutes of Perfection [24S]
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 DR=HUM; BR=3

## HIS429H1 Canada and Empire in the Twentieth Century [24S]

This course explores the ways in which twentieth century Canada was shaped by its complex relationship to empire. Course readings place Canadian historiography into dialogue with new theoretical and methodological approaches drawn
from postcolonial studies, new imperial history, feminist and critical race theory. Topics include the meaning of empire in everyday life, migration, the impact of global decolonization, and Aboriginal politics.
Prerequisite: HIS263Y1

## DR=HUM; BR=3

## HIS430H1 Canadians and the World Wars [24S]

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

## DR=HUM; BR=3

## HIS431H1 Gender and the Holocaust [24S]

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?

## DR=HUM; BR=3

## HIS432H1 Topics in Medieval History [24S]

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 DR=HUM; BR=3

## HIS433H1 Polish Jews Since the Partition of Poland [24S]

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 DR=HUM; BR=3

## HIS434Y1 Kievan Rus [48S]

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/HIS250Y1/
HIS320Y1/HIS322Y1/JHP204Y1
DR=HUM; BR=3
HIS436H1 Culture and the Cold War (formerly HIS436Y1) [24S]
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
DR=HUM; BR=3
HIS437H1 Telling Lies About Hitler: Frauds and Famous Feuds Among German Historians [24S]
Examines historiographical controversies and their public reception. Topics include the forged Hitler diaries, the David Irving trial, monarchical scandals before 1914, German responsibility for 1914, Daniel Goldhagen's "eliminationist" thesis, Auschwitz as an "Asiatic deed," Wehrmacht complicity in the Holocaust, retrospective films about East Germany, and Germany's "special path to modernity." DR=HUM; BR=3

## HIS438H1 Inquisition and Society in Medieval and Early Modern Europe [24S]

Examines historiographical controversies and their public reception. Topics include the forged Hitler diaries, the David Irving trial, monarchical scandals before 1914, German responsibility for 1914, Daniel Goldhagens eliminationist thesis, Auschwitz as an Asiatic deed, Wehrmacht complicity in the Holocaust, retrospective films about East Germany, and Germanys special path to modernity. 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
DR=HUM; BR=3

## HIS439H1 Russias Empire [24S]

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
DR=HUM; BR=3

## HIS440H1 Maps and History [24S]

Examines the use of maps through the ages to depict spatial relationships and political, social, or cultural authority. Explores the visual display of quantitative information, the evolution of historical atlases, and cartographic crime. Such topics as Lebensraum and gerrymandering illustrate how maps can distort historical processes and communal relationships.
Prerequisite: Permission of the Instructor.
Recommended Preparation: at least three History courses at
the 200/300 level
DR=HUM; BR=3

## HIS441H1 Conversion \& Christianities in the Early Modern Spanish World [24S]

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
DR=HUM; BR=3
HIS443H1 Society, Culture and Religion in the Renaissance and Reformation (formerly HIS443Y1) [24S]
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.
Prerequisite: HIS309H1/340Y1/357Y1 or permission of instructor
Exclusion: HIS443Y1
DR=HUM; BR=3
HIS444H1 Topics in Jewish History: Power and Identity in Modern Jewish History [24S]
This seminar will analyze the construction of Jewish identity from the 18th through 20th centuries, with particular emphases on the secularization of modern Jewish life and the Jews' encounter with new forms of political power in both the diaspora and Israel. Topics to be covered include: traditional concepts of Jewish passivity and powerlessness, and the reconfiguration of those concepts by the Jewish Enlightenment; Jewish political and economic influence in 19th -century Europe; the relationship between Jews and communism; Jews as soldiers and revolutionaries; Zionism as a form of modern Jewish politics; the Holocaust's effect on Jewish self-perception; and the extent and limits of Israeli power.
Prerequisite: A course in modern European or Jewish history Recommended Preparation: A course in Jewish history DR=HUM; BR=3

## HIS445H1 Nationalism [24S]

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 1700s through the present.
Prerequisite: Two courses in European history or permission of instructor
DR=HUM; BR=3
HIS446H1 Gender and Slavery in the Atlantic World (formerly HIS446Y1) [48S]
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.
Prerequisite: HIS245Y1/HIS291Y1/HIS294Y1/HIS295Y1
Exclusion: HIS446Y1
DR=HUM; BR=3
HIS447H1 Sex, Money, and American Empire [24S] This seminar considers two bodies of scholarship: American empire and its relationship to global capital, militarism, and technoscience; and empire, sex, race, and intimacy.In doing so, the seminar questions how imperial formations shaped life within the United States, as much as it altered distant and not so distant territories, peoples, and diasporas. DR=HUM; BR=3

## HIS448H1 Gender in East and Southeast Asia (formerly HIS391H1) [24S]

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
DR=HUM; BR=3

## HIS449Y1 Ukrainian National Revival [48S]

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 undergraduategraduate)
Recommended Preparation: One of the following:
JHP204Y1/HIS241H1/HIS251Y1/HIS445H1

## DR=HUM; BR=3

HIS450H1 The Writing of Jewish History [24S]
The development of Jewish historical inquiry over the past two centuries is examined against the background of the general phenomenon of modern historicism and the particular religious, cultural and political interests of Jewish communities and institutions in Europe, North America and Israel.
Prerequisite: a course in Jewish history, religion or thought Recommended Preparation: HIS208Y1/RLG202Y1 DR=HUM; BR=3
HIS451H1 World War II in East Central Europe [24S]
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 DR=HUM; BR=3

## JHP451Y1 The People from Nowhere [48S]

This course traces from earliest times to the present the evolution of a people called Carpatho-Rusyns and their historic homeland Carpathian Rus', located in the heart of Europe. The historic survey will deal with political, socioeconomic, and cultural developments, all the while testing the hypothesis that nationalities are imagined communities. (Given by the Departments of History and Political Science)
Recommended Preparation: a course in eastern European
history, or in nationalism
DR=HUM/SOC SCI; BR=3
HIS452H1 Science and Society in Britain, 1600-1800 [24S]
Covers selected developments in early modern British science between the Renaissance and the French Revolution. Addresses science as a socially and culturally constructed system of knowledge rather than a body of absolute truth. Class topics range from astrology to chemistry. Particular attention is given to the reception (or not) of science in the press and consumer culture. Major course themes include gender, class, religion, and governance.

Prerequisite: HIS244H1/HIS337H1/HIS324H1/HIS324Y1/ HIS341Y1
DR=HUM; BR=3

## HIS453H1 Problems of National Survival in Eastern

 Europe Since 1848 [24S]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 DR=HUM; BR=3
JHP454Y1 Twentieth Century Ukraine [48S]
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/HIS351Y1/HIS353Y1
DR=HUM/SOC SCI; BR=3

## HIS455H1 In the Soviet Archives: Text and History [24S]

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. DR=HUM; BR=3

HIS456Y1 Black Slavery in Latin America [48S]
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/HIS292Y1/HIS294Y1/HIS295Y1/
HIS394Y1/HIS408Y1/IAS200Y1/IAS320H1
DR=HUM; BR=3
$\begin{array}{ll}\text { HIS457H1 The French Revolution and the Napoleonic } \\ & \text { Empire [24S] }\end{array}$
Explores the central themes in the history of France during the Revolution and the First Empire. We will consider the periods 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; Bonapartes rise to power; the Napoleonic Empire; the nature of war during the Empire; the Restoration; and the Revolutions legacy in France and beyond today.
Prerequisite: HIS243H1/HIS244H1/HIS319H1/HIS341Y1/ HIS388H1/HIS492Y1
DR=HUM; BR=3
HIS458H1 Topics in Russian and Soviet Foreign Policy (formerly HIS458Y1) [24S]
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 and HIS334Y1/344Y1/351Y1
Exclusion: HIS458Y1
DR=HUM; BR=3
HIS459H1 Soviet History and Film, 1921-1946 [24S] 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
DR=HUM; BR=1
HIS460H1 Soviet History and Film, 1941-1991 [24S] 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
DR=HUM; BR=1

## HIS461H1 Poland in the 20th Century [24S]

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/HIS353Y1/permission of the instructor
DR=HUM; BR=3

## HIS462H1 Canadian Intelligence and National Security, 1945 Present [24S]

An exploration of Canadian intelligence from the end of World War Two to the present, with an emphasis on understanding policies, institutions and practices in the context of changing perceptions of threats to national security. The Cold War era will provide essential context for understanding the new security environment created in the aftermath of the $9 / 11$ attacks.
Recommended Preparation: HIS343Y1
DR=HUM; BR=3
HIS463H1 Cloth in American History to 1865 [24S]
Cloth was a major commodity in the early modern world. Positioning early America within a global context and employing a material culture framework, textiles and clothing provide the lens through which to view the social, cultural, economic and industrial development of the United States from pre-European contact until the 1860s.
Prerequisite: HIS271Y
Recommended Preparation: HIS374H1/VIC224Y1
DR=HUM; BR=3

## HIS464H1 Religion and Violence in Comparative Perspective [24S]

Examines varying roles of religion in cases of genocide and extreme violence. Seminar proceeds from recent cases (Darfur, Rwanda, wars associated with break-up of Yugoslavia) backward through the 20th century (Cambodia, Indonesia, the Holocaust, Armenians, Herero) and the 19th century (Belgian Congo, Caucasus, native peoples in the Americas).
Prerequisite: one course in HIS/REL/Peace and Conflict DR=HUM; BR=3

HIS465Y1 Gender and International Relations [48S]
This 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: HIS103Y1/377H1/POL208Y1 or permission of instructor
Exclusion: JHP440Y1
DR=HUM; BR=2+3
HIS466H1 Topics in Canadian History (formerly HIS466Y1) [24S]
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/HIS263Y1
DR=HUM; BR=3

## HIS467H1 French Colonial Indochina: History,

 Cultures, Texts, Film (formerly HIS467Y1) [24S]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/EAS204Y1/GGR342H1/HIS104Y1/
HIS107Y1/HIS280Y1/HIS282Y1/HIS283Y/HIS315H1/
HIS388Y1/NEW369Y1
Exclusion: HIS467Y1
DR=HUM; BR=3

## HIS468H1 The Southern Indian Ocean [24S]

This course explores a series of themes relating to Madagascar and the Mascareigne Islands between the eighteenth and the twentieth century. Topics include slavery and its memories, miscegenation, trade, the environment, space and mapping, cultural contact, colonialism, and imperial networks.
Prerequisite: a course in African history or African studies
Recommended Preparation: background in the histories of
Africa and empire
DR=HUM; BR=3

## HIS470H1 History, Rights, and Difference in South Asia [24S]

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 HIS282Y1 or instructors permission
Recommended Preparation: Background in political and social theory and some background in South Asia DR=HUM; BR=3
HIS471H1 United States and Globalization [24S]
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
DR=HUM; BR=3

## HIS472H1 Indigenous-Newcomer Relations in Canadian History (formerly HIS472Y1) [24S]

The trajectory of Canadian history has been (and continues to be) shaped ssignificantly by the changing relationships between indigenous peoples and newcomers to what is now Canada. Through discussion of readings on various seminar topics, we will explore the multi-faceted contours of these relationships, from cultural encounters, treaties \& alliances, and missionization to colonization, assimilation, residential schools and contemporary issues
Prerequisite: HIS262Y1/HIS263Y1 (minimum 73\%)
Exclusion: HIS472Y1
DR=HUM; BR=3
HIS473Y1 The United States and Asia since 1945 (formerly HIS473H1) [48S]
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: HIS271Y/HIS344Y/HIS377H1
Exclusion: HIS473H1
DR=HUM; BR=3

| HIS474H1 | Emancipate Yourselves from Mental <br>  <br>  <br> Slavery? Historical Narratives of Caribbean <br> Decolonisation [24S] |
| :--- | :--- |

This course is a critical intellectual history of Caribbean decolonisation. It begins with the Haitian Revolution, exploring and comparing how history was mobilized to structure anti-colonial theories about the making of postcolonial Caribbean societies. Key conceptual frameworks to be examined include indegenism, noirism, creolization, metissage; Caribbean interpretations of Marxism, Negritude and Pan-Aricanism.
Prerequisite: HIS294Y1
DR=HUM; BR=3

## HIS476H1 Voices from Black America (formerly HIS476Y1) [24S]

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
DR=HUM; BR=3

## HIS477H1 Topics in the Social and Cultural History

 of Victorian Britain (formerly HIS477Y1) [24S]Examination of the impact of industrialism on Victorian society and values. Concentration on Victorian social critics including Engels, Owen, Maynew, Dickens and Morris. Exclusion: HIS477Y1
Recommended Preparation: A course in modern British History/Victorian literature
DR=HUM; BR=3
HIS478H1 Hellhound on my Trail: Living the Blues in the Mississippi Delta, 1890-1945 [24S]
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: HIS271Y1/USA300H1 DR=HUM; BR=3

## HIS479H1 US Foreign Policy Since World War II (formerly HIS479Y1) [24S]

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: HIS271Y1/377H1
Exclusion: HIS479Y1
DR=HUM; BR=3
HIS480H1 Modernity and its Others: History and Postcolonial Critique [24S]
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 nationstate; capitalism and its critique; and the relationship of history, memory, and identity. (Joint undergraduate-graduate)
Prerequisite: a mark of $73 \%$ or higher in HIS282Y1, or instructors permission; HIS470H1
Recommended Preparation: History of colonialism, political
theory, or postcolonial literatures
DR=HUM; BR=3
HIS481H1 Elite Women, Power, and Modernity in Twentieth-Century Africa [24S]
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: HIS295H1/HIS296Y1/HIS383H1/HIS396H1 or permission of instructor
DR=HUM; BR=3

## HIS482H1 History of the Body from Antiquity to the Renaissance [24S]

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

## DR=HUM; BR=3

## HIS484H1 The Car in North American History (formerly

 HIS484Y1) [24S]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/HIS271Y1
Exclusion: HIS484Y1
DR=HUM; BR=3
HIS485H1 Topics in Chinese History (formerly HIS485Y1) [24S]
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)
Prerequisite: EAS102Y1/HIS280Y1, HIS380Y1/JMC201Y1
Exclusion: HIS485Y1
DR=HUM; BR=3
HIS486H1 Writing and Masculinity in Africa [24S]
Introduces African cultural and intellectual history via a series of important primary texts. These texts provide important insights into the gendered nature of African intellectual movements for liberation as well as wider political discourses. It examines how these authors developed and deployed concepts such as authenticity, modernity, nation, and personhood.
Prerequisite: HIS391Y or an equivalent course in African history
Exclusion: HIS395H1
DR=HUM; BR=3

## HIS487H1 Animal and Human Rights in AngloAmerican Culture [24S]

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, anticolonial liberation movements, and animal rights campaigns.
Recommended Preparation: HIS296Y1
DR=HUM; BR=3

## HIS488H1 The Secret War, 1939-1945 (formerly HIS488Y1) [24S]

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/
HIS241H1, HIS242H1/HIS343Y1/HIS344Y1
Exclusion: HIS488Y1
DR=HUM; BR=3

## HIS489H1 The History of Psychiatry and Psychiatric Illiness [24S]

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
DR=HUM; BR=3

## HIS490H1 Everyday Stalinism [24S]

This seminar explores issues of everyday life in Soviet Russia during the Stalin era. What was the Soviet normal? Topics will include belief systems, dreams and myths, terror, fear, repression, and resistance. Texts include a range of different sources, memoirs, diaries, official state documents, and secondary sources.
Prerequisite: grade of A in HIS250Y1/grade of B+ or higher in HIS351Y1
DR=HUM; BR=3

## HIS494H1 Gandhi's Global Conversations [24S]

Primary source analysis of global circuits of ethico-political thought via work and life of Gandhi. Charts transnational environment of Gandhian thought (eg. Ruskin and Tolstoy), its critics (advocates of minority rights, also revolutionary violence) and global afterlife (eg. King, Mandela). Teaches methods in intellectual and political history of the global. Prerequisite: HIS282Y1 with a mark of 76\% or above DR=HUM; BR=None

## HIS495H1 Topics in History (formerly HIS495Y1) [48S]

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 DR=HUM; BR=None

## HIS495Y1 Topics in History [48S]

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: HIS495H1
Recommended Preparation: Varies from year to year DR=HUM; BR=None

## HIS496H1 Topics in History [24S]

An 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. DR=HUM; BR=None

## HIS498H1 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.
DR=HUM; BR=None

## HIS499Y1 Independent Studies

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.
DR=HUM; BR=None

# History and Philosophy of Science and Technology 

## Faculty

## University Professor Emeritus

T.H. Levere, MA, D Phil, D Litt, FRSC (V)

Professors Emeriti
B.S. Hall, BA, Ph D (V)
P.M.H. Mazumdar, MB, M Tech, Ph D (V)
M.P. Winsor, M Phil, Ph D (V)

Professor and Acting Director
C. Fraser, MS, Ph D (V)

Professor and Graduate Coordinator
P. Thompson, MA, Ph D (V)

Professor and Undergraduate Coordinator
D. Walsh, BSc, BA, M Phil, Ph D, Ph D (V) Canada Research Chair

## Professors

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J. Langins, M Eng, Ph D (V)
P. Thompson, MA, Ph D (V)
D. Walsh, BSc, BA, M Phil, Ph D, Ph D (V) Canada Research Chair

## 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)
M. Vicedo, BA, MA, Ph.D., Ph.D. (V)

## Assistant Professors

L. Dacome, BA, M Phil, Ph D (V)
Y. Fehige, Diploma in Theology, M.A., Ph.D. (V)
M. Solovey, BA, MA, MA, Ph.D. (V)
C.-P. Yeang, BS, SM, Ph D, Sc D (V)

The History and Philosophy of Science and Technology (HPST) is committed to the study of science and technology (including mathematics and medicine) as historically significant in themselves, as integral components of the general development of knowledge, and as conceptually and theoretically rich domains for philosophical analysis. The programs of study offered by IHPST reflect the Institute's commitment to interdisciplinarity. These programs require of their students a first-hand knowledge of scientific practice, but also require them to engage in the study of philosophy, history and the important place of science in both. HPS courses in Philosophy of Science engage with the structure of science, its methods, its special claims to the production of knowledge. HPS courses specifically in the History of Science and Technology seek to synthesise the study of science, its history and its place in history. Advanced students in the Major undertake a directed research project into the history or philosophy of science.
Students pursuing a program of study in the history and philosophy of science will find themselves ideally suited to any professional or academic context that requires an understanding of the relation between the sciences and the humanities. These may include, but are not restricted to, medicine, law, journalism, and education. Fur-thermore, the study of the history and philosophy of science furnishes
students with a battery of analytic and critical tools with which to approach a wide range of interdisciplinary endeavours.

Director of Undergraduate Studies:
Professor D. Walsh, Victoria College, Room 316A (416-9785847)

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Enquiries:
Victoria College, Room 316 (416-978-5397)

## History and Philosophy of Science and Technology Programs

## History and Philosophy of Science and Technology Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(7.5 FCEs, including at least 2.0 FCEs at the 300+level, 0.5 of which must be at the 400 -level)

First year:

1. HPS 100 H 1
2. $1.0100+$ level FCE in any natural or social science (including MAT and STA courses), excluding courses for non science students.

## Higher years

3. HPS200H1, HPS210H1, HPS211H1, HPS250H1, HPS201H1 or HPS202H1
4. 0.5 FCE from: PHL245H1, PHL246H1, HPS390H1 or HPS391H1
5. $1.0100+$ level FCE in History
6. $1.0200+$ level in Science, including 0.5 at the $300+$ level (These courses should be in the same area)
7. 0.5 FCE from HPS300+ level courses, JHE353H1, JHE355H1, PHL355H1, PHL356H1, PHL357H1
8. 0.5 FCE from Special Research Opportunities (HPS481H1, HPS482H1, HPS483H1, HPS484H1, HPS485H1) or Independent Studies course HPS495Y1

## History and Philosophy of Science and Technology Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 FCEs including at least one FCE at the 300+level)

1. HPS100H1
2. 0.5 FCE from: HPS200H1, HPS201H1, HPS202H1, HPS210H1, HPS211H1, HPS250H1, SMC230Y1, SMC231Y1
3. An additional 3.0 FCEs from: any HPS course, JHE353, JHE355H1, PHL356H1 PHL357H1

## History and Philosophy of Science and Technology Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars are intended to stimulate the students' curiosity and provide an opportunity to get to know a member of the professorial

## History and Philosophy of Science and Technology

staff in a seminar environment during the first year of study. Details on page 33.

## HPS100H1 Introduction to History and Philosophy of Science [24L/12T]

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.
DR=HUM/SCI; BR=2

## HPS200H1 Science and Values [24L/12T]

An introduction to issues at the interface of science and society. Including the reciprocal influence of science and social norms, the relation of science and religion, dissemination of scientific knowledge, science and policy. Issues may include: Nuclear, Biological and Chemical Weapons; Genetic Engineering; The Human Genome Project; Climate Change.
DR=HUM; BR=3
HPS201H1 Origins of Western Technology [24L/12T] 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.
DR=HUM; BR=3

## HPS202H1 Technology in the Modern World

[24L/12T]
A survey of technical change and its social implications from the Industrial Revolution to the present.
Recommended Preparation: HPS201H1
DR=HUM; BR=3
HPS210H1 Scientific Revolutions I (formerly HPS200Y1) [24L/12T]
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.
Exclusion: HPS200Y1
DR=HUM/SCI; BR=2
HPS211H1 Scientific Revolutions II (formerly HPS200Y1) [24L/12T]
Case studies in the history of science from 1800 to 2000, including Volta, Lyell, Darwin, Mendel, Einstein, Schrdinger, Watson, and Crick. The course is designed to be accessible to science students and non-scientists alike
Exclusion: HPS200Y1
DR=HUM/SCI; BR=2
HPS230H1 Quantifying the Renaissance [24L/24P] This course traces the use of geometry and algebra in the evolution of physics and astronomy from around 1310 to 1690. It examines the conceptual foundations of geometry, algebra, analytic geometry and the differential calculus and their use in understanding the physical world. No prior mathematical knowledge is presupposed.
Exclusion: Any 100-level MAT course
DR=HUM/SCI; BR=5
HPS240H1 Epistemological Issues in Medicine [24L]
An examination epistemological and logical aspects of medical science. Topics may include anecdote, bias,
complexity, evidence, expertise, heuristics, phronesis, placebos, plausibility, probability, randomness, statistics and uncertainty.
Prerequisite: One HPS half course or PHL half course or BIO150Y1
DR=HUM; BR=2
HPS250H1 Introductory Philosophy of Science [24L/12T]
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.
DR=HUM; BR=2

## HPS299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## HPS300H1 Topics in History and Philosophy of Science and Technology [TBA]

Topics vary year to year.
DR=HUM; BR=None
HPS306H1 Technology and War [24L/12T]
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/HPS202H1 or any HIS course
DR=HUM; BR=3
HPS307H1 History of Energy [24L/12T]
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/HPS202H1 or any HIS course
DR=HUM; BR=3
HPS308H1 Technology and Prosperity [24L/10T]
The systemic nature of modern technology suggests that it has intimate interactions with society, human values, ideologies, and the economy. We will attempt to examine these interactions in history in order to promote reflection on ways in which technology and its evolution could be managed for the benefit of humankind.
Recommended Preparation: any half course in HPS at the 200-level
DR=HUM; BR=3
JPH311H1 History of Physics [24S]
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-half PHY course at university level Exclusion: HPS311H1
DR=HUM/SCI; BR=5

# History and Philosophy of Science and Technology 

HPS312H1 History of Chemistry [12S]
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 DR=HUM/SCI; BR=3

HPS313H1 Two Hundred Years of Electricity [24L]
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-half CSC/PHY or Electrical Engineering (ECE) course
DR=HUM/SCI; BR=3

## HPS318H1 History of Medicine I [24L/12T]

A survey of medical theory and practice from Antiquity to the Renaissance, with emphasis on medicines social, cultural and political setting.
Exclusion: HPS314Y1
DR=HUM; BR=3

## HPS319H1 History of Medicine II [24L/12T]

A survey of medical theory and practice from the 17th century to the modern welfare state, with emphasis on medicines social, cultural and political setting.
Exclusion: HPS314Y1; HPS315H1
DR=HUM; BR=3

## HPS320H1 Medicine and Narrative [12L]

Personally and socially, we experience illness as a narrative. Narratives of health and illness have been constructed and interpreted from the early modern period to the present. The continuities and discontinuities that characterize the structure of these stories over time, and what narratives reveal about historical realities will be explored.
DR=HUM; BR=1
HPS321H1 Understanding Engineering Practice: From Design to Entrepreneurship[24S]
This course seeks to understand the nature of engineering practice, which comprises complex social, intellectual, and technical actions at various stages from design to entrepreneurship. Building upon the history and social studies of technology, philosophy of engineering, business history, and management science, we introduce ways to analyze such complex actions.
Prerequisite: Three courses with any combination of engineering, natural sciences, medical sciences, or commerce
DR=HUM; BR=3
HPS322H1 Complexity, Order, and Emergence [TBA] 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 biological and cognitive sciences. Topics covered may 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.
DR=HUM; BR=2

## HPS324H1 Natural Science and Social Issues

 [24L/12T]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.
DR=HUM; BR=3
HPS326H1 History of Science and Religion [12T/12S]
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.
DR=HUM; BR=3
HPS343H1 History of Pre-Electronic Computing [24L]
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. DR=HUM/SCI; BR=3

HPS344H1 History of Mainframe Computing [24L] 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. DR=HUM/SCI; BR=3

## HPS350H1 Revolution in Science [24S]

An investigation into the nature and development of scientific knowledge, inspired by Kuhns notion of revolutions. Topics may include, the rationality of theory choice, and social constructivism.
Prerequisite: HPS250H1 or permission of the instructor DR=HUM; BR=3
HPS352H1 History and Philosophy of the Social Sciences [24L]
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.
DR=HUM/SOC SCI; BR=2

## JHE353H1 History of Evolutionary Biology I

 [24L/12T]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
(BIO120H1,BIO220H1)/150Y1
Exclusion: EEB353H1/HPS323H1/353H1
DR=HUM/SCI; BR=3

## JHE355H1 History of Evolutionary Biology II [24L/12T]

An examination of ideas about biological evolution from the 1930s to the present. Topics include the Modern Synthesis,

## History and Philosophy of Science and Technology

population genetics, the concept of biological species, ecology, sociobiology, and creationism.
Prerequisite: 6 full courses or equivalent including
(BIO120H1,BIO220H1)/150Y1
Exclusion: EEB355H1/HPS333H1/355H1
Recommended Preparation: JHE353H1, EEB353H1/ HPS353H1
DR=HUM/SCI; BR=3
HPS360H1 History of Modern Cosmology [24L/12T]
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 redshift and microwave background radiation. Philosophical and religious implications are examined.
DR=HUM/SCI; BR=2
HPS375H1 Science and Technology in The Realms of Islam, 600-1600, Part I: The Mathematical Sciences and their Practical Applications (formerly HPS275H1) [24L/12T]
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
DR=HUM/SCI; BR=3
HPS376H1 Science and Technology in the Realms of Islam, 600-1600, Part II: The Life Sciences (formerly HPS276H1) [24L/12T]
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
DR=HUM/SCI; BR=3
HPS390H1 History of Mathematics up to 1700 [24L/12T]
A survey of ancient, medieval, and early modern mathematics with emphasis on historical issues. (Offered in alternate years)
Prerequisite: At least one full course equivalent at the
200+level from CSC/MAT/STA
Exclusion: HPS310Y1; MAT220Y1
DR=HUM/SCI; BR=3
HPS391H1 History of Mathematics after 1700 [24L/12T]
A survey of the development of mathematics from 1700 to the present with emphasis on historical issues. (Offered in alternate years)
Prerequisite: At least one full course equivalent at the 200+level from CSC/MAT/STA
Exclusion: HPS310Y1; MAT220Y1, MAT391H1
DR=HUM/SCI; BR=3
HPS410H1 History of Mathematics [24S]
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/HPS310Y1/HPS390H1/HPS391H1/
MAT220Y1 and permission of instructor
DR=HUM; BR=3
HPS411H1 Conceptual Foundations of Mathematics [24S]
An examination of foundational and conceptual aspects of mathematics such as: the nature of mathematical objects, logicism, Church's elementalistic mathematics, Gödel's theorem and formal systems, postulational methods, mathematics and reality, the cardinal, ordinal and abstract approaches to numbers, infinity, and Euclidean and nonEuclidean geometries.
Prerequisite: PHL245H1/HPS390H1 or HPS391H1 or
HPS410H1 or permission of the instructor
Exclusion: PHL346H1
DR=HUM/SCI; BR=5
HPS412H1 History of the Biological Sciences [24S] Advanced level survey of biological science from ancient Greece to the 20th century emphasizing primary sources analyses.
Prerequisite: HPS200Y1/(HPS210H1 + HPS211H1)/
ZOO354Y1/HPS323H1;HPS333H1 and permission of instructor
Recommended Preparation: BIO150Y1/European history/ Philosophy
DR=HUM; BR=3
HPS427H1 Historical Foundations of Chemistry [24S]
The development of chemistry from the Chemical Revolution of Lavoisier to the periodic table of Mendeleev: electrochemistry, the rise of organic chemistry, classification, valency, structural chemistry.
Prerequisite: Permission of instructor DR=HUM; BR=3
HPS430H1 History of Technology I [24S]
An advanced survey of the history of technology from Antiquity to the Industrial Revolution.
Prerequisite: Permission of instructor
Recommended Preparation: HPS201H1/HPS202H1
DR=HUM; BR=3
HPS431H1 History of Technology II [24S]
An advanced survey of the history of technology from the Industrial Revolution to modern times.
Prerequisite: Permission of instructor
Recommended Preparation: HPS201H1/HPS202H1
DR=HUM; BR=3

## JPH441H1 Physical Science in Contemporary Society

 [24S]Complex nature of the scientific method; connection between theory, concepts and experimental data; insufficiency of reductionism; characteristics of pathological and pseudoscience; public perception and misperception of science; science and public policy; ethical issues; trends in modern science.
Prerequisite: PHY224H1/PHY252H1/PHY256H1/ENV235H1 Exclusion: PHY341H1
DR=HUM; BR=3

# History and Philosophy of Science and Technology 

HPS481H1 Special Research Opportunity in History of Medicine [24L/6T
This course offers advanced undergraduate students the opportunity to undertake original research into the history of medi-cine, under the guidance of a faculty seminar leader and a graduate student mentor. Students are required to initiate and pur-sue a research project of their own design, culminating in a research paper.
Prerequisite: Permission of instructor
Recommended Preparation: Preparation with instructor DR=HUM; BR=None

## HPS482H1 Special Research Opportunity in History of Science [24L/6T]

This course offers advanced undergraduate students the opportunity to undertake original research into the history of the natu-ral or physical sciences, under the guidance of a faculty seminar leader and a graduate student mentor. Students are required to initiate and pursue a research project, culminating in a research paper.
Prerequisite: Permission of instructor
Recommended Preparation: preparation with instructor DR=HUM; BR=None
HPS483H1 Special Research Opportunity in History of Technology [24L/6T]
This course offers advanced undergraduate students the opportunity to undertake original research into the history of the natu-ral or physical sciences, under the guidance of a faculty seminar leader and a graduate student mentor. Students are required to initiate and pursue a research project, culminating in a research paper.
Prerequisite: Permission of instructor
Recommended Preparation: Preparation with instructor DR=HUM/SCI; BR=None

HPS484H1 Special Research Opportunity in Philosophy of Science I[24L/6T]
This course offers advanced undergraduate students the opportunity to undertake original research into the history of the natu-ral or physical sciences, under the guidance of a faculty seminar leader and a graduate student mentor. Students are required to initiate and pursue a research project, culminating in a research paper.
Prerequisite: Permission of instructor
Recommended Preparation: Preparation with instructor
DR=HUM/SCI; BR=None
HPS485H1 Special Research Opportunity in Philosophy of Science 2[24L/6T]
This course offers advanced undergraduate students the opportunity to undertake original research into the history of the natu-ral or physical sciences, under the guidance of a faculty seminar leader and a graduate student mentor. Students are required to initiate and pursue a research project, culminating in a research paper.
Prerequisite: Permission of instructor
Recommended Preparation: Preparation with instructor DR=HUM; BR=None

## 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
DR=HUM/SCI; BR=None

## HPS496H1 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
DR=HUM/SCI; BR=None

## 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
DR=HUM; BR=None

## HPS498H1 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
DR=HUM; BR=None

## 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
DR=HUM; BR=None

## Collaborative Program of the Faculty of Arts \& Science and the Faculty of Medicine

## Faculty

## Senior Lecturer and Interim Program Director

R.G. Wilson Jr., M Sc, Ph D

Lecturers
A. Dias, M Sc, Ph D
W. Ju, M Sc, Ph D
M. Papaconstantinou, Ph D
F. Taverna, Ph D

The Human Biology programs are available to students entering their second year of study. Our multi-disciplinary programs integrate topics from the medical sciences, biological and social sciences, as well as the humanities. The goal of each Human Biology 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 of our programs 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://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 science programs are designed to do this.

We offer multiple Specialist programs, and a variety of Major programs. Each program enables students to study specific aspects of human biology. Students can combine a Human Biology Major program with other Science, Social Sciences or Humanities Major and/or Minor programs. Students who later wish to specialize may be able to enter the related Specialist program.

We have five areas of study available as both Human Biology Specialist and Major programs:

Environment \& Health programs provide a basic understanding of the complex relationships between the behaviour of Planet Earth and the working of the human body.

Genes Genetics \& Biotechnology programs focus 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.

Global Health programs provide worldwide perspectives
on health and medicine encompassing social, political, and economic environments.

Health \& Disease programs examine the functioning of living organisms and how they respond to environmental conditions, both internal and external, that cause disease.

Neuroscience programs, relevant to all aspects of the nervous system, cover topics as diverse as mechanisms of learning and memory, pain, Alzheimer's disease and movement disorders such as Parkinson's and Lou Gehrig's disease.

Two additional areas are available as Human Biology Major programs:

Health Care Ethics Major program focuses on social and ethical issues in clinical care and biomedical research.

Human Biology Major program provides a broad and flexible course of study in the basic medical sciences as well as other life sciences.

The first year requirements for all Human Biology programs consist of introductory 100-level courses. All programs require the foundational biology course(s), BIO 120 H 1 Adaptation and Biodiversity plus BIO 130 H 1 Molecular and Cell Biology. Specific programs have additional 100-level course requirements (see specific program requirements), some of which can be chosen from a selection list. Your choice of selected courses should be influenced by which areas and courses you want to study in upper years. All Major programs offered by Human Biology build on a firstyear background in chemistry as well as biology. Major programs also require a course in psychology, physics or mathematics, except for Environment \& Health which extends this selection to specific geography and geology courses; and Neuroscience which requires psychology as well as physics or mathematics. For the Specialist programs in Genes Genetics \& Biotechnology, Health \& Disease and Neuroscience, you are strongly recommended to take both calculus and physics in either first or second year. Both are important for upper level science courses and other life science programs.
Starting in second year, students can either follow the more general Human Biology Major program or take a Major or Specialist program in a more specific area of Human Biology. Each of these more focused programs has core courses in second and third year, tailored to meet the specific interests 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. Fewer core courses are required for the new Major programs than for the Specialist programs. Courses most often include lectures and small groups (e.g., tutorials, seminars) with laboratory courses offered primarily in third year.

To complete their programs, students can choose from a range of options in third and fourth years, depending on their interests, previous course completion, course availability and future career. Options include 400-level advanced seminar courses and research project courses. Please check our website and the online timetable for the most current course
information since we have rapidly expanded our course menu with an addition of $\sim 30$ courses since 2006-07.

For further information about our programs and courses, see: our web site (http://hmb.utoronto.ca) or contact us via email (human.biology@utoronto.ca), telephone (416-946-7609), or in person (Human Biology Program Office, Wetmore Hall room 105, New College, 300 Huron Street).

## Human Biology Programs (Science programs)

## Note

For these programs, BIO 150 Y 1 is equivalent to BIO 120 H 1 and BIO 220 H 1 . BIO 240 H 1 and BIO 241 H 1 is equivalent to BIO 130 H 1 and BIO 230 H 1 .

The Human Biology Program administers all Human Biology Specialist and Major programs except for the Environment \& Health Specialist program (see Environment, Centre for).
We encourage every student registered in a Human Biology program to discuss their individual program each year with a Human Biology student advisor (for appointment, contact counsel.hmb@utoronto.ca).

## Human Biology Specialist Programs

Enrolment in all Human Biology specialist programs is limited. (The exception is the Environment \& Health Specialist Program, which is Type 1.) Students apply for admission on the Arts \& Science Faculty Registrar's Office website as for a Type 3 program (see the Registration Handbook \& Timetable for instructions). Admission will be determined on course marks in the following 3.0 credits:
. BIO120H1, BIO130H1
(CHM138H1, CHM139H1)/CHM151Y1
3. 1.0 FCE from: (MAT135H1, MAT136H1)/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Each course of these 3.0 FCEs must have a final mark of at least $60 \%$, and students must have an average on the 3.0 of at least $70 \%$ to be eligible. Achieving the minimum marks does not guarantee admission to a program.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, an estimate of the marks that will likely be needed for admission is noted with each of the limited enrolment programs below. Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.

## Genes Genetics \& Biotechnology Specialist (Science Program)

Note: An estimate of the marks required for admission: high 70s; average $=$ high-70s
(14.5 to 15 full courses or their equivalent, including at least two 400-series courses)
First Year (3.0 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, (MAT135H1+MAT136H1)/(PHY131H1+PHY132H1)/ (PHY151H1+PHY152H1)
Higher Years:

1. HMB201H1, HMB265H1/BIO260H1, BCH210H1, (BIO220H1+BIO230H1/BIO255H1), CHM247H1
2. 0.5 to 1.0 FCE from: ANT100Y1/ECO100Y1/GGR100H1/ GGR107H1/GGR124H1/PHL100Y1/PSY100H1/ SOC101Y1/SOC102H1/SOC103H1/VIC170Y1/VIC171Y1
3. 1.0 FCE from: ANT203Y1/ANT204H1/ANT208H1/ ENV221H1/ENV222H1/GGR220H1/GGR246H1/ GGR270H1/JGE236H1/PHL240H1/PHL245H1/ PHL273H1/PHL275H1/PHL281H1/SOC205H1/ SOC207H1/SOC210H1/SOC212H1/SOC213Y1/ SOC214H1/SOC220H1/SOC243H1/SOC244H1/ SOC246H1/SOC260H1
4. HMB301H1, HMB321H1, BCH311H1/CSB349H1/ PSL350H1
5. 0.5 FCE science laboratory from: HMB311H1/ BCH370H1/CSB330H1/CSB350H1/MGY360H1/ MGY379Y1/PSL372H1
6. 2.0 FCE from the sciences: ANA $301 \mathrm{H} 1 / \mathrm{BCH} 300$-series (see Note 1 below)/CSB325H1/CSB327H1/CSB328H1/ CSB331H1/CSB332H1/CSB340H1/CSB343H1/ CSB345H1/CSB347H1/CSB351Y1/CSB352H1/ CSB353H1/EHJ351H1/EHJ352H1/EEB323H1/ EEB324H1/IMM334Y1/PSY397H1/LMP301H1/ LMP363H1/MGY377H1/MGY378H1/NFS284H1/ NFS382H1/NFS386H1/PCL201H1/PCL302H1/ (PSL300H1+PSL301H1)
7. 1.0 FCE from a Bio-Social or Social perspective: ANT 300-series/GGR314H1/JGE331H1/GGR333H1/ GGR334H1/GGR338H1/HPS318H1/HPS319H1/ HPS324H1/HPS326H1/HPS350H1/JHE353H1/ JHE355H1/WGS365H1/WGS367H1/WGS368H1/ WGS372H1/WGS373H1/PHL341H1/PHL342H1/ PHL345H1/PHL347H1/PHL349H1/PHL357H1/ PHL381H1/PHL383H1/PHL384H1/SOC303H1/ SOC306Y1/SOC309Y1/SOC312H1/SOC317Y1/ SOC325Y1/SOC355H1/SOC356Y1/SOC363H1/ SOC365H1/SOC366H1/SOC381Y1/SOC382H1/ SOC388H1
8. 1.0 FCE from a 400 -level science series: HMB421H1/ HMB431H1/HMB435H1/HMB436H1/HMB441H1/BCH 400-series (see Note 1 below)/CSB428H1/CSB429H1/ CSB452H1/CSB458H1/CSB459H1/CSB460H1/ CSB472H1/CSB474H1/CSB483H1/CSB484H1/ EEB459H1/EEB460H1/LMP 400-series/MGY 400-series (see Note 3 below)/NFS 400-series/PCL477H1/PSL 400-series
9. 1.0 FCE from a 400 -level Science, Bio-social or Social Perspective (see Note 2 below): HMB 400-series/ HMB499Y1/ANT445H1/ANT448H1/ANT450H1/ GGR416H1/GGR439H1/PHL407H1/PHL440H1/ PHL470H1/PHL475H1/PHL482H1/PHL483H1/ JFG475H1/NEW425Y1/BCH 400-series (see Note 1 below)/CSB428H1/CSB429H1/CSB452H1/CSB458H1/ CSB459H1/CSB460H1/CSB472H1/CSB474H1/ EEB459H1/EEB460H1/LMP 400-series/MGY 400-series (see Note 3 below)/PHC 400-series/PSL 400-series
Global Health Specialist (Science Program)
Note: An estimate of the marks required for admission: course marks $=$ mid 70s ; average $=$ high 70s
( 15.5 to 16 full courses or their equivalent, including at least two 400-series courses)

## Human Biology

First Year (3.0 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, (MAT135H1+MAT136H1)/(PHY131H1+PHY132H1)/ (PHY151H1+PHY152H1)
Higher Years:

1. HMB203H1, (BIO220H1+BIO230H1/BIO255H1), STA220H1
2. 1.0 FCE from Environment or Resource Management: JGE236H11/FOR201H1/GGR201H1/GGR203H1/ GGR206H1/ENV221H1/ENV222H1
3. 0.5 to 1.0 FCE from: ANT100Y1/GGR100H1/GGR107H1/ GGR124H1/PHL100Y1/PSY100H1/SOC101Y1/ SOC102H1/SOC103H1/TRN150Y1/TRN151Y1/ VIC170Y1/VIC171Y1/NEW150Y1/POL101Y1/WGS160Y1
4. 1.0 FCE from Social, Cultural or Political Science: ANT204H1/ANT208H1/GGR216H1/GGR220H1/ JGI216H1/NEW250Y1/PHL273H1/PHL275H1/ PHL281H1/POL201Y1/POL208Y1/PSY220H1/ SOC205H1/SOC210H1/SOC214H1/SOC243H1/ SOC244H1/SOC246H1/SOC256H1/SOC281H1/ UNI209H1/UNI237H1/WGS271Y1/WGS273Y1
5. 1.0 FCE from Biological Sciences: HMB265H1/ HMB342H1/HMB390H1/ANT203Y1/ BCH210H1/BIO251H1/(BIO270H1+BIO271H1)/ EEB225H1/EEB263Y1/ENV234H1/JGE236H1/ (PSL300H1+PSL301H1)/STA221H1
6. HMB303H1
7. 0.5 FCE in Laboratory Sciences: HMB312H1/BCH370H1/ CSB330H1/CSB350H1/MGY379Y1/PSL372H1
8. 1.5 FCE from Basic Medical Sciences: CSB351Y1/ IMM334Y1/LMP363H1/MGY377H1/MGY378H1/ NFS284H1
9. 0.5 FCE from Ecology/Evolution: EHJ351H1/EHJ352H1/ EEB319H1/EEB322H1/EEB323H1/EEB324H1/ EEB328H1/EEB362H1/EEB365H1/BCH311H1/ CSB349H1/PSL350H1
10. 1.0 FCE from Environmental Issues: GGR303H1/ GGR305H1/GGR307H1/GGR314H1/JGE321H1/ ENV322H1/FOR302H1/FOR303H1
11. 1.0 FCE from Social Perspective: HMB323H1/ ANT345H1/ANT346H1/ANT348H1/ANT364Y1/ ANT374H1/ENV333H1/ENV350H1/GGR329H1/ GGR334H1/GGR338H1/ENV320H1/ENV333H1/ ENV341H1/JIE307Y1/JNH350H1/PHL373H1/PHL380H1/ PHL381H1/PHL382H1/PHL383H1/PHL384H1/ POL301Y1/POL317Y1/POL343Y1/POL351Y1/ POL380H1/POL380Y1/PSY333H1/SOC309Y1/ SOC312H1/SOC364H1/SOC381Y1/UNI310H1/ WGS365H1/WGS367H1/WGS368H1/WGS386H1
12. 1.0 FCE from 400-level Sci/Env/Eco series: HMB433H1/ HMB434H1/HMB443H1/HMB473H1/HAJ453H1/ CSB452H1/CSB458H1/EEB428H1/EEB440H1/ EEB459H1/EEB465H1/EEB495H1/GGR403H1/ GGR409H1/LMP402H1/LMP403H1/LMP406H1/ LMP436H1/MGY434H1/MGY440H1/MIJ485H1/ NFS485H1/NFS486H1/NFS487H1/NFS490H1/ PSL420H1/PSL421H1/PSL470H1/PSL472H1/JEH455H1
13. 1.0 FCE from 400-level Soc/Hum/Proj series (see Note 2 below): HMB420H1/HMB433H1/HMB462H1/HMB498Y1/ HMB499Y1/ANT427H1/ANT440H1/ANT448H1/ ANT450H1/ANT452H1/ANT460H1/GGR418H1/ GGR419H1/GGR438H1/GGR439H1/JFG475H1/ NEW452H1/POL412Y1/POL413H1/POL417Y1/

PHL415H1/PHL440H1/PHL470H1/PHL482H1/ TRN411Y1/TRN419Y1/TRN421Y1/UNI411Y1/UNI440H1/ UNI464H1/WGS425H1/WGS426H1

## Health \& Disease Specialist (Science Program)

An estimate of the marks required for admission: course marks $=$ mid 70 s ; average $=$ mid 70s
(14.5 to 15 full courses or their equivalent, including at least two 400-series courses)
First Year (3.0 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, (MAT135H1+MAT136H1)/(PHY131H1+PHY132H1)/ (PHY151H1+PHY152H1)
Higher Years:

1. HMB202H1, HMB265H1/BIO260H1, BCH210H1, (BIO220H1+BIO230H1/BIO255H1), CHM247H1
2. 0.5 to 1.0 FCE from: ANT100Y1/GGR100H1/GGR107H1/ GGR124H1/PHL100Y1/PSY100H1/SOC101Y1/ SOC102H1/SOC103H1/VIC170Y1/VIC171Y1
3. 1.0 FCE from: ANT203Y1/ANT204H1/ANT208H1/ ENV221H1/ENV222H1/GGR220H1/GGR246H1/ GGR270H1/JGE236H1/PHL240H1/PHL245H1/ PHL237H1/PHL275H1/PHL281H1/SOC205H1/ SOC207H1/SOC210H1/SOC212H1/SOC213Y1/ SOC214H1/SOC220H1/SOC243H1/SOC244H1/ SOC246H1/SOC260H1
4. HMB302H1, BCH311H1/CSB349H1/PSL350H1, (MGY377H1+MGY378H1)/CSB351Y1, (PSL300H1+PSL301H1)
5. 0.5 FCE science laboratory from: HMB312H1/ BCH370H1/CSB330H1/MGY379Y1/PSL372H1
6. 0.5 FCE from the sciences: HMB305H1/HMB322H1/ HMB325H1/HMB342H1/HMB390H1/ANA300Y1/ ANA301H1/BIO251H1/(BIO270H1+BIO271H1)/ CSB325H1/CSB327H1/CSB328H1/CSB331H1/ CSB332H1/CSB340H1/CSB345H1/CSB346H1/ CSB347H1/CSB353H1/BCH 300-series (see Note 1 below)/EEB331H1/EEB340H1/EHJ351H1/EHJ352H1/ IMM334Y1/ PSY397H1/LMP301H1/LMP363H1/ NFS284H1/NFS386H1/PCL201H1/PCL302H1/ PCL362H1/PSL304H1/PSL305H1
7. 1.0 FCE from a Bio-Social or Social perspective: ANT 300-series/GGR314H1/GGR333H1/GGR334H1/ GGR338H1/HPS318H1/HPS319H1/HPS324H1/ HPS326H1/HPS350H1/JHE353H1/JHE355H1/ JGE331H1/JNH350H1/ PHL341H1/PHL342H1/ PHL345H1/PHL347H1/PHL349H1/PHL381H1/ PHL383H1/PHL384H1SOC303H1/SOC306Y1/ SOC309Y1/SOC312H1/SOC317Y1/SOC355H1/ SOC356Y1/SOC363H1/SOC365H1/SOC366H1/ SOC381Y1/SOC382H1/SOC388H1/WGS365H1/ WGS366H1/WGS367H1/WGS368H1/WGS372H1/ WGS373H1
8. 1.0 FCE from a 400-level science series: HMB402H1/ HMB422H1/HMB432H1/HMB440H1/HMB441H1/ HMB452H1/HMB470H1/HMB471H1/HMB472H1/ HMB473H1/BCH 400-series (see Note 1 below)/ CSB428H1/CSB429H1/CSB452H1/CSB458H1/ CSB460H1/CSB472H1/EEB460H1/IMM429H1/ IMM430H1/IMM435H1/IMM428H1/LMP 400-series/ MIJ485H1/MGY 400-series/NFS 400-series/PCL470Y1/ PCL471Y1/PCL473Y1/PCL475Y1/PCL477H1/ PCL481H1/PSL 400-series/PSY497H1
9. 1.0 FCE from a 400-level Science, Bio-social or Social Perspective (see Note 2 below): HMB 400-series/ HMB499Y1/HAJ453H1/JEH455H1/ANT433H1/ ANT434H1/ANT435H1/ANT445H1/ANT448H1/ ANT450H1/ANT460H1/GGR415H1/GGR416H1/ GGR439H1/PHL407H1/PHL440H1/PHL470H1/ PHL475H1/PHL482H1/PHL483H1/JFG475H1/ NEW425Y1/BCH 400-series (See Note 4 below)/ CSB428H1/CSB429H1/CSB452H1/CSB458H1/ CSB460H1/CSB472H1/EEB460H1/IMM429H1/ IMM430H1/IMM435H1/PSY497H1/MIJ485H1/LMP 400-series/MGY 400-series (see Note 3 below)/ NFS484H1/NFS486H1/NFS488H1/NFS490H1/ PCL470Y1/PCL471Y1/PCL473Y1/PCL475Y1/ PCL481H1/PHC 400-series/PSL 400-series/UNI440H1

## Neuroscience Specialist (Science Program)

An estimate of the marks required for admission: course marks $=$ mid 70 s ; average $=$ high 70 s
(13.5 to 14 full courses or their equivalent, including at least two 400-series courses)
First Year (3.0 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, (MAT135H1+MAT136H1)/(PHY131H1+PHY132H1)/ (PHY151H1+PHY152H1)
Higher Years:

1. PSY100H1, HMB200H1, HMB265H1/BIO260H1, BCH210H1/CHM247H1, (BIO220H1+BIO230H1/ BIO255H1), STA220H1/PSY201H1
2. 0.5 FCE from: ANT204H1/ANT253H1/LIN200H1/ PSY260H1/PSY270H1/PSY280H1
3. PSL300H1/(BIO270H1+BIO271H1)
4. HMB300H1, HMB310H1, HMB320H1, BCH311H1/ CSB349H1/PSL350H1
5. 2.0 FCE from: CSB325H1/CSB328H1/CSB330H1/ CSB332H1/CSB345H1/CSB346H1/CSB347H1/ EEB322H1/JAL355H1/JLP315H1/JLP374H1/PCL201H1/ PCL302H1/PSL301H1/PSL304H1/PSL305H1/ PSL372H1/PSL374H1/PSY202H1/PSY342H1/ PSY371H1/PSY372H1/PSY390H1/PSY396H1/ PSY397H1/WGS372H1
6. 2.0 FCE from $400-$ level Science Series (see Note 2 below): HMB400Y1/HMB420H1/HMB430H1/ HMB440H1/HMB471H1/HMB473H1/CSB425H1/ CSB428H1/CSB430H1/CSB445H1/EEB459H1/ JLS474H1/JLP471H1/NFS489H1/LMP410H1/PCL475Y1/ PSL425H1/PSL432H1/PSL440Y1/PSL443H1/PSL444Y1/ PSL450H1/PSL452H1/PSL472H1/PSY440H1/ PSY460H1/PSY470H1/PSY471H1/PSY473H1/ PSY475H1/PSY480H1/PSY490H1/PSY492H1/ PSY493H1/PSY494H1/PSY497H1

## Notes (Specialist Programs):

1. Students who have completed BCH 210 H 1 with high standing may enrol in 300 - or 400 -series lecture courses with permission of the Department of Biochemistry program coordinator.
2. One independent research or reading course may be used towards the 400-level FCE requirement after approval by the Human Biology program.
3. Students who have completed BCH311H1/CSB349H1/ PSL350H1 with high standing may be eligible to enrol in other MGY 400-series courses with permission from the instructor.

## Environment \& Health Specialist (Science Program)

Jointly sponsored by the Centre for Environment and the Human Biology Program, a collaborative program of the Faculty of Arts \& Science and 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. For the specialist, consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca, or Human Biology Program Office, Wetmore Hall, Room 105, New College, 300 Huron Street, 416-946-7609
This is a Type 1 program. Information on application and acceptance timelines is available in the Registration Handbook and Timetable.
(14 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)
First Year:
Students must complete (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1 and one FCE from among: GGR100H1/GGR101H1/MAT135H1/ MAT136H1/JMB170Y1/PHY131H1/PHY132H1/ PHY151H1/PHY152H1/PHY131H1/PHY132H1 recommended)/PSY100H1.Students should consider selecting an FCE from ECO/GGR/HIS/SOC to maximize elective course choice in later years.
Second Year (see note 1 below):
(BCH210H1, CHM247H1), (BIO220H1+BIO230H1/ BIO255H1), (ENV221H1+ENV222H1/GGR222H1), ENV234H1, JGE236H1, PHL273H1, BIO260H1/ HMB265H1 (see Note 2 below)
Third Year (see note 1 below):
CSB349H1, LMP363H1/NFS284H1/(PSL300H1+PSL301H1), JGE321H1/ENV321Y1, ENV341H1, STA220H1, STA221H1 (see Note 3 below), one FCE from among CHM210H1/ENV235H1/ENV334H1 (see Note 4 below)

## Fourth Year:

1. ENV421H1/HMB396Y0/HMB496Y1/HMB498Y1/ HMB499Y1 or a minimum of 0.5 FCE from any approved departmental or college independent research project
2. JEH455H1

Elective1:
1.5 FCE, approved by the Undergraduate Coordinator of the Centre, including at least one $300+$-series course from: HMB302H1/HMB303H1/HMB304H1/HMB305H1/ HMB314H1/HMB322H1/HMB390H1/HMB496Y1/ HMB498Y1/HMB499Y1/ANA300Y1/ANA301H1/ BCH311H1/CSB349H1/PSL350H1/BCH370H1/ CHM310H1/CSB325H1/CSB327H1/CSB328H1/ CSB331H1/CSB346H1/CSB347H1/CSB350H1/ CSB351Y1/EEB318H1/EEB319H1/EEB321H1/ EEB328H1/EEB362H1/EEB375H1/EEB428H1/ ECO369Y1/ENV315H1/ENV336H1/ENV430H1/ GGR303H1/GGR305H1/GGR333H1/GGR409H1/

## Human Biology

HIS423H1/JGE347H1/JGE348H1/GLG351H1/ GLG450H1/IMM334Y1/LMP301H1/LMP363H1/ MGY377H1/NFS382H1/NFS386H1/NFS488H1/ PCL362H1/PCL389H1/PSL372H1/PSL420H1/ PSY435H1/SOC243H1/SOC244H1/SOC256H1/ SOC309Y1/SOC312H1/SOC363H1 or any other approved course for which the student has appropriate prerequisites. The 1.5 FCE should reflect the particular academic interests of each student.

## E\&H Specialist Program Notes:

1. Many second, third and fourth 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, and on through higher years
2. Students who have taken one of ENV234Y1 or ENV235Y1 need only take 0.5 FCE of CHM210H1, ENV235H1, ENV334H1; students who have taken both of ENV234Y1 and ENV235Y1 need not take any of CHM210H1, ENV235H1, ENV334H1.
3. EEB225H is no longer equivalent to STA221H, as of the 2011-12 academic year.
4. In choosing among CHM210H1, ENV235H1 and ENV334H1, students should pay particular attention to their respective prerequisites.

## Human Biology Major Programs

Enrolment in a Human Biology Major program requires completion of 4.0 FCEs, no minimum GPA and registration in only one Human Biology Major program.

## Genes Genetics \& Biotechnology Major (Science Program)

(8.0 FCE):

First Year (2.5 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, MAT135H1/ PHY131H1/PSY100H1
Higher Years:

1. 3.0 FCE: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{CHM} 247 \mathrm{H} 1$, (BIO220H1+BIO230H1/BIO255H1), HMB265H1/ BIO260H1
2. 1.0 FCE from: (PSL300H1+PSL301H1)/BIO251H1/ (BIO270H1+BIO271H1)
3. 0.5 FCE: GGB core course HMB201H1

300- \& 400-level:
4. 0.5 FCE: GGB core course HMB301H1/HMB311H1/ HMB321H1
5. 0.5 FCE: BCH311H1/CSB349H1/PSL350H1
6. 0.5 FCE from GGB relevant course HMB301H1/ HMB304H1/HMB305H1/HMB311H1/HMB314H1/ HMB321H1/EHJ351H1/EHJ352H1/HMB390H1/ HMB402H1/HMB421H1/HMB431H1/HMB435H1/ HMB436H1/HMB441H1/HMB489H1/HMB499Y1/ ANA300Y1/ANA301H1/BCB410H1*/BCH370H1/ BCH $422 \mathrm{H} 1 / \mathrm{BCH} 426 \mathrm{H} 1 / \mathrm{BCH} 440 \mathrm{H} 1 / \mathrm{BCH} 441 \mathrm{H} 1 /$ BCH444H1/BCH445H1/BCH446H1/CSB325H1/ CSB327H1/CSB328H1/CSB331H1/CSB340H1/ CSB350H1/CSB351Y1/CSB352H1/CSB353H1/ CSB428H1/CSB429H1/CSB435H1/CSB450H1/ CSB458H1/CSB459H1/CSB460H1/CSB472H1/ CSB473H1/CSB474H1/CSB475H1/EEB403H1/ EEB318H1/EEB323H1/EEB331H1/EEB362H1/ EEB460H1/FOR300H1/FOR310H1/FOR410H1/

FOR423H1/GGR305H1/IMM334Y1/LMP301H1/ LMP363H1/LMP404H1/MGY350H1/MGY377H1/ MGY378H1/MGY428H1/MGY451H1/NFS382H1*/ NFS386H1/NFS487H1*/PSL462H1
7. 0.5 FCE from GGB depth course HMB421H1/ HMB431H1/HMB435H1/HMB436H1/HMB441H1/ HMB499Y1
*Some courses require additional prerequisites. Check course listings.

## Global Health Major (Science Program)

## (8.0 FCE):

First Year (2.5 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, MAT135H1/ PHY131H1/PSY100H1
Higher Years:

1. 3.0 FCE: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{CHM} 247 \mathrm{H} 1$;
(BIO220H1+BIO230H1/BIO255H1), HMB265H1/
BIO260H1, (PSL300H1+PSL301H1)/
(BIO270H1+BIO271H1)
2. 0.5 FCE: GH core course HMB203H1

300- \& 400-level:
3. 0.5 FCE: GH core course HMB303H1/HMB323H1
4. 1.0 FCE from GH relevant courses: $\mathrm{HMB} 303 \mathrm{H} 1 /$ HMB304H1/HMB305H1/HMB312H1/HMB314H1/ HMB323H1/HMB325H1/HMB342H1/HMB390H1/ HMB404H1/HMB433H1/HMB434H1/HMB443H1/ HMB444H1/HMB473H1/HMB498Y1/HAJ453H1/ ANA300Y1/ANA301H1/BCH311H1/CSB349H1/ PSL350H1/BCH370H1/CSB325H1/CSB327H1/ CSB328H1/CSB330H1/CSB331H1/CSB346H1/ CSB351Y1/CSB431H1/CSB483H1/EEB318H1/ EEB319H1/EEB321H1*/EEB328H1/EEB362H1/ EEB375H1/EEB428H1/EEB460H1/IMM334Y1/ LMP301H1/LMP363H1/LMP404H1/LMP406H1/ MGY350H1*/MGY377H1/MGY378H1*/NFS382H1*/ NFS386H1/NFS487H1*/PCL389H1*/PHC320H1*/ PSL372H1/PSL420H1/PSL421H1/PSY321H1*/ UNI440H1/UNI464H1
5. 0.5 FCE from GH depth course $\mathrm{HMB} 433 \mathrm{H} 1 / \mathrm{HMB} 434 \mathrm{H} 1 /$ HMB443H1/HMB498Y1/HAJ453H1
*Some courses require additional prerequisites. Check course listings.

## Health \& Disease Major (Science Program)

(8.0 FCE):

First Year (2.5 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, MAT135H1/ PHY131H1/PSY100H1
Higher Years:

1. 3.0 FCE: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{CHM} 247 \mathrm{H} 1$, (BIO220H1+BIO230H1/BIO255H1), HMB265H1/ BIO260H1, (PSL300H1+PSL301H1)/ (BIO270H1+BIO271H1)
2. 0.5 FCE: H\&D core course HMB202H1

300- \& 400-level:
3. 0.5 FCE: H\&D core course HMB302H1/HMB312H1/ HMB314H1/HMB322H1
4. 1.0 FCE H\&D-relevant courses: HMB302H1/HMB304H1/ HMB305H1/HMB306H1/HMB312H1/HMB314H1/ HMB322H1/HMB325H1/HMB342H1/HMB390H1/ HMB322H1/HMB402H1/HMB404H1/HMB406H1/

HMB422H1/HMB432H1/HMB434H1/HMB435H1/
HMB436H1/HMB440H1/HMB441H1/HMB443H1/ HMB470H1/HMB471H1/HMB472H1/HMB473H1/ HMB489H1/HMB499Y1/HAJ453H1/ANA300Y1/ ANA301H1/BCH311H1/CSB349H1/PSL350H1/ BCH370H1/BCH426H1*/BCH441H1*/BCH444H1*/ BCH446H1*/CSB325H1/CSB327H1/CSB328H1/ CSB330H1/CSB331H1/CSB332H1/CSB346H1/ CSB347H1/CSB351Y1/CSB352H1/CSB431H1/ CSB435H1/CSB472H1/CSB473H1/CSB483H1/ EEB318H1/EEB323H1/EEB331H1/EEB375H1/ EEB460H1/IMM334Y1/LMP301H1/LMP363H1/ LMP404H1/LMP406H1/LMP412H1/MGY350H1*/ MGY377H1/MGY378H1*/NFS382H1*/NFS386H1/ NFS486H1*/PCL389H1*/PHC320H1*/PSL372H1/ PSL420H1/PSL421H1/PSL425H1/PSL470H1/PSL472H1/ PSY333H1*/PSY341H1*/UNI440H1
5. 0.5 FCE H\&D depth course: HMB402H1/HMB406H1/ HMB422H1/HMB432H1/HMB434H1/HMB435H1/ HMB436H1/HMB440H1/HMB441H1/HMB443H1/ HMB452H1/HMB470H1/HMB471H1/HMB472H1/ HMB473H1/HMB462H1/HMB489H1/HMB499Y1/ HAJ453H1/JEH455H1
*Some courses require additional prerequisites. Check course listings.

## Health Care Ethics Major (Science Program)

(8.0 FCE):

First Year (2.5 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, MAT135H1/ PHY131H1/PSY100H1
Higher Years:

1. 3.0 FCE: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{CHM} 247 \mathrm{H} 1$, (BIO220H1+BIO230H1/BIO255H1), HMB265H1/ BIO260H1, (PSL300H1+PSL301H1)/ ( $\mathrm{BIO} 270 \mathrm{H} 1+\mathrm{BIO} 271 \mathrm{H} 1$ )
2. 0.5 FCE: HCE core course PHL281H1/PHL275H1/ HPS250H1
300- \& 400-level:
3. 0.5 FCE: HCE core course HMB306H1
4. 0.5 FCE: HCE relevant humanities course PHL380H1/ PHL381H1/PHL382H1/PHL383H1/PHL384H1/ HPS300H1/HPS318H1/HPS319H1
5. 0.5 FCE: HCE relevant science course HMB303H1/ HMB305H1/HMB314H1/HMB322H1/HMB325H1/ HMB342H1/HMB390H1/HMB402H1/HMB422H1/ HMB432H1/HMB434H1/HMB440H1/HMB444H1/ JEH455H1/HMB470H1/HMB471H1/HMB472H1/ HMB473H1/HMB499Y1*/ANA300Y1/ANA301H1/ BCH311H1/CSB349H1/PSL350H1/BCH370H1/ CSB325H1/CSB327H1/CSB328H1/CSB331H1/ CSB346H1/CSB351Y1/EEB318H1/EEB319H1/ EEB321H1/IMM334Y1/LMP301H1/NFS382H1*/ NFS386H1/NFS490H1*/PSL372H1/PSL420H1/ PSY370H1
6. 0.5 FCE: HCE depth course HMB406H1
*Some courses require additional prerequisites. Check course listings.

## Human Biology Major (Science Program)

( 7.5 to 8 full courses or their equivalent)
First Year:

1. (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/ CHM151Y1
2. 0.5 to 1.0 FCE from: JMB170Y1/(MAT135H1, MAT136H1)/(PHY131H1+PHY132H1)/ (PHY151H1+PHY152H1)/PSY100H1/VIC170Y1/ VIC171Y1
Second Year:
3. $\mathrm{HMB} 265 \mathrm{H} 1 / \mathrm{BIO} 260 \mathrm{H} 1, \mathrm{BCH} 210 \mathrm{H} 1$, (BIO220H1+BIO230H1/BIO255H1)
Third Year:
4. 1.0 FCE from: $\mathrm{BIO} 251 \mathrm{H} 1 /(\mathrm{BIO} 270 \mathrm{H} 1+\mathrm{BIO} 271 \mathrm{H} 1) /$ (PSL300H1+PSL301H1)
5. $1.0300+$ level FCE from: BIO; BOT; EEB; CSB; $\mathrm{HMB}^{*}$; PSY; ZOO
6. $1.0300+$ level FCE from: ANA; BCH; HMB*; IMM; LMP; MGY; NFS; NRS; PCL; PSL
*all joint Human Biology courses included

## Neuroscience Major (Science Program)

(8.0 FCE):

First Year (3.0 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1)/CHM151Y1, MAT135H1/ PHY131H1, PSY100H1
Higher Years:

1. 2.0 FCE: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{CHM} 247 \mathrm{H} 1$, (BIO220H1+BIO230H1/BIO255H1), HMB265H1/ BIO260H1
2. 0.5 FCE: NRS core course $\mathrm{HMB} 200 \mathrm{H} 1 / \mathrm{HMB} 220 \mathrm{H} 1$
3. 0.5 FCE from 200 -series PSY course

300- \& 400-level:
4. 0.5 FCE: NRS core course HMB300H1/HMB310H1/ HMB320H1
5. 0.5 FCE: PSL300H1
6. 0.5 FCE from NRS relevant course $\mathrm{HMB} 300 \mathrm{H} 1 /$ HMB310H1/HMB320H1/HMB390H1/HMB400Y1/ HMB420H1/HMB430H1/HMB440H1/HMB471H1/ HMB473H1/HMB489H1/ANA300Y1/ANA301H1/ BCH311H1/CSB349H1/PSL350H1/BCH446H1/ CSB325H1/CSB328H1/CSB332H1/CSB346H1/ CSB347H1/CSB425H1/CSB428H1/CSB430H1/ CSB445H1/EEB322H1*/JLP315H1/LMP410H1/ NFS489H1*/PCL475Y1/PSL372H1/PSL432H1/ PSL440Y1/PSL443H1/PSL444Y1/PSL452H1/PSL472H1/ PSY 300-series*/PSY460H1*/PSL470H1*
7. 0.5 FCE from NRS depth course HMB400Y1/ HMB420H1/HMB430H1/HMB440H1/HMB471H1/ HMB473H1/CSB425H1/CSB428H1CSB430H1/ CSB445H1/PSL432H1/PSL452H1/PSL472H1/ PSY460H1*/PSY470H1*/PSY497H1*
*Some courses require additional prerequisites. Check course listings.

## Environment \& Health Major (Science program)

(8.0 FCE):

First Year (2.5 FCE): (BIO120H1+BIO130H1), (CHM138H1+CHM139H1), GGR100H1/GGR101H1/ GLG102H1/MAT135H1/PHY131H1/PSY100H1
Higher Years:

1. 2.0 FCE: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{CHM} 247 \mathrm{H} 1$, (BIO220H1+BIO230H1/BIO255H1), HMB265H1/ BIO260H1
2. 1 FCE: E\&H core courses from among: ENV221H1/ ENV222H1/GGR222H1/ENV234H1/JGE236H1
300- \& 400-level:
3. 0.5 FCE: E\&H course ENV341H1
4. 1.0 FCE: (PSL300H1+PSL301H1)
5. 0.5 FCE from E\&H-relevant course HMB302H1/ HMB303H1/HMB304H1/HMB305H1/HMB314H1/ HMB322H1/HMB390H1/HMB496Y1/HMB498Y1*/ HMB499Y1*/ANA300Y1/ANA301H1/BCH311H1*/ CSB349H1/PSL350H1/BCH370H1/CHM310H1/ CSB325H1/CSB327H1/CSB328H1/CSB331H1/ CSB346H1/CSB347H1/CSB350H1/CSB351Y1/ EEB318H1/EEB319H1/EEB321H1*/EEB328H1/ EEB362H1/EEB375H1/EEB428H1/ENV315H1/ ENV336H1/GGR303H1/GGR305H1/GGR409H1/ JGE347H1/JGE348H1/GLG351H1/GLG450H1/ IMM334Y1/LMP301H1/LMP363H1/MGY377H1/ NFS382H1*/NFS386H1/NFS488H1*/PSL372H1/ PSL420H1/PSY435H1*
6. 0.5 FCE: E\&H depth course JEH455H1
*Some courses require additional prerequisites. Check course listings.

## Notes (Major Programs):

Other 400-level courses may be accepted with permission from the Human Biology Program.

## Human Biology Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
HMB200H1 Introduction to Neuroscience [24L/12T] 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. Prerequisite: (BIO120H1+BIO130H1)/BIO150Y1, PSY100H1 Corequisite: Pre- or co-requisite: PSL300H1/PSL302Y1/
(BIO270H1+BIO271H1)
Exclusion: PSY290H1/HMB204H1/HMB220H1
DR=SCI; BR=4
$\begin{array}{ll}\text { HMB201H1 } & \begin{array}{l}\text { Introduction to Genes, Genetics \& } \\ \\ \text { Biotechnology[24L/12T] }\end{array}\end{array}$
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: $(\mathrm{BIO} 120 \mathrm{H} 1+\mathrm{BIO} 130 \mathrm{H} 1)$
Corequisite: Pre- or co-requisite: (BIO220H1+BIO230H1/
BIO255H1)
DR=SCI; BR=4

## HMB202H1 Introduction to Health and Disease [24L/12P]

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 are necessary for understanding the dynamic nexus of human health and disease.
Prerequisite: $(\mathrm{BIO} 120 \mathrm{H} 1+\mathrm{BIO} 130 \mathrm{H} 1) / \mathrm{BIO} 150 \mathrm{Y} 1$
DR=SCI; BR=4
HMB203H1 Introduction to Global Health [24L/12T]
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: ( $\mathrm{BIO} 120 \mathrm{H} 1+\mathrm{BIO} 130 \mathrm{H} 1) / \mathrm{BIO} 150 \mathrm{Y} 1$
DR=SCI; BR=4
HMB205H1 Scientific Controversies (formerly HMB210H1) [18L/6S]
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 are sourced from current issues.
Prerequisite: $(\mathrm{BIO} 120 \mathrm{H} 1+\mathrm{BIO} 130 \mathrm{H} 1) / \mathrm{BIO} 150 \mathrm{Y} 1$
Corequisite: Pre- or co-requisite: (BIO220H1+BIO230H1/
$\mathrm{BIO} 255 \mathrm{H} 1) /(\mathrm{BIO} 240 \mathrm{H} 1+\mathrm{BIO} 241 \mathrm{H} 1), \mathrm{BCH} 210 \mathrm{H} 1$
Exclusion: HMB210H1
DR=SCI; BR=4
HMB220H1 Introduction to Human Neurobehavioural Biology (formerly HMB204H1) [24L/12T]
An introductory course that explores the neuroanatomy and neurophysiology of selected types of human behaviour. Topics (may vary yearly) include addiction, sexual behaviour, and autism. Critical analysis and debating of the available scientific evidence is used to enrich learning.
Prerequisite: $(\mathrm{BIO} 120 \mathrm{H} 1+\mathrm{BIO} 130 \mathrm{H} 1) / \mathrm{BIO} 150 \mathrm{Y} 1, \mathrm{PSY} 100 \mathrm{H} 1$ Exclusion: HMB200H1/HMB204H1
DR=SCI; BR=4
HMB265H1 General \& Human Genetics [24L/12T]
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.
Prerequisite: ( $\mathrm{BIO} 120 \mathrm{H} 1+\mathrm{BIO} 130 \mathrm{H} 1) / \mathrm{BIO} 150 \mathrm{Y} 1$
Corequisite: ( $\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1) /$
( $\mathrm{BIO} 240 \mathrm{H} 1+\mathrm{BIO} 241 \mathrm{H} 1$ )
Exclusion: BIO260H1, BIO207H5
DR=SCI; BR=4
HMB300H1 Neurobiology of Behaviour [24L/12T]
This intermediate course in neuroscience focuses on higher brain functions and mechanisms underlying human and animal behaviours. Topics may include advanced neurophysiological, neuroanatomical and genetic basis of various cortical functions, including learning and memory, "mirroring", and executive function. Experimental techniques used in neuroscience research such as electrophysiological
recordings, brain imaging and neurogenetics are emphasized.
Prerequisite: HMB200H1/HMB204H1/HMB220H1
DR=SCI; BR=4
HMB301H1 Biotechnology [24L/12T]
Students gain an appreciation for how science, business, government and society drive the development of biotechnology products. Topics include stem cells and regenerative medicine, diagnostics, cancer therapy, biotechnology in the developing world, antibiotic alternatives, and patents.
Prerequisite: HMB201H1
DR=SCI; BR=4

## HMB302H1 Vertebrate Histology and Histopathology [24L/36P]

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: ( $\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1$ )/
(BIO240H1+BIO241H1)
DR=SCI; $\mathrm{BR}=4$

## HMB303H1 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 form a framework for approaching these issues.
Prerequisite: 3rd year status or higher
DR=SOC SCI/SCI; BR=3
HMB304H1 Biomedical Visualization 1 [12L/24P]
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.
Prerequisite: ( $\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1) /$
(BIO240H1+BIO241H1)
Exclusion: HSC302H5
DR=SCI; BR=4

## HMB305H1 Scientific Perspectives [24L/3P]

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, are used to illustrate the process of scientific research.
Prerequisite: ( $\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1$ )/
(BIO240H1+BIO241H1), BCH210H1, HMB265H1
DR=SCI; BR=4

## HMB306H1 Epistemological Ethics in Medicine [14L/10S]

Decisions in medicine are affected by the practice of science. For example, experimental design, knowledge acquisition and claims, standards of proof, and regulatory processes can raise ethical issues in clinical practice. This is clearly evident in cases where the negative impact of a disease on health is
high. This course focuses on these non-bioethical problems in biomedical science.
Prerequisite: (BIO220H1+BIO230H1/BIO255H1)/ (BIO240H1+BIO241H1), HMB265H1/BIO260H1, HPS250H1/PHL275H1/PHL281H1
Corequisite: PSL300H1+PSL301H1/PSL302Y1/ (BIO270H1+BIO271H1)
DR=SCI; BR=4

## HMB310H1 Laboratory in Neuroscience [12L/36P]

A laboratory course based on current research techniques for students in the Neuroscience Specialist and Major programs. Lab topics may include human brain imaging and disorders; animal behaviour, electrophysiology and cell culture; and microarray analysis of neural development.
Prerequisite: HMB200H1/HMB204H1/HMB220H1
Exclusion: PSY399H1, NRS302H1, HMB311H1/HMB312H1/
HMB314H1
DR=SCI; BR=4
HMB311H1 Laboratory in Genes, Genetics \& Biotechnology [12L/36P]
A laboratory course based on current research techniques for students in the Genes Genetics \& Biotechnology Specialist and Major programs. Lab topics may include basic microbiology, molecular biology and animal cell culture techniques, nutrigenomics; and microarray analysis of altered gene expression.
Prerequisite: HMB201H1
Exclusion: HMB310H1/HMB312H1/HMB314H1
DR=SCI; BR=4

## HMB312H1 Laboratory in Health and Disease [12L/36P]

A laboratory course based on current research techniques for students in the Health \& Disease Specialist and Major programs. Lab topics may include basic microbiology, molecular biology and animal cell culture techniques, immunocytochemistry, microarrays, and histological techniques.
Prerequisite: HMB202H1
Exclusion: HMB310H1/HMB311H1/HMB314H1
DR=SCI; BR=4
HMB314H1 Laboratory in Human Biology [12L/36P]
Students analyze whole body, cellular, and molecular responses to stress. Techniques range from those standard in medical practice (e.g., blood pressure) to those used in cutting-edge research laboratories (e.g., microarrays). Students gain technical and analytical skills as they use these laboratory techniques to design and carry out individual and group experiments.
Prerequisite: ( $\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1$ )/
(BIO240H1+BIO241H1), HMB265H1/BIO260H1
Corequisite: Pre- or Co-requisite: (PSL300H1+PSL301H1)/
PSL302Y1/(BIO270H1+BIO271H1)
Exclusion: HMB310H1/HMB311H1/HMB312H1
DR=SCI; BR=4
HMB320H1 Neuroanatomy [24L/8T/16P]
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.
Prerequisite: HMB200H1/HMB204H1/HMB220H1/PSL300H1/ PSL302Y1/(BIO270H1+BIO271H1)
Exclusion: NRS202H1

## Human Biology

## DR=SCI; BR=4

HMB321H1 Topics in Genetics [24L/12T]
The overall theme of this course is human genetics in disease. Topics include the molecular basis of human disease, using model organisms to identify disease-related genes, and genetic counseling. Expert guest lectures from clinical and basic sciences as well as small group work in tutorials build in-depth understanding.
Prerequisite: $\mathrm{BIO} 260 \mathrm{H} 1 / \mathrm{HMB} 265 \mathrm{H} 1$
DR=SCI; BR=4
HMB322H1 Topics in Health \& Disease [24L/12T]
Explore the scientific basis and interdisciplinary healthcare practices of several diseases (diseases vary by year).
Discuss current issues related to the biology and the impact of these diseases.
Prerequisite: Prerequisite: (BIO220H1+BIO230H1/
$\mathrm{BIO} 255 \mathrm{H} 1) /(\mathrm{BIO} 240 \mathrm{H} 1+\mathrm{BIO} 241 \mathrm{H} 1), \mathrm{HMB} 265 \mathrm{H} 1 /$
BIO260H1, cGPA 3.3
Corequisite: Pre- or co-requisite: (PSL300H1+PSL301H1)/ (BIO270H1+BIO271H1)
DR=SCI; $\mathrm{BR}=4$

## HMB323H1 Global Health Research [24L/12T]

Globalization of health problems impacts biomedical research. Current global health research advances are explored and global health research skills are developed. Both provide background preparation for global health research, particularly in international settings.
Prerequisite: 3rd-year status; HMB203H1
DR=SCI; BR=4

## HMB325H1 Statistics Applied to Human Biology [24L/24T]

Find out how to use statistics in your research, and critically assess published data using statistical concepts. The examples used in these lectures and small-group sessions are taken solely from human biology studies.
Prerequisite: First Year math or physics
course, (BIO220H1+BIO230H1/BIO255H1)/
(BIO240H1+BIO241H1), HMB265H1/BIO260H1
Exclusion: ECO220Y1/ECO227Y1/GGR270H1/PSY201H1/
SOC300Y1/ STA220H1/STA250H1/STA261H1/STA248H1
DR=SCI; BR=4

## HMB342H1 Epidemiology of Health \& Disease

 [24L/24T]This course 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 health problems will be illustrated using biomedical and public health examples.
Prerequisite: HMB202H1/HMB203H1
Exclusion: UNI373H1, HMB442H1
Recommended Preparation: HMB325H1 or other statistics course
DR=SCI; BR=4
JNH350H1 AIDS: Challenges and Successes (formerly NEW350H1) [24L]
Explores the pandemic of AIDS in Africa through a social science lens. (Given by Human Biology and New College) Exclusion: NEW350H1
Recommended Preparation: NEW150Y1
DR=HUM/SOC SCI/SCI; BR=3

## EHJ352H1 Evolution of the Human Genome [24L/12T]

Human genome diversity and evolution with a focus on current research. The course integrates applications of human evolutionary genomics to the understanding of human history and adaptation, the causes of disease, and genome structure and function. Topics include: comparative genomics, population genomics of adaptation, association mapping, repetitive/selfish DNA, and gene duplication.
Prerequisite: ( $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 220 \mathrm{H} 1) / 150 \mathrm{Y}, \mathrm{BIO} 260 \mathrm{H} 1 /$ HMB265H1
DR=SCI; BR=4

## HMB390H1 Scientific Communication Skills (formerly HMB397H1) [4L/20S]

Increase fundamental skills in analytical and critical analysis of current topics in the biological/clinical sciences through the use of written and communication skills. Assignments focus on assessing primary scientific articles, oral presentation, written reviews, grant proposals, and peer evaluation to enhance effective communication skills.
Prerequisite: $(\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1 / \mathrm{BIO} 255 \mathrm{H} 1) /$
(BIO240H1+BIO241H1), HMB200H1/HMB201H1/
HMB202H1/HMB203H1/HMB205H1/HMB220H1/
HMB265H1
Exclusion: HMB397H1
DR=SCI; BR=4

## HMB394Y0 International Research Project in Human Biology [TBA]

Your individual, independent research project is supervised by a faculty member in an approved partner university. This unique opportunity to conduct a lab-based research project is open to students in any Human Biology program.
Prerequisite: At least 8.5 FCEs including relevant courses in human biology.
DR=SCI; BR=None
HMB395Y1 Human Biology Research Project [TBA]
A research project is supervised by a faculty member of the
Faculty of Arts and Science or the Faculty of Medicine.
Prerequisite: 3rd year status; $\mathrm{BCH} 210 \mathrm{H} 1 /$
CHM247H1, (BIO220H1+BIO230H1/BIO255H1)/
(BIO240H1+BIO241H1), HMB265H1/BIO260H1, and
permission of the Human Biology Program from which
application forms may be obtained.
DR=SCI; BR=None

## HMB396Y0 International Research Project in Human Biology [TBA]

Your individual, independent research project is supervised by a faculty member in an approved partner university. This unique opportunity to conduct a lab-based research project is open to students in any Human Biology program.
Prerequisite: An approved 300-series science laboratory course and permission of the Human Biology Program from which application forms may be obtained.
DR=SCI; BR=None

## HMB399Y0 Independent Experiential Study Project [TBA]

An Independent Experiential Study Project for students in Human Biology. An instructional-supervised group project in an international off-campus setting.
Prerequisite: 10 FCE and permission of the Human Biology
Program from which application forms may be obtained. DR=SCI; BR=None

## HMB400Y1 Project in Neuroscience

Laboratory research project on a neuroscience topic is supervised by a faculty member of the Faculty of Arts and Science or the Faculty of Medicine.
Prerequisite: 4th year status, an approved 300+ series science laboratory course and permission of the Human Biology Program from which application forms may be obtained.

## DR=SCI; BR=4

HMB402H1 Bench-to-bedside: translating lab research into clinical practice [18L/6S]
The bridge between basic scientific research and clinical practice integrates fundamental knowledge about molecular/ cellular mechanisms and clinical disorders to increase the potential for new medical treatments, therapies and interventions as well as understanding of disease processes Case applications delivered by experts illustrate how promising laboratory discoveries transform medicine and medical science.
Prerequisite: 4th year status; HMB302H1/HMB312H1/
HMB314H1/HMB322H1
DR=SCI; BR=4
HMB404H1 Biomedical Visualization 2 [12L/24P]
This interdisciplinary course extends and applies the principles of HMB304H1 Biomedical Visualization 1 to enhance the translation of biomedical knowledge into visual communication. It encompasses medical illustration in health care, education, research and promotion. Nearby multidisciplinary resources are instrumental for in-depth design projects that integrate art, science, and technology.
Prerequisite: 4th year status; HMB304H1
DR=SCI; BR=4

## HMB406H1 Health Care Ethics [8L/16S]

Since research involving human subjects lays the foundation for innovation in modern health care, this course examines health care ethics along a continuum from bench to bedside. Ethical issues are discussed in the context of specific cases involving human research, as well as contemporary clinical practice.
Prerequisite: 4th year status, HMB306H1/other ethics courses may be considered with permission from the Human Biology Program
DR=SCI; BR=4
$\begin{array}{ll}\text { HMB420H1 } & \text { Seminar in Neurobiology of Behaviour } \\ & {[12 \mathrm{~L} / 12 \mathrm{~S}]}\end{array}$
This seminar course focuses on recent research into the neurobiology underlying human behaviour. A variety of normal and abnormal human behaviours are studied (e.g., voluntary action, moral cognition, hedonism, aggression).
Prerequisite: 4th year status; HMB300H1/HMB310H1/
HMB320H1
DR=SCI; BR=4
HMB421H1 Seminar in Genes Genetics \& Biotechnology [12L/12S]
Theme based lecture and seminar course underlining current medical research in relation to the areas of genes, genetics and biotechnology. Topics vary yearly.
Prerequisite: 4th year status; HMB301H1/HMB311H1/ HMB321H1
$\mathrm{DR}=\mathrm{SCI} ; \mathrm{BR}=4$

## HMB422H1 Seminar in Health \& Disease [16L/8S]

This course focuses on current medical research related to human disease. Faculty from the Department of Anaesthesia, Faculty of Medicine present their own perioperative research. The potentially profound health effects of anaesthesia, pain management, and the control of the cardiorespiratory system essential for most surgery are also highlighted.
Prerequisite: 4th year status; HMB302H1/HMB312H1/
HMB314H1/HMB322H1
DR=SCI; BR=4
HMB430H1 Trends in Neuroscience [18L/6S]
Current research covering the breadth of neuroscience is show cased by members of the Collaborative Program in Neuroscience. These topical reports cover the spectrum from molecular through genetic, cellular, developmental, systems, behavioural and modelling. As well, approaches to studying neurodegenerative diseases and clinical neurophysiology are introduced.
Prerequisite: 4th year status; HMB300H1/HMB310H1/
HMB320H1
DR=SCI; BR=4
HMB431H1 Biotechnology: Interface between Science \& Industry [16L/8S]
Students use case studies facilitated by biotechnology experts to explore the integration of biological science with business. The focus is 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: 4th year status; HMB301H1
DR=SCI; BR=3
HMB432H1 Topics in Histology \& Histopathology [12L/12S]
Lecture and seminar course emphasizing current research. Topics may include the digestive system, cardiovascular system, respiratory system, stem cells, and neoplasia. Topics vary depending on class interest.
Prerequisite: 4th year status; HMB302H1/HMB312H1/
HMB322H1
DR=SCI; $\mathrm{BR}=4$
HMB433H1 Topics in Global Health [16L/8S]
Seminar and theme based course examining the opportunity to apply basic knowledge of biological determinants of disease to designing health system interventions and informatics that can have a global impact in the near term. Prerequisite: 4th year status; HMB303H1/HMB323H1 DR=SCI; BR=4
HMB434H1 Complementary and Alternative Medicine [20L/4S]
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 multidisciplinary and culturally-specific health services in the treatment of illness and disease, and an expanded concept of health, illness, and wellness.
Prerequisite: 4th year status; HMB302H1/HMB303H1/
HMB312H1/HMB322H1/HMB323H1
DR=SCI; BR=4

## Human Biology

## HMB435H1 Selected Topics in Molecular Cell Biology [16L/8S]

Theme-based lecture and seminar course underlining current basic science research in the area of molecular and cell biology as related to human disease. Topics focus on the impact of fundamental processes (e.g., cell migration) on the cellular and molecular aspects of physiology and pathophysiology in a variety of systems (e.g., immune, nervous).
Prerequisite: 4th year status; CSB349H1/PSL350H1/
BCH311H1
DR=SCI; BR=4
HMB436H1 Human Fungal Interaction [16L/6P/8S]
Lecture, seminar, and field course that studies the interactions between humans and fungi. Topics focus on fungal genetics and evolution, and the effects of fungi on human physiology. In addition, the commercialization and biotechnology of fungi are explored.
Prerequisite: 4th year status; CSB349H1/PSL350H1/
BCH311H1, (PSL300H1+PSL301H1)/PSL302Y1/
(BIO270H1+BIO271H1)

## DR=SCI; BR=4

## HMB440H1 Dementia [18L/10P/6S]

In patients with dementia, intellectual, social and occupational functioning deteriorate. We explore in depth the multi-disciplinary aspects of dementia (clinical, genetic, molecular, social) with a focus on the most common cause of dementia, Alzheimer's disease. A service-learning opportunity is integrated.
Prerequisite: 4th year status; HMB300H1/HMB302H1/
HMB310H1/HMB314H1/HMB312H1/HMB320H1/
HMB322H1
DR=SCI; $\mathrm{BR}=4$
HMB441H1 Genetics of Human Disease [24L]
Toronto researchers present current insight into the genetics of specific human diseases: single gene (e.g., cystic fibrosis), chromosome (e.g, Down syndrome) and multifactorial inheritance (e.g., heart disease) disorders.
Prerequisite: 4th-year status; HMB265H1/BIO260H1;
HMB301H1/HMB302H1/HMB311H1/HMB312H1/
HMB314H1/HMB321H1/HMB322H1
Recommended Preparation: HMB321H1
DR=SCI; BR=4

## HMB443H1 Global Hidden Hunger [18L/6S]

Vitamin and mineral deficiencies, termed 'hidden hunger', affect about half the world's population. Explore the global nature, catastrophic consequences, and causes of these deficiencies. Discuss formulation and implementation of international, national, and local policies to alleviate 'hidden hunger' especially in infants and young children.
Prerequisite: 4th year status, HMB303H1/HMB323H1 or NFS382H1
DR=SCI; BR=3
HMB444H1 Human Biology and Human Destiny: Science, Popular Science, and Science Fiction [24S]
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 examine how biological concepts and their development affected life, society, and the future of humanity.

Prerequisite: 4th year status, ( $\mathrm{BIO} 220 \mathrm{H} 1+\mathrm{BIO} 230 \mathrm{H} 1 /$ $\mathrm{BIO} 255 \mathrm{H} 1) /(\mathrm{BIO} 240 \mathrm{H} 1+\mathrm{BIO} 241 \mathrm{H} 1)$ ) HMB 300-level course
DR=SCI; BR=3
HMB452H1 Personalized Medicine [12L/12S]
Clinical medicine is making rapid progress in predicting individual patients' disease risk, prevention, diagnosis and treatment. This new health care delivery requires overcoming major science and policy challenges to pave the way for its navigation by professionals and patients. Focus is on the significance of current breakthrough applications (e.g., nanoscale DNA sequencing).
Prerequisite: 4th year status, HMB302H1/HMB312H1/
HMB314H1/HMB322H1
DR=SCI; BR=3
HAJ453H1 AIDS: A Global Perspective [6L/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 politicaleconomic frameworks. The impact of globalization and structural inequality on local cultures and lifestyles provides an essential backdrop to the discussions.
Prerequisite: 4th year status, HMB300H1/HMB301H1/
HMB302H1/HMB303H1/HMB323H1 or 0.5 FCE
300-series ANT course
DR=SOC SCI/SCI; BR=3

## JEH455H1 Current Issues in Environment and Health

 [16L/8S]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: 4th year status, ENV341H1/HMB302H1/
HMB312H1/HMB314H1/HMB322H1
DR=SCI; BR=4
HMB462H1 Topics in Epidemiology [12L/12S]
The focus is on the theory and application of biostatistics and epidemiology to current developments in special topics in substantive areas of epidemiology (e.g., chronic disease, environmental \& occupational health, infectious disease, methods, social).
Prerequisite: 4th-year status; HMB342H1
DR=SCI; BR=4

## HMB470H1 Exercise and Sports Medicine [20L/4S]

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: 4th year status, HMB300H1/HMB301H1/
HMB302H1/HMB303H1/HMB320H1/HMB321H1/
HMB322H1, (PSL300H1+PSL301H1)/PSL302Y1
DR=SCI; BR=4
HMB471H1 Performance Enhancement [20L/4S]
Enhancing performance has broad appeal. This course
explores current developments for achieving peak
performance academically, physically and emotionally. We focus on the scientific basis of the links between performance and stress, and of the benefits and risks of pharmacological methods to achieve performance enhancement. Various stress management skills are introduced.
Prerequisite: 4th year status, HMB300H1/HMB301H1/
HMB302H1/HMB303H1/HMB306H1/HMB320H1/
HMB321H1/HMB322H1, (PSL300H1+PSL301H1)/
PSL302Y1
DR=SCI; BR=4
HMB472H1 Exercise Physiology [20L/4S]
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: 4th year status, HMB300H1/HMB301H1/
HMB302H1/HMB303H1/HMB320H1/HMB321H1/
HMB322H1, (PSL300H1+PSL301H1)/PSL302Y1
DR=SCI; BR=4
HMB473H1 Exercise and Mental Health [18L/10P/6S]
Mental well-being is a critical element of total health. We explore the evidence underpinning the role of physical activity in the avoidance of mental disorders, recovery from mental disorders, and the quality of life of those with or without mental disorders. A service learning component in local organizations enriches learning.
Prerequisite: 4th year status, HMB300H1/HMB301H1/
HMB302H1/HMB303H1/HMB306H1/HMB32OH1/
HMB321H1/HMB322H1, PSL300H1/PSL302Y1
DR=SCI; BR=4
HMB489H1 Advanced Laboratory in Human Biology [72P]
Building on their experience in 3rd-year labs, students participate in inquiry-based laboratory experiments in diverse areas of current human biology research. Open to students in any Human Biology program.
Prerequisite: 4th year status; HMB310H1/HMB311H1/ HMB312H1/HMB314H1
DR=SCI; BR=4
HMB490H1 Scientific Communication 2 [4L/20S]
Enhance and refine fundamental skills in analytical and critical analysis of current topics in the biological/clinical sciences through the use of written and communication skills. Assignments focus on assessing primary scientific articles, oral presentation, written reviews, grant proposals, and peer evaluation to enhance effective communication skills. Prerequisite: 4th year status, HMB390H1/HMB397H1 or demonstrated writing experience with permission from the program.

## DR=SCI; BR=4

## HMB491H1 Literature Research Project [TBA]

Explore an area of current scientific investigation by in-depth reading and manuscript writing under the supervision of a faculty member of the Faculty of Arts and Science or the Faculty of Medicine.
Prerequisite: 4th year status; HMB397H1/HMB390H1 or demonstrated writing experience and permission of the Human Biology Program from which application forms may be obtained.
DR=SCI; BR=4

## HMB496Y1 Summer Research Project in Human Biology

 [TBA]An independent summer research project is supervised by a faculty member of the Faculty of Arts and Science or the Faculty of Medicine.
Prerequisite: 4th year status; an approved 300+ series science laboratory course and permission of the Human Biology Program from which application forms may be obtained.
DR=SCI; BR=None
HMB498Y1 Project in Global Health [TBA]
A research project on issues of global health is supervised by a faculty member of the Faculty of Arts and Science or the Faculty of Medicine.
Prerequisite: 4th year status, HMB203H1/HMB303H1/
HMB323H1 and permission of the Human Biology
Program from which application forms may be obtained.
DR=SOC SCI/SCI; BR=None
HMB499Y1 Project in Human Biology [TBA]
A research project is supervised by a faculty member of the
Faculty of Arts and Science or the Faculty of Medicine.
Prerequisite: 4th year status, an approved 300+ series science laboratory course and permission of the Human Biology Program from which application forms may be obtained.
DR=SCI; BR=None

## Given by the Centre for European, Russian and Eurasian 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 the great Indo-European language territory.
Despite the isolation that might have been imposed by the uniqueness of their language, Hungarians have been engaged with, and participants in, greater European affairs since their arrival in the Carpathian basin more than a thousand years ago. Hungarians have made signal contributions in the fields of arts, science, and mathematics, winning Nobel prizes in Chemistry (4), Medicine (3), Physics (3), Economics, and Literature. In the music world the names Bártok, Kodály, Lehár, Liszt, Széll, Ormandy, Schiff, and many others are internationally famous. Leo Szilárd, Edward Teller, Paul Erdõs, and John von Neumann are famous figures in theoretical physics and mathematics. Joseph Biró developed the ball-point pen and to this day the British call a ball-point pen, a biro. Hungarians have also become famous in sports, particularly soccer, boxing, and fencing, and in the world of cinema. And who has not played with the Rubik's cube?

Hungarian studies at the University of Toronto focus on the language, literature, and culture of Hungary and on the international role of Hungary and Hungarians - particularly on Hungarian immigration to Canada. For many of the courses no prior knowledge of the Hungarian language is necessary, making them easily accessible also to students in other programs.

Program Coordinator:
Professor Robert Austin, robert.austin@utoronto.ca

## Hungarian Programs

Enrolment in the Hungarian program requires the completion of 4.0 courses.

## Hungarian Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(6 full courses or their equivalent including two FCEs in Hungarian language study)
First Year:
HUN100Y1
Higher Years:

1. HUN200Y1, HUN310Y1, HUN320Y1
2. Two courses from: HIS241H1, HIS251Y1, HIS389H1 (Hungarian History), HIS453H1; HUN355H1, HUN345H1, HUN355H1, HUN356H1, HUN440Y1, HUN450H1, HUN455H1; INI381H1

## Hungarian Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including at least one at the $300+$ level)
Four courses from: HUN100Y1, HUN200Y1, HUN310Y1, HUN320Y1, HUN335H1, HUN345H1, HUN351H1, HUN440Y1, HUN450H1, HUN455H1; HIS241H1, HIS251Y1, HIS389H1 (Hungarian History), HIS453H1; INI381H1

## Faculty of Arts \& Science Language Citation

The Hungarian program participates in the Faculty of Arts and Science's Language Citation initiative. Students may achieve this Citation in 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 Hungarian is available to students who complete HUN200Y1 and HUN310Y1 with a grade of at least B-
Students should note that, as explained on page 26 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.

## Hungarian Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Note

The Department reserves the right to assign students to courses appropriate to their level of competence in Hungarian.

## HUN100Y1 Elementary Hungarian[120P]

The Department reserves the right to assign students to courses appropriate to their level of competence in Hungarian. 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.
DR=HUM; BR=1

## HUN200Y1 Intermediate Hungarian [96P]

Review of descriptive grammar; studies in syntax; vocabulary building; intensive oral practice; composition; reading and translation.
Prerequisite: Permission of instructor
DR=HUM; BR=1
HUN310Y1 Advanced Hungarian [48S]
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.
DR=HUM; BR=1
HUN320Y1 A Survey of Hungarian Literature [48S] 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.
DR=HUM; BR=1

## HUN335H1 Urban vs. Rural: Immigration to and Settlement in North America [12L/12S]

This course will provide an examination of the history of Hungarian Immigration to and settlement in North America. The course will examine the "push" and "pull" factors, the socio-economic factors involved, their patterns of migration and the organizational development of the communities they founded in North America. The course will compare and contrast the reception the immigrants and later refugees received in the United States and Canada and examine how they adapted to their new homelands.
Prerequisite:
DR=HUM; BR=3
$\begin{array}{ll}\text { HUN345H1 } & \text { The Dynamic of Hungarian Culture, } \\ & \text { Ethnography, and Folklore [12L/12S] }\end{array}$
Explore the cultural traditions, historical processes, myths, and figures that have shaped and redefined Hungarian civilization and national identity. Theoretical and practical classes on ethno-genesis, anthropology, and folklore. Readings in English (also available in Hungarian). DR=HUM; BR=1

## HUN355H1 One Hundred Years of Dramatic Change: History of the Past Century and Reflections of Society in Hungarian Culture [12L/12S]

 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.DR=HUM; BR=3

## HUN356H1 Hungary, 1956 to 2006: The Past 50 Years [24S]

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.
DR=HUM; BR=3

## HUN440H1 The Roots of Modernism: Hungarian 20th Century Fiction [24S]

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.

## DR=HUM; BR=1

## HUN450H1 Hungary On-Stage: A History of Hungarian Drama in Social Context [24S]

Hungarian theatre prior to the 19th century; birth of the national drama (Katona, Madch); populism and cosmopolitanism; post-war tendencies (Hubay, Orkny, St). Hungarian drama in the European context; the theatre as a social institution. No knowledge of Hungarian required.
DR=HUM; BR=1

HUN455H1 | Hungary and Europe: Cultural Adaptation in |
| :--- |
| the Late 20th Century [12L/12S] |

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).
DR=HUM; BR=1

HUN497Y1 Independent Study (Hungarian) [TBA]
Translation course concentrating on Hungarian prose translation.
Prerequisite: Permission of Department DR=HUM; BR=None

HUN498H1 Independent Study (Hungarian) [TBA]
Translation course concentrating on Hungarian prose translation.
Prerequisite: Permission of Department
DR=HUM; BR=None

## Faculty

## Professors Emeriti

J.B. Hay, M Sc, Ph D
R.G. Miller, M Sc, Ph D
R.H. Painter, B Sc, Ph D
M.J. Shulman, BA, Ph D
G.E. Wu, M 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
B.H. Barber, M Sc, Ph D (Adjunct)
N. Berinstein, MD
J. Danska, AB, Ph D
H.M. Dosch, MD
E. Fish, M Sc Ph D
R.M. Gorczynski, Ph D, MD
C. Guidos, B Sc, Ph D
R. Hakem, M Sc, Ph D
N. Hozumi, Ph D, MD (Adjunct)
R.D. Inman, BA, MD
N.N. Iscove, Ph D, MD
D.E. Isenman, B Sc, Ph D
M.H. Julius, B Sc, Ph D
E.C. Keystone, B Sc, Ph D
M.V. Letarte, B Sc, Ph D
G. Levy, B Sc, MD, FRCP
P.S. Ohashi, B Sc, Ph D
C.A. Ottaway, Ph D, MD, LMCC, FRCP
C. Paige, B Sc, Ph D
J. Penninger, MD (Adjunct)
C. Roifman, MD
R. Rottapel, MD
E. Silverman, MD
K. Siminovitch, MD, FRCP, ABIM
T.H. Watts, B Sc, Ph D
D. Williams, M Sc, Ph D
L. Zhang, MD, Ph D
J.C.Zúñiga-Pflücker, B Sc, Ph D

## Associate Professors

S. Berger, M Sc, Ph D
J.R. Carlyle, B Sc, Ph D
A. Cohen, M Sc, Ph D
J.L. Gommerman, B Sc, Ph D
M. Jeschke, MD, Ph D, FACS, FRCSC
J. Jongstra, M Sc, Ph D
R. Kaul, MD, Ph D
D.J. Kelvin, M Sc, Ph D
K. MacDonald, MD
A. Martin, M Sc, Ph D
M. Ostrowski, MD, FRCP
D.J. Philpott, B Sc, Ph D
P. Poussier, MD
J. Rast, Ph D
L. Rubin, MD, LMCC, FRCP (C)
A. Schuh, MD
D. Spaner M D
F. Tsui, M Sc, Ph D
P. Vadas, B Sc, Ph D, MD
J. Wither, B Sc, MD, Ph D
R.S. Yeung, B Sc MD, Ph D, FRCP (C)

## Assistant Professors

M.K. Anderson, B Sc, Ph D
S. Dunn, Ph D
G. Ehrhardt Ph D
J. Jongstra-Bilen, M Sc, DEA, Ph D
C. Laskin, B Sc, MD
C. Lau, M Sc, Ph D (Adjunct)
T. Mallevaey Ph D

## Lecturers

A. Bourdeau, Ph D
L. Clemenza, B Sc, Ph D
I. Dimitriou, Ph.D

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 humans. Traditionally, the discipline has focussed on the bodys 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. nonself 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 and major program in Immunology. The emphasis of the specialist 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. The major program offers students fundamental training in immunology and gives the student the opportunity to combine immunology with another program in Life Sciences, Basic Sciences, or within the Arts.

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 and major programs are restricted, please consult specific requirements outlined in the program description section.
Undergraduate Coordinator:
Dr. A. Martin
Enquiries:
Department of Immunology, Room 7205, Medical Sciences Building (416-978-0926)
More information is available on our website:
www.immunology.utoronto.ca

## Immunology Programs

## Immunology Specialist (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/ CHM151Y1, (MAT135H1, MAT136H1)/MAT135Y1/ MAT137Y1/MAT157Y1 with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.

While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=80 \mathrm{~s}$; average $=80 \mathrm{~s}$.
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.

Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).
For more information, refer to the Immunology website at www.immunology.utoronto.ca.
(13.5 full courses or their equivalents)

First Year:
BIO120H1; BIO130H1; (CHM138H1; CHM139H1) / CHM151Y1; (MAT135H1; MAT136H1) / MAT135Y1 / MAT 137Y1
First Year or upper years:
(PHY131H1; PHY132H1) ${ }^{1} /(\mathrm{PHY} 151 \mathrm{H} 1 ;$ PHY152H1)1
Second Year:

1. BCH242Y1 ; BIO230H1 ; BIO260H1 / HMB265H1; CHM220H1; CHM247H1
2. One course from the following list: BIO220H1 / STA220H1 / PCL285H1
Third Year:
BCH371H1; IMM335Y1; MGY311Y1; MGY377H1; MGY 378H1
Fourth Year:
3. IMM435H1 ${ }^{2}$
4. Two courses from the following list: IMM428H1 / IMM429H1 / IMM430H1 / MIJ485H1
5. IMM450Y1 or one full course equivalent at the 400-series in ANA, BCH, IMM, LMP, MGY, CSB.

1 These courses may be taken in the first year or subsequent years and are not required for entrance into the specialist program.
2 This course is capped at 40 students. Priority will be given to Immunology Specialist students, followed by Immunology Major students.

## Immunology Major (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 2.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1 with an average of at least 70\% on these 2.0 fullcourse equivalents (FCEs) and a final mark of at least 60\% in each course.

While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks = high 70s; average $=$ high 70s.

Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).
For more information, refer to the Immunology website at www.immunology.utoronto.ca.
(8 full courses or their equivalents, including two 400-series courses)
First Year:
BIO120H1; BIO130H1; CHM138H1; CHM139H1
Second Year:

1. BCH210H1; BIO230H1; IMM250H1; BIO260H1/ HMB265H1
2. 0.5 full-course equivalent ( 0.5 FCE ) from the following list: BIO220H1/STA220H1/PCL285H1
Third Year:
IMM334Y1; CSB349H1/BCH311H1; One full-course equivalent from the following list: $\mathrm{BCH} 370 \mathrm{H} 1 /$
MGY377H1/MGY378H1/PHL281H1
Fourth Year ${ }^{1}$ :
One full-course equivalent from the following list: IMM428H1/ IMM429H1/IMM430H1/ IMM435H13/MIJ485H $1^{2}$

1 Students considering graduate school are encouraged to add the additional non-compulsory IMM450Y research course, if space permits.
2 MIJ485H1 requires MGY377H1 \& MGY378H1 as prerequisites.
3 This course is capped at 40 students. Priority will be given to Immunology Specialist students, followed by Immunology Major students.

## Immunology Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## IMM250H1 The Immune System and Infectious Disease [24L]

Students will be introduced to the basic concepts of immunity to infectious disease and how breakdown of the immune response can lead to auto-immunity. 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.
Exclusion: IMM334Y1/IMM335Y1
Recommended Preparation: BIO120H1, BIO130H1

## Immunology

DR=SCI; BR=4
IMM299Y1 Research Opportunity Program [TBA]
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None
IMM334Y1 Introductory Immunology [48L]
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: BIO 230 H 1
Exclusion: IMM335Y1
DR=SCI; BR=4
IMM335Y1 Introductory Immunology [48L/24T]
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 242 Y 1 ; $\mathrm{BIO} 230 \mathrm{H} 1, \mathrm{BIO} 260 \mathrm{H} 1 / \mathrm{HMB} 265 \mathrm{H} 1$ Corequisite: MGY311Y1
Exclusion: IMM334Y1
DR=SCI; BR=4
IMM428H1 Molecular Immunology [24L]
This course will focus on the molecular and cellular biology of immune recognition. The course will emphasize historical and recent experimental evidence leading to our current understanding of immune recognition. Subtopics are subject to change and have recently included mechanisms of diversification of immunoglobulin receptors, T cell -MHC interactions, $T$ cell activation and signaling mechanisms; receptors of the innate immune system, immune recognition by natural killer cells.
Prerequisite: BCH210H1/BCH242Y1, IMM334Y1/IMM335Y1 Exclusion: JBI428H1
Recommended Preparation: CSB349H1/MGY311Y1/
PSL350H1
DR=SCI; BR=4
IMM429H1 Developmental Immunology [24L] 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. Prerequisite: IMM334Y1/IMM335Y1 DR=SCI; BR=4

## IMM430H1 Clinical Immunology [24L/24T]

This course will address the underlying pathogenesis as well as highlight the challenges of treating immunerelated conditions such as autoimmunity, cancer, HIV, and transplantation and graft rejection. Half of the lectures will address the genetics and cellular pathogenesis of autoimmune diseases such as multiple sclerosis, type I diabetes and lupus. Other lectures will overview a number
of immunological challenges faced in the clinic, such as preventing graft rejection after transplantation or boosting the immune system to fight cancer and HIV.
Prerequisite: IMM334Y1/IMM335Y1
DR=SCI; BR=4

## IMM435H1 Practical Immunology [72P]

Application of basic principles acquired from IMM334Y1/ IMM335Y1; immunological procedures performed in research and diagnostic laboratories using molecular and cellular approaches; instruction through lectures, video tapes, and practical exercises in the laboratory.
Prerequisite: BCH210H1/BCH242Y1, IMM334Y1/IMM335Y1 DR=SCI; BR=4
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 and Major students.
DR=SCI; BR=4
MIJ485H1 Vaccines and Immunity [36L]
Analysis of the strategies used by pathogenic microbes to evade specific and innate immune responses, and the strategies used to combat infectious disease using vaccines, with an emphasis on molecular and immunological aspects. Special topics include: molecular basis of pathogenicity and immune-evasion strategies; vaccination strategies; challenges to vaccine implementation (given jointly by the Departments of Molecular Genetics and Immunology).
Prerequisite: IMM334Y1/IMM335Y1, MGY377H1, MGY378H1
Exclusion: MBY480H1, MGY485H1
DR=SCI; BR=4

## Faculty

## Professor Emerita

E.K. Armatage, Ph D

Associate Professors
C. Columpar, Ph D
R. DiFrancesco, Ph D
A. Fenner, Ph D
C. Keil, Ph D
N. Sammond, Ph D

## Assistant Professors

J. Cahill, Ph D
R. King, Ph D

## Senior Lecturers

S. Brail, Ph D
C. Messenger, MA
R.E. Riendeau, MA
B.W. Testa, MA

The courses offered at Innis College are integral to The Cinema Studies Institute and two academic programs: Urban Studies and Writing and Rhetoric. Courses for the new Innis One Program have been inspired by the College's three academic programs.

## Innis One: The Creative City

Innis One encourages first-year students to develop their creative and critical capacities by exploring the dynamism of the urban environment. By reaching beyond the walls of the academy to engage in an imaginative, inquiry-based, and civic-minded learning experience, students will gain a greater appreciation of the interplay between film, writing, and urban landscapes.

Students may enroll in one ( 0.5 FCE ) or two (1.0 FCE) of the three half-credit courses ( $\mathrm{INI} 100 \mathrm{H} 1, \mathrm{INI} 101 \mathrm{H} 1$, and INI102H1) offered in the Program. Limited to an enrolment of 25 , these seminar courses, featuring group discussions, films, guest lecturers, and special field trips, offer students a unique experiential learning opportunity that will also help them to develop writing, research, and analytical skills.

All first-year students in the Faculty of Arts and Science (St. George campus) are eligible for admission. Students may apply to all three Innis One courses by ranking their preferences. Online applications and further information are available at www.utoronto.ca/innis/innisone.

## Cinema Studies Institute

At the turn of the twentieth century, cinema emerged as a new medium of mass entertainment, source of information, economic force, and as the art form that would define the century. As the twentieth century proceeded, cinema adapted: technological innovations dramatically increased new possibilities for entertainment and communication globally, with these advances informed by shifting political and economic factors. Moving image culture was affected by such transformation, as well as by seismic alterations in ideas, critical theory, and approaches to film as an art. Now, in the early years of the twenty-first century, the evolving mediascape offers exciting opportunities to assess the everchanging role of film within global culture.

Over the span of nearly four decades, Cinema Studies has developed into a major area of academic research, study and teaching at Innis College. As one of the oldest film study programs in Canada, the Cinema Studies Institute at Innis College has contributed in pivotal ways to the evolution of this academic discipline, both in Canada and internationally.
The Cinema Studies Institute offers courses that reflect the diverse nature of the cinematic experience. Film analysis, history and theory are at the core of the program, but other topics receive emphasis, including distinct types of film (such as documentary, animation and the avant-garde), film genre, and new media forms. The programs explore the social dimension of cinema, investigating national and transnational cinema, while also raising the issue of how race, class and gender function in moving image culture. Cinema Studies programs offer a range of research methods, scholarly frameworks and learning opportunities designed to develop students' abilities to appreciate film within a variety of contexts - critical, economic, cultural, technological, and aesthetic.

Cinema Studies graduates achieve learning outcomes that include a strong historical and theoretical foundation coupled with highly developed analytical and critical skills. Thus they are exceedingly well-equipped to apply their knowledge to a variety of media-related careers. Our graduates have found employment as arts and entertainment journalists, as film programmers, and working in film archives, film distribution companies, and television and new media. The program does not offer filmmaking courses, but numerous graduates have successfully pursued professional work in different facets of film and media production.

Enquiries: Undergraduate Program Assistant, Room 122 Innis College (416-978-8571), cinema.studies@utoronto.ca, or the Cinema Studies website [www.utoronto.ca/cinema].

## 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. (richard.difrancesco@ utoronto.ca) or Tony Pi, Writing and Rhetoric and Urban Studies Program Assistant, Room 233A Innis College (416-978-5809), urbanstudies.innis@utoronto.ca. Also see the Urban Studies website at www.utoronto.ca/innis/urban.

## Innis College

## 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 problemsolving and creative, persuasive, and effective writing depend on the ability to analyze discourse critically.

Enquiries: Tony Pi, Writing and Rhetoric and Urban Studies Program Assistant, Room 233A Innis College (416-9785809), writingandrhetoric.innis@utoronto.ca; or Cynthia Messenger, Director of the Writing and Rhetoric program (cynthia.messenger@utoronto.ca). Also see the Writing and Rhetoric website at www.utoronto.ca/innis/wr.

## Innis College Programs

## Cinema Studies Specialist (Arts program)

This is a limited enrolment program that can only accommodate a limited number of students. Enrolment in the Cinema Studies programs requires completion of INI115Y1 'Introduction to Film Study,' and three additional full-course equivalents. Admission will be determined by a student's mark in INI115Y1. It is expected that a final mark of at least $70 \%$ be required for admission in the coming cycle. Students can be considered for admission if they do not meet the minimum grade requirement in INI 115 Y 1 by achieving a minimum grade of $70 \%$ in INI215Y1.
Meeting these minimum requirements may not guarantee admission.
Note: All Cinema Studies programs are Type 2L (limited enrolment) programs. See Registration Handbook and Timetable for application procedures.
(10 full courses or their equivalent (FCEs), at least 8.0 of which must have an INI designator)

First Year:
INI115Y1
Second Year:
INI215Y1
Third Year:
INI315Y1
Second, Third and Fourth Year:
IN 228 H 1 or 0.5 FCE from Breadth Category 5 ; in addition at least 5.5 FCEs from Groups A through G, of which 3.0 FCEs must be at the 300/400 level
Fourth Year:
1.0 FCE from the following: INI460H1, INI461H1, INI462H1, INI463H1, INI464H1, INI465H1, INI466H1, INI467H1, INI468H1, INI469H1, INI470H1, INI471H1, INI482Y1, INI483H1, INI484H1, INI485H1
Students must complete INI115Y1, INI215Y1 and INI315Y1 before taking any fourth-year courses.

## Cinema Studies Major (Arts program)

This is a limited enrolment program that can only accommodate a limited number of students. Enrolment in the Cinema Studies programs requires completion of INI115Y1 'Introduction to Film Study,' and three additional full-course equivalents. Admission will be determined by a student's mark in INI115Y1. It is expected that a final mark of at least $70 \%$ be required for admission in the coming cycle. Students can be considered for admission if they do not meet the minimum grade requirement in INI115Y1 by achieving a minimum grade of $70 \%$ in INI215Y1.
Meeting these minimum requirements may not guarantee admission.
Note: All Cinema Studies programs are Type 2L (limited enrolment) programs. See Registration Handbook and Timetable for application procedures.
( 7 full courses or their equivalent (FCEs), at least 5.5 of which must have an INI designator)
First Year:
INI115Y1
Second Year:
INI215Y1
Third Year:
INI315Y1
Second, Third and Fourth Year:
INI228H1 or 0.5 FCE from Breadth Category 5; in addition at least 3.0 FCEs from Groups A through G, of which 2.0 FCEs must be at the 300/400 level
Fourth Year:
0.5 FCE from the following: INI460H1, INI461H1, INI462H1, INI463H1, INI464H1, INI465H1, IN|466H1, INI467H1, INI468H1, INI469H1, INI470H1, INI471H1, INI482Y1, INI483H1, INI484H1, INI485H1
Students must complete INI115Y1, INI215Y1 and INI315Y1 before taking any fourth-year courses.

## Cinema Studies Minor (Arts program)

This is a limited enrolment program that can only accommodate a limited number of students. Enrolment in the Cinema Studies programs requires completion of INI115Y1 'Introduction to Film Study,' and three additional full-course equivalents. Admission will be determined by a student's mark in INI115Y1. It is expected that a final mark of at least $70 \%$ be required for admission in the coming cycle. Students
can be considered for admission if they do not meet the minimum grade requirement in INI 115 Y 1 by achieving a minimum grade of $70 \%$ in INI215Y1.
Meeting these minimum requirements may not guarantee admission.
Note: All Cinema Studies programs are Type 2L (limited enrolment) programs. See Registration Handbook and Timetable for application procedures.
( 4 full courses or their equivalent (FCEs), with at least one at the 300+ level)
First Year:
INI115Y1
Second Year:
INI215Y1
Second, Third and Fourth Year:
2.0 FCEs from Groups A through G

Students must complete INI115Y1, INI215Y1 and INI315Y1 before taking any fourth-year courses.

## Cinema Studies Course Groups

## Group A: Foundations

INI115Y1, INI215Y1, INI315Y1

## Group B: Genre and Modes

INI222H1, INI223H1, INI226H1, INI227H1, INI322Y1, INI325Y1, INI329Y1, INI396H1, INI460H1, INI461H1, INI462H1, INI482Y1

Group C: Social and Cultural Practices
INI228H1, INI323Y1, INI327Y1, INI383H1, INI388H1,
INI397H1, INI463H1, INI464H1, INI465H1, INI483H1
Group D: Theory and Criticism
INI224Y1, INI330Y1, INI374H1, INI375H1, INI384H1,
INI394H1, INI466H1, INI467H1, INI468H1, INI484H1

## Group E: History and Nation

INI225Y1, INI324Y1, INI378H1, INI380Y1, INI381H1, INI385H1, INI387H1, INI390Y1, INI395H1, INI469H1, INI470H1, INI471H1, INI485H1

Group F: Independent Studies
INI476Y1, INI477H1, INI478H1

## Group G: Cross-Listed

EAS237Y1, EAS431H1, FCS310Y1, FCS331H1, FIN250H1, FIN260H1, GER250H1, GER261H1, HIS335H1, HIS345H1, HIS459H1, HIS460H1, HIS467H1, ITA240Y1, ITA340H1, ITA341H1, ITA347H1, SLA225H1, SLA226H1, SLA244H1, SLA424H1, SMC354H1, SMC355H1, SPA375H1, UNI325H1

## Urban Studies Specialist (Arts program)

For Program requirements and information, consult the Urban Studies website at www.utoronto.ca/innis/urban. Note: All Urban Studies programs are limited enrolment programs (see Registration Handbook and Timetable for application procedures).
This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving
those mark(s) does not necessarily guarantee admission to the POSt in any given year.
Enrolment in the Specialist POSt requires two things:

- Completion of at least 4.0 FCEs in first year courses;
- Completion of at least 3.0 FCEs from the list of 4.0 FCEs in possible First Year selections below with an average final mark of not less than 72 percent across all three and individual final marks not less than 70 percent.
Students who do not meet this criterion at the completion of year 1 (and hence are unsuccessful in their first application to the USP) may re-apply at the end of year 2 and the admission decision will be based on the completion of one of the following (in addition to INI235Y1) with a final mark of at least 70 percent in each:
- ECO220Y1 or
- The pairing of GGR270H1 and GGR271H1; or
- POL242Y1; or,
- The pairing of SOC200H1 and SOC202H1
(11.0 Full Course Equivalents (FCEs) including at least 4.0

FCEs at the $300+$ level, 1.0 of which must be at the $400-$
level)
First Year:
Three of the following selections:

- 1.0 FCEs from First year Economics courses (e.g., ECO100Y1);
- 1.0 FCEs from First year Human/Urban/Social/ Environmental (i.e., Social Science based) Geography courses (e.g., GGR101H1, GGR107H1 and GGR124H1);
- 1.0 FCEs from First year Political Science courses (e.g., POL101Y1).
- 1.0 FCEs from First year Sociology courses (e.g., SOC101Y1).
Higher Years:
- INI235Y1;
- ECO220Y1 or (GGR270H1 and GGR271H1) or POL242Y1 or (SOC200H1 and SOC202H1);
- INI338H1 (and/or INI336H1), INI430H1 and INI437Y1;
- 4.0 FCEs in at least three of groups A through G, including at least 2.0 FCEs at the 300-level or above.


## Urban Studies Major (Arts program)

This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.
Enrolment in the Major POSt requires the following:

- Completion of at least 4.0 FCEs in first year courses;
- Completion of at least 2.0 FCEs from the list of 4.0 FCEs in possible First Year selections below with an average final mark of not less than 72 percent across both courses and individual final marks not less than 70 percent.
Students who do not meet this criterion at the completion of year 1 (and hence are unsuccessful in their first application to the USP) may re-apply at the end of year 2 and the


## Innis College

admission decision will be based on the completion of one of the following (in addition to INI235Y1) with a final mark of at least 70 percent in each:

- ECO220Y1 or
- The pairing of GGR270H1 and GGR271H1; or
- POL242Y1; or,
- The pairing of SOC200H1 and SOC202H1
(7.0 Full Course Equivalents (FCEs) including at least 2.0 FCEs at the $300+$ level, 0.5 of which must be at the $400-$ level)
First Year:
Two of the following selections:
- 1.0 FCEs in 100-level Economics (e.g., ECO100Y1 or ECO105Y1);
- 1.0 FCEs from First year Human/Urban/Social/ Environmental (i.e., Social Science based) Geography courses (e.g., GGR101H1, GGR107H1 and GGR124H1);
- 1.0 FCEs in 100-level Political Science courses (e.g., POL101Y1);
- 1.0 FCEs in 100-level Sociology courses (e.g., SOC101Y1)

Higher Years

- INI235Y1;
- ( $\operatorname{INI} 338 \mathrm{H} 1$ and $\mathrm{IN} \mid 430 \mathrm{H} 1$ as a pair) or $\mathrm{IN} \mid 437 \mathrm{Y} 1$

Note: INI336H1 (when offered) can be taken in place of INI 338 H 1 and paired with $\mathrm{IN} \mid 430 \mathrm{H} 1$ to be used as 1.0 FCEs in core courses.

- 3.0 FCEs in at least two of groups A through G, including at least 1.0 FCEs at the 300-level or above.


## Urban Studies Minor (Arts program)

For Program requirements and information, consult the Urban Studies website at www.utoronto.ca/innis/urban. Note: All Urban Studies programs are limited enrolment programs (see Registration Handbook and Timetable for application procedures).
This is a limited enrolment POSt that can only accommodate a limited number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.
Enrolment in the Minor POSt requires the following:

- Completion of at least 4.0 FCEs in first year courses;
- Completion of 1.0 FCE from the list of 4.0 FCEs in possible First Year selections below with a final mark not less than 70 percent.
Students who do not meet this criterion at the completion of year 1 (and hence are unsuccessful in their first application to the USP) may re-apply at the end of year 2 and the admission decision will be based on the completion of INI235Y1 with a final mark of at least 70 percent.
(4.0 full course equivalents, including at least 1.0 FCEs at the 300+ level)
First Year:
One of the following selections:
- 1.0 FCEs in 100-level Economics (e.g., ECO100Y1 or ECO105Y1);
- 1.0 FCEs from First year Human/Urban/Social/ Environmental (i.e., Social Science based) Geography courses (e.g., GGR101H1, GGR107H1 and GGR124H1);
- 1.0 FCEs in 100-level Political Science courses (e.g., POL101Y1);
- 1.0 FCEs in 100-level Sociology courses (e.g., SOC101Y1)

Higher Years

- INI235Y1;
- 2.0 FCEs in at least two of groups A through G, including at least 1.0 FCEs at the 300-level or above.


## Urban Studies Course Groups

Group A: Fine Art History (FAH)
FAH207H1, FAH215H1, FAH230H1, FAH303H1, FAH354H1, FAH376H1, FAH497H1.

## Group B: Economics

ECO230Y1, ECO239Y1, ECO302H1, ECO310Y1, ECO313H1, ECO314H1, ECO321Y1, ECO332H1, ECO333Y1, ECO336Y1, ECO339Y1, ECO340H1, ECO342Y1, ECO360Y1, ECO364H1, ECO365H1, ECO429Y1, ECO433H1, ECO457Y1, ECO459H1.

## Group C: Geography

GGR216H1, GGR221H1, GGR246H1, GGR252H1, GGR254H1, GGR320H1, GGR323H1, GGR327H1, GGR328H1, GGR329H1, GGR339H1, GGR352H1, GGR356H1, GGR358H1, GGR360H1, GGR361H1, GGR424H1, GGR431H1, GGR438H1, GGR458H1, IJC400H1, JGI216H1, JGI346H1, JGI454H1.

## Group D: History

HIS220H1, HIS241H1, HIS242H1, HIS243H1, HIS244H1, HIS250Y1, HIS251Y1, HIS263Y1, HIS271Y1, HIS280Y1, HIS282Y1, HIS292Y1, HIS294Y1, HIS297Y1, HIS312H1, HIS313H1, HIS314H1, HIS365H1, HIS366H1, HIS369H1, HIS373H1, HIS378H1, HIS384H1, HIS484H1, HIS479H1, GGR240H1, GGR241H1, GGR336H1

## Group E: Political Science

POL201Y1, POL316Y1, POL318H1, POL337Y1, POL370H1, POL413H1, POL438H1, POL443H1, POL447Y1, POL448H1, POL449H1.

Group F: Sociology
SOC205Y1, SOC207Y1, SOC214Y1, SOC243H1, SOC246H1, SOC250Y1, SOC257H1, SOC263H1 SOC270H1, SOC301Y1, SOC303H1, SOC304H1, SOC309Y1, SOC336H1, SOC356Y1, SOC363H1, SOC365Y1, SOC366H1, SOC367H1, SOC376H1, SOC382Y1.

Group G: Environment
ENV200H1, ENV221H1, ENV222H1, ENV307H1, ENV320H1, ENV335H1, ENV350H1, ENV430H1, GGR222H1, GGR314H1, GGR334H1, GGR335H1, GGR416H1, GGR419H1, JGE331H1, JGE347H1, JGE348H1.

## 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.

## Writing and Rhetoric Minor (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. Also contact Tony Pi, Writing and Rhetoric and Urban Studies Program Assistant, Room 233A Innis College (416-978-5809), writingandrhetoric.innis@utoronto. ca.

This is a Type 1 program: enrolment in this program requires the completion of 4.0 courses. This program does not have specific first-year requirements. 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:

1. Complete four full-course equivalents (any discipline).

## Requirements for the Minor program:

four full courses or their equivalent, as outlined below, including the equivalent of at least 1.0 FCEs at the 300/400level. Note: No specialist or major degree is available in this program.

1. 2.5 INI writing courses (note: JEI206H1 counts as an INI course in the Writing and Rhetoric Program)
2. 1.5 other full-course equivalents from groups $\mathrm{A}, \mathrm{B}$, 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. Students do not have to be enrolled in the minor to take INI writing courses. Students who are enrolled in the minor have first priority in most INI courses and in JEI206H1.

## Innis Writing Courses

INI103H1, INI104H1, INI203Y1, INI204Y1, INI300H1, INI302H1, INI301H1, INI304H1, INI305H1, INI310H1, INI311Y1, INI409H1, INI410H1, JEI206H1

## A. Critical Analysis and Reasoning

ARC235H1, ARC417H1; INI204Y1, INI304H1, INI310H1, INI409H1, INI410H1; LIN481H1; PHL247H1, PHL275H1, PSY370H1; TRN190Y1, TRN200Y1

## B. Workplace Writing and Media

ARC232H1; FAH443H1; HIS316H1, HIS482H1; INI104H1, INI300Y1, INI301H1, INI302H1, INI384H1; PHL295H1, POL475H1; PSY327H1; SMC219Y1, SMC228Y1, SMC300H1; UNI221H1

## C. Language and Rhetoric

ANT253H1, ANT329Y1, ANT427H1; ENG100H1, ENG110Y1, ENG205H1; ENG285H1; ENG385H1; INI103H1, INI203Y1, INI305H1, INI311Y1; JAL328H1, JAL355H1; JEI206H1, JPL315H1; LIN200H1, LIN2O1H1, LIN203H1, LIN204H1; VIC120Y1, VIC345H1, VIC350Y1; All Vic One Courses.

## Innis College Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Note

Courses are listed in this order:
Innis One
Cinema Studies
Urban Studies
Writing and Rhetoric
Other Innis College courses

## Innis One Courses

INI100H1 The City Where Movies Are Made [36S] A study of the multiple facets of the city designated as the "place where movies are made" and "the place made by the movies." Focusing on Hollywood's origins in the early 20th century, this course charts how the city's mythic status was constructed through promotional means, giving special attention to how the movies have represented Hollywood. Prerequisite: Admission to Innis One
Exclusion: New One, St. Mike's One, Trinity One, Vic One,
UC One, Woodsworth ONE
DR=HUM; BR=1

## INI101H1 Blogging the Just City [36S]

An introduction to the concept of the city as a creative environment promoting not only growth and wealth but also social justice, equality, cooperation, and civility. Students will learn to build their own blog to help them to observe, interpret, and reflect upon the process of urban interaction and the relationship between creativity and justice.
Prerequisite: Admission to Innis One
Exclusion: New One, St. Mike's One, Trinity One, Vic One,
UC One, Woodsworth ONE
DR=SOC SCI; BR=3
INI102H1 Creative Writing and the Natural City [36S]
An introduction to creative writing techniques and the personal essay form through which students will explore and develop their conscious connection to the natural-urban landscape. The course will include activities such as field trips, readings, interviews, and journaling to generate the material for personal essays on engagement with nature in the city.
Prerequisite: Admission to Innis One
Exclusion: New One, St. Mike's One, Trinity One, Vic One,
UC One, Woodsworth ONE
DR=HUM; BR=1

## Cinema Studies Courses

(Note: Where INI315Y1 is listed as a Prerequisite or recommended preparation, INI214Y1/ INI314Y1 from previous years satisfies this requirement.)

## Innis College

## Group A Courses: Foundations

INI115Y1 Introduction to Film Study [24L/24T/72P]
Introduction to film analysis; concepts of film style and narrative. Topics include: Documentary, avant-garde, genres, authorship, ideology, and representation.
DR=HUM; BR=1

## INI215Y1 Film Cultures I: Art and Industry (formerly INI212Y1 Film History) [24L/24T/72P]

Examines the practices, theories and debates surrounding the emergence of cinema through to the development of studio system filmmaking in the first half of the 20th Century. Topics include: Film's relation to the other arts; formalist and realist traditions; technological innovations; audiences and reception; and cultural industries.
Prerequisite: INI115Y1
Exclusion: INI212Y1
DR=HUM; BR=1+2
INI315Y1 Film Cultures II: Politics and Global Media (formerly INI214Y1 Film TheorylINI314Y1 Film Cultures II) [24L/24T/72P]
Examines film theory and practice from the 1950s onward, and the impact of media change on earlier film cultures and aesthetics. Topics include: New Waves; the politicization of theory; spectatorship; counter-cinemas; transnational film and "Global Hollywood"; and media theory from the analog to the digital.
Prerequisite: INI115Y1, INI215Y1
Exclusion: INI214Y1, INI314Y1
DR=HUM; BR=1+2

## Group B Courses: Genre and Modes

INI222H1 Cinema and Sensation I: Action/Spectacle [12L/12T/36P]
Action cinema holds a dominant place in our contemporary era of the blockbuster and CGI effects. This course examines the modes and function of this popular genre, while also tracing Action's longevity and diversity to include its significant precursors, its social contexts, and forms of spectatorship.
DR=HUM; BR=1
INI223H1 Cinema and Sensation II: Sex [12L/12T/36P]
Sex and eroticism and their various representations have long been central and controversial components of filmic pleasure. This course examines how sex and its regulation in cinema suggest broader ideas and concerns. Topics include: Obscenity laws and the history of film censorship; the emergence of sexploitation and pornography; porno chic and art cinema.
DR=HUM; BR=1

## INI226H1 Horror Film [12L/12T/36P]

Horror film as a genre, focusing on three types of international horror: The un-dead, body horror, and the supernatural. The genre's popular appeal, affective power, unique means of producing pleasure, and its current global resurgence will be emphasized. Topics include: The aesthetics of gore and violence; technologies of fear; J-Horror, new French extremity; cult fandom and paracinema; and media convergence.
DR=HUM; BR=1

INI227H1 Science Fiction Film [12L/12T/36P]
Study of science fiction film in its role as a commercial film genre, social allegory and speculation on technology and the future.
$D R=H U M ; B R=1$

## INI322Y1 Avant-Garde and Experimental Film

[48L/72P]
Film experimentation in the context of modern art and poetry from the 1920s through the 1990s. Influences range from Cubism and Dada-Surrealism to late-era modernism and postmodernism.
Prerequisite: INI115Y1
DR=HUM; BR=1

## INI325Y1 Documentary Film [48L/48P]

Critical survey of documentary practice including newsreels, direct cinema, cinema verité, ethnographic films, 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.
Prerequisite: INI115Y1
Recommended Preparation: INI215Y1
DR=HUM; BR=1+3

## INI329Y1 Genre, Narrative and Narration in Film

 [24L/24T/72P]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; gothic and fantastic; and art cinema.
Prerequisite: INI115Y1
DR=HUM; BR=1+2
INI396H1 Special Topics in Genre and Modes [24L/24P]
Courses in special topics designed for Specialists and Majors in Cinema Studies. Past courses include: "Fantasy Film/Cinéma Fantastique," "B Movies and Cult Cinema," and
"American Animation after 1950."
Prerequisite: INI115Y1
DR=HUM; BR=1

## INI460H1 Advanced Study in Genre and Modes [24P/24S]

See course description for INI462H1 listed below.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

## INI461H1 Advanced Study in Genre and Modes [24P/24S]

See course description for $\operatorname{INI} 462 \mathrm{H} 1$ listed below.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

## INI462H1 Advanced Study in Genre and Modes [24P/24S]

Consideration of the status of a selected film genre from historical and theoretical perspectives. Past seminars include: "Comedy," "Melodrama," "Film Noir," and "The End in Cinema."

Prerequisite: At least ten full-course equivalents, including INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1
INI482Y1 Advanced Studies in Cinema [48P/48S]
Seminars in special topics designed for advanced Specialist and Major students in Cinema Studies.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

## Group C Courses: Social and Cultural Practices

INI228H1 The Business of Film [36L/12T]
Examines cinema as a commercial enterprise, a technology and a formal system, with an emphasis on devising numerically-based approaches to amplify the study of cinema. This course fulfills the Category 5 Quantitative Reasoning requirement.
DR=HUM/SOC SCI; BR=3
INI323Y1 Feminist Approaches to Cinema [48L/48P]
Gender politics of feminist film culture since the 1970s. Topics include: Apparatus theory and its legacy, models of spectatorship, feminist historiography, stardom, the cinematic (re)production of identity, the relationship between social movements and cinema; "postfeminism."
Prerequisite: INI115Y1/ permission of instructor

## DR=HUM; BR=1+2

## INI327Y1 Screening Race [48L/48P]

How race functions in cinema. Topics include: the foundational role of racial inscription and its expansion beyond the black/white paradigm; visual ethnography, 'the primitive,' and Orientalism; aboriginal media; the 'Black Atlantic' and Diaspora; Banlieu and exilic film practice and theory; border aesthetics; race and urban space; 'post-race'; and the evolving racial imaginary in the Obama era.
Prerequisite: INI115Y1, INI215Y1
DR=HUM; BR=1+2
INI383H1 The Origins of the Animation Industry, 19001950: A Technosocial History [24L/36P]
An introduction to early animation, considering its vaudeville roots, its industrialization, 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 milieux from which animation derived.
Prerequisite: INI115Y1, INI215Y1
DR=HUM; BR=1

## INI388H1 Screenwriting [24S]

Students will develop screenwriting skills under the guidance of a renowned screenwriter-in-residence through a combination of writing workshops and individual consultations. Like the course, the Universal Screenwriter-inResidence is a biannual appointment.
Prerequisite: INI115Y1
DR=HUM; BR=1
INI397H1 Special Topics in Cinema as Social and Cultural Practice [24L/24P]
Courses in special topics designed for Specialists and
Majors in Cinema Studies.
Prerequisite: INI115Y1
DR=HUM; BR=1

## INI463H1

Advanced Study in Cinema as Social and Cultural Practice [24P/24S]
See course description for INI465H1 listed below.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor
DR=HUM; BR=1
INI464H1 Advanced Study in Cinema as Social and Cultural Practice [24P/24S]
See course description for INI465H1 listed below.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor
DR=HUM; BR=1
INI465H1 Advanced Study in Cinema as Social and Cultural Practice [24P/24S]
Consideration of cinema and its social relations. Past seminars include: "American Independent Film," "Children in the Movies," "Sub-Saharan African Cinema," "International
Film Festivals" and "The Revolution Will/Will Not Be
Televised."
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor
DR=HUM; BR=1
INI483H1 Advanced Studies in Cinema [24P/24S]
Seminars in special topics designed for advanced Specialist and Major students in Cinema Studies.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor
DR=HUM; BR=1

## Group D Courses: Theory and Criticism

INI224Y1 Great Directors [48L/48P]
Close examination of the careers and works of four auteur directors.
Prerequisite: INI115Y1
DR=HUM; BR=1

## INI330Y1 Contemporary Screen Theory: Analog/ Digital [48L/48P]

Analysis of contemporary screen cultures to assess the age-old question 'what is cinema?' How transformations of the cinematic expose continuities and ruptures with earlier film theories. Topics include: sound; medium specificity; comparison of psychoanalytic, cognitive, and phenomenological models; assessing theoretical frameworks for understanding new forms of aesthetics and spectatorship within multimodal cross platform contexts of digital media.
Prerequisite: INI115Y1, INI315Y1
DR=HUM; BR=1+2
INI374H1 Issues in Film Authorship I [24L/24P]
Advanced study of issues in film authorship through intensive examination of two major filmmakers.
Prerequisite: INI115Y1
DR=HUM; BR=1
INI375H1 Issues in Film Authorship II [24L/24P]
Advanced study of issues in film authorship through intensive examination of one or more major filmmakers.
Prerequisite: INI115Y1
DR=HUM; BR=1
INI384H1 Critical Writing on Film [48L]
The practice of film criticism: studies of examples of journalistic and scholarly critical writing; practical sessions

## Innis College

of process writing; and collaborative editing. Course includes regular film screenings.
Prerequisite: INI115Y1 and one additional Cinema Studies
full-course equivalent/ permission of the instructor DR=HUM; BR=1

## INI394H1 Special Topics in Theory and Criticism [24L/24P]

Courses in special topics designed for Specialists and Majors in Cinema Studies.
Prerequisite: INI115Y1, INI215Y1
DR=HUM; BR=1

## INI466H1 Advanced Study in Theory and Criticism [24P/24S]

See course description for IN 1468 H 1 listed below.
Prerequisite: At least ten full-course equivalents, including INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1
INI467H1 Advanced Study in Theory and Criticism [24P/24S]
See course description for INI468H1 listed below.
Prerequisite: At least ten full-course equivalents, including INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

INI468H1 Advanced Study in Theory and Criticism [24P/24S]
Advanced study of select approaches to film theory and criticism. Past seminars include: "Corporeality and the Cinema," "Godard," "The Cinematic City: Urban Spaces in Film," "Sound and Music in Film," and "Neoformalism." Prerequisite: At least ten full-course equivalents, including

INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

## INI484H1 Advanced Studies in Cinema [24P/24S]

Seminars in special topics designed for advanced Specialist and Major students in Cinema Studies.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

## Group E Courses: History and Nation

INI225Y1 American Popular Film Since 1970 [48L/24T/48P]
Examination of the art of popular film in its social, political, and commercial contexts, through the study of selected popular films from the 1970s to the present.
DR=HUM; BR=1+3

## INI324Y1 American Filmmaking in the Studio Era

 [24L/24T/72P]Industrial, economic, ideological and aesthetic dimensions of the American studio era.
Prerequisite: INI115Y1
DR=HUM; BR=1+3

## INI378H1 Hungarian Cinema [24L/24P]

Examines historical trends, influential filmmakers, and social and cultural factors influencing the development of Hungarian cinema, assessing its impact within the context of Eastern Europe and internationally.
Prerequisite: INI115Y/ permission of instructor
Exclusion: INI381H1/F (2010) Aspects of a National Cinema: Hungarian Cinema
DR=HUM; BR=1

## INI380Y1 Contemporary World Cinema [48L/72P]

Major contemporary developments beyond Hollywood and European filmmaking, examining a select number of national/ regional cinemas: Africa, Asia, Iran, India (Hindi cinema) and Latin America, outlining generic and stylistic conventions, cultural contexts, distribution networks and reception within a global economy.
Prerequisite: INI115Y1
Recommended Preparation: INI215Y1
DR=HUM; BR=1+3
INI381H1 Aspects of a National Cinema [24L/24P]
In-depth treatment of a national cinema. Past courses include: "British Cinema," "Australian and New Zealand Cinema" and "The Other Europe."
Prerequisite: INI115Y1
DR=HUM; BR=1

## INI385H1 Canadian Cinemas [24L/24P]

History and diversity of Canadian and Québécois cinemas. Analyses of film and critical frameworks examine how co-productions, multiculturalism, and post-national arguments are re-shaping the production and reception contexts of national cinema. Annual emphasis will be placed on one of the following topics: the emergence of the feature film, documentary or experimental cinema.
Prerequisite: INI115Y1
Exclusion: FCS391H1, INI385Y1
DR=HUM; BR=1

## INI387H1 The Logics of Canadian Television <br> [24L/24P]

An overview and analysis of Canadian television's history, its current role within the so-called "multi-channel universe," and its future prospects within evolving delivery systems and changing consumption patterns. Issues include: The CBC as official public broadcaster, the future of domestic production, the prospect for niche carriers, and the impact of the internet. Prerequisite: INI115Y1/ SMC219Y1/ permission of instructor DR=HUM; BR=1

## INI390Y1 Chinese Cinemas [48L/48P]

Examination of recent 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 Wong Kar-Wai.
Prerequisite: INI115Y1
Recommended Preparation: INI215Y1
DR=HUM; BR=1+3

## INI395H1 Special Topics in History and Nation

 [24L/24P]Courses in special topics designed for Specialists and Majors in Cinema Studies. Past courses include: "Quebec Cinema." Prerequisite: INI115Y1 DR=HUM; BR=1

## INI469H1 Advanced Study in History and Nation [24P/24S]

See course description for IN 1471 H 1 listed below.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

## INI470H1

## Advanced Study in History and Nation

 [24P/24SSee course description for IN 1471 H 1 listed below.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor
DR=HUM; BR=1

## INI471H1 Advanced Study in History and Nation [24P/24S]

Seminars in historiography and questions of national cinema.
Past seminars include: "Film Historiography," "Early Cinema,"
"Reviewing Hollywood Classicism," "Women Pioneers" and
"Emergent Technologies."
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor DR=HUM; BR=1

## INI485H1 Advanced Studies in Cinema [24P/24S]

Seminars in special topics designed for advanced Specialist and Major students in Cinema Studies.
Prerequisite: At least ten full-course equivalents, including
INI115Y1, INI215Y1, INI315Y1/ permission of instructor
DR=HUM; BR=1

## Group F Courses: Independent Studies

INI476Y1 Independent Studies in Cinema
See course description for INI478H1 listed below.
Prerequisite: At least ten full-course equivalents, including INI115Y1, INI215Y1, INI315Y1 and permission of Cinema Studies Faculty
DR=HUM; BR=1

## INI477H1 Independent Studies in Cinema

See course description for INI478H1 listed below.
Prerequisite: At least ten full-course equivalents, including INI115Y1, INI215Y1, INI315Y1 and permission of Cinema Studies Faculty
DR=HUM; BR=1

## INI478H1 Independent Studies in Cinema

Independent research projects devised by students and supervised by Cinema Studies faculty. Open to advanced Specialist and Major students in the Program. Submit applications to the Undergraduate Program Office: Fall 2012 courses, June1/ Winter 2013 courses, November 1/ Summer 2013 courses, April 1.
Prerequisite: At least ten full-course equivalents, including INI115Y1, INI215Y1, INI315Y1 and permission of Cinema Studies Faculty
DR=HUM; BR=1

## Group G Courses: Cross-Listed

EAS237Y1, EAS431H1, FCS310Y1, FCS331H1, FIN250H1, FIN260H1, GER250H1, GER261H1, HIS335H1, HIS345H1, HIS459H1, HIS460H1, HIS467H1, ITA240Y1, ITA340H1, ITA341H1, ITA347H1, SLA225H1, SLA226H1, SLA244H1, SLA424H1, SMC354H1, SMC355H1, SPA375H1, UNI325H1

## Urban Studies Courses

JGI216H1 Urbanization \& Global Change [24L]
Examines 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 locational and economic shifts that have ensued as a result of globalization, as well as the social and cultural
manifestations associated with the emergence of globa cities.
Recommended Preparation: GGR124H1
DR=SOC SCI; BR=3

## INI235Y1 A Multidisciplinary Introduction to Urban Studies [48L]

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 one of the following

- ECO100Y1/ECO105Y1 or 1.0 FCE from 100-level

GGR courses including GGR101H1, GGR107H1, and
GGR124H1 or 1.0 FCE from 100-level POL courses
including POL103Y1, POL105Y1, POL108Y1, or
POL214Y1, or SOC101Y1
DR=SOC SCI; BR=3

## ENV307H1

See ENV307H1 in Centre for Environment listings.

## JIE307Y1 Urban Sustainability (formerly INI307Y1) [48L/48T/24P]

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: JEG221Y1/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
DR=SOC SCI; BR=3
INI308H1 The City of Toronto [24L]
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 - ECO100Y1/ECO105Y1 or 1.0 FCE from 100-level GGR courses including GGR101H1, GGR107H1, and GGR124H1 or 1.0 FCE from 100-level POL courses including POL103Y1,
POL105Y1, POL108Y1, or POL214Y1, or SOC101Y1.

## DR=SOC SCI; BR=3

INI309H1 Urban Infrastructure [24L]
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, publicprivate partnerships, and international development. Prerequisite: INI235Y1 or permission of the instructor.

# Innis College 

## DR=SOC SCI; BR=3 <br> INI335H1 The Changing Dynamics of Cities (formerly INI335Y1) [24L]

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 INI235Y1.
Prerequisite: $\operatorname{IN} \mid 235 Y 1$. 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: $\mathrm{IN} \mid 335 \mathrm{H} 1$ cannot be taken concurrently with INI235Y1.)
Exclusion: INI335Y1
DR=SOC SCI; BR=3

## INI336H1 Creative Cities (formerly INI336Y1) [24L]

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: completion of 1.0 FCEs from these 100-level
GGR courses: GGR100H1/GGR107H1/GGR124H1/
GGR124Y1; completion of INI235Y1
Exclusion: INI336Y1
Recommended Preparation: GGR220Y1
DR=SOC SCI; BR=3

## INI337H1 Studies in Contemporary Urban Problems [24L]

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: GGR124H1 and/or INI235Y1 DR=SOC SCI; BR=3
INI338H1 Advanced Topics in Urban Studies I [24L]
This course will expose students to a range of contemporary theoretical, analytical, and policy oriented debates in Urban Studies. The emphasis will be on establishing a broad knowledge base in the multifaceted field of urban studies. The exact topics to be covered will fall broadly under the banner of urban socioeconomic change, and specific syllabi, year to year, will follow contemporary and emerging debates. This will be expanded upon in this course's 400 level counterpart.
Exclusion: GGR347H1
DR=SOC SCI; BR=3

## JGI346H1 The Urban Planning Process [24L]

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 contexts. 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, INI235Y1
DR=SOC SCI; BR=3
IJC400H1 Urban Research Seminar [12L/24S]
Presents cutting edge research on cities from an
interdisciplinary perspective. Students will attend six to eight presentations in the Cities Centre Seminar Series, given by eminent scholars, and meet with the course instructor to critique these presentations.
Prerequisite: $\operatorname{IN} \operatorname{I235Y} 1$ and completion of 10.0 full-course equivalents or permission of the instructor. Preference will be given to students enrolled in the Innis College Urban Studies Program.
DR=SOC SCI; BR=3
INI430H1 Advanced Topics in Urban Studies II [24L] This course is meant to be a senior complement to INI338H1 whereby important theoretical, analytical and/or policy debates are addressed in a research seminar format. Students in INI430H1 will be expected to extend, or refine research topics identified and explored in IN 1338 H 1 in a major independent research project. Students will present their proposals, their progress reports, and their final results to the instructor and the class.
Prerequisite: $\operatorname{INI} 235 \mathrm{Y} 1$, and INI 338 H 1 . Priority is given to students enrolled in the Urban Studies Major or Specialist Programs. However, consideration may be given to students with suitable course background as determined by the Program Director. Note: INI430H1 cannot be taken concurrently with INI235Y1.)
DR=SOC SCI; BR=3

## INI431Y1 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: INI235Y1, completion of research design and research methods courses, and suitable 4th-year standing (in terms of credits completed) in an aligned social science discipline.
DR=SOC SCI; BR=None
INI432H1 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: INI235Y1, completion of research design and research methods courses, and
suitable 4th-year standing (in terms of credits completed)
in an aligned social science discipline.
DR=SOC SCI; BR=None
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: INI235Y1, completion of research design and research methods courses, and suitable 4th-year standing (in terms of credits completed)
in an aligned social science discipline

## DR=SOC SCI; BR=None

## INI434Y1 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 department. 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 June 1 for a Fall or Year session course and by November 1 for a Spring session course.
Prerequisite: INI235Y1, completion of research design and research methods courses, and suitable 4th-year standing (in terms of credits completed) in an aligned social science discipline. Enrolment in the Urban Studies Major or Specialist Subject POSts.
DR=SOC SCI; BR=None

## INI435H1 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 department. 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 June 1 for a Fall or Year session course and by November 1 for a Spring session course.
Prerequisite: INI235Y1, completion of research design and research methods courses, and suitable 4th-year standing (in terms of credits completed) in an aligned social science discipline. Enrolment in the Urban Studies Major or Specialist Subject POSts.
DR=SOC SCI; BR=None

## INI436H1 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 department. 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 June 1 for a Fall or Year session course and by November 1 for a Spring session course.
Prerequisite: INI235Y1, completion of research design and research methods courses, and suitable 4th-year standing (in terms of credits completed) in an aligned social science discipline. Enrolment in the Urban Studies Major or Specialist Subject POSts.

## DR=SOC SCI; BR=None

## INI437Y1 Urban Experiential Learning in Toronto \&

 the GTA (formerly INI306Y1) [72S]A method of studying city issues that combines readings, seminar discussions, and field trips with an 8 hour / week internship in the office of a municipal politician, local government, or non-profit organization. Readings focus on community development, urban planning, economic development and local governance. Students must fill out a ballot for the course (available on the Urban Studies website - www.utoronto.ca/innis/urban ) by June 1. Enrolment in this course is competitive and at the discretion of Dr. Shauna Brail (Director, Urban Studies Placement Program).
Prerequisite: INI235Y1. 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: INI437Y1 cannot be taken
concurrently with INI235Y1.)
Exclusion: INI306Y1
DR=SOC SCI; BR=3

## JGI454H1 The Role of the Planner: Making a Difference [24L]

Focuses 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 FCEs, 5.0 of which must be GGR/INI Urban Studies
DR=SOC SCI; BR=3

## Writing and Rhetoric Courses

## INI103H1 Writing Essays [24L/12T]

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. DR=HUM/SOC SCI; BR=None

## Innis College

## INI104H1 Writing Reports [36S]

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.
DR=HUM/SOC SCI; BR=None
INI203Y1 Foundations of Written Discourse [72S]
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. DR=HUM; BR=2

## INI204Y1 The Academic Writing Process [72S]

The strategy necessary to write complete pieces of nonfiction 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. DR=HUM; BR=2
JEl206H1 Writing English Essays [24L/12T]
This course teaches students who already write effectively how to write clear, compelling, research-informed English essays. The course aims to help students recognize the function of grammar and rhetoric, the importance of audience, and the persuasive role of style.
Prerequisite: 1.0 ENG FCE or any 4.0 FCE. English students have priority.
DR=HUM; BR=1

## INI300H1 Strategic Writing in Business and the Professions: Theory and Practice (formerly INI300Y1) [36S]

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. Exclusion: INI300Y1
DR=HUM/SOC SCI; BR=1

## INI301H1 Contemporary Issues and Written Discourse: Rhetoric and the Print Media [36S]

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 columnists persona and the role of editorials are also examined.

Prerequisite: Completion of 4.0 full-course equivalents. DR=HUM/SOC SCI; BR=3

## INI302H1 Writing in Business and the Professions for Rotman Commerce students [24L/12T]

Designed for and restricted to undergraduates in Rotman Commerce. Assignments and course aims reflect the learning goals of the Rotman Commerce program. This course focuses on critical thinking, ethical reasoning, and the rhetoric of the world of business. The theory and practice of written and oral communication are also central. Case study analysis using ethical reasoning models is a central pedagogical tool.
Prerequisite: Completion of 10.0 full-course equivalents.
Exclusion: INI300Y1/INI300H1
DR=HUM/SOC SCI; BR=1

## INI304H1 Critical Thinking and Inquiry in Written Communication [24L]

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. DR=HUM/SOC SCI; BR=2

## INI305H1 Word and Image in Modern Writing [36S]

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. DR=HUM; BR=1

## INI310H1 Editing [36S]

A study of professional editorial conventions, focusing on three stages of the editorial process: substantive editing, stylistic editing, and copy editing. As students learn these stages, they enhance their critical thinking, sharpen their language skills, and practise strategies for strengthening their own writing and the writing of others.
Prerequisite: Completion of 4.0 FCEs
Exclusion: INI409H1 (2009-10, 2011-12 topic: "Editing");
INI410H1 (2011-12 topic: "Scholarly Editing and
Publishing")
DR=HUM; BR=1
INI311Y1 Seminar in Creative Writing [72S]
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.

DR=HUM; BR=1

INI405Y1 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: Permission of Program Director.
DR=HUM/SOC SCI; BR=None
INI406H1 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: Permission of Program Director.
DR=HUM/SOC SCI; BR=None
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: Permission of Program Director.
DR=HUM/SOC SCI; BR=None
INI408Y1 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: Permission of instructor.
DR=HUM/SOC SCI; BR=None
INI409H1 Special Topics in Writing and Rhetoric [36S]
Seminars in special topics designed for students who are completing the Minor Program in Writing, Rhetoric, and Critical Analysis.
Prerequisite: Permission of instructor.
DR=HUM/SOC SCI; BR=None
$\begin{array}{ll}\text { INI410H1 } & \begin{array}{l}\text { Special Topics in Writing and Rhetoric } \\ \\ {[36 S]}\end{array}\end{array}$
Seminars in special topics designed for students who are completing the Minor Program in Writing, Rhetoric, and Critical Analysis.
Prerequisite: Permission of instructor.
DR=HUM/SOC SCI; BR=None

## Other Innis College Courses

INI299Y1 Research Opportunity Program [TBA]
Credit course for supervised participation in faculty research project. Details on page 33.
DR=None; $B R=$ None

## INI400Y1 Independent Research [TBA]

Under the supervision of a faculty member, students explore topics of their own choice and design their own research projects for a course not otherwise available within the

Faculty. The student should submit a detailed proposal and a letter of support from the supervisor by June 1 for $Y$ and $F$ courses and by September 1 for $S$ courses.
Prerequisite: Normally requires completion of 15.0 full-course equivalents with 3.3 CGPA and permission of the Innis College Vice-Principal.
DR=None; $B R=$ None

## INI401H1 Independent Research [TBA]

Under the supervision of a faculty member, students explore topics of their own choice and design their own research projects for a course not otherwise available within the Faculty. The student should submit a detailed propsal and a letter of support from the supervisor by June 1 for $Y$ and $F$ courses and by September 1 for $S$ courses.
Prerequisite: Normally requires completion of 15.0 full-course equivalents with 3.3 CGPA and permission of the Innis College Vice-Principal.
DR=None; BR=None

## INI402H1 Independent Research [TBA]

Under the supervision of a faculty member, students explore topics of their own choice and design their own research projects for a course not otherwise available within the Faculty. The student should submit a detailed proposal and a letter of support from the supervisor by June 1 for $Y$ and $F$ courses and by September 1 for $S$ courses.
Prerequisite: Normally requires completion of 15.0 full-course equivalents with 3.3 CGPA and permission of the Innis College Vice-Principal.
DR=None; $B R=$ None

## Faculty

## Professors Emeriti

R. Capozzi, MA, Ph D
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
O.L. Pugliese, MA, Ph D (V)
M.W. Ukas, MA, Ph D

Professor and Chair of the Department
S. Bancheri, MA, PhD (University of Toronto Mississauga)
Associate Chair and Graduate Co-ordinator
F. Pierno, Dott in Lett, DEA, Doctorat

## Professors

S. Bancheri, MA, PhD (University of Toronto Mississauga)
K. Eisenbichler, MA, Ph D (V)
F. Guardiani, Dott in Lett, MA, Ph D (SM)
M. Lettieri, MA, Ph D (University of Toronto Mississauga)
D. Pietropaolo, MA, Ph D (SM), Commend. Rep. It.

## Associate Professor

L. Somigli, Dott in Lett, Ph D

## Assistant Professor

F. Pierno, Dott in Lett, DEA, Doctorat

## Senior Lecturers

B. Magliocchetti, MA (SM)
M. Pasquarelli Clivio, MA, Ph D (SM)
M. Scarci, MA, Ph D (V)
A. Urbancic, B Ed, MA, Ph D (V)

## Senior Lecturer Emerita

R. Longo Lavorato, MA, Ph D (SM)

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

## Italian Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent, including at least one full course equivalent at the 400 level)
One of the following: ITA100Y1/ITA101Y1/ITA152Y1
One of the following series of language courses
a. ITA250Y1, ITA350Y1 (formerly ITA343H1, ITA344H1) (Prerequisite ITA100Y1)
b. ITA251Y1, ITA351Y1 (formerly ITA354H1, ITA355H1) (Prerequisite ITA101Y1)
c. ITA252Y1, ITA451H1, ITA452H1 (Prerequisite ITA152Y1)

One additional 200 -series ITA full course equivalent
Two full course equivalents at the $300+$ level in literature, including 0.5 FCE in each of the THREE periods of Italian literature:
Medieval / Renaissance: ITA300H1/ITA311H1/ITA312H1/ ITA320H1/ITA321H1/ITA325H1/ITA332H1/ITA370H1/ ITA409H1/ITA420H1/ITA436H1/ITA455H1/ITA494H1
Baroque / Enlightment: ITA301H1/ITA326H1/ITA390H1/ ITA420H1/ITA436H1/ITA455H1/ITA470H1/ITA494H1
Modern / Contemporary: ITA301H1/ITA310H1/ITA312H1/ ITA330H1/ITA334H1/ITA346H1/ITA381H1/ITA405H1/ ITA410H1/ITA421H1/ITA441H1/ITA455H1/ITA493H1/ ITA494H1
One half course from the following: ITA $360 \mathrm{H} 1 / 361 \mathrm{H} 1 / 363 \mathrm{H} 1 /$ $371 \mathrm{H} 1 / 372 \mathrm{H} 1 / 430 \mathrm{H} 1 / 471 \mathrm{H} 1 / 472 \mathrm{H} 1$
One half course from the following: ITA311H1/ITA320H1/ ITA321H1/ITA332H1/ITA340H1/ITA341H1/ITA370H1/ ITA420H1
Two and one half additional full course equivalents at the $300+$ level with at least one half course at the 400 level ITA495H1
NOTE: No more than TWO full courses or equivalent where the language of instruction is English may be counted towards the Specialist Program.

## Italian Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent, including at least one halfcourse equivalent at the 400 level)

One of the following: ITA100Y1/ITA101Y1/ITA152Y1
One language full-course from: ITA250Y1/ITA251Y1/ ITA252Y1
One additional ITA 200-series full course equivalent or JFI225Y1

One full course or equivalent at the 300+ level in literature
One half course from the following: ITA360H1/ITA361H1/ ITA363H1/ITA371H1/ITA372H1/ITA430H1/ITA471H1/ ITA472H1
One half course from the following: ITA311H1/ITA312H1/ ITA320H1/ITA321H1/ITA332H1/ITA370H1/ITA420H1/ ITA340H1/ITA341H1
Two additional 300+ series courses with at least one half course at the 400 level (students whose first-year course is ITA100Y1 must include ITA350Y1, formerly ITA343H1 and ITA344H1, in their selection)

## Italian Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(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 Culture and Communication Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

4 full courses (or equivalent) including one full course equivalent from any of the following:
ITA340H1/ITA341H1/ITA441H1/ITA347H1
ITA360H1/ITA361H1/ITA363H1/ITA430H1
ITA356Y1/357Y1/358Y1/359Y1
ITA371H1/ITA372H1/ITA471H1/ITA472H1/473H1

## Second Language Learning (Italian) Major (Arts

 program)Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent)

1. ITA100Y1/ITA101Y1/110Y1/(133H1, 134H1) (all with minimum 73\%)/ITA152Y1
2. JFI225Y1
3. ITA250Y1/ITA251Y1/ITA252Y1/253Y1
4. One full course or equivalent at the 300+ level in literature
5. At least one full-course equivalent from: ITA360H1, ITA361H1, ITA363H1, ITA430H1
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/ITA101Y1/ITA152Y1) (or the equivalent
prerequisite training), earn a grade of at least $B$ - in a secondyear language course (ITA250Y1/ITA251Y1/ITA252Y1) and in one FCE in Italian language at the 300 or 400 level.
Students should note that, as explained on page 26 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.

## Italian Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Guidelines for the selection of first-year language courses:

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.

ITA102Y1: an introductory language course for students wishing to take Italian solely as a breadth requirement. This course cannot be used towards any Minor, Major or Specialist program 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 halfcourse, 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.

## ITA100Y1 Italian Language for Beginners [72S]

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/ITA102Y1/ITA110Y1/
(ITA133H1, ITA134H1)/ITA152Y1 (Not open to students
with a knowledge, however passive, of an Italian dialect)
DR=HUM; BR=1
ITA101Y1 Elementary Italian Language [72S]
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/ ITA100Y1/110Y1/(133H1, 134H1)/ 152Y1
DR=HUM; BR=1

## Italian Studies

## ITA102Y1 Practical Italian [48L/24P]

A course specifically designed for students who wish to take Italian as a breadth requirement. Emphasis will be given to basic aspects of communication in a functional context. This course cannot be used towards any Minor, Major or Specialist program in Italian.
Exclusion: 4U Italian or any previous university level Italian
language course
DR=HUM; BR=1
ITA135Y0 Conversation and Culture: An Introduction to Italian [72S]
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)
DR=HUM; BR=1
ITA152Y1 Language Practice [72S]
A review of grammar, the writing of short compositions, and oral practice. Linguistic analysis based on readings of contemporary literary texts.
Prerequisite: Italian OAC/4 U or permission of Department.
Exclusion: ITA100Y1/ITA101Y1/ITA110Y1/(ITA133H1,
ITA134H1)
$D R=H U M ; B R=1$
ITA200H1 Major Italian Authors in Translation: from Dante to Tasso [24L]
The course will focus on authors from the Middle Ages to the Renaissance who had a defining influence on Western literature, such as Dante, Petrarca, Boccaccio, Machiavelli,
Ariosto and Tasso. (Given in English)
Exclusion: ITA300H1
DR=HUM; BR=1

## ITA210Y1 Contemporary Italy [48S]

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)
DR=HUM; BR=1

## ITA220H1 Introduction to Modern Italian Literature: Prose [24L]

Reading of selections of Italian prose works, with emphasis on linguistic and stylistic features from Svevo and Pirandello to the present. 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/ITA101Y1/ITA152Y1
DR=HUM; BR=1

## ITA221H1 Introduction to Modern Italian Literature: Poetry [24L]

Reading of selections of Italian poetry, with emphasis on linguistic and stylistic features from Futurism to the present. 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/ITA101Y1/ITA152Y1
DR=HUM; BR=1

## JFI225Y1 Second Language Learning [48L]

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. Students enrolled in the Major in French language learning, must submit all assignments and tests in French.
Prerequisite: FSL221Y1 or, upon first FRE/FSL enrolment,
equivalent as determined by the French Placement Test/ ITA100Y1/101Y1/102Y1/ 110Y1/(133H1, 134H1) (all with
a minimum of $73 \%$ )/152Y1
DR=HUM; BR=2
ITA233H1 Introduction to Italian-Canadian Literature (formerly ITA233Y1) [24L]
An examination of the Italian presence in Canada through an analysis of literary texts and a consideration of sociological and linguistic phenomena. Particular attention will be paid to Italian-Canadian writers such as Nino Ricci, Pier Giorgo Di Cicco, Frank Paci, Mary Di Michele, Caterina Edwards and Gianna Patriarca. (Given in English)
Exclusion: ITA233Y1
DR=HUM; BR=3

## ITA235Y0 Conversation and Culture: Intermediate Italian Intensive Oral Practice [72S]

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)
Prerequisite: ITA100Y1/ITA101Y1/(ITA133H1, ITA134H1)/
ITA135Y1/ITA152Y1 or permission of Department Exclusion: ITA252Y1 (and/or higher)
DR=HUM; BR=1
ITA240Y1 Italian Cinema [48L/72P]
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.
DR=HUM; BR=1

## ITA245Y1 Italian Culture \& Civilization [24L/24T]

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/ITA247H1/ITA248Y1/(ITA356/
ITA357Y1)/(ITA358/ITA359Y1)
DR=HUM; BR=1+3

## ITA249H1 Italians in China: From Marco Polo to

 Matteo Ricci [24L]The course focuses on two historical encounters of Italian civilization with imperial China: One made possible by the immensely popular book, II 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)
DR=HUM; BR=3

## ITA250Y1 Intermediate Italian [72S]

Grammar review, readings of Italian authors and oral practice to enhance comprehension and expressive skills.
Prerequisite: ITA100Y1/(ITA133H1, ITA134H1)
Exclusion: ITA152Y1/ITA251Y1/ITA252Y1/ (Not open to students with a knowledge of an Italian dialect)

## DR=HUM; BR=1

ITA251Y1 Intermediate Italian II [72S]
A review of Italian grammar, readings of Italian authors and one hour of oral practice.
Prerequisite: ITA101Y1/ITA110Y1/(ITA133H1, ITA134H1) or permission of department
Exclusion: ITA152Y1/ITA250Y1/ITA252Y1
DR=HUM; BR=1

## ITA252Y1 Written and Oral Expression in Italian [72S]

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.
Prerequisite: ITA152Y1
Exclusion: ITA250Y1/ITA251Y1
DR=HUM; BR=1

## ITA271Y1 Translating I [24L/24T]

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 DR=HUM; BR=1

## ITA299Y1 Research Opportunity Program [TBA]

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None
ITA300H1 History of Italian Literature: Middle Ages and Renaissance [24L]
This course provides a chronological, comprehensive view of Italian literature and its major authors and trends from its beginnings to the Renaissance. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
Exclusion: ITA200H1,ITA300Y1
DR=HUM; BR=1

## ITA301H1 History of Italian Literature: Baroque to Contemporary [24L]

This course provides a chronological, comprehensive view of Italian literature and its major authors and trends from the Baroque period to the present day. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
Exclusion: ITA300Y1
DR=HUM; BR=1

## ITA310H1 The 'Journey' in 19th Century Italian

 Literature [24L]The course illustrates Italys contribution to the history of the trope during a time when countries became increasingly interdependent and conscious of each others 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. (Given in English)
DR=HUM; BR=1

## ITA311H1 Mediaeval Italian Literature in Translation:

 Dante [24L]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/ITA320H1/ITA321H1
DR=HUM; BR=1
ITA312H1 Mediaeval Italian Literature in Translation: Petrarch and Boccaccio [24L]
A study of the Petrarchs Canzoniere and of Boccaccios 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
DR=HUM; BR=1

## ITA320H1 Dante: Vita Nuova and Divina Commedia

 (Inferno) [24L]Dantes 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.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
Exclusion: ITA311H1/ITA320Y1
DR=HUM; BR=1

## ITA321H1 Dante: Divina Commedia (Purgatorio and Paradiso) [24L]

A continuation of ITA320H1, this course examines the Purgatorio and the Paradiso in the context of Dantes vision of contemporary society. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA320H1
Exclusion: ITA311H/ITA320Y
DR=HUM; BR=1

## Italian Studies

## ITA325H1 Themes and Forms of the Lyric Tradition from Petrarch to Tasso [24L]

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
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
Exclusion: ITA325Y1/ITA312H1
DR=HUM; BR=1

## ITA326H1 Themes and Forms of the Lyric Tradition from Late Renaissance to 20th Century [24L]

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 DAnnunzio. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
Exclusion: ITA325Y1
DR=HUM; BR=1
ITA330H1 The Christian Epic: Manzoni and the 19th Century [24L]
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.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
Exclusion: ITA330Y1
DR=HUM; BR=1

## ITA332H1 Love in the Renaissance [24L]

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, womens position in society, homosexuality and other issues. This course includes a component designed to enhance students research experience. (Given in English)
Exclusion: ITA345H1
DR=HUM; $B R=1$

## ITA334H1 Italian Canadian Literature I: Life in a New World [12L/12T]

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)
DR=HUM; BR=1

## ITA340H1 Italian Neorealist Cinema [24L/36P]

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
DR=HUM; BR=1
ITA341H1 Italian Cinema after Neorealism [24L/36P]
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)
Prerequisite: ITA340H1 or permission of Department. Exclusion: ITA340Y1
DR=HUM; BR=1

## ITA346H1 Monsters and Marvels in Italian Modern Literature [24L]

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/ITA251Y1/ITA252Y1 AND one FCE among 300 -level ITA literature courses
DR=HUM; BR=1

## ITA347H1 Topics in Italian Cinema [24L/36P]

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
DR=HUM; BR=1
ITA350Y1 Language Practice (formerly ITA343H1, ITA344H1) [24P/48S]
For students who have completed ITA250Y1. Discussion of problems of grammar, style, and composition. 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. Prerequisite: ITA250Y1
Exclusion: ITA252Y1/ITA351Y1/ITA352Y1/ITA343H1/
ITA344H1/ITA354H1/ITA355H1/ITA364H1/ITA365H1 DR=HUM; BR=1

ITA351Y1 Language Practice II (formerly ITA354H1, ITA355H1) [24P/48S]
For students who have completed ITA251Y1. Discussion of problems of grammar, style, and composition. 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.
Prerequisite: ITA251Y1
Exclusion: ITA252Y1/ITA350Y1/ITA352Y1/ITA343H1/
ITA344H1/ITA354H1/ITA355H1/ITA364H1/ITA365H1 DR=HUM; BR=1

## ITA356YO Italian Culture from the Middle Ages to the

 Renaissance [24L/24T]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.)

ITA356Y0: This course is taught in English and is open to students from other disciplines.
ITA357Y0: 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/ITA246H1/ITA248Y1
DR=HUM; BR=1+3

## ITA357YO Italian Culture from the Middle Ages to the

 Renaissance [24L/24T]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.)

ITA356Y0: This course is taught in English and is open to students from other disciplines.
ITA357Y0: 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/ITA246H1/ITA248Y1
DR=HUM; BR=1+3

## ITA358Y0 Modern Italian Culture [24L/24T]

ITA358Y0: This course is taught in English and is open to students from other disciplines.
ITA359Y0: 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/ITA247H1/ITA248Y1
DR=HUM; BR=1+3
ITA359Y0 Modern Italian Culture [24L/24T]
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)

ITA358Y0: This course is taught in English and is open to students from other disciplines.
ITA359Y0: 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/ITA247H1/ITA248Y1
DR=HUM; BR=1+3

## ITA360H1 Italian Linguistics [24L]

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. (Given in English)
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
DR=HUM; BR=2
ITA361H1 Aspects of Italian Descriptive and Applied Linguistics [24L]
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. (Given in English) Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1 AND ITA360H1 DR=HUM; BR=2

## ITA363H1 Italian Sociolinguistics [24L]

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/ITA251Y1/ITA252Y1
DR=HUM; BR=2

## ITA370H1 Power and Success in the Renaissance [24L]

Concepts of power and strategies for success in Renaissance texts including Machiavellis II principe and Castigliones II libro del cortegiano. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1
Exclusion: ITA370Y1
DR=HUM; BR=2

## ITA371H1 Translating II [24S]

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.
Prerequisite: Permission of Department
Exclusion: ITA371Y
DR=HUM; BR=1

## ITA372H1 Translating III [24S]

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. Prerequisite: ITA371H1 or permission of Department Exclusion: ITA371Y1
DR=HUM; BR=1
ITA381H1 Topics in Modern and Contemporary Literature [24L]
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/ITA251Y1/ITA252Y1
DR=HUM; BR=1
ITA390H1 The Commedia dellArte [24L]
A study of the conventions of the Commedia dellArte tradition in the context of its performance history from the

## Italian Studies

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)
DR=HUM; BR=1
ITA395Y0 Special Topics in Italian Studies [48S]
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) DR=HUM; BR=1

ITA398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33
DR=HUM; BR=None
ITA399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33
DR=HUM; BR=None

## ITA400H1 Machiavelli [24S]

An intensive study of Machiavelli's major works in English translation, including his political treatises (The Prince, excerpts from The Discourses), plays (The Mandrake Root), letters, and short story (Belfagor), in the context of Renaissance Florence, the history of Machiavelli criticism, and modern ethical debates. This course includes a component designed to enhance students' research experience. (Given in English)
Prerequisite: Completion of at least 10.0 FCEs DR=HUM; BR=2

ITA405H1 19th Century Italian Poetry [24L]
Centred around the poetic production of Leopardi, Pascoli, and DAnnunzio, the course explores the main literary, artistic and socio-political issues that characterize Italys cultural contribution within the context of the romantic movements in Europe. This course includes a component designed to enhance students' research experience.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level DR=HUM; BR=1

## ITA409H1 Masterpieces of Medieval and Renaissance Drama [24L]

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/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level DR=HUM; BR=1

ITA410H1 Masterpieces of Modern Drama [24L]
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/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level
DR=HUM; BR=1

ITA420H1 Spinning a Tale: The Italian Short Story from Boccaccio to Basile [24L]
The short story genre and its development from the Middle Ages to the Baroque. In addition to Boccaccios 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.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level
Exclusion: ITA421Y1
DR=HUM; BR=1
ITA421H1 Spinning a Tale: The Italian Short Story after 1800 [24L]
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.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level
Exclusion: ITA421Y1
DR=HUM; BR=1
ITA430H1 History of the Italian Language [24L]
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/ITA251Y1/ITA252Y1
DR=HUM; BR=2

## ITA436H1 Man and Society from the Renaissance to the Enlightenment [24L]

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. Prerequisite: ITA250Y1/251Y1/252Y1 and at least 0.5 FCE

ITA literature courses at the 300-level
Exclusion: ITA436Y1
DR=HUM; BR=1

## ITA441H1 Italian Novel into Film: Aspects of Cinematic Adaptation [24L]

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/
ITA340H1/ITA341H1/ITA347H1/381Y1. Knowledge of Italian recommended
DR=HUM; BR=1

## ITA451H1 Advanced Composition and Stylistics I [36S]

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: ITA350Y1 (formerly ITA343H1, ITA344H1) /
ITA351Y1(formerly ITA354H1,ITA355H1)/ITA352Y1/
ITA364H1,ITA365H1)
Exclusion: ITA450Y/ITA451Y/ITA452Y
DR=HUM; BR=1

## ITA452H1 Advanced Composition and Stylistics II [36S]

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/ITA451Y/ITA452Y
DR=HUM; BR=1

## ITA455H1 Women Writers in Italy [24L]

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/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level DR=HUM; BR=1

## ITA470H1 Galileo and the Scientific Revolution in Renaissance Italy [24L]

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/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level
DR=HUM; BR=1

## ITA471H1 Translating IV [24S]

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
DR=HUM; BR=1

## ITA472H1 Translating V [24S]

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.
Prerequisite: ITA471H1 or permission of Department
Exclusion: ITA471Y1
DR=HUM; BR=1

## ITA489H1 Independent Studies [TBA]

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

## DR=HUM; BR=None

ITA490Y1 Independent Studies [TBA]
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
DR=HUM; BR=None
ITA491H1 Topics in Contemporary Fiction [24L]
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/ITA251Y1/ITA252Y1 and at least 0.5
FCE ITA literature courses at the 300-level DR=HUM; BR=1

## ITA493H1 Italian-Canadian Literature II: Identity and Voice [24L]

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/ITA334H1 DR=HUM; BR=1
ITA494H1 The Renaissance Artist as Writer [24S] An analysis of writings (in English translation) by artists from Alberti and Leonardo da Vinci to Michelangelo,Vasari and Cellini in relation to Renaissance thought, the theory of art, and the status of the artist. This course includes a component designed to enhance students' research experience. (Given in English)
Exclusion: ITA494Y1
DR=HUM; BR=1

## 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 DR=HUM; BR=None

## 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
DR=HUM; BR=None

## Faculty

## Professors Emeriti

E. Birnbaum, BA, DOAS (NMC)
L.R.M. Garshowitz, Ph D (NMC)
J. Kornberg, MA, Ph D (HIS)
M.R. Marrus, MA, Ph D, FRSC (T) (HIS)

Chancellor Rose and Ray Wolfe Professor Emeritus of Holocaust Studies
A. Pietersma, BD, Ph D (NMC)
G.P. Richardson, B Arch, BD, Ph D (U) (RLG)
R. Sandler, MA, Ph D (NMC)

Professor and Acting Director
J. Kopstein, MA, Ph D (POL)

Associate Professor and Associate Director
A. Shternshis, MA, D Phil, Ph D (GER)

Al and Malka Green Professor in Yiddish

## Professor and Graduate Director

D. Bergen, MA, PhD (His)

Chancellor Rose and Ray Wolfe Chair in Holocaust Studies

## Professors

E. Adler, MA, Ph D (POL)

Andrea and Charles Bronfman Chair in Israeli Studies
M. Bodemann, MA, Ph D (SOC)
R. Brym, MA, Ph D (SOC)
B.E. Dresher, BA, Ph D (LIN)
P. Franks, MA, Ph D (PHL)

Senator Jerahmiel S. and Carole S. Grafstein Chair in Jewish Philosophy
R.B. Gibbs, MA, Ph D (U) (PHL)
W. Goetschel, M Phil, Ph D (GER, PHL)
A. Harrak, MA, Ph D (NMC)
B. Inwood, MA, Ph D (PHL)
T.P. Harrison, MA, Ph D (NMC)
I. Kalmar, MA, Ph D (W, V) (ANT)
J. Kloppenborg, MA, Ph D (RLG)
R.J. Leprohon, MA, Ph D (NMC)
L. Livak, MA, Ph D (SLA)
P. R. Magocsi, MA, Ph D (POL)
M.D. Meyerson, MA, Ph D (HIS)
E. Morgan, LLB, LLM (LAW)
D. Novak, MHL, Ph D (U) (RLG, PHL)
J. Richard and Dorothy Shiff Chair of Jewish Studies
C. Orwin, MA, Ph D (SM) (POL)
D.J. Penslar, MA, Ph D, C Phil (U) (HIS)

Samuel J. Zacks Chair in Jewish History
J.Retallack, BA, D.Phil (HIS)
A. Ripstein, MA, Ph D, MSL (LAW, PHL)
M.E. Subtelny, MA, Ph D (NMC)
E. Weinrib, Ph D, LL B (LAW)

Cecil A. Wright Professor of Law

## Associate Professors

S. Akbari, MA, Ph D (ENG, CMS)
J. Bryant, MA, Ph D (SM) (REL, SOC)
M. Chazan, M Phil, Ph D (V)
A.S. Cohen, MA, Ph D (ART)
R. Comay, MA, Ph D (PHL)
H. Fox, MA, Ph D (NMC, RLG)
K.H. Green, MA, Ph D (RLG)
J. Harris, MA, Ph D (SMC)
L. Kaplan, MA, Ph D (ART)
T. Lawson, MS, Ph D (NMC)
J. Marshall, MA, Ph D (RLG)
T. Meacham, MA, Ph D (NMC)
S. Metso, MA, Th D (NMC)
A. Most, MA, Ph D (ENG)
H. Najman, MA, Ph D (REL)
J. Newman, MAR, Ph D (REL)
J. Ross, MA, Ph D (HIS)
W. Saleh, MA, Ph D (NMC, REL)
K. Weisman, MA, Ph D (ENG)
R. Wittmann, MA, Ph D (HIS)
P. Wróbel, MA, Ph D (HIS)

## Assistant Professors

K. Blouin, MA, Ph D (HIS)
R. Holmstedt, MA, Ph D (NMC)
A. Komaromi, MA, Ph D (VIC)

## Special Lecturers

F. Bialystok, MA, Ph D (HIS)
S. Goldberg, MA, PhD (PHL)
S. Green, MA, Ph D (NMC)
B. Walfish, MA, Ph D (Fisher Library)
K.Rubinstein, MA, PhD (RLG)
R. Seelig, MA, PhD (GER)

Faculty offer courses in numerous disciplines, including archaeology, art, history, languages, literature, performance, philosophy, political science, religion and sociology. Jewish Studies classes are noted for their combination of close textual study and vigorous intellectual debate. While languages such as Hebrew and Yiddish, along with texts from biblical and rabbinic literature, remain crucial to Jewish Studies, the topics studied have expanded dramatically to include many courses in modern Jewish history, thought and culture, the Holocaust, Israeli society and Jewish popular culture. The appeal of Jewish Studies rests on the role of Judaism as one of the fountainheads of Western civilization. In addition, because Jewish communities have developed ways of inheriting the past through a highly critical engagement both with Jewish traditions and with other cultures, Jewish Studies classes provide an excellent education in critical thinking for students of all backgrounds. Indeed, Judaism has survived by reinventing itself in response to adverse circumstances, so Jewish Studies classes also offer an excellent education in survival at a time when social and economic change proceed at ever increasing rates and thus demand repeated reinventions. Moreover, because Jewish thought and culture have engaged in perhaps the longest sustained discussion of the role of minorities within majority cultures, Jewish Studies classes provide many resources for critical and fruitful reflection on Canada's remarkable diversity and on Canada's place in an increasingly global society.

Enquiries: Centre for Jewish Studies
(416) 978-8118/(416) 978-1624, jewish.studies@utoronto.ca/ anna.shternshis@utoronto.ca

## Centre for Jewish Studies Programs

The Jewish Studies Undergraduate Program is divided into four areas of concentration:
A: Classical Judaism
B: Jewish Philosophy and Thought
C: History and Social Sciences
D: Modern Culture, Languages, and Literatures

## Jewish Studies Specialist (Arts prograrm)

Enrolment in this program requires the completion of 4.0 courses.
There are no specific first-year requirements; however, firstyear students are welcome to take CJS 200, CJS 201, and Hebrew Language courses (MHB 155H and MHB 156H) and Yiddish Language courses (GER 260), which count towards the Jewish Studies Specialist.
(10 FCEs or equivalent, including at least 4 FCEs at the $300+$ level and at least 1 FCE at the 400 -level)

1. CJS200H1/CJS201H1, CJS400H1
2. 3 FCEs or proof of proficiency at the third-year level in one of the following languages: Aramaic, Hebrew, Yiddish. Other languages are accepted with special permission. Students entering the program with requisite linguistic proficiency will choose any 3 FCEs in their first or second areas of concentration (see below) in addition to the regular requirements described in sections 3 and 4.
3. 4 FCEs in one of the four Jewish Studies areas of concentration, of which at least 0.5 FCE at the 400 level. This is in addition to the language requirements in section 2 (above).
4. Additional 2 FCEs in one other area of concentration, with at least 1 FCE at $300+$ level.
5. At least 0.5 FCE among the courses in sections 1-4 must satisfy the quantitative reasoning requirement. If no Jewish Studies courses meeting this requirement are available in any area of Jewish studies, students, in consultation with a Jewish Studies advisor, may choose a course with a quantitative reasoning component among those specifically designated for this purpose in the Faculty of Arts and Science. If quantitative reasoning course is chosen from Jewish studies courses, it will also count toward the requirements in section 4. If it is taken outside of the Jewish studies courses, it is in addition to any program requirements listed above.

## Jewish Studies Major (Arts prograrm)

Enrolment in this program requires the completion of 4.0 courses.

There are no specific first-year requirements; however, firstyear students are welcome to take CJS 200, CJS 201, and Hebrew Language courses (MHB 155H and MHB 156H) and Yiddish Language courses (GER 260Y), which count towards the Jewish Studies Major.
(6.5 FCEs or equivalent, including at least 2 FCEs at the $300+$ level, 0.5 of which must be at the 400 -level)

1. CJS200H1/CJS201H1
2. 4 FCEs in one of the four Jewish Studies areas of concentration, with at least 2 FCEs at the $300+$ level. Students choosing "Classical Judaism" concentration
must take 2 FCEs of Jewish Studies approved language or demonstrate linguistic proficiency at the second year level.
3. Additional 1 FCE in one other area of Jewish Studies concentration.
4. 0.5 FCE to satisfy the Quantitative Reasoning requirement, to be chosen among any courses in Jewish Studies developing this competency. If not available, students can choose from courses from other units (with permission of the program director), or courses in Breadth Category 5 "The Physical and Mathematical Universe".
5. CJS 400 H 1 or another 400 level course in Jewish Studies (with permission of the program director).

## Jewish Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
There are no specific first-year requirements; however, firstyear students are welcome to take CJS 200, CJS 201, and Hebrew Language courses (MHB 155H and MHB 156H) and Yiddish Language courses (GER 260Y), which count towards the Jewish Studies Minor.
(4 FCEs or their equivalent, including at least 1 FCE at the 300+ level)

1. CJS200H1/CJS201H1
2. 3.5 FCEs in one of the four Jewish Studies areas of concentration, including at least 1 FCE at the $300+$ level.

## Jewish Studies Courses by Concentration:

Please note: For the most up-to-date lists of courses qualifying for each concentration, see the undergraduate handbook issued by the Centre for Jewish Studies.

A: Classical Judaism
CJS200H1, CJS201H1, CJS390H1, CJS400H1, CJS491H1; RLG100Y1, RLG202Y1, RLG239H1, RLG280Y1, RLG319H1, RLG320H1, RLG325H1, RLG326H1, RLG340Y1, RLG342Y1, RLG343H1, RLG345H1, RLG346H1, RLG432H1; MHB155H1, MHB156H1, MHB256H1, MHB255H1, MHB355H1, MHB356H1, NML150Y1, NML220Y1, NML250Y1, NML251Y1, NML320H1, NML350H1, NML351H1, NML352H1, NML354H1, 356H1, NML357H1, NML358H1, NML359H1, NML420Y1, NML450H1, NML451H1, NML452H1, NML454H1, NML457H1; NMC150H1, NMC151H1, NMC250H1, NMC252H1, NMC254Y1, NMC257Y1, NMC281H1, NMC282H1, NMC284H1, NMC324H1, NMC360H1, NMC361H1, NMC370Y1, NMC384H1, NMC388Y1, NMC450H1, NMC484H1; SMC421H1

## B: Jewish Philosophy and Thought

 CJS200H1, CJS201H1, CJS390H1, CJS400H1, CJS491H1; GER412H1, GER430H1; MHB155H1, MHB156H1, MHB256H1, MHB255H1, MHB355H1, MHB356H1,RLG100Y1, RLG202Y1, RLG220H1, RLG221H1, RLG239H1, RLG280Y1, RLG340Y1, RLG341H1, RLG342Y1, RLG343H1, RLG345H1, RLG346H1, RLG388H1, RLG432H1, RLG434H1, RLG445H1, RLG446H1; NMC388Y1; PHL310H1, PHL322H1, PHL323H1, PHL338H1, PHL370H1; POL381H1, POL407Y1, POL421H1, POL430Y1; SMC421H1
## C: History and Social Sciences

ANT426H1; CJS200H1, CJS201H1, CJS390H1, CJS400H1, CJS491H1; GER362H1, HIS208Y1, HIS301H1, HIS303Y1, HIS308H1, HIS317H1, HIS338Y1, HIS352H1, HIS356H1, HIS361H1, HIS389H1, HIS403Y1, HIS414H1, HIS431H1, HIS433H1, HIS442Y1, HIS444H1, HIS451H1;MHB155H1, MHB156H1, MHB256H1, MHB255H1, MHB355H1, MHB356H1, NMC275Y1, NMC278H1, NMC477H1;
POL345H1, POL381H1, POL407Y1, POL430Y1, POL453Y1; RLG344Y1, RLG430H1, RLG453H1; SLA202H1, SLA302H1; SMC421H1; SOC250Y1, SOC341Y1; UNI280H1, UNI380H1
D. Modern Culture, Languages, and Literatures ANT426H1; CJS200H1, CJS201H1, CJS390H1, CJS400H1, CJS491H1; DTS404H1; FAH381H1; ENG275Y1, ENG375H1; GER260Y1, GER360H1, GER361H1, GER362H1,
GER412H1, GER462H1; HIS352H1, HIS389H1;MHB155H1, MHB156H1, MHB256H1, MHB255H1, MHB355H1, MHB356H1, NML155H1, NML156H1, NML255Y1, NML355Y1, NML455H1, NML456H1; NMC256Y1, NMC352Y1; RLG344Y1, RLG430H1; SLA202H1, SLA302H1, SLA303H1, SLA318H1; SMC421H1; UNI280H1, UNI380H1

## Centre for Jewish Studies Courses

## CJS200H1 Introduction to Jewish Thought [24L]

A balanced presentation of the multifaceted approach to the discipline by treating Jewish religion and thought. The course introduces students not only to a chronological and thematic overview of the subject, but also to different methodological approaches.
DR=HUM; BR=2
CJS201H1 Introduction to Jewish Culture [24S]
General introduction to history, literatures and cultures of Jewish people from antiquity to contemporary. A balanced presentation of multi-disciplinary approaches and multimethodological approaches to Jewish studies, with a special emphasis on Jewish cultural studies and Jewish secularity. DR=HUM; BR=1

## CJS220H1 The Holocaust in Fiction [24S]

The course examines literary works written in different languages, in ghettos and concentration camps during the Holocaust, as well as those reflecting on the genocide in its aftermath. We focus on literature as a means of engaging with the unimaginable and on the cross analysis of eyewitness and memory writing.
Recommended Preparation: CJS200H1
DR=HUM; BR=1
CJS230H1 God, Nation, and Self Transformed: The Secularization of the Jewish Experience [24S]
The course provides a theoretical background to the issue of secularization and examines the diverse attempts to define on a secular basis the Jew, the Jewish nation, and the Jewish God since the breakdown of traditional Jewish society. A variety of Jewish secularisms are examined in a larger, non-Jewish context.
Recommended Preparation: CJS200H1
DR=HUM; BR=2
CJS290H1 Topics in Jewish Studies [24L/24T]
An examination of issues in Jewish Studies. Content in any given year depends on instructor.

## DR=HUM; BR=None

CJS389H1 Jewish Secularism and Messianic Thought: From Spinoza to Derrida [24S]
This course examines the critical role that Messianic thought plays in the emergence of modern Jewish secular thought. A study of the secular dimension of Messianism in the writings of Jewish philosophers, from Spinoza to Derrida, leading to the larger question of its place in the project of Jewish modernity.
Recommended Preparation: CJS200H1
DR=HUM; BR=2
CJS398H1 Independent Study [TBA]
A scholarly project on an approved topic supervised by a faculty affiliated with the Centre for Jewish Studies.
Prerequisite: CJS200H1 or CJS201H1
DR=None; $B R=$ None
CJS390H1 Special Topics in Jewish Studies [24L]
An examination of issues in Jewish Studies. Content in any given year depends on instructor.
Prerequisite: Permission of the instructor/program
DR=HUM; BR=None
CJS400H1 Research Seminar in Jewish Studies [24S]
An interdisciplinary seminar in which Jewish Studies topics are explored intensively, culminating in a major research paper by each student.
Prerequisite: JSP200H1; permission of the instructor/program DR=HUM; BR=None

CJS490H1 Advanced Topics in Jewish Studies [24S]
An in-depth investigation of topics in Jewish Studies. Content in any given year depends on instructor. Prerequisite: Permission of the instructor/program DR=HUM; BR=None
CJS491H1 Advanced Topics in Jewish Studies [24S]
An in-depth investigation of topics in Jewish Studies. Content in any given year depends on instructor.
Prerequisite: Permission of the instructor/program DR=HUM; BR=None

## CJS498Y1 Independent Study [TBA]

A scholarly project on an approved topic supervised by a faculty affiliated with the Centre for Jewish Studies. Prerequisite: CJS200H1 and permission of the Centre Recommended Preparation: CJS400H1 DR=HUM; BR=None

## CJS499H1 Independent Study [TBA]

A scholarly project on an approved topic supervised by a faculty affiliated with the Centre for Jewish Studies.
Prerequisite: CJS200H1 and permission of the Centre Recommended Preparation: CJS400H1 DR=HUM; BR=None

## Jewish Studies Courses Offered by Affiliated Academic Units

The following is a list of undergraduate courses offered by the academic units affiliated with Centre for Jewish Studies. Courses not appearing below may be considered for credit in a Jewish Studies program with permission of the Director or Associate Director. For up-to-date information, please check the Jewish Studies website (www.cjs.utoronto.ca).

| Department of Anthropology (416-978-4805) |  |
| :---: | :---: |
| ANT356H1 | Anthropology of Religion |
| ANT426H1 an Idea | Other Cultures: THe History and Present of |
| Department of Art (416-946-7624) |  |
| FAH319H1 | Illuminated Manuscripts |
| FAH381H1 | Problems in Jewish Art |
| Canadian Studies (University College; 416-9788153) |  |
| UNI280H1 | Canadian Jewish History |
| UNI380H1 | Socio-Cultural Perspective of the Canadian Jewish Community |
| Centre for Diaspora and Transnational Studies (416-946-8464) |  |
| DTS200Y1 | Introduction to Diaspora and Transnational Studies |
| DTS404H1 | Jewish Storytelling |
| Department of Classics (416-978-4848) |  |
| CLA 308 | Religion in the Greek World |
| Department of English (416-978-3190) |  |
| ENG275Y1 | Jewish Literature in English |
| ENG375H1 | Studies in Jewish Literature and Culture |
| Department of Geography and Planning (416-9463148) |  |
| GGR 358H1 | GGR 358 H Geography, Politial Economy, and Religion |
| Department of Germanic Languages and Literatures (416-926-2324) |  |
|  |  |
| GER150H1 German Cultural Studies |  |
| GER260Y1 | Elementary Yiddish |
| GER360H1 Intermediate Yiddish |  |
| GER361H1 Yiddish Literature and Culture in Translatio |  |
| GER362H1 | Soviet and Kosher: Jewish Culture in the Soviet Union |
| GER364H1 | History of Yiddish Cinema |
| GER412H1 | Modernity and Its Discontents |
| GER430H1 | Spinoza: Secularization in Modern Jewish Thought |
| GER462H1 | Advanced Yiddish |
| Department of History (416-978-3363) |  |
| HIS208Y1 | History of the Jewish People |
| HIS242H1 | Europe in the Twentieth Century |
| HIS301H1 | Imperial Spain |
| HIS303Y1 | The Mediterranean, 600-1300 |
| HIS 304H1 | Topics in Middle East History |
| HIS308H1 | The Mediterranean, 1300-1800 |
| HIS317H1 | Modern Germany, 1914 to the Present |
| HIS336H1 | Medieval Spain |
| HIS338Y1 | The Holocaust, to 1942 |
| HIS352H1 | Secularism and Strife: Modern Jewish Politics and Culture |
| HIS356H1 | Zionism and Israel |
| HIS361H1 | The Holocaust, from 1942 |
| HIS389H1 | Conflicted Loyalties: Problems of Jewish Modernity |
| HIS389H1 | Outsiders Inside: Jews and American Popular Culture |
| HIS403Y1 | Jews and Christians in Medieval and |
|  | Renaissance Europe |
| HIS411H1 | Great Trials in History |

HIS414H1 The Third Reich
HIS414H1 Down and Out in Medieval Europe
HIS431H1 Gender and the Holocaust
HIS433H1 Polish Jews Since the Partitions of Poland
HIS437H1 Telling Lies about Hitler
HIS438H1 Inquisition and Society in Medieval and Early
Modern Europe
HIS442Y1 European Women in the 20th Century
HIS444H1 Topics in Jewish History
HIS450H1 The Writing of Jewish History.
HIS451H1 World War II in East Central Europe

## Department of Near \& Middle Eastern Civilizations

(416-978-3180)
NML150Y1 Introductory Biblical Hebrew
NML155H1 Elementary Modern Hebrew I
NML156H1 Elementary Modern Hebrew II
NML220Y1 Introductory Aramaic
NML250Y1 Intermediate Biblical Hebrew
NML251Y1 Intermediate Biblical Hebrew: Pentateuch
NML255Y1 Intermediate Modern Hebrew
NML320H1 Intermediate Aramaic: Targum
NML350H1 Wisdom Literature
NML351H1 History Writings
NML352H1 Myth and Story
NML353H1 Jewish Apocalyptic Literature
NML354H1 Law and Ritual
NML355Y1 Advanced Modern Hebrew
NML356Y1 Babylonian Talmud
NML357H1 Midrash Aggadah
NML358H1 Mishnah and Tosefta
NML359H1 Prophecy
NML420Y1 The Jerusalem Talmud
NML450H1 Advanced Biblical Hebrew Grammar
NML451H1 Advanced Babylonian Talmud
NML452H1 Halakhic Midrashim
NML454H1 Midrash Before the Rabbis
NML455H1 Modern Hebrew Poetry
NML456H1 Modern Hebrew Prose
NML457H1 Introduction to Comparative Semitics
NMC150H1 Hebrew Bible and Ancient Jewish Literature in Translation
NMC151H1 The Bible and Its Interpreters
NMC250H1 Dead Sea Scrolls
NMC252H1 Ancient West Semitic Literature
NMC254Y1 Modern Hebrew Literature in Translation
NMC256Y1 Literature and Culture of Modern Israel
NMC257Y1 Introduction to the Literature of Jewish Sages
NMC275Y1 Muslims \& Jews: The Medieval Encounter
NMC278H1 Introduction to the Modern Middle East
NMC281H1 Prophets: Ancient Jewish Prophecy and Inspired Exegesis
NMC282H1 The Politics of Prophecy in Biblical Narrative
NMC284H1 Judaism and Feminism
NMC324H1 Greek Speaking Judaism of the Second Temple Period
NMC352Y1 Faith and Doubt in Modern Hebrew Poetry
NMC360H1 Archaeology of the Biblical World I: The Bronze Age
NMC361H1 Archaeology of the Biblical World II: The Iron Age
NMC370Y1 Ancient Israel
NMC384H1 Life Cycle and Personal Status in Judaism

| NMC388Y1 | Medieval Jewish and Islamic Philosophy and Theology | RLG343H1 | Kabbalah: A History of Mystical Thought in Judaism |
| :---: | :---: | :---: | :---: |
| NMC450H1 | Advanced Biblical Hebrew Grammar | RLG344Y1 | Antisemitism |
| NMC477H1 | Nationalism, Ethnicity and Minority Rights in the Middle East | RLG345H1 <br> RLG346H1 | Social Ecology and Judaism Time and Place in Judaism |
| NMC484Y1 | Gender-related Topics in Law and Religion | RLG388H1 | Special Topics: Kabbalah and Modernity |
| Department of Philosophy (416-978-3311) |  | RLG430H1 | Advanced Topics in Judaism |
|  |  | RLG432H1 | Natural Law in Judaism and Christianity |
| PHL235H1 | Philosophy of Religion | RLG434H1 | Modern Jewish Thought |
| PHL310H1 | The Rationalists | RLG389H1 | Special Topics |
| PHL313 | Seveneteenth and Eighteenth Century | RLG445H1 RLG446H1 | Maimonides and His Modern Interpreters The Thought of Leo Strauss |
|  | Philosophy | RLG451H1 | The Parables of Jesus |
| PHL321H1 | Heidegger | RLG453H1 | Christianity and Judaism in Colonial Context |
| PHL323H1 | Social and Cultural Theory | Department of Slavic Languages and Literatures(416-926-2075) |  |
| PHL338H1 | Jewish Philosophy |  |  |
| PHL366H1 | Topics in Political Philosophy | SLA103H1 | Golems and Robots on Stage and on Screen |
| PHL370H1 | Issues in Philosophy of Law | SLA202H1 | Jewish Communities in Slavic Countries |
| PHL402H1 | Seminar in Early Modern Philosophy | SLA302H1 | The Imaginary Jew |
| PHL408H1 | Seminar in Philosophy | SLA303H1 | Literary Imagination and Jewish Identity in |
| Department of Political Science (416-978-3343) |  | SLA318H1 | Modern Europe |
| POL101Y1 | Democracy, Dictatorship, War \& Peace |  | Kyiv-Kiev-Kijow: A City through Cultures and Centuries |
| POL321H1 | Ethnic Politics in Comparative Perspective |  |  |
| POL345H1 | Becoming Israel: War, Peace and the Politics of Israel's Identity | Department of Sociology (416-978-3412) |  |
| POL381H1 | Topics in Political Theory | SOC341Y1 | The Jewish Community in Europe and North |
| POL407Y1 | Politics of Origins |  | America |
| POL421H1 | Maimonides and His Modern Interpreters |  |  |
| POL430Y1 | Comparative Studies in Jewish and NonJewish Political Thought | St. Michae SMC421H1 | Jews and Judaism in Christian Traditions |
| POL453Y1POL479H1 | The Politics of Post-Communism | University College (416-978-8083) |  |
|  | Topics n Middle East Politics | UNI280H1 | Canadian Jewish History |
| Jointly Offered by Politics and Religion |  | UNI380H1 | Socio-Cultural Perspective of the CanadianJewish Community |
| Department for the Study of Religion (416-9782395) |  |  |  |
| MHB155H1 | Elementary Modern Hebrew I |  |  |
| MHB156H1 | Elementary Modern Hebrew II |  |  |
| MHB255H1 | Intermediate Modern Hebrew I |  |  |
| MHB256H1 | Intermediate Modern Hebrew II |  |  |
| MHB355H1 | Advanced Hebrew I |  |  |
| MHB356H1 | Advanced Hebrew II |  |  |
| RLG100Y1 | Religions East and West |  |  |
| RLG202Y1 | The Jewish Religious Tradition |  |  |
| RLG213H1 | Reading Sacred Texts |  |  |
| RLG220H1 | Philosophical Responses to the Holocaust |  |  |
| RLG221H1 | Religious Ethics: The Jewish Tradition |  |  |
| RLG239H1 | Special Topics: Jewish and Christian Polemics |  |  |
| RLG280Y1 | World Religions: A Comparative Study |  |  |
| RLG319H1 | Reconception of Biblical Figures in Early Jewish and Christian Sources |  |  |
| RLG320H1 | Judaism and Christianity in the Second |  |  |
|  | Century |  |  |
| RLG325H1 | Visions and Revelations in Ancient Judaism and Christianity |  |  |
| RLG326H1 | Judaism and the Roots of Christianity |  |  |
| RLG340Y1 | Classical Jewish Theology |  |  |
| RLG341H1 | Dreaming of Zion: Exile and Return in Jewish Thought |  |  |
| RLG342Y1 | Judaism in the Modern Age |  |  |

These courses are sponsored by more than one department, college, or program office. For full course descriptions, check the department/sponsor entry that is referred to after each course title.

These listings include sponsor and course title only.
EHJ352H1 Evolution of the Human Genome [24L, 12T
See Ecology \& Evolutionary Biology or Human Biology
HAJ453H1 AIDS: A Global Perspective [6L, 18S]
See Anthropology or Human Biology
IJC400H1 Urban Research Seminar [12L/24S] See Innis College
JAL328H1 Writing Systems [24L]
See Anthropology and Linguistics.
JAL353H1 Conversational Structures [48L, 24P]
See Anthropology and Linguistics
JAL355H1 Language and Gender [24L]
See Anthropology and Linguistics
JAL401H1 Field Linguistics [52P]
See Anthropology and Linguistics)
JDC400Y1 Redefining Security Through Art [48L]
See Drama and Comparative Literature
JDC410H1 New Approaches to Theatre History [48L] See Drama and Comparative Literature
JEI206H1 Writing English Essays [24L, 12T]
See English and Innis College Writing \& Rhetoric Program
JEH455H1 Current Issues in Environment \& Health [16L, 8S]
See Centre for Environment or Human Biology.
JEP100H1 Natural History of Sex and Sexual Health
See Ecology \& Evolutionary Biology.
JFG470H1 Forest Management [24L]
See Geography and Forest Conservation
JFG475H1 Emergency Response Systems Planning [24L, 24T]
See Geography or Forest Conservation
JFI225Y1 Second Language Learning [48S]
See French or Italian
JFL477H1 Issues in French and Linguistics I [24S]
See French or Linguistics
JFL478H1 Issues in French and Linguistics II: French in Contact [24S]
See French or Linguistics
JFP450H1 First Nations Issues in Health and Healing [24L]
See Aboriginal Studies and Faculty of Pharmacy
JFV323H1 Semiotics and Literature I [24S]
See French or Victoria College
JGA305H1 Environmental and Archaeological Geophysics [24L/12P]
See Archaeology or Geology

JGE321H1 Multicultural Perspectives on Environmental Management [24L
See Geography or Centre for Environment.
JGE236H1 Human Interactions with the Environment
See Geography or Centre for Environment.
JGE331H1 Resource and Environmental Theory
(formerly GGR331H1) [24L]
See Centre for Environment or Geography
JGI216H1 Urbanization \& Global Change [24L]
See Geography or Innis College
JGI346H1 The Urban Planning Process [24L]
See Geography or Innis College.
JGI454H1 The Role of the Planner: Making a Difference [24L]
See Geography or Innis College.
JGP438H1 Shallow Crust Geophysics [24L, 48P]
See Geology or Physics.
JHA394H1 The Asia Pacific War [24L]
See Asia-Pacific Studies or History
JHE353H1 History of Evolutionary Biology I (formerly EEB353H1) [24L, 12T]
See Ecology \& Evolutionary Biology or History and
Philosophy of Science \& Technology
JHE355H1 History of Evolutionary Biology II (formerly EEB355H1) [24L, 12T]
See Ecology \& Evolutionary Biology or History and
Philosophy of Science \& Technology
JHP304Y1 Ukraine: Politics, Economy and Society (formerly JHP204Y) [48L]
See History and Political Science.
JHP451Y1 The People from Nowhere
See History and Political Science
JHP454Y1 Twentieth Century Ukraine [48S]
See History and Political Science
JIA400H1 Interdisciplinary Practice for the Arts [144P]
See Comparative Literature or Drama.
JIE307Y1 Urban Sustainability (formerly INI307Y1) [48L/48T/24P]
See Geography or Centre for Environment
JLP315H1 Language Acquisition [36L]
See Linguistics and Psychology.
JLP374H1 Psychology of Language [36L]
See Linguistics and Psychology.
JLP471H1 Advanced Psycholinguistics [24S]
See Linguistics and Psychology
JLS474H1 Disorders of Speech and Language [36L] See Linguistics and Speech Pathology.
JMB170Y1 Biology, Models, and Mathematics [72L]
See Ecology \& Evolutionary Biology or Mathematics.

JMC301Y1 State \& Society in 20th Century China [48L]
See East Asian Studies or Political Science.
JNH350H1 AIDS: Challenges and Successes (formerly NEW350H1) [24L]
See Human Biology or New College
JLS472H1 Child Language Disorders [36L]
See Linguistics and Speech Pathology
JLS473H1 Adult Language Disorders [36L]
See Linguistics and Speech Pathology
JNV300H1 Gender, History and Literature [24L]
Victoria College and New College
JOP210H1 Holography for 3D Visualization [24L, 54P]
See Physics.
JPA308H1 Aboriginal Politics in Canada (formerly POL308H1) [24L]
See Aboriginal Studies or Political Science
JPA331Y1 Issues in Contemporary Chinese Politics [48L]
See Political Science and Asia Pacific Studies
JPA354H1 Aboriginal Rights and Indigenous Law in Canada (formerly ABS354H1) [24L]
See Aboriginal Studies or Political Science
JPA410H1 Democracy and Identity in Asia (formerly ASI410H1)
[24S]
See Asia-Pacific Studies and Political Science
JPA411H1 The Political Economy of Global Taiwan
See Asia-Pacific Studies and Political Science
JPA461Y1 Globalization and Indigenous Politics [48S]
See Aboriginal Studies or Political Science
JPA462H1 Contemporary Indigenous Theory and Political Thought [24S]
See Aboriginal Studies or Political Science
JPD439Y1 Post-Modern and Contemporary Thought [48S]
See Political Science or Sociology

## JPF455Y1 Cities [48L/S]

Given by the Departments of Literature, Philosophy, Political Science, Urban Studies, Faculty of Social Work and Faculty of Architecture, Landscape and Design. See Political Science

JPH311H1 History of Physics [24S]
See Physics and History \& Philosophy of Science \& Technology.
JPH441H1 Physical Science in Contemporary Society (formerly PHY341H1) [24S]
See Physics and History \& Philosophy of Science \& Technology.
JPJ421H1 Comparative Constitutionalism:
Rights and Judicial Review (formerly JPJ421Y1) [48S]
See Political Science or Faculty of Law

JPJ494H1 Innovation and Knowledge Transfer in City Regions [24S]
See Political Science or Faculty of Law
JPP343H1 Women in Western Political Thought [24L]
See Philosophy and Political Science.
JPR364Y1 Religion and Politics (formerly POL364H/ Y1) [48L]
See Political Science and Religion.
JPR374H1 Religion and Power in the Postcolony [24L]
See Political Science and Religion.
JPR419H1 Secularism and Religion (formerly RLG419H1) [24S]
See Political Science and Religion.
JPR457H1 Political Theologies [24S]
See Political Science and Religion.
JPU315H1 Sexual Diversity Politics (formerly POL 315H) [24L]
See Political Science or University College
JQR360H1 The Canadian Census: Populations, Migrations and Demographies [24L]
See Diaspora \& Transnational Studies or New College
JSC301H1 Principles and Practices in Science Education [24L]
See Chemistry
JSH300H1 Literature and History in Russia [24L]
See History and Slavic Languages \& Literatures
JSV200H1 Communication and Conflict Resolution in Education [24L]
See St. Michael's College or Victoria College
JSV262H1 Communication and Conflict Resolution [24L]
See St. Michael's College or Victoria College
JUG320H1 The Canadian Wilderness [24L]
See Geography or University College
JUM202H1 Mathematics as an Interdisciplinary Pursuit
(formerly JUM102H1) [24L, 12T]
See University College and Mathematics.
JUM203H1 Mathematics as Recreation (formerly JUM103H1) [24L, 12T]
See University College and Mathematics.
JUM205H1 Mathematical Personalities (formerly JUM105H1) [24L, 12T]
See University College and Mathematics.
JWH100Y1 Canadian History [72L]
See Academic Bridging Program
JWU100Y1 Contemporary Canada [72L]
See Academic Bridging Program
MIJ485H1 Vaccines and Immunity (formerly MGY485H1) [36L]
See Molecular Genetics and Immunology.

Offered by the Faculty of Kinesiology \& Physical Education

## Kinesiology \& Physical Education

 CoursesPHE110H1 Active Healthy Living [24L/12P]
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. Not offered in 2012-2013.
(This course is particularly suitable as a Science Distribution course for students in the Humanities and Social Sciences) DR=SCI; BR=4

## Laboratory Medicine and Pathobiology

| Given by Members of the Faculty of Medicine | M. Pollanen, PhD, MD |
| :---: | :---: |
| Faculty | S. Richardson, MD Faculty J. Robertson, PhD <br> M. Rozakis-Adcock, PhD |
| Faculty | G. Schmitt-Ulms, DNS |
| Professor and Chair of the Department <br> R. G. Hegele, MD, FRCPC, PhD | B. Strauss, MD, PhD <br> R. Vieth, PhD |
| Professors | G. Yousef, MD, PhD |
| K. Adeli, PhD | Assistant Professors |
| S.L. Asa, MD, PhD | I. Aubert, PhD |
| B. Bapat, PhD | J. Fish, PhD |
| M. Bendeck, PhD | L. Fu, PhD |
| C. Bergeron MD | S. Girardin, PhD |
| J.M. Boggs, PhD | C. McKerlie, DVM, DVSc |
| J. Brunton, MD | K. Mekhail, PhD |
| J. Butany, PhD | P. Yip, PhD |
| E. Cutz, MD | The Department of Laboratory Medicine and Pathobiology |
| M. Cybulsky, MD | provides a bridge between the basic sciences and medicine. |
| E.P. Diamandis, MD, PhD | Investigating the molecular mechanisms of disease is an |
| M.D. Grynpas, PhD | important priority of the department. Faculty are concerned |
| P. Hamel, PhD | with the biochemical changes that may be associated with |
| J.B. Hay, PhD | cell and tissue injury and with the etiology, pathogenesis |
| A. Hinek, PhD | and behaviour of disease. Research is carried out in such |
| D.M. Irwin, PhD | areas as cardiovascular disease, immunopathobiology, |
| M.G. Johnston, PhD | neuropathology, endocrinology and metabolism, neoplasia, |
| S. Jothy, MD, PhD | bone and connective tissue disease, clinical and molecular |
| S. Kamel-Reid, PhD | epidemiology, antiobiotic resistance, and molecular |
| R. Kandel, MD | pathogenesis of infectious disease. |
| F.W. Keeley, PhD |  |
| G.A. Levy, MD | understanding of contemporary medical research and basic |
| C.A. Lingwood, PhD | scientific insights that have revolutionized our understanding |
| D. Mahuran, PhD | of disease in recent years. Aspects of biochemistry, |
| P.A. Marsden, MD |  |
| T. Mazzuli, MD | program will frequently pursue graduate studies in medical |
| A. McGeer, MD | research and eventual research careers in academic, |
| J. McLaurin, PhD | industrial, pharmaceutical, or governmental laboratories. A |
| S. Nag, MD <br> M. Opas, PhD | knowledge of cellular and molecular mechanisms of disease |
| J. Prudhomme, MD | processes is also useful in a wide variety of multidisciplinary |
| A. Seth, PhD | environment. |
| P. Shek, PhD |  |
| A.E.M. Simor, MD | Undergraduate Secretary: Prof. D.M. Templeton (doug. |
| J. Squire, PhD | templeton@utoronto.ca) |
| D.M. Templeton, PhD, MD |  |
| P. Thorner, MD, PhD | Undergraduate Office/General inquiries: Teresa Trimboli, |
| M.S. Tsao, MD | Medical Sciences Building, Rm. 6209, (416-946-7459; |
| G.A. Wilson, MD | teresa.trimboli@utoronto.ca) |
| B. Yang, PhD | More information is available on our website: |
| H. Yeger, PhD | www.Imp.facmed.utoronto.ca |
| L. Zhang, PhD |  |
| M. Zielenska, PhD | Course Coordinators: |
| Associate Professors | LMP300Y1: Dr. D.M. Templeton (416-978-3972) |
| I. Crandall, PhD | LMP301H1: Dr. L. Fu (416-323-6400 ext 4427) / |
| J.C.S. de Azavedo, PhD | Dr. P. Yip (416-340-4800) |
| G. Denomme, PhD | LMP363H1: Dr. B. Bapat (416-586-4800) |
| H.P. Elsholtz, PhD | LMP365H1: Dr. M. Ohh (416-946-7922) |
| G. Hannigan, PhD | LMP402H1: Dr. M. Cybulsky (416-581-7483) / |
| D. Hwang, PhD, MD | Dr. J. Mogridge (416-9468095) |
| J. Mogridge, PhD | LMP403H1: Dr. O. Adeyi (416-340-3136) / |
| H. Ni, MD, PhD | Dr. H. Ni (416-864-6060 ext 6758) |
| M. Ohh, PhD | LMP404H1: Dr. J.O. Minta (416-946-0316) |

## Given by Members of the Faculty of Medicine

## Faculty

Professor and Chair of the Department
R. G. Hegele, MD, FRCPC, PhD

Professors
K. Adeli, PhD
S.L. Asa, MD, PhD
B. Bapat, PhD
C. Berg
J.M. Boggs, PhD
J. Brunton, MD
J. Butany, PhD
D.E.C. Cole, MD, PhD
E.P. Diamandis, MD, PhD
M.D. Grynpas, PhD

Hamel, PhD
A. Hinek, PhD
D.M. Irwin, PhD
M.G. Johnston, PhD
S. Jothy, MD, PhD
S. Kame-Reid, PhD
el, MD
F.W. Keeley, PhD
C.A. Lingwood, PhD
ow, MD
P.A. Marsden, MD
T. Mazzuli, MD
A. McGeer, MD
S. Nag, MD
M. Opas, PhD
J. Prudhomme, MD
A.E.M. Simor, MD
J. Squire, PhD
D.M. Templeton, PhD, MD
M.S. Tsa, MD
B. Yang, PhD
H. Yeger, PhD
L. Zhang, PhD

Associate Professors
I. Crandall, PhD
J.C.S. de Azavedo, PhD
G. Denomme, PhD
H.P. Elsholtz, PhD
. Hwang PhD
J. Mogridge, PhD
H. Ni, MD, PhD
M. Ohh, PhD
M. Pollanen, PhD, MD

MD J . Robertson, PhD

B. Strauss, MD, PhD
R. Vieth, PhD
G. Yousef, MD, PhD

## Astant Professors

J. Fish PhD
L. Fu, PhD
S. Girardin, PhD

Lee, PhD
K. Mekhail, PhD
P. Yip, PhD

The Department of Laboratory Medicine and Pathobiology provides a bridge between the basic sciences and medicine. 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 aviou of disease. Research is carried out in such areas as cardiovascular disease, immunopathobiology, and
 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 mistry brought to bear upon human pathology. Graduates from the program will frequently pursue graduate studies in medical and eventual research careers in academic, knowledge of cellular and molecular mechanisms of disease processes is also useful in a wide variety of multidisciplinary areers in government, regulatory agencies, law, and

Undergraduate Secretary: Prof. D.M. Templeton (doug. templeton@utoronto.ca)

Undergraduate Office/General inquiries: Teresa Trimboli, teresa.trimboli@utoronto.ca)

More information is available on our website: ww.Imp.facmed.utoronto.ca

## Coordinators:

Dr. P. Yip (416-340-4800)
LMP363H1: Dr. B. Bapat (416-586-4800)
LMP365H1: Dr. M. Ohh (416-946-7922)
P402H1: Dr. M. Cybulsky (416-581-7483) /
6-9468095)
Dr. H. Ni (416-864-6060 ext 6758)
LMP404H1: Dr. J.O. Minta (416-946-0316)

# Laboratory Medicine and Pathobiology 

LMP405Y1: Dr. H. Yeger (416-813-5958)
LMP406H1: Dr. M. Bendeck (416-946-7133)
LMP410H1: Dr. J. McLaurin (416-978-1035)
LMP412H1: Dr. M.G. Johnston (416-480-5706)
LMP415H1: Dr. M. Pollanen (416-314-4040)
LMP436H1: Dr. S. Girardin (416-978-7507)

## Laboratory Medicine and

 PathobiologyPrograms
## Pathobiology Specialist (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1; (MAT135H1, MAT136H1)/MAT137Y1/
MAT157Y1 with an average of at least $70 \%$ on these 3.0 fullcourse equivalents (FCEs) and a final mark of at least $60 \%$ in each course.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions) from early April to mid-May. At later times, contact the LMP Undergraduate Office.

Eligibility is competitive and based on marks in 3.0 of the following required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1, (MAT135H1, MAT136H1)/MAT137Y1/

## MAT157Y1

(13.5 full courses or their equivalent, including at least two 400-series courses)
First Year:
(BIO120H1, BIO130H1); (CHM138H1, CHM139H1)/ CHM151Y1; (MAT135H1, MAT136H1)/MAT137Y1/ MAT157Y1
First or Second Year:
(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year:
BCH210H1; (BIO240H1, BIO241H1)/BIO255Y1; BIO260H1/
HMB265H1; CHM220H1; CHM247H1/CHM249H1; PSL302Y1
Third Year:
BCH370H1; IMM334Y1/(MGY377H1, MGY378H1); CSB349H1/BCH311H1; LMP300Y1; LMP365H1
Fourth Year:
At least 4 of LMP402H1, LMP403H1, LMP404H1, LMP405Y1, LMP406H1, LMP410H1, LMP412H1, LMP415H1, LMP436H1

## Laboratory Medicine and Pathobiology Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

LMP299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI ; BR=None
LMP300Y1 Introduction to Pathobiology [42L/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, LMP363H1
DR=SCI; BR=4

## LMP301H1 Introduction to the Biochemistry of Human Disease [24L]

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.
Prerequisite: BCH210H1/BCH242Y1
Corequisite: PSL302Y1/JBO302Y1
Exclusion: LMP300Y1
DR=SCI; BR=4
LMP363H1 Principles of Pathobiology [24L]
Pathological changes brought on by foreign compounds; applications of pathology to the detection of toxic carcinogenic actions.
Prerequisite: (BIO240H1, BIO241H1)/BIO255Y1, CHM247H1/CHM249H1
Exclusion: LMP300Y1
DR=SCI; BR=4

## LMP365H1 Neoplasia [20L/4P]

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. Corequisite: LMP300Y1 or permission of department DR=SCI; BR=4

LMP402H1 Inflammation and Infection [24L]
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.

## Laboratory Medicine and Pathobiology

Prerequisite: IMM334Y1/IMM335Y1/(MGY377H1, MGY378H1)
DR=SCI ; BR=4
LMP403H1 Immunopathology [24L]
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/IMM335Y1
DR=SCI; BR=4
LMP404H1 Bone and Skeletal Disorders [24L]
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.
DR=SCI; BR=4
LMP405Y1 Project in Laboratory Medicine and Pathobiology [154P]
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/BCH242Y1, LMP300Y1/LMP363H1/
LMP365H1 and permission of department
DR=SCI; BR=4

## LMP406H1 Pathobiology of the Cardiovascular System [24L]

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
DR=SCI; BR=4

## LMP410H1 Pathobiology of Neurodegenerative Disease [24L]

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: (BIO240H1, BIO241H1)/BIO255Y1/PSL302Y1 DR=SCI; BR=4

## LMP412H1 Pathobiology of the Lymphatic System [24L]

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

## DR=SCI; BR=4

LMP415H1 Forensic Pathobiology [24L]
A thematic review of the major scientific areas and research controversies in forensic medicine. The approach is mechanistic analysis and evidence-based medicine. Classical forensic medicine is critically analyzed with emphasis on experimental meth-ods to resolve controversies. We also explore how the justice system utilizes medical and scientific data.
Prerequisite: LMP300Y1
DR=SCI; BR=4
LMP436H1 Microbial Pathogenesis [36L]
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/BCH242Y1, IMM334Y1/MGY377H1 DR=SCI; BR=4

## Faculty

## Professors

Susan Antebi (Spanish and Portuguese, St. George)
Ana María Bejarano (Political Science, UTM and St. George)
Anne-Emanuelle Birn (Public Health Sciences, Faculty of Medicine, St. George, and Social Science, UTSC)
Peter Blanchard (History, St. George)
Gustavo J. Bobonis (Economics, St. George)
Laura Colantoni (Spanish and Portuguese, St. George)
María Cristina Cuervo (Spanish and Portuguese, and Linguistics, St. George)
Bernardo García Domínguez (Latin American Studies, New College, St. George)
Jock Galloway (Emeritus, Geography, St. George)
Rubén Gaztambide-Fernández (OISE)
Gustavo Indart (Economics, St. George)
Eva-Lynn Jagoe (Spanish and Portuguese, Comparative Literature, St. George)
Courtney Jung (Political Science, St. George)
Christopher Krupa (Anthropology, UTSC and St. George)
Patricia Landolt (Social Science, UTSC and Centre for Urban and Community Studies, St. George)
Kenneth Mills (History, St. George)
Lena Mortensen (Social Science, UTSC)
Mariana Mota Prado (Law)
Valentina Napolitano Quayson (Anthropology, St. George)
Jeff Packman (Music History and Culture)
Ana T. Pérez-Leroux (Spanish and Portuguese, St. George)
Manuel Ramírez (Spanish and Portuguese, St. George)
Roberta Rice (Social Sciences, UTSC)
Víctor R. Rivas (Latin American Studies, St. George)
Néstor Rodríguez (Spanish and Portuguese, St. George)
Rosa M. Sarabia (Spanish and Portuguese, St. George)
Christian Abizaid (Geography and Centre for the Environment, St. George)
Luisa Farah Schwartzman (Department of Sociology, UTM)
Ricardo Sternberg (Spanish and Portuguese, St. George)
Edward R. Swenson (Anthropology, St. George)
Judith Teichman (Social Sciences, UTSC, and Political Science, St. George)
Antonio Torres-Ruiz (Latin American Studies, 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 Universitys three-campus community and beyond. The programmes 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 programmes 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.

Students seeking counselling and information should visit the LAS@UofT website: las.utoronto.ca and/or contact Dr. Berenice Villagomez, the Program Coordinator (las.coord@ utoronto.ca)

## Latin American Studies Programs

## Latin American Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(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. At least two courses in total must be taken at the 300 level or above, and a minimum of one half course should derive from the Social Sciences (e.g. LAS300H1).
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 SPA220Y1]; 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 Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

4 full courses or their equivalent, must include LAS200Y1, at least one full course at the 300+ level
(0.5 FCE of which must be an LAS 300+-level seminar), and a minimum of one half course ( 0.5 FCE) deriving from the Social Sciences (e.g. LAS300H1). Language study is recommended, but not a requirement of the Minor programme. In the Minor programme, language can be counted either towards the 300+ level requirement or as one full course (1 FCE).

## Courses eligible for programme credit

Courses eligible for programme credit include those appearing below. Please note that some of the courses have

## Latin American Studies

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 LAS301H1 Topics in the Humanities
LAS302H1 Topics in Latin American Studies (The Hispanic Caribbean)
LAS400H1 Topics in Latin American Studies
LAS410H1 Independent Studies

## Anthropology

ANT316H1 Ancient Cultures of Mesoamerica
ANT340H1 Anthropology of Latin America
ANT407H1 Inka and Aztec States

## Geography

GGR101H1 Ancient Civilizations and their Environments
GGR240H1 Historical Geography of North America
GGR249H1 Contemporary Latin America
GGR341H1 Changing Geography of Latin American

## History

HIS291Y1 Latin America: The Colonial Period
HIS292Y1 Latin America: The National Period
HIS294Y1 Caribbean History and Culture: Indigenous Era to 1886
HIS301Y1 Imperial Spain
HIS333Y1 Revolution in 20th Century Latin America
HIS359H1 Regional Politics and Radical Movements in the 20th Century Caribbean
HIS390Y1 Latin America in the Age of Revolution
HIS441H1 Conversion \& Christianities in the Early Modern Spanish World
HIS456Y1 Black Slavery in Latin America

## New College Caribbean Studies

NEW223Y1 Caribbean Literature and Society
NEW324Y1 Caribbean Thought II
JQR360H1 The Canadian Census: Populations, Migrations, and Demographics

## Political Science

POL305Y1 Politics and Society in Latin America
POL442H1 Topics in Latin American Politics

## Portuguese

PRT100Y1 Beginners Portuguese
PRT110Y1 Elementary Portuguese
PRT220Y1 Intermediate Portuguese
PRT255H1 The Brazilian Puzzle: Culture and Identity
PRT258H1 Introduction to Luso-Brazilian Studies
PRT320Y1 Composition and Oral Practice
PRT351H1 Literature and the Age of Discovery (formerly PRT351Y1)
PRT355H1 Topics in Brazilian Studies
PRT357H1 Modern and Contemporary Brazilian Literature
PRT358H1 Transatlantic Africa and Brazil
PRT365H1 The Rise of Modern Identity
PRT443H1 Machado de Assis: The Creation of the Modern Self (formerly PRT342H1/PRT455Y1)
PRT454Y1 The Luso-Brazilian Identity PRT458H1 The LusoBrazilian Short Story

St. Michael's College, Christianity and Culture
SMC207H1 Christianity in Latin America

## Spanish

SPA100Y1 Spanish for Beginners
SPA219Y1 Spanish for Bilingual and Native Speakers
SPA220Y1 Intermediate Spanish
SPA258H1 Introduction to Hispanic Literary Studies
SPA259H1 Introduction to Hispanic Cultural Studies
SPA320Y1 Advanced Spanish
SPA375H1 Latin American Cinema
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
SPA387H0 Contemporary Mexican Literature
SPA422H1 Sociolinguistics of Spanish
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

## UTM Courses

HIS290H5 Intro to Latin American History
HIS345H5 Popular Culture in Latin America
HIS390H5 Revolutions and Nations in Latin America
HIS391H5 Mexico from Aztec to Zapatista
HIS454H5 Race, Gender and Nation in Modern Latin America
HIS490H5 Religion and Society in Latin America
POL438Y5 Topics in Comparative Politics: Latin America SOC332H5 Race and Ethnicity 1

## UTSC Courses

LGGA30H3 Introductory Spanish I
LGGA31H3 Introductory Spanish II
LGGB32H3 Intermediate Spanish I
LGGB33H3 Intermediate Spanish II
LGGC30H3 Advanced Spanish: Language, Culture and Literature
POLB90H3 Comparative Development in International Perspective
POLB91H3 Comparative Development in Political Perspective
POLC90H3 Development Studies: Political and Historical Perspectives
POLC91H3 Latin America: Dictatorship and Democracy
POLC94H3 Globalization, Gender and Development
POLC99H3 Latin America: The Politics of the Dispossessed

## Latin American Studies Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars are intended to stimulate the students' curiosity and provide an opportunity to get to know a member of the professorial

## Latin American Studies

staff in a seminar environment during the first year of study. Details on page 33.

## LAS200Y1 Latin America: History, Civilization and Culture [48L/24P]

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
DR=HUM/SOC SCI; BR=1+3

## LAS300H1 Topics in the Social Sciences [24S]

The goal of this course is to critically analyze the current economic, social, and political realities of Latin America, based on an insightful knowledge of its past and present. Topics of the course vary depending on the needs of the program and the interests of students.
Prerequisite: IAS200Y1/LAS200Y1
DR=SOC SCI; BR=None

## LAS301H1 Topics in the Humanities [24S]

The goal of this course is to critically analyze the Latin American social imaginaries as expressed in art, literature and/or film, based on close readings of texts. Topics of the course vary depending on the needs of the program and the interests of students.
Prerequisite: IAS200Y1/LAS200Y1
DR=HUM; BR=None

## LAS302H1 Topics in Latin American Studies (The Hispanic Caribbean) [24S]

This interdisciplinary course examines Cuba's relevance and legacy from the mid-nineteenth century to the present. It explores 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. DR=HUM/SOC SCI; BR=None

JQR360H1 The Canadian Census: Populations, Migrations and Demographics [24L/12T] Examines the Canadian population census through the experience of diasporic groups in Canada. Approaches the census as a statistical tool, an historical source and an ideological project of citizenship and nationalism. Uses census data to explore mathematical and statistical concepts and to integrate numerical ways of thinking with qualitative analysis. (Jointly sponsored by African Studies, Diaspora and Transnational Studies, Caribbean Studies, Equity Studies
and Latin American Studies).
Prerequisite: DTS200Y1/NEW150Y1/NEW224Y1/
NEW240Y1/LAS200Y1
DR=SOC SCI; BR=3
LAS400H1 Topics in Latin American Studies
An upper level seminar. Topics of the course vary from year to year, depending on the needs of the program and the interests of students.
DR=HUM/SOC SCI; BR=None

## LAS410H1 Independent Study

This course provides an opportunity for students to do academic research related to Latin American issues under the supervision of a faculty member. The intent 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. For application forms, please visit the "Resources" section of the programme's website.
Prerequisite: LAS200Y and LAS300H/LAS301H/LAS302H DR=HUM/SOC SCI; BR=None

## Life Sciences

The following Life Science departments and programs are listed in this Calendar:

- Biochemistry
- Biology
- Cell \& Systems Biology
- Ecology \& Evolutionary Biology
- Human Biology
- Immunology
- Laboratory Medicine \& Pathobiology
- Molecular Genetics \& Microbiology
- Nutritional Sciences
- Pharmaceutical Chemistry
- Pharmacology \& Toxicology
- Physiology
- Psychology

Many of the Life Science programs 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 judgments 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

Biochemistry, Biological Chemistry (Chemistry), Bioinformatics and Computational Biology (Biochemistry), Biology, Biophysics (Physics), Cell and Molecular Biology (Cell \& Systems Biology), Developmental Biology
(Cell \& Systems Biology), Ecology and Evolutionary Biology (Ecology \& Evolutionary Biology), Environment and Health (Centre for Environment), 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.

## Major Programs

Animal Physiology (Cell \& Systems Biology), Biochemistry, Biodiversity and Conservation Biology (Ecology \& Evolutionary Biology), Biology, Cell and Molecular Biology (Cell \& Systems Biology), Ecology \& Evolutionary Biology, Environmental Biology (Ecology \& Evolutionary Biology), Environment and Health (Human Biology), Genes Genetics \& Biotechnology (Human Biology), Genome Biology (Biology), Global Health (Human Biology), Health \& Disease (Human Biology), Health Care Ethics (Human Biology), Human Biology, Immunology, Neuroscience (Human Biology), Nutritional Sciences, Pharmacology, Physiology, Psychology, Toxicology.

## Minor Programs

Biology, Environmental Biology (Ecology \& Evolutionary Biology), NUS Environmental Biology (Ecology
\& Evolutionary Biology), Physiology, Psychology

## 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.

## Faculty

## Professors Emeriti

B. Brainerd, MS, Ph D
J.K. Chambers, MA, Ph D
B.E. Dresher, BA, Ph D
P.A.Reich, MS, Ph D
T. Venkatacharya, MA, Vyakarana Siromani
R. Wardhaugh, MA, Ph D

Professor and Chair of the Department TBA
Professor and Interim Chair of the
Department
D. Massam, MA Ph D

## Professor, Graduate Coordinator and

## Associate Chair

E.A. Cowper, AM, Ph D

Undergraduate Coordinator
E.M. Gold, MA, Ph D

University Professor
K.D. Rice, MA, Ph D

## Professors

A. Johns, MA, Ph D
A.T. Perez-Leroux, MA, Ph D

## Assistant Professors

M.C. Cuervo, MA, Ph D
D. Heller, MA, Ph D
M. Ippolito, MA, Ph D
A. Kochetov, MA, Ph D
N. Nagy, Ph D

## 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.
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, Philosophy, and Psychology, and in the Cognitive Science and Artificial Intelligence program.

Students seeking counselling and information should contact the Undergraduate Coordinator (416-978-1760/lin.ungr@ chass.utoronto.ca).

## Linguistics Programs

Enrolment in the following Linguistics programs is open to students who have completed 4 FCEs. The Specialist program is suitable for students who have a strong interest or aptitude for linguistics. Linguistics naturally combines as a major or minor with many disciplines, including, but not limited to, Psychology, Philosophy, Computer Science, Cognitive Scinece, French, Spanish and Portuguese, Slavic languages, German and Italian.

## Linguistics Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(12 full courses or their equivalent)
Language Requirement (2 FCEs): 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 Coordinator). We encourage you to begin this language study in your first or second year.
Required Courses (5 FCEs):
First Year: LIN100Y1
Second Year: LIN228H1, LIN229H1, LIN232H1, LIN241H1
Third and Fourth Years: LIN322H1, LIN331H1, JAL401H1
plus at least one of LIN351H1 or JLP374H1 or JLP315H1
Elective Courses (5 FCEs):
A total of 5 FCEs in LIN/JAL/JFL/JLP/JLS (excluding LIN200H1, LIN203H1, LIN204H1) including:

- a further 1.5 FCEs at the $300+$ level
- a further .5 FCE at the 400 level

Up to 1 FCE may be from other departments. Approved courses include ANT329H1, ANT425H1, ANT427H1; COG250Y1; CSC384H1, CSC401H1, CSC448H1, CSC485H1; FIN220H1, FIN305H1; FRE272H1, FRE273H1, FRE274H1, FRE376H1, FRE378H1, FRE379H1, FRE379H1, FRE383H1, FRE386H1, FRE387H1, FRE388H1, FRE471H1, FRE487H1, FRE488H1, FRE489H1; GER400H1, GER426H1, GER462H1; HPS250H1, HPS322H1, HPS352H1; ITA360H1, ITA361H1, ITA363H1, ITA364H1, ITA365H1, ITA430H1; NML315H1, NML457H1, NML463H1; PHL210Y1, PHL245H1, PHL310H1, PHL311H1, PHL325H1, PHL326H1, PHL340H1, PHL342H1, PHL345H1, PHL347H1, PHL351H1, PHL355H1, PHL405H1, PHL451H1, PHL479H1, PHL480H1, PHL481H1; SLA255H1, SLA380H1, SLA438H1, SLA452Y1, SLA455H1; SPA322H1, SPA324H1, SPA421H1, SPA422H1, SPA423H1, SPA425H1; VIC223Y1. Other courses might also qualify; consult the Department of Linguistics for approval.

## Linguistics

## Linguistics Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent)
First Year: LIN100Y1
Second Year: LIN228H1, LIN229H1, LIN232H1, LIN241H1
Third and Fourth Years: A total of 4 FCEs in LIN/JAL/JFL/
JLP/JLS (excluding LIN 200H1, LIN203H1, LIN204H1)
including:

- at least one of LIN351H1 or JLP374H1 or JLP315H1
- 0.5 FCE at the 400 level
- a further 1 FCE at the 300+ level


## Linguistics Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)
First Year: LIN100Y1
Higher Years: Three FCE's in LIN/JAL/JFL/JLP/JLS
(excluding LIN200H1) at least one of which must be at the 300+ level

## Linguistics Courses

## First Year Seminars

The 199Y1 and 199 H 1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## LIN100Y1 Introduction to General Linguistics [48L/24T]

Lectures on fundamental principles with illustrations from English and from a broad spectrum of other languages.
Practice in elementary analytic techniques.
DR=HUM; BR=2
LIN200H1 Introduction to Language [24L/12T]
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, ANT253H1
DR=HUM; BR=2

## LIN201H1 Canadian English [24L]

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.
Prerequisite: LIN100Y1/LIN200H1
DR=HUM ; BR=2
LIN203H1 English Words [24L/12T]
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.
DR=HUM ; BR=2
LIN204H1 English Grammar [24L/12T]
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. DR=HUM; BR=2
LIN205H1 East Asian Languages and English [24L]
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. (Not offered every year).
DR=HUM; BR=2

## LIN228H1 Phonetics [24L/12T]

Investigation of the sounds most commonly used in languages from an articulatory and acoustic point of view, with practice in their recognition and production. Students will learn the International Phonetic Alphabet (IPA) and practice transcribing a wide variety of speech sounds. Recommended Preparation: LIN100Y1/LIN200H1 DR=HUM; BR=2

## LIN229H1 Sound Patterns in Language <br> [24L/12T]

The nature and organization of phonological systems, with practical work in analysis.
Prerequisite: LIN100Y1, LIN228H1
DR=HUM; BR=2
LIN232H1 Syntactic Patterns in Language [24L/12T]
The nature and organization of syntactic systems; their relation to semantic systems and the linguistic organization of discourse; practical work in analysis.
Prerequisite: LIN100Y1
DR=HUM; BR=2
LIN241H1 Introduction to Semantics [24L/12T]
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
DR=HUM; BR=2

## LIN299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=TBA ; BR=None
LIN305H1 Quantitative Methods in Linguistics [36L]
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
$D R=S O C S C I ; B R=2$

## LIN306H1 Language Diversity and Language Universals [24L]

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: LIN232H1
DR=HUM; BR=2

## JLP315H1 Language Acquisition [36L]

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. (Sponsored by the Departments of Linguistics and Psychology, but administered soley by the Dept. of Linguistics).
Prerequisite: One full course equivalent at the 200+ level in
LIN/JAL/JUP/PSL/PSY/COG
DR=SCI; BR=2
LIN322H1 Phonological Theory [36L]
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
DR=HUM; BR=2

## LIN323H1 Acoustic Phonetics [24L]

Introduction to the acoustics of the vocal tract, including acoustic properties of speech and its analysis using instrumental techniques.
Prerequisite: LIN228H1 and LIN229H1
DR=SCI; BR=5

## JAL328H1 Writing Systems [24L]

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) (Not offered every year)
Prerequisite: ANT100Y1/LIN100Y1/LIN200H1
DR=SOC SCI; BR=2

## LIN331H1 Syntactic Theory [36L]

An introduction to the foundations and formal framework of current generative grammar, concentrating on Chomskys Minimalist theory. (Students who want to pursue graduate studies in linguistics are strongly advised to include this course in their program.)
Prerequisite: LIN232H1
DR=HUM; BR=2

## LIN333H1 Morphological Patterns in Language [24L/12T]

The nature and organization of morphological systems, with practical work in analysis.
Prerequisite: LIN229H1, LIN232H1
Exclusion: LIN231H1, LIN231H5
DR=HUM; BR=2
LIN341H1 Semantic Theory [36L]
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
DR=HUM; BR=2
LIN351H1 Sociolinguistic Patterns in Language [24L/12T]
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
DR=HUM/SOC SCI; BR=3

## JAL353H1 Conversational Structures [36L]

An introduction to the detailed observation of ordinary conversational interaction, and to some of the main ways in which such interaction is organized. The focus is on developing the capacity to discern orderliness in the details of everyday interaction, and beginning independent research in this area. (Given by the Departments of Anthropology and Linguistics)
Prerequisite: LIN100Y1/LIN200H1/ANT253H1
DR=SOC SCI; BR=2

## JAL355H1 Language and Gender [24L]

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 FCE at the 200-level in LIN/ANT/JAL/SOC/ WGS
Recommended Preparation: ANT204H1/ANT253H1/
SOC200H1/SOC214H1
DR=SOC SCI; BR=3
LIN362H1 Historical Linguistics [24L/12T]
An introduction to diachronic linguistics. Theories of language change;
the comparative method, internal reconstruction, linguistic geography, the
origin of languages; language death.
Prerequisite: LIN229H1
DR=HUM ; BR=2

## JLP374H1 Psychology of Language [36L]

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. (Sponsored by the Departments of Linguistics and Psychology, but
administered soley by the Dept. of Linguistics).
Prerequisite: One FCE from LIN228H1, LIN229H1, LIN232H1, LIN241H1, PSY260H1, PSY270H1, PSY280H1, PSY290H1, COG250Y1
Exclusion: PSY374H5, PLIC55H3
DR=SCI; BR=2
LIN398HO Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
BR=None

## Linguistics

LIN399YO Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.

## BR=None

## JAL401H1 Field Linguistics [48P]

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 and LIN331H1 or permission of the instructor
DR=SOC SCI; BR=2
LIN409H1 Structure of a Specific Language [24L]
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, LIN229H1, LIN232H1 + 1 FCE at the 300+ level in LIN/JAL/JFL/JLP/JLS
DR=HUM; BR=2

## LIN423H1 Phonetic Analysis [24L]

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
DR=HUM; BR=5

## LIN432H1 Advanced Morphology [24L]

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/LIN231H1 Corequisite: LIN331H1 DR=HUM; BR=2

## LIN451H1 Urban Dialectology [24L]

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/LIN256H1 plus 2 FCE at the 200+ level in LIN/JAL/JLP
DR=HUM/SOC SCI; BR=3
LIN456H1 Language Variation and Change: Theory and Analysis [36L]
The theory and practice of sociolinguistics. The interrelationship 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
DR=HUM/SOC SCI; BR=3
LIN458H1 Revitalizing Languages [24L]
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.
Prerequisite: LIN100Y1Y plus 2 FCE at the 200+ level in LIN/JAL
DR=HUM/SOC SCI; BR=3
JLP471H1 Advanced Psycholinguistics [24S]
Seminar in advanced topics in psycholinguistics. Content varies from year to year. (Sponsored by the Departments of Linguistics and Psychology, but administered solely by the Dept. of Linguisitics).
Prerequisite: JLP374H1
DR=SCI; BR=2

## JLS472H1 Child Language Disorders [36L]

Students are introduced to the etiologies and characteristics of speech and language disorders in children, associated with autism, intellectual disabilities, and specific language impairment. Theoretical underpinnings of the major intervention approaches for children with speech and langauge disorders are discussed.
Prerequisite: LIN100Y1, LIN228H1
DR=SCI; BR=4

## JLS473H1 Adult Language Disorders [36L]

Students are introduced to the etiologies and characteristics of speech and language disorders in adults, associated with aphasia, neurodegenerative disorders, and head injuries.
The effects of communication handicaps on the individual and theoretical underpinnings of the major intervention approaches for cadults are discussed.
Prerequisite: LIN100Y1 and LIN228H1
DR=SCI; BR=4
JLS474H1 Disorders of Speech and Language [36L] 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)(Not offered every year).
Prerequisite: JLP315H1/JLP374H1 DR=SCI; BR=4
JFL477H1 Issues in French and Linguistics I [24S]
An advanced seminar on issues of current theoretical relevance in linguistics with special reference to French. This course is taught in English.
Prerequisite: ANY 300+ series LIN or FRE Linguistics course and/or specific Prerequisites depending on course topic.
DR=HUM; BR=2
JFL478H1 Issues in French and Linguistics II [24S]
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 2012-13). Prerequisite: ANY 300+ series LIN or FRE Linguistics course DR=HUM; BR=2

## LIN479H1 Current Issues in Linguistics [24S]

An advanced seminar in current issues of theoretical relevance. (Not offered every year).
Prerequisite: LIN228H1, LIN229H1, LIN231H1/241H1, LIN232H1 + I FCE at the 300+ level in LIN/JAL/JFL/JLP/ JLS
DR=HUM; BR=2

## LIN481H1 Introduction to Analysis and Argumentation

 [36L]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/LIN331H1
DR=HUM; BR=2
LIN495Y1 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
DR=TBA; BR=None
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
DR=TBA; BR=None
LIN496H1 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
DR=TBA; BR=None
LIN498H1 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
DR=TBA; BR=None

## 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
DR=TBA; BR=None

## 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.

Introduction to Materials Science, 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.

## Materials Science Programs

## Materials Science Specialist (Science program)

Consult Professor Eugenia Kumacheva, Department of Chemistry and Professor Glenn Hibbard, Department of Materials Science and Engineering.
Enrolment in this program requires the completion of 4.0 courses.

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.
(14 full courses or their equivalent, including at least one 400-series course)

First Year: (BIO120H1, BIO130H1/BIO220H1)/BIO150Y1; CHM151Y1 (strongly recommended)/(CHM138H1, CHM139H1); (MAT135H1, MAT136H1)/ MAT135Y1/ MAT137Y1
First or Second Year: PHY138Y1/PHY140Y1/(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year:

1. MSE101H1
2. (CHM220H1, CHM221H1)/CHM225Y1, CHM238Y1, CHM247H1/CHM249H1
3. MSE219H1, MSE235H1

Third and Fourth Years:

1. CHM325H1, CHM327H1, CHM338H1, CHM343H1/ CHM348H1, CHM426H1, CHM434H1
2. At least two of the following: MSE316H1, MSE318H1, (MSE342H1, MSE343H1), MSE351H1
3. At least two of the following: MSE430H1, MSE440H1, MSE459H1, MSE550H1, MSE561H1
4. Materials Chemistry Stream: CHM 499Y1 Introduction to Chemistry Research. Materials Science and Engineering Stream: MSE 498Y1 Design \& Research Project

## Materials 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.
3. Enrollment in MSE courses is done through your own College Registrar. It is not necessary to petition as the courses listed below have been pre-approved for this Specialist Program.
4. Deferment of Final Exams is NOT allowed in the Faculty of Applied Science and Engineering.

## MSE101H1 Introduction to Materials Science [39L/13T/13P]

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
DR=SCI; BR=5

## MSE219H1 Structure and Characterization of Materials

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.
DR=SCI; BR=5
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, $\mathrm{B}-\mathrm{H}$ curves.
DR=SCI ; BR=5

## MSE316H1 Mechanical Behaviour of Materials [39L/13T/20P]

The mechanical behaviour of engineering materials including metals, alloys, ceramics and polymeric materials. The following topics will be discussed: macro- and microstructural response of materials to external loads; loaddisplacement 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. DR=SCI; BR=5
MSE318H1 Phase Transformations [39L/13T/20P] 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. DR=SCI; BR=5

## MSE342H1 Nanomaterials [26L/13T]

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. (Quarter term course taught over the entire Fall term, worth . 25 credits).
DR=SCI ; BR=5

## MSE343H1 Biomaterials [26L/13T]

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. (Quarter term course taught over the entire Fall term, worth .25 credits).
DR=SCI; BR=5

## MSE351H1 Design and Simulation of Materials Processes [36L/12T/24P]

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. ; $\mathrm{BR}=5$

## 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.
DR=SCI ; BR=5

## 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.
DR=SCI; BR=5

## 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.
DR=SCI; BR=5

## MSE498Y1 Design and Research Project [156P]

The students, alone or preferably organized in small groups, select a project involving original research and design work which is normally closely related to the current work of a staff member, and in close collaboration with an external partner (e.g. local industry, hospital, government lab). The students

## Materials Science

conceive and carry out a research plan under the supervision of the academic staff member usually with an external liaison person as a resource person. The project must contain a significant design component. The project work may be carried out in the department, at the external site, or both locations. The final grade will be based on interim and final written reports, oral presentations at the end of each term and a final poster presentation.
Prerequisite: permission of the Department
Exclusion: CHM499Y1
DR=SCI; BR=5
MSE550H1 Advanced Physical Properties of Structural Nanomaterials [39L/13T/26P]
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
DR=SCI; BR=5

## MSE561H1 Engineered Ceramics

The unique combinations of physical, electrical, magnetic, and thermomechanical properties exhibited by advanced technical ceramics has led to a wide range of applications including automobile exhaust sensors and fuel cells, high speed cutting tool inserts and ball bearings, thermal barrier coatings for turbine engines, and surgical implants. This course examines the crystal and defect structures which determine the electrical and mass transport behaviours and the effects of microstructure on optical, magnetic, dielectric, and thermomechanical properties. The influence of these structure-property relations on the performance of ceramic materials in specific applications such as sensors, solid oxide fuel cells, magnets, and structural components is explored.

## Faculty

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B. Szegedy, B Sc, Ph D (UTSC)
R. Young, BA, M Sc, Ph D (UTSC)

## Senior Lecturers

D. Burbulla, B Sc, B Ed, MA
A. Igelfeld, M Sc
A. Lam, M Sc

## Lecturers

S. Homayouni, B Sc, Ph D
N. Jung, BA, MSc, Ph D
P. Kergin, M Sc, Ph D
E.A.P. LeBlanc, MA, Ph D
J. Tate, B Sc, B Ed
S. Uppal, M Sc

## Senior Lecturer Emerita

## F. Recio, MSc, Ph D

Mathematics teaches you to think, analytically and creatively. It is a foundation for advanced careers in a knowledgebased 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

## Mathematics

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 worlds 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, and the physical sciences. 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.) In many cases it is possible to complete a Specialist program in Mathematics and its Applications with a given concentration along with a major in the other subject without taking many extra courses. You might even consider choosing your options to fulfill the requirements for a double Specialist degree, in both Mathematics and its Applications and in the other discipline.
The Specialist program in Mathematical Applications in Economics and Finance is recommended to students with career aspirations in any form of the financial sector. Furthermore, the program is an excellent preparation for an MBA and an MMF. 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 12-16 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 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.toronto.edu/ cms/pump.

Associate Chair for Undergraduate Studies: Bahen Building, 40 George Street, Room 6236

Student Counselling: Bahen Building, Room 6291 \& NC64

Mathematics Aid Centre: Sidney Smith Hall, Room 1071
Departmental Office: Bahen Building, Room 6290 (416-9783323)

## Mathematics Programs

Enrolment in Mathematics programs requires completion of four courses; no minimum GPA is required.

Students with a good grade in MAT137Y1 (75\%) or
MAT135Y1/MAT135H1 \& MAT136H1 (85\%) may apply to the Mathematics Undergraduate Office for permission to enter a Mathematics program requiring MAT157Y1.

## Mathematics Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(12.0 full courses or their equivalent, including at least 1.5 full courses at the 400-level)

The Specialist Program in Mathematics is directed toward students who hope to pursue mathematical research as a career.

First Year:
MAT157Y1, MAT240H1, MAT247H1
Second Year:
MAT257Y1, MAT267H1
Third and Fourth Years:

1. MAT327H1, MAT347Y1, MAT354H1, MAT357H1
2. One of: APM351Y1; MAT457Y1/(MAT457H1, MAT458H1)
3. Three of: APM461H1; MAT309H1, MAT363H1, ANY 400level APM/MAT
4. 2.5 APM/MAT including at least 1.5 at the 400 level (these may include options above not already chosen)
5. MAT477Y1

## NOTE:

1. The Department recommends that PHY151H1 and PHY152H1 be taken in the First Year, and that CSC150H1 and STA257H1 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 CSC108H1 and then CSC148H1 instead of CSC150H1.
2. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL201H1/PHL265H1/ PHL268H1/PHL271H1/PHL273H1/PHL275H1/ PH L281H1/PHL295H1 or similar courses in other departments.
3. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.

## Applied Mathematics Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(13.5 full courses or their equivalent, including at least one full course at the 400-level)

The Specialist Program in Applied Mathematics is directed toward students who hope to pursue applied mathematical
research as a career.
First Year:
MAT157Y1, MAT240H1, MAT247H1; (CSC108H1/ CSC148H1)/CSC150H1
Second Year:
MAT257Y1, MAT267H1; CSC260H1; (STA257H1, STA261H1)
Third and Fourth Years:

1. APM351Y1; MAT327H1, MAT347Y1, MAT354H1, MAT357H1,MAT363H1; STA347H1
2. At least 1.5 full courses chosen from: MAT332H1, MAT344H1, MAT454H1, MAT457Y1/(MAT457H1, MAT458H1), MAT464H1; STA302H1, STA457H1; CSC350H1, CSC351H1, CSC446H1, CSC456H1
3. Two courses from: APM421H1, APM426H1, APM436H1, APM441H1, APM446H1, APM461H1, APM462H1, APM466H1

## 4. MAT477Y1

NOTE:

1. The Department recommends that PHY151H1 and PHY152H1 be taken in the First Year, and STA257H1 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 (CSC108H1/ CSC148H1) instead of CSC150H1.
2. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL201H1/PHL265H1/ PHL268H1/PHL271H1/PHL273H1/PHL275H1/ PH L281H1/PHL295H1 or similar courses in other departments.
3. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.

## Mathematics and Physics Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(14-14.5 full courses or their equivalent, including at least one full course at the 400-level)
First Year:
MAT157Y1, MAT240H1, MAT247H1; PHY151H1, PHY152H1
Second Year:
MAT257Y1, MAT267H1; PHY224H1, PHY250H1, PHY252H1, PHY254H1, PHY256H1
Note: PHY252H1 and PHY324H1 may be taken in the 2nd or 3rd year.
Third Year:

1. APM351Y1; MAT334H1/MAT354H1, MAT357H1
2. One of: MAT327H1, MAT347Y1, MAT363H1
3. PHY324H1, PHY352H1, PHY354H1, PHY356H1

Fourth Year:

1. Two of: APM421H1, APM426H1, APM436H1; MAT446H1
2. Two of: PHY450H1, PHY452H1, PHY454H1, PHY456H1, PHY460H1
3. One of: MAT477Y1; PHY424H1, PHY478H1, PHY479Y1

## NOTE:

1. Students who are intending to apply to graduate schools in mathematics would be well-advised to take MAT347Y1
2. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL201H1/PHL265H1/ PHL268H1/PHL271H1/PHL273H1/PHL275H1/ PH L281H1/PHL295H1 or similar courses in other departments.
3. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.

## Mathematics \& Its Applications Specialist (Teaching)

Enrolment in this program requires the completion of 4.0 courses.
Core Courses:
First Year: CSC108H1/CSC150H1; MAT137Y1/MAT157Y1, MAT223H1/MAT240H1 Note: CSC150H1 is required for the Computer Science concentration. If you do not have a year course in programming from high school, the Department strongly recommends that you take CSC108H1 and CSC148H1 in place of CSC150H1.
Second Year:
MAT224H1/MAT247H1, MAT235Y1/MAT237Y1/MAT257Y1, MAT246H1 (waived for students taking MAT157Y1), MAT244H1/MAT267H1;STA257H1
Note:

1. MAT237Y1/MAT257Y1 is a direct or indirect prerequisite for many courses in each of the areas of concentration except the Teaching Concentration. Students are advised to take MAT237Y1/MAT257Y1 unless they have planned their program and course selection carefully and are certain that they will not need it.
Higher Years: MAT301H1, MAT334H1
NOTE:
2. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL201H1/ PHL265H1/ PHL268H1/PHL271H1/PHL273H1/PHL275H1/ PHL281H1/PH L295H1 or similar courses in other departments.
3. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.
Teaching Concentration:
It may be to students' advantage to keep in mind that OISE requires students to have a second teachable subject.
4. MAT329Y1, HPS/MAT390H1, HPS/MAT391H1
5. Two of:MAT332H1/MAT344H1, MAT335H1, MAT337H1, MAT363H1
6. Two of: MAT309H1, MAT315H1; STA302H1/STA347H1
7. MAT $401 \mathrm{H} 1 / \mathrm{MAT} 402 \mathrm{H} 1$ and one half course at the $400-$ level from MAT475H1, APM, STA

## Mathematics \& Its Applications Specialist (Physical Science)

Enrolment in this program requires the completion of 4.0 courses.
Core Courses:
First Year:
CSC108H1/CSC150H1; MAT137Y1/MAT157Y1, MAT223H1/ MAT240H1
Note:

## Mathematics

CSC150H1 is required for the Computer Science concentration. If you do not have a year course in programming from high school, the Department strongly recommends that you take CSC108H1 and CSC148H1 in place of CSC150H1.
Second Year:
MAT224H1/MAT247H1, MAT235Y1/MAT237Y1/MAT257Y1, MAT246H1 (waived for students taking MAT157Y1), MAT244H1/MAT267H1;STA257H1
Note:

1. MAT237Y1/MAT257Y1 is a direct or indirect prerequisite for many courses in each of the areas of concentration except the Teaching Concentration. Students are advised to take MAT237Y1/MAT257Y1 unless they have planned their program and course selection carefully and are certain that they will not need it. Higher Years: MAT301H1, MAT334H1

## NOTE:

1. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL201H1/ PHL265H1/ PHL268H1/PHL271H1/PHL273H1/PHL275H1/ PHL281H1/PH L295H1 or similar courses in other departments.
2. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.

## Physical Sciences Concentration:

1. PHY151H1, PHY152H1; AST221H1
2. Three of: AST222H1; PHY250H1, PHY252H1, PHY254H1, PHY256H1
3. APM346H1/APM351Y1
4. Three of: AST320H1, AST325H1; MAT337H1, MAT363H1; PHY352H1, PHY354H1, PHY356H1, PHY357H1, PHY358H1
5. Two of: APM421H1, APM426H1, APM441H1, APM446H1; PHY407H1, PHY408H1, PHY456H1

## Mathematics \& Its Applications Specialist (Design Your Own)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol. For more information, consult the department.

## Core Courses:

First Year:
CSC108H1/CSC150H1; MAT137Y1/MAT157Y1, MAT223H1/ MAT240H1

## Note:

CSC150H1 is required for the Computer Science concentration. If you do not have a year course in programming from high school, the Department strongly recommends that you take CSC108H1 and CSC148H1 in place of CSC150H1.
Second Year:
MAT224H1/MAT247H1, MAT235Y1/MAT237Y1/MAT257Y1, MAT246H1 (waived for students taking MAT157Y1), MAT244H1/MAT267H1;STA257H1
Note:

1. MAT237Y1/MAT257Y1 is a direct or indirect prerequisite for many courses in each of the areas of concentration except the Teaching Concentration. Students are
advised to take MAT237Y1/MAT257Y1 unless they have planned their program and course selection carefully and are certain that they will not need it. Higher Years: MAT301H1, MAT334H1

NOTE:

1. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL201H1/PHL265H1/ PHL268H1/PHL271H1/PHL273H1/PHL275H1/ PH L281H1/PHL295H1 or similar courses in other departments.
2. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.

## Design-Your-Own Concentration:

Eleven half-courses of which at least six must be at the $300+$ level including at least 2 at the 400 level. Choice of courses in program must be approved by the Department no later than the beginning of the third year or it will not be allowed. It is understood that the remaining 5 half-courses may be in the departments pertaining to the area of concentration.

## Mathematics \& Its Applications Specialist (Probability/Statistics)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Core Courses:
First Year: CSC108H1/CSC150H1; MAT137Y1/MAT157Y1, MAT223H1/MAT240H1
Note: CSC150H1 is required for the Computer Science concentration. If you do not have a year course in programming from high school, the Department strongly recommends that you take CSC108H1 and CSC148H1 in place of CSC150H1.
Second Year: MAT224H1/MAT247H1, MAT235Y1/ MAT237Y1/MAT257Y1, MAT246H1 (waived for students taking MAT157Y1), MAT244H1/MAT267H1;STA257H1
Note:

1. MAT237Y1/MAT257Y1 is a direct or indirect prerequisite for many courses in each of the areas of concentration except the Teaching Concentration. Students are advised to take MAT237Y1/MAT257Y1 unless they have planned their program and course selection carefully and are certain that they will not need it.
Higher Years: MAT301H1, MAT334H1
NOTE:
2. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL201H1/PHL265H1/ PHL268H1/PHL271H1/PHL273H1/PHL275H1/ PH L281H1/PHL295H1 or similar courses in other departments.
3. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.

## Probability/Statistics Concentration:

1. APM346H1/APM351Y1/APM462H1; MAT337H1; STA261H1, STA302H1, STA347H1, STA352Y1
2. One additional full credit at $300+$ level from APM/MAT/ STA
3. Two of: STA437H1, STA438H1, STA442H1, STA447H1, STA457H1

## Mathematical Applications in Economics and Finance Specialist (Science Program)

Enrolment in this program requires the completion of 4.0 courses.
(12-13 full courses or their equivalent including at least 1.5 full courses at the 400-level)

First Year:
ECO100Y1 (70\% or more); MAT137Y1 (55\%)/MAT157Y1 (55\%), MAT223H1, MAT224H1
Second Year:
ECO206Y1; MAT237Y1, MAT244H1, MAT246H1 (waived for students taking MAT157Y1); STA257H1, STA261H1, PHL295H1 (Business Ethics): This course may be taken in second, third, or fourth year.
Third Year:

1. APM346H1; ECO358H1; ECO359H1; MAT337H1; (STA302H1, ECO375H1)/ECO327Y1; STA347H1
2. One of: MAT332H1, MAT344H1, MAT334H1, MAT475H1 Fourth Year:
APM462H1, APM466H1; STA457H1

## NOTE:

1. Students who do not include PHL295H1 (Business Ethics) as part of their degree are expected to take another Arts and Science course with a significant emphasis on ethics and social responsibility.
2. Students planning to take specific fourth year courses should ensure that they have the necessary third year prerequisites.

## Mathematics and Philosophy (Science program)

Consult the Undergraduate Coordinators of the Departments of Mathematics and Philosophy.
Specialist program:
(12 full courses or their equivalent including one full course at the 400 -level)

First Year:
MAT157Y1, MAT240H1, MAT247H1; PHL245H1
Higher Years:

1. MAT257Y1, MAT327H1, MAT347Y1, MAT354H1/ MAT357H1
2. PHL345H1/H5, MAT309H1/PHL348H1/5
3. Four of: PHL246H1/H5, PHL346H1/5, PHL347H1/H5, PHL349H1, PHL451H1/H5, PHL480H1
4. One full course from PHL200Y1/PHL205H1/PHL206H1/ PHL210Y1
5. PHL265H1/PHL275H1
6. 2 additional PHL or MAT courses to a total of 12.0

## NOTE:

The logic component of this program is offered jointly with the Department of Philosophy at the University of Toronto Mississauga. Students enrolling in this program must be prepared to travel to the UTM campus in order to complete program requirements with an H5 designation.

## Mathematics Major (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(7.5 full courses or their equivalent including at least 2.5 full courses at the 300+ level and at least . 5 courses at the 400 level).
First Year:
MAT135Y1/MAT137Y1/MAT157Y1, MAT223H1/MAT240H1

## Second Year:

MAT224H1/ MAT247H1, MAT235Y1/ MAT237Y1, MAT244H1, MAT246H1; PHL275H1, or PHL265H1/ PHL268H1/PHL271/ PHL273H1

## NOTE:

1. MAT224H1 may be taken in first year
2. PHL275H1, or PHL265H1/PHL268H1/PHL271H1/ PHL273H1 may be taken in any year.
Higher Years:
3. MAT301H1, MAT309H1/MAT315H1, MAT334H1
4. One half course at the 200+ level from: ACT240H1; APM236H1; MAT309H1/MAT315H1/MAT335H1/ MAT337H1; STA247H1/STA250H1/STA257H1
5. One additional half course at the $300+$ level from: APM346H1, APM462H1; MAT309H1, MAT315H1, MAT332H1/MAT344H1, MAT335H1, MAT337H1, MAT475H1; HPS390H1, HPS391H1; PSL432H1
6. MAT401H1/MAT402H1

## NOTES:

1. In the major program, higher level courses within the same topic are acceptable substitutions. With a judicious choice of courses, usually including introductory computer science, students can fulfill the requirements for a double major in mathematics and one of several other disciplines.
2. Students are required, as part of their degree, to take a course with a significant emphasis on ethics and social responsibility such as: PHL20H1/PHL265H1/PHL268H1/ PHL271H1/PHL273H1/PHL275H1/PHL 281/PHL295H1 or similar courses in other departments.
3. Students planning to take specific fourth year courses should ensure that they have the necessary second and third year prerequisites.

## Mathematics Minor (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. MAT135Y1/MAT137Y1
2. MAT223H1, MAT235Y1/MAT237Y1, MAT224H1/ MAT244H1/APM236H1Note: MAT223H1 can be taken in first year
3. one 300+level full course or combination from: any APM; MAT; HPS390H1, HPS391H1; PSL432H1

## NOTE:

1. In the minor program, higher level courses within the same topic are acceptable substitutions.
2. Students planning to take specific third and fourth year courses should ensure that they have the necessary first, second and third year prerequisites.

## Joint Programs

Computer Science and Mathematics, see Computer Science

## Economics and Mathematics, see Economics

Statistics and Mathematics, see Statistics

## Mathematics Courses

## Applied Mathematics/Mathematics Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## JMB170Y1 Biology, Models, and Mathematics [48L/24T]

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, $\mathrm{max} / \mathrm{min}$, 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.
Corequisite: BIO120H1
DR=SCI ; BR=5
JUM202H1 Mathematics as an Interdisciplinary Pursuit (formerly JUM102H1) [24L/12T]
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)
JUM202H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.
Exclusion: JUM102H1
DR=SCI; BR=5
JUM203H1 Mathematics as a Recreation (formerly JUM103H1) [24L/12T]
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)
JUM203H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.

Exclusion: JUM103H1
DR=SCI; BR=5

## JUM205H1 Mathematical Personalities (formerly JUM105H1) [24L/12T]

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) JUM205H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.
Exclusion: JUM105H1
DR=SCI; BR=5

## Applied Mathematics Courses

## APM236H1 Applications of Linear Programming

 [36L]Introduction to linear programming including a rapid review of linear algebra (row reduction, matrix inversion, linear independence), the simplex method with applications, the duality theorem, complementary slackness, the dual simplex method and the revised simplex method.
Prerequisite: MAT223H1/MAT240H1 (Note: no waivers of prerequisites will be granted)
DR=SCI; BR=5
APM346H1 Partial Differential Equations [36L] Sturm-Liouville problems, Greens functions, special functions (Bessel, Legendre), partial differential equations of second order, separation of variables, integral equations, Fourier transform, stationary phase method.
Prerequisite: MAT235Y1/MAT237Y1/MAT257Y1, MAT244H1
Exclusion: APM351Y1
DR=SCI; BR=5
APM351Y1 Partial Differential Equations [72L] Diffusion and wave equations. Separation of variables. Fourier series. Laplaces equation; Greens function. Schrdinger 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 Corequisite: MAT334H1/MAT354H1 DR=SCI; BR=5

## 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 graduate brochure for more details.

## APM421H1 Mathematical Foundations of Quantum Mechanics [36L]

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. Schrdinger and Heisenberg pictures, complete sets of observables, representations of the canonical commutative relations; essential self-
adjointedness of Schrdinger operators, density operators, elements of scattering theory.
Prerequisite: (MAT224H1, MAT337H1)/MAT357H1
DR=SCI; BR=5

## APM426H1 General Relativity[36L]

Einsteins theory of gravity. Special relativity and the geometry of Lorentz manifolds. Gravity as a manifestation of spacetime curvature. Einsteins 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
DR=SCI; BR=5

## APM436H1 Fluid Mechanics [36L]

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
DR=SCI ; BR=5

## APM441H1 Asymptotic and Perturbation Methods [36L]

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/APM351Y1, MAT334H1 DR=SCI; BR=5
APM446H1 Applied Nonlinear Equations [36L] Nonlinear partial differential equations and their physical origin. Fourier transform; Greens 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/APM351Y1
DR=SCI ; BR=5
APM461H1 Combinatorial Methods [36L]
A selection of topics from such areas as graph theory, combinatorial algorithms, enumeration, construction of combinatorial identities.
Prerequisite: MAT224H1
Recommended Preparation: MAT344H1
DR=SCI; BR=5

## APM462H1 Nonlinear Optimization [36L]

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, MAT235Y1
DR=SCI; BR=5

## APM466H1 Mathematical Theory of Finance [36L]

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 interestrate derivatives), value at risk, credit risk, portfolio theory.
Prerequisite: APM346H1, STA347H1
Corequisite: STA457H1
DR=SCI; BR=5
APM496H1 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
DR=SCI; BR=5

## APM497H1 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

## DR=SCI; BR=5

APM498Y1 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

## DR=SCI; BR=5

## APM499Y1 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
DR=SCI; BR=5

## Mathematics Courses

NOTE: Transfer students who have received MAT1**H1 Calculus with course exclusion to MAT133Y1/MAT135Y1 may take MAT137Y1/MAT157Y1 without forfeiting the half credit in Calculus.

| 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 |

## MAT123H1, MAT124H1

See below MAT133Y1
MAT125H1, MAT126H1
See below MAT135Y1

## Mathematics

## MAT133Y1 Calculus and Linear Algebra for Commerce [72L]

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.
Note that for Rotman Commerce students there is no Breadth Requirement status for this course (and courses deemed equivalent in the program requirements in the Calendar).
Prerequisite: MCV4U, MHF4U
Exclusion: MAT123H1, MAT124H1, MAT125H1, MAT126H1, MAT135H1, MAT136H1, MAT135Y1, MAT137Y1, MAT157Y1
DR=SOC SCI; BR=None

## MAT123H1 Calculus and Linear Algebra for Commerce

 (A) [36L]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.
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.
Exclusion: MAT125H1, MAT126H1, MAT133Y1, MAT135H1, MAT136H1, MAT135Y1, MAT137Y1, MAT157Y1
DR=SOC SCI; BR=None

## MAT124H1 Calculus and Linear Algebra for Commerce

 (B) [36L]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.
Prerequisite: MAT123H1 successfully completed in the preceding Spring Term
Exclusion: MAT125H1, MAT126H1, MAT133Y1, MAT135H1, MAT136H1, MAT135Y1, MAT137Y1, MAT157Y1
DR=SOC SCI; BR=None
MAT135H1 Calculus 1(A) [36L/12T]
Review of trigonometric functions, trigonometric identities and trigonometric limits. Functions, limits, continuity. Derivatives, rules of differentiation and implicit differentiation, related rates, higher derivatives of logarithms, exponentials. Trigonometric and inverse trigonometric functions, linear approximations. Mean value theorem, graphing, minmax
problems, l'Hôpital's rule; anti- derivatives. Examples from life science and physical science applications.
Prerequisite: MCV4U, MHF4U
Exclusion: MAT123H1, MAT124H1, MAT125H1, MAT126H1, MAT133Y1, MAT136H1, MAT135Y1, MAT137Y1, MAT157Y1
DR=SCI; BR=5
MAT136H1 Calculus 1(B) [36L/12T]
Definite Integrals, Fundamental theorem of Calculus, Areas, Averages, Volumes. Techniques: Substitutions, integration by parts, partial fractions, improper integrals. Differential Equations: Solutions and applications. Sequences, Series, Taylor Series. Examples from life science and physical science applications.
Prerequisite: MAT135H1/MAT125H1
Exclusion: MAT124H1, MAT126H1, MAT133Y1, MAT135H1, MAT135Y1, MAT137Y1, MAT157Y1
DR=SCI; BR=5
MAT137Y1 Calculus [72L/24T]
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, Taylors theorem, sequence and series, uniform convergence and power series.
Prerequisite: MCV4U, MHF4U
Exclusion: MAT125H1, MAT126H1, MAT135H1, MAT136H1, MAT135Y1, MAT157Y1
DR=SCI; BR=5

## MAT157Y1 Analysis I [72L/48T]

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. Taylors theorem; sequences and series; uniform convergence and power series.
Prerequisite: MCV4U, MHF4U
Exclusion: MAT137Y1
DR=SCI; BR=5

## MAT223H1 Linear Algebra I [36L/12T]

System of linear equations, matrix algebra, real
vector spaces, suspaces, span, linear dependence
and independence, bases, rank, inner products,
orthogonality, orthogonal complements, Gram-Schmidt linear transformations, determinants, Cramers rule, eigenvalues, eigenvector, eigenspaces, diagonalization.
Prerequisite: MCV4U, MHF4U
Exclusion: MAT240H1
DR=SCI ; BR=5

## MAT224H1 Linear Algebra II [36L/12T]

Fields, complex numbers, vector spaces over a field, linear transformations, matrix of a linear transfromation, kernel, range, dimension theorem, isomorphisms, change of basis, eigenvalues, \& eigenvectors, diagonalizability, real and complex inner products, spectral theorem, adjoint/self-
adjoint/normal linear operators, triangular form, nilpotent mappings, Jordan cannonical form.
Prerequisite: MAT223H1/MAT240H1
Exclusion: MAT247H1
DR=SCI; BR=5

## MAT235Y1 Calculus II [72L]

Parametric equations and polar coordinates. Vectors, vector functions and space curves. Differential and integral calculus of functions of several variables. Line integrals and surface integrals and classic vector calculus theorems. Examples
from life sciences and physical science applications.
Prerequisite: MAT135Y1/MAT137Y1/MAT157Y1
Exclusion: MAT237Y1, MAT257Y1
DR=SCI; BR=5
MAT237Y1 Multivariable Calculus [72L]
Sequences and series. Uniform convergence. Convergence of integrals. Elements of topology in R2 and R3. 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.
Prerequisite: MAT137Y1/MAT157Y1/
MAT135Y1(90\%),MAT223H1/MAT240H1
Exclusion: MAT235Y1, MAT257Y1
DR=SCI; BR=5

## MAT240H1 Algebra I [36L/24T]

A theoretical approach to: vector spaces over arbitrary fields including $\mathrm{C}, \mathrm{Zp}$. 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: MCV4U, MHF4U
Corequisite: MAT157Y1
DR=SCI; BR=5

## MAT244H1 Introduction to Ordinary Differential Equations [36L]

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.
Prerequisite: MAT135Y1/MAT137Y1/MAT157Y1, MAT223H1/
MAT240H1 Corequisite: MAT235Y1/MAT237Y1
Exclusion: MAT267H1
DR=SCI; BR=5

## MAT246H1 Concepts in Abstract Mathematics (formerly MAT246Y1) [36L/12T]

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.
Prerequisite: MAT133Y1/MAT135Y1/MAT137Y1,MAT223H1

## Exclusion: MAT157Y1, MAT246Y1

DR=SCI; BR=5

## MAT247H1 Algebra II [36L]

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
Corequisite: MAT157Y1
DR=SCI ; BR=5

## MAT257Y1 Analysis II [72L/48T]

Topology of Rn; compactness, functions and continuity, extreme value theorem. Derivatives; inverse and implicit function theorems, maxima and minima, Lagrange multipliers. Integrals; Fubinis theorem, partitions of unity, change of variables. Differential forms. Manifolds in Rn; integration on manifolds; Stokes theorem for differential forms and classical versions.
Prerequisite: MAT157Y1, MAT240H1, MAT247H1
DR=SCI; BR=5

## MAT267H1 Advanced Ordinary Differential Equations I [36L/12T]

First-order equations. Linear equations and first-order systems. Nonlinear 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. Prerequisite: MAT157Y1, MAT247H1
Corequisite: MAT257Y1
Exclusion: MAT244H1
DR=SCI; BR=5

## MAT271H1 Insights from Mathematics [36L/6T]

This breadth course is accessible to students with limited mathematical background. Various mathematical techniques will be illustrated with examples from humanities and social science disciplines. Some of the topics will incorporate user friendly computer explorations to give participants the feel of the subject without requiring skill at calculations.
DR=SCI; BR=5

## MAT299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI ; BR=None

## 300-Series Courses

## MAT301H1 Groups and Symmetries [36L]

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, Lagranges theorem. Normal subgroups, quotient groups. Classification of finitely generated abelian groups. Emphasis on examples and calculations.
Prerequisite: MAT224H1, MAT235Y1/MAT237Y1,
MAT246H1/CSC236H1/CSC240H1. (These Prerequisites will be
waived for students who have MAT257Y1)
Exclusion: MAT347Y1
DR=SCI; BR=5

## Mathematics

MAT309H1 Introduction to Mathematical Logic [36L]
Predicate calculus. Relationship between truth and provability; Gdels completeness theorem. First order arithmetic as an example of a first-order system. Gdels incompleteness theorem; outline of its proof. Introduction to recursive functions.
Prerequisite: MAT223H1/MAT240H1, MAT235Y1/MAT237Y1,
MAT246H1/CSC236H1/CSC240H1 (These prerequisites
will be waived for students who have MAT257Y1)
Exclusion: CSC438H1
DR=SCI ; BR=5
MAT315H1 Introduction to Number Theory [36L]
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: MAT223H1/MAT240H1, MAT235Y1/MAT237Y1,
MAT246H1/CSC236H1/CSC240H1 (These prerequisites
will be waived for students who have MAT257Y1)
DR=SCI; BR=5

## MAT327H1 Introduction to Topology [36L]

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. Students in the math specialist program wishing to take additional topology courses are advised to obtain permission to take MAT1300Y. Students must meet minimum GPA requirements as set by SGS and petition with their college.
Prerequisite: MAT257Y1/(MAT224H1, MAT237Y1,
MAT246H1 and permission of the instructor)
DR=SCI; BR=5

## MAT329Y1 Concepts in Elementary Mathematics [72L]

The formation and development of fundamental reasoning and learning skills required for a future teacher to understand the nature of mathematics, their concepts and elementary techniques, and their application to the everyday world. Role of observation, conjecture, analysis, structure, critical thinking, logical argument and problem solving methods. Set and logic numbers, numeration and basic number theory, geometry, counting techniques, recursion and algorithms. This course, specifically addressed to students intending to become elementary school teachers and is strongly recommended by the Faculty of Education and may include a practicum in school classrooms. The course content is considered in the interestsof elementary school teachers. The enrolment has a limit of limit of 40, and students are required to ballot.
Prerequisite: Any 7 full courses with a CGPA of at least 2.5
Recommended Preparation: Participation in volunteer
service requires the presentation of an Ontario Police
Report that declares suitability to work with minors and other special groups.
DR=SCI; BR=5
MAT332H1 Introduction to Graph Theory [36L]
This course will explore the following topics: Graphs, Subgraphs, Isomorphism, Trees, Connectivity, Euler and Hamiltonian Properties, Matchings, Vertex and Edge Colourings, Planarity, Network Flows and Strongly Regular Graphs. Participants will be encouraged to use these
topics and execute applications to such problems as timetabling, tournament scheduling, experimental design and finite geometries. Students are invited to replace MAT344H1 with MAT332H1.
Prerequisite: MAT224H1/MAT247H1
Corequisite: Recommended Corequisite: MAT301H1/
MAT347Y1
$\mathrm{DR}=\mathrm{SCI}$; $\mathrm{BR}=5$
MAT334H1 Complex Variables [36L]
Theory of functions of one complex variable, analytic and meromorphic functions. Cauchys theorem, residue calculus, conformal mappings, introduction to analytic continuation and harmonic functions.
Prerequisite: MAT223H1, MAT235Y1/MAT237Y1, MAT240H1 Exclusion: MAT354H1
DR=SCI; BR=5
MAT335H1 Chaos, Fractals and Dynamics [36L]
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, MAT223H1 DR=SCI; BR=5

MAT336H1 Elements of Analysis [36L/12T]
This course provides the foundations of analysis and rigorous calculus for students who will take subsequent courses where these mathematical concepts are central of applications, but who have only taken courses with limited proofs. Topics include topology of Rn, implicit and inverse function theorems and rigorous integration theory.
Prerequisite: MAT223H1, MAT235Y1
Exclusion: MAT257Y1, MAT337H1
DR=SCI; BR=5
MAT337H1 Introduction to Real Analysis [36L]
Construction of Real Numbers. 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.
Prerequisite: MAT224H1, MAT235Y1/MAT237Y1,MAT246H1;
NOTE: These Prerequisites will be waived for students
who have MAT257Y1
Exclusion: MAT357H1
DR=SCI; BR=5

## MAT344H1 Introduction to Combinatorics [36L]

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/MAT240H1
DR=SCI; BR=5
MAT347Y1 Groups, Rings and Fields [72L/24T]
Groups, subgroups, quotient groups, Sylow theorems, Jordan-HIder 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
DR=SCI; BR=5

## MAT354H1 Complex Analysis I [36L]

Complex numbers, the complex plane and Riemann sphere, Mobius transformations, elementary functions and their mapping properties, conformal mapping, holomorphic functions, Cauchys theorem and integral formula. Taylor and Laurent series, maximum modulus principle, Schwarzs lemma, residue theorem and residue calculus.
Prerequisite: MAT257Y1
DR=SCI ; BR=5

## MAT357H1 Real Analysis I [36L]

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/(MAT327H1 and permission of instructor)
DR=SCI ; BR=5
MAT363H1 Introduction to Differential Geometry [36L]
Geometry of curves and surfaces in 3 -spaces. Curvature and geodesics. Minimal surfaces. Gauss-Bonnet theorem for surfaces. Surfaces of constant curvature.
Prerequisite: MAT224H1, MAT237Y1/MAT257Y1
DR=SCI ; BR=5
MAT390H1 History of Mathematics up to 1700 [36L]
A survey of ancient, medieval, and early modern mathematics with emphasis on historical issues. (Offered in alternate years)
Prerequisite: at least one full MAT 200-level course Exclusion: HPS309H1, HPS310Y1, HPS390H1
DR=SCI; BR=5

## MAT391H1 History of Mathematics after 1700 [24L/12T]

A survey of the development of mathematics from 1700 to the present with emphasis on technical development. (Offered in alternate years)
Prerequisite: At least one full 200-level MAT course
Exclusion: HPS309H1, HPS310H1, HPS391H1
DR=SCI; BR=5
MAT393Y1 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
DR=SCI; BR=5
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
DR=SCI; BR=5

MAT395H1 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
DR=SCI; BR=5
MAT396H1 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
DR=SCI; BR=5
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
DR=SCI; BR=5
MAT398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
MAT399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None

## 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 graduate brochure for more details.

MAT401H1 Polynomial Equations and Fields [36L] Some courses at the 400 -level are cross-listed as graduate courses and may not be offered every year. Please see the Departments graduate brochure for more details. 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.
Prerequisite: MAT301H1
Exclusion: MAT347Y1
DR=SCI; BR=5

## MAT402H1 Classical Geometries [36L]

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/MAT347Y1, MAT235Y1/MAT237Y1/
MAT257Y1
DR=SCI; BR=5
MAT409H1 Set Theory [36L]
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

## Mathematics

large cardinals, infinitary combinatorics and descriptive set theory.
Prerequisite: MAT357H1
DR=SCI; BR=5
MAT415H1 Topics in Algebraic Number Theory [36L]
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 DR=SCI ; BR=5

MAT417H1 Topics in Analytic Number Theory [36L] 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/MAT354H1/permission of instructor DR=SCI; BR=5

## MAT425H1 Differential Topology [36L]

Smooth manifolds, Sards 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, MAT327H1
DR=SCI ; BR=5
MAT427H1 Algebraic Topology [36L]
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, MAT347Y1
DR=SCI; BR=5
MAT436H1 Introduction to Linear Operators [36L]
The course will survey the branch of mathematics developed (in its abstract form) primarily in the twentieth century and referred to variously as functional analysis, linear operators in Hilbert space, and operator algebras, among other names (for instance, more recently, to reflect the rapidly increasing scope of the subject, the phrase non-commutative geometry has been introduced). The intention will be to discuss a number of the topics in Pedersen's textbook Analysis Now. Students will be encouraged to lecture on some of the material, and also to work through some of the exercises in the textbook (or in the suggested reference books).
Prerequisite: Five FCE MAT courses including MAT223H1/
MAT240H1, MAT224H1/MAT247H1 and MAT237Y1/
MAT257Y1.
Exclusion: MAT1011H1
DR=SCI; BR=5

## MAT437H1 Topics in Operator Algebras: K-Theory and C* Algebras [36L]

The course will begin with a description of the method (K-theoretical in spirit) used by Murray and von Neumann to give a rough initial classification of von Neumann algebras (into types I, II, and III). It will centre around the relatively recent use of K-theory to study Bratteli's approximately finite-
dimensional $\mathrm{C}^{*}$-algebras---both to classify them (a result that can be formulated and proved purely algebraically), and to prove that the class of these $\mathrm{C}^{*}$-algebras---what Bratteli called AF algebras---is closed under passing to extensions (a result that uses the Bott periodicity feature of K-theory). Students will be encouraged to prepare oral or written reports on various subjects related to the course, including basic theory and applications
Prerequisite: MAT436H1
Exclusion: MAT1016H1
DR=SCI; BR=5

## MAT443H1 Computer Algebra [36L]

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, Grbner bases. Symbolic manipulators such as Maple and Mathematica are used.
Prerequisite: MAT347Y1
DR=SCI; BR=5

## MAT445H1 Representation Theory [36L]

A selection of topics from: Representation theory of finite groups, topological groups and compact groups. Group algebras. Character theory and orthogonality relations. Weyls 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
DR=SCI; BR=5

## MAT448H1 Introduction to Commutative Algebra and Algebraic Geometry [36L]

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 Hilberts 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
DR=SCI; BR=5

## MAT449H1 Algebraic Curves [36L]

Projective geometry. Curves and Riemann surfaces. Algebraic methods. Intersection of curves; linear systems; Bezouts theorem. Cubics and elliptic curves. Riemann-Roch theorem. Newton polygon and Puiseux expansion; resolution of singularities.
Prerequisite: MAT347Y1, MAT354H1
DR=SCI; BR=5

## MAT454H1 Complex Analysis II [36L]

Harmonic functions, Harnacks principle, Poissons integral formula and Dirichlets 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
DR=SCI; BR=5

MAT457H1 Real Analysis I (formerly MAT457Y1) [36L]
Lebesque measure and integration; convergence theorems, Fubinis theorem, Lebesgue differentiation theorem, abstract measures, Caratheodory theorem, Radon-Nikodym theorem. Hilbert spaces, orthonormal bases, Riesz representation theorem, compact operators, Lp spaces, Holder and Minkowski inequalities.
Prerequisite: MAT357H1
Exclusion: MAT457Y1
DR=SCI; BR=5
MAT458H1 Real Analysis II (formerly MAT457Y1) [36L]
Fourier series and transform, convergence results, Fourier inversion theorem, L2 theory, estimates, convolutions.
Banach spaces, duals, weak topology, weak compactness, Hahn-Banach theorem, open mapping theorem, uniform boundedness theorem.
Prerequisite: MAT457H1
Exclusion: MAT457Y1
DR=SCI; BR=5
MAT464H1 Differential Geometry [36L]
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
DR=SCI; BR=5
MAT468H1 Ordinary Differential Equations II [36L]
Sturm-Liouville problem and oscillation theorems for secondorder 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, MAT354H1, MAT357H1
DR=SCI; BR=5
MAT475H1 Problem Solving Seminar [TBA]
This course addresses the question: How do you attack a problem the likes of which youve never seen before? Students will apply Polyas principles of mathematical problem solving, draw upon their previous mathematical knowledge, and explore the creative side of mathematics in solving a variety of interesting problems and explaining those solutions to others.
Prerequisite: MAT224H1/MAT247H1, MAT235Y1/MAT237Y1/ MAT257Y1, and at least ONE 300-level MAT or APM course
DR=SCI; BR=5
MAT477Y1 Seminar in Mathematics [TBA]
Seminar in an advanced topic. Content will generally vary from year to year. (Student presentations will be required)
Prerequisite: MAT347Y1, MAT354H1, MAT357H1; or permission of instructor.
DR=SCI; BR=5
MAT495H1 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
DR=SCI; BR=5
MAT496H1 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
DR=SCI; BR=5
MAT497H1 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
DR=SCI; BR=5

## MAT498Y1 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
DR=SCI ; BR=5
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
DR=SCI ; BR=5

## Modern Languages and Literatures

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.

## 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:

Italian (with German/Portuguese/Russian/Spanish)
Same as the Major Program in Italian
Polish (with German//Russian)
Same as the Major Program in Polish
Portuguese (with Italian/Spanish)
(7 courses)
Same as the Major Program in Portuguese

## Russian (with German/Italian)

See Slavic Languages \& Literatures for details.
Spanish (with German/Italian/Portuguese)
See Spanish \& Portuguese for details.
Ukrainian (with German)
See Slavic Languages \& Literatures for details.

# Molecular Genetics and Microbiology 

## Faculty

## Professor and Chair of the Department of Molecular Genetics

H. D. Lipshitz, Ph D

Professors
B. J. Andrews, Ph D
B. J. Blencowe, Ph D
C. Boone, Ph D
A. W. Cochrane, Ph D
R. A. Collins, Ph D
D. Durocher, Ph D
J. Ellis, Ph D
A. Emili, Ph D
L. D. Frappier, Ph D
B. E. Funnell, Ph D
S. D. Gray-Owen, 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
J. Liu, Ph D
A. Nagy, Ph D
J. M. Rommens, Ph D
F. P. Roth, Ph D
F. Sicheri, Ph D
A. M. Spence, Ph D
J. Wrana, Ph D

## Associate Professors

A. L. Bognar, Ph D
J. Brill, Ph D
M. Brown, M Sc, Ph D
J. Brumell, Ph D
W. B. Derry, Ph D
S. Egan, Ph D
A. G. Fraser, Ph D
S. Joshi-Sukhwal, D Sc, Ph D
B. D. Lavoie, Ph D
J. Parkinson
C. E. Pearson, Ph D
P. J. Roy, Ph D
A. Wilde, Ph D

## Assistant Professors

J. M. Claycomb, Ph D
L. Cowen, Ph D
A. W. Ensminger, Ph D
M. Meneghini, Ph D
J. Moffat, Ph D
W. W. Navarre, Ph D
C. Nislow, Ph D
L. Pelletier
I. Scott, Ph D

Molecular biology has revolutionized the fields of genetics and microbiology. The Department of Molecular Genetics offers Specialist and Major programs in Molecular Genetics and Microbiology, which emphasize 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. More recently the advent of genome sequencing has fueled efforts to understand in full the information content of the genome and to assign function to every gene, using methods that allow systematic, genome-scale analyses of gene expression, the phenotypic consequences of gene disruption, and the interactions between genes and gene 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 Specialist program is a research-intensive program and is designed to provide strong in-depth training in science, including critical analyses of scientific concepts and literature, advanced laboratory experience, and detailed understanding and application of molecular biology. Specialists enter the program in 2nd year and then choose one of two Streams, called Genetics and Microbiology, by the start of the third year. Each Stream provides focused training, but there is considerable overlap between the streams, reflective of both the cross-disciplinary requirements of these two rapidly evolving disciplines and the impact of each on areas spanning modern biomedical science.

The Molecular Genetics and Microbiology Major program offers students fundamental training in molecular genetics and microbiology. Students tailor their own program and may focus on a microbiology major, a genetic major, or a combination; they choose a path to suit their specific interests. Students take several advanced courses in these disciplines, but the Major allows them to choose the breadth of their training by combining the MGY Major with another Major of interest.

The Department of Molecular Genetics is also a cosponsor of the Major program in Genome Biology, with the Departments of Cell and Systems Biology (CSB), and Ecology and Evolutionary Biology (EEB). See the Biology program listings for details of the Genome Biology Major.

Career opportunities for graduates include employment in research institutes, universities and other educational

## Molecular Genetics and Microbiology

institutions, and industry. The programs provide excellent preparation for post-graduate research and professional programs.

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. molgen@utoronto.ca)

More information is available on our website: http://www. moleculargenetics.utoronto.ca/

## Molecular Genetics and Microbiology Programs

## Molecular Genetics and Microbiology Specialist (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/ CHM151Y1, and (MAT135H1, MAT136H1)/MAT135Y1/ MAT137Y1/MAT157Y1 with an average of at least $75 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.

While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks = high 70s; average $=$ low 80s.
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).

At later times, contact the Undergraduate Coordinator.
(14 full courses or their equivalent)
First Year:
BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1; /(MAT135H1, MAT136H1)/MAT135Y1/ MAT137Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Note that biology, chemistry and math should be taken in 1st year; Physics may be taken in later years.
Second Year:
BCH242Y1; BIO230H1, BIO260H1; CHM220H1, CHM247H1, BIO220H1/STA220H1
Third Year:
Genetics Stream:

1. BCH340H1, BCH377H1; MGY311Y1, MGY314H1, MGY315H1
2. One ( 0.5 full-course equivalent) from CHM 347 H 1 , MGY350H1, MGY377H1, MGY378H1
Microbiology Stream
3. IMM335Y1; MGY311Y1, MGY377H1, MGY378H1, MGY379Y1
Fourth Year:
Genetics Stream:
4. MGY420H1, MGY432H1 plus 2 credits from Genetics Lists 1 and 2, distributed as follows:
5. At least 1.0 full-course equivalent must be taken from list 1:CSB460H1, MGY425H1, MGY428H1, MGY451H1, MGY452H1, MGY470H1
6. Up to 1.0 full-course equivalent may be taken from list 2: $\mathrm{BCH} 422 \mathrm{H} 1, \mathrm{BCH} 440 \mathrm{H} 1, \mathrm{BCH} 441 \mathrm{H} 1$; BCH448H1,CSB472H1; MGY434H1, MGY440H1, MGY445H1, MGY480Y1
Microbiology Stream:
7. MGY432H1 plus 2 credits from Microbiology Lists 1 and 2, distributed as follows:
8. At least 1.0 full-course equivalent must be taken from list 1:LMP436H1; MGY420H1, MGY428H1, MGY434H1, MGY440H1, MGY445H1; MIJ485H1
9. Up to 1.0 full-course equivalent may be taken from list 2: BCH340H1, BCH422H1, BCH426H1, BCH441H1, BCH445H1; BCH446H1; BCH448H1,CSB452H1, CSB460H1; IMM430H1; JBI428H1; LMP403H1; MGY350H1, MGY425H1, MGY451H1, MGY452H1, MGY470H1, MGY480Y1

## Molecular Genetics and Microbiology Major (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1, and (MAT135H1, MAT136H1)/MAT135Y1/
MAT137Y1/MAT157Y1, with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 70 s ; average $=$ mid 70s.
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.

Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).
At later times, contact the Undergraduate Coordinator.
(8 full courses or their equivalent)
First Year:
BIO120H1, BIO130H1; (CHM138H1, CHM139H1)/
CHM151Y1; (MAT135H1, MAT136H1)/MAT135Y1/
MAT137Y1
Second Year:
BCH210H1; BIO230H1, BIO260H1/HMB265H1, MGY200H1 Third and Fourth Years:
BCH311H1/CSB349H1; 2.5 full-course equivalents from MGY314H1; MGY315H1; MGY350H1; MGY377H1; MGY378H1; MGY379Y1; MGY425H1, MGY428H1, MGY434H1, MGY440H1, MGY445H1, MGY451H1, MGY452H1, MGY470H1, MIJ485H1 (at least 0.5 FCE must be a laboratory course and at least 0.5 FCE must be a 400-level course)

# Molecular Genetics and Microbiology 

## Molecular Genetics and Microbiology Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## MGY200H1 Current Topics in Molecular Genetics and Microbiology [24L]

Introduction to the modern era of genetics and microbiology, and its impact on human health. Topical biological problems and cutting-edge scientific approaches with examples from world-class Toronto labs. Topics include: combating HIV; emerging and recurring microbial threats; repairing spinal cord injury; cancer biology; power of stem cells; fountain of youth.
Prerequisite: $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1$
Corequisite: BIO260H1/HMB265H1
DR=SCI; BR=4

## MGY299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None

## MGY311Y1 Molecular Biology [72L]

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.
Prerequisite: $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1, \mathrm{BCH} 242 \mathrm{Y} 1$
Exclusion: BCH311H1, CSB349H1, JBC372H5(UTM), PSL350H1
DR=SCI; BR=4
MGY314H1 Principles of Genetic Analysis I [12T/36P]
Laboratory experiments in genetics, with the focus on microbial and prokaryotic genetics. Topics and experiments include mutagenesis and genetic selection, linkage and recombination, genetic crosses, gene regulation, suppressor analyses, and genetic mapping.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1, \mathrm{BIO} 260 \mathrm{H} 1 / \mathrm{HMB} 265 \mathrm{H} 1$
Exclusion: MGY312H1
DR=SCI; BR=4
MGY315H1 Principles of Genetic Analysis II [12T/36P]
Laboratory experiments in eukaryotic genetics, using two of the most powerful eukaryotic model systems, the yeast Saccharomyces cerevisiae and fruit fly Drosophila melanogaster. The course follows MGY314H1; topics include analysis of genetic networks and pathways, meiotic segregation analysis, recombination mapping, genetic crosses, and phenotypic analyses.
Prerequisite: BIO230H1, BIO260H1/HMB265H1, MGY314H1 Exclusion: MGY312H1
DR=SCI; BR=4
MGY350H1 Model Organisms to Disease [36L]
The concepts of genetics in the context of human development, disease and evolution. Topics include genetic interactions and complex traits, variation in disease
phenotype, signalling and development, stem cells and epigenetic regulation.
Prerequisite: $\mathrm{BIO} 120 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1, \mathrm{BIO} 260 \mathrm{H} 1 / \mathrm{HMB} 265 \mathrm{H} 1$
Corequisite: BCH311H1/CSB349H1/MGY311Y1
DR=SCI; BR=4

## MGY360H1 Whole-Genome Sequencing and Analysis Laboratory [36P]

The principles and practice of whole-genome sequencing. Each student team will sequence an entire eukaryotic genome and analyze it. Topics will include: modern sequencing technology, yeast husbandry, genomic library construction and quality control, 'next-generation' sequencing, sequence assembly using a reference genome, principles of genome organization, mutation detection and interpretation.
Prerequisite: BIO230H1, BIO260H1/HMB265H1

## DR=SCI; BR=4

MGY377H1 Microbiology I: Bacteria [36L]
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.
Prerequisite: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{BCH} 242 \mathrm{Y} 1$; BIO120H1, BIO230H1
Exclusion: BIO370Y5 (UTM)
DR=SCI; BR=4
MGY378H1 Microbiology II: Viruses [36L]
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 (IMM334Y1/335Y1) is recommended.
Prerequisite: BCH210H1/BCH242Y1; BIO120H1, BIO230H1; BIO260H1/HMB265H1
Corequisite: BCH311H1/CSB349H1/MGY311Y1
Exclusion: BIO351Y1, CSB351Y1
Recommended Preparation: MGY377H1
DR=SCI; BR=4
MGY379Y1 Microbiology Laboratory [24L/72P]
Laboratory experiments that teach fundamental concepts and techniques in working safely with bacteria and viruses. Valuable for advanced work in microbiology and in related disciplines that make use of bacteria and viruses as research tools. Topics include biofilms, molecular-based identification of bacteria, antibiotic sensitivity, viral vectors, immunologically-based assays.
Prerequisite: BIO120H1, BIO230H1, BIO260H1/HMB265H1
Corequisite: MGY377H1, MGY378H1
Exclusion: MGY376H1
DR=SCI; BR=4
MGY420H1 Regulation of Gene Expression [24L]
Regulatory mechanisms controlling gene expression in eukaryotes; students will read, discuss, and present the primary research literature in class. Topics include: assembly of the initiation complex; roles of transcription factors, co-activators and cis-acting regulatory elements; promoter escape; mechanisms that control elongation, termination and anti-termination of transcription; chromatin control of transcription.
Prerequisite: BCH340H1, BCH311H1/MGY311Y1
Exclusion: BIO477H5 (UTM)
DR=SCI; BR=4

# Molecular Genetics and Microbiology 

## MGY425H1 Signal Transduction and Cell Cycle Regulation [24L]

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 proteinprotein interactions in cell regulation.
Prerequisite: BCH311H1/MGY311Y1
DR=SCI; BR=4
MGY428H1 Functional Genomics [24L]
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.
Prerequisite: BCH210H1/BCH242Y1; BIO260H1/HMB265H1;
MGY311Y1/CSB349H1/BCH311H1
DR=SCI; BR=4

## MGY432H1 Laboratory in Molecular Genetics and Microbiology [72P]

Laboratory experiments demonstrating basic and advanced molecular biological methods applied to molecular genetics and microbiology.
Prerequisite: MGY312H1/MGY376H1, MGY311Y1 DR=SCI; BR=4

## MGY434H1 Bacterial Signalling and Physiological Regulation [36L]

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 twocomponent systems and quorum sensing.
Prerequisite: BCH210H1/BCH242Y1, BCH311H1/CSB349H1/
MGY311Y1, MGY377H1
DR=SCI; BR=4
MGY440H1 Virus-Host Interactions [36L]
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.
Prerequisite: BCH311H1/CSB349H1/ MGY311Y1;
CSB351Y1/MGY378H1
Recommended Preparation: IMM334Y1/IMM335Y1 DR=SCI; BR=4

## MGY445H1 Genetic Engineering for Prevention and Treatment of Disease [36L]

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.
Prerequisite: MGY378H1/ MGY311Y1
DR=SCI; BR=4
MGY451H1 Genetic Analysis of Development I [24L]
Basic and advanced principles of genetic analysis applied to the study of two of the best-understood eukaryotic model
organisms: the yeast Saccharomyces cerevisiae and the nematode worm Caenorhabditis elegans. 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.
Prerequisite: BIO260H1/HMB265H1, MGY311Y1/CSB349H1/
BCH311H1
DR=SCI; BR=4
MGY452H1 Genetic Analysis of Development II [24L]
This companion course to MGY451H1 moves on to cover the more complex animal models of development and disease - the fruit fly, zebrafish and mouse. Advanced genetic principles and approaches used in the study of these animals are introduced, and applied to highly conserved genetic and molecular processes that give rise to common structures such as the limbs, nervous system and eyes. Students completing this course should be able to understand and evaluate any study that makes use of these three major model systems.
Prerequisite: BIO260H1/HMB265H1, MGY311Y1/CSB349H1/
BCH311H1

## DR=SCI; BR=4

## MGY470H1 Human and Molecular Genetics [24L]

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.
Prerequisite: BCH311H1/MGY311Y1 (Note: CSB349H1 is acceptable with permission of the instructor)
DR=SCI; BR=4

## 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/MGY314H1/
MGY315H1/MGY376H1/MGY379Y1, MGY311Y1
DR=SCI; $B R=4$
MIJ485H1 Vaccines and Immunity [36L]
Analysis of the strategies used by pathogenic microbes to evade specific and innate immune responses, and the strategies used to combat infectious disease using vaccines, with an emphasis on molecular and immunological aspects.
Special topics include: molecular basis of pathogenicity and immune-evasion strategies; vaccination strategies; challenges to vaccine implementation (given jointly by the Departments of Molecular Genetics and Immunology).
Prerequisite: IMM334Y1/IMM335Y1, MGY377H1,
MGY378H1
Exclusion: MBY480H1, MGY485H1
DR=SCI; BR=4

## Faculty

## Professors

R. Elliott, MA, Ph D (M)
J. Haines, MA, Ph D (T)
J. Kippen, Ph D (T)
M.A. Parker, MM, Ph D (M)
C.Clark, MA, Ph D (T)

Associate Professors
W. Bowen, MA, Ph D (S)
G.S. Johnston, MA, Ph D

Assistant Professors
J. Pilzer, Ph D
S. Vande Moortele, MA, Ph D

Faculty: Music Theory and Composition

## Professors

K.N. Chan, Mus M, D Mus
C. Hatzis, M Mus, Ph D

## Associate Professor

R. McClelland, Ph D

Assistant Professor
N. Palej, DMA

Senior Lecturers
J. Kruspe, Mus Bac
G. Kulesha
D. Patrick, Mus M
A. Rapoport, MA, Ph D
M. Sallmen, MA, Ph D

## Lecturer

L. Kuzmenko, Mus Bac

Faculty: Peformance

## Associate Professors

G. MacKay, M.Mus,D.M.
T. Promane, Hons Dip Mus

## Assistant Professor

D. Briskin, MA

Senior Lecturer
J. Reynolds, M Mus, Ph D

## Visiting Professor

J. Packman, MA, 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. Note that unlike students in the Mus.Bac. program at the Faculty of Music, students in the Specialist and Major programs are not given individual applied music instruction (e.g. piano or voice lessons). They are, however, offered a thorough grounding in musicology, and strong training in both ethnomusicology and music theory, with the option of increasing their exposure to the latter two disciplines via their upper-year option courses.

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 or Major Program should examine the courses listed under HMU History of Music and TMU Theory of Music in the Faculty of Music Calendar. 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 Royal Conservatory of Music 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 R. Elliott, 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 September 4, 2012. Students are required to complete and submit the Student Profile available on-line at www.music.utoronto.ca prior to August 17, 2012. Hard copies 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 Specialist (Arts program)

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 September 4, 2012.

Students are required to complete and submit the Student Profile available on-line at www.music.utoronto.ca prior to August 17, 2012. Hard copies 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 MUS120Y1. An information sheet is available at the Faculty of Music. (This is not required for the Music Minor program, see below.)
(10 full courses or equivalent, including three 300+ level courses and one 400+ level course)

## First Year:

HMU111H1, TMU140Y1, one FCE at the 100- level in a language other than English
Higher Years:

1. HMU225H1, HMU126H1
2. HMU425H1, HMU426H1, HMU430H1, HMU431H1, HMU432H1, HMU433H1, HMU450H1
3. TMU240Y1 and a half-course in advanced theory (TMU) 4. Three half-courses in history options (HMU)

NOTE: Part-time students will satisfy co-requisites by taking courses in the following order: TMU140Y1, HMU111H1, TMU240Y1, HMU225H1, HMU126H1

## Music Specialist with Ensemble Option (Arts program)

Enrolment in HMU and TMU courses, and, therefore, in the Specialist and Major programs, is limited to students who pass the audition-interview, held September 4, 2012. Students are required to complete and submit the Student Profile available on-line at www.music.utoronto.ca prior to August 17, 2012. Hard copies 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 MUS120Y1. An information sheet is available at the Faculty of Music. (This is not required for the Music Minor program, see below.)
(10.5 full courses or equivalent, including three $300+$ level courses and one 400+ level course)

First Year: HMU111H1, MUS120Y1, TMU140Y1, one FCE at the 100-level in a language other than English
Higher Years:

1. HMU225H1, HMU126H1
2. Three-and-a-half full courses in history options (HMU), including HMU433H1 and 1.5 FCE of topic courses from the list HMU425H1, HMU426H1, HMU430H1, HMU431H1, HMU432H1, HMU450H1
3. TMU240Y1 and a half-course in $300+$ level theory (TMU)

## 4. MUS220Y1

NOTE: Part-time students will satisfy co-requisites by taking courses in the following order: TMU140Y1, HMU111H1, TMU240Y1, HMU225H1, HMU126H1

## Music Major (Arts program)

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 September 4, 2012. Students are required to complete and submit the Student Profile available on-line at www.music.utoronto.ca prior to August 17, 2012. Hard copies 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 MUS120Y1. An information sheet is available at the Faculty of Music. (This is not required for the Music Minor program, see below.)
( 7 full courses or equivalent, including at least 1.5 FCE at the 300-level and . 5 FCE at the 400-level)
First Year:
HMU111H1, TMU140Y1
Higher Years:

1. HMU225H1, HMU126H1 and three further half-courses in history options (HMU)
2. TMU240Y1 and a half-course in advanced theory (TMU)
3. 1.5 additional HMU/TMU courses

## Music Major with Ensemble Option (Arts program)

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 September 4, 2012. Students are required to complete and submit the Student Profile available on-line at www.music.utoronto.ca prior to August 17, 2012. Hard copies 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 MUS120Y1. An information sheet is available at the Faculty of Music. (This is not required for the Music Minor program, see below.)
(7.5 full courses or equivalent, including at least 1.5 FCE at the 300-level and .5 FCE at the 400-level)
First Year:
HMU111H1, MUS120Y1, TMU140Y1
Higher Years:

1. HMU225H1, HMU126H1
2. TMU240Y1
3. 2.0 additional HMU/TMU options
4. MUS220Y1

## Music History \& Culture Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or equivalent)

1. MUS110H1, MUS111H1
2. MUS200H1 or an alternative 200-level course in world music (MUS209H1 or MUS211H1)
3. 2.5 MUS courses from the list below, including one full course at the 300+ level. Either MUS120Y1 or MUS220Y1 can be counted towards the 2.5 MUS courses

## Music Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## MUS courses offered in 2012-2013

## MUS110H1 Introduction to Music History and Culture

 [24L]Introduction to form, style and the interrelationship of music and culture. A basic ability to read music is required.
Exclusion: HMU111H1, VPMA80H3
DR=HUM; BR=1

## MUS120Y1 Vocal and Instrumental Ensembles I [144P]

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, eartraining, 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 17, 2012.
Once your request form is received, you will be notified of your audition time. Placement audition will be held on September 5, 2012 from 4-10 p.m. in the Edward Johnson Building. The audition will be 10 minutes in length.
Exclusion: MUS291Y1
DR=HUM; $B R=1$

## MUS209H1 Performing Arts of South Asia [24L]

Survey of classical, devotional, folk and popular musics and dances from the Indian subcontinent and their toll in the sociocultural life of the region. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1

## MUS210H1 Music in Film [24L]

The theory and practice of how music is used in a variety of film genres, drawing on case studies from different eras in film history. Examples will be drawn primarily from European and North American cinema.
DR=HUM; $B R=1$

## MUS220Y1 Vocal and Instrumental Ensembles II [144P]

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, eartraining, 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 17.2012. Once your request form is received, you will be notified of your audition time.
Placement audition will be held on September 5, 2012 from 4-10 p.m. in the Edward Johnson Building. The audition will be 10 minutes in length.
Prerequisite: MUS120Y1. Placement audition and permission of the Department required.
DR=HUM; BR=1
MUS300H1 Music, Media and Technology [24L]
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
DR=HUM; BR=1

## MUS302H1 Symphony [24L]

Masterpieces in the symphonic genre from the eighteenth to the twentieth centuries. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1
MUS306H1 Popular Music in North America [24L] A selected survey of North American popular music from the 1930s through present. Students will develop a critical framework for listening to and analyzing popular music in historical and social context by focusing on aspects of performance, representation, composition, mass media, aesthetics, and commodification. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1
MUS325H1 The Age of Haydn \& Mozart [24L]
Selected works from the second half of the eighteenth century by Haydn, Mozart, and their contemporaries will be examined in cultural and historical context. No prior background in music or ability to read music is required. Exclusion: HMU111H1
DR=HUM; $B R=1$

## Future MUS Offerings

## MUS111H1 Historical Survey of Western Music

Historical survey of Western art music from the Middle Ages to the present. A basic ability to read music is required. Exclusion: HMU111H1, VPMA99H3 DR=HUM; BR=1

MUS200H1 Music of the World's Peoples [24L]
A survey of musical traditions from various regions of the world, with particular emphasis on the sociocultural contexts in which those musics are created and appreciated. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1
MUS202H1 Beethoven [24L]
A study of Beethoven's musical style in historical context, including a non-technical consideration of Beethoven's innovations based on listening to music and reading history. No prior background in music or ability to read music is required.
Exclusion: HMU111H1, VPMC85H3
DR=HUM; BR=1

## MUS204H1 The Age of Bach \& Handel [24L]

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
DR=HUM; BR=1

## MUS205H1 Mozart [24L] <br> Mozart

DR=HUM; BR=1
MUS206H1 The World of Opera [24L]
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
DR=HUM; BR=1
MUS207H1 Music for Orchestra [24L]
Study of selected orchestral works from 1700 to the present. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1

## MUS208H1 Medieval and Renaissance Masterpieces [24L] <br> Medieval and Renaissance Masterpieces <br> Exclusion: HMU111H1 <br> DR=HUM; BR=1

## MUS211H1 The World of Popular Music [24L]

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
DR=HUM; BR=1

## MUS225H1 Music: Islamic World [24L]

A survey of the musical systems of Muslim societies from North Africa to Southeast Asia, with special focus on the broader cultural contexts in which they are created, used, and appreciated. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1
MUS230H1 Music of the 1960s [24L]
Examination of musical and cultural aspects of the decade, with emphasis on North America. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1
MUS303H1 Music in the Contemporary World [24L]
The modern musical repertoire, including popular and traditional music from various parts of the world, will be studied from a variety of theoretical perspectives. No prior background in music or ability to read music is required. Exclusion: HMU111H1
DR=HUM; BR=1

## MUS305H1 Latin American and Caribbean Music

 [24L]A survey of popular, folk, and religious music from Latin America and the Caribbean. Each practice will be considered in its socio-cultural context with attention to the histories and discourses of racial and cultural mixing that deeply inform everyday life in nation-states including Peru, Brazil, Haiti, and Jamaica among others.
Exclusion: HMU111H1
DR=HUM; BR=1
MUS308H1 Handel [24L]
Handel's life and music will be examined in its cultural contexts.
Exclusion: HMU111H1
DR=HUM; BR=1
MUS315H1 North American Vernacular Music [24L]
Explores vernacular music in North America, considering how musical performances and festivals of vernacular music map local, regional, and ethnic identities in North America. Specific case studies will include Scottish Highland, Tejano Conjunto, Métis Fiddling, Powwow, and Zydeco. No prior background in music or ability to read music is required.
Exclusion: HMU111H1
DR=HUM; BR=1

## MUS321H1 The Beatles [24L]

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
DR=HUM; BR=1

## MUS330H1 Music, Violence, and War[24L]

An inquiry into the social life of music in situations of violence, war, social domination, and traumatic experience. Case studies include music and African-American slavery, the First World War, Nazi Germany and the Holocaust, the Asia-Pacific War, Khmer Rouge Cambodia, the Iraq Wars and others.
DR=HUM; BR=1
MUS335H1 A Social History of the Piano[24L]
A survey of the changing roles and gendered associations of the piano c. 1700 to the present day. Examples from the western art music tradition are compared to the acculturating force of the piano in other cultures, representations in the visual arts and film, and contemporary contexts of piano performance.
Exclusion: VPMB76
DR=HUM; BR=1

## HMU, TMU Faculty of Music Courses

## HMU111H1 Introduction to Music and Society[24L/12T]

An examination of musical thought and practice in Western and non-Western traditions.
Prerequisite: Permission of Department
Corequisite: TMU140Y1
DR=HUM; $B R=1$
TMU140Y1 Materials of Music I[48L/72P]
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
Corequisite: HMU111H1
DR=HUM; BR=1

## Note

HMU111H1 and TMU140Y1 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.

## National University of Singapore

Programs offered in conjunction with the National University of Singapore are part of official student exchange programs administered by the University of Toronto Centre for International Experience (CIE)

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:

CIE
Cumberland House, Room 204
Telephone: (416) 946-3138
student.exchange@utoronto.ca
www.cie.utoronto.ca

## National University of Singapore

 Programs
## Asian Geographies - see Geography

Asian Literatures \& Cultures Minor - see English
Environmental Biology Minor - see Ecology \&
Evolutionary Biology
Nanoscience Minor - see Chemistry

## Faculty

## Professors Emeriti

E. Birnbaum, BA, Dipl OAS
P.E. Dion, L Th, L SS, Ph D
L.V. Golombek, MA, Ph D, FRSC (ROM)
A.K. Grayson, MA, Ph D, FRSC
J.S. Holladay, BS, BD, Th D
A. Jwaideh, MA, B Litt, D Phil
A. Pietersma, BA, BD, Ph D
D.B. Redford, MA, Ph D, FRSC
E.J. Revell, MA, Ph D, FRSC (V)
R.M. Savory, MA, Ph D, FRSC (T)
R.F.G. Sweet, MA, Ph D

## Associate Professors Emeriti

J.R. Blackburn, MA, Ph D
H. Dajani-Shakeel, MA, Ph D
L. Garshowitz, MA, Ph D
E.J. Keall, BA, Ph D (ROM)
R. Sandler, MA, Ph D

## Senior Lecturer Emeritus

R.T. Lutz, MA

## Professor and Chair

T.P. Harrison, MA, Ph D

## Professors

P-A. Beaulieu, MA, Ph D
A. Harrak, MA, Ph D
R.J. Leprohon, MA, Ph D
J.A. Reilly, MA, Ph D
M.E. Subtelny, BA, Ph D
M. Tavakoli-Targhi, MA, Ph D (UTM)

Associate Professors
H. Fox, MS, Ph D
K. Goebs, MA, Ph D
K.A. Grzymski, MA, Ph D (ROM)
J.P. Hanssen, D Phil (UTM)
R.D. Holmstedt, MA, Ph D
B.T. Lawson, MA, Ph D
R. Mason, MA, Ph D (ROM)
T. Meacham, MA, Ph D
S. Metso, MA, Ph D
L. Northrup, MA, Ph D
V. Ostapchuk, BA, Ph D

M-A. Pouls-Wegner, BA, Ph D
K. Ruerhdanz, Ph D (ROM)
W. Saleh, MA, Ph D (U), Distinguished Professor of Islam

## Assistant Professors

A. Mittermaier, MA, Ph D
E. Raffaelli, MA, Ph D (UTM)
C. Reichel, MA, Ph D (ROM)

## Lecturers

A.K. Ali, MA, Ph D
A. Taleghani, MA, Ph D (UTM)

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 archaeology, history, mythology, religion and thought, art and architecture, and languages and literatures (Akkadian, Babylonian, Sumerian, Aramaic, Syriac, ancient Egyptian, Hebrew, Arabic, Persian and Turkish). The Department's programs provide students with a unique opportunity to study non-Western complex societies and civilizations.

The 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 CE. The Middle East begins with the advent of Islam and refers to a much broader geographical area whose predominant Islamic culture in medieval and modern times has stretched to North Africa and Spain in the west and to Central Asia, India, and Southeast Asia in the east.

The Department welcomes students of all academic backgrounds who wish to learn about the Near and Middle East. NMC101H1, NMC102H1 and NMC104H1 introduce students to the ancient Near East, including ancient Egypt, Mesopotamia, and Israel, while NMC103H1 introduces students to the Islamic world. Students pursuing a Specialist or Major program are required to take two of these Gateway courses.

Many courses offered in the Department do not require any knowledge of the languages of the region. However, the Department strongly believes that a deeper understanding of the civilizations and cultures of the Near and Middle East can be achieved through the study of one or more of its languages. In fact, admission to a graduate program in NMC requires the applicant to have acquired a background in languages. Students should consult the Department's web site www.utoronto.ca/nmc for more detailed information about programs and courses offered in a particular year.
Undergraduate Enquiries: 4 Bancroft Avenue, Room 200, robert.holmstedt@utoronto.ca

## Near and Middle Eastern Civilizations Programs

## Near and Middle Eastern Civilizations Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
11 FCEs, including at least four 300+ FCEs, one of which must be at the 400 -level.

At least 9 FCEs must be NMC and/or NML courses. Others may be taken only from a list of pre-approved courses offered by other departments.
First Year: One FCE from NMC101Y1/NMC101H1/ NMC102H1/NMC103H1/NMC104H1/NMC184H1. It is recommended that language instruction begin in first year if possible.

## Near and Middle Eastern Civilizations

1. Four FCEs in one or two primary source languages (Akkadian, Ancient Egyptian, Biblical or Modern Hebrew, Aramaic, Syriac, Arabic, Persian, Turkish), with NML designator (i.e., not literature in translation).
2. Three FCEs in History \& Society and/or Religion \& Thought.
3. Two FCEs in Archaeology and/or Art \& Architecture.
4. One additional FCE.

## Near and Middle Eastern Civilizations Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
6 FCEs including at least two 300+ series FCEs, one of which must be at the 400 -level.

At least five FCEs must be NMC and/or NML courses. One FCE may be taken from a list of pre-approved courses offered by other departments.
Students can choose to take a Major with language(s). NML courses are language courses. NMC courses are courses in culture and civilization.
Major with language component:
First Year: One FCE from NMC101Y1/NMC101H1/ NMC102H1/NMC103H1/NMC104H1/NMC184H1.
Higher Years: Two to four FCEs in one or two languages, and at least two FCEs with an NMC designator.

## Near and Middle Eastern Civilizations Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Four FCEs, including at least one 300+ series course. All four must be NMC and/or NML courses.

## Near and Middle Eastern Civilizations Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Gateway Courses

These courses are designed to introduce students to the major civilizations and cultures of the Near and Middle East, ancient, medieval, and modern, and to present students with the range of possibilities for further study in their chosen areas of interest.

## NMC101H1 Near and Middle Eastern Civilizations I:

 Land of the Pharaohs [24L/12T]The course traces the history of ancient Egypt from the foundation of the Egyptian state around 3050 BCE to its incorporation into the Roman Empire. The focus is on various aspects of Egyptian culture, including the institution of kingship, the role of women, and the peculiarities of Egyptian art, literature, and religion. Emphasis is placed
on the methods by which knowledge about this ancient civilization can be obtained.
Exclusion: NMC101Y1. NMC343H1/NMC344H1 may not be taken in the same year.
DR=HUM; BR=3
NMC102H1 Near and Middle Eastern Civilizations II:
Heartland of Ancient Empires[24L/12T]
The history of ancient Near Eastern peoples and empires, particularly those centered in Mesopotamia. The origins and role of writing systems in the development of civilization.
The cultural contributions of the Sumerians, Assyrians,
Babylonians, ancient Israelites, Persians, and others, in the areas of law, administration, science, art and architecture, religion, and literature.
Exclusion: NMC101Y1. NMC346H1/NMC347H1 may not be
taken in the same year.
DR=HUM; BR=3
NMC103H1 Near and Middle Eastern Civilizations III: The Islamic World [24L/12T]
An introduction to the history, lands, peoples, religions, and cultures that came under the influence of Islam and that, in turn, contributed to the formation of Islamic civilization. Topics to be covered include an overview of the geographical and ethno-linguistic scope of the Islamic world, the role of the Qur'an and Arabic language, the major Islamic empires, the production and transmission of knowledge, law and society, and literary and artistic expressions.

## Exclusion: NMC184H1

DR=HUM; BR=3
NMC104H1 Near and MIddle Eastern Civilizations IV: The Biblical World[24L/12T]
An introduction to the history, lands, peoples, religions, literatures and cultures that produced the collection of texts known as the Hebrew Bible and Old Testament. Topics to be covered include an overview of the geography of Ancient Israel and Persian/Hellenistic/Roman Judea, the role of the Hebrew, Aramaic, and Greek languages, the literary genres reflected in biblical and some contemporary non-biblical texts, and the scholarly methods by which the Bible is studied.
Exclusion: NMC370H1
DR=HUM; BR=3

## Archaeology Courses

NMC260Y1 The Archaeology of Early Near Eastern Civilizations[72L]
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.
DR=HUM; BR=1 + 3
NMC261YO Field Archaeology[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
DR=HUM; $B R=1$

## NMC360H1 Archaeology of the Biblical World I: The Bronze Age[24L]

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
DR=HUM; BR=1
NMC361H1 The Archaeology of the Biblical World II: The Iron Age [24L]
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
DR=HUM; BR=1
NMC362Y1 Ancient Egyptian Sites [48L]
Detailed examination of significant sites for the understanding of ancient Egyptian cultural development, encompassing the study of spatial organization, architecture, artifactual material, and archaeological evidence from each site. (Offered in alternate years)
Prerequisite: NMC343H1 and NMC344H1
DR=HUM; BR=1 + 3
NMC363H1 The Archaeology of Mesopotamia I 80002000 BC [36L]
Comprehensive survey class on the origins of complex societies, urbanism and early states in Mesopotamia from the Neolithic period to the end of the Early Bronze Age. Covers the archaeology and material culture of Iraq and surrounding regions (western Iran, eastern Syria, southeastern Turkey).
Prerequisite: NMC260Y1
Exclusion: NMC363Y1
DR=HUM; BR=1
NMC364H1 The Archaeology of Mesopotamia II 2000330 BC [36L]
Comprehensive survey class on the state societies of Babylon, Assur, and Elam during the second millennium BC and on the emergence and manifestation of world empires (Assyria, Persia) in the first millennium BC. Covers the archaeology and material culture of Iraq and surrounding regions (western Iran, eastern Syria, southeastern Turkey).
Prerequisite: NMC260Y1
Exclusion: NMC363Y1
DR=HUM; BR=1
NMC365Y1 Archaeology of the Islamic World [48L] 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: NMC103H1/NMC184H1/
NMC260Y1/NMC273Y1
DR=HUM; BR=1 + 3
NMC366Y1 Archaeology from Alexander to Muhammad [48L]
An overview of late antique Greek, Arab and Persian material culture, as seen through the archaeological record of Syria, Iraq, and Iran.
Recommended Preparation: NMC260Y1 and/or an introductory course in archaeology
$D R=H U M ; B R=1+3$
NMC367H1 Archaeology \& Architecture of Egyptian Monasticism [24L]
Underlines the role of some Egyptian monasteries as active institutions carrying out numerous economic activities, and reveals the forces that enabled their survival and changing function. Exploration of these rich sites of cultural exchange, as manifested in their architecture and religious art and written material.
Recommended Preparation: NMC202H1/NMC260Y1/
NMC342H1/NMC368H1
DR=HUM; BR=1
NMC368H1 Coptic Art \& Archaeology [24L]
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: NMC202H1/NMC260Y1/
NMC289H1
DR=HUM; BR=1
NMC369Y1 Archaeological Materials and Industries [72L]
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)
Exclusion: NMC369H1
Recommended Preparation: NMC260Y1
DR=HUM; BR=1 + 3
NMC461Y1 Problems in the Archaeology of the Ancient Near East [36S]
Problems in the Archaeology of the Ancient Near East
Prerequisite: 1.5 courses from NMC360H1/NMC361H1/ NMC361Y1/ NMC362Y1/NMC363H1/NMC364H/ NMC363Y/NMC465H1/NMC466H1; two courses from NMC343H/NMC344H/NMC346H/NMC347H/NMC370H1

## DR=HUM; BR=1 + 3

## NMC462Y1 Polarized-light Microscopy in

 Archaeology[72P]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

## Near and Middle Eastern Civilizations

pottery, rocks, soils and other materials are studied. (Offered in alternate years)
Prerequisite: NMC369H1/NMC369Y1
Exclusion: NMC462H1
DR=SOC SCl; BR=1 + 5

## NMC465H1 Ceramic Analysis [36S]

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.
Prerequisite: ARH312Y1/NMC360H1/NMC361H1/361Y1/
369H1/NMC369Y1
DR=SOC SCI; BR=1

## NMC466H1 Near Eastern Ceramics [36S]

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, NMC465H1
DR=HUM; BR=1
NMC467H1 Seminar in Egyptian Archaeology I [12S] Seminar focuses on the social and cultural development of Egypt from the Predynastic Period through the Middle Kingdom, engaging with major theories regarding social complexity, state formation, urbanism, social organization, and regionalism. An independent research project and hands-on experience with artifacts at the ROM are important features of the course.
Prerequisite: NMC362Y1/NMC371Y1/NMC343H1 and NMC344H1
DR=HUM; BR=1
NMC468H1 Seminar in Egyptian Archaeology II [12S]
Seminar focuses on the social and cultural development of Egypt from the Middle Kingdom through the Ptolemaic Period, engaging with major theories regarding urbanism, ethnicity, core-periphery relationships, cultural interaction, and social organization. An independent research project and hands-on experience with artifacts at the ROM are important features of the course.
Prerequisite: NMC362Y1/NMC371Y1/NMC343H1 and NMC344H1
DR=HUM; BR=1
NMC469Y1 Mediaeval Middle Eastern Ceramics [72S] An introduction to the ceramics of the Middle or Near East from the time of Alexander until recent times. A particular emphasis will be the elite glazed wares of the mediaeval and Islamic periods. Apart from providing a history of the production of ceramics and their social and archaeological context, this course is intended to train archaeologists and art-historians in the fundamental field recognition and identification of the various types and their production origins, and the course will rely heavily on the collections of the ROM.
Prerequisite: NMC260Y1 and at least one other upper-level course in archaeological materials
Recommended Preparation: NMC369Y1/NMC465H1/
NMC365Y1/NMC366Y1
DR=HUM; $B R=1+3$

## History and Society Courses

NMC241H1 Anthropology of the Middle East [24L]
This course offers an introduction to the contemporary
Middle East from an anthropological perspective. Topics will include gender, kinship, religion, modernity, popular culture, and the study of everyday life.
Exclusion: RLG250H1, RLG355H1
DR=HUM; BR=3
NMC270H1 Christians of the Middle East [24L]
The course will introduce students to the Christian communities living in the Middle East since the distant past, identified by ecclesiastical and or ethnic terms, including Armenian, Copt, Greek-Melkite, Maronite, and Syriac. The course will discuss the plurality of their cultural, literary, and theological traditions, the social and intellectual roles of their monasteries, the contributions of their top religious authorities in diplomacy between Byzantium and the Sassanians, their position in the Islamic world and contributions to Islamic culture, philosophy, sciences, and theology, interreligious dialogues and polemics with Islam. (Offered in alternate years)
Recommended Preparation: NMC101Y1/NMC102H1 DR=HUM; BR=3

## NMC273Y1 Early Islamic History: The Prophet and the Caliphates [72L]

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.
Recommended Preparation: NMC103H1/NMC184H1 DR=HUM; BR=3

## NMC274Y1 The Steppe Frontier in Eurasian and Islamic History [48L]

This course will unfold around the eastern and northern frontiers of the Islamic world from Central Asia in the east, to the Black and Caspian Sea steppes in the north, and from these frontiers its focus will move into the lands of the Middle East. For centuries Altaic peoples (Turks and Mongols), originally nomads in the Eurasian steppes (and mountains), played varied and crucial roles in the lands of the Middle Eastas raiders, migrants, slave-soldiers, conquerors, and state-builders. Topics to be covered include pastoral nomadism, steppe warfare, clan, tribal and state structures, ethnicity, sedentarization, and the roles of physical geography and ecology. (Offered in alternate years) Recommended Preparation: NMC103H1/NMC184H1 DR=HUM; BR=3

## NMC275H1 Muslims \& Jews: The Medieval Encounter [24L]

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.
DR=HUM; BR=3

NMC277H1 Special Topics in Near \& Middle Eastern History [TBA]
Topics vary from year to year, depending on instructor. DR=HUM; BR=None
$\begin{array}{ll}\text { NMC278H1 } & \text { Introduction to the Modern Middle East } \\ \text { [36L] }\end{array}$
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
DR=HUM; BR=3
NMC342H1 History \& Sources of Egyptian Monasticism [24L]
Presents an historical overview on the origins of Egyptian monasticism based on written sources. Comparison of written sources with archaeological artifacts reveals the relation between spiritual and material aspects of monastic life. Literary sources produced for different monastic orders -such as sermons, canons and biographies -- will be studied.
Recommended Preparation: NMC202H1/NMC289H1/
NMC368H1
DR=HUM; BR=3
NMC343H1 History of Ancient Egypt I: Predynastic Period to Middle Kingdom [24L]
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: NMC101H1 may not be taken in the same year Recommended Preparation: NMC101H1/101Y1 DR=HUM; BR=3

## NMC344H1 History of Ancient Egypt II: Second Intermediate Period to Greco-Roman Period[24L]

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: NMC101H1 may not be taken in the same year Recommended Preparation: NMC101H/NMC101Y1 DR=HUM; BR=3
NMC346H1 Ancient Mesopotamia I: Sumerians and Akkadians [24L]
The political and cultural history of the peoples of ancient South-Western Asia from 3000 BCE to the destruction of Babylon by the Hittites ca. 1600 BCE. (Offered in alternate years)
Exclusion: NMC102H1 may not be taken in the same year Recommended Preparation: NMC101Y1/NMC102H1 DR=HUM; BR=3
NMC347H1 Ancient Mesopotamia II: Assyrians and
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: NMC102H1 may not be taken in the same year Recommended Preparation: NMC101Y1/NMC102H1 DR=HUM; BR=3

## NMC348Y1 History of Iran from the Sasanians to the Safavids [48L]

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 PersoIslamic 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 TurkoMongolian dynasties. 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. (Offered in alternate years.)
Recommended Preparation: NMC273Y1/NMC274Y1 DR=HUM; BR=3
NMC355H1 The Ottoman Empire in the Age of Reform, 1808-1918 [24L]
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 IIs accession and the defeat of the Ottoman empire in World War I. Focusing largely on Istanbul and the Ottoman capitals 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/NMC278H1/
NMC278Y1/NMC353H1/NMC377H1/NMC377Y1/
NMC378H1/NMC378H1
DR=HUM; BR=3
NMC370H1 Ancient Israel [24L]
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: NMC104H1 may not be taken in the same year Recommended Preparation: NMC101Y1/NMC104H1 DR=HUM; BR=3

## NMC373H1 Iran in the 20th Century [24L]

Situated within a world historical context, this course offers a critical history of modern Iran from the establishment of the Safavid Empire in 1501 to the Islamic Revolution of 1979. While focusing on institutional and political reforms and revolutions, it also explains the making of modern Iranian political, literary, and visual cultures.
Exclusion: NMC373Y1. NMC451H1 may not be taken in the same year
Recommended Preparation: NMC278H1/NMC348Y1 DR=HUM; BR=3

NMC374H1 History of Islamic Egypt [24L]
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

## Near and Middle Eastern Civilizations

invasions, commercial and diplomatic relations, the emergence of Cairo as the centre of the later mediaeval western Islamic world. (Offered in alternate years)
Prerequisite: NMC273Y1
Exclusion: NMC374Y1
DR=HUM; BR=3

## NMC376H1 History of Islamic Spain and North Africa (640-1492) [24L]

Muslim conquest of North Africa and Spain, history of Spain under Muslim rule to 1492. Attention given to institutional and cultural development, Islamic Spains relations with the Islamic east and neighbours in Europe. (Offered in alternate years)
Prerequisite: NMC273Y1
DR=HUM; BR=3

## NMC377Y1 The Ottoman Empire to 1800 [48L]

A survey of the Ottoman Empire from its late 13th/early 14th century origins as a border principality through the classical age of Mehmed the Conqueror and Süleyman the Magnificent when as a mature Islamic Empire it ruled lands in Europe, Asia, and Africa, to the internal and external challenges faced by the empire during the 17th and 18th centuries when it underwent substantial transformation. Coverage includes topics in Ottoman institutions, economy, society, and culture. (Offered in alternate years)
Prerequisite: NMC273Y1
Exclusion: NMC377H1
DR=HUM; BR=3

## NMC378H1 Modern Arab History [36L]

A thematic treatment of the Arab lands of the Middle East and North Africa from 1700 onward, focusing on the Ottoman and colonial periods.
Prerequisite: NMC278H1/278Y1 and permission of instructor Exclusion: NMC378Y1
DR=HUM; BR=3

## NMC451H1 Iranian Constitutional Revolution (formerly NMC359Y1/359H1) [24S]

Explores competing narratives of the Constitutional Revolution (19061911), 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 Revolutions memory. (Offered in alternate years)
Prerequisite: NMC278H1/NMC278Y1/NMC348Y1/

## NMC373H1

Exclusion: NMC373H1 may not be taken in the same year; NMC359Y1
DR=HUM; BR=3
NMC471H1 Topics in Early \& Medieval Islamic History [24S]
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. Intended for upper year students. (Offered in alternate years)
Prerequisite: NMC273Y1
DR=HUM; BR=3

## NMC472H1 Theory \& Method in Middle East Studies [24S] <br> 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. Intended for 4th year students only. <br> Prerequisite: Permission of the instructor DR=HUM; BR=3

## NMC473H1 Intellectuals of the Modern Arab World <br> (formerly NMC385Y1/NMC355H1) [24S]

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. Intended for upper year students. (Offered in alternate years)
Prerequisite: NML410Y1Y or fluency in Arabic and 1 FCE
from NMC278H1/NMC377Y1/NMC378H1
DR=HUM; BR=3
NMC475H1 Orientalism \& Occidentalism [24S]
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 seminarstyle 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. Intended for upper year students.
Prerequisite: Permission of the instructor.
DR=HUM; BR=3

## NMC476H1 Politics of Archaeology in the Modern Middle East [24S]

This course examines the role nineteenth and twentiethcentury archaeology played in Middle Eastern politics, the culture of colonialism and in nationalist struggles. The course will first familiarize the students with the diplomatic and intellectual context of the formation of archaeology as a field of study in Europe and analyse the role archaeology played in the production of knowledge about the Middle East. Next, the course will examine the archaeological practices on the ground (and underground) and inquire what happens in the contact zone between foreign and local archaeologists. Finally, we will trace the ways in which emergent nationalist discourse challenge, appropriate and imitate the historical narratives of Western archaeology.
Prerequisite: Permission of instructor is required.
DR=HUM; BR=3

NMC478H1 Modern Arab Societies [24S]
A seminar built around thematic readings of social and economic history of the modern Arab world. Offered every other year.
Prerequisite: NMC378H1 and permission of instructor DR=HUM; BR=3
NMC479H1 Nationalism in the Arab World [24S]
A seminar that critically examines the types and varieties of national expression in Arab societies of the Middle East and North Africa, through a reading of common texts and students' individual research projects. (Offered in alternate years)
Prerequisite: NMC378H1 and permission of instructor DR=HUM; BR=3

## Religion and Thought Courses

NMC283Y1 Islam: Religion and Civilization [48L]
This course will examine the religious beliefs and practices of Muslims. The period of time covered by the course is from shortly before the birth of Islam in the 7th century to the present. Attention will focus on the central concerns of the religion: God, Prophethood, Holy Book, Community, the Individual. The sources and development of the Sharí'a, the teachings of the mystical tradition, the contributions to art and science, social institutions such as marriage and divorce, family life, the position of women in Islam, modern social changes and the more recent impact of the West on Muslim lands (and vice versa) will also be discussed. Lectures, assignments and workshops will be framed by the close identification between "religion" and "civilization" found in the Islamic sources, beginning with the Qur'an. Doubtless in part a reflection of the 7th century "view from the Hijaz," of the contemporary and competing civilizations of the Christian Eastern Roman Empire in the west and the Zoroastrian Iranian Sasanid Empire in the east, this identification may be seen as a presupposition of Islamic religious discourse, beginning with the two foundational opposites, the defining and characteristic Islamic religio-cultural categories: jahiliyya,
"ignorance, barbarism" and islamiyya, "Islām". (Offered in alternate years.)
Exclusion: NMC185H1/RLG204Y
Recommended Preparation: NMC103H1/NMC184H1
DR=HUM; BR=1

## NMC284H1 Judaism and Feminism [24L]

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 womens prayer groups are some of the topics considered. (Offered in alternate years)

## DR=HUM; BR=2

## NMC285H1 The Quran: Spirit and Form (formerly NMC285Y1) [24L]

Concern is mainly with the sacred character of the Quran (koran), its preeminence in Islam. Topics include: the idea of the sacred book, the Quran and the Bible, the influence of the Quran on Islamic spirituality, literature, theology, law, philosophy, and the various apporaches taken in interpreting the Quran. Knowledge of Arabic is not required. (Offered in alternate years)
Exclusion: NMC285Y1/RLG351H1

Recommended Preparation: NMC185H1/NMC283Y/ RLG204Y1
DR=HUM; BR=2

## NMC286H1 The Quran: Reading and Transformation [24L]

This course is a continuation of NMC285H1. 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.
Exclusion: NMC285Y1/RLG351H1
Recommended Preparation: NMC185H/NMC283Y/
NMC285H1/RLG204Y
DR=HUM; BR=2
NMC289H1 Introduction to Coptic Studies (formerly NMC202H1) [24L]
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.
Exclusion: NMC2O2H1
DR=HUM; BR=3
NMC380Y1 Religion and Myth in the Ancient Near East [72L]
The ancient religions of the ancient Near East are interesting for the profound insights their myths enshrine, and for the impact they had on Judaism, Christianity and Islam, as well as on Greek literature. This course will give equal attention to the religions of Mesopotamia (Sumerian, AssyroBabylonian), and to those of Syria (especially Ugarit).
(Offered in alternate years)
Exclusion: NMC380H1
Recommended Preparation: NMC101Y1/NMC102H1 DR=HUM; BR=2

## NMC381H1 Modern Islamic Thought (formerly

 NMC381Y1) [24L]Survey of major intellectual trends in the Islamic tradition, particularly those identified with Middle Eastern Muslim thinkers, from the early 19th century to the present. Topics include reformism, modernism, hermeneutics, feminism, Islamism, and liberal and progressive trends in contemporary Muslim thought. Readings in English translation.
Prerequisite: NMC185H1/NMC283Y1/RLG204Y1
Exclusion: NMC381Y1, RLG352H1
Recommended Preparation: NMC278H1
DR=HUM; BR=2
NMC382Y1 Mummies, Myth and Magic: The Religion of
Ancient Egypt [72L]
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: NMC101H1/NMC101Y1 DR=HUM; BR=2

## NMC384H1 Life Cycle and Personal Status in Judaism

 [24L]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

# Near and Middle Eastern Civilizations 

sources to modern Jewish positions. (Offered in alternate years)
DR=HUM; BR=2

## NMC385H1 Introduction to Islamic Law [24L]

The course will introduce students to the history, theory, and doctrines of Islamic law, and focus on hot-topics that are at the center of public debate in various regions across the world. Students will be required to do close readings of primary sources, provide oral and written responses to secondary literature, and engage the materials of the course in light of their own context and experiences. It will be designed for students from various departments, teach them critical thinking skills, and help them understand the dynamics of legal reasoning and analysis in a comparative perspective.
Prerequisite: NMC283Y/RLG204Y
DR=HUM; BR=2
NMC387H1 Islamic Mystical Tradition [24L]
Mysticism and spirituality in Islam: the Quran; doctrine; prayer; Sufism; Irfan (Shii mysticism). Themes include love, knowledge, authority, being, interpretation.
Prerequisite: NMC185H1/NMC283Y/RLG204Y

## DR=HUM; BR=2

## NMC388H1 Shii Islam I (formerly NMC386H1) [24L]

Subjects covered include the rise and development of the Shii version of Islamic orthodoxy from the mid-7th to the mid-13th centuries CE. Distinctive Shii interpretations of the Quran will be examined.
Prerequisite: NMC185H1/NMC283Y/RLG204Y

## DR=HUM; BR=2

NMC389H1 Shii Islam II (formerly NMC386H1) [24L]
This course continues the study of Shiism from 1258 to the present day and will include the history and teachings of the various members of the Shii family of Islamic religion. Prerequisite: NMC185H1/NMC283Y1/RLG204Y1 DR=HUM; BR=2

NMC481H1 Muslim Gnostics and Mystics [24L]
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, and the nature of their literary productions. There is no Prerequisite, but students must be advanced undergraduates in the Humanities.
Prerequisite: Permission of instructor
DR=HUM; BR=2
NMC484H1 Gender-related Topics in Law and Religion (formerly NMC484Y1) [36L]
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
DR=HUM; BR=1

## Art and Architecture Courses

NMC392H1 The Taj Mahal and Its Origins [24L]
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 bestknown 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: One full course in pre-modern history of the Muslim world or Islamic art/material culture; or one full course in pre-modern art history (FAH)
DR=HUM; BR=1
NMC393H1 Early Islamic Art \& Architectures [24L]
A survey of the arts of the Islamic world from the 7th century to the Mongol conquest in the mid-13th century. Studying objects in the ROM collections of Islamic art.
Prerequisite: One full course from FAH or NMC in medieval art/history/culture
$D R=H U M ; B R=1$
NMC394H1 Persianate Art \& Architecture [24L]
A continuation of NMC393H1, covering art and material culture in the eastern Islamic lands from the late 13th century CE to the modern period. Studying objects in the ROM collections of Islamic art..
Prerequisite: One full course from FAH or NMC in medieval art/history/culture
DR=HUM; BR=3

## NMC396Y1 The Islamic City [24L]

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.
Prerequisite: One full course in Near Eastern/Islamic art and/ or material culture
DR=HUM; BR=3
NMC491H1 Mesopotamian Material Culture: Art [24S] This course focuses on a comprehensive introduction and discussion of Mesopotamian artwork from the Neolithic to the Iron Age periods (ca. 6000-300 BCE). Following an introduction of major artifact classes (including sculpture, relief, and glyptics [seals and sealings]), students will learn to describe and catalogue works of Mesopotamian art, allowing them to critically use and evaluate primary and secondary publications. Systematic descriptions and labels for key characteristics such as the object materials, size, iconography, genre, style, and theme will be established to show how meaningful artifact typologies can be constructed. The potential as well as limitations of art-historical approaches for archaeological work, especially for the chronology and interpretation of archeological contexts, will be discussed and examined on selected cases. Several classes will be taught at the Royal Ontario Museum to demonstrate the handling and physical analysis of artifacts. Prerequisite: Permission of the instructor
DR=HUM; BR=1

## Research Courses

NMC299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research
project. Details on page 33.
DR=HUM; BR=None
NMC399YO Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
NMC495Y1 Independent Studies [TBA]
Independent Studies
Prerequisite: Permission of Department
DR=HUM; BR=None
NMC496H1 Independent Studies [TBA]
Independent Studies
Prerequisite: Permission of Department
DR=HUM; BR=None
NMC497H1 Independent Studies [TBA]
Independent Studies
Prerequisite: Permission of Department
DR=HUM; BR=None

## 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 DR=HUM; BR=None

## Language and Literature Courses

## Note:

The Department reserves the right to place students in the course level best suited to their linguistic preparation.

## Akkadian

NML305Y1 Introductory Akkadian [48S]
Introduction to Old Babylonian. Grammar and the reading of selected texts. (Offered in alternate years)
Prerequisite: Arabic or Hebrew, normally NML155H1/
NML156H1/NML110Y1/NML250Y1
DR=HUM; BR=1
NML405Y1 Intermediate Akkadian [48S]
(Offered in alternate years)
Prerequisite: NML305Y1
$\mathrm{DR}=\mathrm{HUM} ; \mathrm{BR}=1$

## Arabic

NMC255H1 Arabic Literature in Translation [12L]
Introduces students to the richness and breadth of modern Arabic literature in translation. The course starts with the age of translation in the nineteenth century, then it examines several literary schools and trends that emerged in the twentieth century, such as romanticism, the novel, modernism, free verse, symbolism, and postmodernism. The course covers a wide range of selected texts and genres, which may include travel accounts, novellas, fiction, prose, poetry, and drama. (Offered in alternate years) $D R=H U M ; B R=1$

## NML110Y1 Introductory Standard Arabic (formerly NML210Y) [96L/24P]

This course is an introduction to the formal variety of Arabic used throughout the Arab world. It is designed for students with no prior knowledge of Arabic language and it follows a teaching approach that places equal emphasis on the development of all language skills: reading, writing, listening, and speaking. The fundamental learning philosophy underlying this approach is that proficiency in a foreign language is best achieved through consistent, deliberate, and systematic practice. From the outset, students are strongly encouraged to develop the habit of consistently and continuously practicing learned material.
Prerequisite: Priority enrollment will be given to declared
NMC majors/specialists.
Exclusion: Native speakers/NML210Y1
DR=HUM; BR=1
NML211Y1 Intermediate Standard Arabic I (formerly NML310Y/NMC310Y1) [96L/24P]
Students enrolled in this course are assumed to have active knowledge of the grammar and vocabulary covered in the introductory level. After a brief review, the course continues from where NML110Y1leaves off. Following the same teaching approach and learning philosophy, emphasis is placed on balanced development of all language skills. As the course progresses, students are introduced to the fundamentals of Arabic morphology and syntax. This is achieved through analysis of texts covering a wide range of topics. By the end of the course, students are expected to achieve upper intermediate level of proficiency.
Prerequisite: NML110Y1 or permission of the instructor.
Exclusion: Native speakers/NML310Y/NMC210Y1. Priority enrollment will be given to declared NMC majors/ specialists.
DR=HUM; BR=1
NML310Y1 Intermediate Standard Arabic II (formerly NML310Y/NMC310Y1) [96L/24P]
Students enrolled in this course are assumed to have active knowledge of the grammar and vocabulary covered in previous two levels. After a brief review, the course continues from where NML211Y1 leaves off. Following the same teaching approach and learning philosophy, emphasis is placed on balanced development of all language skills. Throughout the course, students are introduced to increasingly complex morphological and syntactic patterns of Arabic. This is achieved through analysis of texts covering a wide range of genres. By the end of the course, students are expected to achieve advanced level of proficiency.
Prerequisite: NML211Y1 or permission of the instructor.
Exclusion: Native speakers/NMC310Y1. Priority enrollment will be given to declared NMC majors/specialists.
DR=HUM; BR=1
NML315H1 The Structure of Arabic Language (formerly NML415H1) [24L]
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: NML211Y1 or permission of instructor
Exclusion: NML415H1

# Near and Middle Eastern Civilizations 

## DR=HUM; BR=1

## NML410Y1 Advanced Standard Arabic [96S]

Students enrolled in this course are assumed to have active knowledge of the grammar and vocabulary covered in previous levels. After a brief review, the course continues from where NML310Y1leaves off. Following the same teaching approach and learning philosophy, the goal of this course is to enable the students to reach a superior level of proficiency in Arabic. To this end, the materials covered are designed to strengthen the students reading and writing skills, refine and expand their knowledge of sentence structure, morphological patterns, verb system, and enrich their cultural background. The primary method is analysis of sophisticated authentic texts covering a wide range of genres and drawn from different parts of the Arabic speaking world. Although the main focus remains to be on Modern Standard Arabic, texts from the Classical Arabic literary tradition will be introduced incrementally throughout the course.
Prerequisite: NML310Y1 or permission of instructor.
Exclusion: Native speakers/NMC410Y1.
DR=HUM; BR=1
NML411H1 Readings in Arabic Newspapers [24S]
The primary goal of this course is to familiarize advanced students of Arabic with structural properties, styles, and discourse features of the language used in the Arabic Press. To achieve this goal, class time is devoted to directed readings of authentic texts covering a wide range of topics and are drawn from various Arabic newspapers.
The newspaper articles assigned for reading are approached from a purely linguistic point of view. It is not the course objective to assess the factual accuracy of the content of the articles nor is it to evaluate the validity of the claims and assumptions made by their authors.
Prerequisite: NML310Y1 or adequate reading knowledge of Arabic.
Exclusion: Native speakers of Arabic must obtain permission of instructor.
DR=HUM; BR=1
NML412Y1 Survey of Classical Arabic Literature [48S] Systematic outline of the development, characteristics, and peculiarities of selected genres of classical Arabic literature such as historiography, belles-lettres (adab), philosophy, ethics - Quran, exegesis, Literature of Tradition - poetry. Complementary readings, analysis and translation of original text passages are given emphasis.
Prerequisite: NML310Y1 or permission of the instructor.
Exclusion: NMC412Y1
DR=HUM; BR=1 + 2

## Aramaic/Syriac

NMC350H1 Syriac Literature in Translation [24L] 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/NMC102H1 DR=HUM; BR=1
NML220Y1 Introductory Aramaic [72S]
Introduction to Aramaic grammar. Readings from biblical Aramaic. (Offered in alternate years)

Prerequisite: NML250Y1
Exclusion: NMC315Y1
DR=HUM; BR=1
NML320H1 Intermediate Aramaic: Targum [24S]
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
Exclusion: NMC415Y1/NMC415H1
DR=HUM; BR=1

## NML420Y1 The Jerusalem Talmud: Jewish Western

 Aramaic [48S]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
Exclusion: NMC416Y1
Recommended Preparation: NML220Y1/NML320H1
DR=HUM; BR=1 + 2
NML421Y1 Classical Syriac [48S]
This course is primarily a reading course in Syriac literature with reference to specific points in grammar and syntax as contrasted with Aramaic. The texts are read with reference to the history of Syriac literature. (Offered in alternate years) Prerequisite: NML220Y1
DR=HUM; BR=1

## Coptic

## NML230H1 Elementary Coptic I [48S]

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.
DR=HUM; BR=1

## NML231H1 Elementary Coptic II [48S]

A continuation of NML230H1.
DR=HUM; BR=1

## (Ancient) Egyptian

NMC251H1 Ancient Egyptian Literary Texts in Translation [24L]
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 NMC101H1 may be helpful, but is not required.
Exclusion: NMC251Y1
Recommended Preparation: NMC101H1
DR=HUM; BR=1

## NMC253H1 Ancient Egyptian Cultural Texts in Translation [24L]

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 NMC101H1 may be helpful, but is not required.
Exclusion: NMC251Y1
Recommended Preparation: NMC101H1
DR=HUM; BR=1
NML240Y1 Introduction to Middle Egyptian [72L] Grammar and reading of selected hieroglyphic texts. DR=HUM; BR=1

## NML340Y1 Intermediate Egyptian [72S]

Middle Egyptian texts.
Prerequisite: NML240Y1
DR=HUM; BR=1

## NML440H1 Ancient Egyptian Historical Texts [48S]

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 or permission of instructor DR=HUM; BR=1 + 3

## NML441H1 Ancient Egyptian Religious and Funerary

 Texts [48S]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: NML340Y1 or permission of instructor
DR=HUM; BR=1 + 2

## Hebrew

NMC252H1 Hebrew Bible and Ancient Jewish Literature in Translation (formerly NMC150H1) [24L]
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: NMC150H1
Recommended Preparation: NMC104H1
DR=HUM; BR=1

## NMC351H1 Dead Sea Scrolls (formerly NMC250H1) [24L]

This course provides an examination of the historical and cultural context in which the Dead Sea Scrolls were authored and copied, the types of writings included in the Scrolls, and the ancient Jewish groups behind these texts. It also discusses the significance of the Scrolls for understanding the textual development of the Hebrew Bible, ancient scriptural interpretation, and the thought world of the Jews during the period that gave birth to both Rabbinic Judaism and early Christianity. No knowledge of Hebrew or Aramaic is required.
Exclusion: NMC250H1
Recommended Preparation: NMC104H1
DR=HUM; BR=1

NMC450H1 Research Seminar on the Hebrew Bible and Ancient Jewish Literature [24S]
A seminar focusing on the critical analysis of the Hebrew Bible and related ancient Jewish texts. Literary genre and critical topics will vary according to instructor's research interests. Focus will be given to developing research skills by working with accepted critical methodologies.
Prerequisite: Permission of the instructor is required.
DR=HUM; BR=1
NML155H1 Elementary Modern Hebrew I [48L] See MHB155H1 in Religion.
NML156H1 Elementary Modern Hebrew II [48L] See MHB156H1 in Religion.

## NML250Y1 Introductory Biblical Hebrew (formerly NML150Y1) [72S]

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/NML150Y1
DR=HUM; BR=1
NML255H1 Intermediate Modern Hebrew I [48L]
This course marks the transition from easy to regular
Hebrew. Conversational skills developed by regular participation in class presentations and discussions of current events and cultural issues; reading unadapted texts, simple articles in regular Hebrew; beginning of practical writing on topics discussed in class, writing about personal experiences, writing of structured compositions; completion of syntactic study of main structures; study of the weak verb. Prerequisite: MHB156H1/NML156H1
Exclusion: Those who have completed Grade 8 Hebrew (or
Ulpan level 2 in Israel), MHB255H!
DR=HUM; BR=1

## NML256H1 Intermediate Modern Hebrew II [48L]

This course offers practice in understanding both spoken and written Hebrew at a university level. Focuses on: (1) Comprehension: listening to the news, radio and television programs, and lectures in regular Hebrew; (2) Conversation: intensive practice in oral expression to improve proficiency;
(3) Reading: texts from various academic fields, the press and literature; (4) Writing: practical writing and the expression of opinions; (5) Grammatical Skills: enhanced perception of the construction of the language; broadening of grammatical knowledge.
Prerequisite: NML255H1/MHB255H1
Exclusion: Those who have completed Grade 8 Hebrew (or
Ulpan level 2 in Israel), MHB256H1
DR=HUM; $B R=1$
NML350H1 Intermediate Biblical Hebrew I [24S]
A continuation of the study of ancient Hebrew grammar and texts. Focus is given to covering a wide variety of genres, e.g., narrative, chronicle, genealogy, oracle, prayer, hymn, and proverb.
Prerequisite: NML250Y1/Introductory Biblical Hebrew
Exclusion: NML350Y1
$D R=H U M ; B R=1$
NML351H1 Intermediate Biblical Hebrew II [24S]
A continuation of the study of ancient Hebrew grammar and texts. Focus is given to covering a wide variety of genres,

## Near and Middle Eastern Civilizations

e.g., narrative, chronicle, genealogy, oracle, prayer, hymn, and proverb.
Prerequisite: NML250Y1/Introductory Biblical Hebrew DR=HUM; BR=1

NML355H1 Advanced Modern Hebrew I [48S]
The course is designed to deepen the student's knowledge of Hebrew in various fields. Areas of focus include:
(1) Comprehension: listening to radio programs on an advanced level and viewing regular television programs;
(2) Conversation: increasing the vocabulary used in conversations and discussions, while placing emphasis on different language styles; (3) Reading: Scientific articles, newspaper editorials, prose and poetry passages; (4) Writing: practical writing according to communicative functions, according to models of persuasion, explanation, etc; (5) Grammatical Skills: complementing the student's linguistic knowledge; the handling of irregular forms.
Prerequisite: MHB256H/NML255Y1/NML256H1
Exclusion: OAC Hebrew, MHB355H1
DR=HUM; BR=1
NML356H1 Advanced Modern Hebrew II [48S]
This course is designed to enable the student to use Hebrew freely, incorporating all of the language skills comprehension, conversation, reading and writing - with exposure to a wide range of vocabulary, language structures, and academic and scientific texts. Attention is paid to lexical collocations and semantic fields.
Prerequisite: NML255Y1/NML355H1/MHB355H1
Exclusion: OAC Hebrew, MHB356H1
DR=HUM; BR=1

## NML357H1 Midrash Aggadah [24S]

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) DR=HUM; BR=1

## NML358H1 Mishnah and Tosefta [24S]

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
DR=HUM; BR=1
NML359Y1 Babylonian Talmud [48S]
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: Intermediate Hebrew (Modern or Biblical) DR=HUM; BR=2

## NML450H1 Advanced Biblical Hebrew Grammar (formerly NML450Y1) [36S]

Advanced survey of phonology, morphology, syntax, semantics, and pragmatics of ancient Hebrew. Introduction to the various methods used to investigate ancient Hebrew. Prerequisite: NML250Y1, and one NML300-series course Exclusion: NML450Y1
DR=HUM; BR=1
NML451H1 Advanced Babylonian Talmud [24S]
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) DR=HUM; BR=2

## NML452H1 Halakhic Midrashim [24S]

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)
DR=HUM; BR=1
NML455H1 Modern Hebrew Poetry [36S]
A study of the poetic works of a major modern Hebrew poet. (Conducted in Hebrew) (Offered in alternate years)
Prerequisite: Permission of instructor
DR=HUM; BR=1

## NML456H1 Modern Hebrew Prose [36S]

A study of an important modern writer of Hebrew fiction. (Conducted in Hebrew) (Offered in alternate years) Prerequisite: Permission of instructor DR=HUM; BR=2

## NML457H1 Introduction to Comparative Semitics [36S]

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: NML250Y1, and one NML
300-series course
DR=HUM; BR=2

## NML459H1 Readings in Second Temple Period Texts

 [24S]This course provides an advanced investigation of selected issues in ancient Jewish texts stemming from the Second Temple Period (5th cent. BCE 1st cent. CE), and includes comparative study of biblical writings, apocrypha and pseudepigrapha, the Dead Sea Scrolls, and writings of ancient Jewish historians and philosophers. The specific topic for the course varies from one semester to another, and can deal with, e.g., language, scriptural interpretation, poetry and liturgy, theology, legal developments, and social and
political history. The course has a strong research and writing component.
Prerequisite: NML250Y1, and one NML350-series course. Depending on the specific topic of the semester, knowledge of Greek or Aramaic may be recommended. DR=HUM; BR=2

## Persian

NMC258H1 Persian Literary Classics (formerly NMC258Y1) [24L]
Introduction to a millennium of Persian poetry and prose. Selected readings in translation from such classics of Persian literature as the Persian national epic (Shah-nameh), Attars Conference of the Birds, Rumis Masnavi, and Sadis Rose Garden.
DR=HUM; BR=1

## NML260Y1 Introductory Persian [144L]

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. Priority enrollment will be given to declared NMC majors/specialists
DR=HUM; BR=1

## NML360Y1 Intermediate Persian [144L]

This course involves reading, grammatical analysis, and translation of representative samples of contemporary Persian prose of intermediate difficulty. The reading materials are selected from a wide range of sources in order to ensure balanced, yet comprehensive exposure to the different usage of the language. The course serves as preparation for courses on both classical and contemporary Persian literature.
Exclusion: Native users. Priority enrollment will be given to declared NMC majors/specialists
Recommended Preparation: NML260Y1 and/or adequate knowledge of modern Persian
DR=HUM; $B R=1$
NML460Y1 Classical Persian Literature [72S]
Survey of Persian literature, chiefly poetry, from the 10th to the 15th centuries, based on selected readings at an advanced level from representative authors, including Rudaki, Nizami, Sadi, Rumi, and Hafiz, as well as from the Persian national epic, Shah-nameh. Introduction to the Persian prosodial system, and analysis of the rhetorical devices and imagery employed by the classical poets Intended for upper year students.
Prerequisite: NML360Y1 or adequate knowledge of classical Persian
Recommended Preparation: NML260Y and/or NML360Y and/or adequate knowledge of modern and/or classical Persian
DR=HUM; BR=1
NML461H1 Modern Persian Poetry [24S]
A survey of modern Persian poetry using connected passages of Persian texts.
Prerequisite: NML360Y1 or adequate reading knowledge DR=HUM; $B R=1$

NML462H1 Modern Persian Prose [24S]
A survey of modern Persian prose using connected passages of Persian texts.
Prerequisite: NML360Y1 or adequate reading knowledge DR=HUM; BR=2

## NML463H1 Structural Development of Iranian Languages [24S]

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 or permission of instructor Exclusion: NML361H1
DR=HUM; BR=2

## Turkish

NML270Y1 Introductory Turkish [96L]
This course covers the essentials of Turkish grammar, and introduces students to reading and translation of passages of elementary difficulty. Designed for students with no previous knowledge of Turkish. This course also serves as a basis for the study of Ottoman Turkish and other Turkic languages. Exclusion: Native speakers
DR=HUM; BR=1

## NMC370Y1 Intermediate Turkish [96L]

This course involves reading, grammatical analysis and translation of modern Turkish texts of intermediate difficulty. The reading materials are selected from a wide range of literary genres (short stories, poetry, essays, and newspaper articles). There will be a review of basic Turkish grammar, as well as an introduction of more advanced topics. This course serves as a preparation for further study of Turkish language and literature, as well as Ottoman Turkish language and literature
Prerequisite: NML270Y1 or adequate reading knowledge of Turkish
DR=HUM; $B R=1$

## NML470Y1 Advanced Turkish [48S]

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: NML370Y1 or adequate knowledge of Turkish DR=HUM; $B R=1$

## Eaculty of Arts \& Science Language Citation

The Department of Near and Middle Eastern Civilizations participates in the Faculty of Arts \& Science's Language Citation initiative for Arabic, Persian, ancient Egyptian, Biblical Hebrew, and modern Hebrew. The study of ancient languages is a demanding and intellectually rewarding experience that makes available to the modern student the rich resources of primary texts in the original languages. The many languages offered by NMC provide invaluable insights into the varieties of human culture and expression and offer many directions in which to take the study of a foreign language.

Students should note that, as explained on page 26 of this Calendar, the Language Citation is not equivalent to an

## Near and Middle Eastern Civilizations

academic program and that enrollment in a program is not necessary in order to earn the recognition bestowed by the Citation.
The Citation in Biblical Hebrew is available to students who complete NML250Y1 (or the equivalent Prerequisite training) and earn a grade of at least B- in NML350H1, NML351H1, NML450H1, NML457H1, NML459H1 and NMC450H1.
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 NML440Y1, and NML441Y1.

The Citation in Arabic is available to students who complete NML110Y1 (or the equivalent Prerequisite training) and earn a grade of at least B- in NML211Y1, NML310Y1 and any 2 FCEs of the following additional Arabic courses: NML315H1, NML410Y1, NML411H1, and NML412Y1
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, NML461H1, NML462H1, NML463H1.

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 NML255H1/256H1 and any 2 FCEs of the following additional Hebrew courses: NML355H1, NML356H1, NML357H1, NML358H1, NML359Y1, NML451H1, NML452H1, NML455H1, NML456H1.

## Faculty

## Associate Professors

D.L. Eyoh, MA, Ph D (African Studies/Political Science)
A. Trotz, BA, MPhil, Ph D (Caribbean Studies/Women and Gender Studies)

## Assistant Professors

M. Lo, MA, MSc, Ph D (African Studies/Women and Gender Studies)
A. McGuire, MA, Ph D (Equity Studies)
T. Tieku, BA, MA, Ph D (African Studies)

## Senior Lecturers

A. Itwaru, Ph D (Caribbean Studies)
D. Knott, MA, MTS (Writing Centre)
J. Larkin, BA, M Ed, Ph D (Equity Studies/Women and Gender Studies)

## Lecturers

L. Freedman, MFA (Writing Centre/English Language Learning)
A. Guerson, Ph D (International Foundation Program)
L. Manicom, B.Soc.Sci. (Hons), MA (Writing Centre/ Service Learning)
A. Wasike, BA, MA, M Ed, Ph D (African 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 priority 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 research, analytic, synthetic, and creative skills by writing a thesis. The Service Learning Program, that includes both course-based and independent service learning opportunities, allows students to integrate theoretical knowledge with practical experience, while engaging in meaningful work in campus and community organizations.

Contact:
Program Secretary's Office: New College, Room 133 (416-978-5404 or nc.programs@utoronto.ca)

## New One: newone.applications@utoronto.ca

Registrar's Office: New College, Room 107 (416-978-2460)

## New One: Learning Without Borders

Food, talk, texting, home - these taken-for-granted elements of our daily lives consist of strands of connection to other places, people, and communities, locally, nationally, and internationally. Learning Without Borders grapples with these often invisible connections that we depend upon, asking what it means to be a citizen linked in myriad ways to others across the globe.

Inspired by the social advocacy focus of New College's academic programs, Learning Without Borders offers four interrelated and interdisciplinary courses that address, in different ways, this core question: given the
interconnectedness of our lives, how do we imagine and build socially just global citizenship today? Through the lenses of food, language, digital media and community, and learning across disciplinary borders, New One courses explore how we might build a more equitable and just society.
Selecting one of the theme-based courses, students will work in a small seminar of twenty five students. There will be opportunities to join together with students from the other three courses for plenary lectures, performances, and workshops, to address common issues, engage different disciplinary approaches, and experience a variety of ways of learning. Each seminar group will meet weekly for two hours; in addition, plenary events, field trips and workshops will be scheduled regularly throughout the year using a two-hour time slot reserved for all New One courses. Representatives from New College's community partner organizations and its senior students will be invited to share their insights and wisdom in the smaller and larger learning settings.

All New One courses will provide students with opportunities to develop research, writing and oral communication abilities. Individual and group projects will encourage innovative and creative forms of inquiry, learning, and presentation of knowledge. In an annual end-of-year plenary event students will be able to share their work.

New One is a full credit course. An application is required. All first-year students in the Faculty of Arts and Science on the St. George campus are eligible for admission. Students participating in other College One programs are excluded from New One. For more information about the application process and criteria of selection go to http://www.newcollege. utoronto.ca/programs/NewOne.htm.

## The African Studies Program

(Specialist, Major, Minor) offers opportunities to study the people, ideas and knowledge, cultures and institutions of Africa and African diasporas through interdisciplinary lenses. The courses are drawn from humanities, social sciences and sciences. The core courses deal with subjects such as African history and systems of thought, development, African innovations, the slave trade, colonialism, African diasporas, African international relations, health, humanitarianism and politics.

## 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) offers students an interdisciplinary approach to the study of Caribbean history, society, economy and culture. In addition to core offerings, students can also directly engage the Caribbean through courses drawn from history, literature, women and gender studies, Spanish and Portuguese.

## The Equity Studies Program

(Major) offers an interdisciplinary approach to social justice theories and practices in a variety of local and global contexts. Areas of emphasis include disability studies, global food equity and social advocacy. In addition to core courses, students are required to take equity courses from other programs and departments across the university.

## 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 (see Human Biology section of the Calendar.)

## The International Foundation Program

is designed for international students who do not meet the University's English language requirement and wish to acquire the academic and language skills necessary for full admission to undergraduate studies. Core courses include one first year history credit course (IFP100Y1), three non-credit language courses and one non-credit disciplinespecific course. For program and admission information, please see http://www.ifp.utoronto.ca.

## 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.
N.B. This program is being discontinued; students who are enrolled in the program as of September 2011 will be able to complete it.

## The Women and Gender Studies Program

(Specialist, Major, Minor) provides an interdisciplinary and culturally inclusive approach to understanding gender (see Women and Gender Studies section of the Calendar.)

## New College Programs

## African Studies Specialist (Arts program)

Consult Program Director, Prof. D. Eyoh, New College, 416-978-8288. For general enquiries call 416-978-5404 or email nc.programs@utoronto.ca.
Enrolment in this program requires the completion of 4.0 courses.
(11 full courses or their equivalent, including at least four $300+$ series courses with at least one FCE at the 400-level)

## First Year:

1. NEW150Y1

Higher Years:
2. NEW450Y1
3. Three full course equivalents from Group A, to be chosen from at least two different departments/programs
4. Two full course equivalents from Group B
5. Two full course equivalents from Groups $A$ or $B$
6. A combination of two language full course equivalents as outlined in Group C

Note: Four FCEs of the eleven courses must be 300/400 series (including at least one 400 -series FCE) of which at least one FCE must be from Group A and another from Group B

## African Studies Major (Arts program)

Consult Program Director, Prof. D. Eyoh, New College, 416-978-8288. For general enquiries call 416-978-5404 or email nc.programs@utoronto.ca.
Enrolment in this program requires the completion of 4.0 courses.
(6 full courses or their equivalent, including two FCEs at the 300+level)
First Year:

1. NEW150Y1

Higher Years:
2. NEW450Y1
3. Two full course equivalents from Group A
4. Two full course equivalents from Group B, or NEW280Y1 and NEW380Y1
Note: At least two full course equivalents from Groups A and/ or B must be at the 300/400 level

## African Studies Minor (Arts program)

Consult Program Director, Prof. D. Eyoh, New College, 416-978-8288. For general enquiries call 416-978-5404 or email nc.programs@utoronto.ca.
Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including one FCE at the 300+level)
First Year:

1. NEW150Y1

Higher Years:
2. One full course equivalent from Group A
3. One full course equivalent from Group B , or another one from Group A
4. One full course equivalent from Group B or NEW280Y1, NEW281Y1 or NEW380Y1
Note: At least one full course equivalent must be a 300/400 series course from Groups A and/or B

## African Studies Course Groups

Group A (Courses that deal exclusively with Africa.
These include but are not limited to the following): HIS297Y1, HIS383H1, HIS481H1; JNH350H1; JQR360H1; NEW250Y1, NEW258H1, NEW322H1, NEW351Y1, NEW352H1, NEW359H1, NEW450Y1, NEW451H1, NEW452H1, NEW453Y1; POL301Y1, POL488Y1, POL489H1; 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):
ANT204H1, ANT345H1, ANT363Y1, ANT367Y1, ANT426H1, ANT454H1; ARC233H1; DTS200Y1, DTS401H1, DTS402H1; ECO230Y1, ECO320H1, ECO324Y1, ECO459H1; ENG270Y1, ENG277Y1, ENG278Y1, ENG370H1; ENV221H1, ENV333H1; FCS291H1, FCS392H1; FOR201H1; FRE332H1, FRE334H1, FRE336H1; GGR338H1, GGR419H1; HAJ453H1;

HIS106Y1, HIS294Y1, HIS305H1, HIS359H1, HIS360H1, HIS370H1, HIS381H1, HIS382H1, HIS383H1, HIS393H1, HIS408Y1, HIS413H1, HIS446H1, HIS456Y1, HIS475H1, HIS476H1, HIS478H1, HIS487H1; HMB202H1, HMB203H1, HMB303H1, HMB323H1, HMB433H1, HMB443H1; HPS375H1, HPS376H1; INI327Y1, INI380Y1; JPR374Y1; NFS490H1; NMC285H1, NMC286H1, NMC343H1, NMC344H1, NMC362Y1, NMC365Y1, NMC374H11, NMC376H1, NMC377Y1, NMC378H1, NMC381H1, NMC393H1; NEW223Y1, NEW224Y1, NEW324Y1, NEW325H1, NEW326Y1; PHL336H1, PHL380H1; POL201Y1, POL417Y1, POL447H1, POL479H1, POL482H1; RLG203Y1, RLG204Y1, RLG241Y1, RLG251H1, RLG321H1, RLG333H1, RLG351H1, RLG355H1; SOC210H1; WGS330H1, WGS369H1, WGS380H1, WGS440H1, WGS463H1

## Group C:

(NEW280Y1, NEW380Y1)/(FSL221Y1, FSL321Y1/
FSL421Y1)/(NML110Y1, NML211Y1)/(PRT100Y1/
PRT110Y1, PRT220Y1); or two courses in a major African language approved by the Program Committee

## Buddhism, Psychology and Mental Health Minor (Arts program)

Consult Program Director, Dr. T. Toneatto, Department of Psychiatry, 45 Willcocks St., room M-135, 416-946-0282/416-875-2533 or tony.toneatto@utoronto.ca. For general enquiries call 416-978-5404 or email nc.programs@ utoronto.ca.
Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including one FCE at the 300+level)

First Year:
No specific first-year courses required.

1. NEW232Y1 (Buddhist Psychology: Theories and Applications)
2. NEW332H1 (Buddhism and Psychotherapy) or NEW333H1 (Buddhism and Cognitive Science)
3. NEW331H1 (Buddhism and the Science of Mindfulness Meditation) or NEW339H1 (Yogacara Buddhism and Western Psychology)
4. NEW214H1 (Socially Engaged Buddhism) or NEW438H1 (Research Seminar in Buddhist Psychology)
5. 1.5 full course equivalent from: ANT100Y1, ANT204H1, ANT348H1, ANT356H1; COG250Y1; EAS324H1, EAS325H1, EAS346H1, EAS361Y1, EAS368Y1, EAS369Y1, EAS393Y1; HPS100H1, HPS200H1, HPS250H1, HPS324H1, HPS326H1 HPS352H1; NEW214H1, NEW232Y1, NEW302Y1, NEW303H1, NEW304Y1, NEW331H1, NEW336H1, NEW339H1, NEW433H1, NEW438H1; PHL100Y1, PHL200Y1, PHL201H1, PHL217H1, PHL232H1, PHL235H1, PHL240H1, PHL244H1, PHL275H1, PHL301H1, PHL302H1, PHL310H1, PHL311H1, PHL319H1, PHL320H1, PHL326H1, PHL331H1, PHL332H1, PHL335H1, PHL340H1, PHL342H1; PSY100H1, PSY220H1, PSY230H1, PSY240H1, PSY270H1, PSY280H1, PSY305H1, PSY311H1, PSY312H1, PSY313H1, PSY316H1, PSY321H1, PSY326H1, PSY331H1, PSY333H1, PSY336H1, PSY341H1, PSY342H1, PSY343H1, PSY370H1, PSY414H1,

PSY424H1, PSY425H1, PSY426H1, PSY434H1, PSY435H1, PSY473H1, PSY493H1; RLG206Y1, RLG207Y1, RLG210Y1, RLG211Y1, RLG229H1, RLG231H1, RLG245Y1, RLG246H1, RLG280Y1, RLG301H1, RLG302H1, RLG303H1, RLG304H1, RLG368H1, RLG372H1, RLG373H1, RLG375H1, RLG376H1, RLG377H1, RLG379H1, RLG380H1, RLG421H1, RLG425H1, RLG440H1, RLG463H1, RLG464H1, RLG466H1, RLG467H1, RLG469Y1, RLG470H1; SOC101Y1, SOC103H1, SOC212H1, SOC243H1, SOC250Y1, SOC306Y1, SOC363H1, SOC381Y1, SOC410H1, SOC483Y1; VIC106H1

## Caribbean Studies Specialist (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 this program requires the completion of 4.0 courses.
(10 full courses or their equivalent, including at least four $300+$ series courses with at least one FCE at the 400-level)

## First Year:

No specific first-year courses required.

1. NEW224Y1, NEW324Y1
2. Eight full courses or their equivalent, with at least six from Group A, the remaining two from Group A or Group B.

## Caribbean Studies Major (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 this program requires the completion of 4.0 courses.
(6 full courses or their equivalent including two FCEs at the 300+level)
First Year:
No specific first-year courses required.

1. NEW224Y1, NEW324Y1
2. Four full courses or their equivalent from Group $A$ or Group B, including at least one at the 300+level

## Caribbean Studies Minor (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 this program requires the completion of 4.0 courses.
(4 full courses or their equivalent including one FCE at the 300+level)

First Year:
No specific first-year courses required.

1. NEW224Y1, NEW324Y1
2. Two courses from Group A or Group B

## Caribbean Studies Course Groups

## Group A:

ENG264H1, ENG370H1; HIS106Y1, HIS294Y1, HIS305H1, HIS312H1, HIS359H1, HIS360H1, HIS413H1, HIS446H1, HIS474H1, HIS496H1; JQR360H1; NEW223Y1, NEW258H1,

NEW259H1, NEW325H1, NEW326Y1, NEW327H1, NEW329H1, NEW423H1, NEW424Y1, NEW426Y1; SPA486H1, SPA487H1; WGS330H1, WGS336H1, WGS362H1, WGS375H1, WGS380H1, WGS440H1, WGS445H1

## Group B:

ANT324H1, ANT364Y1, ANT426H1; DTS200Y1, DTS401H1, DTS402H1; ENG270Y1, ENG370H1; FRE336H1; GGR240H1, GGR338H1; HIS106Y1, HIS390Y1; JPR374Y1; LAS200Y1, LAS300H1, LAS301H1; NEW150Y1, NEW240Y1, NEW270H1, NEW322H1, NEW351Y1, NEW359H1; POL201Y1, POL305Y1, POL326Y1,
POL417Y1, POL429H1, POL447H1, POL482H1; RLG100Y1, RLG204Y1, RLG205Y1, RLG243H1, RLG280Y1;
SOC336H1, SOC383H1; WGS369H1, WGS369H1, WGS385H1, WGS425H1, WGS426H1, WGS463H1

## Equity Studies Major (Arts program)

Consult Program Co-ordinator, Dr. J. Larkin, 416-9788282. For general inquiries call 416-978-5404 or email nc.programs@utoronto.ca.

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent, including two FCEs at the 300+level)
First Year:

1. NEW240Y1

Higher Years
2. NEW341H1
3. JQR360H1
4. One additional full course equivalent from the core group below, including at least 0.5 at the 400 -level Although students may select from any of the core courses to fulfill the additional 1.0 FCE core group requirement, those who wish to focus on a specific area of emphasis can choose from the following series of course offerings:
Core Group:
Disability Studies: NEW241Y1, NEW270H1, NEW344Y1, NEW349H1, NEW449H1;
Global Food Equity: NEW270H1, NEW342H1, NEW442H1;
Social Advocacy: NEW270H1, NEW345H1, NEW346H1, NEW444H1, NEW445H1, NEW446H1;
Special Topics: NEW348H1, NEW441H1
5. Four FCEs from Groups A, B, C, and D (including one or more FCEs from at least three of the four groups)

## Equity Studies Course Groups

## Group A: Gender

ANT460H1; CLA219H1, CLA319H1; DRM462H1, DRM468Y1; EAS303H1, EAS453H1; ENG307H1, ENG355H1, ENG383H1; FAH425H1; FRE304H1; GER421H1; GGR327H1; HIS202H1, HIS245Y1, HIS306H1, HIS348H1, HIS354H1, HIS363H1, HIS406H1, HIS418H1, HIS422H1, HIS431H1, HIS442H1, HIS446H1, HIS448H1, HIS481H1, HIS483H1, HIS486H1; ITA455H1; JAL355H1; JPP343H1; NEW325H1; NMC284H1, NMC484H1; PHL367H1; POL351H1, POL432H1, POL440Y1, POL450H1; PSY323H1; RLG236H1, RLG237H1, RLG251H1, RLG314H1; SLA248H1, SLA453H1; SMC336H1; SOC214H1, SOC365H1, SOC366H1, SOC383H1,

SOC465H1; SPA382H1, VIC341H1, VIC343Y1; VIS209H1; WGS160Y1, WGS262H1, WGS271Y1, WGS273Y1, WGS367H1, WGS372H1, WGS373H1, WGS430H1
Group B: Race, Creed, Ethnicity
ANT204H1, ANT343H1, ANT351H1, ANT359H1, ANT365H1, ANT367Y1, ANT426H1, ANT446H1, ANT448H1, ANT463H1; ARC234H1; ENG264H1, ENG268H1, ENG269H1, ENG270Y1, ENG275Y1, ENG277Y1, ENG278Y1, ENG355H1, ENG368H1, ENG370H1; FIN320H1; FRE336H1, HIS107Y1, HIS208Y1, HIS282Y1, HIS284Y1, HIS294Y1, HIS297Y1, HIS303H1, HIS305H1, HIS312H1, HIS338H1, HIS355H1, HIS359H1, HIS360H1, HIS370H1, HIS383H1, HIS384H1, HIS391Y1, HIS393H1, HIS408Y1, HIS412Y1, HIS413H1, HIS416H1, HIS456Y1, HIS470H1, HIS474H1, HIS475H1, HIS476H1; ITA493H1; LAS301H1, LAS302H1; NEW150Y1, NEW223Y1, NEW224Y1, NEW250Y1, NEW322H1, NEW324Y1, NEW326Y1, NEW351Y1, NEW352H1, NEW359H1, NEW424Y1, NEW426H1, NEW426Y1, NEW452H1, NEW453Y1; NMC384H1, NMC484H1; POL301Y1, POL321H1, POL425Y1; PRT255H1; RLG220H1, RLG236H1, RLG237H1, RLG243H1, RLG315H1, RLG344Y1; SLA222H1; SOC210H1, SOC336H1, SOC449H1; SPA486H1; UNI307H1

## Group C: Sexual Diversities

ANT456H1; ENG273Y1, ENG384Y1; PHL243H1; POL315H1; SOC410H1; UNI255H1, UNI256H1, UNI325H1, UNI354H1, UNI355H1, UNI365H1, UNI375H1, UNI377H1, UNI455H1, UNI475H1, UNI477H1; WGS272Y1, WGS374H1, WGS430H1

## Group D: General Equity

ABS201Y1, ABS205Y1, ABS240Y1, ABS250H1, ABS300Y1, ABS301Y1, ABS302H1, ABS303Y0, ABS320Y1, ABS341H1, ABS350Y1, ABS351Y1, ABS352H1, ABS353H1, ABS354H1, ABS360Y1, ABS402H1, ABS403H1, ABS404H1, ABS405Y1; ANT324H1, ANT329H1, ANT348H1, ANT353H1, ANT358H1, ANT364Y1, ANT366H1, ANT427H1, ANT452H1; ARC233H1; DTS200Y1, DTS401H1, DTS402H1; EAS462H1; ECO239Y1, ECO332H1, ECO339Y1, ECO340H1, ECO369Y1; ENG254Y1; FAH390H1, FAH390Y1, FAH457H1; GGR216H1, GGR241H1, GGR321H1, GGR328H1, GGR338H1, GGR339H1, GGR363H1, GGR419H1, GGR452H1, GGR457H1; HAJ453H1; HIS106Y1, HIS313H1, HIS323H1, HIS366H1, HIS369H1, HIS424H1, HIS459H1, HIS472H1, HIS480H1, HIS489H1; HMB203H1, HMB303H1, HMB443H1; HPS324H1; JFP450H1, JGI216H1; JNH350H1; JPA461H1; NEW214H1; PHL281H1, PHL380H1, PHL383H1, PHL384H1; POL201Y1, POL344H1, POL405Y1, POL412Y1, POL439H1, POL480Y1; PRT351H1; RLG225H1, RLG317H1; SAS318H1;
SOC220H1, SOC301Y1, SOC309Y1, SOC355H1, SOC363H1, SOC364H1, SOC367H1; UNI220Y1, UNI237H1; VIC185H1, VIC261H1, VIC351H1; VIS310H1

Note: students are responsible for checking the co- and
Prerequisites for all courses in Groups A,B,C, and D

## Human Biology

See Human Biology

## Paradigms and Archetypes Minor (Arts Program)

Note: This program is being discontinued; students who are enrolled as of September 2011 will be allowed to complete it.
For general enquiries call 416-978-5404 or email
nc.programs@utoronto.ca.
(4 full courses or their equivalent, including one at the 300+level)

1. NEW209Y1
2. NEW301Y1/NEW304Y1
3. One full course equivalent from NEW232Y1, NEW301Y1 (if not chosen in 2 above), NEW302Y1, NEW303H1, NEW304Y1 (if not chosen in 2 above), NEW306H1, NEW308H1, NEW402Y1, NEW403H1, NEW404H1
4. One full course equivalent from ABS300Y1; HPS 201 H 1 , HPS202H1, HPS210H1, HPS211H1, HPS250H1; NEW332H1, NEW333H1, NEW344Y1; NMC101H1, NMC102H1; RLG200H1, RLG204Y1, RLG205Y1, RLG206Y1, RLG211Y1, RLG231H1; any NEW courses listed in 3 above.

## Women \& Gender Studies

See Women \& Gender Studies

## New College Courses

New One: Learning Without Borders
The following courses are restricted to students enrolled in New One: Learning Without Borders

## NEW101Y1 Food Matters

How do we produce and ensure access to nutritious and environmentally sustainable food? Can we achieve ethical food production and global food security? What is the relationship among food science, local food movements, and global food systems? Science and social advocacy perspectives will be brought together to consider alternative food systems and topics such as the role of biotechnology, animal rights, and health and wellness.
Prerequisite: Admission to New One
Exclusion: INI, SMC, TRN, UNI, VIC, and WDW One DR=SOC SCI; BR=2 + 3
NEW102Y1 Travelling Words: Language and Diversity How does language connect and divide people, places, and communities? Defining language broadly, topics may include language norms and policy; the politics of minority, indigenous, and global languages (such as English); translation, labeling, and meaning; academic and technical vs. everyday languages; disability and diverse ways of communicating. Students will have opportunities to draw on their own multi-literacies and multi-lingual experiences. Prerequisite: Admission to New One
Exclusion: INI, SMC, TRN, UNI, VIC, and WDW One DR=HUM/SOC SCI

## $B R=1+3$

NEW103Y1 Digital Technology: Promise and Perils How does digital technology shape how we live, think, see and imagine? What can it contribute to projects for social change? How are our lives affected by increased opportunities for surveillance and regulation? From the perspectives of science, media arts, psychology, and ethics, topics may include new media and social activism; access
to and control over knowledge; digitizing healthcare; and biometrics.
Prerequisite: Admission to New One
Exclusion: INI, SMC, TRN, UNI, VIC and WDW One
DR=HUM/SOC SCI
$B R=1+3$

## NEW104Y1 Recreating Place: Displaced Communities and the Creative Arts

How do displaced and marginalized people and communities re-locate and re-make themselves in Toronto? How is Toronto transformed in the process? Students will investigate the role of the creative arts in building the cultural landscape of this diverse city. Topics may include the literature of immigration and exile; First Nations' narrative art; cultural re-creations of the Caribbean, Africa, East and South Asia; artistic expression and disability; and LGBTQ cultural production.
Prerequisite: Admission to New One
Exclusion: INI, SMC, TRN, UNI, VIC and WDW One
DR=HUM/SOC SCI; BR=1 + 3

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## ELL010H1 Intensive Academic English

Students will learn strategies for improving high-level reading comprehension, listening to lectures with full understanding, and giving successful oral presentations. A series of short writing assignments will develop and apply skills in grammar, vocabulary-building, critical thinking and research. Suitable for humanities, social science and science students. This course has no credit value: it does not count toward degree requirements. For information, see http://www.artsci.utoronto. ca/current/undergraduate/ell.

## IFP100Y1 Themes in World History [48L/36T]

Surveys the development of human societies from their origins to the present using examples from across the world. Topics may include the environment, cultural development and interaction, the creation and nature of belief systems, political, economic and social structures, gender relations, and the relationship between global patterns and local developments. Enrolment is restricted to students registered in the International Foundation Program.
DR=HUM/SOC SCI; BR=2 + 3

## Interdisciplinary Courses

## NEW270H1 Foundations for Community Engagement

 [24L/12T]Examines issues in community-based organizing, partnerships and advocacy. Drawing on interdisciplinary theory, methodology and case studies, develops skills both to analyze the social, economic, political, ethical and cultural dimensions of working with communities and to critically evaluate organizing practices and strategic approaches in community engagement.
DR=SOC SCI; BR=3

New College

## JQR360H1 The Canadian Census: Populations,

 Migrations and Demographics [24L/12T]Examines the Canadian population census through the experience of diasporic groups in Canada. Approaches the census as a statistical tool, an historical source and an ideological project of citizenship and nationalism. Uses census data to explore mathematical and statistical concepts and to integrate numerical ways of thinking with qualitative analysis. (Jointly sponsored by African Studies, Diaspora and Transnational Studies, Caribbean Studies, Equity Studies and Latin American Studies).
Prerequisite: DTS200Y1/NEW150Y1/NEW224Y1/
NEW240Y1/LAS200Y1
DR=SOC SCI; BR=3
NEW471H1 Interdisciplinary Special Topics [24S]
Topics vary from year to hear depending on the instructor. DR=HUM; BR=None

Interdisciplinary Courses in Jungian Theory
NEW302Y1 Carl Jung: Analytical Psychology as Interpretive Practice [48L/24S]
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 feminist and non-Jungian sources.
Prerequisite: Four FCEs, at least one of which should be in the humanities
$D R=H U M ; B R=1+2$
NEW303H1 Hypotheses of the Unconscious [12L/12S]
Current discussions of the hypothesis, starting with Freud's and Jung's hypotheses, 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, postFreudians and post-Jungians.
Prerequisite: Four FCEs, at least one of which should be in the humanities
Recommended Preparation: NEW302Y1
DR=HUM; BR=2
NEW402Y1 Advanced Special Topics in Jungian Theory [48S]
Topics vary from year to year, depending on the interests of students and instructors.
Prerequisite: Permission of instructor
DR=HUM; BR=None
NEW403H1 Advanced Special Topics in Jungian Theory [24S]
Topics vary from year to year depending on the interests of students and instructors.
Prerequisite: Permission of instructor
DR=HUM; BR=None

## African Studies Courses

NEW150Y1 Introduction to African Studies [48L]
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.
DR=HUM/SOC SCI; BR=3
NEW250Y1 Africa in the 21st Century: Challenges and Opportunities [48L/24T]
An introduction to the study of Africa as a living place rather than merely a site for intellectual speculation and study. 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 will include urban life, family networks, kinship and social capital, religion and belief systems, indigenous government, politics, economics, courts and judicial processes, migration, and land tenure. Materials studied will include 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.
DR=HUM/SOC SCI; BR=1 + 3
NEW258H1 African Expressive Culture: African Drumming and Dancing [48P]
Rehearsal, performance and study of West African music. Prerequisite: permission of the African Studies Program Director
Exclusion: PMU264
DR=HUM; BR=1
NEW280Y1 Introductory Swahili[24L/72T]
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.
DR=HUM; BR=1

## NEW322H1 The Contemporary African Novel (formerly NEW322Y1) [24S]

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)
Exclusion: NEW322Y1
DR=HUM; BR=1
JNH350H1 AIDS: Challenges and Successes (formerly NEW350H1) [24L]
Explores the pandemic of AIDS in Africa through a social science lens. (Given by Human Biology and New College) Exclusion: NEW350H1
Recommended Preparation: NEW150Y1
DR=HUM/SOC SCI/SCI; BR=3

## NEW351Y1 African Systems of Thought (formerly NEW252Y1) [48L]

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.
Exclusion: NEW252Y1, JAP256H1/JAP356H1
Recommended Preparation: NEW150Y1
DR=HUMI; BR=2 + 3

NEW352H1 International Organizations, NGOs, Development and Change in Africa [24L]
Critically explores the role of international organizations such as the World Bank Group, the UN and NGOs in the economic development of Africa.
Prerequisite: NEW150Y1/NEW250Y1
DR=HUM/SOC SCI; BR=3
NEW353H1 International Relations of Africa [24L]
Explores inter-state relations in Africa, African states'
relations with the West, China, India, Brazil, and international political, economic and financial institutions.
Prerequisite: NEW150Y1/NEW250Y1
DR=HUM/SOC SCI; BR=3
NEW359H1 Humanitarianism Industry and Africa [24L]
Examines the role of humanitarian actors and organizations in economic development, human rights and democracy promotion, resolution of conflicts and post-conflict reconstruction in Africa.
Prerequisite: NEW150Y1/NEW250Y1
DR=HUM/SOC SCI; BR=3
JQR360H1 The Canadian Census: Populations, Migrations and Demographics [24L, 12T]
See Interdisciplinary Courses above.
NEW380Y1 Intermediate Swahili [24L/72T]
Grammar and syntax. Conversation and written composition.
Reading of texts: literary, journalistic. Relation of the
language to its East African context.
Prerequisite: NEW280Y1
DR=HUM; $B R=1$
NEW450Y1 Advanced Topics in African Studies [24S]
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.
DR=HUM; BR=None
NEW451H1 Special Topics in African Studies [24L]
An upper level course. Topics of study vary from year to year. DR=HUM/SOC SCI; BR=None
NEW452H1 Negotiating Peace in Africa [24S]
Examines approaches and styles employed by diplomats to resolve conflicts in Africa.
Prerequisite: NEW150Y1, NEW250Y1 or permission of the instructor
DR=HUM/SOC SCI; BR=3
NEW453Y1 Language and Postcolonial Education in East Africa [48S]
Examines the choice of languages for education in East Africa using critical perspectives. Pays particular attention to the influences of the historical experience of colonialism, the socio-linguistic contours of each country and the strength of linguistic and educational lobby groups in East African countries.
Prerequisite: NEW150Y1/NEW250Y1
DR=HUM; BR=1 + 3

## Buddhism, Psychology and Mental Health Courses

NEW214H1 Socially Engaged Buddhism (formerly NEW214Y1) [24L]
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.
Exclusion: NEW214Y1
DR=HUM; BR=3

## NEW214Y1 Socially Engaged Buddhism [48L]

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.
Exclusion: NEW214H1
DR=HUM; BR=3
NEW232Y1 Buddhist Psychology: Theories \& Applications (formerly NEW402Y1, NEW432Y1) [72S]
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
DR=HUM; BR=2

## NEW331H1 Buddhism and the Science of Mindfulness Meditation [24S]

Examines 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
DR=HUM; BR=2
NEW332H1 Buddhism and Psychotherapy [24S]
Evaluates 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
DR=HUM; BR=2
NEW333H1 Buddhism and Cognitive Science [36L] Explores 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 DR=HUM; BR=2

NEW336H1 | Special Topics in Buddhism, Psychology |
| :--- |
| and Mental Health [36L] |

Topics vary from year to year depending on the instructor.
Recommended Preparation: NEW232Y1
DR=HUM; BR=2

## NEW339H1 Yogacara Buddhism and Western Psychology [36L]

A comparative study of mind in Indian Yogacara Buddhism and modern psychology. Yogacara teachings address the three aspects of mind, the storehouse consciousness, and the notion that the root of all phenomena is mind, allowing a dialogue with the modern scientific understanding of the mind in psychology.
Recommended Preparation: NEW232Y1
DR=HUM; BR=2

## NEW432H1 Advanced Special Topics in Buddhism,

 Psychology and Mental Health [24S]An upper-level seminar. Topics vary from year to year, depending on the instructor.
Recommended Preparation: NEW232Y1/RLG206Y1 DR=HUM; BR=2

NEW433H1 Advanced Special Topics in Buddhism, Psychology and Mental Health [24S]
An upper-level seminar. Topics vary from year to year, depending on the instructor.
Recommended Preparation: NEW232Y1/RLG206Y1 DR=HUM; BR=2

## NEW438H1 Research Seminar in Buddhist Psychology (formerly NEW338H1) [24L]

Critically evaluates the empirical research literature relevant to the study of Buddhist psychology. Conceptual, methodological and interpretive limitations of the scientific literature are discussed. Students will apply their understanding by designing an experiment to empirically evaluate an aspect of Buddhist psychology.
Prerequisite: a statistics course (e.g. PSY201H1, SOC202H1, STA220H1)
Exclusion: NEW338H1
Recommended Preparation: NEW232Y1/NEW331H1/ NEW333H1
DR=SOC SCI; BR=5

## Caribbean Studies Courses

NEW223Y1 Caribbean Literature and Society [48S] 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.

## DR=HUM; BR=1 + 3

NEW224Y1 Caribbean Thought I [72L]
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
DR=HUM; BR=2 + 3
NEW259H1 World Music Ensemble: Steel Pan [48P]
Rehearsal, performance and study of Steel Pan ensemble. Prerequisite: permission of the Caribbean Studies Program Director
Exclusion: PMU272H1
DR=HUM; $B R=1$

## NEW324Y1 The Contemporary Caribbean in a Global Context [48L]

This upper level course examines the interplay between wider global processes and intra-regional responses that together help shape contemporary Caribbean realities. Topics include: economic crisis and structural adjustment; tourism; the agricultural sector; the Caribbean Single Market and Economy; migration and diaspora.
Prerequisite: NEW224Y1
DR=HUM/SOC SCI; BR=2 + 3

## NEW325H1 Caribbean Women Thinkers [24L]

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. DR=HUM; BR=1

NEW326Y1 Indenture, Survival, Change [48L]
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) DR=HUM; BR=2 + 3
NEW327H1 The Hispanic Caribbean: Race, Religion and Revolution in Cuban History and Culture (formerly NEW327Y1) [24L]
Examines Cuba's relevance and legacy from the midnineteenth 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.
Exclusion: LAS302H1, NEW327Y1
Recommended Preparation: LAS200Y1/NEW224Y
DR=HUM; BR=3
NEW329H1 Special Topics in Caribbean Studies [24L]
An upper level course. Topics of study vary from year to year.
Prerequisite: NEW224Y1
DR=HUM/SOC SCI; BR=None
JQR360H1 The Canadian Census: Populations, Migrations and Demographics [24L, 12T]
See Interdisciplinary Courses above.
NEW423H1 Special Topics in Caribbean Studies [24S]
An upper-level seminar. Topics vary from year to year, depending on the instructor.
Prerequisite: NEW324Y1
DR=HUM; BR=None

NEW424Y1 | The Capitalist Press and the New |
| :--- |
| Imperialism (formerly NEW424H1) [72S] |

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: NEW224Y1, NEW324Y1
Exclusion: NEW424H1
DR=HUM; BR=2+3

NEW426H1 Special Topics in Caribbean Studies [36S]
An upper level seminar. Topics vary from year to year, depending on the instructor.
Prerequisite: NEW324Y1
DR=HUM; BR=None
NEW426Y1 Special Topics in Caribbean Studies [72S]
An upper level seminar. Topics vary from year to year,
depending on the instructor.
Prerequisite: NEW324Y1
DR=HUM; BR=None

## Equity Studies Courses

NEW240Y1 Introduction to Equity Studies [48L/24T]
An interdisciplinary study of social justice issues in local and global contexts. Examines ongoing and new forms of inequity and various approaches to social change. Topics include the origins of inequities, critical anti-racism, global labour patterns, economic restructuring, gender variance, disability studies, food security and the politics of resistance. DR=HUM/SOC SCI; BR=3

NEW270H1 Foundations for Community Engagement See Interdisciplinary Courses above.

NEW241Y1 Introduction to Disability Studies [48L] 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.
DR=HUM/SOC SCI; BR=1 + 3
NEW341H1 Theorizing Equity [24S]
Explores theories that inform Equity Studies and situates them historically to examine both the social conditions and practices that generate inequities and the responses by equity advocates. Examines texts in relevant fields such as post-colonial theory, queer theory, disability studies, feminist theory and transnational studies.
Prerequisite: NEW240Y1
DR=HUM/SOC SCI; BR=3
NEW342H1 Theory and Praxis in Food Security [24S]
Explores the concept of food security in the context of equity issues related to global food systems. Provides opportunities for field work experience in topics addressed in the course. Prerequisite: NEW240Y1
DR=SOC SCI; BR=3
NEW344Y1 Equity and the Body [48L]
An analysis of the body as the product of complex social organizations, processes and structures. Examines cultural narratives recounted about the body through topics that include genetics, beauty, health, pathology and the multiples identities that intersect at the site of the body.
Prerequisite: NEW240Y1
DR=HUM; BR=1 + 3
NEW345H1 Equity and Activism in Education [24L] Examines contemporary issues in education and schooling from a social justice and equity perspective. Engages with a variety of theoretical frameworks including anti-homophobia education, critical pedagogy, critical race theory, decolonizing knowledges, and intersectionality. Includes an overview of
educational activist projects.
Prerequisite: NEW240Y1
DR=HUM/SOC SCI; BR=3

## NEW346H1 Community Development in Local and Global Contexts [24L]

An interdisciplinary approach to community development that considers the changing roles of community organizations and non-profits in the context of neoliberalism. Examines the political economy of community development in Canada, the impact on marginalized groups, and emerging forms of collaboration across sectors and geographic (including national) localities.
Prerequisite: NEW240Y1
DR=SOC SCI; BR=3
NEW348H1 Special Topics in Equity Studies [24L]
An upper level course. Topics of study vary from year to year.
Prerequisite: NEW240Y1
DR=HUM/SOC SCI; BR=None
NEW349H1 Disability and Representation [24S]
Explores the connection between disability and representation through contemporary social theries and methods in disability studies. Problematizes disability representation to challenge the taken-for-granted cultural assumption that disability is a problem that requires a solution.
Prerequisite: NEW240Y1
DR=HUM/SOC SCI; BR=3
JQR360H1 The Canadian Census: Populations, Migrations and Demographics [24L, 12T]
See Interdisciplinary Courses above.
NEW441H1 Advanced Topics in Equity Studies[24S]
An advanced level seminar course. Topics vary from year to year.
Prerequisite: NEW240Y1 or permission of instructor DR=HUM; BR=None
NEW442H1 Food Systems and the Politics of Resistance [36L]
Examines the food we eat in the local and global context of food systems, food sovereignty and food movements. Explores the possibilities for food as a catalyst for learning, resistance and social change.
Prerequisite: NEW240Y1, NEW342H1, and an additional 0.5
Equity Studies Core Group 300+ level course DR=SOC SCI; BR=3
NEW444H1 Social Change and Non-Violence[24S]
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: NEW240Y1 and an additional 0.5 Equity
Studies Core Group 300+ level course
DR=HUM; BR=3

## NEW445H1 Anti-Oppression Education in School

 Settings[24L]Identifies ways systems of oppression and oppressive educational practices manifest themselves in school settings. Discusses how educators can use these settings or create new spaces to do anti-oppressive educational work.

Integrates anti-oppressive educational theories with antioppressive school practice.
Prerequisite: NEW240Y1, NEW345H1 and an additional 0.5
Equity Studies Core Group 300+ level course
DR=SOC SCI; BR=3

## NEW446H1 Community Development and Social Change

 [36L]Explores the significance of community development as a social change strategy, through a critical social analysis of local and global case studies and policies.
Prerequisite: NEW240Y1, NEW346H1, and an additional 0.5
Equity Studies Core Group 300+ level course
DR=SOC SCI; BR=3

## NEW449H1 Contemporary Theories in Disability Studies

 [24S]Explores the influence of contemporary social theory in the formation of Disability Studies and its contemporary expressions. Examines how contemporary feminist theory, queer theory, and post-colonial theory intersect with Disability Studies to develop an understanding of disability as a sociopolitical phenomenon.
Prerequisite: NEW240Y1/NEW241Y and an additional 0.5
Equity Studies Core Group 300+ level course
DR=HUM/SOC SCI; BR=3

## Paradigms and Archetypes Courses

## NEW209Y1 Stories: Constructs of Knowledge [48L/24T]

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 Certeau, Darwin, Davis, Foucault, Freud, Gould, Kincaid, Kuhn, Plato, etc. Prerequisite: Four course credits
DR=HUM; BR=1 + 2
NEW301Y1 Analogy and Its Rituals [48L/24T]
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. Works by Aristotle, Beckett, Camus, Kafka, Langer, McLuhan, Ryle, Plato, Shelley, etc. (Offered in alternate years)
Recommended Preparation: NEW209Y
DR=HUM; BR=1 + 2
NEW302H1 Carl Jung: Analytical Psychology as Interpretive Practice [48L, 24S]
See Interdisciplinary Courses in Jungian Theory above.
NEW303H1 Hypotheses of the Unconscious [12L, 12S]
See Interdisciplinary Courses in Jungian Theory above.

## NEW304Y1 Dilemmas [48L/24T]

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. Works by Borges, Carroll, Dostoevski, Freud, Mill, Nishitani, Rorty, Ryle, Sophocles, Watson, etc,. (Offered in alternate years) Recommended Preparation: NEW209Y1
DR=HUM; BR=1 + 2

## NEW306H1 Rabindranath Tagore: Paradigms of Culture [24L]

Examines Tagores concepts of humanity, art, personality, freedom, nationalism, ashram, science, education. Evaluates Tagores literary contribution, his work in rural reconstruction, and Tagore-Gandhi tensions over education and the noncooperation movement. Reading knowledge of Bengali not presumed; however students with knowledge of language are encouraged to read materials in Bengali.

## DR=HUM; BR=2

NEW308H1 Satyajit Ray: Paradigms of Vision [24L] 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 are encouraged to read materials in Bengali. DR=HUM; BR=1

## NEW402Y1 Advanced Special Topics in Jungian Theory

 [48]See Interdisciplinary Courses in Jungian Theory above.

## NEW403H1 Advanced Special Topics in Jungian Theory

 [24S]See Interdisciplinary Courses in Jungian Theory above.

## 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 Fall \& 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/programs/ independent .htm
Enquiries: New College, room 133 (978-5404)

## NEW299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None
NEW390Y1 New College Independent Studies [TBA]
New College Independent Studies
Prerequisite: Permission of College
DR=None; BR=None
NEW391H1 New College Independent Studies [TBA]
New College Independent Studies
Prerequisite: Permission of College
DR=None; $B R=$ None

NEW490Y1 New College Independent Studies [TBA]
New College Independent Studies
Prerequisite: Permission of College
DR=None; BR=None

## NEW491H1 New College Independent Studies [TBA]

New College Independent Studies
Prerequisite: Permission of College
DR=None; BR=None

## Service Learning Courses

Provide an opportunity to integrate theory and classroom learning with experiential learning through participation in activities and knowledge production in community or campus organizations. Projects are developed in consultation with the site supervisor and academic supervisor. Students' learning is supported in a regular seminar that fosters reflective practice.

Information about the program and specific placement opportunities can be found at http://www.newcollege. utoronto.ca/programs/slp.htm
Enquiries: New College Service Learning Coordinator: 416-978-8821

## NEW495Y1 Independent Community Service Learning

 [96P/24S]Independent Community Service Learning
Recommended Preparation: NEW150Y1/NEW214H1/ NEW224Y1/ NEW232Y1/NEW240Y1/NEW241Y1/ NEW270H1/other NEW courses
DR=HUM/SOC SCI; BR=3

## NEW496H1 Independent Community Service Learning [48P/12S]

Independent Community Service Learning
Recommended Preparation: NEW150Y1/NEW214H1/
NEW224Y1/ NEW232Y1/NEW240Y1/NEW241Y1/
NEW270H1/other NEW courses
DR=HUM/SOC SCI; BR=3

Nutritional Sciences

## 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.R. L'Abbe, Ph D

Professors
G.H. Anderson, M Sc, Ph D
M.C. Archer, MA, Ph D, D Sc
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
A.J. Hanley, Ph D

## Assistant Professors

R.P. Bazinet, Ph D
E.M. Comelli, Ph D
M. Keith, PhD

## Senior Lecturer

A.L, Fox, MHSc, Ph D, RD

## Lecturers

D. Gurfinkel, Ph D
M. Morris, M Ed, RD
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 Program provides 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 MPH-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 Coordinators:

Professor R. Bazinet, FitzGerald Building
Dr Debbie Gurfinkel, Fitzgerald Building
Enquiries: FitzGerald Building, 150 College Street, Room
316 (416-978-2747)

## Nutritional Science Programs

## Nutritional Sciences Major (Science program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1with an average of at least $70 \%$ on these 2.0 fullcourse equivalents (FCEs) and a final mark of at least 60\% in each course.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ high 70 s ; average $=$ low 80s.
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).
First Year:
(BIO120H1, BIO130H1)/150Y1; (CHM138H1, CHM139H1)/ CHM151Y1
Second Year:
NFS284H1; BCH210H1; (STA220H1, STA221H1/JBS229H1)
Third Year:
NFS382H1; NFS386H1; PSL302Y1/(PSL300H1, PSL301H1); CSB349H1/PSL350H1/BCH311H1
Fourth Year:
Any three of: NFS484H1, NFS485H1, NFS486H1, NFS487H1, NFS488H1, NFS489H1, NFS490H1, NFS494Y1

## Nutritional Science Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## NFS284H1 Basic Human Nutrition [36L/12T]

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: (BIO120H1, BIO130H1)/
BIO150Y1; (CHM138H1,CHM139H1)/CHM151Y1;
MAT135Y1/MAT137Y1; (PHY131H1, PHY132H1)/
(PHY151H1, PHY152H1)
DR=SCI; BR=4

NFS300H1 Food Regulation In Canada [36L]
This course introduces the food regulatory system in Canada that ensures the safety and quality of the Canadian food supply.
Prerequisite: NFS284H1
DR=SCI; BR=3

## NFS301H1 Nutrition Literacy: Sorting Science from Snake Oil [36L]

This course will help students learn how to recognize the strengths and limitations of various nutrition research methods, find reliable nutrition information on the Internet and develop systematic thinking skills to critically evaluating
the quality of nutrition information in both the scientific literature and popular media.
Prerequisite: NFS284H1
DR=SCI; BR=4

## NFS302H1 Nutrition, Athletics, Performance and Behaviour [36L]

This course will give an overview of the emerging and advancing role of chronic diet and supplements in athletics, performance and behavior.
Prerequisite: NFS284H1
DR=SCI; BR=4
NFS382H1 Vitamin and Mineral Metabolism Throughout the Life Cycle [36L/12T]
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: (BIO120H1/BIO130H1)/BIO150Y1;

(CHM138H1, CHM139H1)/CHM151Y1; NFS284H1
DR=SCI; BR=4

## NFS386H1 Food Chemistry [36L]

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: CHM138H1
Recommended Preparation: NFS284H1
DR=SCI; BR=4

## NFS394Y1 Research Course in Nutritional Science

 [144P]Credit course for supervised participation in faculty research project.
Prerequisite: NFS284H1, Permission of Department and Project Supervisor
DR=SCI; BR=4

## NFS484H1 Advanced Nutrition [24L/12T]

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: $\mathrm{BCH} 210 \mathrm{H} 1, \mathrm{CSB} 349 \mathrm{H} 1 / \mathrm{PSL} 350 \mathrm{H} 1 / \mathrm{BCH} 311 \mathrm{H} 1$, NFS284H1, PSL302Y1/(PSL300H1, PSL301H1), (STA220H1, STA221H1/JBS229H1)
DR=SCI; BR=4

## NFS485H1 Nutritional Microbiology [36L]

Provides an integrated approach to how prokaryotes modulate nutrient availability and how they interact with the host to impact human health from a molecular perspective.
Prerequisite: BCH210H1, CSB349H1/PSL350H1/BCH311H1/
MGY311Y1, NFS284H1, PSL302Y1 /(PSL300H1,
PSL301H1), (STA220H1, STA221H1/JBS229H1)
DR=SCI; BR=4
NFS486H1 Nutrition and Human Disease [36L]
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/(PSL300H1, PSL301H1),
(STA220H1, STA221H1/JBS229H1)
DR=SCI; $\mathrm{BR}=4$
NFS487H1 Nutrigenomics and Personalized Nutrition [36L]
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. Application of the various 'omics' technologies to nutrition research as well as exploring the social, legal and ethical issues associated with direct-to-consumer marketing of genetic tests for personalized nutrition.
Prerequisite: NFS284H1, CSB349H1/PSL350H1/BCH311H1 DR=SCI; BR=4

NFS488H1 Nutritional Toxicology [36L]
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
DR=SCI; BR=4
NFS489H1 Nutritional Neurosciences [36L]
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/(PSL300H1, PSL301H1)
DR=SCI; BR=4

## NFS490H1 International and Community Nutrition

 [36L]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
DR=SCI; BR=3

## Nutritional Sciences

## NFS494Y1 Research Projects in Nutritional Sciences [144P]

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 NFS494Y1 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
DR=SCI; BR=None
NFS400H1 Functional Foods and Nutraceuticals in Human Nutrition [36L]
This course will demonstrate the rationale, including health benefits, development and marketing of functional foods and nutraceuticals.
Prerequisite: NFS284H1, CSB349H1/PSL350H1/BCH311H1 $\mathrm{DR}=\mathrm{SCl} ; \mathrm{BR}=4$

## Peace, Conflict and Justice Studies

## Eaculty

## Associate Professors

Nancy Kokaz, BA, Ph D
Ron Levi, BCL, LLB, LLM, SJD (George Ignatieff Chair of Peace and Conflict Studies)

## Assistant Professor

Vsevolod Gunitskiy, BA, MA, M Phil, PhD
The Trudeau Centre for Peace and Conflict Studies administers the program in Peace, Conflict and Justice, in the Munk School of Global Affairs

The Peace, Conflict and Justice program provides undergraduates with an interdisciplinary education covering three central pillars: the meanings and causes of conflict peace, and justice; the lived experiences of living in the context of conflict and struggles for peace and justice; and approaches to resolving conflict and producing peace and/ or justice. The topics of study are wide-ranging, including the study of peacemaking and peace-building, interstate war and intrastate conflicts, insurgencies, revolutions and rebellions, ethnic strife, global justice, and negotiation theory. In so doing, we address some of the world's most urgent humanitarian problems, and train students to deeply analyze these issues across several levels of analysis, from the local through the national and the global.

## Peace, Conflict and Justice Studies Programs

Consult Program Assistant, E-mail: pcs.programme@ utoronto.ca, or visit the Trudeau Centre for Peace and Conflict Studies website at http://www.utoronto.ca/mcis/ trudeaucentre/

## Peace, Conflict, and Justice Specialist (Arts program)

This is a limited enrolment program that can only accommodate a limited number of students. Admission is determined by a range of criteria, including at the initial stage a student's academic background, a statement of interest in the program, and as a later stage of the process, a personal interview on invitation of the Program Director. In some cases, reference letters may be requested by the Program Director. In the past, enrolment in Peace and Conflict Studies has proven to be extremely competitive across all these dimensions, and an applicant's success in any one of these dimensions does not necessarily guarantee admission to the program in any given year.
(12 full courses or their equivalent, including at least one 400-series course)

1. HIS103Y1/ECO100Y1/ECO105Y1; (PSY100H1 + PSY220H1)/SOC101Y1; POL208Y1. Except for POL208Y1, substitutions may be permitted for other introductory courses in relevant disciplines, based on a student's rationale and on approval of the Program Director.
2. PCS260Y1, PCS360Y1, PCS460H1, 461H1
3. Three FCEs from one of Groups A, B, C, D, E or F (below), or substitutions with a rationale that must be approved by the Program Director. Students may
substitute from different disciplines or with different courses from within these disciplines. At least one FCE must be at the $300+$-level.
4. Three complementary FCEs with either a disciplinary, regional, or thematic focus relevant to Peace and Conflict Studies (on approval of the Director, based on the needs of students' interdisciplinary programs of study). At least two FCEs must be at the 300+-level.

Disciplinary focus:
3 FCEs from one of ANT, ECO, GGR and Environmenta Studies (combined), HIS, HPS, PHL, POL, PSY, RLG, SLA, SOC, or from other units with a rationale approved by the Program Director.
(Note: The disciplinary focus in this cluster must be different from the discipline chosen in requirement 3 . For instance,
HIS is excluded for students who have taken 3 HIS FCEs to meet requirement 3; POL is excluded for students who have taken 3 POL FCEs, etc.)

## Regional Studies focus:

3 FCEs on, for example, Canada, Southern Africa, the Middle East, Latin America, or the Slavic countries.

## Thematic focus:

3 FCEs on a thematic topic proposed by the student and approved by the Program Director. Examples include negotiation and conflict resolution, diplomatic history gender and conflict, morality of war, quantitative analysis, group-identity conflict, economic development and conflict, literature, culture, and everyday life of conflict, or environmental change and conflict.

## Peace, Conflict, and Justice Groups

Note: Substitutions for any of the below (Groups A through F) are allowable, if accompanied by a rationale regarding a student's specific program of study that must be approved by the Program Director. This is not a strict list, and students may in their program rationale substitute courses from different disciplines or with different courses from within these disciplines below. Please note that not all courses may be offered in a given year, and students are responsible for checking and meeting co- and prerequisites for all courses.

## Group A

HIS103Y1, HIS106Y1, HIS202H1, HIS241H1, HIS242H1 HIS243H1, HIS244H1, HIS250Y1, HIS251Y1, HIS271Y1 HIS296Y1, HIS303Y1, HIS311Y1, HIS317H1, HIS319H1, HIS325H1, HIS329H1, HIS333Y1, HIS334Y1, HIS338Y1, HIS343Y1, HIS344Y1, HIS347H1, HIS351H1, HIS355Y1 HIS356H1, HIS359H1, HIS364H1, HIS370H1, HIS376H1, HIS377H1, HIS386Y1, HIS390Y1, HIS396H1, HIS401Y1 HIS405Y1, HIS407H1, HIS408Y1, HIS412Y1, HIS414H1 HIS415H1, HIS421Y1, HIS424Y1, HIS436Y1, HIS445H1 HIS451H1, HIS453H1, HIS458Y1, HIS461H1, HIS473H1 HIS475H1, HIS480H1, HIS488H1, HIS491Y1, HIS492Y1; JHP435Y1, JHP440Y1; NMC278H1, NMC474H1; TRN421Y1

## Group B

JHP440Y1, JMC301Y1; NEW250Y1; NMC476H1, NMC477H1; POL108Y1, POL201Y1, POL242Y1, POL300Y1, POL301Y1, POL304H1, POL305Y1, POL312Y1, POL313Y1, POL321H1, POL323H1, POL324Y1 POL330H1, POL326Y1, POL340Y1, POL342H1, POL343Y1 POL345H1, POL354H1, POL358Y1, POL364H1
POL370Y, POL405Y1, POL412Y1, POL416Y1, POL417Y1 POL419Y1, POL422Y1, POL428H1, POL429Y1,

## Peace, Conflict and Justice Studies

POL432H1, POL435H1, POL442H1, POL447Y1, POL448H1, POL459Y1, POL463Y1, POL464H1, POL465H1, POL467H1, POL468H1, POL469H1, POL476H1, POL479H1, POL480H1, POL486H1, POL487H1

## Group C

JLP374H1, JLP471H1; PSY100H1, PSY201H1, PSY210H1, PSY220H1, PSY270H1, PSY280H1, PSY300H1, PSY311H1, PSY312H1, PSY314H1, PSY320H1, PSY321H1, PSY322H1, PSY324H1, PSY326H1, PSY328H1, PSY331H1, PSY334H1, PSY370H1, PSY372H1, PSY420H1, PSY471H1

## Group D

ENV200H1, ENV234Y1, ENV235Y1, GGR107H1, GGR124Y1, GGR203H1, GGR220H1, GGR314H1, GGR331H1, GGR333H1, GGR338H1, GGR343H1, GGR368H1, GGR393H1, GGR398H0/GGR399Y0, GGR409H1, GGR415H1, GGR418H1, GGR435H1, GGR439H1, GGR452H1, GGR494H1; PHL273H1, PHL373H1

## Group E

ANT100Y1, ANT204Y1, ANT329H1, ANT343H1, ANT357H1, ANT358H1, ANT363Y1, ANT364Y1, ANT366H1, ANT395Y0/ ANT396Y0, ANT425H1, ANT426H1, ANT427H1, ANT440H1, ANT448H1, ANT450H1, ANT452H1; RLG250H1, RLG333H1; SOC205Y1,SOC210Y1, SOC212Y1, SOC213Y1, SOC215Y1, SOC220Y1, SOC250Y1, SOC301Y1, SOC306Y1, SOC312Y1, SOC320Y1,SOC330Y1, SOC336H1, SOC344Y1, SOC355Y1, SOC356Y1, SOC360Y1, SOC365Y1, SOC367H1, SOC386Y1

## Group F

COG250Y1; JPP343Y1; PHL232H1, PHL235H1, PHL240H1, PHL244H1, PHL247H1, PHL271H1, PHL273H1,PHL275H1, PHL317H1, PHL340H1, PHL341H1, PHL351H1, PHL357H1, PHL365H1, PHL370H1, PHL373H1, PHL375H1, PHL378H1, PHL380H1,PHL394H1

## Peace, Conflict, and Justice Major (Arts program)

This is a limited enrolment program that can only accommodate a limited number of students. Admission is determined by a range of criteria, including at the initial stage a student's academic background, a statement of interest in the program, and as a later stage of the process, a personal interview on invitation of the Program Director. In some cases, reference letters may be requested by the Program Director. In the past, enrolment in Peace and Conflict Studies has proven to be extremely competitive across all these dimensions, and an applicant's success in any one of these dimensions does not necessarily guarantee admission to the program in any given year.
(7 full courses or their equivalent)

1. HIS103Y1/ECO100Y1/ECO105Y1; (PSY100H1 + PSY220H1)/SOC101Y1; POL208Y1. Except for POL208Y1, substitutions may be permitted for other introductory courses in relevant disciplines, based on a student's rationale and on approval of the Program Director.
2. PCS260Y1, PCS360Y1, PCS460H1
3. 2.0 FCE of complementary courses, at least 1.0 FCE of which must be at the $300+$ series level, from: ECO230Y1; GGR439H1; HIS241H1, HIS242H1, HIS343Y1, HIS344Y1, HIS377Y1,

HIS401Y1, HIS412Y1, HIS445H1; HPS306H1; PHL378H1; POL201Y1, POL304H1, POL313Y1, POL321H1, POL323H1, POL326Y1, POL340Y1, POL417Y1;PSY270H1, PSY322H1; SOC210Y1, SOC330Y1; or alternative courses on the approval of the Program Director, based on the needs of students' interdisciplinary programs of study.

## International Relations/Peace and Conflict Studies Specialist (Arts program)

Consult the Office of the International Relations Program, room 310N, Munk School of Global Affairs, 416-946-8950 or, for Peace and Conflict Studies, consult the program administrator in the Office of the Peace and Conflict Studies Program,Room 255S, Munk School of Global Affairs, 416-946-8917.
Admission requirements for Joint Specialist program (IR and Peace and Conflict Studies): An average grade of at least $75 \%$ in the required first-year courses: (1) ECO100Y1/ ECO105Y1; (2) HIS103Y1; (3) (PSY100H1 + PSY220H1) or SOC101Y1.

This is a limited enrollment program that can only accommodate a limited number of students. Admission is determined by a range of criteria, including at the initial stage a student's academic background and record of courses taken, a statement of interest in the program, and as a later stage of the process, a personal interview on invitation of the program directors. In some cases, reference letters may be requested by the program directors. In the past, enrollment in the program has proven to be extremely competitive across all these dimensions, and an applicant's success in any one of these dimensions does not necessarily guarantee admission to the program in any given year.
(13 full courses or their equivalent, including at least two 400-series courses)
First Year:
ECO100Y1/ECO105Y1; HIS103Y1; PSY100H1 + PSY220H1/SOC101Y1
Second Year:
ECO230Y1; POL208Y1; PCS260Y1
Third Year:
HIS311Y1/HIS344Y1; PCS360Y1/PCS361Y1
Fourth Year:
PCS460H1 + PCS461H1 plus
One full course equivalent from the following: HIS458H1, HIS473Y1, HIS479H1, HIS482H1, HIS488H1, 497Y1, HIS498H1; TRN421Y1
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.

## Peace, Conflict and Justice Studies Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars are intended to stimulate the students' curiosity and provide an opportunity to get to know a member of the professorial

## Peace, Conflict and Justice Studies

staff in a seminar environment during the first year of study. Details on page 33.

## Note

*Students in the Major program will now be required to take PCJ460H1 as part of their program of study.
*Students in the Specialist and Joint Specialist will take both PCJ460H1 and PCJ461H1.

PCJ260Y1 Introduction to Peace and Conflict Studies (formerly PCS260Y1, UNI110Y1, UNI260Y1) [72L]
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
Prerequisite: Only for current PCJ program students in
second year and higher/permission of the Program Director
Exclusion: PCS260Y1, UNI110Y1, UNI260Y1
DR=SOC SCI; BR=3

## PCJ360H1 Topics in Peace, Conflict, and Justice [24L]

An in-depth exploration of seleted issues in the field of Peace, Conflict, and Justice. Topics may include: negotiation theory, ethnic and inter-group identity conflict, feminist perspectives on peace, war, and justice; mathematical modeling of arms races, war, and peacemaking; decisionmaking theory and conflict; environmental change and conflict; global justice institutions; and traditional perspectives on statecraft.
Prerequisite: PCS260Y1 or permission of the Program Director.
Exclusion: PCS360Y1, UNI360Y1
Recommended Preparation: POL208Y1
DR=SOC SCI; BR=3
PCJ361H1 Special Topics in Peace and Conflict Studies (formerly PCS361H1, UNI361H1) [24S]
An exploration of selected issues in the field of Peace and Conflict Studies involving an overseas and/or practicum component.
Exclusion: PCS361H1, UNI361Y1
Recommended Preparation: POL208Y1
DR=SOC SCI; BR=None
PCJ361Y1 Special Topics in Peace and Conflict Studies (formerly PCS361Y1, UNI361Y1) [48S]
An exploration of selected issues in the field of Peace and Conflict Studies involving an overseas and/or practicum component.
Prerequisite: PCS260Y1 or permission from the Program Director
Exclusion: PCS361H1, PCS361Y1, UNI361Y1
Recommended Preparation: POL208Y1
DR=SOC SCI; BR=None

## PCJ362H1 Topics in Peace, Conflict, and Justice

 [24L]An in-depth exploration of seleted issues in the field of Peace, Conflict, and Justice. Topics may include: negotiation theory, ethnic and inter-group identity conflict, feminist perspectives on peace, war, and justice; mathematical modeling of arms races, war, and peacemaking; decisionmaking theory and conflict; environmental change and
conflict; global justice institutions; and traditional perspectives on statecraft.
Prerequisite: PCS260Y1 or permission of the Program Director
Exclusion: PCS360Y1, UNI360Y1
Recommended Preparation: POL208Y1
DR=SOC SCI; BR=3

## PCJ444H1 Special Topics in Peace and Conflict Studies

 (formerly PCS444H1) [TBA]Topics vary annually. The objective of the course is to explore emerging issues in Peace and Conflict Studies. The focus of the course will be on a specific topic, rather than a broad survey of the field.
Prerequisite: PCJ260Y1/PCS260Y1, PCJ360Y1/PCS360Y1
or permission of the instructor
Exclusion: PCS444H1
DR=SOC SCI; BR=3

## PCJ460H1 Contemporary Issues in Peace and Conflict

 (formerly PCS460H1, UNI460H1) [24S]A colloquium (fall term) on selected issues in the field of Peace and Conflict Studies. Topics to be considered include planetary, ecospheric, state, societal, and human security.
Prerequisite: PCS360Y1, or PCS360H1 and PCS362H1, or permission of the Program Director; enrolment restricted to students enrolled in Peace \& Conflict Studies specialist or joint specialist
Exclusion: PCS460H1, PCS460Y1, UNI460H1
DR=SOC SCI; BR=None
PCJ461H1 Contemporary Issues in Peace and Conflict (formerly PCS461H1, UNI460Y1) [48S]
A research seminar (spring term) on selected issues in the field of Peace and Conflict Studies. Topics to be considered include planetary, ecospheric, state, societal, and human security.
Prerequisite: PCS360Y1 and PCS460H1; enrolment restricted to students enrolled in Peace \& Conflict Studies specialist or joint specialist
Exclusion: PCS460Y1, PCS461H1
DR=SOC SCI; BR=None

## PCJ499H1 Peace and Conflict Studies Independent Study Course (formerly PCS499H1) [TBA]

Independent study in the area of Peace and Conflict Studies. It is designed to provide students with the opportunity to explore topics not covered in the curriculum, or to develop a more detailed focus on topics covered. Approval of the Program Director is required. The student must obtain the written agreement of the instructor who will supervise the independent study.
Prerequisite: PCS260Y1
Exclusion: PCS499H1
Recommended Preparation: For students enrolled in the Major, Specialist, or Joint Specialist in Peace and Conflict Studies
DR=SOC SCI; BR=3

# Pharmaceutical Chemistry 

## 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:Linda Chung, (416-978-2162), I.chung@utoronto.ca

Program Director: Dr. Rob Macgregor, (416-978-7332) rob. macgregor@utoronto.ca

## Pharmaceutical Chemistry Programs

Pharmaceutical Chemistry combines knowledge of the biological, medical and physical sciences in the study of the scientific aspect of drug therapy. The emphasis is on the chemical nature of the reactions and interactions involved in drug therapy.
This program is offered jointly by the Leslie Dan Faculty of Pharmacy and the Faculty of Arts and Science. Students in the Pharmaceutical Chemistry Specialist program will receive a solid background in physical, organic and analytical chemistry, and will also learn the fundamental aspects of the synthesis, manufacture, use and mode of action of drugs. The fourth-year project course gives students direct involvement in research.
We also offer an internship in which qualified students may spend 12 or 16 months working at a pharmaceutical company or research lab. This is a project-based, paid employment placement that takes place between the third and fourth years of undergraduate study. It provides the student with an opportunity to apply the knowledge acquired in the first three years of university to private- or publicsector settings. Placements are available in pharmaceutical and biotechnology companies, university research labs, university-affiliated organizations, or government research agencies.

## Pharmaceutical Chemistry Specialist (Science program)

This is a limited enrolment POSt. Eligibility is based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 70 s ; average $=$ high 70s.
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.

Visit the Pharmaceutical Chemistry Program web site for updated information about requirements, course offerings, and events: http://pharmacy.utoronto.ca/programs/ pharmchem/curriculum.htm.
(13.0 full courses or their equivalent, including at least one 400-series course)

NOTE: Some of the courses listed below may have prerequisites.
First Year:
BIO120H1, BIO130H1; (CHM138H1,CHM139H1)/ CHM151Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year:
BCH210H1; BIO230H1; (CHM220H1,CHM221H1)/ CHM225Y1; CHM247H1/CHM249H1; PHC230H1
Third Year:
CHM217H1; PCL201H1; PHC230H1 (2012-13 only); PHC300H1; PHC301H1; PHC320H1; PHC330H1; PHC340Y1
Fourth Year:

1. PHC489Y1
2. Two full course equivalents from: $\mathrm{CHM} 317 \mathrm{H} 1 ; \mathrm{CHM} 342 \mathrm{H} 1$; CHM347H1; CHM379H1; CHM410H1; CHM414H1; CHM417H1; PCL362H1; PHC331H1; PHC401H1; PHC331H1; PHC420H1, PHC421H1, PHC422H1; PHC430H1; PHC431H1; PHC451H1; PHC452H1; PHC460H1; PHC462H1, PSL300H1; PSL301H1
Note that not all of the 400-series PHC courses are offered every academic year.
We also offer an optional 12- or 16-month internship program to qualified students. This is a project-based, paid employment placement that takes place between the third and fourth years of undergraduate study. It provides the student with an opportunity to apply the knowledge acquired in the first three years of university to private- or publicsector settings. Placements are available in pharmaceutical and biotechnology companies, university research labs, university-affiliated organizations, or government research agencies.

## Pharmaceutical Chemistry Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## PHC230H1 Pharmaceutics 1 (formerly PHC330Y1)

 [36L/12T]An introduction to the key concepts in the design, manufacture, and use of efficatious dosage forms. The course covers the characteristics of different delivery routes.
Prerequisite: CHM138H1, CHM139H1/CHM151Y1;
CHM220H1/CHM225Y1
Exclusion: PHC330Y1; PHM224Y1; PHM141H1
DR=SCI; BR=4

## PHC300H1 Molecular Pharmacology 1 (formerly

 PHC300Y1) [36L/12T]Structural and mechanistic determinants of drug action at the molecular level. Topics include the physicalchemical properties of drugs per se as they relate to therapeutic intervention and the biophysical and biochemical properties

# Pharmaceutical Chemistry 

of enzymes and nucleic acids that underlie and are affected by their interactions with drugs.
Prerequisite: CHM138H1,CHM139H1/CHM151Y1; CHM220H1/CHM225Y1
Exclusion: PHC300Y1, PHM222Y1, PCL302H1
DR=SCI; BR=4
PHC301H1 Molecular Pharmacology 2 (formerly PHC300Y1) [36L/12T]
Structural and mechanistic determinants of drug action via macromolecules that effect cellular signalling. Neurohumoral receptors and other signalling proteins are grouped according to their structure and mechanism of action. Native properties and their modulation by drugs are discussed in the context of basic principles of molecular pharmacology.
Prerequisite: CHM138H1,CHM139H1/CHM151Y1;
CHM220H1/CHM225Y1; BCH201H1
Exclusion: PHM140H1, PHC300Y1, PHM222Y1, PCL302H1
DR=SCI; BR=4
PHC320H1 Medicinal Chemistry [36L]
Modern discovery and synthesis of antibiotics, antineoplastics, antiviral and other therapeutic agents.
Prerequisite: CHM247H1/CHM249H1; BCH210H1
DR=SCI; BR=4
PHC330H1 Pharmaceutics 2 (formerly PHC330Y1) [36L/12T]
This course presents a detailed examination of the material properties of pharmaceuticals and the role of cellular processes in delivery of a drug to its site of action.
Prerequisite: CHM138H1,CHM139H1/CHM151Y1; CHM220H1/CHM225Y1
Exclusion: PHC330Y1, PHM224Y1
DR=SCI; BR=4
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.
Prerequisite: MAT135Y1/MAT137Y1, BCH210H1, CHM247H1/CHM249H1
Corequisite: Pre- or Co-requisite: PHC330Y1/PHM224Y1
DR=SCI; BR=4

## PHC340Y1 Pharmaceutical Chemistry Laboratory [24L/96P]

The scientific basis and practical techniques relevant to modern pharmaceutical development.
Prerequisite: CHM247H1/CHM249H1;
(CHM220H1,CHM221H1)/CHM225Y1; BCH210H1
DR=SCI; BR=4
PHC401H1 Drug Transport across Biological Membranes [24L]
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 Instructor DR=SCI; BR=4

## PHC420H1 Application of Medicinal Chemistry to

 Pharmacology [24L]This course shows students the links between basic science and the drugs used therapeutically to treat clinical problems. Prerequisite: PHC300Y1, PHC320H1
DR=SCI; BR=4
PHC421H1 Biomoleuclar Interactions and Thermodynamics I[24L]
This course will consider many of the topics presented in the first half in much greater detail including a rigorous examination of the interpretation of experimental data. This course is intended for students whose research or interest is in the thermodynamics of biological molecules.
Prerequisite: Enrolment in the PHC program or permission of the instructor
DR=SCI; BR=4
PHC422H1 Biomoleuclar Interactions and Thermodynamics II [24L]
This course will consider many of the topics presented in the first half in much greater detail including a rigorous examination of the interpretation of experimental data. This course is intended for students whose research or interest is in the thermodynamics of biological molecules. (Not offered in 2011-2012).
Prerequisite: Enrolment in the PHC program or permission of the instructor
DR=SCI; BR=4
PHC430H1 Recent Developments in Dosage Form Design [24L]
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 Preparation: PHC330Y1,PHC340Y1,
Permission of the Instructor
DR=SCI; BR=4
PHC431H1 Selected Topics in Drug Development [24L]
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 Preparation: PHC330Y1,PHC340Y1,
Permission of the Instructor
DR=SCI; BR=4
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,PHC340Y1, Permission of the Instructor
DR=SCI; BR=4
PHC452H1 Selected Topics in Radiopharmaceuticals [14L/12P]
Introduces nuclear pharmacy through the discussion of problems that explain the design, production, analysis, and

## Pharmaceutical Chemistry

the clinical use of radiopharmaceuticals. Topics introduced
using group discussions and laboratory exercises.
Prerequisite: PHC330Y1, PHC340Y1, Permission of the Instructor
DR=SCI; BR=4
PHC460H1 Fundamentals of Drug Discovery [24L] 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.
Prerequisite: BIO240H1, 241H1/250Y1, PHC300Y1,
Permission of the Instructor
DR=SCI; BR=4
PHC462H1 Clinical Drug Development [24L]
This course is designed to broaden student's understanding of the development and licensing of new drugs and how scientific principles, ethics, governmental regulations and commercial considerations are coordinated for designing clinical trails. The format involves lectures, group discussion and student presentations.
Prerequisite: PHC300Y1, PHC330Y1, PHC340Y1
DR=SCI; BR=3
PHC489Y1 Pharmaceutical Chemistry Research [144P]
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
DR=SCI; BR=4
Faculty
Professors Emeriti
W.M. Burnham, Ph DL. Endrenyi, Ph DJ.N. Heersche, Ph D
T. Inaba, Ph D
D. Kadar, Ph D
H. Kalant, MD, Ph D
M.W. Milgram, Ph D
P.J. O'Brien, Ph D
R.I. Ogilvie, MD
A. B. Okey, Ph D
C. Pace-Asciak, Ph D
B.P. Schimmer, Ph D
P. Seeman, MD, Ph D
Professor and Chair of the Department
D.M. Grant, Ph D
Professors
U.E. Busto, Pharm D
P. Dorian, MD
S. George, MD
D.R. Hampson, Ph D
D. Haas, Ph D, DDS
S. Ito, MD
S. Kish, Ph D
G. Koren, MD
K. Lanctôt, Ph D
A.D. Lê, Ph D
J.F. MacDonald, Ph D
M. Moore, MD
J.N. Nobrega, Ph D
B.F. O'Dowd, Ph D
K.S. Pang, Ph D
J.D. Parker, MD
P. Pennefather, Ph D
A. Petronis MD Ph D
J. Semple, Ph D
N.H. Shear, MD
O.C. Snead III, MD
R. Tyndale, Ph D
J.P. Uetrecht, MD, Ph D
J.J. Warsh, MD, Ph D
J.W. Wells, Ph D
P.G. Wells, Pharm D
L.T. Young, MD, Ph D
Associate Professors
N. Chirgadze, Ph D
Y. Finkelstein, MD
P. Harper, Ph D
B. Le Foll, MD, Ph D
P. Li, Ph D
J. Matthews Ph D
R.S. McIntyre, MD
J.P. McPherson, Ph D
J.H. Meyer, MD, Ph D
J. Mitchell, Ph D
H-W Park, Ph D
M. Piquette-Miller, Ph D
D. Riddick, Ph D
M. Schapira, Ph D
A.H.C. Wong, MD, Ph D

## Assistant Professors

S. Belo, MD, Ph D
B. Brands, Ph D
H. Grad, MSc Phm
B. I. Goldstein, MD
A.J. Lança, MD, Ph D
R.R. Laposa, Ph D
J.M. Mayer, Ph D
N. Mittmann, Ph D
M.G. Neuman, Ph D
G. Rachamin, Ph D
A.J. Ramsey, Ph D
A. Salahpour, Ph D

H-S. Sun, MD, MSc, Ph D
C. Toal, Ph D
D. Tomkins, Ph D
M. Zack, Ph D
L. Zawertalio, Ph D

## Adjunct Professors

R.A. Forman MSc MD
G. Higgins Ph D
A. Nava-Ocampo MSc MD
M.J. Shram Ph D

## Senior Lecturers

M.I. Arnot, Ph D
C. Woodland, Ph D

## Lecturers

D. Flynn, Ph D
A. Hamadanizadeh, Ph D

Pharmacology and Toxicology are integrative biological sciences that examine 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 pharmaceutical products, and the investigation and control of pollutants and poisons in natural and social environments. The Department of Pharmacology and Toxicology offers four Specialist and two Major undergraduate programs of study that are jointly sponsored by the Faculties of Arts and Science and Medicine. The Specialist programs have the added benefit of providing students with opportunities to learn advanced laboratory techniques and to gain realworld experience through supervised independent research projects and participation in the Professional Experience Year Internship (see below). Students who intend to pursue graduate research and/or careers in pharmacology or toxicology are encouraged to enroll in a Specialist program because of the opportunities for additional experiential learning.
Students wishing to enroll in any of the Type 3 programs will initially apply to a general departmental Specialist or Major stream and during the spring of their second year of study (and completion of PCL201H1) students will select the focus for their future studies (i.e. Pharmacology and/or Biomedical Toxicology). For Specialist programs, students who rank a program as their first choice will be considered before students who assign the program a lower ranking. The top-ranked students who meet the program requirements will be sent an invitation to join the program. If a student is not selected, his or her application will be forwarded to the

## Pharmacology and Toxicology

administrator of the program listed as the second choice.This process continues until an invitation is sent or all programs have been considered.

For further information about registration and courses, consult the A\&S Registration Handbook and Timetable, and visit our website at: www.pharmtox.utoronto.ca.

Undergraduate Office - General Inquiries: undergrad. pharmtox@utoronto.ca; Medical Sciences Building, Room 4207 (416-978-2728)

Undergraduate Coordinator: Dr. M. Arnot, michelle.arnot@ utoronto.ca; Medical Sciences Building, Room 4219 (416-978-3164)

## Pharmacology and Toxicology Programs

The Professional Experience Year (PEY) internship program is an elective 12-16 month paid employment placement within pharmaceutical/ biotechnology/chemical companies, university research laboratories, university-affiliated organizations, consulting companies or government research agencies. The PEY takes place between the 3rd and 4th years of undergraduate study and is open to Specialists in Pharmacology, Biomedical Toxicology and Environment and Toxicology who have a cGPA of at least 3.0. The PEY internship provides an excellent opportunity for real-world experience in drug development, project management, client relations, basic and clinical research, information management and regulatory affairs

## Pharmacology Specialist (Science program)

Pharmacology is an integrative medical science that builds upon the core foundational disciplines of the basic life sciences. The Pharmacology Specialist program aims to provide students with an understanding of the therapeutic properties and clinical uses of externally administered chemical substances in the whole body, as well as the mechanisms of their actions and interactions with molecular, cellular and tissue targets. This understanding prepares students for a variety of either research-based or non-research-based careers, including positions in the pharmaceutical and biotechnology industries, in government agencies, in research institutes and in universities. Students learn about both basic and clinical pharmacology through lectures, tutorials, laboratories and independent research projects. The senior research project course enables students to gain valuable research experience while working under the supervision of an individual faculty member in either a laboratory-based or a non-laboratory-based setting.
The Professional Experience Year (PEY) internship program is an elective 12-16 month paid employment placement within pharmaceutical/ biotechnology/chemical companies, university research laboratories, university-affiliated organizations, consulting companies or government research agencies. The PEY takes place between the 3rd and 4th years of undergraduate study and is open to Specialists in Pharmacology who have a cGPA of at least 3.0. The PEY internship provides an excellent opportunity for real-world experience in drug development, project management, client relations, basic and clinical research, information management and regulatory affairs.

Pharmacology (and its application in clinical therapeutics) plays a prominent role in society, and a comprehension of drug mechanisms and uses is fundamental to career success in the fields of medicine, dentistry, pharmacy and nursing. While some students take the Pharmacology Specialist program in preparation for these professional programs, students are advised to contact the respective Faculties directly for questions related to transfer credits.
This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:

BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/ CHM151Y1, and 1.0 FCE from (MAT135H1, MAT136H1)/ MAT137Y1/MAT157Y1/(PHY131H1, PHY132H1)/ (PHY151H1, PHY152H1) with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.

While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 80 s ; average $=$ mid 80 s .

Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions). Students wishing to enroll in this program will initially apply to a general departmental Specialist stream and during the spring of their second year of study (and completion of PCL201H1) students will select the focus for their future studies (i.e. Pharmacology and/or Biomedical Toxicology).
Students wishing to enroll after their second year who have taken PCL201H1 will be considered on a case by case basis. Successful completion of required pre-requisite courses is required to further enroll in upper level program courses. Students may not transfer to the Major program from the Specialist stream after completion of the PCL472Y1 course.

## (14.5 full courses or their equivalent)

First Year: BIO120H1; BIO130H1; (CHM138H1, CHM139H1/ CHM151Y1; and 1 FCE from any combination of (MAT135H1, MAT136H1); PHY131H1/PHY151H1; PHY132H1/PHY152H1 (see NOTE 1)
Second Year: BCH210H1; BIO230H1/(BIO240H1, 241H1); BIO260H1/HMB265H1; CHM247H1/CHM249H1; PCL201H1; (PSL300H1, PSL301H1)/PSL302Y1 (NOTE: PSL201Y1 is not acceptable). In addition, we recommend completion of PCL285H1 prior to the 3rd year of study; see NOTE 2.
Third Year: BCH311H1/CSB349H1; PCL302H1; PCL376H1; PSL372H1
Third or Fourth Year: 3 full-course equivalents with at least 1.5 from PCL courses: ANA300Y1/ BCH340H1/ BCH370H1/CSB328H1(See NOTE 4)/ PCL389H1/ PCL402H1/PCL475Y1 (see NOTE 5)/PCL477H1
Fourth Year: PCL470Y1; PCL471Y1; PCL472Y1 (see NOTE 3)

NOTES

1. Any PHY/MAT courses should be completed during the first year and included for program enrollment.

## Pharmacology and Toxicology

2. This elective course will count towards the 3 FCE electives which are required for the program.
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 will register them in the course. It is the student's responsibility to make all necessary preparations before the session starts (see course description).
4. Some of the choices listed above are only available to students who are enrolled in a POSt sponsored by the department or unit offering the course, and/or who have completed specified prerequisites
5. PCL475Y1 counts as one half-credit towards the program requirement. Although a full year course, some of the basic principles of pharmacology are revisited for students with a "non-pharmacology" background and subsequently program students who have an extensive background in pharmacology will receive a 0.5 FCE for the novel material discussed under the realms of neuroscience and psychology.

## Pharmacology Major (Science Program)

Pharmacology is an integrative medical science that builds upon the core foundational disciplines of the basic life sciences. This program is intended for students who want to gain knowledge in Pharmacology in combination with a separate and complementary area of study and is designed for students interested in broad, multidisciplinary training. The Pharmacology Major program is designed to provide students with a broad understanding of the therapeutic properties and clinical uses of externally administered chemical substances in the whole body, as well as the mechanisms of their actions and interactions with molecular, cellular and tissue targets. Students learn about both basic and clinical pharmacology through lectures, tutorials and small group sessions.
This understanding prepares students for a variety of either research-based or non-research-based careers, including positions in the pharmaceutical and biotechnology industries, in government agencies, in research institutes and in universities. Pharmacology (and its application in clinical therapeutics) plays a prominent role in society, and a comprehension of drug mechanisms and uses is fundamental to career success in the fields of medicine, dentistry, pharmacy and nursing. While some students take the Pharmacology Major program in preparation for these professional programs, students are advised to contact the respective Faculties directly for questions related to transfer credits.
This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 2.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1, with an average of at least $70 \%$ on these 2.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 80 s ; average $=$ mid 80 s .

Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.

Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions). Students wishing to enroll in this program will initially apply to a general departmental Major stream and during the spring of their second year of study (and completion of PCL201H1) students will select the focus for their future studies (i.e. Pharmacology and/or Biomedical Toxicology).
Students wishing to enroll after their second year who have taken PCL201H1 will be considered on a case by case basis. Successful completion of required pre-requisite courses is required to further enroll in upper level program courses.
(8 full courses or their equivalent)
First Year: BIO120H1; BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1
Second Year: BCH210H1; BIO230H1/(BIO240H1,241H1); PCL201H1; CHM247H1/CHM249H1; (PSL300H1, PSL301H1)/PSL302Y1 (NOTE: PSL201Y1 is not acceptable). In addition, we recommend completion of PCL285H1 prior to the 3rd year of study; see NOTE 1.
Third Year: PCL302H1; BCH311H1/CSB349H1 (see NOTE 2)

Third or Fourth Year: 1.0 full course equivalent from: BCH370H1/PCL389H1/PCL402H1/PCL475Y1 (see NOTE 3)/PCL477H1
Fourth Year: PCL470Y1

## NOTES

1. This elective course will count towards the 1.0 FCE electives which are required for your program.
2. CSB349H1 requires $\mathrm{BIO} 260 \mathrm{H} 1 / \mathrm{HMB} 265 \mathrm{H} 1$ as a prerequisite.
3. PCL475Y1 counts as one half-credit towards the program requirement. Although a full year course, some of the basic principles of pharmacology are revisited for students with a "non-pharmacology" background and subsequently program students who have an extensive background in pharmacology will receive a 0.5 FCE for the novel material discussed under the realms of neuroscience and psychology.
4. Students are not allowed to enroll concurrently in the Major Program in Pharmacology and the Major Program in Toxicology.
5. Students are not allowed to enroll concurrently in the Major Program in Pharmacology and a Specialist Program in Toxicology.
6. Students are not permitted to take PCL472Y1 or PCL474Y1.

## Biomedical Toxicology Specialist (Science program)

Biomedical toxicology has emerged as an important science addressing drug safety and the adverse consequences of chemical exposure. The Biomedical Toxicology Specialist program examines the harmful effects of chemicals on the health and behaviour of individuals and society. The safety/ toxicity of a wide array of chemicals is examined including pharmaceutical preparations, herbal products, natural toxins and environmental contaminants, with a focus on their effects on human health. This program emphasizes the application

## Pharmacology and Toxicology

of toxicological knowledge and risk assessment and prepares students for a variety of job opportunities following its completion as well as for further study in graduate research or professional programs such as Medicine, Dentistry, and Pharmacy. (Note: Students interested in professional programs should contact the respective faculties to inquire about specific transfer credits.) Many graduates of the Biomedical Toxicology Specialist program pursue careers in scientific research, forensic science, nutrition and food sciences, governmental agencies, consulting agencies, and industrial settings including the pharmaceutical and chemical industries. Students learn about basic and clinical toxicology and related areas through lectures, tutorials, laboratories, and independent research projects. The senior research project course enables students to gain valuable research experience while working under the supervision of an individual faculty member in either a laboratory-based or a non-laboratory-based setting.
The Professional Experience Year (PEY) internship program is an elective 12-16 month paid employment placement within pharmaceutical/biotechnology/chemical companies, university research laboratories, university-affiliated organizations, consulting companies or government research agencies. The PEY takes place between the 3rd and 4th years of undergraduate study and is open to Specialists in Biomedical Toxicology who have a cGPA of at least 3.0. The PEY internship provides an excellent opportunity for realworld experience in drug development, project management, client relations, basic and clinical research, information management and regulatory affairs.
This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1, and 1.0 FCE from (MAT135H1, MAT136H1)/ MAT137Y1/MAT157Y1/(PHY131H1, PHY132H1)/ (PHY151H1, PHY152H1) with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.

While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 80 s ; average $=$ mid 80 s .
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions). Students wishing to enroll in this program will initially apply to a general departmental Specialist stream and during the spring of their second year of study (and completion of PCL201H1) students will select the focus for their future studies (i.e. Pharmacology and/or Biomedical Toxicology).
Students wishing to enrol after their second year who have taken PCL201H1 will be considered on a case by case basis. Successful completion of required pre-requisite courses is required to further enroll in upper level program courses. Students may not transfer to the Major program from the Specialist stream after completion of the PCL474Y1 course.
(14.5 full courses or their equivalent)

First Year: BIO120H1; BIO130H1; (CHM138H1, CHM139H1/ CHM151Y1; and 1 FCE from any combination of (MAT135H1, MAT136H1); PHY131H1/PHY151H1; PHY132H1/PHY152H1 (see NOTE 1)
Second Year: BCH210H1; BIO230H1/(BIO240H1, 241H1); BIO260H1/HMB265H1; CHM247H1/CHM249H1; PCL201H1; (PSL300H1, PSL301H1)/PSL302Y1 (NOTE: PSL201Y1 is not acceptable). In addition, we recommend completion of PCL285H1 prior to the 3rd year of study; see NOTE 2.
Third Year: LMP363H1; PCL302H1; PCL362H1; PCL365Y1; PCL376H1
Third or Fourth Year: Two full-credit equivalent with at least one-full credit equivalent from PCL courses: ANA301H1/ BCH370H1/CHM310H1/GGR409H1 /PCL389H1 / PCL402H1/PCL475Y1 (see NOTE 4)/PCL477H1
Fourth Year: LMP301H1; PCL473Y1; PCL474Y1 (see NOTE 3); PCL481H1.

NOTES

1. Any PHY/MAT courses should be completed during the first year and included for program enrollment.
2. This elective course will count towards the 2 FCE electives which are required for your program.
3. Enrollment in the Research Project Course (PCL474Y1) 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).
4. PCL475Y1 counts as one half-credit towards the program requirement. Although a full year course, some of the basic principles of pharmacology are revisited for students with a "non-pharmacology" background and subsequently program students who have an extensive background in pharmacology will receive a 0.5 FCE for the novel material discussed under the realms of neuroscience and psychology.

## Biomedical Toxicology Major (Science program)

Biomedical toxicology has emerged as an important science addressing drug safety and the adverse consequences of chemical exposure. The Biomedical Toxicology Major program examines the harmful effects of chemicals on the health and behavior of individuals and society. The safety/ toxicity of a wide array of chemicals is examined including pharmaceutical preparations, herbal products, natural toxins, and environmental contaminants, with a focus on their effects on human health. Students learn about basic and clinical toxicology and related areas through lectures, tutorials and class discussions/debates.

This program includes the application of toxicological knowledge and risk assessment and prepares students for a variety of job opportunities following its completion as well as for further study in graduate research or professional programs such as Medicine, Dentistry, and Pharmacy. (Note: Students interested in professional programs should contact the respective faculties to inquire about specific transfer credits.) Many graduates of the Biomedical Toxicology major program pursue careers in scientific research, forensic science, nutrition and food sciences, governmental agencies,

## Pharmacology and Toxicology

consulting agencies, and industrial settings including the pharmaceutical and chemical industries.

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 2.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/ CHM151Y1, with an average of at least $70 \%$ on these 2.0 full-course equivalents (FCEs) and a final mark of at least 60\% in each course.

While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 80 s ; average $=$ mid 80 s .
Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions). Students wishing to enroll in this program will initially apply to a general departmental Major stream and during the spring of their second year of study (and completion of PCL201H1) students will select the focus for their future studies (i.e. Pharmacology and/or Biomedical Toxicology).
Students wishing to enroll after their second year who have taken PCL201H1 will be considered on a case by case basis. Successful completion of required pre-requisite courses is required to further enroll in upper level program courses.
(8 full courses or their equivalent)
First Year: BIO120H1; BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1
Second Year: BCH210H1; BIO230H1/(BIO240H1,241H1); PCL201H1; CHM247H1/CHM249H1; (PSL300H1, PSL301H1)/PSL302Y1 (NOTE: PSL201Y1 is not acceptable). In addition, we recommend completion of PCL285H1 prior to the 3rd year of study; see NOTE 1.
Third Year: PCL302H1; PCL362H1. (See NOTE 2)
Third or Fourth Year: 1.0 full-credit equivalent with at least one-half credit equivalent from PCL courses: ANA301H1/ BCH370H1/LMP301H1/LMP363H1 /PCL389H1 / PCL402H1/PCL475Y1(see NOTE 4)/PCL477H1/ PCL481H1
Fourth Year: PCL473Y1

## NOTES

1. This elective course will count towards the 1.5 FCE electives which are required for your program.
2. Although LMP301H1 (Introduction to the Biochemistry of Human Disease) and LMP363H1 (Principles of Pathobiology) are not prerequisites to enroll in PCL473Y1, students are recommended to enroll in at least one of these courses.
3. PCL475Y1 counts as one half-credit towards the program requirement. Although a full year course, some of the basic principles of pharmacology are revisited for students with a "non-pharmacology" background and subsequently program students who have an extensive background in pharmacology will receive a 0.5 FCE for the novel material discussed under the realms of neuroscience and psychology.
4. Students are not allowed to enroll concurrently in the Major Program in Pharmacology and the Major Program in Toxicology.
5. Students are not allowed to enroll concurrently in the Major Program in Pharmacology and a Specialist Program in Toxicology.
6. Students are not permitted to take PCL472Y1 or PCL474Y1.

## Specialist in Pharmacology and Biomedical Toxicology (Science program)

Pharmacology and Biomedical Toxicology are complementary sciences, and the Pharmacology and Biomedical Toxicology Specialist combines the requirements of the two distinct specialist programs. The Specialist program integrates knowledge of pharmacology - the understanding of the therapeutic properties and clinical applications of externally administered chemical substances in the whole body and the mechanisms of their actions and interactions with their intended targets, while biomedical toxicology examines the harmful effects of exogenous chemicals on the health and behaviour of individuals and society, addressing drug safety and the adverse consequences of chemical exposure. Biomedical toxicology includes understanding the safety/ toxicity of a wide array of chemicals (pharmaceutical preparations, herbal products, natural toxins and environmental contaminants) with a focus on their effects and adverse consequences on human health

Both Pharmacology and Biomedical Toxicology are integrative life sciences which build on the core foundational disciplines of the basic life sciences and the prominent role each science plays in society. A comprehension of the biological mechanisms of action and potential uses of chemicals are key to career success in the fields of medicine, dentistry, pharmacy and nursing.The Specialist program prepares students for a variety of job opportunities following its completion as well as for further study in graduate research or professional programs such as Medicine, Dentistry, and Pharmacy. (Note: Students interested in professional programs should contact the respective faculties to inquire about specific transfer credits.) Graduates of this rigorous program will have access to an impressive variety of job opportunities in either research-based or non-researchbased careers, including scientific research in research institutes and in universities, positions in the pharmaceutical, biotechnology and chemical industries, forensic science, nutrition and food sciences, government or consulting agencies. Students learn about both basic and clinical pharmacology and biomedical toxicology through lectures, tutorials, small group sessions, laboratories and independent research projects. The senior research project course enables students to gain valuable research experience while working under the supervision of an individual faculty member in either a laboratory-based or a non-laboratorybased setting.

The Professional Experience Year (PEY) internship program is an elective 12-16 month paid employment placement within pharmaceutical/ biotechnology/chemical companies, university research laboratories, university-affiliated organizations, consulting companies or government research agencies. The PEY takes place between the 3rd and 4th years of undergraduate study and is open to Specialists in Pharmacology and Biomedical Toxicology who have a cGPA

## Pharmacology and Toxicology

of at least 3.0. The PEY internship provides an excellent opportunity for real-world experience in drug development, project management, client relations, basic and clinical research, information management and regulatory affairs.
This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1, and 1.0 FCE from (MAT135H1, MAT136H1)/
MAT137Y1/MAT157Y1/(PHY131H1, PHY132H1)/
(PHY151H1, PHY152H1) with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 80 s ; average $=$ mid 80 s .

Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions). Students wishing to enroll in this program will initially apply to a general departmental Specialist stream and during the spring of their second year of study (and completion of PCL201H1) students will select the focus for their future studies (i.e. Pharmacology and/or Biomedical Toxicology).
Students wishing to enroll after their second year who have taken PCL201H1 will be considered on a case by case basis. Successful completion of required pre-requisite courses is required to further enroll in upper level program courses. Students may not transfer to the Major program from the Specialist stream after completion of the PCL472Y1/ PCL474Y1 course.
(15 full courses or their equivalent)
First Year: BIO120H1; BIO130H1; (CHM138H1, CHM139H1)/ CHM151Y1; and 1 FCE from any combination of (MAT135H1, MAT136H1); PHY131H1/PHY151H1; PHY132H1/PHY152H1 (see NOTE 1)
Second Year: BCH210H1; BIO230H1/(BIO240H1, 241H1); BIO260H1/HMB265H1; CHM247H1/CHM249H1; PCL201H1; (PSL300H1, PSL301H1)/PSL302Y1 (NOTE: PSL201Y1 is not acceptable). In addition, we recommend completion of PCL285H1 prior to the 3rd year of study; see NOTE 2.
Third Year: BCH311H1/CSB349H1; LMP363H1; PCL302H1; PCL362H1; PCL365Y1 (See NOTE 3); PCL376H1; PSL372H1
Third or Fourth Year: A half full-credit equivalents from the following PCL courses: PCL389H1/PCL402H1/ PCL475Y1 (see NOTE 5)/PCL477H1. Additional courses that may strengthen your background in this program can be taken, but will not count towards your program: ANA300Y1/ANA301H1/BCH340H1/BCH370H1/ CHM310H1/CSB328H1(see NOTE 6)/GGR409H1
Fourth Year: LMP301H1; PCL470Y1; PCL473Y1; PCL471Y1 (See NOTE 3); PCL472Y1/PCL474Y1 (see NOTE 4); PCL481H1.

NOTES

1. Any PHY/MAT courses should be completed during the first year and included for program enrollment.
2. This elective course will count towards the 0.5 FCE elective which is required for the program.
3. Students may take either PCL365Y1 or PCL471Y1.
4. Enrollment in the Research Project Course (PCL472Y1/ PCL474Y1) 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 will register them in the course. It is the student's responsibility to make all necessary preparations before the session starts (see course description).
5. PCL475Y1 counts as one half-credit towards the program requirement. Although a full year course, some of the basic principles of pharmacology are revisited for students with a "non-pharmacology" background and subsequently program students who have an extensive background in pharmacology will receive a 0.5 FCE for the novel material discussed under the realms of neuroscience and psychology.
6. Some of the choices listed above are only available to students who are enrolled in a POSt sponsored by the department or unit offering the course, and/or who have completed specified prerequisites.

## Environment \& Toxicology Specialist (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" (www.environment.utoronto.ca) or consult our website: www.pharmtox@utoronto.ca
The Environment and Toxicology Specialist program is an interdisciplinary program which spans the social, physical and life sciences and integrates study of the effects of chemicals not only on the health and behaviour of human beings but on whole ecosystems as the adverse effects associated with therapeutic and environmental chemicals are discussed. This program emphasizes the application of knowledge of environmental toxicology and risk assessment and prepares students for a variety of job opportunities following its completion. Graduates of the Environment and Toxicology program may pursue careers in scientific research, environmental science, conservation science, governmental agencies, consulting agencies, and within chemical, manufacturing or agriculture industries.Students learn to integrate basic environmental and life science with particular aspects of clinical toxicology and related areas through lectures, tutorials, and laboratory and independent research project experience. The senior independent research project course enables students to gain valuable research experience while working under the supervision of an individual faculty member in either a laboratory-based or a non-laboratory-based setting.
Students may choose to participate in the Professional Experience Year internship. The PEY internship is an elective 12-16 month paid employment placement within pharmaceutical/biotechnology/chemical companies,

## Pharmacology and Toxicology

university research laboratories, university-affiliated organizations, consulting companies or government research agencies. The PEY takes place between the 3rd and 4th years of undergraduate study and is open to Specialists in Environment and Toxicology who have a cGPA of at least 3.0. The PEY internship provides an excellent opportunity for real-world experience in drug development, project management, client relations, basic and clinical research, information management and regulatory affairs.
The Environment and Toxicology Specialist is a Type 2L program and can only accommodate a limited number of students. Admission into this program is determined by a student's average in the following courses: BIO 120 H 1 , BIO130H1, CHM138H1, CHM139H1, and one of PHY131H1, MAT135H1, or GGR100H1. It is expected that a cumulative average $70 \%$ in the selected courses will be required for admission; however, achieving that mark does not necessarily guarantee admission to the program in any given year. Entry into the program requires completion of BIO120H1, BIO130H1; CHM138H1, CHM139H1, one of PHY131H1, MAT135H1, or GGR100H1 and 0.5 FCE from among the other first year course requirements. Completion of the program requires completion of all 4 FCE of the first year required courses.
Students who wish to enroll in the program after their second year will be considered on a case-by-case basis. Successful completion of required prerequisite courses is required to enroll in further upper-level program courses.
( 15 full courses or their equivalent, including $4.0300+$-level courses, 1.0 of which must be at the 400 -level).

First Year: BIO120H1; BIO130H1; CHM138H1; CHM139H1 ; and at least 0.5 FCE from PHY131H1; MAT135H1; GGR100H1
First or Second Year: At least 1.5 FCE from GGR100H1 (if not counted in First Year, 2 above); GGR101H1; MAT135H1 (if not counted in First Year, 2 above); MAT136H1/JMB170Y1; PHY131H1 (if not counted in First Year, 2 above); PHY132H1
Second Year: BCH210H1; BIO230H1/(BIO240H1, 241H1); ENV221H1; ENV222H1, PCL201H1 and CHM247H1. One FCE from (BIO270H1,BIO271H1)/ (PSL300H1, PSL301H1)/PSL302Y1 (see NOTE 1)
Third and Fourth Years: BIO220H1; ENV234H1; JGE321H1; ENV334H1; CHM210H1; PCL302H1; PCL362H1; PCL473Y1.
One from PCL376H1/STA220H1/STA221H1/EEB225H1 (see NOTE 2).
One from ENV421H1/PCL365Y1/PCL474Y1 (see NOTE 2).
At least 1.0 FCE from: ENV341H1; ENV235H1; JGE236H1; CHM310H1; GGR409H1; PCL477H1; PCL481H1; LMP301H1; LMP363H1 (see NOTE 3)

## NOTES:

1. PSL300H1 and PSL301H1 require MAT100/PHY100 -series courses.
2. PCL302H1 is a required co-requisite of PCL365Y1, PCL201H1, PCL302H1 and PCL376H1 are prerequisites for students intending to take PCL474Y1 Students intending to take PCL474Y1 must obtain permission from the Undergraduate Student Advisor of the Centre for Environment 3 months prior to the intended date of enrolment. Students must also consult
with the Department of Pharmacology and Toxicology at least 3 months prior to the intended date of enrolment as the student is responsible for arranging for a supervisor.
3. Students taking PCL481H1 must take BCH 210 H 1 , PCL302H1 and PCL362H1 as prerequisites. Students taking PCL477H must take BCH210H prior. Students taking ENV421H must take 1.5 FCE from group 7 to have 15 FCE program credits

## Pharmacology and Toxicology

 Courses
## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## PCL102H1 The Art of Drug Discovery [24L]

This course introduces students to the processes and strategies for discovering new drugs with a special focus on current and emerging approaches for the rational design of drugs that are both effective and safe.
DR=SCI; BR=4

## PCL201H1 Introduction to Pharmacology and Pharmacokinetic Principles [36L/6T]

A general introduction to the principles of pharmacology and pharmacokinetics. Topics include chemical (drug) absorption, distribution, biotransformation, elimination; the calculation of dosages and pharmacokinetic parameters, variability in drug response, adverse drug reactions and special interest topics. Corequisite: Recommended Co-requisites: $\mathrm{BIO} 230 \mathrm{H} 1 /$
(BIO240H1, BIO241H1), CHM247H1/CHM249H1,
PSL300H1/PSL301H1
DR=SCI; BR=4
PCL285H1 Effective Writing in Life Science [36L]
This course focuses on developing reading, writing and communication skills as applied to Pharmacology, Toxicology and the related biomedical and life sciences. Students will develop analytical and critical thinking skills while learning to develop essays/reviews and to evaluate discipline-specific data and readings.
Prerequisite: BIO120H1, BIO130H1, CHM138H1,
CHM139H1
DR=HUM/SCI; BR=None
PCL299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None
PCL302H1 Pharmacodynamic Principles[36L]
Topics include biological action of drugs on membranes, enzymes, receptors, neural and hormonal systems, transmission and modulation.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1)$,
CHM247H1/CHM249H1, (PSL300H1, PSL301H1)/
PSL302Y1
DR=SCI; BR=4

## Pharmacology and Toxicology

## PCL362H1 Introductory Toxicology [27L/5T]

Toxicological problems encountered in animals and humans; biochemical mechanisms and clinical factors of toxicological significance; models of drug-related diseases.
Prerequisite: $\mathrm{BCH} 210 \mathrm{H} 1, \mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1)$, CHM247H1/CHM249H1, PCL201H1, PCL302H1 or
Permission of the Course Coordinator
Corequisite: Recommended Co-requisite: BCH311H1/
CSB349H1
DR=SCI; BR=4
PCL365Y1 Toxicology Laboratory [48T/48P]
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 generally restricted to students enrolled in the Biomedical Toxicology Specialist, Pharmacology and Biomedical Toxicology Specialist, and Environment and Toxicology Specialist programs.
Prerequisite: PCL201H1,(PSL300H1, PSL301H1)/PSL302Y1
Corequisite: PCL302H1, PCL362H1
DR=SCI; BR=4

## PCL376H1 Experimental Design and Data Analysis for Pharmacology and Toxicology [36L]

A practically oriented course, focused 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.
Prerequisite: PCL201H1
Corequisite: PCL302H1
DR=SCI; BR=4

## PCL389H1 Understanding the Role of Pharmacology and Toxicology in Society [24L]

This service learning course explores issues surrounding the effects that pharmaceuticals and chemicals have in society. Specifically, it integrates pharmacology and toxicology with social, health and political issues as they relate to drug abuse and addiction. Students are required to interact and work with community partners during the semester. Classroom discussions will integrate community experiences with lecture material.
Prerequisite: PCL201H1
Corequisite: PCL302H1; (PSL300H1, PSL301H1)/PSL302Y1
DR=SCI; BR=4

## PCL402H1 Pharmacology and Toxicology in Drug Development [24L]

This course provides the basic principles of drug development, with a primary focus on the application of fundamental principles of pharmacology and toxicology to the design and conduct of early phase clinical trials. This is the phase of the drug development process where much of the innovation and science occurs.
Prerequisite: PCL201H1, PCL302H1
Recommended Preparation: PSL300H1, PSL301H1
DR=SCI; BR=4

## PCL470Y1 Systems Pharmacology [61L/9S]

Concepts of drug properties and their interactions within the body. Mechanism of action, pharmacological properties and clinical use of drugs acting on the autonomic and central nervous systems, cardiovascular, renal, respiratory, gastrointestinal, immunological and endocrine systems; therapuetic use of endogenous compounds; antimicrobial and anti-inflammatory drugs, chemotherapy, pharmacogenomics. Critical evaluation of primary literature and examination of clinical case studies will be integrated with lecture material.
Prerequisite: BCH210H1, PCL201H1, PCL302H1,
(PSL300H1, PSL301H1)/PSL302Y1
DR=SCI; BR=4

## PCL471Y1 Pharmacology Laboratory [40T/56P]

Demonstrations, seminars, and laboratory exercises in selected areas of pharmacology. Enrollment in this course is generally restricted to students enrolled in the Pharmacology Specialist and Pharmacology and Biomedical Toxicology Specialist programs.
Prerequisite: PSL372H1, PCL201H1, PCL302H1
Corequisite: PCL470Y1

## DR=SCI; BR=4

## PCL472Y1 Project in Pharmacology [TBA]

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 faculty member and will submit a final written report and oral presentation. 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 and Toxicology) is signed by an approved supervisor and approved by the Department of Pharmacology and Toxicology. Students are expected to spend approximately 200 hours towards this project but this will be project/supervisor dependent.
Prerequisite: PCL201H1, PCL302H1, PCL376H1 and
permission of Department
Exclusion: PCL474Y1
DR=SCI; BR=4

## PCL473Y1 Interdisciplinary Toxicology [48L]

This course explores several contemporary topics in biomedical and environmental toxicology with emphasis on how chemicals affect human health. Lectures cover principles of toxicology, the mechanisms of toxicity of a wide variety of toxic agents and the associated toxicities, methodologies used to examine chemical toxicities, risk assessment, and the applications of toxicology.
Prerequisite: BCH210H1, PCL201H1, PCL302H1, PCL362H1
or Permission of the Course Coordinator
Recommended Preparation: BCH311H1/CSB349H1
DR=SCI; BR=4

## PCL474Y1 Project in Toxicology [TBA]

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 and oral presentation. 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. Students are expected to spend approximately 200 hours towards this project but this will be project/supervisor dependent.
Prerequisite: PCL201H1, PCL302H1, PCL376H1 and
permission of Department
Exclusion: PCL472Y1
DR=SCI; BR=4
PCL475Y1 Neuropsychopharmacology [72L/24T]
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.
DR=SCI; $B R=4$

## PCL477H1 The DNA Damage Response in Pharmacology and Toxicology [24L]

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: $\mathrm{BCH} 210 \mathrm{H} 1 / \mathrm{BCH} 242 \mathrm{Y} 1$
DR=SCI; BR=4
PCL481H1 The Molecular and Biochemical Basis of Toxicology [24L]
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.
Prerequisite: PCL302H1, PCL362H1, BCH210H1
DR=SCI; BR=4

## 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)
F.A. Cunningham, MA, Ph D, FRSC
R.B. DeSousa, BA, Ph D
D.D. Evans, BA, BD, D Phil (V)
D. Goldstick, BA, D Phil
A. Gombay, MA, B Phil (UTM)
W.C. Graham, MA, Ph D (UTSC)
C.M.T. Hanly, BA, MS 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)
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 (UTSC)
J.T. Stevenson, MA (U)
M.T. Thornton, B Phil, MA, Ph D (V)
R. E. Tully, BA, D Phil (SM)
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)

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R. V. Friedman, BA, MA, Ph D (SM)
J. Hartley B Ph, BA, MA, Ph D (SM)
P. Hess, BA, AM, Ph D (V)
J. Wheatley, BSc, MA PhD
A. Wingell, BA, MA, MSL, Ph D (SM)

Professor and Chair
A. Ripstein, MA, Ph D

## Professor and Associate Chair

(Undergraduate)
R. Barney, BA, Ph D

Professor and Associate Chair (Graduate)
D. Raffman, BA, Ph D (UTM)

## University Professor

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)
D. Dyzenhaus, D Phil, FRSC
P. Franks, MA Ph D
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)
J.M. Heath, MA, Ph D (U)
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, BA, M Litt, Ph D (T)
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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. Novak, MHL, Ph D (U)
M. Rozemond, Kand., Ph D (UTM)
W.E. Seager, MA, Ph D (UTSC)
V. Shen, MA, MA, Ph D
I. Leman Stefanovic, MA, Ph D (SM)
E. Thompson, MA, Ph D (U)
D. Walsh, BSc, Ph D, BA, M Phil, Ph D
J.E. Whiting, BA, MA, Ph D

## Associate Professors

D.C. Ainslie, B Sc, MA, Ph D (U)
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B. Hellie, BA, Ph D (UTSC)
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L. Lange, MA, Ph D (UTSC)
S.R. Moreau, B Phil, Ph D, JD
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M. Pickavé, MA, Ph D
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S.A. Sedivy, BA, Ph D (UTSC)
J. Wilson, BA, Ph D (UTSC)
B. Yi, MA, Ph D (UTM)

## Assistant Professors

M. Ganea, Ph D
K. Hübner, BA, MA , Ph D (UTSC)
J. John, BA, Ph D
U. Schlösser, MA, D Phil (UTM)
A. Sepielli, AB, JD, Ph D (UTM)
J. Weisberg, BA, Ph D (UTM)

## Lecturers

T.J. Berry, MA, Ph D
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); NineteenthCentury Philosophy (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?); Moral Philosophy (How should we argue rationally about right and wrong?); 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?); Aesthetics (What is art? Must it be beautiful?). In addition, the Department offers Seminars (numbered PHL400H1 - PHL488H1), Individual Studies courses (numbered PHL495H1 - PHL497H1), the Socrates Project (PHL489Y1) and the Honours Seminar (PHL490Y1 and PHL498H1).

Counselling is available in the main departmental office, 170 St. George St., 4th floor. In particular, students may wish to get advice about how best to combine philosophy programs with other majors or minors, given that various co-specialist programs with other disciplines have been discontinued. 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: Rachel Barney, 170 St. George Street, Room 404 (416-978-3314), undergrad.phil@utoronto. ca

Undergraduate Counsellor: Mr. Eric Correia, 170 St. George Street, Room 403 (416-978-3314), eric.correia@utoronto.ca
Website: http://philosophy.utoronto.ca

## Philosophy Programs

Enrolment in Philosophy programs requires the completion of 4.0 courses.

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.

## Philosophy Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent, including PHL100Y1 if taken)

First year (recommended):
PHL100Y1
Higher Years (required):

1. Two full courses 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 10, including four full courses at the 300+ level, of which one full course must be at the 400 level.

## Philosophy Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent, including PHL100Y1 if taken)

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 seven, including two full courses at the 300+ level, of which one half course must be at the 400 level.

## Philosophy Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including PHL100Y1 if taken)

1. One full course from the following: PHL200Y1/ (PHL205H1,PHL206H1)/PHL210Y1
2. Additional philosophy courses, to a total of four, including one full course at the 300+ level.

## Philosophy and Mathematics: see Mathematics

Philosophy and Physics: see Physics

## Bioethics Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

10 full courses or their equivalent including at least 4.0 FCEs at the 300+ level of which 1.0 FCE must be at the 400 level
First year (recommended):
PHL100Y1
BIO120H1, BIO220H1
Higher Years (required):

1. PHL281H1, PHL271H1, PHL275H1

## Philosophy

## 2. PHL245H1/PHL246H1

3. 1.5 full courses from Group 1 (Advanced Bioethics)
4. 1.0 full course from Group 2 (Value Theory)
5. 0.5 full course from Group 3 (Metaphysics and Epistemology).
6. Additional philosophy courses, to a total of 10 FCEs, or else additional philosophy courses to a total of 9.0 FCEs and 1.0 FCE from Group 4 (Interdisciplinary)

## Bioethics Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
7 full courses or their equivalent including at least 2.0 FCEs at the $300+$ level of which 0.5 FCE must be at 400 level.

First year (recommended):
PHL100Y1
BIO120H1, BIO220H1
Higher Years (required):

1. PHL281H1
2. PHL245H1/PHL2461H
3. 1.0 full course from Group 1 (Advanced Bioethics)
4. 1.5 full courses from PHL271H1 / PHL275H1 / Group 2 (Value Theory)
5. 0.5 course from Group 3 (Metaphysics and Epistemology).
6. Additional philosophy courses, to a total of 7.0 FCEs, or else additional philosophy courses to a total of 6.5 FCEs, plus 0.5 FCE from Group 4 (Interdisciplinary).

## Bioethics Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent including at least 1.0 FCE at $300+$ level)

1. PHL281H1
2. PHL245H1/PHL246H1
3. One half course from Group 1 (Advanced Bioethics)
4. One full course from PHL271H1 / PHL275H1 / Group 2 (Value Theory)
5. Additional philosophy courses to a total of four.

## Bioethics Course Groups

Group 1 Advanced Bioethics
PHL380H1, PHL381H1, PHL382H1, PHL383H1, PHL384H1, PHL440H1, PHL470H1

## Group 2 Value Theory

PHL265H1, PHL295H, PHL365H1, PHL366H1, PHL370H1, PHL375H1, PHL407H1, PHL412H1, PHL413H1, PHL483H1

## Group 3 Metaphysics and Epistemology

PHL232H1, PHL240H1, PHL331H1, PHL332H1, PHL340H1,
PHL341H1, PHL342H1, PHL355H1, PHL357H1, HPS250H1, HPS350H1

## Group 4 Interdisciplinary

NOTE: Many of these courses have Prerequisites; students
who wish to use these courses for their Bioethics program must fulfill all those Prerequisites as required by the departments concerned:
ANT 348H1, ECO 369Y1, GER338H1, GGR340H1,
HIS423H1, HIS459H1, HIS489H1, HMB201H1, HMB202H1, HPS318H1, HPS319H1, JHE353H1, SOC243H1,

SOC244H1, SOC309Y1, SOC327Y1, SOC363H1, WGS261Y1, WGS366H1, WGS367H1

## Environmental Ethics (Arts Program): see Centre for Environment

## Philosophy Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## 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 [48L/24T]

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, PHL201H1
DR=HUM; BR=2

## 200-SERIES COURSES

Note: No 200-series course has a 100 -series PHL course as Prerequisite.

## PHL200Y1 Ancient Philosophy [72L]

Central texts of the pre-Socratics, Plato, Aristotle, and postAristotelian philosophy.
DR=HUM; BR=2
TRN200Y1 Modes of Reasoning
See "Trinity College Courses"
PHL201H1 Introductory Philosophy [36L]
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.
Prerequisite: Four FCEs in any subject
Exclusion: PHL100Y1, PHL102Y1, or more than 1.0 PHL course
DR=HUM; BR=2
PHL205H1 Early Medieval Philosophy [36L]
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.
DR=HUM; BR=2

## PHL206H1 Later Medieval Philosophy [36L]

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.
DR=HUM; BR=2
PHL210Y1 17th-and 18th-Century Philosophy [72L]
Central texts of such philosophers as Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. DR=HUM; BR=2

## PHL217H1 Introduction to Continental Philosophy [36L]

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
DR=HUM; BR=2

## PHL232H1 Knowledge and Reality [36L]

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: PHL230H1, PHL231H1
$D R=H U M ; B R=2$
PHL235H1 Philosophy of Religion [36L]
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.
Exclusion: PHL236Y1
DR=HUM; BR=2
PHL237H1 History of Chinese Philosophy [36L]
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
DR=HUM; BR=2
PHL240H1 Persons, Minds and Bodies [36L]
Consciousness and its relation to the body; personal identity and survival; knowledge of other minds; psychological events and behaviour.
DR=HUM; BR=2
PHL243H1 Philosophy of Human Sexuality [36L]
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. DR=HUM; BR=2

## PHL244H1 Human Nature [36L]

Aspects of human nature, e.g., emotion, instincts, motivation. Theories of human nature, e.g., behaviourism, psychoanalysis.
DR=HUM; BR=2
PHL245H1 Modern Symbolic Logic [36L]
The application of symbolic techniques to the assessment of arguments. Propositional calculus and quantification theory. Logical concepts, techniques of natural deduction.
Exclusion: CSC330H1
DR=None; $\mathrm{BR}=2$
PHL246H1 Probability and Inductive Logic [36L] 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
DR=HUM; BR=2

## PHL247H1 Critical Reasoning [36L]

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
DR=HUM; BR=2
COG250Y1 Introduction to Cognitive Science See "Cognitive Science"

## HPS250H1 Introductory Philosophy of Science

 See "History \& Philosophy of Science \& Technology"PHL265H1 Introduction to Political Philosophy [36L] 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.
DR=HUM; BR=3
PHL268H1 Philosophy and Social Criticism [36L] Is the objective of philosophy to understand and interpret the world, or to change it? A study of theorists who have taken philosophy to be a tool for social criticism. Topics studied may include feminism, critical race theory, anti-consumerism, the critique of mass society, and conservative cultural criticism.
DR=HUM; BR=3
PHL271H1 Law and Morality [36L]
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.
DR=HUM; BR=3
PHL273H1 Environmental Ethics [36L]
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. DR=HUM; BR=3

## Philosophy

## PHL275H1 Introduction to Ethics [36L]

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.
DR=HUM; BR=2
PHL281H1 Bioethics (formerly PHL281Y1) [36L]
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
DR=HUM; BR=3

## PHL285H1 Aesthetics [36L]

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.
DR=HUM; BR=1

## PHL295H1 Business Ethics [36L]

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? DR=HUM; BR=3

## PHL299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## 300-SERIES COURSES

All 300-series courses have a Prerequisite of three half courses (or equivalent) in philosophy, with the exception of PHL345H1 - PHL349H1, PHL356H1 and PHL357H1. 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 [36L]

A study of selected Greek philosophers before Plato.
Topics may include the Pre-Socratic natural philosophers, Parmenides and the Eleatics, and the so-called sophistic movement.
Prerequisite: PHL200Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
$D R=H U M ; B R=2$

PHL302H1 Ancient Philosophy After Aristotle [36L]
A study of selected themes in post-Aristotelian philosophy. Topics may include Stoicism, Epicureanism, Neoplatonism, and various forms of scepticism.
Prerequisite: PHL200Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
$D R=H U M$; $B R=2$
UNI302H1 Bases of Cognition [36L]
See University College Courses

## PHL303H1 Plato [36L]

Selected metaphysical, epistemological, and ethical themes in Plato's dialogues.
Prerequisite: PHL200Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL304H1 Aristotle [36L]
Selected anthropological, ethical and metaphysical themes in the works of Aristotle.
Prerequisite: PHL200Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL307H1 Augustine [36L]
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/PHL205H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL308H1 Aquinas [36L]
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/PHL205H1/PHL206H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL309H1 Topics in Medieval Philosophy [36L] 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/PHL205H1/PHL206H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL310H1 The Rationalists [36L]
Central philosophical problems in philosophers such as Descartes, Spinoza, Leibniz, and their contemporaries. Prerequisite: PHL210Y1, 7.5 courses (in any field) with at least 1.5 in philosophy DR=HUM; BR=2
PHL311H1 The Empiricists [36L]
Central philosophical problems in philosophers such as Locke, Berkeley, Hume, and their contemporaries.
Prerequisite: PHL210Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2

PHL313H1 Topics in 17th and 18th Century Philosophy [36L]
Central philosophical problems arising in the early modern period.
Prerequisite: PHL210Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
$D R=H U M ; B R=2$
PHL314H1 Kant (formerly PHL312H1) [36L]
A systematic study of The Critique of Pure Reason.
Prerequisite: PHL210Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
Exclusion: PHL312H1
DR=HUM; BR=2
PHL315H1 Topics in 19th-Century Philosophy [36L]
Central philosophical problems arising in the 19th century.
Prerequisite: PHL210Y1, 7.5 courses (in any field) with at
least 1.5 in philosophy
DR=HUM; BR=2
PHL316H1 Hegel [36L]
An examination of Hegel's project of absolute knowing, its philosophical assumptions, and its implications for history, science and experience.
Prerequisite: PHL210Y1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2

## PHL317H1 Marx and Marxism [36L]

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.
Prerequisite: 7.5 courses (in any field) with at least 1.5 in philosophy
Exclusion: PHL216H1, PHL318H1
Recommended Preparation: PHL265H1/POL200Y1 DR=HUM; BR=2

## PHL319H1 Philosophy and Psychoanalytic Theory [36L]

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.
DR=HUM; BR=2

## PHL320H1 Phenomenology [36L]

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/PHL217H1, 7.5 courses (in any
field) with at least 1.5 in philosophy

## DR=HUM; BR=2

PHL321H1 Heidegger [36L]
Some work from the 1920s (either Being and Time or contemporary lectures) and selections from Heideggers 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, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2

## PHL322H1 Contemporary Continental Philosophy

 [36L]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, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL323H1 Social and Cultural Theory [36L]
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.
Prerequisite: 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=3
PHL325H1 Early Analytic Philosophy [36L]
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 PHL232H1/PHL240H1, 7.5 courses (in any field) with at least 1.5 in philosophy DR=HUM; BR=2
PHL326H1 Wittgenstein [36L]
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 PHL210Y1/PHL232H1/PHL240H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2

## PHL331H1 Metaphysics [36L]

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, 7.5 courses (in any field) with at least 1.5 in philosophy
Exclusion: PHL330Y1
DR=HUM; BR=2

## PHL332H1 Epistemology [36L]

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, 7.5 courses (in any field) with at least 1.5 in philosophy
Exclusion: PHL330Y1
$D R=H U M ; B R=2$
PHL335H1 Issues in Philosophy of Religion [36L] 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.

## Philosophy

Prerequisite: 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2

## PHL336H1 Islamic Philosophy [36L]

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, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL337H1 Topics in Chinese Philosophy [36L]
An intermediate level treatment of such topics as: human nature; good and evil; the role of emotions; the metaphysical ultimate.
Prerequisite: PHL237H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL338H1 Jewish Philosophy [36L]
A selection of texts and issues in Jewish philosophy, for example, Maimonides' Guide of the Perplexed, Bubers The
Prophetic Faith, prophecy and revelation, Divine Command
and morality, creation and eternity, the historical dimension of

## Jewish thought.

Prerequisite: 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL340H1 Issues in Philosophy of Mind [36L]
Typical issues include: the mind-brain identity theory;
intentionality and the mental; personal identity.
Prerequisite: One of COG250Y1/UNI250Y1/PHL240H1, 7.5
courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL341H1 Freedom, Responsibility, and Human Action
[36L]
Human action, and the nature of freedom and responsibility in the light of contemporary knowledge concerning the causation of behaviour.
Prerequisite: PHL210Y1/PHL232H1/PHL240H1, 7.5 courses
(in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL342H1 Minds and Machines [36L]
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.
Prerequisite: 7.5 courses (in any field) with at least 1.5 in philosophy or COG250Y1

## DR=HUM; BR=2

JPP343H1 Women in Western Political Thought (formerly JPP343Y1) [24L]
Examines contemporary feminist perspectives in political theory as responses to the limitations of western tradition of modern political theory. (Given by the Departments of Philosophy and Political Science)
Prerequisite: NEW360Y1/PHL265H1/POL200Y1
Exclusion: JPP343Y1/POLC76H3/POLC77H3
DR=HUM/SOC SCI; BR=2

## PHL345H1 Intermediate Logic [36L]

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 DR=HUM; BR=2
PHL346H1 Philosophy of Mathematics [36L]
Platonism versus nominalism, the relation between logic and mathematics, implications of Gödels theorem, formalism and intuitionism.
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT DR=HUM; BR=2

PHL347H1 Modal Logic [36L]
Formal study of the concepts of necessity and possibility; modal propositional and quantificational logic; possibleworlds semantics; the metaphysics of modality.
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT DR=HUM; BR=2

PHL348H1 Metalogic (formerly PHL344H1) [36L]
Soundness and completeness of propositional and
quantificational logic, undecidability of quantificational logic, and other metalogical topics.
Prerequisite: PHL245H1 and a full course in PHL/CSC/MAT
Exclusion: MAT309H1/CSC438H1, PHL344H1
DR=HUM; BR=2

## PHL349H1 Set Theory [36L]

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 DR=HUM; BR=2

## HPS350H1 Revolution in Science

See "History and Philosophy of Science and Technology"
PHL351H1 Philosophy of Language [36L]
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 PHL232H1/PHL240H1,
7.5 courses (in any field) with at least 1.5 in philosophy DR=HUM; BR=2

PHL355H1 Philosophy of Natural Science [36L]
The structure and methods of science: explanation,
methodology, realism and instrumentalism.
Recommended Preparation: A solid background in science or HPS250H1/PHL246H1, 7.5 courses (in any field) with
at least 1.5 in philosophy
DR=HUM; BR=2
PHL356H1 Philosophy of Physics [36L]
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.
DR=HUM; BR=2

## PHL357H1 Philosophy of Biology [36L]

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

## DR=HUM; BR=2

## PHL362H1 Philosophy of History [36L]

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?
Prerequisite: 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL365H1 Political Philosophy [36L]
A study of some of the central problems of political philosophy, addressed to historical and contemporary political theorists.
Prerequisite: PHL265H1/POL200Y1, 7.5 courses (in any field) with at least 1.5 in philosophy

## DR=HUM; BR=2

PHL366H1 Topics in Political Philosophy [39L]
A focused examination of a selected issue in political philosophy.
Prerequisite: PHL265H1/POL200Y1, 7.5 courses (in any field) with at least 1.5 in philosophy

## DR=HUM; BR=2

## PHL367H1 Philosophy of Feminism (formerly PHL267H1) [36L]

Selected issues and topics in the philosophy of feminism.
Prerequisite: PHL265H1/PHL268H1, 7.5 courses (in any field) with at least 1.5 in philosophy
Exclusion: PHL267H1
DR=HUM; BR=2

## PHL370H1 Issues in Philosophy of Law [36L]

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, 7.5 courses (in any field) with at least 1.5 in philosophy
Recommended Preparation: PHL265H1
DR=HUM; BR=2
PHL373H1 Issues in Environmental Ethics [36L] 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, 7.5 courses (in any field) with at least 1.5 in philosophy
$D R=H U M ; B R=2$

## PHL375H1 Ethics [36L]

An intermediate-level study of selected issues in moral philosophy, or of influential contemporary or historical works in ethical theory.
Prerequisite: PHL275H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL376H1 Topics in Moral Philosophy [39L]
A focused examination of a selected issue in moral philosophy.
Prerequisite: PHL275H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2

## PHL378H1 War and Morality [36L]

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/PHL275H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL380H1 Global Bioethics [36L]
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; HIVIAIDS; intellectual property and access to essential medicines; clinical trials in developing countries; exploitation and the 10/90 gap.
Prerequisite: PHL281H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL381H1 Ethics and Medical Research [36L]
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, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL382H1 Ethics: Death and Dying [36L]
An intermediate-level study of moral and legal problems, including the philosophical significance of death, the hightech 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, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL383H1 Ethics and Mental Health [36L]
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

## Philosophy

Mental Health Act, involuntary commitment, the insanity defence.
Prerequisite: PHL281H1, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2
PHL384H1 Ethics, Genetics and Reproduction [36L] 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, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=2

## PHL385H1 Issues in Aesthetics [36L]

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, 7.5 courses (in any
field) with at least 1.5 in philosophy
DR=HUM; $B R=1$
PHL388H1 Literature and Philosophy [36L]
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.
Prerequisite: 7.5 courses (in any field) with at least 1.5 in philosophy
Exclusion: PHL288H1
DR=HUM; BR=1

## PHL394H1 Markets and Morals [36L]

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/PHL275H1/POL200Y1, 7.5
courses (in any field) with at least 1.5 in philosophy
Exclusion: PHL296H1
DR=HUM; BR=3
PHL395H1 Issues in Business Ethics [36L]
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, 7.5 courses (in any field) with at least 1.5 in philosophy
DR=HUM; BR=3
PHL398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

PHL399Yo Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

## 400-SERIES COURSES

## Notes

The general Prerequisite for ALL 400-level courses is eight 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.
PHL400H1-PHL451H1 are undergraduate-level courses.
PHL470H1-PHL488H1 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.
Individual Studies courses (PHL495H1/PHL496H1/ PHL497H1), which involve directed study and research, are available to advanced students. Arrangements must be made with a faculty supervisor, and approval of the Undergraduate Coordinator obtained before registration.
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.
The Honours Seminar (PHL490Y1 and PHL498H1) and the Socrates Project (PHL489Y1) are special enrolment courses. If you are interested in these courses please contact the department.

## PHL400H1 Seminar in Ancient/Medieval Philosophy [36S]

Advanced discussion of the principal figures and themes in ancient and/or medieval philosophy.
Prerequisite: PHL200Y1, 4.0 credits in philosophy DR=HUM; BR=None

## PHL401H1 Seminar in the History of Philosophy [36S]

Advanced study of some of the principal figures in a
particular historical, philosophical tradition.
Prerequisite: PHL200Y1/PHL210Y1
DR=HUM; BR=None

## UNI401H1 Advanced Cognitive Science

See "University College Courses"

## PHL402H1 Seminar in Early Modern Philosophy [36S]

Advanced discussion of the principal figures and themes in the philosophy of the 17th and/or 18th centuries.
Prerequisite: PHL210Y1, 4.0 credits in philosophy
DR=HUM; BR=None
PHL403H1 Seminar in 19th-Century Philosophy [36S]
Advanced discussion of the principal figures and themes in 19th century philosophy.
Prerequisite: PHL210Y1/PHL217H1/PHL315H1/PHL316H1,
4.0 credits in philosophy

DR=HUM; BR=None

PHL404H1 Seminar in Epistemology [36S]
Typical problems include the nature of knowledge and belief; perception; theories of truth and necessity; skepticism.
Prerequisite: PHL232H1, 4.0 credits in philosophy
DR=HUM; BR=None
PHL405H1 Seminar in Philosophy of Mind [36S]
Advanced study of a problem in the philosophy of mind.
Prerequisite: PHL240H1/PHL342H1/UNI250Y1, 4.0 credits in philosophy
DR=HUM; BR=None
PHL406H1 Seminar in Metaphysics [36S]
Typical problems include causality and determinism; ontological categories; mind and body; the objectivity of space and time.
Prerequisite: PHL232H1, 4.0 credits in philosophy DR=HUM; BR=None

## PHL407H1 Seminar in Ethics [36S]

Advanced discussion of issues in moral philosophy, including issues of applied ethics.
Prerequisite: PHL275H1, 4.0 credits in philosophy

## DR=HUM; BR=None

PHL408H1 Seminar in Philosophy [36S]
Topics vary but bridge two or more areas or traditions of philosophy.
Prerequisite: 4.0 credits in philosophy
DR=HUM; BR=None
PHL409H1 New Books Seminar [36S]
Advanced study of key philosophical works published within the last five years.
Prerequisite: 4.0 credits in philosophy
DR=HUM; BR=None
PHL410H1 Seminar in Continental Philosophy [36S]
Advanced study of recent philosophical discussions within the continental tradition.
Prerequisite: PHL217H1/PHL315H1/PHL316H1/PHL319H1/
PHL320H1/PHL321H1/PHL322H1, 4.0 credits in philosophy
DR=HUM; BR=None
PHL411H1 Seminar in Analytic Philosophy [36S]
Advanced study of some topic of current philosophical interest within the analytic tradition.
Prerequisite: PHL245H1 and one of PHL232H1/PHL24OH1, 4.0 credits in philosophy

DR=HUM; BR=None
PHL412H1 Seminar in Political Philosophy [36S]
Advanced study of some topic in social or political philosophy.
Prerequisite: PHL265H1/PHL271H1, 4.0 credits in philosophy DR=HUM; BR=None

## PHL413H1 Seminar in Applied Ethics [36S]

Advanced study of some topic in an area of applied ethics, including bioethics, environmental ethics, and so on. Prerequisite: PHL271H1/PHL273H1/PHL275H1/PHL281Y1,
4.0 credits in philosophy

DR=HUM; BR=None
PHL414H1 Seminar in Philosophy of Religion [36S] Advanced study of topics in the philosophy of religion. Prerequisite: PHL235H1/PHL335H1, 4.0 credits in philosophy DR=HUM; BR=None

PHL415H1 Seminar in Philosophy of Science [36S]
Advanced study of some area or problem in the philosophy of science.
Prerequisite: One of PHL355H1 - PHL357H1 or HPS250H1, 4.0 credits in philosophy

DR=HUM; BR=None
PHL440H1 Clinical Bioethics [36S]
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 (by ballot). Limited to students enrolled in the Bioethics Specialist or Bioethics Major programs.
DR=HUM; BR=None
PHL451H1 Seminar in Logic/Philosophy of Language [36S]
Advanced study of some topic in logic and/or the philosophy of language.
Prerequisite: PHL245H1 and one of PHL232H1/PHL24OH1/ PHL246H1, 4.0 credits in philosophy
DR=HUM; BR=None

## PHL470H1 Advanced Bioethics[36S]

Philosophical exploration of the foundations and methodology of bioethics. Offered jointly with PHL2145H.
Prerequisite: PHL281H1 and one of PHL380H1/PHL381H1/ PHL382H1/PHL383H1/PHL384H1, and permission of the instructor and Department (by ballot). Limited to students enrolled in the Bioethics Specialist or Bioethics Major programs.
DR=HUM; BR=None

## PHL471H1 Advanced Topics in Greek Philosophy

 [36S]Advanced Topics in Greek Philosophy
Prerequisite: PHL200Y1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL472H1 Advanced Topics in Medieval Philosophy [36S]
Advanced Topics in Medieval Philosophy
Prerequisite: PHL200Y1/PHL205H1/ PHL206H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL473H1 Advanced Topics in Modern Philosophy [36S]
Advanced Topics in Modern Philosophy
Prerequisite: PHL210Y1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL475H1 Advanced Topics in Moral Philosophy [36S]
Advanced Topics in Moral Philosophy
Prerequisite: PHL275H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None

## PHL476H1 Advanced Topics in Epistemology [36S]

Advanced Topics in Epistemology
Prerequisite: PHL232H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None

## Philosophy

PHL477H1 Advanced Topics in Metaphysics [36S]
Advanced Topics in Metaphysics
Prerequisite: PHL232H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL478H1 Advanced Topics in Philosophy of Religion [36S]
Advanced Topics in Philosophy of Religion
Prerequisite: PHL235H1/PHL335H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL479H1 Advanced Topics in Philosophy of Mind [36S]
Advanced Topics in Philosophy of Mind
Prerequisite: UNI250Y1/PHL240H1/PHL340H1/ PHL341H1/
PHL342H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL480H1 Advanced Topics in Logic [36S]
Advanced Topics in Logic
Prerequisite: Two of PHL344H1 - PHL349H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL481H1 Advanced Topics in the Philosophy of Language [36S]
Advanced Topics in the Philosophy of Language
Prerequisite: PHL351H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL482H1 Advanced Topics in Philosophy of Natural Science [36S]
Advanced Topics in Philosophy of Natural Science
Prerequisite: One of PHL355H1 - PHL357H1 or HPS250H1, and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL483H1 Advanced Topics in Social and Political Philosophy [36S]
Advanced Topics in Social and Political Philosophy
Prerequisite: PHL265H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL484H1 Advanced Topics in the Philosophy of Law [36S]
Advanced Topics in the Philosophy of Law
Prerequisite: PHL271H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL485H1 Advanced Topics in Aesthetics [36S]
Advanced Topics in Aesthetics
Prerequisite: PHL285H1/PHL385H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None
PHL486H1 Advanced Topics in Philosophy of History [36S]
Advanced Topics in Philosophy of History
Prerequisite: PHL362H1 and permission of the instructor and Department (by ballot)
DR=HUM; BR=None

PHL487H1 Advanced Topics in Philosophy [TBA]
Advanced Topics in Philosophy
Prerequisite: Permission of the instructor and Department DR=HUM; BR=None

PHL488H1 Advanced Topics in Philosophy [TBA]
Advanced Topics in Philosophy
Prerequisite: Permission of the instructor and Department DR=HUM; BR=None
PHL489Y1 Advanced Topics in Philosophy [TBA]
Advanced Topics in Philosophy
Prerequisite: Permission of the instructor and Department DR=HUM; BR=None
PHL490Y1 Individual Studies (formerly PHL390Y1) [TBA]
Individual Studies
DR=HUM; BR=None
PHL495H1 Individual Studies (formerly PHL395H1) [TBA]
Individual Studies
DR=HUM; BR=None
PHL496H1 Individual Studies (formerly PHL396H1) [TBA]
Individual Studies
DR=HUM; BR=None
PHL497H1 Individual Studies (formerly PHL397H1) [TBA]
Individual Studies
DR=HUM; BR=None
PHL498H1 Individual Studies (formerly PHL398H1) [TBA]
Individual Studies
DR=HUM; BR=None
PHL499H1 Individual Studies (formerly PHL399H1) [TBA]
Individual Studies
DR=HUM; BR=None

Physical Education: see Kinesiology \& Physical Education

## Faculty

University Professor Emeritus
A.E. Litherland, B Sc, Ph D, FRSC, FRS

Professors Emeriti
R.L. Armstrong, MA, Ph D, FRSC
R.E. Azuma, MA, Ph D
M.J. Bronskill, M Sc, Ph D, FCCPM
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.M. Graham, M Sc, Ph D
J.V. Iribarne, Dr In Chem
D.G. Ivey, MA, Ph D
A.W. Key, MA, D Phil (I)
J.D. King, BA, D Phil (UTSC)
P.P. Kronberg, M Sc, Ph D, D Sc
R. List, Dipl Phys ETH, Dr Sc Nat, FRSC
R.K. Logan, B Sc, Ph D (N)
G.J. Luste, BA, Ph.D.
F.D. Manchester, M Sc, Ph D
A.D. May, MA, Ph D
J.W. Moffat, Ph D, D Sc
K.H. Norwich, M Sc, MD, Ph D
D.A.L. Paul, BA, Ph D
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J.D. Prentice, M Sc, Ph D
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M.B. Walker, B Eng, D Phil
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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)
S.R. Julian, B Sc, M Sc, Ph D

Professor and Associate Chair
(Undergraduate Studies)
P.J. Kushner, B Sc, M Sc, PhD

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
D.J. Donaldson, BSc, Ph D
R.N. Edwards, B Sc, Ph D, C Phys, F Inst P
R. Holdom, MA, Ph D
D.F.V. James, Ph D
M.L.G. Joy, MA Sc, Ph D

H-Y. Kee, MS, Ph D
Y-B. Kim, B Sc, M Sc, Ph D
H-K. Lo, Ph D
J.F. Martin, B Sc, D Phil
B. Milkereit, Ph D
G.W.K. Moore, B Sc, Ph D (UTM)
S.W. Morris, B Sc, M Sc, Ph D
N. Murray, Ph D
B. Netterfield, BS, Ph D
R.S. Orr, B Sc, Ph D
E. Poppitz, Ph D
J. Repka, B Sc, Ph D
T.G. Shepherd, 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

D.C. Bailey, B Sc, Ph D
V. Barzda, M Sc, Ph D (UTM)

A-A. Dhirani, BSc, Ph D
C. Gradinaru, Ph D (UTM)
D.B.A. Jones, AB, SM, Ph D

Y-J. Kim, BS, Ph D
P. Krieger, M Sc, Ph D
J. Lowman, B A, M Sc, Ph D (UTSC)
R.S. Marjoribanks, MS, Ph D
A. Paramekanti, B Tech, Ph D
A. Peet, B Sc, Ph D

U-L. Pen, M Sc, Ph D
P. Savard, M Sc, Ph D
S. Stanley, B Sc, Ph D
R. Teuscher, M Sc, Ph D
A.C. Thompson, BS, Ph D
J. Thywissen, MS, Ph D
K. Walker, B Sc, Ph D
J.T. Wei, MS, Ph D

Assistant Professors
K. Burch, B Sc, MS, Ph D
Q. Liu, BS, Ph D
D. McMillen, B Sc, M Sc, Ph D (UTM)
J.N. Milstein, BS, Ph D (UTM)
W. Ryu, AB, Ph D
M. Wells, B Sc, Ph D (UTSC)
A. Zilman, B Sc, M Sc, Ph D

## Senior Lecturers

V.B. Deyirmenjian, B Sc, Ph D
J. Harlow, B Sc, PhD
R.M. Serbanescu, M Sc, Ph D

## Part-Time Lecturers

N. Krasnopolskaia, Ph D
P. Savaria, M Sc, Ph D

Physics forms the bedrock of our understanding of Nature. Any physical object or process, or even the structure of the whole universe itself, can be the subject of physics. Physicists study an extremely diverse array of systems, from the simplest subatomic particles to the most complex processes found in biological cells or in the Earth's climate. Physics provides a comprehensive set of fundamental tools

## Physics

that can be brought to bear on many problems across a wide variety of fields.

Students can choose between Specialist Programs in Physics or Physics combined with numerous other sciences, as well as Philosophy. In addition, the Physics Major and Minor programs give the student the option of mixing Physics with the nearly limitless array of science and non-science programs available across the University. As well, students have the opportunity to do original research and to undertake independent supervised studies for course credit.
A program in physics has much to offer. Beyond the traditional careers of teaching and research, a knowledge of physics is a powerful asset for professions like Medicine or Law, or for careers involving the environmental, geological or biological sciences. An understanding of physics is essential for those who are concerned about how society is affected by the impact of climate change or advanced technology. The conceptual problem-solving tools one acquires as a physicist can be applied with great success to many occupations.

The Physics Specialist Program offers intensive training in all aspects of physics. Courses can be selected in order to emphasize the experimental, theoretical or applied sides of physics. In fourth year, students intending to undertake graduate studies are encouraged to take advanced optional courses. These courses are offered in areas such as Relativity, High Energy Physics, Quantum Optics, Condensed Matter, Geophysics and Atmospheric Physics, reflecting the research excellence of the faculty.

The Specialist Program in Biological Physics combines the analytical problem solving skills of the physicist with sound backgrounds in relevant biology and biochemistry. The interface between biology and physics lies at the forefront of the rapidly growing field of quantitative biology.
The Professional Experience Year program ("PEY": see also http://www.engineeringcareers.utoronto.ca/programs/ pey.htm) 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.

The Departmental web site gives detailed information on programs and courses, and describes the operation of the Department and the counseling services available. All students, most particularly those entering first year, are strongly urged to consult the web site before term begins.
Associate Chair (Undergraduate Studies): Professor P. J. Kushner, 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.

## Biological Physics Specialist (Science program)

The Biological Physics specialist program focuses on the physical principles that organize complex biological phenomena. How does diffusion limit the ability of cells to measure the concentration of chemicals? How do neurons transmit and process information? How does blood flow through a beating heart? In general, Biological Physics deals with problems at the interface of Physics, Biochemistry, and Systems Biology, and covers the full range of scales, from the molecular, to the cellular and the organismic. Students in this program will be trained to think rigorously and quantitatively about a wide range of interdisciplinary problems, and will be well prepared to work in a variety of fields such as medicine and biotechnology, and to undertake graduate work in the fast emerging field of Biological Physics.
Consult the Associate Chair (Undergraduate Studies), Department of Physics or Physiology.
(14.0 full courses or their equivalent, including at least one 400-series course)
First Year (3.5 FCE):
BIO130H1, (CHM138H1, CHM139H1)/CHM151Y1, (MAT135H1, MAT136H1)/MAT137Y1,
(PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
((PHY151H1, PHY152H1) recommended)
First or Second Year (0.5 FCE):
MAT223H1
Second Year (3.5 FCE):
BCH210H1, BIO230H1, CHM247H1, (MAT235Y1/ MAT237Y1), MAT244H1, PHY250H1
Third Year (2.5 FCE):
PHY224H1, PHY252H1, PHY254H1, PHY256H1, PHY354H1
Third or Fourth year (4.0 FCE):

1. PHY431H1
2. five of (PSL300H1, PSL301H1)/ PSL304H1/PSL305H1/PSL452H1/PSL350H1/ BCH311H1/ PSL432H1/BCH425H1/BCH427H1/BCH441H1/ BCH447H1/BCB420H1
3. two of PHY350H1/PHY356H1/PHY357H1/PHY358H1/ PHY385H1/PHY324H1/PHY407H1/PHY408H1/ PHY452H1/PHY454H1
NOTES: We strongly recommend you consider taking one of the research project courses PHY479Y1/PSL498Y1.

## Physics Specialist (Science Program)

The Physics Specialist Program offers rigorous training in the full spectrum of core physics subfields, as well as their numerous important applications. Practical courses treat the experimental and computational aspects and complement the lecture courses. Physics concerns many of the ultimate questions in our scientific understanding of the universe. What is the nature of matter and energy at the smallest scales? What are the physical processes that govern the Earth's climate? What is the nature of light and how can it be controlled? How do the collective properties of solids
emerge from those of individual atoms? How do biological processes organize themselves to maintain their survival? What is the structure and evolution of the Earth and the other planets? How can quantum information be used for computation? Physics seeks answers to these questions using a combination of theory, computation and precision experiment, and the results find application across all of science.
Consult the Associate Chair (Undergraduate Studies), Department of Physics.
(13.0 full courses or their equivalent, including at least one full course at the 400 level)

First Year: (2.5 FCE)
(MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1, MAT223H1/MAT240H1, (PHY151H1, PHY152H1)/ (PHY131H1, PHY132H1)
(MAT137Y1, MAT223H1, (PHY151H1, PHY152H1) recommended) .
Second Year : (4.0 FCE)
MAT237Y1/MAT257Y1/MAT235Y1, MAT244H1/MAT267H1, PHY224H1, PHY250H1, PHY252H1, PHY254H1, PHY256H1
(MAT237Y1, MAT244H1 recommended)
Second or Third Year: (0.5 FCE)
PHY324H1
Third Year: (3.0 FCE)
APM346H1, MAT334H1, PHY350H1, PHY354H1, PHY356H1, PHY3/4XXH1
Third or Fourth Year: (3.0 FCE)

1. PHY424H1
2. two of (PHY450H1, PHY452H1, PHY456H1, PHY454H1, PHY460H1)
3. one of (PHY3/4XXH1/JGP438H1/JPH441H1)
4. one of (PHY405H1/PHY407H1/PHY408H1/PHY426H1/ PHY479Y1)
5. plus one PHY4XXH1

## Notes:

1. Students intending to pursue a career in industry are encouraged to take advantage of the Professional Experience Year Program.
2. Students who do not include JPH441H1 or HPS200H1 as part of their program are expected to take another Arts \& Science course with a significant emphasis on "Ethics and Social Responsibility".

## Physics Major (Science Program)

( 7.5 full courses, or their equivalent, including at least 2.0 full courses at the $300+$ level, with at least 0.5 full courses at the 400 level)

A Physics Major program is appropriate for students interested in a more flexible and diverse undergraduate physics program. A Physics Major may be tailored to be a natural counterpart to a second Major in mathematics, astronomy, computer science, environmental science, geology or the life sciences. Students should consult the undergraduate chairs of Physics and the respective departments for advice on course selections.
First Year: (2.0 FCE)
(MAT135H1, MAT136H1)/MAT137Y1, (PHY131H1, PHY132H1)/ (PHY151H1, PHY152H1)

Second Year: (3.0 FCE)

1. MAT235Y1/MAT237Y1, MAT223H1, PHY224H1
2. One full course equivalent from ( PHY 231 H 1 , PHY331H1), PHY250H1, PHY252H1, PHY254H1, PHY256H1, ENV235H1
Third Year: (2.5 FCE)
3. MAT244H1, PHY324H1/PHY405H1/PHY407H1/ PHY408H1/PHY424H1
4. One full course equivalent from any PHY300+ courses
5. A half course from: any PHY400+ level course, including JGP438H1, JPH441H1

Notes:

1. The Physics Major program is not designed primarily for students intending to pursue graduate studies in Physics. Such students should consider a Specialist degree, or consult the Physics Associate Chair (Undergraduate Studies) about their course selections.
2. Students who do not include JPH441H1 or HPS200H1 as part of their program are expected to take another Arts \& Science course with a significant emphasis on "Ethics and Social Responsibility".

## Physics "Core" Minor (Science Program)

(4.0 full courses or their equivalent)

First Year: (1.0 FCE)
PHY151H1, PHY152H1
Second Year: (2.0 FCE)

1. PHY224H1
2. Three of: PHY250H1, PHY252H1, PHY254H1, PHY256H1
Third Year: (1.0 FCE)
3. PHY324H1
4. One of PHY354H1, PHY350H1, PHY356H1

## Astronomy and Physics Specialist: see Astronomy

 and Astrophysics section
## Chemical Physics Specialist: see Chemistry

 section
## Geophysics Specialist: see Geology section

Mathematics and Physics Specialist: see Mathematics section

Physics and Philosophy Specialist (Science Program)
Physics has deep historical roots in natural philosophy and many aspects of contemporary Physics raise profound philosophical questions about the nature of reality. The interdisciplinary Physics and Philosophy Program allows the student to engage with both Physics and Philosophy at their deepest levels, and to more fully explore the connections between them.
Consult Associate Chair (Undergraduate Studies),
Department of Physics or Philosophy.
(16.0 full courses or their equivalent, including at least 2.0 full courses at the 400 level)
First Year: (3.5 FCE)
PHY151H1, PHY152H1, (MAT137Y1/MAT157Y1), MAT223H1, PHL100Y1

## Physics

Second Year: (3.5 FCE)
MAT237Y1, MAT244H1, PHY250H1, PHY254H1, PHY256H1, HPS250H1
Third Year: (2.5 FCE)
MAT334H1, PHY252H1, PHY354H1, PHY350H1, PHY356H1
Fourth Year: (1.5 FCE)
PHY456H1, (PHY483H1/PHY452H1), PHY491H1
Any Year: (5.0 FCE)
PHL245H1, (PHL345H1/PHL347H1/PHL348H1/PHL349H1), PHL355H1, PHL356H1, (PHL415H1/PHL482H1),
plus 2.5 additional PHL courses, including at least 0.5 at the 300+ level

## Physics "Life and Environmental" Minor (Science

 Program)Basic understanding of physics for students focusing their academic studies in Life Sciences and/or the Environment.
Consult the Physics Associate Chair (Undergraduate Studies).
(4.0 full courses, or their equivalent)

First Year: (2.0 FCE)
(MAT135H1, MAT136H1)/MAT137Y1, (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1)
Second Year: (1.0 FCE)
Any other 1.0 full course equivalent from PHY courses at the 200+ level, including ENV235H1
Third Year: (1.0 FCE)
One full course equivalent from: Any 300 or 400 level PHY course, CSB472H1/JGP438H1/BME595H1

## Physics Courses

## Note

More detailed and current information on courses is available through the Physics Department web site. Many course numbers have changed in recent years: check the course descriptions and Exclusions below for course equivalencies. Pre- and co-requisites are recommendations which may be waived in special circumstances. Students should consult the Physics Associate Chair (Undergraduate Studies) with questions about pre- and co-requisites prior to the beginning of term.

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## PHY100H1 The Magic of Physics [24L/12T]

This course provides a survey of Physics, including both Classical and Modern Physics. It is designed for nonscientists, and assumes no background in either science or mathematics. The approach to the course is broad rather than deep. We will concentrate on the concepts underlying such fascinating topics as planetary motion, chaos, the nature of light, time travel, black holes, matter waves, Schrodinger's cat, quarks, and climate change. We will uncover the wonders of the classical and the quantum worlds courtesy of Galileo, Newton, Maxwell, Einstein, Heisenberg and many others.
(PHY100H1 is primarily intended as a Breadth Requirement course for students in the Humanities and Social Science)
Exclusion: PHY131H1/PHY132H1/PHY151H1/PHY152H1/
PHY110Y1/PHY138Y1/PHY140Y1 taken previously or concurrently
DR=SCI; BR=5
PHY101H1 Emergence in Nature [24L/12T]
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.
PHY101H1 is primarily intended as a Breadth Requirement course for students in the Humanities and Social Sciences
Exclusion: PHY131H1/PHY132H1/PHY151H1/PHY152H1/
PHY110Y1/PHY138Y1/PHY140Y1 taken previously or concurrently
DR=SCI; BR=5
PHY131H1 Introduction to Physics I [24L/20P]
A first university physics course primarily for students not intending to pursue a Specialist or Major program in Physical or Mathematical Sciences. Topics include: classical kinematics \& dynamics, momentum, energy, force, friction, work, power, angular momentum, oscillations, fluids, viscosity.
Prerequisite: MCV4U Calculus \& Vectors / MCB4U Functions \& Calculus
Corequisite: MAT135H1/MAT137Y1/MAT157Y1
Exclusion: PHY151H1/PHY110Y1/PHY138Y1/PHY140Y1
Recommended Preparation: SPH4U Physics and SCH4U Chemistry
DR=SCI; BR=5

## PHY132H1 Introduction to Physics II [24L/20P]

The second university physics course primarily for students not intending to pursue a Specialist or Major program in Physical or Mathematical Sciences. Topics include: waves, sound, light, electricity, magnetism, special relativity.
Prerequisite: PHY131H1/PHY151H1
Corequisite: MAT136H1/MAT137Y1/MAT157Y1
Exclusion: PHY152H1/PHY110Y1/PHY138Y1/PHY140Y1
DR=SCI; BR=5
PHY151H1 Foundations of Physics I [36L/12T/15P]
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.
Prerequisite: MCV4U Calculus \& Vectors / MCB4U Functions
\& Calculus; SPH4U Physics
Corequisite: MAT137Y1/MAT157Y1
Exclusion: PHY131H1/PHY110Y1/PHY138Y1/PHY140Y1
DR=SCI; BR=5

PHY152H1 Foundations of Physics II [36L/12T/15P]
The second physics course in many of the Specialist and Major Programs in Physical Sciences. Topics include special relativity and electromagnetism.
Prerequisite: PHY131H1/PHY151H1/PHY180H1
Corequisite: MAT137Y1/MAT157Y1
Exclusion: PHY132H1/PHY110Y1/PHY138Y1/PHY140Y1

## DR=SCI; BR=5

PHY189H1 Physics at the Cutting Edge [36L]
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.
Corequisite: PHY132H1/PHY152H1
DR=SCI; BR=5

## 200-SERIES COURSES

## Notes

Exceptional first year students, for example those who have scored very high on the Canadian Association of Physicists High School Exam, may be allowed direct enrollment in Physics Second Year Courses. Contact the Physics Associate Chair (Undergraduate Studies).
ALL 200-series PHY courses except PHY201H1 and PHY205H1 require (MAT135H1,MAT136H1)/MAT137Y1/ MAT157Y1.

## PHY201H1 Concepts of Physics [24L/12T]

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 Breadth Requirement course for students in the Humanities and Social Sciences

## DR=SCI; BR=5

PHY205H1 The Physics of Everyday Life [24L/12T]
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.
PHY205H1 is primarily intended as a Breadth Requirement course for students in the Humanities and Social Sciences Exclusion: PHY131H1/PHY132H1/PHY151H1/PHY152H1/

PHY110Y1/PHY138Y1/PHY140Y1 or equivalent, taken
previously or concurrently
DR=SCI; BR=5
JOP210H1 Holography for 3D Visualization [24L/54P]
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.
DR=SCI; BR=5

## PHY224H1 Practical Physics I [72P]

Develops the core practical experimental and computational skills necessary to do Physics. Students tackle simple physics questions involving mathematical models, computational simulations and solutions, experimental measurements, data and error analysis.
Prerequisite: PHY132H1/PHY152H1
Corequisite: PHY231H/PHY250H1/PHY252H1/PHY254H1/
PHY256H1/ENV235H1
Exclusion: PHY225H1
DR=SCI; BR=5
PHY231H1 Physics of Living Systems [24L/18P]
An introductory course for students interested in understanding the physical phenomena occurring in biological systems and the applications of physics in life sciences. Topics may include physical processes inside living cells and systems; medical physics and imaging.
Prerequisite: PHY132H1/PHY152H1, (MAT135H1,
MAT136H1)/MAT137Y1/MAT157Y1
Exclusion: PHY238YH1
Recommended Preparation: BIO130H1
DR=SCI; BR=5

## ENV235H1 Physics and the Environment [24L/12T]

The nature of physical processes in the Earth's environment, the global energy budget, sustainable energy source, wind, solar, geothermal, waves and tidal energy. Hazards, such as earthquakes, tsunamis and volcanoes. The physical principles of remote sensing and environmental monitoring of temperature, radioactivity, and ice cover.
Prerequisite: PHY131H1/PHY151H1, MAT135H1/MAT137Y1/ MAT157Y1
Exclusion: ENV235Y1
DR=SCI; BR=5
PHY250H1 Electricity and Magnetism [24L/12T]
Point charges; Coulombs Law; electrostatic field and potential; Gauss Law; conductors; electrostatic energy; magnetostatics; Amperes Law; Lorentz Force; Faradays Law; Maxwells equations.
Prerequisite: PHY132H1/PHY152H1
Corequisite: MAT235Y1/MAT237Y1/MAT257Y1
Exclusion: PHY238Y1, PHY251H1
DR=SCI; BR=5
PHY252H1 Thermal Physics [24L/12T]
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: PHY132H1/PHY152H1
Corequisite: MAT235Y1/MAT237Y1/MAT257Y1
DR=SCI; BR=5

## PHY254H1 Mechanics: From Oscillations to Chaos [24L/12T]

The course analyzes the linear, nonlinear and chaotic behaviour of classical mechanical systems such as harmonic oscillators, rotating bodies, and central field systems. The course will develop the analytical and numerical tools to solve such systems and determine their basic properties. The course will include mathematical analysis, numerical

## Physics

exercises using Python, and participatory demonstrations of mechanical systems.
Prerequisite: PHY132H1/PHY152H1 (PHY152H1 recommended)
Corequisite: MAT235Y1/MAT237Y1/MAT257Y1 (MAT244H1 and PHY224H1 recommended Co-requisites)
Exclusion: PHY255H1
DR=SCI; BR=5

## PHY256H1 Introduction to Quantum Physics [24L/12T]

Failures of classical physics; the Quantum revolution; SternGerlach effect; harmonic oscillator; uncertainty principle; interference packets; scattering and tunneling in onedimension.
Prerequisite: PHY132H1/PHY152H1
Corequisite: MAT235Y1/MAT237Y1/MAT257Y1 (MAT223H1/
MAT240H1 recommended)
DR=SCI; BR=5

## PHY299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.

## DR=SCI; BR=None

## 300-SERIES COURSES

## Note

Students taking 300 -series courses are invited to attend the Thursday afternoon Department colloquia.

## JPH311H1 History of Physics [24S]

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-half PHY course at university level Exclusion: HPS311H1
DR=HUM/SCI; BR=5

## PHY324H1 Practical Physics II [12L/72P]

A modular practical course that further develops the core experimental and computational skills necessary to do Physics: Mathematical models, computational simulations and solutions, experimental measurements, data and error analysis.
Prerequisite: PHY224H1
Exclusion: PHY225H1
DR=SCI; BR=5

## PHY331H1 Introduction to Biological Physics [24L/18P]

A course for students interested in a deeper understanding of physical phenomena occurring in biological systems. Thermodynamics, diffusion, entropic forces, fluids, biological applications.
Prerequisite: PHY231H1/PHY224H1 (or permission of instructor)
DR=SCI; BR=5
PHY350H1 Electromagnetic Theory [24L/12T]
Solving Poisson and Laplace equations via method of images and separation of variables, Multipole expansion for electrostatics, atomic dipoles and polarizability, polarization in dielectrics, Ampere and Biot-Savart laws,
multipole expansion in magnetostatics, magnetic dipoles, magnetization in matter, Maxwell's equations in matter.
Prerequisite: (MAT223H1/MAT240H1/MAT244H1),
PHY250H1, PHY254H1
Exclusion: PHY352H1
DR=SCI; BR=5
PHY354H1 Classical Mechanics [24L/12T]
Symmetry and conservation laws, stability and instability, generalized co-ordinates, Hamiltons principle, Hamiltons equations, phase space, Liouvilles theorem, canonical transformations, Poisson brackets, Noethers theorem.
Prerequisite: (MAT244H1/MAT267H1), PHY254H1
Exclusion: PHY351H1
DR=SCI; BR=5

## PHY356H1 Quantum Mechanics I [24L/12T]

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.
Prerequisite: (MAT223H1/MAT240H1), PHY250H1,
(PHY256H1/CHM225Y1), (PHY256H1 recommended)
Corequisite: MAT244H1
Exclusion: CHM326H1, PHY355H1
DR=SCI; BR=5
PHY357H1 Nuclear and Particle Physics [24L/12T]
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: PHY356H1

## DR=SCI; BR=5

PHY358H1 Atoms, Molecules and Solids [24L/12T]
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 PHY400level course.
Prerequisite: PHY356H1
DR=SCI; BR=5

## PHY371Y1 Supervised Study in Physics

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. Consult the department web pages for some possible topics.
This course may also be available in the summer.
Prerequisite: Consult the Physics Associate Chair
(Undergraduate Studies)
DR=SCI; BR=5

## PHY372H1 Supervised Study in Physics

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. Consult the department web site for some possible topics.
This course may also be available in the summer.
Prerequisite: Consult the Physics Associate Chair
(Undergraduate Studies)
DR=SCI; BR=5

## PHY385H1 Introductory Optics [24L/20P]

An introduction to the physics of light. Topics covered include: electromagnetic waves and propagation of light; the Huygens and Fermat principles; Geometrical optics and optical instruments; Interference of waves and diffraction; Polarization; Introduction to photons, lasers, and optical fibers.
Prerequisite: PHY250H1, PHY254H1
DR=SCI; BR=5

## PHY392H1 Physics of Climate [24L]

This course provides an introduction to climate physics and the earth-atmosphere-ocean system. Topics include solar and terrestrial radiation; global energy balance; radiation laws; radiative transfer; atmospheric structure; convection; the meridional structure of the atmosphere; the general circulation of the atmosphere; the ocean and its circulation; and climate variability.
Prerequisite: (PHY231H1/PHY250H1), (MAT235Y1/
MAT237Y1)
Exclusion: PHY315H1
DR=SCI; BR=5

## PHY395H1 Physics of the Earth [24L]

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: PHY152H1/PHY254H1, MAT235Y1/MAT237Y1,
MAT244H1 (or permission of instructor)
Exclusion: PHY359H1
DR=SCI; BR=5

## PHY396Y0 Research Topic Abroad [TBA]

Course credit for research or field studies abroad under the supervision of a faculty member.
Prerequisite: At least 8.5 FCEs and no more than 14.0 FCEs DR=SCI; BR=5

PHY398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Consult the Physics Department web pages for information about opportunities.
DR=SCI; BR=None
PHY399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. See page 33 for details. Consult the Physics Department web pages for information about opportunities. DR=SCI; BR=None

## 400-SERIES COURSES

## Note

Students taking 400-series courses are invited to attend Thursday afternoon Department colloquia.

## PHY405H1 Electronics Lab [24L/36P]

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, flipflops, 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: PHY324H1, PHY250H1, PHY254H1
Exclusion: PHY305H1
DR=SCI; BR=5
PHY407H1 Computational Physics [12L/36P]
This is an introduction to problem solving by computer where symbolic, numeric and graphical approaches are combined. The emphasis is on a range of ordinary and partial differential equations encountered in physics. Special functions, wave functions, Lagrangians and Monte Carlo methods are also considered.
Prerequisite: PHY224H1/PHY250H1/PHY324H1
Corequisite: Any third-year lecture course in Physics.
PHY407H1 may be taken in third or fourth year.
Exclusion: PHY307H1
DR=SCI; BR=5
PHY408H1 Times Series Analysis [12L/24P]
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.
Prerequisite: PHY407H1/PHY224H1/PHY250H1/PHY254H1/ PHY324H1
Corequisite: Any third-year lecture course in Physics
Exclusion: PHY308H1
DR=SCI; BR=5
PHY424H1 Advanced Physics Laboratory [72P]
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: PHY224H1/PHY250H1/PHY256H1/PHY324H1
Exclusion: PHY326H1
DR=SCI; BR=5
PHY426H1 Advanced Practical Physics [[72P]
This course is a continuation of PHY424H1, but students have more freedom to progressively focus on specific areas of physics, do extended experiments, projects, or computational modules.
Prerequisite: PHY424H1
DR=SCI; BR=5
PHY428H1 Advanced Practical Physics II [72P]
This course is a continuation of PHY426H1, but students have more freedom to progressively focus on specific

## Physics

areas of physics, do extended experiments, projects, or computational modules.
Prerequisite: PHY426H1
DR=SCI; BR=5
PHY429H1 Advanced Practical Physics III [72P]
This course is a continuation of PHY428H1, but students have more freedom to progressively focus on specific areas of physics, do extended experiments, projects, or computational modules.
Prerequisite: PHY428H1
DR=SCI; BR=5
PHY431H1 Topics in Biological Physics [24L/12T]
An introduction to the physical phenomena involved in the biological processes of living cells and complex systems. Models based on physical principles applied to cellular processes will be developed. Biological computational modeling will be introduced.
Prerequisite: MAT235Y1/MAT237Y1/MAT257Y1, PHY331H1/
PHY250H1, PHY252H1
Exclusion: PHY346H1
DR=SCI; BR=5
JPH441H1 Physical Science in Contemporary Society [24S]
Complex nature of the scientific method; connection between theory, concepts and experimental data; insufficiency of reductionism; characteristics of pathological and pseudoscience; public perception and misperception of science; science and public policy; ethical issues; trends in modern science.
Prerequisite: PHY224H1/PHY252H1/PHY256H1/ENV235H1
Exclusion: PHY341H1

## DR=HUM; BR=3

## PHY450H1 Relativistic Electrodynamics [24L/12T]

Special Relativity, four-vector calculus and relativistic notation, the relativistic Maxwell's Equations, electromagnetic waves in vacuum and conducting and non-conducting materials, electromagnetic radiation from point charges and systems of charges.
Prerequisite: PHY 350 H 1
Exclusion: PHY353H1
DR=SCI; BR=5
PHY452H1 Basic Statistical Mechanics [24L]
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.
Prerequisite: PHY224H1/PHY324H1/PHY231H1/PHY331H1/
PHY250H1/PHY252H1/PHY254H1/PHY256H1/
ENV235H1
Exclusion: PHY480H1
DR=SCI; BR=5

## PHY454H1 Continuum Mechanics [24L/12T]

The theory of continuous matter, including solid and fluid mechanics.Topics include the continuum approximation, dimensional analysis, stress, strain, the Euler and NavierStokes equations, vorticity, waves, instabilities, convection and turbulence.
Exclusion: PHY459H1
DR=SCI; BR=5

PHY456H1 Quantum Mechanics II [24L/12T]
Quantum dynamics in Heisenberg and Schrdinger Pictures; WKB approximation; Variational Method; Time-Independent Perturbation Theory; Spin; Addition of Angular Momentum; Time-Dependent Perturbation Theory; Scattering.
Prerequisite: PHY356H1
Exclusion: PHY457H1
DR=SCI; BR=5

## PHY460H1 Nonlinear Physics [36L]

The theory of nonlinear dynamical systems with applications to many areas of physics. Topics include stability,
bifurcations, chaos, universality, maps, strange attractors and fractals. Geometric, analytical and computational methods will be developed.
Prerequisite: PHY354H1
DR=SCI; BR=5

## Note

Students are required to consult the Physics Associate Chair (Undergraduate Studies) before enrolling in PHY471Y1/ PHY472H1, PHY478H1/PHY479Y1.

## PHY471Y1 Supervised Study in Physics

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. Consult the department web pages for some possible topics. This course may also be available in the summer.
Prerequisite: Consult the Physics Associate Chair
(Undergraduate Studies).
DR=SCI; BR=5

## PHY472H1 Supervised Study in Physics

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. Consult the department web pages for some possible topics.
This course may also be available in the summer.
Prerequisite: Consult the Physics Associate Chair
(Undergraduate Studies).
DR=SCI
$\mathrm{BR}=5$

## PHY478H1 Undergraduate Research Project

An individual experimental or theoretical research project undertaken 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 independent research. Consult the department web site for some possible topics. This course may also be available in the summer.
Prerequisite: Consult the Physics Associate Chair
(Undergraduate Studies).
DR=SCI; BR=5

## PHY479Y1 Undergraduate Research Project

An individual experimental or theoretical research project undertaken with the advice of, and under the direction of, a faculty member. A student may take advantage of this course either to specialize further in a field of interest or to explore independent research. Consult the department web site for
possible topics. This course may also be available in the summer.
Prerequisite: Consult the Physics Associate Chair (Undergraduate Studies)
DR=SCI; BR=5

## 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. Most Advanced Courses are offered every year, but some are not. Please check the Physics Department web site for current offerings.
It is the student's responsibility to ensure they have adequate preparation for any of the Optional Advanced courses. Please contact the course instructor or the Physics Associate Chair (Undergraduate Studies) for more information.

## PHY483H1 Relativity Theory I [24L]

Basis to Einstein's theory: differential geometry, tensor analysis, gravitational physics leading to General Relativity. Theory starting from solutions of Schwarzschild, Kerr, etc. DR=SCI; BR=5

## PHY484H1 Relativity Theory II [24L]

Applications of General Relativity to Astrophysics and Cosmology. Introduction to black holes, large-scale structure of the universe.
DR=SCI; BR=5
PHY485H1 Lasers and Modern Optics [24L]
Maxwells equations in media, basic optics and imaging, manipulations of polarization, coherence and diffraction theory, Gaussian beams, laser resonators, simple semiclassical laser theory. End-of year student seminars from the range of modern areas of research, e.g., laser cooling, photonic bandgap structures, extreme optics, quantum information, and other topics.
Prerequisite: PHY350H1, PHY356H1
DR=SCI; BR=5
PHY487H1 Condensed Matter Physics [24L]
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.
DR=SCI; BR=5
PHY489H1 Introduction to High Energy Physics [24L]
This course introduces the basics of fundamental particles and the strong, weak and electromagnetic forces that govern their interactions in the Standard Model of particle physics. Topics include relativistic kinematics, conservation laws, particle decays and scattering processes, with an emphasis on the techniques used for calculating experimental observables.
DR=SCI; BR=5

## PHY491H1 Current Interpretations of Quantum Mechanics [24L/12T]

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: PHY456H1
DR=SCI; BR=5
PHY492H1 Advanced Atmospheric Physics [24L]
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.
Exclusion: PHY498H1
DR=SCI; BR=5
PHY493H1 Seismology [24L]
This course covers wavefield and ray approximation methods for imaging the interior of the Earth, including hydrocarbon reservoirs and mineral deposits, using seismology.
DR=SCI; BR=5
PHY494H1 Geophysical Imaging: EM and Potential Fields [24L]
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.
DR=SCI; BR=5
PHY495H1 Research Topic in Geophysics [24L]
A research project done in consultation with an individual staff member on a geophysics-related topic leading to a detailed written report and oral presentation. The course will also involve weekly lectures where the student will be introduced to various geophysical research methods and current research topics in geophysics.
Corequisite: PHY395H1/PHY493H1/PHY494H1
DR=SCI
$B R=5$

## Physiology

## 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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M. Percy, Ph D
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A.M-F. Sun, MA, Ph D
M. Vranic, MD, D Sc, FRCP (C), FRSC

Professor and Chair of the Department
S.G. Matthews, Ph D

Professors
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G.H. Anderson, M Sc, Ph D
P. Backx, Ph D
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M. Wheeler, Ph D
C. Wittnich, DVM, M Sc
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## Associate Professors

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Assistant Professors
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H. Mount, Ph D
D. Ng, Ph D, MD, FRCP (C)
J.V. Rocheleau, PhD
I. Rogers, Ph D
H.-S. Sun, MD, Ph D
H. Suzuki, MD, Ph D
A. Velumian, Ph D
A. Volchuk, Ph D

## Senior Lecturer

C. Perumalla, M Sc, D Phil

## Lecturers

M.B. French, M Sc, Ph D
N. Kee, Ph D

Physiology is the study of living matter in action. It integrates physical and life science disciplines in order to understand body functions and the origins of disease. Beyond the study of control mechanisms, compensations, and cooperation among body molecules, cells, tissues and organs, the interaction between the bodys external and internal environments is a key theme in Physiology. Most importantly, Physiology unifies the life sciences from molecule to organism, providing the link from genomics, and molecular signaling pathways to behavior and disease. Emerging fields for physiologists are the analysis of the functional implications of genomic sequence variation, developmental factors leading to chronic illness, and novel approaches for regenerative medicine.

Biological function---of molecules, cells, and organs----is at the heart of Physiology, and this knowledge is fundamental to the life sciences in general. Accordingly, Physiology provides an excellent and often necessary background for subsequent training in Medicine, Dentistry, Pharmacy, Nursing, Physical or Occupational Therapy, and other health-related professions. It is also excellent preparation for graduate work in Physiology and related areas; or for the teaching of Biological Science in secondary schools. Physiologists are needed in hospitals and departments of medicine as teachers and research personnel. Other outlets would be in agriculture and veterinary medicine, 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.physiology. utoronto.ca).
Undergraduate Secretary: Dr. M.B. French, Medical Sciences Building, Room 3368 (416-978- 8712)
Enquiries and Counseling: Medical Sciences Building, Room 3209 (416-978-5077)

## Physiology Programs

## Biological Physics: see Physics

## Physiology Specialist (Science program)

Physiology Specialist program ( 14 full courses or their equivalent)
The Physiology Specialist program is a Type 3 program. Only students with an average of at least $70 \%$ in the required first-year courses and a minimum of $60 \%$ in each of these
courses will be considered for entrance into the specialist program. Enrolment is limited and selection is based on performance in the following first-year required courses: $\mathrm{BIO} 130 \mathrm{H} 1, \mathrm{CHM} 138 \mathrm{H} 1, \mathrm{CHM} 139 \mathrm{H} 1$ or their equivalents, and 1.5 full course equivalents from: BIO120H1, MAT135H1, MAT136H1, MAT137Y1, PHY131H1, PHY132H1. Students apply via the Faculty's Subject POSt website. For more information, refer to the Physiology website at www. physiology.utoronto.ca.
First Year:
BIO120H1/PSL190H1, BIO130H1; CHM138H1, CHM139H1, PHY131H1, PHY132H1
First Year or upper years:
(MAT135H1, MAT136H1)/MAT137Y1 ${ }^{1}$
Second Year:

1. BCH210H1; BIO230H1; CHM220H1/CHM247H1; PSL300H1, PSL301H1
2. 1.5 full course equivalents from: $\mathrm{BIO} 220 \mathrm{H} 1, \mathrm{BIO} 260 \mathrm{H} 1 /$ HMB265H1; MAT235Y1, PHY231H1, PSL299Y1, STA220H1/STA250H1
Third Year:
3. BCH370H1; PSL304H1, PSL305H1, PSL350H1/ CSB349H1/BCH311H1, PSL372H1, PSL374H1
4. One full course equivalent from the following list: ANA300Y1; CSB325H1, CSB332H1, CSB343H1, CSB345H1, CSB346H1, CSB347H1, CBS445H1; IMM334Y1; PCL201H1, PCL285H1, PCL302H1; PHY331H1, PSL378H1/PSL379H0; PSY397H1
Fourth Year: (at least 2 FCEs at 400-level)
5. PSL498Y1/PSL499H1
6. 1-1.5 full course equivalents from PSL400-series or HMB472H1
${ }^{1}$ These courses may be taken in the first year or subsequent years, and are not required for entrance into the specialist program.

## Physiology Major (Science Program)

This is a limited enrolment subject POSt that can only accommodate a limited number of students. Eligibility will be competitive and based on a student's marks in the 3.0 required first-year courses:
BIO120H1, BIO130H1, (CHM138H1, CHM139H1)/
CHM151Y1, and 1.0 FCE from (MAT135H1, MAT136H1)/ MAT135Y1/MAT137Y1/MAT157Y1/(PHY131H1, PHY132H1)/ (PHY151H1, PHY152H1) with an average of at least $70 \%$ on these 3.0 full-course equivalents (FCEs) and a final mark of at least $60 \%$ in each course.
While it is difficult to predict what will be competitive course marks and average in a given year, based on previous years, the estimate is: course marks $=$ mid 70s; average $=$ mid 70s.

Achieving these estimated marks does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).
(8 full courses or their equivalent, including 0.5 FCE at the 400-level)

## First Year:

1. (BIO120H1, BIO130H1)/BIO150Y1; CHM138H1, CHM139H1

## Physiology

2. One full-course equivalent from: (MAT135H1, MAT136H1), MAT135Y1, MAT137Y1, JMB170Y1, PHY131H1, PHY132H1
Second Year:
BCH210H1; BIO230H1; (PSL300H1, PSL301H1)/PSL302Y1
Higher Years:
3. PSL372H1, PSL350H1/BCH311H1/CSB349H1
4. One full-course equivalent from: ANA300Y1; CSB325H1, CSB330H1, CSB332H1, CSB343H1, CSB345H1/445H1, CSB346H1, CSB347H1; IMM334Y1; NFS284H1; PCL201H1, PCL285H1, PCL302H1; PSY397H1; STA220H1
5. One full-course equivalent from: $\mathrm{HMB430H} 1$, HMB472H1; PSL304H1, PSL305H1, PSL374H1, PSL350H1, PSL378H1/PSL379H0, PSL380H1, PSL400level courses

## Physiology Minor (Science program)

Enrolment in this program requires the completion of 4.0 courses. One 300+-level FCE must be included in the program.
(4 full courses or their equivalent)

1. (BIO120H1, BIO130H1)/BIO150Y1; PSL201Y1/ (PSL300H1, PSL301H1)/PSL302Y1
2. Two full-course equivalents from: BIO251Y1, BIO270H1, BIO271H1; CSB325H1, CSB332H1, CSB343H1, CSB344H1, CSB345H1/445H1, CSB346H1, CSB347H1; EEB328H1; HMB200H1, HMB430H1, HMB470H1, HMB472H1; NUS 348H0; PSL280H1, PSL299Y1, PSL 300-series, 400 -series; PSY290H1, PSY396H1, PSY397H1, PSY399H1, PSY490H1, PSY492H1, PSY494H1, PSY497H1

## Physiology Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## PSL190H1 Biomedical Research at the Cutting Edge [24L/6S]

Explore the thought processes, logic, motivation, techniques, analysis and impact of recent high-profile publications to gain insight into the enterprise of science. Outstanding scientists present recent high-impact papers, and students will examine the research in depth, focusing on the underlying questions, experimental approach, results and significance.
Prerequisite: SBI4U and SCH4U (Grade 12 University
Preparation Biology and Chemistry); permission of
Department
DR=SCI; BR=4
PSL201Y1 Basic Human Physiology [52L]
A survey course intended for students who are not proceeding further in Physiology.
Prerequisite: 100-level course in BIO or equivalent Exclusion: Any 300-level PSL course taken previously or concurrently
DR=SCI; BR=4
$\begin{array}{ll}\text { PSL280H1 } & \begin{array}{l}\text { Introduction to Physiologic Adaptations of } \\ \text { Marine Mammals[24L/12P] }\end{array}\end{array}$
Systems approach to physiology of marine mammals in their aquatic environment. Highlights unique features of cardiovascular, respiratory, gastrointestinal, renal, urinary, and reproductive systems. Introduces relevant nervous and endocrine physiology, and makes comparisons to human condition and disease.
Prerequisite: (BIO120H1, BIO130H1)/BIO150Y1, CHM138H1 DR=SCI; BR=4
PSL299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None
PSL300H1 Human Physiology I [36L/5T]
Principles of neurophysiology, endocrinology and reproductive physiology for students enroled in Life Science programs.
Prerequisite: BIO130H1/BIO150Y1; CHM138H1; MAT100series/PHY100 series
Exclusion: PSL201Y1, PSL302Y1
DR=SCI; BR=4
PSL301H1 Human Physiology II [36L/4T]
Principles of respiratory, cardiovascular, gastrointestinal, and renal physiology for students enroled in Life Science programs.
Prerequisite: BIO130H1/BIO150Y1; CHM138H1; MAT 100-series/PHY 100-series
Exclusion: PSL201Y1, PSL302Y1
DR=SCI; BR=4
PSL304H1 Topics in Cellular, Molecular and Organismic Physiology I [36L/12T]
Control systems, feedback, networks, cardiovascular regulation and respiratory control are the topics examined in detail using homeostasis as a unifying theme. Tutorials use computer simulations and real-life demonstrations.
Prerequisite: BCH210H1, JBO302Y1/PSL302Y1/(PSL300H1,
PSL301H1), MAT 100-series, PHY 100-series
Exclusion: PSL303Y1
Recommended Preparation: PSL372H1
DR=SCI; BR=4
PSL305H1 Topics in Cellular, Molecular and Organismic Physiology II [36L/12T]
Molecular and cellular physiology of the central nervous system, gut, pancreas and glucose-sensing tissues; CNS diseases, obesity and diabetes used as model systems. Tutorials involve computer simulations.
Prerequisite: BCH210H1, JBO302Y1/PSL302Y1/(PSL300H1, PSL301H1), MAT 100-series
Exclusion: PSL303Y1
Recommended Preparation: PSL372H1
DR=SCI; BR=4

## PSL350H1 Mammalian Molecular Biology [20L/6S]

Molecular biology is essential for understanding mammalian function. The knowledge from BIO250Y1of 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: BIO230H1

Corequisite: Pre- or co-requisite:(PSL300H1,PSL301H1)/ PSL302Y1/JBO302Y1, BCH210H1
Exclusion: BCH311H1/BIO349H1/CSB349H1/MGY311Y1
DR=SCI; BR=4

## PSL372H1 Mammalian Physiology Laboratory [12L/36P]

A laboratory course covering selected topics in physiology.
Prerequisite: $\mathrm{BIO} 230 \mathrm{H} 1 /(\mathrm{BIO} 240 \mathrm{H} 1, \mathrm{BIO} 241 \mathrm{H} 1), \mathrm{BCH} 210 \mathrm{H} 1$, MAT100-series/PHY100-series; Pre- or co-requisite: PSL300H1/PSL302Y1, BCH370H1 (recommended)
Corequisite: Pre- or co-requisite: PSL300H1/PSL302Y1, BCH370H1 (recommended)
DR=SCI; BR=4

## PSL374H1 Advanced Physiology Laboratory [12L/36P/12S]

A problem-based laboratory course focused on the integration of organ systems to understand the control mechanisms of body function.
Prerequisite: BIO230H1/(BIO240H1, BIO241H1), (PSL300H1, PSL301H1)/PSL302Y1, PSL372H1
Corequisite: BCH370H1
DR=SCI; BR=4

## PSL378H1 Field Physiology: Marine Mammal Autopsy [12L/24T/36P]

An opportunity to go outside of the traditional university classroom and actively participate in a marine mammal autopsy. Learn 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 of handson tissue dissection, and one week of group discussions of the findings and draft report preparation.
Prerequisite: (BIO270H1,BIO271H1)/PSL201Y1/PSL280H1/
(PSL300H1, PSL301H1)/PSL302Y1
DR=SCI; BR=4

## PSL379H0 Comparative Marine Mammal Physiology in the Field [24T/24P]

Hands-on monitoring of physiological measures with live dolphins, manatee and sea lions; field observations and applied learning to a physiology project. Two-weeks: 1st week at marine research center in Mexico, 2nd week of wrap-up discussion and integration of data at $U$ of $T$.
Prerequisite: PSL280H1; PSL201Y1/PSL302Y1/(PSL300H1, PSL301H1)
DR=SCI; BR=4
PSL404H1 Regenerative Medicine [24L/12T]
Regenerative medicine promises to restore body function that has been lost due to disease, damage or age. Students will explore selected molecular, stem cell and tissue engineering developments to better understand how the body normally functions and how cells, tissues, and organs can be repaired or replaced.
Prerequisite: (PSL300H1, PSL301H1)/PSL302Y1
Recommended Preparation: PSL350H1/BCH311H1/ CSB349H1
DR=SCI; BR=4

## PSL420H1 Reproduction I: Development and Function [24L]

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: (PSL300H1, PSL301H1)/PSL302Y1
DR=SCI; BR=4
PSL421H1 Reproduction II: Pregnancy and Birth [24L]
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: (PSL300H1,PSL301H1)/PSL302Y1
Recommended Preparation: PSL420H1
DR=SCI; BR=4

## PSL425H1 Integrative Metabolism and its Endocrine Regulation [24L]

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/PSL305H1
DR=SCI; BR=4

## PSL432H1 Theoretical Physiology [24L]

Theoretical treatment of neurophysiology. Mathematical modeling and analysis of neurophysiological systems. Prerequisite: MAT235Y1/MAT237Y1; APM346H1/MAT244H1
Recommended Preparation: PHY200-series; PSL201Y1/
PSL300H1/PSL302Y1/ (BIO270H1,BIO271H1)
DR=SCI; BR=4

## PSL440Y1 Neuroscience I: Systems and Behaviour

 [72L]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/PSL302Y1/PSY290H1/CSB332H1 or equivalent
DR=SCl; BR=4

## PSL444Y1 Neuroscience II: Cellular and Molecular [72L]

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/PSL302Y1/CSB332H1 DR=SCI; BR=4

## PSL450H1 Mechanisms of Neural and Endocrinal Secretion [24L]

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: BCH210H1, PSL300H1/PSL302Y1/(BIO240H1, BIO241H1), PSL350H1/CSB349H1
DR=SCI; BR=4
PSL452H1 Membrane Physiology [24L]
Biophysics and molecular biology of ion channels. Topics include equivalent circuits for cells, molecular structure of

## Physiology

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: (PSL300H1,PSL301H1)/PSL302Y1
Recommended Preparation: PSL432H1
DR=SCI; BR=4

## PSL462H1 Molecular Aspects of Cardiovascular Function [24L]

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: (PSL300H1,PSL301H1)/PSL302Y1/PSL303Y1
DR=SCI; BR=4
PSL470H1 Cardiovascular Physiology [24L/12T]
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: (PSL300H1,PSL301H1)/PSL302Y1
DR=SCI; BR=4

## PSL472H1 Sleep Physiology and Chronobiology [24L]

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 cardiorespiratory systems are emphasized.
Prerequisite: (PSL300H1,PSL301H1)/PSL302Y1
DR=SCI; BR=4

## PSL480H1 Diving Physiology of Marine Mammals [24L/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: (BIO270H1, BIO271H1)/PSL201Y1/(PSL300H1,
PSL301H1)/PSL302Y1, PSL280H1
DR=SCI; BR=4
PSL498Y1 Project in Physiology [144P]
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/(PSL304H1, PSL305H1),
PSL372H1, PSL374H1, permission of Department DR=SCI; BR=4

PSL499H1 Project in Physiology [72P]
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/(PSL304H1, PSL305H1), PSL372H1, PSL374H1, permission of Department DR=SCI; $\mathrm{BR}=4$

## Sponsored by the Departments of Astronomy \& Astrophysics, Chemistry, Geology and Physics

## Planetary Science Programs

## Planetary Science Specialist (Science program)

14 full courses or equivalent, including at least one 400+series course)

Enrolment in this program requires the completion of 4.0 courses.

First Year:
(CHM138H1, CHM139H1)/CHM151Y1;
(MAT135H1,MAT136H1)/MAT137Y1; (PHY131H1, PHY132H1)/(PHY151H1, PHY152H1) (MAT137Y1 and PHY151H1, PHY152H1 preferred)
First or Second Year:
MAT223H1/MAT240H1
Second or Third Year:
AST221H1; CHM225Y1/(PHY252H1, PHY256H1);
CHM238Y1; GLG206H1, GLG216H1/GLG207H1; MAT235Y1/MAT237Y1 (MAT237Y1 preferred); MAT244H1; PHY250H1, PHY254H1
Third and/or Fourth Years:

1. PHY395H1
2. At least three of AST325H1; CHM327H1, CHM338H1;

GLG318H1, GLG440H1, GLG465H1; PHY354H1, PHY407H1, PHY408H1
3. One additional 300+series course; consult with appropriate Undergraduate Secretary for course selection
Fourth Year:
PLN420H1, PLN425H1

## Planetary Science Courses

First Year Seminars
The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## PLN420H1 Interdisciplinary Seminar in Planetary Science [24S]

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.
DR=SCI; BR=5
PLN425H1 Research in Planetary Science [120P]
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.
DR=SCI; BR=5

## 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 (U)
S. Clarkson, OC, MA, D de Rech, FRSC (M)
S.J. Colman, MA
$\dagger$ F.A. Cunningham, MA, Ph D, FRSC (I)
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
H. D. Forbes, MA, Ph D
F.J.C. Griffiths, MIA, Ph D (U)
G. Horowitz, MA, Ph D
B. Kovrig, MA, Ph D (T)
$\dagger$ A.M. Kruger, BA, Ph D
L. LeDuc, MA, Ph D, (SM)
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)
$\dagger$ A. Rotstein, BA, Ph D (M)
A.G. Rubinoff, MA, Ph D (University of Toronto Scarborough)
K.R.J. Sandbrook, MA, D Phil, FRSC
P. Silcox, MA, Ph D (University of Toronto Mississauga)
$\dagger$ R. Simeon, MA, Ph D, FRSC
J.E. Smith, AB, Ph D, DLit
P. H. Solomon, MA, Ph D
S.G. Solomon, MA, Ph D (University of Toronto Scarborough)
R.E. Stren, MA, Ph D (I)
C. Tuohy, MA, Ph D, FRSC
$\dagger$ M.H. Watkins, B COM, LL D (U)
Professor and Chair TBA
University Professor and Associate Chair
J.G. Stein, OC, O Ont, MA, Ph D, LL D, FRSC (U)

Professor and Associate Chair (Graduate Studies)
S.E. Chambers, MA, M Phil, Ph D (T)

## Associate Professor and Associate Chair <br> (Undergraduate Studies)

A. Handley, M Phil, Ph D

## Professors

E. Adler, MA, Ph D
$\dagger$ R.C.A. Andersen, MA, Ph D
R.K. Balot, 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)
$\dagger$ S. Borins, BA, MPP, Ph D
A. Braun, MA, Ph D (University of Toronto Mississauga) (T)
$\dagger$ A.S. Brudner, LL B, MA, Ph D, FRSC
D.R. Cameron, M Sc, Ph D, FRSC
J.H. Carens, M Phil (Theol), M Phil, Ph D
D.B. Cook, MA, Ph D (V)
R.B. Day, Dip REES, MA, Ph D (University of Toronto Mississauga)
$\dagger$ R.B. Deber, SM, Ph D
R.J. Deibert, MA, Ph D (T)
R. Hansen, M Phil, D Phil (T)
$\dagger$ R. Hirschl, LLB, MA, M Phil, Ph D
C. Jung, MA, Ph D
J.S. Kopstein, MA, Ph D
P.R. Magocsi, MA, MA, Ph D, FRSC
J. Nedelsky, MA, Ph D
N. Nevitte, MA, Ph D, FRSC
C. Orwin, MA, Ph D (SM)
L.W. Pauly, MA, M Sc, Ph D, FRSC (T)
$\dagger$ I. Peng, MA, Ph D
D.M. Rayside, AM, Ph D (U)
† K. Roach, LLB, LLM, FRSC
$\dagger$ D. Schneiderman, LLB, LLM
D.V. Schwartz, MA, Ph D
$\dagger$ A. Shachar, BA, LLB, LLM, JSD
G. Skogstad, MA, Ph D (University of Toronto Scarborough)
$\dagger$ A. Stark, M Sc, AM, Ph D
J.A. Teichman, MA, Ph D (University of Toronto Scarborough)
R. Vipond, MA, Ph D (V)
$\dagger$ L.E. Weinrib, BA, LLB, LLM
G. White, MA, Ph D (University of Toronto Mississauga)
M.S. Williams, AM, Ph D (T)
D.A. Wolfe, MA, Ph D (University of Toronto Mississauga)

## Associate Professors

A.M. Bejarano, MA, M Phil, Ph D (University of Toronto Mississauga)
S. Bernstein, MA, Ph D (University of Toronto Mississauga)
$\dagger$ N. Bertoldi, MA, Ph D (U)
J. Bertrand, M Sc, MA, Ph D
$\dagger$ D.L. Eyoh, MA, Ph D (N)
J.F. Fletcher, MA, Ph D
$\dagger$ K.H. Green, MA, Ph D
R.S. Haddow, M Sc, Ph D
M.J. Hoffmann, M Phil, Ph D (University of Toronto Scarborough)
P.W.T. Kingston, MA, M Phil, D Phil (University of Toronto Scarborough)
R.E. Kingston, MA, Ph D
J.J. Kirton, MA, Ph D (T)
M. Kohn, MA, Ph D (University of Toronto Scarborough)
$\dagger$ R. Levi, LLB, LLM, SJD
P.L. McCarney, MCP, Ph D
C. Norrlof, MA, Ph D (University of Toronto Scarborough)
† J. Orbinski, OC, O Ont, M Sc, MA
E. Schatz, MA, Ph D, (University of Toronto Mississauga)
L. Way, MA, Ph D (University of Toronto Scarborough)
$\dagger$ L. White, MA, Ph D
N. Wiseman, MA, Ph D

## Political Science

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    J. Wong, MA, Ph D
    \daggerA. Yoon, BA, LLM, Ph D
Assistant Professors
    C. Breunig, MA, Ph D
    C. Cochrane, MA, Ph D (University of Toronto
        Scarborough)
    C. de Miguel, MA
    L.A. Fujii, MA, Ph D (University of Toronto Mississauga)
    L. Gilady, MA, M Phil, Ph D
    \daggerV.Gunitskiy, MA, M Phil, Ph D
    T. Hall, MA, Ph D (University of Toronto Mississauga)
    W. Hurst, MA, Ph D (University of Toronto Scarborough)
    \dagger R. Kuokkanen, MA, MA, Ph D
    D. Lee, M Phil, MA, Ph D (University of Toronto
        Scarborough)
    \dagger M. Light, MA, JD, Ph D
    P.J. Loewen, BA, Ph D (University of Toronto
        Mississauga)
    \dagger R.A. Marshall, MA, D Phil
    K. Murali, M Sc
    \dagger L. Ong, MA, Ph D
    \dagger W. Prichard, M Phil, D Phil
    T. Triadafilopoulos, MA, Ph D (University of Toronto
        Scarborough)
    W. Wong, MA, Ph D
Senior Lecturer
    M. Lippincott, MA, Ph D (University of Toronto
        Mississauga)
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## Lecturer

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R. Levine, MA, Ph D (University of Toronto Scarborough)
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## CLTAs

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\(\dagger\) R. Hurl, MA, Ph D (University of Toronto Scarborough)
R. Jahanbegloo, MA, Ph D
M. Stein, MA, Ph D
\(\dagger\) I. Studin, MA, M Sc, Ph D
\(\dagger\) Cross-appointed
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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.

Detailed information on our programs, extended descriptions of courses, and background information on the interests of our instructors can be found on our website. 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 Antoinette Handley, Sidney Smith Hall, Room 3030 (416-978-3342)

Student Coordinator: Elizabeth Jagdeo, Sidney Smith Hall, Room 3027 (416-978-3340)

Enquiries: Sidney Smith Hall, Room 3012 (416-978-6197)
Undergraduate Program Information and Course
Descriptions: http://www.politics.utoronto.ca

## Political Science Programs

## Political Science Specialist (Arts program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Required courses:
i) After first year:

A final mark of at least 67\% in POL 101Y or POL 200Y or one full POL course or the equivalent in half courses.
ii) After second year:

A final mark of at least 70\% in any two full POL courses or the equivalent in half courses.
(10 POL full courses or their equivalent. Of these, at least 3.0 FCEs must be 300+ series courses and 1.0 FCE must be 400 - series.)
First Year:
POL101Y1
Higher Years:

1. POL 200 Y 1
2. One of the following: POL201Y1/POL203Y1/POL207Y1/ POL208Y1/POL215Y1
3. POL214Y1/POL224Y1
4. POL242Y1
5. POL320Y1
6. 4.0 FCEs additional POL courses. Of these, at least 2.0 FCEs must be 300+ series courses and 1.0 FCE must be 400 - series.

## Note:

Students must complete one full course equivalent each in at least two of the following three fields: comparative politics, development studies, international relations. See the Department's website at http://www.politics.utoronto.ca for courses by area.

## Political Science Major (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s)

## Political Science

in the required course(s) will be eligible to enrol.
Required courses:

## i) After first year:

A final mark of at least 67\% in POL 101Y or POL 200Y or one full POL course or the equivalent in half courses.
ii) After second year:

A final mark of at least 70\% in any two full POL courses or the equivalent in half courses.
( 7 POL full courses or their equivalent. Of these, 1.5 FCEs must be 300+ series courses and 0.5 must be a 400 - series.)
First Year:
POL101Y1
Higher Years:

1. POL200Y1
2. One of the following: POL201Y1/POL203Y1/POL207Y1/ POL208Y1/POL215Y1
3. POL214Y1/POL224Y1
4. POL322H1
5. 2.5 FCEs additional POL courses. Of these, at least 1.0 must be $300+$ series and 0.5 must be a 400 - series course.

## Political Science Minor (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.
Required courses: a minimum grade of $65 \%$ in 1.0 POL FCE.

## (4.0 POL full courses or their equivalent)

1. 4.0 POL FCEs. Of these, at least 1.0 FCE must be $300+$ series courses.

## Political Science Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## PLEASE NOTE:

Not all courses listed in the Calendar are offered every year. Please check the Department's website for the list of courses offered in 2012-13.
Prerequisites and exclusions are enforced for all 2nd, 3rd and 4th year courses. Please consult the POL Section of the 2012-13 Faculty of Arts and Science Registration Handbook and Timetable for details. Students without course prerequisites will be removed at any time they are discovered.
Enrolment is limited for all 300 -level and 400 -level courses. See the Faculty of Arts and Science Registration Handbook and Timetable for details.
Nearly all 400-level courses are offered as joint undergraduate-graduate seminars with class sizes ranging from 20-25.

Due to the significant enrolment pressure on 4th year seminars, students who enrol in more than the required number of POL courses needed for the program may be removed from the additional 400-level courses. Specialists require 1.0 FCEs; Majors require a 0.5 course.

## POL101Y1 Democracy, Dictatorship, War, and Peace: An Introduction [48L/24T]

This course is an introductory survey of the main currents and important themes in political science, emphasizing the subdisiplines of international relations, comparative politics, and political theory.
Exclusion: POL103Y1, POL105Y1, POL108Y1
DR=SOC SCI; BR=3

## 200-Series Courses

POL200Y1 Political Theory: Visions of the Just/Good Society [48L/24T]
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.
Exclusion: POLB70H3/POLB71H3
DR=SOC SCI; BR=2 + 3
POL201Y1 Politics of Development: Issues and Controversies[48L/12T]
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
Exclusion: POLB90H3/POLB91H3
DR=SOC SCI; BR=3
POL203Y1 U.S. Government and Politics [48L/24T]
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
Exclusion: POLC92H3/POLC93H3
DR=SOC SCI; BR=3

## POL207Y1 Politics in Europe [48L/24T]

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.
Prerequisite: A course in POL/EUR200Y1
Recommended Preparation: General history of Europe
DR=SOC SCI; BR=3
POL208Y1 Introduction to International Relations [48L/24T]
The course analyzes the impact of the individual, the nationstate, and the international and transnational systems on international conflict and conflict resolution, and examines

## Political Science

the major problems the international community confronts in a rapidly changing international environment.
Prerequisite: One full POL course/4.0 FCEs
Exclusion: POLB80H3/POLB81H3
Recommended Preparation: Prior reading or study of modern history
DR=SOC SCI; BR=3

## POL214Y1 Canadian Government and Politics

 [48L/24T]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.
Prerequisite: One full POL course/4.0 FCEs
Exclusion: POL224Y1/POLB50H3/POLB52H3
DR=SOC SCI; BR=3

## POL215Y1 Politics and Transformation of Asia-Pacific

 [48L/24T]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
DR=SOC SCI; BR=3

## POL224Y1 Canada in Comparative Perspective (formerly POL103Y1) [48L/24T]

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.
Prerequisite: One full POL course/4.0 FCEs
Exclusion: POL103Y1/POL214Y1
DR=SOC SCI; BR=3

## POL242Y1 Research Methods for Specialists [48L/24T]

This hands-on course aims at helping Political Science specialists and other interested students to use some of the quantitative methods and research approaches now widely employed throughout the discipline.
Prerequisite: A course in POL
DR=SOC SCI; BR=None

## POL299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SOC SCI; BR=None

## 300-Series Courses

POL300H1 Topics in Comparative Politics [24L]
An introduction to the field of comparative politics. Content in any given year depends on instructor.

Prerequisite: A course in POL
DR=SOC SCI; BR=3
POL300Y1 Topics in Comparative Politics [48L]
An introduction to the field of comparative politics. Content in any given year depends on instructor.
Prerequisite: A course in POL
DR=SOC SCI; BR=3

## JMC301Y1 State \& Society in 20th Century China

 [48L]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: EAS102Y1/EAS105H1/HIS280Y1/HIS328Y1/ JMC201Y1/POL215Y1
DR=HUM/SOC SCI; BR=3
POL301Y1 Government and Politics in Africa [48L]
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
DR=SOC SCI; BR=3

## JHP304Y1 Ukraine: Politics, Economy and Society

 [48L]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)
DR=HUM/SOC SCI; BR=3

## POL305Y1 Politics and Society in Latin America [48L]

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
Exclusion: POLC91H3/POLC99H3
DR=SOC SCI; BR=3
POL306H1 Urban Politics and Governance in Canada
[24L]
Examines issues of contemporary urban politics and
governance through intensive analysis of politics in Toronto.
The city's politics are analyzed in terms of demography,
social composition and economic character. Possible topics
include the prospects for local democracy, relations with
senior governments and with other GTA municipalities,
and specific policy areas (transportation, education, social
welfare).

Examines issues of contemporary urban politics and governance through intensive analysis of politics in Toronto. The city's politics are analyzed in terms of demography, social composition and economic character. Possible topics include the prospects for local democracy, relations with and specific policy areas (transportation, education, social welfare).

## Political Science

Prerequisite: POL103Y1/POL214Y1/POL224Y1
DR=SOC SCI; BR=3

## JPA308H1 Aboriginal Politics in Canada (formerly POL308H1) [24L]

Explores key issues in Aboriginal politics in Canada. Provides students with an overview of historical and contemporary socio-political issues in Aboriginal societies and institutions such as Aboriginal self-governance, land claims and treaty negotiations. (Given by the Department of Political Science and the Aboriginal Studies Program) Prerequisite: ABS201Y1/POL103Y1/POL214Y1/POL224Y1 Exclusion: ABS353H1 and ABS354H1 or POL308H1 DR=SOC SCI; BR=3

## POL312Y1 Canadian Foreign Policy [48L]

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: POL108Y1/POL208Y1
Exclusion: POLC84H3/POLC85H3
DR=SOC SCI; BR=3
POL313Y1 Politics and Psychology [48L]
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
DR=SOC SCI; BR=2+3

## POL314H1 Public Opinion and Voting (formerly POL314Y1) [24L]

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. Students will have the opportunity to work with data from the Canadian Election Studies and other sources.
Prerequisite: POL242Y1/an equivalent course in quantitative research methods
Exclusion: POL314Y1
DR=SOC SCI; BR=2 + 3

## JPU315H1 Sexual Diversity Politics (formerly POL 315H) [24L]

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. (Given by the Department of Political Science and the Sexual Diversity Studies Program at University College)
Prerequisite: UNI255H1/UNI 256 H 1 /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 Exclusion: POL315H1/POL315Y1
DR=SOC SCI; BR=3

POL316Y1 Contemporary Canadian Federalism [48L]
Constitutional, political, administrative, and financial aspects of federal-provincial relations, regionalism, and cultural dualism.
Prerequisite: POL103Y1/POL214Y1/POL224Y1
Exclusion: POLC54H3/POLC57H3
DR=SOC SCI; BR=3

## POL317Y1 Comparative Public Policy [48L]

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: EUR200Y1/POL103Y1/POL108Y1/POL203Y1/
POL214Y1/POL224Y1
DR=SOC SCI; BR=3
POL318H1 Canada and the Global Challenge Since 9/11, Part I: NAFTA [24L]
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.
It is strongly recommended that students do not take both POL318H1 and POL341H1 at the same time because of the heavy work load.
Prerequisite: POL103Y1/POL108Y1/POL214Y1/POL224Y1 Recommended Preparation: ECO100Y1/ECO105Y1 DR=SOC SCI; BR=3

## POL320Y1 Modern Political Thought [48L/24T]

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: POL200Y1
Exclusion: POLC73H3/POLC74H3
DR=SOC SCI; BR=2

## POL321H1 Ethnic Politics in Comparative Perspective [24L]

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.
Prerequisite: POL103Y1/POL108Y1/POL214Y1/POL224Y1/ EUR200Y1
Exclusion: POL321Y1
DR=SOC SCI; BR=3

## POL322H1 Introduction to Quantitative Reasoning [24L]

Quantitative evidence is an important part of political science research. This course introduces the basic tools for evaluating quantitative evidence. The focus is in measurement, probability and tests of significance. Prerequisite: A course in POL

Exclusion: POL242Y1
DR=SOC SCI; BR=3
POL323H1 Might and Right Among Nations [24L]
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 on these issues.
Prerequisite: POL200Y1/POL208Y1
Exclusion: POL323Y1
DR=SOC SCI; BR=2
$\begin{array}{ll}\text { POL324H1 } & \text { Themes in European Politics (Politics of } \\ & \text { Europe and the European Union) [24L] }\end{array}$
This course applies concepts in comparative political science to the study of contemporary Europe. The course requires familiarity with basic concepts and methods in political science and knowledge of post-World War II European history. The course will be divided into three parts. The first part of the course will examine the variation in institutions, social cleavages, and political behavior across European countries. The second part of the course will focus on European politics at the supranational level and examine the history, political institutions, and policies of the European Union. Finally, the third part of the course will address the challenges facing Europe and the EU today and will closely examine a series of key contemporary social and political debates.
Prerequisite: EUR200Y1/POL207Y1/a course in POL Exclusion: POL324Y1
DR=SOC SCI; BR=3
POL324Y1 Themes in European Politics (Politics of Europe and the European Union) [48L]
This course applies concepts in comparative political science to the study of contemporary Europe. The course requires familiarity with basic concepts and methods in political science and knowledge of post-World War II European history. The course will be divided into three parts. The first part of the course will examine the variation in institutions, social cleavages, and political behavior across European countries. The second part of the course will focus on European politics at the supranational level and examine the history, political institutions, and policies of the European Union. Finally, the third part of the course will address the challenges facing Europe and the EU today and will closely examine a series of key contemporary social and political debates.
Prerequisite: EUR200Y1/POL207Y1/a course in POL Exclusion: POL324H1
DR=SOC SCI; BR=3
POL326Y1 United States Foreign Policy [48L]
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: POL203Y1/POL208Y1
Exclusion: POLC82H3/POLC83H3
DR=SOC SCI; BR=3
POL330Y1 Politics and Morality (formerly POL330H1) [72L]
Is it possible to provide politics with a solid moral foundation? If so, what are the moral principles that should guide political order? The course examines these questions
through the study of key figures in 20th-century political thought, including Max Weber, Hannah Arendt, Frantz Fanon, Mahatma Gandhi, Michel Foucault, Isaiah Berlin, John Rawls, and Jürgen Habermas.
Prerequisite: POL200Y1
Exclusion: POL330H1/POL330Y1 (taken before 2012-2013) DR=SOC SCI; BR=2

## JPA331Y1 Issues in Contemporary Chinese Politics

 [48L]This course covers topics of interest in China from the Communist takeover in 1949 through to the reform period of the 1980s, 1990s and 2000s. It will also address aspects of China's diplomacy related to its growing economic power. (Given by the Department of Political Science and the Contemporary Asian Studies Program)
Prerequisite: POL201Y1
Exclusion: POL300H1 (F) taken in 2009-10 or 2010-11
DR=HUM/SOC SCI; BR=3
POL334H1 Ontario and Quebec Politics [24L]
An examination of politics in Canada's two most populous provinces. Drawing insights from comparative political economy scholarship, the course compares their politics in term of their distinctive historical origins, and their political economies, party systems, cultures, and relations with the federal government.
Prerequisite: POL214Y1/POL224Y1
Exclusion: POL334H1/334Y1/POL336H1/POL336Y1 (taken
before 2012-2013)
DR=SOC SCI; BR=3
POL336H1 Topics in Provincial Politics [24L]
Content in any given year depends on instructor.
Prerequisite: POL214Y1/POL224Y1
Exclusion: POL336Y1
DR=SOC SCI; BR=3
POL337Y1 The Canadian Constitution [48L]
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 in particular the Charter of Rights and Freedoms; the politics of constitutional change; "differentiated citizenship", 'rights talk', and the judicialization of politics.
Prerequisite: POL103Y1/POL214Y1/POL224Y1
DR=SOC SCI; BR=3
POL340Y1 International Law [48L]
International law as an instrument of conflict resolution. Recognition, sovereign immunity, subjects of international law, jurisdiction.
Prerequisite: POL208Y1
DR=SOC SCI; BR=3
POL341H1 Canada and the Global Challenge Since 9/11, Part II: The WTO [24L]
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

## Political Science

Organization affects Canada's capacity to develop policies for cultural, economic and environmental development. It is strongly recommended that students do not take both POL318H1 and POL341H1 at the same time because of the heavy work load.
Prerequisite: POL103Y1/POL108Y1/POL214Y1/POL224Y1
Recommended Preparation: ECO100Y1/ECO105Y1
DR=SOC SCI; BR=3
JPP343H1 Women in Western Political Thought (formerly JPP343Y1) [24L]
Examines contemporary feminist perspectives in political theory as responses to the limitations of western tradition of modern political theory. (Given by the Departments of Philosophy and Political Science)
Prerequisite: NEW360Y1/PHL265H1/POL200Y1
Exclusion: JPP343Y1/POLC76H3/POLC77H3
DR=HUM/SOC SCI; BR=2
POL343Y1 Politics of Global Governance [48L]
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: POL208Y1
DR=SOC SCI; BR=3

## POL344Y1 Social Movements in Europe and North

 America [48L]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: POL344H1
Recommended Preparation: One full course on 20th century politics or history of Europe, U.S. or Canada/one full course on gender or sexuality
DR=SOC SCI; BR=3
POL345Y1 Becoming Israel: War, Peace, and the Politics of Israel's Identity (formerly POL345H1) [48L]
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.
Prerequisite: A course in POL
Exclusion: POL345H1
DR=SOC SCI; BR=3

## POL351H1 Gender, Politics, and Public Policy in

 Comparative Perspective [24L]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
Exclusion: POL351Y1
DR=SOC SCI; BR=3

## JPA354H1 Aboriginal Rights and Indigenous Law in

 Canada (formerly ABS354H1) [24L]Examines Aboriginal rights and Indigenous law in Canada from a socio-political perspective. Studies key cases of contemporary Aboriginal case law, Section 35 of the Constitution, issues related to criminal and restorative justice, customary law and Indigenous legal traditions and law-making.
Prerequisite: JPA308H1/POL 308H1 and ABS201Y1
Exclusion: ABS354H1
DR=HUM/SOC SCI; BR=3
POL354H1 Politics and Society in Russia (formerly POL354Y1) [48L]
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.
Prerequisite: One full POL course
Exclusion: POL354Y1
DR=SOC SCI; BR=3
POL356H1 Canadian Political Parties[24L]
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.
Prerequisite: POL103Y1/POL214Y1/POL224Y1
Exclusion: POL356Y1
DR=SOC SCI; BR=3
POL357Y1 Topics in South Asian Politics (formerly POL357H1) [48L]
Selected issues in South Asian politics. Content in any given year depends on instructor.
Prerequisite: POL201Y1
Exclusion: POL357H1
DR=SOC SCI; BR=3

## POL359Y1 Enlarging Europe: The European Union and Its Applicants [48L]

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: EUR200Y1/POL103Y1/POL108Y1/POL224Y1 DR=SOC SCI; BR=3

## JPR364Y1 Religion and Politics (formerly JPR364H1/ POL364H/Y1) [48L]

This course examines the evolving role of religions in contemporary public, political contexts. Themes include: democracy and secularism; religion, human rights, law and justice; party politics, identity-formation and citizenship; gender and sexuality; interreligious conflict. (Given by the Departments of Political Science and Religion)
Prerequisite: A course in POL or 1.5 FCEs in Religious Studies
Exclusion: JPR364H1/RLG230H1/POL364H1/POL364Y1
DR=SOC SCI; BR=2 + 3

## Political Science

POL366Y0 "Kidnapped Europe's" Return?: Politics, Security and Culture in Central Europe since 1989 [48L]
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".
DR=SOC SCI; BR=3
POL367Y0 Australia in Transition [48L]
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.
DR=SOC SCI; BR=3
POL368Y0 Returning to Europe: Bringing South East Europe Into the European Union [48L]
From empires to modern states, ethnic wars and peace building to European Union integration, Southeastern Europe provides a fascinating case study for students in areas of politics, history, and conflict resolution. Through coursework and field trips to the major regional cities, students can witness first-hand the transformation of this critical area.
Recommended Preparation: Course in European Studies
and/or Political Science
DR=SOC SCI; BR=3
POL370H1 International Political Economy [24L]
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.
Prerequisite: A course in POL, and ECO100Y1 or ECO105Y1
DR=SOC SCI; BR=3
POL371H1 Institutions and the Spatial Construction of the Political Economy [24L]
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.
Prerequisite: POL103Y1/POL108Y1/POL207Y1/POL208Y1/ POL224Y1
Recommended Preparation: ECO100Y1/ECO105Y1 DR=SOC SCI; BR=3
POL372H1 Political Economy of Germany and the EU [24L]
The goal of this course is to explore the structure of the German political economy in the context of EU integration and economic globalization. Drawing upon the varieties-
of-capitalism approach, the main themes in the course will analyze 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. Prerequisite: A course in POL
Exclusion: POL300H1(F) (Taken in 2007-08)
DR=SOC SCI; BR=3

## POL373Y1 Emotions in Political Theory [48L]

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.
Prerequisite: POL200Y1
Exclusion: POL373H1
Recommended Preparation: POL320Y1
DR=SOC SCI; BR=2

## JPR374H1 Religion and Power in the Postcolony [24L]

This course examines the role of a variety of religious forms and spiritual practices in the politics of postcolonial societies, tracing their genealogies from the colonial period to the present. Cases taken principally from Africa and Asia. (Given by the Departments of Political Science and Religion) Prerequisite: A POL 200-level course or 1.5 FCEs in

## Religious Studies

Exclusion: JPR374Y1
DR=SOC SCI; BR=2 + 3
POL376Y1 Transforming Global Politics: Comparative and Chinese Perspectives [48L]
Set against the backdrop of the rise of China, this course examines the dynamics of global change from comparative and Chinese perspectives. Themes include international security, political economy, political development and democracy, global climate change, economic development, poverty and inequality, corruption, technology innovation, among others.
Prerequisite: POL103Y1/POL208Y1/POL215Y1/POL224Y1
DR=SOC SCI; BR=3
POL377H1 Introduction to Political Economy [24L] Political economy as a tool for understanding and evaluating the political world. The course introduces students to the use of microeconomic reasoning to understand political phenomena. Combines theory, methods, and insights derived from economics and political science and applies them to a range of substantive issues.
Prerequisite: A course in POL
Exclusion: POL300H1(S) (taken in 2009-10)
DR=SOC SCI; BR=3
POL380H1 Topics in International Politics [24L]
Content in any given year depends on instructor.
Prerequisite: POL208Y1
DR=SOC SCI; BR=3
POL380Y1 Topics in International Politics[48L]
Content in any given year depends on instructor. Prerequisite: POL208Y1
DR=SOC SCI; BR=3

## Political Science

## POL381H1 Topics in Political Theory[24L]

A detailed examination of particular authors or topics in political theory. Content in any given year depends on instructor.
Prerequisite: POL200Y1
DR=SOC SCI; BR=2

## POL381Y1 Topics in Political Theory[48L]

A detailed examination of particular authors or topics in political theory. Content in any given year depends on instructor.
Prerequisite: POL200Y1
DR=SOC SCI; BR=2
POL382H1 Topics in Canadian Politics [24L]
Examines in depth enduring and emerging issues in
Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y1/POL214Y1/POL224Y1

## DR=SOC SCI; BR=3

POL382Y1 Topics in Canadian Politics [48L]
Examines in depth enduring and emerging issues in
Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y1/POL214Y1/POL224Y1
DR=SOC SCI; BR=3

## POL395H1 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.
Prerequisite: Available to students in their third year of study (who have completed at least 9 full courses or their equivalent)
Exclusion: POL299Y1
DR=SOC SCI; BR=None

## POL396H1 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.
Prerequisite: Available to students in their third year of study (who have completed at least 9 full courses or their equivalent)
Exclusion: POL299Y1
DR=SOC SCI; BR=None

## 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.
Prerequisite: Available to students in their third year of study (who have completed at least 9 full courses or their equivalent)

Exclusion: POL299Y1
DR=SOC SCI; BR=None
POL398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None
POL399Y0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SOC SCI; BR=None

## 400-Series Courses

POL400H1 Sovereignty [24S]
The course investigates the intellectual origins of the concept of sovereignty, focusing especially on the political thought of Bodin and Hobbes. We study why the notion of sovereignty emerged in the feudal context of the later Middle Ages, and its later influence on political theory, jurisprudence, and international politics.
Prerequisite: POL200Y1/POL320Y1 and completion of minimum 14.0 FCEs
DR=SOC SCI; BR=3
POL402Y1 Problems in the Political Thought of the Socratic School (formerly POL402H1) [84S]
Study of a small number of texts illuminating the origins and/ or legacy of Socratic political philosophy.
Prerequisite: POL320Y1/POL323H1/POL323Y1/POL330H1/ POL330Y1
Exclusion: POL402H1
DR=SOC SCI; BR=2

## POL407Y1 The Politics of Origins [84S]

What are the implications of accounts of human beginnings for our understanding of political life? We compare the book of Genesis with such appropriate counterparts from the classical and modern western traditions as Hesiod's Theogony, Lucretiu's On the Nature of Things, and Rousseau's Second Discourse.
Prerequisite: POL200Y1 and POL320Y1/POL323H1/
POL323Y1/POL330H1/POL330Y1/an appropriate Jewish
Studies course
Exclusion: POL375Y1
DR=SOC SCI; BR=2
POL408H1 Innovation and Governance [24S]
This course explores technological change, its socioeconomic consequences, spatial implications and aspects of economic policies. As future growth in the knowledgebased 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: ECO360Y1/HPS201H1/HPS202H1/a POL 200+ comparative politics course/SOC317Y1/SOC356Y1
DR=SOC SCI; BR=3

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POL409H1 Political Economy of Technology: From
                                    the Auto-Industrial to the Information Age
                                    [24S]
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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

## Political Science

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: CSC300H1/ECO360Y1/GGR431H1/
HPS201H1/HPS202H1/HPS431H1/POL218Y5/a 300 or
400 level course in comparative politics/SOC356Y1

## DR=SOC SCI; BR=3

JPA410H1 Democracy and Identity in Asia (formerly ASI410H1) [24S]
The course explores the ways in which identity has been empowered, represented, and institutionalized in Asia's emerging democracies; how identity claims challenge historically notions of state and nation; various ways in which democracy is being shaped and challenged by demands for identity recognition. Thematic, cross-regional approach; pan-Asian (East, Southeast, South Asia). (Given by the Department of Political Science and the Contemporary Asian Studies Program)
Exclusion: ASI410H1
DR=HUM/SOC SCI; BR=3
POL410H1 Topics in Comparative Politics III [24S]
Selected issues in comparative politics. Varies from year to

## year.

Prerequisite: Two POL courses in comparative politics or permission of the instructor
DR=SOC SCI; BR=3

## POL410Y1 Topics in Comparative Politics III [48S]

Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two POL courses in comparative politics or permission of the instructor
DR=SOC SCI; BR=3

## JPA411H1 The Political Economy of Global Taiwan

 [24S]This course explores the place of Taiwan the new global economy from historical, comparative, and international relations perspectives. (Given by the Department of Political Science and the Contemporary Asian Studies Program) DR=HUM/SOC SCI; BR=3

## POL411H1 International Political Economy of Finance [24S]

The course explains why financial markets exist, and their evolution, by looking at the agents, actors, and institutions that generate demand for them. We also consider the consequences of increasingly integrated markets, the causes of systemic financial crises, as well as the implications and feasibility of regulation.
Prerequisite: POL208Y1; ECO100Y1
DR=SOC SCI; BR=3

## POL412Y1 Human Rights and International Relations [48S]

Human rights have become dominant in international politics since the end of World War II. The process of creating and implementing human rights is political. We explore historical, philosophical, and empirical explanations of the roots,
effects, and implications of human rights today through a variety of topics.
Prerequisite: POL201Y1/POL208Y1/POL320Y1
Exclusion: POL412H1
DR=SOC SCI; BR=3
POL413H1 Global Environmental Politics [24S] 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.
Prerequisite: POL208Y1
DR=SOC SCI; BR=3
POL414H1 Politics of Independent Ukraine [24S] 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.
DR=SOC SCI; BR=3
POL415H1 Topics in Ukrainian and Post-Soviet Politics [24S]
Content depends on instructor.
DR=SOC SCI; BR=3

## POL417Y1 The Third World in International Politics [48S]

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: POL208Y1/a POL course in development studies
DR=SOC SCI; BR=3
JPR419H1 Secularism and Religion (formerly RLG419H1) [24S]
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. (Given by the Departments of Political Science and Religion)
Registration in this course is through the Department of Religion.
Prerequisite: 2.0 FCEs in Religion or Political Science at the
200 level or above; or permission of the instructor
Exclusion: RLG419H1
DR=HUM/SOC SCI; BR=3

## POL419Y1 Quantitative Methods and Data Analysis

 [48S]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.

## Political Science

Prerequisite: POL242Y1/one course in STA
Exclusion: POL419H1
Recommended Preparation: basic familiarity with SPSS
DR=SOC SCI; BR=3
POL420Y1 Elements of United States Foreign Policy [48S]
Seminar on the tradition, process, and implementation of American foreign policy.
Prerequisite: POL203Y1/POL208Y1
DR=SOC SCI; BR=3

## JPJ421H1 Comparative Constitutionalism: Rights and Judicial Review [24S]

The seminar explores the global expansion of judicial power, the constitutionalization of rights and the fortification of judicial review. The international migration of constitutional ideas; comparative analysis of constitutional courts and rights jurisprudence; theories of judicial behaviour; the judicialization of politics worldwide; and the impact of constitutional jurisprudence on social change.
Prerequisite: POL332Y1/POL337Y1
Exclusion: JPJ421Y1
Recommended Preparation: Basic grounding in the constitutional system of Canada and/or other leading democracies is recommended.
DR=SOC SCI; BR=3

## POL421H1 Maimonides and His Modern Interpreters

 [24S]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.
Prerequisite: Minimum 14 FCEs
Exclusion: RLG433H1
DR=SOC SCI; BR=2
POL422H1 Ethnonationalism and State-Building: The Communist and Postcommunist Experience [24S]
We will explore nationalities issues. We examine interpretations of the development and role of ethnic politics and ethnonationalism in the Soviet Union, especially its role in the disintegration of the Soviet state. We then explore the role of ethnonationalism in state building and interstate relations in the successor states.
Prerequisite: HIS351Y1/POL354H1/POL354Y1/a course in
Russia/Soviet or East European politics
Exclusion: POL422Y1
DR=SOC SCI; BR=3
POL423H1 The Politics of Public Monies [24S]
The course examines government finance at the subnational and national level across developed democracies. It investigates how economic, political and institutional factors are transformed into budgetary policy especially during times of fiscal constraint. Comparative analysis, budgeting theory, and case studies inform this seminar.
Recommended Preparation: POL242Y1
DR=SOC SCI; BR=3
POL425Y1 Multiculturalism in Canada [48S]
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.
Prerequisite: POL320Y1
Exclusion: POL425H1

## DR=SOC SCI; BR=2+3

POL426H1 Democracy and Dictatorship [24S]
This course provides an in-depth introduction to theories of the origins of democracy and dictatorship. In the first part of the course, we examine and compare theories rooted in economic development, voluntarism, institutional design, and historical institutionalism. The latter half of the course applies these different approaches to debates over the origins of Nazi rule in Germany in the 1930s, military dictatorship in Chile in the 1970s, and non-democratic rule in contemporary Russia.
Prerequisite: A course in POL; minimum 14 FCEs
Exclusion: POL443H1(S) (taken in 2006-07, 2007-08, 200809)

DR=SOC SCI; BR=3
POL427H1 The Spirit of Democratic Citizenship [24S]
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. Prerequisite: POL103Y1/POL108Y1/POL200Y1/POL224Y1 Exclusion: POL427Y1
DR=SOC SCI; BR=2

## POL429H1 Nationalism, Ethnic Conflict, and Democracy [24S]

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.
Prerequisite: A course in POL; minimum 14 FCEs
Exclusion: POL429Y
DR=SOC SCl; BR=3

## POL430Y1 Comparative Studies in Jewish and Non-

 Jewish Political Thought [48S]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: POL200Y1, POL320Y1/POL323H1/POL323Y1/
POL330H1/POL330Y1/a relevant course in Jewish studies
DR=SOC SCI; BR=2 +3

## POL431Y1 Politics and Society in Contemporary China

 [48S]Issues and themes in China's modernization effort with emphasis on 20th century social, political and economic developments.
Prerequisite: Two POL courses; minimum 14 FCEs
Exclusion: POL431H1
DR=SOC SCI; BR=3

POL432H1 Feminist Theory: Challenges to Legal and Political Thought [24S]
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.
Prerequisite: JPP343H1/JPP343Y1/POL320Y1
Exclusion: POL432Y1
DR=SOC SCI; BR=2
POL433H1 Topics in United States Government and Politics [24S]
Selected issues and topics in U.S. politics. Varies from year to year.
Prerequisite: A course in POL
Exclusion: POL433Y1
DR=SOC SCI; BR=3

## POL434Y1 Enlightenment and its Critics [48S]

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.
Prerequisite: POL320Y1/POL330H1/POL330Y1
Exclusion: POL434H1
DR=SOC SCI; BR=2
POL436Y1 Problems of Political Community [48S]
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: POL200Y1/POL320Y1
DR=SOC SCI; BR=2+ 3

## POL437H1 Government, Law and Politics in Russia

 [24S]Law in the governance of Russia, in the Soviet and post Soviet periods, including constitutional development, courts, business disputes, crime and criminal justice, corruption, cultural obstacles to legal order, and legal transition in comparative perspective.
Prerequisite: HIS351Y1/POL354H1/POL354Y1/a course in Russia or Soviet politics
Exclusion: POL422Y1
DR=SOC SCI; BR=3
POL438H1 Topics in Comparative Politics I [24S]
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two courses in comparative politics/permission of instructor
DR=SOC SCI; BR=3
POL438Y1 Topics in Comparative Politics I [48S]
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two courses in comparative politics/permission of instructor
DR=SOC SCI; BR=3

## JPD439Y1 Post-Modern and Contemporary Thought

 [48S]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: POL200Y1
DR=SOC SCI; BR=2

## POL439H1 The Canadian Welfare State in Comparative

 Perspective [24S]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: POL103Y1/POL214Y1/POL224Y1
DR=SOC SCI; BR=3

## POL440Y1 The Politics of Transition in Eastern Europe [48S]

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: POL208Y1/POL354H1/POL354Y1
DR=SOC SCI; BR=3

## POL441H1 Topics in Asian Politics [24S]

Selected issues in Asian politics. Content in any given year depends on instructor.
Prerequisite: POL201Y1; minimum 14 FCEs
DR=SOC SCI; BR=3
POL442H1 Topics in Latin American Politics [24S]
This seminar focuses on five countries in the Andean region of Latin America: Venezuela, Colombia, Ecuador, Peru and Bolivia. First part deals with the challenges to democracy in the region. Second part explores potential solutions - in particular the drafting of new constitutions by popularly elected constituent assemblies.
Prerequisite: POL201Y1 and POL305Y1
Exclusion: POL442Y1
DR=SOC SCI; BR=3
POL443H1 Topics in Comparative Politics II [24S]
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two POL courses in comparative politics or permission of the instructor
DR=SOC SCI; BR=3
POL443Y1 Topics in Comparative Politics II [48S]
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two POL courses in comparative politics or permission of the instructor
DR=SOC SCI; BR=3
POL444Y1 The Political Theory of G.W.F. Hegel [48S]
An examination of the Phenomenology of Spirit and the Philosophy of Right.

## Political Science

Prerequisite: POL320Y1
DR=SOC SCI; BR=2

## POL446H1 20th-Century Political Thought[24S]

The goal of this course is to introduce students to some of the themes and approaches of critical theory (power, subjectivity, ideology, and hegemony).
Prerequisite: POL200Y1/POL320Y1/a course in PHL
Exclusion: POL446Y1
DR=SOC SCI; BR=2

## POL447H1 Political Economy of Development (formerly

 POL447Y1) [24S]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.
Prerequisite: POL201Y1/POL215Y1/POL301Y1/POL305Y1; minimum 14 FCEs
Exclusion: POL447Y1
Recommended Preparation: Introductory economics is helpful
DR=SOC SCI; BR=3
POL448H1 Law, Religion, and Public Discourse [24S]
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: POL320Y1
DR=SOC SCI; BR=2

## POL449H1 Qualitative Methods in Political Research

 [24S]This course surveys qualitative methods used in political science research. After briefly reviewing positivist and interpretivist research traditions, the course covers the idealtypical and practical use of specific qualitative methods such as fieldwork, interviewing, archival research, participant observation, ethnography, counterfactuals, discourse analysis, and multiple-methods approaches.
Prerequisite: POL242Y1
DR=SOC SCI; BR=3

## POL450H1 Women and Politics [24S]

This course uses theories of representation as well as gender and politics analyses of elected women as starting points to evaluate appointed women elites at the international level, notably with reference to linkages between those decision-makers and feminist perspectives on domestic and global politics.
Prerequisite: POL315H1/POL315Y1/POL344H1/POL344Y1/ JPP343H1/JPP343Y1
Exclusion: POL450Y1
Recommended Preparation: At least one course in both political behaviour and women's studies
DR=SOC SCI; BR=3

## JHP451Y1 The People from Nowhere [48S]

This course traces from earliest times to the present the evolution of a people called Carpatho-Rusyns and their historic homeland Carpathian Rus', located in the heart of Europe. The historic survey will deal with political, socioeconomic, and cultural developments, all the while
testing the hypothesis that nationalities are imagined communities. (Given by the Departments of History and
Political Science)
Recommended Preparation: a course in eastern European
history, or in nationalism
DR=HUM/SOC SCI; BR=3

## POL451H1 Contentious Politics and Social Movements [24S]

Provides an introduction to various perspectives on contentious politics and social movements. Students will acquire a solid foundation in the study of all forms of disruptive politics in a broad range of comparative contexts. (Offered in alternate years)
Prerequisite: POL201Y1/POL203Y1/POL207Y1/POL215Y1, POL214Y1/POL224Y1 and completion of minimum 14.0 FCEs
DR=SOC SCI; BR=3

## POL452Y1 Multilevel Politics: The European Union in

 Comparative Perspective [48S]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: POL207Y1/POL324H1/POL324Y1/2.0 full course equivalents in POL
Recommended Preparation: Introductory textbook on European integration
DR=SOC SCI; BR=3

## JHP454Y1 Twentieth Century Ukraine [48S]

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/HIS351Y1/HIS353Y1
DR=HUM/SOC SCI; BR=3

## JPF455Y1 Cities [48S]

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 or permission of instructor DR=SOC SCI; BR=3

POL456Y1 The G8, G20 and Global Governance [48S]
The development, operation, and participants of the Group of Eight (G8) and Group of Twenty (G20) of institutions, their growth and performance as centres of global governance, and their relationship with the United Nations (UN) and Bretton Woods galaxy in providing public goods in economic, social, environmental and security realms.
Prerequisite: POL208Y1/POL312Y1/POL343Y1
Recommended Preparation: POL208Y1
DR=SOC SCI; BR=3
JPR457H1 Democracy and the Secular [24S]
What is the philosophical relationship between modern democracy and the secular? How can critical political thought respond to attempts to re-found politics along religious or theo-political lines? What would a project of rethinking the secular 'all the way down' entail? This seminar in theory will explore these questions through an examination of dilemmas of sovereignty, community, justice and violence as developed in continental political philosophy - Schmitt, Benjamin, Lefort, Agamben, Derrida, Nancy, Zizek, Badiou. (Given by the Departments of Political Science and Religion).
Registration in this course is through the Department of Religion.
Prerequisite: POL320Y1/permission of instructor
Exclusion: POL485H1(S), Section L0201 (taken in 2008-09)
Recommended Preparation: POL320Y1 or a 300-level course in Philosophy or Philosophy of Religion or
Anthropology of Religion
DR=SOC SCI; BR=2

## POL457Y1 Markets, Justice and the Human Good [48S]

The course offers a philosophical perspective on the advantages and disadvantages of markets as ways of organizing economic activity. It asks in what ways markets and market-like arrangements can contribute to or create obstacles to the achievement of justice and human wellbeing.
Prerequisite: POL320Y1 or permission of the instructor DR=SOC SCI; BR=2

## POL458H1 The Political Economy of International Trade [24S]

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.
Prerequisite: ECO100Y1 and POL208Y1 and HIS344Y1
Exclusion: POLC95H3
DR=SOC SCI; BR=3

## POL459Y1 The Military Instrument of Foreign Policy [48S]

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: POL208Y1
DR=SOC SCI; BR=3
POL460H1 Studies in Modern Political Theory [24S] Studies on a modern political thinker or thinkers since Machiavelli.

Prerequisite: POL320Y1/POL323H1/POL323Y1/POL330H1/ POL330Y1
Exclusion: POL460Y1
DR=SOC SCI; BR=2

## JPA461Y1 Globalization and Indigenous Politics (formerly JPA461H1) [48S]

This course explores the intersections of globalization and indigenous politics and introduces students to critical considerations of globalization from the perspective of indigenous peoples. It investigates the dominant economic paradigm as the historical outcome of colonization and examines political and economic alternatives and challenges that various indigenous struggles embody and embrace. Issues explored in the course include indigenous epistemologies, impacts of globalization on indigenous peoples, international indigenous organizing, democratization and political participation, human rights, indigenous economies, contested sovereignties and indigenous social movements. It examines indigenous communities as heterogeneous locations where not only impacts of globalization but forms of engagement and resistance take various forms. (Given by the Department of Political Science and the Aboriginal Studies Program)
Prerequisite: POL201Y1/permission of instructor
Exclusion: POL410H1F (taken in 2009-10); JPA461H1
Recommended Preparation: Studies in Indigenous/Aboriginal politics or law; studies in globalization DR=SOC SCI; BR=3

## JPA462H1 Contemporary Indigenous Theory and Political Thought [24S]

Explores some of the key texts of contemporary critical Indigenous theory and political thought. Provides students with an in-depth understanding of the development of Indigenous critical and political thought in the past two decades. Key texts include: Deloria, Vine Jr.1999. Spirit \& Reason; Waters, Anne. 2004. American Indian thought Philosophical essays; Muecke, Stephen. 2004. Ancient and Modern: Time, Culture, and Indigenous Philosophy; Turner, Dale. 2006.This is Not a Peace Pipe and Borrows, John (2010). Drawing out law. (Given by the Department of Political Science and Aboriginal Studies Program)
Prerequisite: ABS300Y1/POL308H1/JPA308H1/permission of instructor, and completion of minimum 14.0 FCEs DR=SOC SCI; BR=3

## POL462Y1 Comparative Political Parties and Elections

 [48S]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.
Prerequisite: POL103Y1/POL207Y1/POL224Y1/POL356Y1
Exclusion: POL462H1
DR=SOC SCI; BR=3
POL466H1 Topics in International Politics III [24S]
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y1
Exclusion: POL 487H1(S) taken in 2011-12
DR=SOC SCI; BR=3

## Political Science

POL469H1 Ethics and International Relations [24S]
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: POL208Y1
DR=SOC SCI; BR=2

## POL470Y1 Contemporary Issues in Foreign Policy [48S]

The 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: POL208Y1
DR=SOC SCI; BR=3

## POL472H1 The Comparative Political Economy of Industrial Societies [24S]

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: POL103Y1/POL108Y1/POL207Y1/POL224Y1
DR=SOC SCI; BR=3
POL474H1 Politics and Policy Analysis [24S]
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: POL103Y1/POL214Y1/POL224Y1/POL317Y1 DR=SOC SCI; BR=3

## POL477H1 Advanced Topics in International Political Economy [24S]

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
Prerequisite: POL208Y1; ECO100Y1
DR=SOC SCI; BR=3

## POL479H1 Topics in Middle East Politics [24S]

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: POL201Y1/NMC217Y; minimum 14 FCEs DR=SOC SCI; BR=3

## POL480H1 Pluralism, Justice, and Equality: Political Imaginaries of Global Justice and Global Democracy (formerly POL480Y1) [36S]

This course examines contemporary theories of global justice and global democracy in a spirit similar to that of the difference-based critiques of liberal justice in the 1980s and 1990s. What would it mean to open up theoretical reflection about global justice to non-Western and/or colonized perspectives? What are the political imaginaries at work in leading and oppositional understandings of global public space?
Prerequisite: POL200Y1/POL320Y1//JPP343H1/JPP343Y1 Exclusion: POL480Y1
DR=SOC SCI; BR=2

## POL480Y1 Pluralism, Justice, and Equality: Political Imaginaries of Global Justice and Global Democracy [72S]

This course examines contemporary theories of global justice and global democracy in a spirit similar to that of the difference-based critiques of liberal justice in the 1980s and 1990s. What would it mean to open up theoretical reflection about global justice to non-Western and/or colonized perspectives? What are the political imaginaries at work in leading and oppositional understandings of global public space?
Prerequisite: POL200Y1/POL320Y1/JPP343H1/JPP343Y1
Exclusion: POL480H1
DR=SOC SCI; BR=2

## POL481Y1 The Geopolitics of Information and Communication Technologies [48S]

The Geopolitics of ICTs course is an intensive examination of the ways in which states and non-state actors are contesting the newly evolving terrain of global digital-electronic-telecommunications. Topics covered include Internet censorship and surveillance, information warfare, computer network attacks, hacktivism, and governance of global communications. The course is organized as a series of intensive modules. One feature of the class will be a "hands-on" analysis of censorship circumvention and network interrogation techniques at the Citizen Lab (http://www. citizenlab.org/).
Prerequisite: POL208Y1
Exclusion: POL486Y1 (taken in 2008-09)
DR=SOC SCI; BR=3

## POL482H1 The Politics of Disease and Epidemic [24S]

Examines the mutually constitutive relationship between HIV/ AIDS and the social, economic and political characteristics of its "host" society. Class readings focus on South Africa but students will each research key features of the epidemic in the developing country of their choice.
Prerequisite: POL201Y1 or equivalent; minimum 14 FCEs. DR=SOC SCI; BR=3

## POL483H1 Cosmopolitanism [24S]

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 postcolonial theory.
Prerequisite: POL200Y1
DR=SOC SCI; BR=2
POL484H1 Topics in Political Thought I [24S]
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: POL320Y1
DR=SOC SCI; BR=2

## POL484Y1 Topics in Political Thought I[48S]

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: POL320Y1
DR=SOC SCI; BR=2
POL485H1 Topics in Political Thought II [24S]
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: POL320Y1
DR=SOC SCI; BR=2
POL485Y1 Topics in Political Thought II [48S]
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: POL320Y1
DR=SOC SCI; BR=2
POL486H1 Topics in International Politics I [24S]
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y1
DR=SOC SCI; BR=3
POL486Y1 Topics in International Politics I [48S]
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y1
DR=SOC SCI; BR=3
POL487H1 Topics in International Politics II [24S]
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y1
DR=SOC SCI; BR=3
POL487Y1 Topics in International Politics II [48S]
For advanced students of international relations. Various topics are taken up each year, the content of which depends on the instructor.
Prerequisite: POL208Y1
DR=SOC SCI; BR=3

POL488H1 Topics in African Politics I [24S]
In depth examination of specific themes relating to contemporary African politics. Content in any given year depends on instructor.
Prerequisite: POL201Y1/POL301Y1; minimum 14 FCEs
DR=SOC SCI; BR=3
POL488Y1 Topics in African Politics I [48S]
In depth examination of specific themes relating to contemporary African politics. Content in any given year depends on instructor.
Prerequisite: POL201Y1/POL301Y1; minimum 14 FCEs DR=SOC SCI; BR=3

POL489H1 Topics in African Politics II [24S]
In depth examination of specific themes relating to contemporary African politics. Content in any given year depends on instructor.
Prerequisite: POL201Y1/POL301Y1; minimum 14 FCEs DR=SOC SCI; BR=3
POL489Y1 Topics in African Politics II [48S]
In depth examination of specific themes relating to contemporary African politics. Content in any given year depends on instructor.
Prerequisite: POL201Y1/POL301Y1; minimum 14 FCEs DR=SOC SCI; BR=3
POL490H1 Topics in Canadian Politics I [24S]
Examines in depth enduring and emerging issues in
Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y1/POL214Y1/POL224Y1 and one other POL course in Canadian politics
DR=SOC SCI; BR=3
POL490Y1 Topics in Canadian Politics I [48S]
Examines in depth enduring and emerging issues in
Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y1/POL214Y1/POL224Y1 and one other POL course in Canadian politics
DR=SOC SCI; BR=3
POL491H1 Topics in Canadian Politics II [24S]
Examines in depth enduring and emerging issues in Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y1/POL214Y1/POL224Y1 and one other POL course in Canadian politics
DR=SOC SCI; BR=3
POL491Y1 Topics in Canadian Politics II [48S]
Examines in depth enduring and emerging issues in Canadian politics. Content in any given year depends on instructor.
Prerequisite: POL103Y1/POL214Y1/POL224Y1 and one other POL course in Canadian politics
DR=SOC SCI; BR=3
POL492H1 Topics in Comparative Politics IV [24S]
Selected issues in comparative politics. Varies from year to year.
Prerequisite: Two POL courses in comparative politics DR=SOC SCI; BR=3
POL492Y1 Topics in Comparative Politics IV [48S] Selected issues in comparative politics. Varies from year to year.

## Political Science

Prerequisite: Two POL courses in comparative politics DR=SOC SCI; BR=3

## POL493H1 Topics in Politics I [24S]

An in-depth examination of a "big issue" in Political Science. Content in any given year depends on instructor.
Prerequisite: Completion of 3.0 POL courses and at least 14
FCEs
DR=SOC SCI; BR=3

## POL494H1 Topics in Politics II [35S]

An in-depth examination of a "big issue" in Political Science. Content in any given year depends on instructor.
Prerequisite: Completion of 3.0 POL courses and at least 14 FCEs
DR=SOC SCI; BR=3

## JPJ494H1 Innovation and Knowledge Transfer in City Regions [24S]

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)
Prerequisite: CSC300H1/ECO360Y1/GGR431H1/
HPS202H1/HPS431H1/POL218Y5/a 300 or 400 level
course in comparative politics/POL409H1/SOC356Y1

## Exclusion: LAW453HS

DR=SOC SCI; BR=3

## 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. Application forms can also be downloaded from the Department's website at www.politics.utoronto.ca.
Exclusion: POL496H1/POL497H1
DR=SOC SCI; BR=None
POL496H1 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. Application forms can also be downloaded from the Department's website at www.politics.utoronto.ca.
Exclusion: POL495Y1
DR=SOC SCI; BR=None

## 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. Application forms can also be downloaded from the Department's website at www.politics.utoronto.ca.
Exclusion: POL495Y1
DR=SOC SCI; BR=None

## POL498H1 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.
DR=SOC SCI; BR=None

## 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.

## DR=SOC SCI; BR=None

POL499Y1 Senior Thesis and Thesis Seminar [TBA] A 40 to 60 page ( 15,000 to 20,000 word) research paper ( $75 \%$ of the final mark) written under the supervision of a political science 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.
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.
Exclusion: POL495Y1/POL496H1/POL497H1 (taken in the same session)
DR=SOC SCI; BR=None

## Given by Members of the Department of Spanish and Portuguese

## Faculty

## Professor Emerita

J.R. Webster, MA, Ph D, FRSC (SM)

Professor and Chair of the Department
J. Blackmore, MA, Ph D (V)

Professor
R. Sternberg, MA, Ph D (SM)

Senior Lecturer and Associate Chair
M. Marujo, MA, Ph D

Lecturer (Instituto Camões)
J.P. Ferreira, MA

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 countrys 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.

Portuguese opens the door to a rich range of cultural expressions in literature, film, and art, from the worldchanging contribution of Renaissance Portugal and Cames to the contemporary Brazilian and Luso-African diaspora. Whether it is Nobel-prize winning Portuguese literature or the excitement of the Brazilian cinema novo, Lusophone writers, filmmakers, and artists continue to shape and change contemporary global culture.
The Department encourages students to consider completing part of their course work at a university in Portugal or Brazil.
Undergraduate Coordinator: Professor Manuel Ramirez (416-813-4082). E-mail: spanport.undergraduate@utoronto. ca

Enquiries: Victoria College, Room 208 (416-813-4080).
Email: spanport@chass.utoronto.ca
Web site: www.spanport.utoronto.ca

## Portuguese Programs

Enrolment in the Portuguese programs requires the completion of 4.0 courses.

## Portuguese Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor Manuel Ramirez, Department of Spanish and Portuguese.
(10 full courses or their equivalent, including at least one 400-series course)
First Year:
PRT100Y1/PRT110Y1/PRT220Y1
Second Year:

1. PRT220Y1/PRT320Y1
2. PRT258H1

Third and Fourth Years:

1. PRT320Y1
2. PRT420Y1
3. Plus additional PRT courses to make ten 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.

## Portuguese Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor Manuel Ramirez, Department of Spanish and Portuguese.
(7 full courses or their equivalent)
First Year:
PRT100Y1/PRT110Y1/PRT220Y1
Second Year:

1. PRT220Y1/PRT320Y1
2. PRT258H1

Third and Fourth Years:

1. PRT320Y1
2. PRT420Y1 is recommended for students who start in PRT100Y1, and is required for students who start in PRT220Y1 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.

## Portuguese Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor Manuel Ramirez, Department of Spanish and Portuguese.
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 page 26 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

## Portuguese: see also European Studies; Latin American Studies

## Portuguese Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## 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 [48L/24T]

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
DR=HUM; BR= 1

## PRT110Y1 Elementary Portuguese [48L/24T]

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)
Prerequisite: A familiarity with Portuguese
Exclusion: OAC Portuguese or equivalent
$D R=H U M ; B R=1$

## PRT217H1 Language Practice [24L]

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: PRT100Y1/PRT110Y1 or permission of the Department
Exclusion: PRT220Y1, PRT320Y1, PRT420Y1
DR=HUM; BR=1
PRT220Y1 Intermediate Portuguese [48L]
Students enlarge their vocabulary and improve their oral and writing skills through reading, composition and translation. (May not be taken by students who, in the judgement of the Department, qualify for entry into PRT320Y1)
Prerequisite: OAC Portuguese or equivalent ; PRT100Y1/
PRT110Y1
DR=HUM; $B R=1$
PRT234H1 Portuguese Immigration to North America [24L]
This course examines Portuguese immigration in North America. It highlights selected themes and topics, focused on Portuguese settlements in USA and Canada. Through readings, films and other art forms students will analyze concepts of cultural history, self and identity, community building and related issues.
$D R=H U M ; B R=3$

PRT250H1 Portuguese Culture \& Civilization [24L]
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; taught in English)
DR=HUM; BR=1
PRT252H1 Portuguese Island Culture [24L]
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; taught in English)
DR=HUM; BR= 3

## PRT255H1 The Brazilian Puzzle: Culture and Identity [24L]

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)
DR=HUM; BR= 3

## PRT258H1 Introduction to Luso-Brazilian Studies (formerly PRT258Y1) [24L]

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.
Corequisite: PRT220Y1
Exclusion: PRT258Y1
DR=HUM; $B R=1$

## PRT299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR= None
PRT320Y1 Composition and Oral Practice [48L] Intensive practice in written and oral Portuguese for the advanced student. Reading and discussion of contemporary literature. (May not be taken by students who, in the judgement of the Department, qualify for entry into PRT420Y1)
Prerequisite: PRT220Y1 or equivalent DR=HUM; BR=1

## PRT351H1 Discovery and Conquest: Literature and

 Nationhood (formerly PRT351Y1) [24L]A study of the driving ideologies behind the Age of Discoveries. Close scrutiny of key texts reveals how the ideas of displacement, violence, gender, and colonization play crucial roles in the establishment and maintenance of nationhood and nationality in Renaissance Portugal. (Offered in alternate years)
Prerequisite: PRT210Y1/PRT220Y1, PRT258H1
Exclusion: PRT351Y1
$D R=H U M ; B R=3$

## PRT355H1 Topics in Brazilian Studies [24L]

In years when this course is offered, topics are described in the departmental brochure.
Prerequisite: PRT258H1
DR=HUM; BR= 1

## PRT357H1 Modern and Contemporary Brazilian

 Literature (formerly PRT457Y1) [48L]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)
Prerequisite: PRT220Y1, PRT258H1
Exclusion: PRT457Y1
DR=HUM; BR= 1
PRT358H1 Topics in Portuguese Studies [24L]
In years when this course is offered, topics are described in detail in the departmental brochure.
Prerequisite: PRT220Y1, PRT258H1
DR=HUM; BR=1

## PRT359H1 From Pessoa to Saramago (formerly PRT456Y1) [48L]

An examination of Portuguese literature as it confronts the changing social, political, and aesthetic currents of the twentieth century. The Orpheu movement of Pessoa 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)
Prerequisite: PRT220Y1, PRT258H1
Exclusion: PRT456Y1
DR=HUM; BR= 1
PRT365H1 The Rise of Modern Identity [48L]
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: PRT258H1 or permission of instructor DR=HUM; BR=2
PRT398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR= None
PRT399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR= None

## PRT420Y1 Advanced Portuguese [48L]

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.
Prerequisite: PRT320Y1 or equivalent
DR=HUM; BR=1

## PRT442H1 Eça de Queiroz: Portugal in the Crosshairs

 [24L]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. (Taught in English in 2011-2012)
Prerequisite: PRT220Y1, PRT258H1
Exclusion: PRT356Y1 and PRT455Y1
DR=HUM; BR=1
PRT443H1 Machado de Assis: The Creation of the
Modern Self (formerly PRT342H1) [24L]
Beginning with Memórias Póstumas de Brás Cubas, Machado de Assis developed the art of creating characters who prefigure the 20th and 21st century selves: 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 Portuguese in 2011-2012)
Prerequisite: PRT220Y1, PRT258H1
Exclusion: PRT342H1, PRT455Y1
DR=HUM; BR=1
PRT452H1 Camões (formerly PRT352H) [24L]
A study of the works of Camões, including Os Lusíadas, and a portion of the lyrics and theatre. (Offered in alternate years) (Taught in English)
Prerequisite: PRT220Y1, PRT258H1
Exclusion: PRT352H1
DR=HUM; BR=1
PRT454Y1 The Luso-Brazilian Novel [48L]
Fiction in Portugal and Brazil from the 19th century to the present. Naturalism, realism, the experimental novels of the 1920s, the novel of social protest. (Offered in alternate years)
Prerequisite: PRT220Y1, PRT258H1
DR=HUM; BR= 1
PRT458H1 The Luso-Brazilian Short Story [24S]
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 Guimaraes Rosa, Clarice Lispector and others. (Offered in alternate years)
Prerequisite: PRT220Y1, PRT258H1
DR=HUM; BR= 1
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
DR=HUM; BR= None

## Psychology

Eaculty
University Professors Emeriti
F.I.M. Craik, B Sc, Ph D, FRSC
E. Tulving, MA, Ph D, D Litt, FD, FRS
Professors Emeriti
J.L. Freedman, MA, Ph D
J.E. Grusec, BA, Ph D
C.P. Herman, BA, Ph D
J.A. Hogan, MA, Ph D
R.S. Lockhart, MA, Ph D
B.B. Murdock, BA, Ph D
P.L. Pliner, BS, Ph D (UTM)
B.B. Schiff, M Sc, Ph D
S.J. Shettleworth, MA, Ph D
I. Spence, MA, Ph D
G.C. Walters, BA, Ph D
Associate Professor Emeritus
D. Creelman, MA, PhD
Professor and Undergraduate Chair of the
DepartmentJ.W. Pratt, MS, Ph D
Professor and Graduate Chair of theDepartment
M. Moscovitch, MA, Ph D
Associate Professor and Director
(Undergraduate Studies)
G. Einstein, MA, Ph D
Associate Professor and Director (GraduateStudies)
S. Ferber, Diplom, Ph D
Professors
M. Bagby, MA, Ph D (UTSC)
J. Bassili, BA, Ph D (UTSC)
G.C. Cupchik, MA, Ph D (UTSC)
M. Daneman, MA, Ph D (UTM)
K.K. Dion, BA, Ph D (UTSC)
A.S. Fleming, BS, Ph D (UTM)
R. Gerlai, Ph D (UTM)
L. Hasher, AB, Ph D
C.C. Helwig, BA, Ph D
S. Joordens, MA, Ph D (UTSC)
J.M. Kennedy, BA, Ph D (UTSC)
G. Kraemer, Ph D (UTM)
J.B. Peterson, BA, Ph D
T.L. Petit, MA, Ph D (UTM)
M.K. Pichora-Fuller, M Sc, Ph D (UTM)
J. Polivy, MA, Ph D (UTM)
M.R. Ralph, BS, Ph D
E.M. Reingold, MA, Ph D (UTM)
G. Schellenberg, B Sc, Ph D (UTM)
U. Schimmack, MA, Ph D (UTM)
B.A. Schmuckler, BA, Ph D (UTSC)
B.A. Schneider, BA, Ph D (UTM)
M.L. Smith, M Sc, Ph D (UTM)
F. J. Vaccarino, M Sc, Ph D (UTSC)

## Associate Professors

A. Anderson, Ph D
C. Chambers, MS, Ph D (UTM)
A. Chasteen, MA, Ph D
G.S. Cree, MA, Ph D (UTSC)
W. Cunningham, MA, MS, Ph D
E. DeRosa, Ph D
S. Erb, MA, Ph D (UTSC)
M. Fournier, BA, Ph D (UTSC)
M. Inzlicht, Sc M, Ph D (UTSC)
P. Lockwood, MA, Ph D
G. MacDonald, BA, Ph D
A. Monks, Ph D (UTM)
M. Niemeier, MA, Ph D (UTSC)
J.E. Plaks, MA, M Phil, Ph D
R. Smyth, M Sc, Ph D (UTSC)
R.W. Tafarodi, BA, Ph D
K. Zakzanis, MA, Ph D (UTSC)

## Assistant Professors

J. Anderson, Ph D (UTM)
M. Barense, BA, Ph D
D. Haley, MA, Ph D (UTSC)
M. Holmes, MA, Ph D (UTM)
E. Impett, MA, Ph D (UTM)
R. Ito, Ph D (UTSC)
E. Johnson, Ph D (UTM)
J. Kim, MSc, Ph D
A. Lee, Ph D (UTSC)
T. Malti, MA, Ph D (UTM)
D. Nussbaum, MA, Ph D (UTSC)
E. Paige-Gould, Ph D (UTSC)
N. Rule, MS, Ph D
A. Ruocco, Ph D (UTSC)
K. Takehara, MSc, PhD
S. Tran, Ph D (UTSC)
A. Uliaszek, Ph D (UTSC)

## Special Lecturers

M. Djikic, MA, Ph D
R. Hetherington, MA, Ph D
A. Luby, Ph D
L. Lundell, Ph D
N. Rector, BA, Ph D
G. Rowe, Ph D
N. Stuckless, Ph D

## Senior Lecturer

D. Bors, MA, Ph D (UTSC)

Lecturers
D. Dolderman, Ph D
J. Vervaeke, 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, 424, and 425, etc. at the fourth year represent all the Social Psychology courses. Other areas within Psychology follow a similar pattern.
Undergraduate Advisor: Sidney Smith, Room Hall 4014 (416-978-3407)
General Enquiries: Sidney Smith Hall, Room 4020 (416-9785201)

Web site: www.psych.utoronto.ca

## Psychology Programs

(See web site for further details)
Entry into all Psychology programs requires the minimum of a senior-level high school Calculus course. Please note that this requirement will not be waived, nor can it be substituted with a different type of math course (i.e. Data Management, Algebra and Geometry, etc.). Students who completed PSY100Y1 in 1997 or earlier at the University of Toronto are exempt from the Calculus requirement.
Students must follow the program requirements in the Calendar of the academic year they enrolled in their PSY Subject POSt. For example, if you enrol into the PSY Major during the summer or fall of 2012 you would follow the requirements as listed in the 2012-2013 Calendar. Keep a copy of that Calendar throughout your academic career here for reference and to ensure that you are taking the correct courses for you particular program. If the program requirements change in the future while you are still at UofT, you would continue to follow the 2012-2013 requirements. If you wish to clarify or discuss your program requirements or have any questions about them, please do not hesitate to contact the Undergraduate Advisor as soon as possible.

## Psychology Research Specialist - Thesis (Science program)

(10-full courses or their equivalents)
This program is designed for students who have demonstrated particular interest in and aptitude for research and who want to complete a thesis. Admission to the program is based on academic performance and expressed interest in research.
Enrolment in the Research Specialist program is limited. Students apply at the end of their second year and begin
the program in their third year. All students accepted into or considering the Research Specialist program should enrol in a PSY lab course in their third year. In addition to applying in the spring, students may also apply in the fall of their third year and begin the program that January. The deadline for the second round of applications is usually in late October. More information on the fall applications can be found on the department website in late September to early October.
This is a limited enrolment subject POSt that can only accommodate a finite number of students. Eligibility is highly competitive and based on a student's overall marks, as well as the following:

PSY100H1 with a final mark of at least $80 \%$ (AP Psychology not accepted)
A senior-level high school Calculus course, or equivalent
Completion of at least 8 -full university courses
Completion of PSY201H1 and PSY202H1 (or their equivalents)
Completion of four 200-level PSY courses, with an average of at least $73 \%$ (note that this does not mean $73 \%$ in EACH of them)
Meeting these requirements does not guarantee admission to the subject POSt in any given year.
Note: Students must apply to this program on the Arts \& Science Faculty Registrar's Office website (see the Registration Handbook \& Timetable for instructions).
Required Courses:

1. First Year: PSY100H1
2. Statistics: PSY201H1 and PSY202H1 (or their equivalents)
3. Two of PSY210H1, PSY220H1, PSY230H1, PSY240H1 (Cluster A)
4. Two of PSY260H1, PSY270H1, PSY280H1, PSY290H1 (Cluster B)
5. One half-course ( 0.5 FCEs ) at the $300 / 400$-level from Group 1 in Cluster A
6. One half-course ( 0.5 FCEs) at the $300 / 400$-level from Group 1 in Cluster B
7. Two half-courses ( 1.0 FCEs) at the 300/400-level from Group 1 (Clusters A and/or B)
8. One lab course ( 0.5 FCEs ), and no more, taken from PSY319H1, PSY329H1, PSY339H1, PSY379H1, PSY389H1, PSY399H1
9. PSY309H1
10. PSY409H1
11. PSY400Y1
12. 2.0 FCEs from Groups 1 and/or 2 at any level

## Psychology Specialist (Science program)

(10-full courses or their equivalents)
You should consider pursuing the Specialist Program in Psychology if you want a greater concentration in Psychology than provided by the Major Program. Having a Specialist is not required to be admitted to a graduate program in Psychology but is helpful in making your application competitive.
This is a limited enrolment POSt that can only accommodate a finite number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will

## Psychology

be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.
PSY100H1 with a final mark of at least 80\% (AP Psychology not accepted)

A senior-level high school Calculus course, or equivalent
Completion of 4-full university courses
If an $80 \%$ final mark is not achieved in PSY100H1, students must have:

At least a 75\% final mark in PSY100H1
A senior-level high school Calculus course, or equivalent
Completion of 4-full university courses
Completion of PSY201H1 and PSY202H1 (or their equivalents), with at least a 73\% final mark in each
Two additional 200-level PSY courses, with an average of at least 73\% (note that this does not mean 73\% in EACH of them)

## Required Courses:

1. First Year: PSY100H1
2. Statistics: PSY201H1 and PSY202H1 (or their equivalents)
3. Two of PSY210H1, PSY220H1, PSY230H1, PSY240H1 (Cluster A)
4. Two of PSY260H1, PSY270H1, PSY280H1, PSY290H1 (Cluster B)
5. One half-course (0.5 FCEs) at the 300/400-level from Group 1 in Cluster A
6. One half-course ( 0.5 FCEs) at the 300/400-level from Group 1 in Cluster B
7. Three half-courses (1.5 FCEs) at the 300/400-level from Group 1 (Clusters A and/or B)
8. One lab course (0.5 FCEs), and no more, taken from PSY319H1, PSY329H1, PSY339H1, PSY379H1, PSY389H1, PSY399H1
9. Two seminar courses (1.0 FCEs), and no more, taken from JLP471H1, PSY410H1, PSY420H1, PSY430H1, PSY440H1, PSY460H1, PSY470H1, PSY471H1, PSY480H1, PSY490H1, PSY497H1
10. 2.5 FCEs from Groups 1 and/or 2 at any level

## Psychology Major (Science Program)

(7-full courses or their equivalents)
You should consider pursuing the Major Program in Psychology if you want to concentrate in Psychology together with another discipline.

This is a limited enrolment POSt that can only accommodate a finite number of students. Eligibility will be based on a student's mark(s) in the required course(s). The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving those mark(s) does not necessarily guarantee admission to the POSt in any given year.

PSY100H1 with a final mark of at least 75\% (AP Psychology not accepted)
A senior-level high school Calculus course, or equivalent
Completion of 4-full university courses
If a $75 \%$ final mark is not achieved in PSY100H1, students must have:

At least a 73\% final mark in PSY100H1
A senior-level high school Calculus course, or equivalent
Completion of 4-full university courses
At least a 70\% final mark in PSY201H (or its equivalent)
One additional 200-level PSY course with at least a 70\% final mark in it
Required Courses:

1. First Year: PSY100H1
2. Statistics: PSY201H1 (or its equivalent)
3. Two of PSY210H1, PSY220H1, PSY230H1, PSY240H1 (Cluster A)
4. Two of PSY260H1, PSY270H1, PSY280H1, PSY290H1 (Cluster B)
5. One half-course (0.5 FCEs) at the 300/400-level from Group 1 in Cluster A
6. One half-course (0.5 FCEs) at the 300/400-level from Group 1 in Cluster B
7. Two half-courses (1.0 FCEs) at the 300/400-level from Group 1 (Clusters A and/or B)
8. One 400-level half-course (0.5 FCEs) from Group 1 (Cluster A or B)
9. 1.5 FCEs from Groups 1 and/or 2 at any level

## Psychology Minor (Science Program)

## (4-full courses or their equivalent)

ou should consider pursuing the Minor Program in Psychology if you are interested in Psychology as a part of your general education or as a compliment to your training in another profession (i.e., nursing, rehabilitation medicine, physical health and education, social work, etc.).
This is a limited enrolment POSt that can only accommodate a finite number of students. Eligibility will be based on a student's mark in the required course. The precise mark thresholds outlined below are an estimate of what will be required in the coming POSt admission cycle. Achieving this mark does not necessarily guarantee admission to the POSt in any given year.

PSY100H1 with a final mark of at least 73\% (AP Psychology not accepted)
A senior-level high school Calculus course, or equivalent
Completion of 4-full university courses
Required Courses:

1. First Year: PSY100H1
2. Statistics: PSY201H1 (or its equivalent)
3. Two of PSY210H1/PSY220H1/PSY230H1/PSY240H1/ PSY260H1/PSY270H1/PSY280H1/PSY290H1
4. Two half-courses (1.0 FCEs) at the 300/400-level from Group 1 (Clusters A and/or B)
5. 1.0 FCEs from Goups 1 and/or 2 at any level

## Psychology Course Groups

## Group 1 (Courses offered through the Psychology Department):

Cluster A (Courses with a focus on Social/Personalityl Developmental/Abnormal Psychology):
JLP315H1; PSY210H1/PSY220H1/PSY230H1/PSY240H1/ PSY299Y1/PSY311H1/PSY312H1/PSY313H1/PSY316H1/

PSY319H1/PSY320H1/PSY321H1/PSY322H1/PSY323H1/ PSY326H1/PSY328H1/PSY329H1/PSY330H1/PSY331H1/ PSY332H1/PSY333H1/PSY336H1/PSY337H1/PSY339H1/ PSY341H1/PSY342H1/PSY343H1/PSY402H1/PSY403H1/ PSY404H1/PSY405H1/PSY406H1/PSY410H1/PSY414H1 (formerly PSY314H1)/PSY417H1 (formerly PSY317H1)/ PSY420H1/PSY 421H1/PSY424H1 (formerly PSY324H1)/ PSY425H1 (formerly PSY325H1)/PSY426H1/PSY427H1 (formerly PSY327H1)/PSY430H1/PSY434H1 (formerly PSY334H1)/PSY435H1 (formerly PSY335H1)/PSY440H1/ PSY450H1 (formerly PSY300H1)

## Cluster B (Courses with a focus on Cognition/

 Perception/Learning/Brain and Behaviour): JLP374H1/JLP471H1,PSY260H1/PSY270H1/PSY280H1/ PSY290H1/PSY299Y1/PSY312H1/PSY316H1/PSY362H1/ PSY370H1/PSY371H1/PSY372H1/PSY378H1/PSY379H1/ PSY380H1/PSY389H1/PSY390H1/PSY396H1/PSY397H1/ PSY399H1/PSY402H1/PSY403H1/PSY404H1/PSY405H1/ PSY406H1/PSY450H1 (formerly PSY300H1) /PSY460H1/ PSY470H1/PSY471H1/PSY473H1 (formerly PSY373H1)/ PSY475H1 (formerly PSY375H1)/PSY480H1/PSY490H1/ PSY492H1 (formerly PSY392H1)/PSY493H1 (formerly PSY393H1)/PSY494H1 (formerly PSY394H1)/PSY497H1*Some PSY courses are included in both of Clusters A and $B$ and may count in either cluster, but not both, for program requirements. For independent study courses being used to complete the cluster requirement, please confirm group cluster with the Undergraduate Advisor.

Group 2 (Courses relevant to Psychology offered outside the Psychology Department):
PSL300H1/PSL301H1 (together formerly PSL302Y1)/ PSL440Y1/PSL444Y1; RLG211Y1/RLG301H1/RLG302H1/ RLG421H1; RSM260H1/RSM353H1; SOC363H1; WDW260H1/WDW360H1/WDW365H1/WDW431H1; WGS372H1
*Please note that the courses in Group 2 are optional and that enrolment priority is not given to PSY program students.

## Environment \& Behaviour Minor (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 behaviour changes. Consult David Powell, Undergraduate Student Advisor, Centre for Environment, Room 1049A, Earth Sciences Centre, 416-946-8100 or david.powell@utoronto.ca Information on application and acceptance timelines is available in the Registration Handbook and Timetable.
(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. (ENV221H1,ENV222H1/GGR222H1)/222Y1/GGR222Y1; PSY220H1, PSY335H1/435H1
2. One FCE from ENV333H1, ENV335H1; JGE321H1; JGE331H1; SOC385H1
3. One FCE from PSY320H1, PSY321H1, PSY327H1, PSY336H1

## Psychology Courses

PSY100H1 Introductory Psychology [36L]
A brief introductory survey of psychology as both a biological and social science. Topics will include physiological, learning, perception, motivation, cognition, developmental, personality, abnormal, and social psychology.
Prerequisite: None.
Exclusion: PSY100Y1
DR=SCI; BR= 2

## 200-SERIES COURSES

Students registered in a St. George campus PSY program will be given priority to enrol in all PSY courses above the $100-l e v e l$. Please see the Arts and Science Registration Handbook and Timetable for more details.
Note on prerequisites: It is important that all students have the necessary prerequisite(s) when enrolling in a PSY course. The Department does not waive 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 to the Undergraduate Advisor before you enrol to provide proof that you meet all of the prerequisites of that course. Furthermore, UTSC and UTM students must also have the correct prerequisites for St. George PSY courses, regardless if they are a Psychology program student at their own campus. We do accept UTSC- and UTM-equivalent PSY courses as prerequisites but do not need to see your transcript as we have access to this information via ROSI.

## PSY201H1 Statistics I [36L]

Fundamentals of descriptive and inferential statistics, including population and sampling distributions, simple association, probability, estimation, and hypothesis testing. Prerequisite: PSY100H1
Exclusion: ECO220Y1/ECO227Y1/EEB225H1/GGR270H1/
HMB325H1/SOC202H1/STA22OH1/STA25OH1
Recommended Preparation: Grade 12 Calculus
DR=SCI; BR= 5

## PSY202H1 Statistics II [36L]

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.
Prerequisite: PSY201H1 (or equivalent)
Exclusion: ECO220Y1/ECO227Y1/STA221H1/JBS229H1/

## SOC300H1

DR=SCI; BR=5
PSY210H1 Introduction to Development [36L]
The developmental approach to the study of behaviour with reference to sensorimotor skills, cognition, socialization, personality, and emotional behaviour.
Prerequisite: PSY100H1/COG250Y1 (formerly UNI250Y) DR=SCI; BR= 2

## Psychology

## PSY220H1 Introduction to Social Psychology [36L]

Contemporary areas of research in social psychology: social perception, attitudes, inter-personal relations, and group processes.
Prerequisite: PSY100H1/COG250Y1 (formerly UNI250Y) DR=SCI; BR= 2

## PSY230H1 Personality and Its Transformations [36L]

Theory and research in personality structure and dynamics: the interaction of cultural and biological factors in the development and expression of individual differences. Prerequisite: PSY100H1/COG250Y1 (formerly UNI250Y) DR=SCI; BR= 2

## PSY240H1 Introduction to Abnormal Psychology [36L]

A critical survey of concepts, theories, and the state of research in the area of emotionally disturbed persons and therapeutic methods.
Prerequisite: PSY100H1/COG250Y1 (formerly UNI250Y) DR=SCI; BR= 2

## PSY260H1 Learning and Plasticity [36L]

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: PSY100H1/COG250Y1 (formerly UNI250Y) DR=SCI; BR=4

## PSY270H1 Introduction to Cognitive Psychology [36L]

An introduction to research and theory on the neural and cognitive architecture of attention, memory, language, thinking and reasoning.
Prerequisite: PSY100H1/COG250Y1 (formerly UNI250Y) or registered in the Cognitive Science program
DR=SCI; BR=2
PSY280H1 Introduction to Perception [36L]
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: PSY100H1/COG250Y1 (formerly UNI250Y) or registered in the Cognitive Science program

## DR=SCI; BR= 4

PSY290H1 Physiological Psychology I [36L]
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..
Prerequisite: PSY100H1/COG250Y1 (formerly UNI250Y) or enrolled in the Cognitive Science program
Exclusion: HMB200H1/HMB204H1/NRS201H1
DR=SCI; BR=4
PSY299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR= None

## 300-SERIES COURSES

Almost all 300/400-level lecture courses require PSY 201H1 (or its equivalent) as one of their prerequisites. This will not be waived. Students must complete the statistics requirement before taking any 300+-level PSY lecture courses.

## PSY305H1 The Treatment of Psychological Data [36L]

This course emphasizes advanced use of statistical computer program packages 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 (or equivalent)
DR=SCI; BR=5
PSY307H1 Special Topics in Psychology [36L]
In depth examination of specific topics/themes relating to Psychology. Content in any given year depends on instructor. Open only to those students enrolled in the Psychology Major Program at the St. George Campus. Prerequisite: PSY100H1, PSY201H1 (or equivalent), and one further 200-level PSY half-course. Enrolment in the PSY
Major Program.
DR=SCI; BR= 2
PSY308H1 Special Topics in Psychology [36L] In depth examination of specific topics/themes relating to Psychology. Content in any given year depends on instructor. Open only to those students enrolled in the Psychology Major Program at the St. George Campus. Prerequisite: PSY100H1, PSY201H1 (or equivalent), and one further 200-level PSY half-course. Enrolment in the PSY Major Program.
DR=SCI; BR=2
PSY309H1 Research Specialization: Practicum [36P]
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. Enrolment is restricted to PSY
Research Specialists.
Prerequisite: PSY202H1 (or equivalent), PSY3*9H1 (PSY lab course)
DR=SCI; BR= None

## PSY311H1 Social Development [36L]

Theory and research in social attachment, aggression, morality, imitation and identification, altruism, and parental discipline, with discussion of methodological issues.
Prerequisite: PSY201H1 (or equivalent), PSY210H1/
PSY220H1
DR=SCI; BR= 2
PSY312H1 Cognitive Development [36L]
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 (or equivalent), PSY210H1/
PSY270H1/COG250Y1 (formerly UNI250Y1)
DR=SCI; BR= 2

## PSY313H1 Psychology of Aging [36L]

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 (or equivalent), PSY210H1 DR=SCI; BR= 2

## JLP315H1 Language Acquisition [36L]

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. (Sponsored by the Departments of Linguistics and Psychology, but administered soley by the Dept. of Linguistics).
Prerequisite: One full course equivalent at the 200+ level in LIN/JAL/JUP/PSL/PSY/COG
DR=SCI; BR=2

## PSY316H1 Perceptual Development [36L]

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 (or equivalent), PSY280H1
Recommended Preparation: PSY210H1
DR=SCI; BR=2
PSY319H1 Developmental Laboratory [36P]
Provides an overview of developmental psychology methods.
The class conducts an original research project, including design, data collection and analysis, and a written report. Course capacity is limited to 15 students and enrolment priority is given to PSY Specialists and Research Specialists. Prerequisite: PSY202H1 (or its equivalent), PSY210H1 DR=SCI; BR= 2

## PSY320H1 Social Psychology: Attitudes [36L]

Intensive study of social attitudes and opinions development, description, measurement, modification, and organization. Prerequisite: PSY201H1 (or equivalent), PSY220H1 DR=SCI; BR= 2

## PSY321H1 Cross-Cultural Psychology [36L]

One of the hallmarks of human behaviour is its diversity. Some of the ways in which we are different are thought to be relatively idiosyncratic (e.g., specific aspects of personality), whereas others are known to be fairly systematic. Cultural psychology is one area of research in human behaviour that examines systematic differences resulting from individuals' cultural backgrounds. This course will introduce you to the consideration of cultural variation in the study of human thought and behaviour.
Prerequisite: PSY201H1 (or equivalent), PSY220H1,
PSY230H1/PSY240H1
DR=SCI; BR=2

## PSY322H1 Intergroup Relations [36L]

An in-depth examination of theories and research in intergroup relations;
focuses on stereotyping, prejudice, discrimination, and stigma.
Prerequisite: PSY201H1 (or equivalent), PSY220H1
DR=SCI; BR= 2

## PSY323H1 Sex Roles and Behaviour [36L]

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 (or equivalent), PSY210H1/
PSY220H1/PSY230H1
DR=SCI; BR= 2

## PSY326H1 Social Cognition [36L]

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 (or equivalent), PSY220H1 DR=SCI; BR= 2

## PSY328H1 Psychology and the Law [36L]

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 (or equivalent), PSY220H1 DR=SCI; BR= 2
PSY329H1 Social Psychology Laboratory [36P] Illustrates major methodologies within social psychology, such as attitude measurement, observation of small groups, and experiments. Course capacity is limited to 15 students and enrolment priority is given to PSY Specialists and Research Specialists.
Prerequisite: PSY202H1 (or its equivalent), PSY220H1
DR=SCI; BR=2

## PSY330H1 Psychometrics [36L]

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 (or equivalent)
Recommended Preparation: PSY202H1 (or equivalent)
DR=SCI; BR= None
PSY331H1 Social Psychology of Emotion [36L]
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 (or equivalent), PSY220H1,
PSY230H1/PSY240H1
DR=SCI; BR=2
PSY332H1 Organizational Behaviour [36L]
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 (or equivalent), PSY220H1
Exclusion: MGT260H1/RSM260H1/WDW260H1
DR=SCI; BR=3

## Psychology

## PSY333H1 Health Psychology [36L]

Examines research evidence concerning the impact of psychological factors on physical health and illness.
Prerequisite: PSY201H1 (or equivalent), PSY230H1/
PSY240H1
DR=SCI; BR=2

## PSY336H1 Positive Psychology [36L]

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 wellbeing, optimism, flow experiences, self-control and emotional intelligence, social support and empathy.
Prerequisite: PSY201H1 (or equivalent), PSY220H1/
PSY230H1/PSY240H1
DR=SCI; BR= 2
PSY337H1 Advanced Personality Psychology [36L]
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: PSY201H1 (or equivalent), PSY230H1/
PSY240H1
DR=SCI; BR=2
PSY339H1 Individual Differences Laboratory [36P] 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. Course capacity is limited to 15 students and enrolment priority is given to PSY Specialists and Research Specialists.
Prerequisite: PSY202H1 (or its equivalent), PSY230H1/
PSY240H1
DR=SCI; BR=2
PSY341H1 Psychopathologies of Childhood [36L] This course focuses on cognitive and neuropsychological aspects of neurodevelopmental and psychiatric disorders in children from clinical and theoretical perspectives.
Prerequisite: PSY201H1 (or equivalent), PSY210H1/
PSY230H1/PSY240H1
DR=SCI; BR= 2
PSY342H1 Cognition and Psychopathology [36L]
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 (or equivalent), PSY230H1/
PSY240H1/PSY270H1
DR=SCI; BR=2
PSY343H1 Theories of Psychopathology and Psychotherapy [36L]
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 (or equivalent), PSY230H1/
PSY240H1
DR=SCI; BR=2
PSY362H1 Animal Cognition [36L]
The study of memory, representation, concept learning, and other cognitive processes in non-human animals. Prerequisite: PSY201H1 (or equivalent), PSY260H1 DR=SCI; BR= 4
PSY370H1 Thinking and Reasoning [36L]
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: PSY270H1/COG250Y1 (formerly UNI250Y1) DR=SCI; BR=2

PSY371H1 Higher Cognitive Processes [36L]
This course covers selected topics pertaining to higher cognitive processes including expertise, consciousness, creativity, and human and artificial intelligence.
Prerequisite: PSY270H1/PSY370H1/COG250Y1 (UNI250Y1) DR=SCI; BR= 2

## PSY372H1 Human Memory [36L]

Current theories and data on human memory: processes involved in encoding, storage, and retrieval.
Prerequisite: PSY201H1 (or equivalent), PSY260H1/
PSY270H1/COG250Y1 (formerly UNI250Y1)
DR=SCI; BR= 2
JLP374H1 Psychology of Language [36L]
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. (Sponsored by the Departments of Linguistics and Psychology, but administered soley by the Dept. of Linguistics).
Prerequisite: One FCE from LIN228H1, LIN229H1,
LIN232H1, LIN241H1, PSY260H1, PSY270H1,
PSY280H1, PSY290H1, COG250Y1
Exclusion: PSY374H5, PLIC55H3
DR=SCI; BR= 2

## PSY378H1 Engineering Psychology [36L]

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 (or equivalent), PSY270H1/
PSY280H1/COG250Y1 (formerly UNI250Y1)
Recommended Preparation: PSY202H1 (or equivalent)
DR=SCI; BR= 2

## PSY379H1 Human Memory and Learning Laboratory

 [36P]Examination of issues and methods in human memory research. Students conduct supervised research projects, and read, critique, and write research articles. Course capacity is limited to 15 students.
Prerequisite: PSY202H1 (or its equivalent), PSY260H1/ PSY270H1/COG250Y1 (formerly UNI250Y1) DR=SCI; BR= 2

## PSY380H1 Vision Science [36L]

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.
Prerequisite: PSY201H1 (or equivalent), PSY280H1
DR=SCI; BR= 4

## PSY389H1 Perception Laboratory [36P]

Examination of issues and methods in perception research. Students conduct supervised research projects, and read, critique, and write research articles. Course capacity is limited to 15 students.
Prerequisite: PSY202H1 (or its equivalent), PSY280H1
DR=SCI; BR= 4

## PSY390H1 Behavioural Genetics [36L]

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 (or equivalent), PSY260H1/
PSY290H1/HMB200H1/HMB204H1/NRS201H1
DR=SCI; BR= 4
PSY396H1 Neurochemical Basis of Behaviour [36L]
The functional relevance of neurotransmitters, with particular emphasis on their role in mediating behaviour.
Prerequisite: PSY201H1 (or equivalent), PSY260H1/
PSY290H1/HMB200H1/HMB204H1/NRS201H1
Exclusion: PCL475Y1
DR=SCI; BR= 4

## PSY397H1 Biological Rhythms [36L]

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/PSY100H1, one FCE at the 200level in the Sciences
Exclusion: JZP326H1
DR=SCI; BR= 4
PSY399H1 Psychobiology Laboratory [36P]
An introduction to experimental methods in behavioural neuroscience, including anatomical and neurobiological methods, especially behavioural and genetic analyses in rodents. Projects include studies of psychopharmacology, motivation, habituation, operant and classical conditioning, acoustic startle reflex and ultrasonic vocalizations. Course capacity is limited to 20 students.
Prerequisite: PSY202H1 (or its equivalent), PSY290H1/
HMB200H1/HMB204H1/NRS201H1
Exclusion: HMB310H1/NRS302H1
DR=SCI; BR= 4

## 400-Series Courses

The 400-series courses comprise of lecture courses, seminars, individual projects, and the thesis course.

## 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. Enrolment is restricted to PSY Research Specialists.
Prerequisite: Enrolment in PSY Research Specialist program, PSY309H1, PSY3*9H1 (PSY lab course)
DR=SCI; BR= None
PSY402H1 Psychology Seminar [24S]
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 Undergraduate Advisor for more details.
DR=SCI; BR= None
PSY403H1 Psychology Seminar [24S]
See PSY402H1 above.
DR=SCI; BR= None
PSY404H1 Psychology Seminar [24S]
See PSY402H1 above.
DR=SCI; BR= None

## PSY405H1 Individual Projects [TBA]

An intensive laboratory or applied research project under the supervision of a faculty member. Will be approved by the Department only when the student and supervisor can show that the project is academically demanding and uniquely suitable for the individual student. Additional information and applications are available at the department and on the website. Note: Projects spread out over the full academic year are still only worth a half credit.
Prerequisite: PSY202H1 (or equivalent) and appropriate background for the proposed work
Exclusion: PSY303H1
DR=SCI; BR= None
PSY406H1 Individual Projects [TBA]
See PSY405H1 above.
Prerequisite: PSY202H1 (or equivalent) and appropriate background for the proposed work
Exclusion: PSY304H1
DR=SCI; BR= None
PSY407H1 Special Topics in Psychology [36L]
In depth examination of specific topics/themes relating to Psychology. Content in any given year depends on instructor. Open only to those students enrolled in the Psychology Major Program at the St. George Campus. Prerequisite: PSY100H1, PSY201H1 (or equivalent), and one further 200-level PSY half-course. Enrolment in the PSY
Major Program.
DR=SCI; BR=2
PSY408H1 Special Topics in Psychology [36L]
In depth examination of specific topics/themes relating to Psychology. Content in any given year depends on instructor. Open only to those students enrolled in the Psychology Major Program at the St. George Campus. Prerequisite: PSY100H1, PSY201H1 (or equivalent), and one further 200-level PSY half-course. Enrolment in the PSY Major Program.
DR=SCI; BR= 2

## Psychology

## PSY409H1 Research Specialization: Theoretical Foundations [24S]

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. Enrolment is restricted to PSY Research Specialists.
Prerequisite: Enrolment in the PSY Research Specialist program, PSY309H1
DR=SCI; BR= 2
PSY410H1 Developmental Psychology Seminar [24S]
Examination in depth of a limited topic within developmental psychology. Content in any given year depends on instructor. Course capacity is limited to 20 students and enrolment priority is given to PSY Specialists and Research Specialists. Prerequisite: PSY202H1 (or its equivalent), PSY210H1 DR=SCI; BR=2

## PSY414H1 Moral Development [36L]

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. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY210H1
Exclusion: PSY314H1
DR=SCI; BR= 2
PSY417H1 Aging and Social Cognition [36L]
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. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY220H1
Exclusion: PSY317H1
DR=SCI; BR= 2

## PSY420H1 Social Psychology Seminar [24S]

Examination in depth of a limited topic within social psychology. Content in any given year depends on instructor. Course capacity is limited to 20 students and enrolment priority is given to PSY Specialists and Research Specialists. Prerequisite: PSY202H1 (or its equivalent), PSY220H1 DR=SCI; BR= 2

## PSY421H1 Person Perception [36L]

Person perception is an important core topic in social psychology that is often reported upon in the popular media This course discusses how we perceive, categorize, and form impressions of other people, relying on readings from primary sources in the scientific literature.
Prerequisite: PSY201H1 (or equivalent), PSY220H1,
PSY230H1/PSY240H1, PSY270H1/PSY280H1
Exclusion: PSY420H1 (taken in Fall of 2011)
DR=SCI; BR=2

## PSY424H1 Social Psychology of Interpersonal Relationships [36L]

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. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY220H1
Exclusion: PSY324H1
DR=SCI; BR= 2

## PSY425H1 Self-Consciousness [36L]

The distinguishing feature of our species is the reflexivity of our consciousness - the ability to conceive of and interpret ourselves and our experiences. For us, consciousness involves self-consciousness. All our higher symbolic capabilities rest upon this foundation. The aim of this course is to trace out a variety of frames through which we may look at and understand the shared aspects of our subjectivity as self-conscious agents. The approach will be multidisciplinary, drawing together ideas and insights from psychology, sociology, philosophy, anthropology, and biology. The broader purpose of the course is to promote articulacy and critical acumen in how we think about reflexive experience. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY220H1, PSY230H1/PSY240H1
Exclusion: PSY325H1
DR=SCI; BR= 2

## PSY426H1 Motivational Theories in Social Psychology [36L]

With intensive reading and discussion of 'classic' and contemporary articles, this advanced course in social psychology focuses on the central issues, methods, and findings in the study of motivation. Topics will include: selfregulation, achievement, and reward/punishment. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY220H1 DR=SCI; BR=2

## PSY427H1 Media Psychology [36L]

This course examines how we come to understand ourselves and our world, and learn to feel, judge, and act, through the simulative mediation of personal and mass communication technologies. The aim is to provide students with a deeper understanding of the highly commodified symbolic environment that surrounds them and in which they participate as audience and, increasingly, producer. Although the focus is psychological, the history, sociology, political economy, and technology of various media will be discussed in relation to the changing forms of public and private life in the 21st century. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY220H1,
PSY230H1/PSY240H1
Exclusion: PSY327H1
DR=SCI; BR= 2

## PSY430H1 Personality Seminar [24S]

Examination in depth of a limited topic within the area of personality. Content in any given year depends on instructor. Course capacity is limited to 20 students and enrolment priority is given to PSY Specialists and Research Specialists. Prerequisite: PSY202H1 (or its equivalent), PSY230H1/ PSY240H1
DR=SCI; BR=2

## PSY434H1 Maps of Meaning: The Architecture of Belief [36L]

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. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY230H1/
PSY240H1
Exclusion: PSY334H1
DR=SCI; BR=2
PSY435H1 Environmental Psychology [36L]
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. This is not a seminar course.
Prerequisite: PSY100H1, PSY220H1/PSY230H1/PSY240H1
Exclusion: PSY335H1
DR=SCI; BR= 2

## PSY440H1 Abnormal Psychology Seminar [24S]

Examination in depth of a limited topic within abnormal psychology. Content in any given year depends on instructor. Course capacity is limited to 20 students and enrolment priority is given to PSY Specialists and Research Specialists. Prerequisite: PSY202H1 (or its equivalent), PSY230H1/

PSY240H1
DR=SCI; BR= 2

## PSY450H1 History of Psychology [36L]

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. This is not a seminar course.
Prerequisite: One FCE in the PSY200- or 300-series
Exclusion: PSY300H1
DR=SCI; BR= 3

## PSY460H1 Learning Seminar [24S]

Examination in depth of a limited topic in learning. Content in any given year depends on instructor. Course capacity is limited to 20 students.
Prerequisite: PSY202H1 (or its equivalent), PSY260H1 DR=SCI; BR= 4

## PSY470H1 Memory Seminar [24S]

Examination in depth of limited topics within the area of memory. Content in any given year depends on instructor. Course capacity is limited to 20 students.
Prerequisite: PSY202H1 (or its equivalent), PSY260H1/ PSY270H1/COG250Y1 (formerly UNI250Y1)
DR=SCI; BR= 2
PSY471H1 Cognition Seminar [24S]
Examination in depth of a limited topic in cognition. Content in any given year depends on instructor. Course capacity is limited to 20 students.
Prerequisite: PSY202H1 (or its equivalent), PSY270H1/
PSY280H1, PSY371H1/PSY380H1/PSY475H1 (formerly
PSY375H1)
DR=SCl; BR=2

## JLP471H1 Advanced Psycholinguistics [24S]

Seminar in advanced topics in psycholinguistics. Content varies from year to year. (Sponsored by the Departments of Linguistics and Psychology, but administered solely by the Dept. of Linguisitics).
Prerequisite: JLP374H1
DR=SCI; BR=2
PSY473H1 Social Cognitive Neuroscience [36L]
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. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY220H1,
PSY270H1/PSY290H1/HMB200H1/HMB204H1/
NRS201H1
Exclusion: PSY373H1
Recommended Preparation: PSY326H1
DR=SCI; BR= 2

## PSY475H1 Attention and Performance [36L]

Visual attention; attentional selection for object recognition, feature integration, and action; movements of attention; eyehand coordination, eye movements, limb movements. Models of attention and motor control. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY270H1/
PSY280H1/COG250Y1 (formerly UNI250Y1)
Exclusion: PSY375H1
DR=SCI; BR=2
PSY480H1 Seminar in Perception [24S]
An in-depth examination of current issues in perception (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. Course capacity is limited to 20 students.
Prerequisite: PSY202H1 (or its equivalent), PSY280H1 DR=SCI; BR= 4
PSY490H1 Brain Activity \& Behaviour Seminar [24S]
An in-depth examination of current issues in brain and behaviour science (e.g. activity of neurons, sensory, motor, motivational, and higher cortical systems.). Content in any given year depends on instructor. Course capacity is limited to 20 students.
Prerequisite: PSY202H1 (or its equivalent), PSY260H1/
PSY290H1/HMB200H1/HMB204H1/NRS201H1
DR=SCI; BR=4
PSY492H1 Neurobiology of Learning and Memory [36L]
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. This is not a seminar course. Prerequisite: PSY201H1 (or equivalent), PSY290H1/

HMB200H1/HMB204H1/NRS201H1
Exclusion: PSY392H1
DR=SCI; BR= 4

## Psychology

## PSY493H1 Cognitive Neuroscience [36L]

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. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY260H1/
PSY270H1/PSY290H1/HMB200H1/HMB204H1/
NRS201H1
Exclusion: PSY393H1
DR=SCI; BR= 4

## PSY494H1 Physiology and Psychology of Emotion

 [36L]The role of brain and body in expression and experience of emotion in humans, considered theoretically and through the experimental, physiological and clinical literatures. This is not a seminar course.
Prerequisite: PSY201H1 (or equivalent), PSY260H1/
PSY270H1/PSY290H1/HMB200H1/HMB204H1/
NRS201H1
Exclusion: PSY394H1
DR=SCI; BR= 4

## PSY497H1 Advanced Topics in Biological Rhythms

 [24S]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. Course capacity is limited to 20 students.
Prerequisite: PSY397H1
Exclusion: JZP428H1
DR=SCI; BR= 4

## Public Health Sciences

## Offered by the Dalla Lana School of Public Health

## Faculty

## Professor and Interim Director of the School

Professors
L.M. Calzavara, Ph D, MA
P. Corey, Ph D
M. Escobar, Ph D
J. Stafford, Ph D

## Associate Professors

G. Einstein, MA, Ph D
B.J. Harvey, MD, Ph D, MEd
M. Millson, MD, MHSc
B. Poland, Ph D

## Assistant Professor

V. Kristman, Ph D

Public health is the science and art of preventing disease and promoting health through organized population-based efforts. The focus of public health is to prevent rather than treat disease and to positively affect determinants of health through a wide range of strategies, including the surveillance and assessment of population health and the promotion of healthy behaviours, healthy environments and healthy public policies. In addition to these activities, the identification and treatment of those with disease may be vital to preventing it in others, such as during an outbreak of an infectious disease. Hand washing, vaccination programs, the inspection of restaurants, laws banning smoking in public places and tax credits for childhood physical activity programs are examples of public health measures. Public health includes sub-disciplines such as epidemiology, biostatistics, occupational and environmental health, public health policy, and social and behavioural health sciences.
Undergraduate Coordinator: Professor B.J. Harvey (416-946-5793 or bart.harvey@utoronto.ca)
Enquiries: Room 688, Health Sciences Building (416-9465793 or bart.harvey@utoronto.ca)

## Public Health Sciences Courses

GGR434H1 Building Community Resilience [24S]
Examines concepts of resilience as a way of building the capacity of communities to (a) respond to predicted disruptions/shocks associated with climate change, global pandemics, anticipated disruptions in global food supply, energy insecurity, and environmental degradation; and (b) nurture the development of alternative spaces that support the emergence of more life-sustaining structures and practices.
Prerequisite: 10 FCEs
Exclusion: GGR400H1 (2011-12)
Recommended Preparation: 1.0 FCEs in Geography DR=SOC SCI; BR= 3

HMB325H1 Statistics Applied to Human Biology [24L/24T]
Find out how to use statistics in your research, and critically assess published data using statistical concepts. The examples used in these lectures and small-group sessions are taken solely from human biology studies.
Prerequisite: First Year math or physics
course, (BIO220H1+BIO230H1/BIO255H1)/
(BIO240H1+BIO241H1), HMB265H1/BIO260H1
Exclusion: ECO220Y1/ECO227Y1/GGR270H1/PSY201H1/
SOC300Y1/ STA220H1/STA250H1/STA261H1/STA248H1
DR=SCI; BR= 4
HMB342H1 Epidemiology of Health \& Disease [24L/24T]
This course 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 health problems will be illustrated using biomedical and public health examples.
Prerequisite: HMB202H1/HMB203H1
Exclusion: UNI373H1, HMB442H1
Recommended Preparation: HMB325H1 or other statistics course
DR=SCI; BR=4
PHS300H1 HIV Prevention Research [24L/24T]
This course engages students in in-depth learning about HIV research. In addition to learning about methods and issues from a variety of research disciplines as applied to HIV, students will be expected, with guidance, to design a study relevant to the content of the course.
Prerequisite: UNI200H1/UNI250H1/UNI237H1/SOC309Y1 or permission of instructor
Recommended Preparation: Introductory course in statistics DR=SCI/SOC SCI; BR= 3

STA365H1 Applied Bayesian Statistics [36L]
Bayesian inference has become an important applied technique and is especially valued to solve complex problems. This course first examines the basics of Bayesian inference. From there, this course looks at modern, computational methods and how to make inferences on complex data problems.
Prerequisite: STA302H1
DR=SCI; BR= 5

## UNI330H1 Population Health (formerly UNI373H1) [24S]

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.
Prerequisite: STA221H1 or equivalent
Corequisite: UNI250H1
DR=SOC SCI; BR=3

## Public Health Sciences

UNI373H1 Epidemiology (formerly UNI440H1) [24S]
This course is designed to introduce students to the principles and methods of epidemiology. 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 aggregrate data will be discussed.
Prerequisite: UNI209H1, STA221H1 or equivalent DR=SOC SCI; BR=3

Solving real-world policy challenges requires the use of multidisciplinary tools to analyze problems, determine the best means to deal with those problems, and decide on the best course of action. An undergraduate Major in Public Policy provides a unique opportunity for students in Social Science disciplines to think in an interdisciplinary way, by drawing on theories and approaches, as well as tool kits developed in the core disciplines of Economics and Political Science, and beyond. Students in this program develop theoretical and applied reasoning skills in policy analysis, as well as a solid grounding in quantitative methods and research.

## Public Policy Programs

The Major program in Public Policy is offered jointly by the School of Public Policy, the Department of Economics, and the Department of Political Science. Students enroll after first-year, and must meet the prerequisite conditions for all second-year and higher courses.
The Program Director and Program Assistant are available for consultation. For enquiries or an appointment call the Undergraduate Administrator, Petra Jory at 416-978-2882 or send an e-mail to public.policy@utoronto.ca.

## Major in Public Policy (Arts program)

(8.0 FCEs)

This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined by a student's average marks in the required first year courses. Achieving the minimum required marks does not necessarily guarantee admission to the program in any given year
Enrolment in this program is limited to students with:

$$
\text { A minimum of } 67 \% \text { in ECO100Y1 }
$$

A minimum of 67\% in POL101Y1
MAT133Y1 or higher
First Year:

1. ECO100Y1 with a final mark of at least $67 \%$, OR

ECO105Y1 with a final mark of at least $80 \%$
2. POL101Y1
3. MAT133Y1/(MAT123H1, MAT124H1)/MAT135Y1/ MAT137Y1/MAT157Y1
Second Year:
ECO200Y1/ECO206Y1
ECO220Y1
POL214Y1
Third and Fourth Years:
PPG301H1
PPG401H1
3. 1.0 FCEs at the 300+-level drawn from Economics, Political Science, and cognate disciplines. A nonexhaustive list of eligible courses includes:
ECO310Y1/ECO313H1/ECO314H1/ECO320H1/ ECO324H1/ECO332H1/ECO333Y1/ECO336Y1/ ECO339Y1/ECO340H1/ECO349H1/ECO364H1/ ECO365H1/ECO369Y1/ECO433H1/ECO434H1/ ECO435H1/POL306H1/POL308H1/POL312Y1/ POL314Y1/POL315H1/POL316Y1/POL317Y1/ POL318H1/POL321H1/POL332Y1/POL334H1/ POL336H1/POL337Y1/POL341H1/POL344H1/ POL351Y1/POL356Y1/JPR364H1/POL370H1/ POL371H1/POL377H1/POL408H1/POL409H1/

POL411H1/POL413H1/JPJ412H1/POL423H1/
POL425Y1/POL439H1/POL447Y1/POL448H1/
POL450H1/JPF455Y1/JPR457H1/POL457Y1/
POL458H1/POL474H1/POL480Y1/POL481Y1/
POL482H1
With the approval of the program director, students can take public-policy oriented courses outside this list.

## Public Policy Courses

PPG301H1 Introduction to Public Policy [24L]
The course introduces students to the study of public policy, the policy process and our policy institutions in Canada. The course examines how issues emerge, how important ideas are framed, priorities are established, and agendas are set and managed. It explores how institutions - formal and informal rules which enable and constrain actors - shape policy-making in Canada.
Prerequisite: (ECO200Y1/ECO206Y1), ECO220Y1,
POL101Y1, POL214Y1
DR=SOC SCI; BR=3
PPG401H1 The Role of Government [24L]
This course explores the government's role in promoting efficiency and equity in both the financing and delivery of public policy goals. It explores the conditions when government involvement is important, the policy levers available to government in promoting social policy, market failures, and conditions for efficiency. It examines the role of government in many of the major areas of social policy such as health care, education, redistribution, the environment, financial regulations and other important issues.
Prerequisite: PPG301H1
DR=SOC SCI; BR=3

## Religion

## Faculty

## Professors Emeriti

A.T. Davies, BA, BD, STM, Ph D (V)
C.T. McIntire, MA, M Div, Ph D (V)
H.J. McSorley, MA, D Th (SM)
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)
L.E. Schmidt, MA, Ph D (SM)
R.E. Sinkewicz, AM, M Div, D Phil (CMS)
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
F. Garrett, MA, Ph D

Professors
J. Bryant, MA, Ph D
S. Coleman, Ph D
J. Dicenso, MA, Ph D
P. Klassen MA, Ph D
D. Novak, MHL, Ph D (FRSC)

## Associate Professors

A. Dhand, MA, Ph D (V)
H. Fox, MS, MA, Ph D
F. Garrett, MA, Ph D
K. H. Green, MA, Ph D (U)
J. Marshall, MA, Ph D (U)
J. Newman, MAR, Ph D (V)
W. Saleh, MA, Ph D (U)
S. Virani, MA, Ph D (University of Toronto Mississauga)

## Assistant Professors

C. Emmrich, MA, Ph D (University of Toronto Mississauga)
A. Goodman, MA
R. Marshall, D Phil
A. Mittermaier, Ph D
K. O'Neil, MA, Ph D
S. Raman, MA, Ph D
A. Rao, MA, Ph D (University of Toronto Mississauga)
K. Ruffle, Ph D (University of Toronto Mississauga)
K. Smith, Ph D (University of Toronto Mississauga)

As an intellectual inquiry into an important dimension of human experience, the study of religion enables students to grasp an essential aspect of the cultures of the world and the interactions among them. We look at the development of religious beliefs, practices, and doctrines as they intersect with the history of peoples and cultures right up to the contemporary world. The study of religion also prepares students for a wide range of careers, such as social work, law, politics from the local to the international level, teaching, medicine, or leadership in religious organizations. Combined with appropriate language preparation, it 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 our University's own Graduate programs.

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 crosslisted 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 students interests and fulfill the programs requirements.

Undergraduate Adminstrative Assistant: Jackman Humanities Building, Room 310 (416-978-2395)

Enquiries: Jackman Humanities Building (416-978-2395)

## Religion Programs

Enrolment in Religion programs requires completion of four courses.

## Religion Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

## (10 full courses or their equivalent)

1. RLG100Y1/RLG280Y1 in first or second year.
2. No later than the third year of study: RLG200H1. RLG200H1 is a prerequisite for all 400 level courses.
3. One course from: RLG 202Y1-RLG207Y1/ RLG241Y1.
4. Three RLG FCEs at the $300+$ level course in tradition area chosen for RLG 202Y-207Y/241Y. If more than one course from RLG202Y1 - RLG207Y1/RLG241Y1 is taken (e.g., in partial fulfillment of req. 6, below) consult the associate chair on which courses from more than one tradition can fulfill this requirement. Certain combinations, such as RLG203Y1 and RLG241Y1, or RLG206Y1 and RLG207Y1, are cognate to one another. At least one of these FCEs must be at the 400 level.
5. One other RLG FCE 300+ level course
6. Three other RLG FCEs at any level.
7. RLG404H1/RLG405H1 or RLG406H1, a capstone integrative course (note: this does not fulfil the requirement of the 400 level FCE in \#4 above.)
Two cross-listed course may be counted towards the fulfillment of the degree (consult the Departmental Handbook for a list of eligible courses).

## Religion Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(6.5 full courses or their equivalent)

1. RLG100Y1/RLG280Y1 in first or second year.
2. RLG 200 H 1 , which is a prerequisite for all 400 level courses and must be taken no later than the third year of study.
3. One FCE from: RLG202Y1 - RLG207Y1/RLG241Y1.
4. Two RLG FCEs the $300+$ level, one of which must be in the same tradition/area as that for \#3 above.
5. 1.5 FCE other RLG courses.
6. RLG404H1 or RLG405H1 or RLG406H1, a capstone, integrative course.
One cross-listed course may be counted towards the fulfillment of the degree (consult the Departmental Handbook for a list of eligible courses)

## Religion Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)

1. RLG100Y1/RLG200Y1/RLG280Y1.
2. One $300+$ series RLG course.
3. Two other courses.
4. No cross-listed courses may be counted. NMC283Y and SOC250Y will be counted as Religion courses.

## Religion: Christian Origins Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(11 full courses or their equivalent)

1. RLG100Y1/RLG280Y1 in first or second year
2. RLG241Y1
3. RLG203Y1/RLG331Y1
4. No later than the third year of study: RLG200H1. RLG200H1 is a prerequisite for all 400 level courses.
5. Two full courses in Greek, normally fulfilled by GRK101H1, GRK102H1 + GRK200H1, 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.)
6. Five $300+$ half-courses (at least one half course must be from the 400-level) chosen from RLG319H1, RLG320H1, RLG321H1, RLG322H1, RLG323H1, RLG324H1, RLG325H1, RLG326H1, RLG327H1, RLG448H1, RLG449H1, RLG451H1, RLG452H1, RLG453H1, RLG454H1, RLG455H1, RLG458H1.
7. Three half courses or the equivalent chosen from CLA204H1, CLA230H1, CLA231H1, CLA232H1, CLA233H1, CLA305H1, CLA308H1, CLA310H1, CLA364H1, CLA368H1, CLA369H1, CLA371H, CLA378H1, NMC250H1 (formerly NMC329H1), NMC252H1, NMC257H, NMC270Y1, NMC281H1 (formerly NMC252H1), NMC324H1, NMC338H1, NMC360H1, NMC361H1, NML352H1, NML353H1, NML356Y1, NML357H1, NML358H1, NML359H1, NML451H1, NML452H1, NML454H1, FAH300H1, FAH309H1, FAH312H1, FAH313H1, FAH316H1, FAH318H1, FAH319H1, FAH418H1, FAH424H1.
8. One full course in another religious tradition, preferably an Asian tradition such as Hinduism or Buddhism.
9. RLG404H1 or RLG405H1, or RLG406H1, a capstone integrative course (note: this does not fulfil the requirement of the 400 level FCE in \#6 above.)

## Buddhist Studies Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent)

1. RLG100Y1/RLG280Y1 in first or second year.
2. No later than the third year of study: RLG200H1. RLG200H1 is a prerequisite for all 400 level courses.
3. RLG206Y1/207Y1
4. Two consecutive (FCE) language courses in one of: Chinese, Japanese, Korean, Sanskrit or Tibetan.
5. One FCE drawn from RLG courses in Judaism, Christianity or Islam, or RLG210Y1, RLG211Y1, RLG212H1.
6. A total of EIGHT half-courses (or equivalent) chosen from the list below. At least six half-courses (or equivalent) must be RLG courses (EAS324H1, EAS325H1, and EAS361Y1 are counted as RLG courses here). At least six half-courses (or equivalent) must be taken at the 300 level or higher, including at least two half-courses (or equivalent) at the 400 level. Second year courses: RLG205Y1, RLG207Y1, RLG236H1, RLG245Y1, RLG246H1, RLGB03H3F, RLGB07H3F, FAH260H1, EAS209Y1, EAS215H1, HIS280Y1, HIS281Y1, HIS282Y1, HIS283H1, NEW214Y1, NEW232Y1, PHL237H1. Third year courses: RLG316H1, RLG356H1, RLG361H1, RLG363H1, RLG366H1, RLG367H1, RLG368H1, RLG371H1, RLG372H1, RLG373H1, RLG375H1, RLG371H5, RLG373H5, RLG374H5, RLGC07H3S, FAH361H1, FAH362H1, FAH363H1, FAH364H1, FAH368H1, EAS324H1, EAS325H1, EAS338H1, EAS361Y1, EAS346H1, HIS380H1, NEW331H1, NEW332H1, NEW333H1, NEW339H1, PHL337H1. Fourth year courses: RLG462H1, RLG463H1, RLG464H1, RLG465H1, RLG466H1, RLG467H1, RLG468H1, RLG469H1, RLG470H1, RLG470H5, RLG473H1, RLG490Y1, FAH461H1, HIS409H1, HIS485H1, NEW433H1.
7. RLG404H1 or RLG405H1 or RLG406H1, a capstone integrative course (note: this does not fulfil the requirement of the 400 level FCE in \#6 above).

## Buddhist Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent)

1. RLG100Y1/RLG280Y1 in first or second year
2. No later than the third year of study: RLG200H1. RLG200H is a prerequisite for all 400 level courses
3. RLG206Y1/RLG207Y1
4. A total of EIGHT half-courses (or equivalent) chosen from the following list; at least six half-courses (or equivalent) must be RLG courses (EAS324H, EAS325H, and EAS361Y are counted as RLG courses here). Six halfcourses (or equivalent) must be taken at the 300 level or higher, including at least two half-courses (or equivalent) at the 400 level.

## Religion

Second year courses: RLG205Y1, RLG207Y1, RLG236H1, RLG245Y1, RLG246H1, RLGB03H3F, RLGB07H3F, FAH260H1, EAS209Y1, EAS215H1, HIS280Y1, HIS281Y1, HIS282Y1, HIS283H1, NEW214Y1, NEW232Y1, PHL237H1.
Third year courses: RLG316H1, RLG356H1, RLG361H1, RLG363H1, RLG366H1, RLG367H1, RLG368H1,RLG371H1, RLG372H1, RLG373H1, RLG375H1, RLG371H5, RLG373H5, RLG374H5, RLGC07H3S, FAH361H1, FAH362H1, FAH363H1 FAH364H1, FAH368H1, EAS324H1, EAS325H1, EAS338H1, EAS361Y1, EAS346H1, HIS380H1, NEW331H1, NEW332H1, NEW333H1, NEW339H1, PHL337H1.
Fourth year courses: RLG462H1, RLG463H1, RLG464H1, RLG465H1, RLG466H1, RLG467H1, RLG468H1, RLG469H1, RLG470H1, RLG470H5, RLG473H1, RLG490Y1, FAH461H1, HIS409H1, HIS485H1, NEW433H1.
5. RLG4041H1 or RLG405H1 or RLG406H1, a capstone, integrative course. (Note: this does not fulfil the requirement of the 400 level FCE in \#4 above.)

## Islamic Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(6.5 full courses or their equivalent)

1. RLG100Y1/RLG280Y1 in first or second year.
2. RLG200H1. RLG200H1 is a prerequisite for all 400 level courses and must be taken no later than the third year of study
3. RLG204Y1 or NMC283Y1Y
4. One full course from the following: RLG210Y1/RLG211Y1/ RLG212H1
5. 2.5 (or 3 if RLG212H1 is taken to fulfill requirement 4) full courses from the following list: (2 FCEs must be at the 300+ level): HIS336H, HIS386, NMC275H1, NMC285H1, NMC286H1, 365H, NMC381H1, NMC387H1, NMC388H1, NMC389H1, NMC393H1, NMC396Y1, NMC481H1; RLG250H, RLG251H1, RLG351H1, RLG350H1, RLG354H1, RLG355H1, RLG456H1, RLG457H1, RLG459H1, RLG461H1; PHL336H1
6. RLG404H1 or RLG405H1 or RLG406H1, a capstone, integrative course.

## Religion Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
MHB155H1 Elementary Modern Hebrew I [36L/12T] Introduction to the fundamentals of Hebrew grammar and syntax. Emphasis on the development of oral and writing skills.
Exclusion: Grade 4 Hebrew (or Grade 2 in Israel)/NML155H1 DR=HUM; BR= 1

MHB156H1 Elementary Modern Hebrew I [36L/12T]
Continued introduction to the fundamentals of Hebrew grammar and syntax. Emphasis on the development of oral and writing skills.
Prerequisite: MHB155H1/NML155H1 or permission of instructor
Exclusion: Grade 4 Hebrew (or Grade 2 in Israel)/NML156H1
DR=HUM; BR= 1
MHB255H1 Intermediate Modern Hebrew [36L/12T]
Intensive study of written and spoken Hebrew.
Prerequisite: MHB156H1/ NML156H1 or permission of instructor
Exclusion: Grade 8 Hebrew (or Ulpan level 2 in Israel)/ NML255Y1
DR=HUM; BR=1
MHB256H1 Intermediate Modern Hebrew [36L/12T]
Continued intensive study of written and spoken Hebrew.
Prerequisite: MHB255H1/NML156H1 or permission of instructor
Exclusion: Grade 8 Hebrew (or Ulpan level 2 in Israel)/ NML255Y1
DR=HUM; BR= 1
MHB355H1 Advanced Modern Hebrew [36L/12T]
Advanced intensive study of written and spoken Hebrew.
Prerequisite: MHB256H1/NML255Y1 or permission of instructor
Exclusion: OAC Hebrew/NML355Y1
DR=HUM; BR= 1
MHB356H1 Advanced Modern Hebrew [37L/12T]
Continued advanced intensive study of written and spoken Hebrew.
Prerequisite: MHB355H1 or permission of instruc
Exclusion: OAC Hebrew/NML355Y1
DR=HUM; BR= 1

## RLG100Y1 World Religions [48L/24T]

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. Note: RLG101H5 is not equivalent to RLG100Y1Y
$D R=H U M ; B R=2+3$

## 200-Series Courses

## Note

No 200-series course has a 100-series RLG course prerequisite or co-requisite.

## RLG200H1 The Study of Religion (formerly RLG200Y1) [24L/12T]

An introduction to the discipline of the study of religion. This course surveys methods in the study of religion and the history of the discipline in order to prepare students to be majors or specialists in the study of religion.
Prerequisite: Open to Religion Specialists and Majors Exclusion: RLG200Y1
DR=HUM; BR=2

RLG202Y1 The Jewish Religious Tradition [48L/24T] 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.
Exclusion: RLG202H5
Recommended Preparation: RLG100Y1/200Y1/RLG280Y1
DR=HUM; BR=2 + 3

## RLG203Y1 The Christian Religious Tradition [48L/24T]

An introduction to the Christian religious tradition as it has developed from the 1 st century C.E. to the present and has been expressed in teachings, institutions, social attitudes, and the arts.
Exclusion: RLG203H5
Recommended Preparation: RLG100Y1/RLG200Y1/
RLG280Y1
$D R=H U M ; B R=2+3$
RLG204Y1 The Islamic Religious Tradition [48L/24T]
The faith and practice of Islam: historical emergence, doctrinal development, and interaction with various world cultures. Note: this course is offered alternatively with NMC283Y1, to which it is equivalent.
Exclusion: NMC185Y1, NMC185H1, NMC283Y, RLG204H5
Recommended Preparation: RLG100Y1/RLG200Y1/
RLG280Y1
DR=HUM; BR=2 + 3
RLG205Y1 The Hindu Religious Tradition [48L/24T]
A historical and thematic introduction to the Hindu religious tradition as embedded in the socio-cultural structures of India.
Exclusion: RLG205H5
Recommended Preparation: RLG100Y1/RLG200Y1/ RLG280Y1
DR=HUM; BR=2 +3

## RLG206Y1 The Buddhist Religious Tradition [48L/24T]

The development, spread, and diversification of Buddhist traditions from southern to northeastern Asia, as well as to the West.
Exclusion: RLG206H5
Recommended Preparation: RLG100Y1/RLG200Y1/
RLG280Y1
$D R=H U M ; B R=2+3$

## RLG207Y1 The Study of East Asian Religions [48L/24T]

This course is an introduction to the study of East Asian religious traditions, including Confucianism, Daoism, Buddhism, Shinto, shamanism and so on. The first semester will focus on premodern traditions across China, Japan and Korea, while the second term will examine specific traditions within their modern cultural contexts. Emphasis both terms will be placed on the various scholarly approaches to the study of East Asian religions.
Recommended Preparation: RLG100Y1/RLG200Y1/
RLG280Y1
$D R=H U M ; B R=2+3$

## RLG210Y1 Introduction to the Sociology of Religion [48L/24T]

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 SOC250Y1.
Exclusion: SOC250Y1
DR=SOC SCI; BR=2 + 3

## RLG211Y1 Introduction to the Psychology of Religion [48L/24T]

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.
DR=SOC SCI; BR=2 + 3

## RLG212H1 Introduction to the Anthropology of Religion (formerly RLG212Y1) [48L/24T]

Anthropological study of the supernatural in small-scale nonliterate 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.
Exclusion: RLG212Y1
DR=SOC SCI; BR=2

## RLG213H1 Reading Sacred Texts [24L/12T]

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. Prior exposure to the study of religion is not required; all readings will be in English.
DR=HUM; BR= 2
RLG215H1 Pilgrimage as Idea and Practice [24L/12T]
The study of pilgrimage has become increasingly prominent in anthropology and religious studies in recent decades. Why should this be? This course provides some answers while engaging in a cross cultural survey and analysis of pilgrimage practices. We also explore whether research into pilgrimage has wider theoretical significance.
DR=HUM; BR=3

## RLG220H1 Philosophical Responses to the Holocaust [24L/12T]

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. DR=HUM; BR=3

## RLG221H1 Religious Ethics: The Jewish Tradition [24L/12T]

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.
DR=HUM; BR=2
RLG224H1 Problems in Religious Ethics [48L/24T]
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.
DR=HUM; BR=2 + 3

## RLG225H1 Christian Ethics and Human Sexuality

 [24L/12T]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
DR=HUM; BR= 2

## RLG228H1 Religious Ethics: The Environment [24L/12T]

The ethics and religious symbolism of environmental change: animal domestication and experimentation, deforestation, population expansion, energy use, synthetics, waste and pollution.
DR=HUM; BR=2
RLG229H1 Death, Dying and Afterlife [24L/12T]
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.
DR=HUM; BR=2

## RLG230H1 Religion and Public Life [24L/12T]

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
DR=HUM; BR=3

## RLG231H1 Religion and Science (formerly RLG231Y1)

 [24L/12T]Course explores issues at the intersection of religion and science which may include such topics as evolution and the assessment of its religious significance by different traditions, conceptions of God held by scientists (theism, pantheism, panentheism), ethical issues raised by scientific or technological developments ( cloning or embryonic stem cell research), philosophical analysis of religious and scientific discourses.
Exclusion: RLG231Y1, SMC230Y1
$D R=H U M ; B R=2$

## RLG232H1 Religion and Film [24L/12T]

The role of film as a mediator of thought and experience concerning religious worldviews. The ways in which movies relate to humanitys 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
DR=HUM; BR=1

## RLG236H1 Gender, Body and Sexuality in Asian Traditions [24L/12T]

A study of women in the religious traditions of South and East Asia, including historical developments, topical issues, and contemporary womens movements.
DR=HUM; BR= 3

## RLG237H1 Women and Western Religions (formerly

 RLG237Y1) [24L/12T]The social and legal status of women in Judaism, Christianity, and Islam. The historical and contemporary situation of women in these traditions.
Exclusion: RLG237Y1
DR=HUM; BR=3

## RLG239H1 Special Topics [24L]

Some topic of central interest to students of religion, treated on a once-only basis. For details of this years offering, consult the Departments current undergraduate handbook. DR=HUM; BR= None

## RLG241Y1 Early Christian Writings I [48L/12T]

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; RLG341H5; HUMC14H3
DR=HUM; BR=2 + 3
RLG243H1 Diasporic Religions [24L/12T]
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
DR=HUM; BR=3

## RLG245Y1 Religions of the Silk Road [48L/24T]

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/RLG280Y1/
RLG100H5
DR=HUM; BR=2 +3

## RLG246H1 Karma and Dharma in Indic Tradition [24L/12T]

A comparative study of the development of ethical perspectives in Hinduism, Buddhism, and Jainism, concluding with a discussion of contemporary moral issues. DR=HUM; BR= 2
RLG248H1 Martyrs, Mystics, and Saints [24L/12T]
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
DR=HUM; BR=2

## RLG249H1 Dreams and Visions [24L/12T]

While dreaming seems to be a universal experience, dreams have been understood in a variety of ways in different historical, cultural, and religious contexts. This course introduces students to different approaches to dreams, visions and apparitions, drawing from the fields of psychology, anthropology, history, and religious studies. Topics will include the social life of dreams and visions, the politics of discernment, faith and skepticism, and narrative and visual representations of dreams. Special attention will be given to the question of when, how, and under what circumstances an experience is deemed religious.
DR=HUM; $B R=2$

## RLG251H1 Women in Islam [24L]

An introduction to the role of women in Muslim societies in past and present. Topics include the status of women in the Quran and Islamic law, veiling, social change, and Islamic feminism.
Recommended Preparation: RLG100Y1/RLG200Y1/
RLG204Y1/NMC283Y1/RLG204H5

## DR=HUM; BR= 3

## RLG260Y1 Introduction to Sanskrit [48L/24T]

An introduction to Sanskrit for beginners. An overview of basic grammar and development of vocabulary, with readings of simple texts.
DR=HUM; BR= 1
RLG261Y1 Introduction to Tibetan [48L/24T]
An introduction to Tibetan for beginners. An overview of basic grammar and development of vocabulary, with readings of simple texts.
DR=HUM; BR=1

## RLG280Y1 World Religions: A Comparative Study [48L/24T]

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.
Prerequisite: Completion of 5.5 full course equivalents Exclusion: RLG100Y1
DR=HUM; BR=2 +3

RLG290Y1 Special Topics [24S]
Topics vary from year to year Please check Department handbook.
DR=HUM; BR= None
RLG299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR= None

## 300-Series Courses

## Note

All 300-series courses normally presuppose at least three prior RLG half-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 [24L]
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
DR=SOC SCI; BR=2
RLG302H1 Carl Jung's Theory of Religion [24L]
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

## DR=SOC SCI; BR=2

## RLG303H1 Evil and Suffering [24L]

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 DR=SOC SCI; BR=2

RLG304H1 Language, Symbols, Self [24L]
Theories of the self that involve the constitutive role of language in its various forms. Problems of sociallyconditioned 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
DR=SOC SCI; BR=2

## RLG305H1 Material Religion? [24L]

Religions are constituted by material forms, including bodies, shrines, films, icons, and ' kitsch'. Anti-material impulses have also prompted many religious impulses, involving forms of iconoclasm that ironically demonstrate the power of objects. What is at stake in studying materiality? How might such a perspective transform our view of religion?

Religion

Prerequisite: See note above for general prerequisites DR=HUM; BR=1
RLG306H1 Anthropology of Christianity [24L]
This course focuses on current debates in the fastdeveloping field of the anthropology of Christianity.
Topics possibly included: the past and present influence of Christianity on anthropological thinking; historical interactions between missionaries and anthropologists; emerging transnational, charismatic Christian networks; the 'Southernization’ of Christianity; Christianity and competing ideas of 'the modern'.
Prerequisite: RLG100Y1/ANT204H1
DR=SOC SCI; BR=3

## RLG308H1 Religion and the City [24L]

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 DR=HUM; BR= 3

## RLG309Y1 Religion, Morality and Law [48L]

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 RLG or PHI/PHL half-courses and third year standing. See note above for general Prerequisites

## Exclusion: RLG309H5

DR=HUM; BR=2

## RLG310Y1 Modern Atheism and the Critique of Religion (formerly RLG310H1) [48L]

This course examines major classical thinkers who have contributed to the development of critical approaches to religion in the modern West, and whose theories still influence contemporary debates. We begin with the 17th century European Enlightenment and proceed to examine selected 19th and 20th century thinkers. The approaches considered are mainly philosophical, but include historical, social, and political issues as well. Authors studied include Hume, Kant, Marx, Nietzsche and others.
Prerequisite: three RLG or PHI/PHL half-courses and third year standing. See note above for general Prerequisites DR=HUM; BR=2+3
RLG314H1 Religion, Gender, and Sexuality [24L]
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
DR=SOC SCI; BR= 2

## RLG315H1 Rites of Passage [24L]

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 RLG or PHI/PHL. See note above for general Prerequisites

## DR=SOC SCI; BR=3

RLG317H1 Religious Violence and Nonviolence [24L] 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.
Exclusion: RLG317H5
Recommended Preparation: RLG100Y1/280Y1; see note above for general Prerequisites
$D R=H U M ; B R=2$

## RLG319H1 Reconception of Biblical Figures in Early

 Jewish and Christian Sources [24L]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/NMC280H1/NMC280Y1; see note above for general Prerequisites
DR=HUM; BR= 2

## RLG320H1 Judaism and Christianity in the Second Century [24L]

Judaism and Christianity in the period from 70 C.E. to 200 C.E. 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
$D R=H U M ; B R=3$

## RLG321H1 Early Christian Writings II [24L]

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
DR=HUM; BR=2

## RLG322H1 Early Christian Gospels [24L]

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
DR=HUM; $B R=1$

## RLG323H1 Jesus of Nazareth [24L]

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
DR=HUM; BR=2

## RLG324H1 Paul of Tarsus [24L]

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
DR=HUM; BR=2

## RLG326H1 Roots of Early Christianity and Rabbinic

 Judaism [24L]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
DR=HUM; BR= 3

## RLG327H1 Magic and Miracle in Early Christianity [24L]

Magic, religion, astrology, alchemy, theurgy, miracle, divinationall 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
DR=HUM; BR=2

## RLG328H1 The Politics of Belief in Early Christianity [24L]

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 DR=HUM; BR= 3

## RLG332H1 Memoir and Confession: Telling Christian

 Lives [24L]How and why have modern Christians revealed their inner lives via diaries, autobiographies, memoirs, and letters? Reading autobiographical writings and theoretical approaches, we consider how Christians have negotiated self-aggrandizement and self-security, revelation in the wake of scientific worldviews, and the influences of race, gender, nationality, celebrity, and class on their storytelling.

Prerequisite: RLG203Y1; see note above for general Prerequisites
DR=HUM/SOC SCI; BR= 1

## RLG333H1 Christianity and Conflict [24L]

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 nonChristians, 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. DR=HUM; BR=3

## RLG337H1 Witchcraft and Magic in Christian Tradition [24L/12T]

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.
Prerequisite: See note above for general Prerequisites Recommended Preparation: RLG203Y1/RLG203H5 DR=HUM; BR= 3

## RLG338Y1 Technology, Ethics and the Future of

 Humanity [48L]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 Exclusion: RLG338H5
Recommended Preparation: RLG224Y1
DR=HUM; BR= 2

## RLG340Y1 Classical Jewish Theology [48L]

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/RLG202Y1/RLG221H1/RLG280Y1; see note above for general Prerequisites
DR=HUM; BR=2

## RLG341H1 Dreaming of Zion: Exile and Return in

 Jewish Thought [24L]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/RLG202Y1/RLG280Y1/RLG342Y1; see note above for general Prerequisites DR=HUM; $B R=2$

## Religion

## RLG342Y1 Judaism in the Modern Age (formerly RLG244Y1) [48L]

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/RLG202Y1/RLG221H1/RLG280Y1; see note above for general Prerequisites
DR=HUM; BR= 2

## RLG343H1 Kabbala: A History of Mystical Thought in Judaism [24L]

A historical study of the Kabbala and the mystical tradition in Judaism, with emphasis on the ideas of Jewish mystical thinkers and movements.
Prerequisite: RLG100Y1/RLG202Y1/RLG280Y1; see note above for general Prerequisites
DR=HUM; BR=2

## RLG344H1 Antisemitism [24L]

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 DR=HUM; BR=2 +3

## RLG345H1 Social Ecology and Judaism [24L]

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/RLG228H1/RLG280Y1/one course in Jewish Studies
DR=HUM; BR=3

## RLG346H1 Time and Place in Judaism [24L]

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/RLG280Y1/one course in Jewish Studies
DR=HUM; BR= 2

## RLG350H1 The Life of Muhammad [24L]

This course examines Muhammads 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 Muhammads life. Issues include: relationship between Muhammads life and Quran teachings and the veneration of Muhammad.
Prerequisite: RLG100Y1/RLG200Y1/RLG204Y1/NMC283Y1/ RLG204H5; See note above for general Prerequisites DR=HUM; BR=2

RLG351H1 The Quran: An Introduction [24L]
The revelatory process and the textual formation of the Quran, its pre-eminent orality and its principal themes and linguistic forms; the classical exegetical tradition and some contemporary approaches to its interpretation.

Prerequisite: RLG100Y1/RLG204Y1/RLG224H1/RLG280Y1/
NMC185Y1/NMC185H1; see note above for general
Prerequisites
Exclusion: NMC285H1, NMC285Y1
DR=HUM; $B R=1$

## RLG352H1 Post-Colonial Islam [24L]

This course will study Islam in a post-colonial framework. It will introduce students to the work of post-colonial studies, and how critical scholarship has transformed our understanding of monolithic concepts such as modernity, the nation and Islam. It will focus on the particular case of Islam in South Asia and the Middle East by exposing students to the transformative impact of colonialism. It will equip students with the tools to challenge the hegemonic notion of a singular 'tradition' in Islam by tracing its lineages in the post-colony.
Prerequisite: NMC185H1/NMC201Y1 or RLG204Y1,
NMC278H1; see note above for general Prerequisites
Exclusion: NMC381Y1, RLG250H1
DR=HUM; BR=3
RLG354H1 Islam in Egypt [24L]
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
DR=SOC SCI; BR=3

## RLG355H1 Anthropology of Islam [24S]

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
DR=SOC SCI; BR=2

## RLG356H1 Islam in China [24S]

Despite having an estimated Muslim population of 20 million, the place of Islam within the Peoples Republic of China is not widely understood. This course will examine the history of Islam in China from its introduction in the seventh century through the modern period. Emphasis will be placed on the variety of practices within Chinas contemporary Muslim communities. Specific attention will be paid to official state policy toward the Hui and Uygur ethnic minorities, including laws governing pilgrimage, the veil, the formation of Islamic organizations, the reformation of writing systems and so on.

Prerequisite: See note above for general Prerequisites DR=HUM; BR=3

## RLG360H1 Intermediate Sanskrit [24S]

Review of grammar and the further development of vocabulary with a focus on reading simple narrative prose and verse.
Prerequisite: Introductory Sanskrit
DR=HUM; BR=1

## RLG361H1 Hindu Myth [24L]

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/RLG205Y1/RLG280Y1; see note above for general Prerequisites
$D R=H U M ; B R=1$

RLG362H1 Rama Through the Ages: An Odyssey from Valmiki to Ayodhya [24L]
A historical study of the Rama tradition incorporating text, orality, performance, and political theatre.
Prerequisite: RLG205Y1; see note above for general
Prerequisites
DR=HUM; BR= 1

## RLG363H1 Hindu Ritual [24L]

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/RLG205Y1/RLG280Y1; see note above for general Prerequisites
DR=HUM; BR= 3
JPR364Y1 Religion and Politics (formerly JPR364H1/ POL364H/Y1) [48L]
This course examines the evolving role of religions in contemporary public, political contexts. Themes include: democracy and secularism; religion, human rights, law and justice; party politics, identity-formation and citizenship; gender and sexuality; interreligious conflict. (Given by the Departments of Political Science and Religion)
Prerequisite: A course in POL or 1.5 FCEs in Religious Studies
Exclusion: JPR364H1/RLG230H1/POL364H1/POL364Y1 DR=SOC SCI; BR=2 + 3

RLG364H1 Fiction, Film and Cyberspace: Hinduism and Contemporary Media [24L]
A historically-informed look at Hinduisms engagement with contemporary media: books, television, film, and cyberspace.
Prerequisite: RLG205Y; see note above for general prerequisites
DR=HUM; BR=1
RLG365H1 Modern Hinduism [24L]
The development of modern Hindu religious thought in the contexts of colonialism, dialogue with the West and the secular Indian state.
Prerequisite: RLG100Y1/RLG205Y1/RLG280Y1; see note above for general Prerequisites
Exclusion: RLG360H1
DR=HUM; BR= 3

## RLG366H1 Hindu Philosophy and Practice [24L]

A study of six classical schools of Hindu philosophy, focusing on the key issues of the Self, the Real, karma and ethics.
Prerequisite: RLG100Y1/RLG205Y1/RLG280Y1/ ;See note above for general Prerequisites
Exclusion: RLG362H1
DR=HUM; BR=2
RLG367H1 Religious Pluralism in Modern India [24L]
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/RLG280Y1/ RLG205Y1
DR=HUM; BR=3

## RLG368H1 Yoga and Ayurveda from pre-Modernity to post-Modernity [24L]

The course surveys the textual sources of the practices of Yoga and Ayurveda. It critically evaluates the assumption of
an unbroken continuity of tradition of these practices from antiquity onwards and comes to consider what they have come to constitute as a result of modernity and globalization.
Prerequisite: RLG205Y1; see note above for general
Prerequisites
DR=HUM; BR= 2

## RLG369H1 The Mahabharata [24L]

A study of the great Sanskrit epic, the Mahabharata.
Prerequisite: RLG205Y1; see note above for general
Prerequisites
DR=HUM; BR= 1
RLG370Y1 Intermediate Tibetan [48L]
Intermediate level language course focusing on both spoken and literary forms of Tibetan.
Prerequisite: The equivalent of one year of Tibetan language training.
DR=HUM; $B R=1$

## RLG371H1 Asian Epics [24L]

This course explores oral and written epic storytelling and performance in one or more Asian culture. The course will begin with theoretical studies on the heroic epic as a literary genre and on oral storytelling traditions cross-culturally. We will then engage in a comparative study and close reading of several Asian epics together with a study of related epic performance practices. Topics to be considered include the social functions and historicity of epic, the nature of heroism and the epic journey, encounters with and characterizations of dangerous and non-human characters, the manifestations of religious practice in epic traditions, and the transmission of various kinds of cultural knowledge and practice through storytelling.
Prerequisite: RLG205Y/206Y/207Y
DR=HUM; BR= 1
RLG372H1 Tibetan Buddhism [24L]
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
DR=HUM; BR=2

## RLG373H1 Buddhist Meditation: Historical, Doctrinal,

 and Ethnographic Perspectives [24L]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 DR=HUM; BR= 2

## JPR374H1 Religion and Power in the Postcolony [24L]

This course examines the role of a variety of religious forms and spiritual practices in the politics of postcolonial societies, tracing their genealogies from the colonial period to the

## Religion

present. Cases taken principally from Africa and Asia. (Given
by the Departments of Political Science and Religion)
Prerequisite: A POL 200-level course or 1.5 FCEs in
Religious Studies
Exclusion: JPR374Y1
DR=SOC SCI; BR=2 + 3

## RLG374H1 Buddhist Auto/Biography [24L]

This course explores the genres of autobiography and biography in Buddhist literature. The course will begin with theoretical studies on narrative and religious life-writing. We will then consider the development and distinctive features of auto/biographies and hagiographies in the literature of one or more Buddhist cultures, analyzing representative examples of these genres from a range of traditions and historical periods, and considering how these sources have been understood and used in secondary scholarship.
Prerequisite: RLG206Y
DR=HUM; BR= 1

## RLG375H1 Buddhist Thought [24L]

An introduction to philosophical thought in various Buddhist traditions.
Prerequisite: RLG206Y1; see note above for general prerequisites
DR=HUM; BR=2
RLG377H1 Theravada Literature [24L]
By looking into the Three Baskets of the Pali canon, distinguishing the voices of its various medieval commentators, handling the illuminated folios of palm leaf manuscripts and comparing contemporary vernacular fiction, the course introduces the historical and contemporary Buddhist literatures of Sri Lanka, Myanmar, Thailand, Cambodia, Laos and Nepal.
Prerequisite: RLG206Y1 or RLG206H5; see note above for general Prerequisites
$D R=H U M ; B R=1$
RLG378H1 Buddhism in Nepal [24L]
With the Transhimalayan former kingdom of Mustang, Sherpa and Tamang shamanic and monastic institutions, Sanskrit Newar Buddhism, Theravada modernism and the Tibetan diaspora Nepal offers a diversity of Buddhist traditions unique in the world. This course introduces their texts, rituals, histories and personalities and discusses methods employed in their study.
Prerequisite: RLG206Y1 or RLG205Y1
DR=HUM; BR= 1

## RLG379H1 Daoism in Practice [24L]

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/RLG280Y1/
RLG208Y1/RLG274H1
DR=HUM; BR=2

## RLG380H1 Comparative Mysticism [24L]

A comparative examination of Christian (Latin and Orthodox), Buddhist, Confucian, Taoist, Hindu and Islamic mystical traditions.
Prerequisite: See note above for general prerequisites DR=HUM; BR=2

RLG382H1 The Taking of Human Life [24S]
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?
Prerequisite: Instructor's permission required for admission to course
DR=HUM; BR= 2
RLG384H1 Pluralism and Dialogue [24L]
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 DR=HUM; BR= 3
RLG388H1 Special Topics I [24L]
Special Topics.
DR=HUM; BR= None
RLG389H1 Special Topics II [24L]
Special Topics
DR=HUM; BR= None
RLG398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR= None
RLG399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR= None

## 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 [TBA]

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) DR=HUM; BR= None
RLG401H1 Independent Studies Abroad [TBA] 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) DR=HUM; BR= None

RLG402H1 Independent Studies Abroad [TBA]
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) DR=HUM; BR= None

RLG404H1 Departmental Capstone-Research [24S]
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.An integrative capstone seminar that emphasizes iterative development of a research project, locating a research specialization within its broader disciplinary audience, and communicating the process and results of a research project to non-specialists within the study of religion
Prerequisite: open to 4th year Religion Specialists and Majors
DR=HUM; BR= None
RLG405H1 Departmental Capstone-Practical [24S] An capstone seminar that emphasizes integration of the study of religion with contemporary public life in the development of a research project, locating a research specialization in relation to non-academic contexts, and communicating the process and results of a research project to non-academic audiences.
Prerequisite: open to 4th year Religion Specialists and Majors
DR=HUM; BR= None

## RLG406H1 Constructing Religion [24S]

How have different researchers constructed 'religion' as their object of study, and are some frameworks simply incompatible with each other? We discuss - but also provide critical assessments of -- different theoretical and methodological frameworks.
Prerequisite: open to 4th year Religion Specialists and Majors
DR=HUM; BR=2
RLG410Y1 Advanced Topics in Religion [24S]
Advanced Topics in Religion
DR=HUM; BR= None
RLG411H1 Advanced Topics in Religion [24S]
Advanced Topics in Religion
DR=HUM; BR= None
RLG412H1 Advanced Topics in Religion [24S]
Advanced Topics in Religion
DR=HUM; BR= None
RLG416H1 Topics in Religion and Gender [24S]
Advanced study in specialized topics focusing on the instersection of religion and gender.
Prerequisite: Permission of instructor
DR=HUM; BR= None

## JPR419H1 Secularism and Religion (formerly RLG419H1) [24S]

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. (Given by the Departments of Political Science and Religion)
Registration in this course is through the Department of Religion.
Prerequisite: 2.0 FCEs in Religion or Political Science at the
200 level or above; or permission of the instructor
Exclusion: RLG419H1
DR=HUM/SOC SCI; BR=3

## RLG420H1 Religion and Philosophy in the European Enlightenment [24S]

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. Prerequisite: Instructors permission required for admission to course
DR=HUM; BR=2
RLG421H1 Topics in Psychology of Religion [24S]
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.
Prerequisite: Instructors permission required for admission to course
DR=HUM; BR=2
RLG422H1 Kant's Theory of Religion [12S]
An advanced study of Immanuel Kant's theory of religion, as developed in major writings such as Critique of Practical Reason and Religion within the Boundaries of Mere Reason. Emphasizes rational ethical criteria as the basis for analyzing the doctrines, symbols, and institutions of historical religions.
Prerequisite: Instructor's permission required for admission to this course
Recommended Preparation: RLG310Y1
DR=HUM; BR= 2

## RLG425H1 Hermeneutics and Religion [24S]

A study of how principles of textual interpretation and theories of language have been central to modern philosophy of religion. Beginning with Spinoza, we examine the development of modern hermeneutical theory of religion in Kant and Schleiermacher, and conclude with 20th century hermeneutical theories of Gadamer, Ricoeur, and Derrida.
Prerequisite: Instructors permission required for admission to course
Recommended Preparation: RLG310Y1
DR=HUM; BR=2

## RLG426H1 Religion in the Public Sphere ServiceLearning Internship [24S]

For upper-year students, from any discipline. In a 40-hour community service placement, discover first-hand religion's significance in Toronto and examine how religion manifests in public spaces, institutions, and interactions, while critically reflecting on the experience of working with professionals and their "clients" in settings where religious diversity is at play.
Prerequisite: RPS coordinators permission required for admission to course
DR=HUM; BR= None

## RLG430H1 Advanced Topics in Judaism [24S]

Advanced Topics in Judaism
DR=HUM; BR= None
RLG431H1 Advanced Topics in Judaism [24S]
Advanced Topics in Judaism
DR=HUM; BR= None

## RLG432Y1 Advanced Topics in Judaism [48S]

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.
Prerequisite: Instructors permission required for admission to course
DR=HUM; BR= None

## RLG433H1 Maimonides and His Modern Interpreters [24S]

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.
Prerequisite: Instructors permission required for admission to course
Exclusion: POL421H1
DR=HUM; BR=2

## RLG434H1 Modern Jewish Thought [24S]

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.
Prerequisite: Instructors permission required for admission to course
DR=HUM; BR=2

## RLG435H1 The Thought of Leo Strauss [24S]

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.
Prerequisite: Instructors permission required for admission to course
DR=HUM; BR=2

## RLG437H1 Constructions of Authority in Early Christianity [24L/12T]

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: Instructors permission required for admission to course
Recommended Preparation: RLG203Y1/RLG203H5
DR=HUM; BR=2
RLG440H1 Religion and Healing [24S]
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.
Prerequisite: Instructors permission required for admission to course
DR=HUM; BR=2

## RLG441H1 Words and Worship in Christian Cultures [24S]

How are we to analyze the words that Christians use? And how are such words related to ritual forms? We explore techniques for the analysis of texts, while looking at forms of verbal discourse ranging from prayers, speaking in tongues, and citing the Bible to more informal narratives.
Prerequisite: ANT356H1/RLG212Y1 and permission of instructor
DR=HUM; BR= 1
RLG442H1 North American Religions [24S]
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.
Prerequisite: Instructors permission required for admission to course
DR=HUM; BR=2

## RLG448H1 Pseudepigraphy in Ancient Mediterranean Religion [24S]

A seminar examining the phenomenon of falsely claimed and/or attributed authorship in religions of the ancient Mediterranean, mainly Christianity and Judaism. The course examines understandings of authorship and other cultural forms that facilitate or inhibit ancient pseudepigraphy, ancient controversies over authorship, as well as specific pseudepigraphical writings.
Prerequisite: Two half FCEs numbered RLG32*; permission of instructor
$D R=H U M ; B R=1$
RLG449H1 The Synoptic Problem [24S]
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 RLG327H1; Instructor's permission required for admission to course
DR=HUM; BR=1
RLG451H1 The Parables of Jesus [24S]
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 RLG327H1; Instructor's permission required for admission to course
DR=HUM; BR=1

## RLG452H1 The Death of Jesus [24S]

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 -
RLG327H1; Instructor's permission required for admission to course
DR=HUM; BR=1

## RLG453H1 Christianity and Judaism in Colonial Context

 [24S]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.
Prerequisite: Instructors permission required for admission to course;
DR=HUM; BR=3

## RLG454H1 Social History of the Jesus Movement [24S]

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 -
RLG327H1; Instructor's permission required for admission to course
DR=HUM; BR=3

## RLG455H1 Heresy and Deviance in Early Christianity [24S]

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 preChristian communities.
Prerequisite: RLG241Y1 and at least one of RLG319H1 RLG327H1; Instructor's permission required for admission to course
DR=HUM; BR=3
RLG456H1 Readings in Quran and Tafsir [24S]
This course is an introduction to the rich literature that has grown around the study of the Quran in the Arabic tradition. In addition to readings in the Quran 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. DR=HUM; BR=2
RLG457H1 The Quran and its Interpretation [24S]
This course is designed to orient students to the field of contemporary Quranic studies through reading and discussion of the text itself and of significant European-
language scholarship about the Quran 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. DR=HUM; BR=2

## JPR457H1 Democracy and the Secular [24S]

What is the philosophical relationship between modern democracy and the secular? How can critical political thought respond to attempts to re-found politics along religious or theo-political lines? What would a project of rethinking the secular 'all the way down' entail? This seminar in theory will explore these questions through an examination of dilemmas of sovereignty, community, justice and violence as developed in continental political philosophy - Schmitt, Benjamin, Lefort,
Agamben, Derrida, Nancy, Zizek, Badiou. (Given by the Departments of Political Science and Religion).
Registration in this course is through the Department of Religion.
Prerequisite: POL320Y1/permission of instructor Exclusion: POL485H1(S), Section L0201 (taken in 2008-09)
Recommended Preparation: POL320Y1 or a 300-level
course in Philosophy or Philosophy of Religion or Anthropology of Religion
DR=SOC SCI; BR=2

## RLG459H1 Disciplining Islam [24S]

Considers the disciplinary power of modernity through case-studies on the codification of Islamic law and practice. Contrasting modernitys discipline with Islams own disciplinary power. Readings include works by Saba Mahmood, Charles Hirschkind, Jakob Skovgaard-Petersen, Brinkley Messick, Michel Foucault and Talal Asad.
Prerequisite: Instructors permission required for admission to course
Recommended Preparation: RLG204Y1/RLG204H1/
NMC185H1/ RLG250H1

## DR=SOC SCI; BR=3

## RLG460H1 Ramayana in Literature, Theology, and Political Imagination [24S]

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 Ramayanas ideal of divine kingship and medieval theistic approaches to Ramas identification with Visnu, the rise of Rama worship, and the use of Ramas divinity in contemporary political discourse.
Prerequisite: Instructor's permission required for admission to course
Recommended Preparation: RLG205Y1/RLG205H1 DR=HUM; BR= 1
RLG461H1 Ismaili History and Thought: The Persian
Tradition [24S]

## RLG461H1 Ismaili History and Thought: The Persian Tradition [24S]

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 studied will change yearly.

## Religion

Prerequisite: Instructor's permission required for admission to course
DR=HUM; BR=2

## RLG462H1 Newar Religion [24L/24T]

An academic legend recounts that if you ask a Newar whether he is Hindu or Buddhist the answer is yes. The course deals with the problem of how to study religions which coexist and compete with each other creating shifting coordinates of religious identification from the perspective of one specific Nepalese community.
Prerequisite: Instructor's permission required for admission to course
Recommended Preparation: RLG205Y1/ RLG206Y1/ RLG205H5/RLG206H5
DR=HUM; BR=2

## RLG463H1 Causation, Movement and Time in Buddhist

 Scholastic Debate [24S]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: Instructor's permission required for admission to course
Recommended Preparation: RLG206Y1/ RLG206H5 DR=HUM; BR= 2

## RLG464H1 History and Historiography of Buddhism [24S]

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.
Prerequisite: Instructor's permission required for admission to course
Recommended Preparation: RLG206Y1/RLG206H5 DR=HUM; BR= 3

## RLG465H1 The Mahaparinirvanasutra [24S]

With the Buddha's final nirvana at its centre the MPNS is one of the most important narratives in Buddhist literature. The course will show its impact on Buddhist historiography, hagiography and ritual across Asia by looking at parallel readings of the text on the basis of Waldschmidt's synoptic edition.
Prerequisite: Reading knowledge of Sanskrit/Pali/Tibetan or Chinese; Instructor's permission required for admission to this course
DR=HUM; $B R=1$
RLG466H1 Buddhism and Society in East Asia [24S] 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.
Prerequisite: Instructor's permission required for admission to course
$D R=H U M ; B R=3$

RLG467H1 Theravada Practice [24S]
"The galactic polity," "the funeral casino," "intercultural mimesis," "accretism" and "Sanskritization" have been crucial terms in attempts to understand how Theravada Buddhism works. We will assess the significance and usefulness of these models by confronting first-hand data with groundbreaking monographs in the study of Buddhism in South and Southeast Asia.
Prerequisite: Instructor's permission required for admission to course
DR=HUM; BR=2

## RLG469Y1 Readings in Tibetan Buddhism [24S]

Advanced readings in Tibetan Buddhist literature. Tibetan language skills required.
Prerequisite: Instructor's permission required for admission to course
DR=HUM
BR=1+2;

## RLG470H1 Tantra in Tibet [24L]

A study of Tantric Buddhism in Tibet. The course will address ritual and scholastic practices in the history of Tibetan Tantra, also looking at problems of translation and interpretation in the study of those traditions. Readings will include secondary scholarship in Buddhist and Tibetan Studies and possibly primary sources in Tibetan.
Prerequisite: Instructor's permission required for admission to course.
Recommended Preparation: At least 2 half-courses at the 300-level in Buddhist Studies
DR=HUM; BR=2

## RLG471H1 Special Topics in Hinduism [24L]

Advanced study in specialized topics on Hinduism.
Prerequisite: RLG205Y; Instructor's permission required for admission to course.
DR=HUM; BR= None

## RLG472H1 Religion and Aesthetics in South Asia [24S]

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, Abhinavaguptas 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
DR=HUM; BR= 1

## RLG473H1 Vedanta Through the Ages [24S]

A survey of Vedantic thought beginning with the classical commentaries on the Brahmasutras (such as those of Sankara, Ramanuja etc.) and ending with neo-Vedanta in the writings of Dayananda Saraswati, Sri Aurobindo and Radhakrishnan.
Prerequisite: RLG205Y1; RLG205H5; Instructor's permission required for admission to course
DR=HUM; BR=2

## Religion

RLG474H1 Sanskrit Readings (1) [24S]
This course will have students read choice pieces of South Asian literature. While tackling a text in Sanskrit from a major literary tradition, Buddhist or Hindu, and discussing its content and context, students will learn strategies for translating and interpreting Sanskrit literature.
Prerequisite: Intermediate Sanskrit
DR=HUM; BR= 1

## RLG475H1 Fasting and Feeding in Hindu Traditions [24S]

An upper-level undergraduate and graduate course. Will look at a wide range of narratives and ritual practices as well as philosophical reflections from classical Indian thought on the relationship between food and religion and how this relationship plays out in the context of feasting and fasting in Indian/Hindu traditions.
Prerequisite: Instructor's permission required for admission to this course.
DR=HUM; BR=2

## RLG484H1 Religion and the Environment [24S]

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.
Prerequisite: Instructor's permission required for admission to course
DR=HUM; BR=4

## RLG490Y1 Individual Studies [48S]

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.
DR=HUM; BR= None

## RLG491Y1 Individual Studies [48S]

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.
DR=HUM; BR= None

## RLG492H1 Individual Studies [24S]

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.
DR=HUM; BR= None

## RLG493H1 Individual Studies [24S]

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.
DR=HUM; BR= None

## RLG494H1 Individual Studies [24S]

Student-initiated projects supervised by members of the Department. The student must obtain both a supervisors agreement and the Departments 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 supervisors approval is the first week of classes of the session. DR=HUM; BR=None

## Rotman Commerce

## Faculty

Professor and Director, Rotman Commerce
K. Corts, BA, 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. Gans, B Econ, Ph D
I. Horstmann, BA, Ph D
R. Kan, MBA Ph D
T. McCurdy, MA, Ph D
G. Richardson, BA, MBA, Ph D
W. Smieliauskas, MS, Ph D

D D. Soman, BE, MBA, Ph D
A. White, B Eng, MBA, Ph D

## Associate Professors

B. Blum, BA, MA, Ph D
C. Doidge, B Com MSC, Ph D
A. Goldfarb, BAH, MA, Ph D
S. Hawkins, BA, MS, Ph D
H. Lu, BE, MS, MBA, Ph D
M. Shi, BS, MBA, Ph D
K. Wang, MA, Ph D
P. Zhang, B Sc, MA, M Acc, Ph D

## Assistant Professors

R. Borkowsky, MA, B Sc, Ph D
S. Buti, MA, Ph D
M. Christianson, MD, Ph D
S. Davydenko, M.SC, MA, Ph D
A. Edwards, B Acc, CA, M Acc, MS, Ph D
A. Fleischer, BA, MBA, Ph D
M. Grennan, BSc, MA, Ph D
L. Han, BA, MA, Ph D
J. B. Hirsh, Ph D
M. $\mathrm{Hu}, \mathrm{BS}, \mathrm{MS}, \mathrm{Ph} D$
B. S. Lee, B Sc, MA, Ph D
S. Liao, Ph D
C. Liu, BA, Ph D, DBA
N. Mazar, MBA, Ph D
L. Pomorski, BA, MA, Ph D
M. Simutin, BA, Ph D
C. Tsai, MBA, Ph D
B. Xin, Ph D
L. Yang, Ph D
M. Zhao, Ph D

## Adjunct Professor

D. Dunne, B.Comm, Ph D

## Senior Lecturers

J. Kitunen, BBM, FCA
H. Laurence, BA, MA, Ph D, LLB
D.L. Losell, MBA, CA
A. MacKay, BSc, MA, Ph D
J. Oesch, BSc, M Ed, MBA, MSc, Ph D
M. Schneider, BCom, MBA, JD, CFP, CA
E. Zuliani, BCom, CA

## Lecturers

L. Harvey, BBA, MAcc, CA
W. Huggins, BCom, MBA, MPhil
M. Khan, BCom, MBA, CA
M. Stapleton, B Sc, M Sc, MBA, CFA
D. Stojanovic, B.Comm, CA
F. Tolias, BCom, MBA

Rotman Commerce at the University of Toronto offers an innovative curriculum combining studies in management, economics, and the liberal arts 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: Accounting, Finance and Economics or Management. Each program combines courses in management and applied economics with a variety of advanced courses in the liberal arts and 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.

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.

General Enquiries: Rotman Commerce Academic Program Services; Rotman Commerce, 125 St. George Street; email: rotmancommerce.info@utoronto.ca; telephone: 416.978.3339; www.rotmancommerce.utoronto.ca

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

## Bachelor of Commerce (BCom) 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 - Accounting, Finance and Economics, or Management, (see below);
(c) For students who began September 2010 or after: complete the Breadth Requirement for BCom students (see below)

OR
For students who began degree studies prior to September 2010: complete the Distribution Requirement for BCom students (see below).
(d) Obtain standing (i.e., complete with a grade of $50 \%$ or more or CR ) in at least six 300 - or 400 -series courses,

## Rotman Commerce

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.)
(e) 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 Registrar 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 (mid-May/late September) from the program sponsor;
2. an email from the Office of Convocation providing details of the convocation ceremony (late March/midOctober);
3. a letter from the Office of the Faculty Registrar confirming degree eligibility (end of May/late October).

## Faculty Breadth Requirement for BCom Students

Students beginning degree studies in September 2010 or after are required to complete the following Breadth Requirement as part of their Degree Requirements. Courses in the Faculty of Arts \& Science are classified into five Breadth categories by subject content. (Note that some courses are not designated and do not count toward this requirement.). The purpose of the Breadth Requirement is to ensure all students graduating with an Honours degree from the Faculty of Arts \& Science have chosen courses across a broad range of subject areas in the Faculty as part of their undergraduate education.

1. Creative and Cultural Representations
2. Thought, Belief, and Behaviour
3. Society and Its Institutions

## 4. Living Things and Their Environment

5. The Physical and Mathematical Universes

Students must take at least 4 full-course equivalents (FCEs) that have been designated as satisfying the Breadth Requirement. To satisfy the requirements for the Bachelor of Commerce, Rotman Commerce students must a) complete at least 1 FCE from Category 1 (Creative and Cultural Representations) AND b) complete at least 1 FCE in each of any 4 of the 5 categories above, OR, at least 1 FCE in each of any 3 of the 5 categories, and at least 0.5 FCE in each of the other 2 categories.
Note that there is no Breadth Requirement status for MGT120H1/MGT201H1, COM110H1, RSM100Y1, and that MAT133Y1 and ECO220Y1 (and courses deemed equivalent in the program requirements in the calendar) cannot be used to satisfy the Breadth Requirement.
A course's Breadth designation can be found following the course description in the Calendar for the year in which the course is taken.

Courses marked "BR=None" do not count toward any breadth category

Courses count toward the Breadth Requirement as they have been classified in the Calendar of the year in which they were taken

Students may count towards the Breadth Requirement any course which has a Breadth designation, and in which they have achieved standing, whether or not the course is used to satisfy a Subject POSt requirement, and whether or not the course was taken as CR/NCR.
Students who transfer from the University of Toronto Mississauga or Scarborough must meet the Rotman Commerce BCom Breadth Requirement.

## Faculty Distribution Requirement for BCom Students

Students who began degreCe studies PRIOR to September 2010 must complete the Faculty Distribution Requirement for BCom students.

As part of the degree requirements for the BCom, students must complete 1 full-course equivalent (FCE) in EACH OF the HUMANITIES, the SOCIAL SCIENCES and the SCIENCES AREAS as defined below:

1. one FCE must be from the Humanities.
2. one FCE must be from the Social Sciences (MGT/RSM courses may be used to meet this requirement with the exception of MGT120H1/MGT201H1, COM110H1, and RSM100Y1 which have NO Distribution Requirement status).
3. one FCE must be from the Sciences, 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 BCom Distribution Requirement.

## Rotman Commerce Notes

* Enrolment in Rotman Commerce programs is limited. Formal program enrolment takes place before entry into second year. The majority of spaces each year will be reserved for students admitted to First Year Rotman Commerce with a guaranteed place in their offer of admission. A limited number of places may be available for other Arts \& Science students not admitted to First Year Rotman Commerce with the guarantee (see below)
* First Year Rotman Commerce Students Admitted with the Rotman Commerce Guarantee: These students will be offered a space in Rotman Commerce programs after their first year provided they attain a minimum grade in the three required courses (ECO100Y1 and RSM100Y1 each with at least $67 \%$ and MAT133Y1 or equivalent with at least $50 \%$ ) and accumulate a minimum of 4.0 credits. These requirements must be met within one calendar year of their first enrolment in Arts \& Science. (For students beginning in September, the requirements must be completed no later than the end of the following Summer session)
o Note: students may repeat any of the required courses once, in order to attain the requisite mark. The repeated course(s) must be completed within the


## Rotman Commerce

calendar year (as per the terms of the guarantee); as such, the repeated course(s) must be taken during the summer session of first-year (i.e. a student may not extend the terms of her/his guarantee in order to attain the minimum marks). Failure to meet any of the above or failure to finish all the required courses by the end of the summer after first year will result in losing the admission guarantee. None of these courses may be completed using the CR/NCR option).

* Part-Time Students: Students holding the Rotman Commerce Guarantee, who have applied for and been admitted to Part-Time study, will be assessed for entry into Rotman Commerce programs at the point when they have completed 4.0 credits including the required courses (see above for Rotman Commerce Guarantee). To qualify under the Part-Time provision, students must have been enrolled in a part-time course load from the beginning of each session. They may repeat each of the required courses once in order to attain the minimum marks.
* Other Students: Each year, a limited number of spaces in Rotman Commerce will be available to Arts \& Science students who were not admitted to the First Year Rotman Commerce category, but who have completed the firstyear requirements.
Applications are submitted in late-April/May of each year and admission decisions are made and communicated in late-June. All admission requirements must be completed by May in order to be eligible for admission. Students who have not completed the necessary requirements (see below for specifics) by May must apply for admission the following year.
o Admission Requirements:
+ Complete RSM100Y1 and ECO100Y1, each with a mark of at least 67\%
+ Complete one of MAT133Y1/(135H1, $136 \mathrm{H} 1) / 137 \mathrm{Y} 1 /(123 \mathrm{H} 1,124 \mathrm{H} 1) /(125 \mathrm{H} 1,126 \mathrm{H} 1)$, with a mark of at least $50 \%$
+ Attain an average of at least 73\% across the 3 qualifying courses (RSM100Y1, ECO100Y1 and MAT133Y1). Note: in the case of repeated attempts, the highest mark attained will be considered when calculating this average
+ Accumulate a minimum of 4.0 credits
+ Submit an online Personal Statement
+ Admission will be based on marks and the Personal Statement and in some cases, a personal interview
Note: admission to second-year of the Rotman Commerce program is extremely competitive; meeting the minimum academic requirements does not guarantee admission to the program.
* Tuition Fees: Students enrolling in Rotman Commerce programs pay fees that are higher than other Arts \& Science programs.
* Mathematics Note: MAT133Y1/(MAT123H1, MAT124H1) are courses that satisfy the minimum Program requirements. Students who are likely to enroll in 200+ series MAT or CSC courses are advised to take MAT137Y1 instead, noting that MAT137Y1 is a theoretically-oriented course for mathematically-based disciplines such as Mathematics, Computer Science, and Actuarial Science.
* Maximum Course Load: Rotman Commerce students are limited to a maximum of 6.0 credits in any Fall/Winter session of their program.


## Rotman Commerce Programs

## Accounting Specialist (BCom)

(15 full courses or their equivalent out of 20 courses, for a BCom)

First Year:

1. ECO100Y1, RSM100Y1
2. MAT133Y1/(MAT123H1, MAT124H1)/ (MAT135H1,MAT136H1)/MAT137Y1/MAT157Y1
3. Students are encouraged to take at least one course towards the Breadth Requirement in First Year Second Year:
4. ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/ (STA250H1, STA255H1)/(STA257H1, STA261H1)
5. RSM219H1, RSM220H1, RSM221H1, RSM222H1, RSM225H1
6. 0.5 from: RSM230H1, RSM250H1, RSM260H1, RSM270H1, RSM392H1.
Third Year:
7. RSM320H1, RSM321H1, RSM322H1, RSM323H1, RSM324H1, RSM332H1, RSM333H1
8. Any $1.0300+$ ECO

Fourth Year:
9. RSM422H1, RSM423H1, RSM424H1, RSM426H1, RSM427H1
Note: Students must take a minimum of 10.0 RSM and 10.0 non-RSM courses

## Finance and Economics Specialist (BCom)

(13.5 full courses or their equivalent out of 20 courses, for a BCom)

First Year:

1. ECO100Y1, RSM100Y1
2. MAT133Y1/(MAT123H1, MAT124H1)/(MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1
3. Students are encouraged to take at least one course towards the Breadth Requirement in First Year
Second Year:
4. ECO204Y1/ECO206Y1; ECO208Y1/ECO209Y1; ECO220Y1/ECO227Y1/(STA250H1, STA255H1)/ (STA257H1, STA261H1)
5. RSM219H1, RSM222H1, RSM230H1
6. 0.5 from: RSM250H1, RSM260H1, RSM270H1, RSM392H1
Third Year:
7. RSM330H1, RSM332H1, RSM333H1
8. $2.5300+$ ECO

Fourth Year:
9. 1.0 from RSM430H1, RSM432H1, RSM433H1, RSM434H1, RSM435H1, RSM437H1
10. 0.5 from: RSM295Y0/RSM296Y0/RSM395Y0, RSM437H1 (note: RSM437H1 may be counted towards requirement 9 OR 10 - not both), RSM462H1, RSM480H1, RSM490H1, RSM491H1
Note: Students must take a minimum of 10.0 RSM and 10.0 non-RSM courses

## Rotman Commerce

## Management Specialist (BCom)

(12 full courses or their equivalent out of 20 courses, for a BCom)
First Year:

1. ECO100Y1, RSM100Y1
2. MAT133Y1/(MAT123H1, MAT124H1)/(MAT135H1, MAT136H1/MAT137Y1/MAT157Y1
3. Students are encouraged to take at least one course towards the Breadth Requirement in First Year
Second Year:
4. ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/ (STA250H1, STA255H1)/(STA257H1, STA261H1)
5. RSM219H1, RSM222H1, RSM250H1, RSM260H1, RSM270H1
Third Year:
6. RSM332H1, RSM333H1, RSM392H1
7. Any $1.0300+$ ECO

Fourth Year:
8. 1.0 from: ECO324Y1*, ECO357H1, ECO364H1, ECO365H1, ECO419H1, ECO435H1, ECO451H1, ECO457Y1*, ECO459H1, RSM295YO/RSM296Y0/ RSM395Y0*, RSM437H1, RSM462H1, RSM480H1, RSM490H1, RSM491H1 (excluding any courses that have already been used to satisfy requirement 7 , as outlined above) *NOTE: Y courses may count as 0.50 FCEs towards this requirement.
9. 1.0400 -level RSM, in addition to any courses taken in requirement 8 above.
Note: Students must take a minimum of 10.0 RSM and 10.0 non-RSM courses

## Rotman Commerce Courses

## MGT201H1 Introduction to Financial Accounting (formerly MGT120H1) [24L]

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 Rotman Commerce students.
Exclusion: MGT120H1, RSM219H1
DR=None; BR=None
RSM100Y1 Introduction to Management [48L/24T] Introduction to management and its various subdisciplinesaccounting, 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. Corequisite: ECO100Y1, MAT133Y1 (or equivalent) Exclusion: COM110H1
DR=None; BR= None
RSM219H1 Introduction to Financial Accounting [24L/24T]
Basic introduction to financial reporting and analysis. 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. Coverage includes the use of accounting information to prepare a basic set of financial statements Prerequisite: RSM100Y1
DR=SOC SCI; BR= None

## RSM220H1 Financial Accounting (formerly MGT220H1) [24L/24T]

This course introduces Rotman Commerce students to financial accounting including both conceptual and technical aspects.
Prerequisite: MGT120H1/MGT201H1/RSM100Y1, RSM219H1
Exclusion: MGT220H1
DR=SOC SCI; BR= None
RSM221H1 Intermediate Financial Accounting I (formerly MGT224H1) [24L/12T]
Covers topics such as income statement and balance sheet topics with an emphasis on quality of earnings.
Prerequisite: MGT220H1/RSM220H1
Exclusion: MGT224H1
DR=SOC SCI; BR= None

## RSM222H1 Management Accounting I (formerly

 MGT223H1) [24L/24T]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.
Prerequisite: Rotman Commerce: RSM219H1; Employment
Relations or Human Resource Management: MGT201H1 Exclusion: MGT223H1
DR=SOC SCI; BR= None

## RSM225H1 Legal Environment of Business I (formerly MGT393H1) [24L] <br> 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. <br> Prerequisite: COM110H1/RSM100Y1 <br> Exclusion: MGT393H1 <br> DR=SOC SCI; BR=3

RSM230H1 Financial Markets [24L]
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.
Prerequisite: COM110H1/RSM100Y1
Exclusion: ACT349H1, ECO358H1, ECO359H1
DR=SOC SCI; BR=3

## RSM250H1 Principles of Marketing (formerly MGT252H1) [24L]

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.

## Rotman Commerce

Prerequisite: COM110H1/RSM100Y1
Exclusion: MGT252H1
DR=SOC SCI; BR=2

## RSM251H1 Marketing Management (formerly MGT353H1/RSM350H1) [24L]

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.
Prerequisite: MGT252H1/RSM250H1
Exclusion: MGT353H1/RSM350H1
DR=SOC SCI; BR=2

## RSM260H1 Organizational Behaviour (formerly MGT262H1) [24L]

Theoretical ideas and practical applications concerning the behaviour of individuals and groups in organizations. We explore relevant topics for management: motivation, personality, perception, decision-making, groups, and negotiation.
Prerequisite: COM110H1/RSM100Y1
Exclusion: MGT262H1, PSY332H1, WDW260H1
DR=SOC SCI; BR=2

## RSM270H1 Operations Management (formerly MGT374H1/RSM370H1) [24L]

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.
Prerequisite: COM110H1/RSM100Y1
Exclusion: MGT374H1/RSM370H1
DR=SOC SCI; BR=5

## RSM295YO Special Topics [24L]

The areas of concentration depend on the instructor teaching the course. (Offered only during the summer session through the Summer Abroad Program)
DR=SOC SCI; BR= None

## RSM296YO Special Topics [24L]

The areas of concentration depend on the instructor teaching the course. (Offered only during the summer session through the Summer Abroad Program)
DR=SOC SCI; BR= None
RSM310H1 Special Topics in Management [TBA]
Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. DR=SOC SCI; BR= None

## RSM311H1 Special Topics in Management [TBA]

Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. DR=SOC SCI; BR= None

RSM312H1 Special Topics in Management [TBA]
Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. DR=SOC SCI; BR= None

## RSM313H1 Special Topics in Management [TBA]

Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and Prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. DR=SOC SCI; BR= None

## RSM314H1 Special Topics in Management [TBA]

Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
DR=SOC SCI; BR= None
RSM315H1 Special Topics in Management [TBA]
Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. DR=SOC SCI; BR= None
RSM316H1 Special Topics in Management [TBA]
Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
DR=SOC SCI; BR= None

## RSM317H1 Special Topics in Management [TBA]

Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. DR=SOC SCI; BR= None

## RSM318H1 Special Topics in Management [TBA]

Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
DR=SOC SCI; BR= None
RSM319H1 Special Topics in Management [TBA]
Topics and Issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. DR=SOC SCI; BR= None

## RSM320H1 Intermediate Financial Accounting II (formerly MGT322H1) [24L]

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.
Prerequisite: MGT224H1/RSM221H1
Exclusion: MGT322H1
DR=SOC SCI; BR=5

## Rotman Commerce

## RSM321H1 Advanced Financial Accounting Topics

 (formerly MGT426H1) [24L/12T]This course covers accounting issues and practices relating to long-term investments, consolidations, foreign transactions and foreign investments. International accounting issues are also introduced.
Prerequisite: MGT322H1/RSM320H1
Exclusion: MGT426H1
DR=SOC SCI; BR=5

## RSM322H1 Managerial Accounting and Decision Making (formerly MGT323H1) [24L]

The course focuses on making managerial decisions based on cost information. The relationship between strategy and costing systems is explored as are the economic characteristics which form the context for business decisions.
Prerequisite: MGT223H1/RSM222H1
Exclusion: MGT323H1
DR=SOC SCI; BR=5
RSM323H1 Auditing I (formerly MGT321H1) [24L/12T]
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.
Prerequisite: MGT224H1/RSM221H1, MGT393H1/
RSM225H1
Exclusion: MGT321H1
DR=SOC SCI; BR=5

## RSM324H1 Canadian Income Taxation I (formerly MGT423H1) [24L/12T]

This course gives a basic understanding of the Income Tax Act and its administration. This is achieved by applying the law to practical problems and cases. Topics covered include administration of the tax system, residence, employment income, business and property income, capital gains, other income and deductions, computation of taxable income and taxes payable for individuals.
Prerequisite: MGT220H1/RSM220H1
Exclusion: MGT423H1
DR=SOC SCI; BR=3

## RSM325H1 Legal Environment of Business II (formerly MGT394H1) [24L]

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.
Prerequisite: MGT393H1/RSM225H1
Exclusion: MGT394H1
DR=SOC SCI; BR=3

## RSM327H1 Business Information Systems (formerly MGT371H1) [24L/12T]

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
DR=SOC SCI; BR=3

RSM328H1 Financial Distress and Insolvency [24L]
This course explores the reasons for financial distress and introduces options for managers, creditors, lenders, and directors of firms in financial distress. The use of financial ratios to predict solvency problems is covered as well as strategies both for restructuring companies having financial difficulties and for negotiation with creditors.
Prerequisite: MGT220H1/RSM220H1, MGT223H1/
RSM222H1
DR=SOC SCI; BR=3
RSM330H1 Investments (formerly MGT330H1) [24L]
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.
Prerequisite: RSM230H1
Corequisite: ECO220Y1/ECO227Y1/(STA250H1,
STA255H1)/(STA257H1, STA261H1)
Exclusion: ACT349H1, MGT330H1
DR=SOC SCI; BR=3

## RSM332H1 Capital Market Theory [24L]

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.
Corequisite: ECO204Y1/ECO206Y1, ECO220Y1/ECO227Y1/
(STA250H1, STA255H1)/(STA257H1, STA261H1)
Exclusion: ACT349H1, ECO358H1, MGT337Y1
DR=SOC SCI; BR=3
RSM333H1 Introduction to Corporate Finance [24L]
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.
Prerequisite: RSM219H1,RSM332H1
Exclusion: ACT349H1, ECO359H1, MGT337Y1 DR=SOC SCI; BR=3

## RSM352H1 Marketing Research (formerly MGT453H1/ RSM452H1) [24L]

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.
Prerequisite: MGT353H1/RSM350H1/RSM251H1,
ECO220Y1/ECO227Y1/(STA250H1, STA255H1)/
(STA257H1, STA261H1)
Exclusion: MGT453H1/RSM452H1
DR=SOC SCI; BR=3

## RSM353H1 Consumer Behaviour (formerly MGT455H1/ RSM451H1) [24L]

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.

## Rotman Commerce

Prerequisite: MGT353H1/RSM350H1/RSM251H1
Exclusion: MGT455H1/RSM451H
DR=SOC SCI; BR=2

## RSM361H1 Human Resource Management (formerly

 MGT460H1, RSM460H1) [24L]Human resource management is studied from the perspective of the manager/practitioner. The course focuses on decisions about when and whom to hire, how much to pay, what training to offer, and how to evaluate employees. Class exercises and projects are used to provide students with some practical experience with these topics.
Prerequisite: Rotman Commerce: MGT262H1/RSM260H1;
Employment Relations and Human Resource
Management: WDW260H1
Exclusion: MGT460H1; RSM460H1
DR=SOC SCI; BR=3
RSM380H1 Real Estate Finance and Investment [24L] Real estate assets account for about one-third of the value of all capital assets in the world. This course provides an understanding of real estate investment, valuation and liabilities along with the public policy associated with home ownership, using modern finance and economic tools.
Prerequisite: ECO204Y1/ECO206Y1, ECO220Y1/
ECO227Y1, RSM332H1
Corequisite: RSM333H1
DR=SOC SCI; BR=3

## RSM392H1 Strategic Management (formerly MGT492H1)

 [24L]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? Enrolment is restricted to 3rd or 4th year Rotman Commerce students.
Prerequisite: RSM219H1, RSM222H1
Exclusion: MGT492H1
DR=SOC SCI; BR=3

## 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)
DR=SOC SCI; BR= None
RSM401H1 Independent Study Course [TBA]
Open when a faculty member is willing and able to supervise. Students must obtain the approval of the Director of Rotman Commerce and the supervising faculty member before enrolling. Enrolment is restricted to 4th year Rotman Commerce students. Consult the Rotman Commerce Office for details.
Prerequisite: Cumulative GPA of at least 2.70
DR=SOC SCI; BR= None
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 Rotman Commerce and the supervising faculty member before enrolling. Enrolment is restricted to 4th year Rotman Commerce students. Consult the Rotman Commerce Office for details.
Prerequisite: Cumulative GPA of at least 2.70
DR=SOC SCI; BR= None

RSM403Y1 Independent Study Course [TBA]
Open when a faculty member is willing and able to supervise. Students must obtain the approval of the Director of Rotman Commerce and the supervising faculty member before enrolling. Enrolment is restricted to 4th year Rotman Commerce students. Consult the Rotman Commerce Office for details.
Prerequisite: Cumulative GPA of at least 2.70
DR=SOC SCI; BR= None

## 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 Rotman Commerce and the supervising faculty member before enrolling. Enrolment is restricted to 4th year Rotman Commerce students. Consult the Rotman Commerce Office for details.
Prerequisite: Cumulative GPA of at least 2.70
DR=SOC SCI; BR= None

## RSM410H1 Special Topics in Management [TBA]

 Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.DR=SOC SCI; BR= None

## RSM411H1 Special Topics in Management [TBA]

Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None

## RSM412H1 Special Topics in Management [TBA]

Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None

## RSM413H1 Special Topics in Management [TBA]

Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None
RSM414H1 Special Topics in Management [TBA]
Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None
RSM415H1 Special Topics in Management [TBA]
Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None
RSM416H1 Special Topics in Management [TBA]
Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None

## Rotman Commerce

## RSM417H1 Special Topics in Management [TBA]

Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None

## RSM418H1 Special Topics in Management [TBA]

Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and prerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None
RSM419H1 Special Topics in Management [TBA]
Topics and issues in Management. Content in any given year will depend on the instructor. Consult the Rotman Commerce Portal for course description and Pprerequisites. Enrolment is restricted to 4th year Rotman Commerce students.
DR=SOC SCI; BR= None

## RSM422H1 Management Control (formerly MGT428H1)

 [24L/12T]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. Prerequisite: MGT323H1/RSM322H1
Exclusion: MGT428H1

## DR=SOC SCI; BR=3

RSM423H1 Auditing II (formerly MGT421H1) [24L]
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.
Prerequisite: MGT321H1/RSM323H1
Exclusion: MGT421H1
DR=SOC SCI; BR=5
RSM424H1 Canadian Income Taxation II (formerly MGT429H1) [24L/12T]
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.
Prerequisite: MGT423H1/RSM324H1
Exclusion: MGT429H1

## DR=SOC SCI; BR=3

RSM426H1 Critical Thinking, Analysis and Decision Making (formerly MGT420H1) [24L/12T]
This is a capstone case course stressing the pervasive competencies and critical thinking skills required from Rotman 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. Enrolment is restricted to 4th year Rotman Commerce students.
Prerequisite: MGT323H1/RSM322H1, MGT321H1/
RSM323H1, MGT423H1/RSM324H1
Corequisite: MGT426H1/RSM321H1
Exclusion: MGT420H1
DR=SOC SCI; BR= None

RSM427H1 Auditing and Information Systems (formerly MGT422H1) [24L/12T]
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.
Prerequisite: MGT321H1/RSM323H1
Exclusion: MGT422H1
DR=SOC SCI; BR=5

## RSM428H1 Analysis of Banking Financial Institutions

 and Instruments (formerly MGT427H1) [24L]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.
Prerequisite: MGT337Y1/RSM333H1, MGT322H1/
RSM320H1
Exclusion: MGT427H1
DR=SOC SCI; BR=3

## RSM430H1 Fixed Income Securities (formerly MGT430H1) [24L]

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.
Prerequisite: Rotman Commerce: RSM332H1; Actuarial Science: ACT349H1
Exclusion: MGT430H1
DR=SOC SCI; BR=3

## RSM432H1 Risk Management for Financial Managers

 (formerly MGT432H1) [24L]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.
Prerequisite: MGT337Y1/RSM333H1
Exclusion: MGT432H1
DR=SOC SCI; BR=5

## RSM433H1 Advanced Corporate Finance (formerly MGT431H1) [24L]

Applying fundamental finance ideas developed in RSM332H1 and RSM333H1 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.
Prerequisite: Rotman Commerce: MGT337Y1/RSM333H1;
Actuarial Science: ACT349H1
Exclusion: MGT431H1
DR=SOC SCI; BR=3

## RSM434H1 Financial Trading Strategies (formerly offered as RSM412H Financial Trading Strategies) [24L]

This course will use finance theory applied with Excel applications to understand potential returns and risks

## Rotman Commerce

inherent in particular investment/trading strategies. Learning-by-doing will be facilitated by simulation-based Rotman Interactive Trader cases focused on particular risks. This training will be analogous to using a flight simulator for learning to fly.
Prerequisite: RSM332H1
Exclusion: RSM412H1 Financial Trading Strategies
DR=SOC SCI; BR=5

## RSM435H1 Futures and Options Markets (formerly MGT438H1) [24L]

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.
Prerequisite: ECO204Y1/ECO206Y1, RSM332H1
Exclusion: ACT370H1, MGT438H1
DR=SOC SCI; BR=5

## RSM437H1 International Finance (formerly MGT439H1) [24L]

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.
Prerequisite: Rotman Commerce: MGT337Y1/RSM333H1;
Actuarial Science: ACT349H1
Exclusion: MGT439H1
DR=SOC SCI; BR=3
RSM450H1 Judgment and Decision-Making: Psychology and Markets (formerly offered as RSM418H Integrative Thinking: Psychology and Markets) [24L]
What motivates consumers, investors, employees, and managers? In this highly interdisciplinary course, we will examine topics such as the role of emotions in decisionmaking, "irrational" patterns of how people think about products, money, or investments, and how expectations shape perceptions. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: RSM100Y1
Exclusion: RSM418H1 Integrative Thinking: Psychology and Markets
DR=SOC SCI; BR=2
RSM455H1 Pricing (formerly RSM351H) [24L]
Approaches pricing decision as an intersection of economics and psychology. Using product categories as diverse as financial services, healthcare, industrial products and consumer packaged goods, students study dynamic pricing, value pricing, price customization, price bundling and multi-part tariffs, menu costs and price stickiness, sales promotions, and pricing in two-sided markets. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: RSM250H1/MGT252H
Exclusion: RSM351H
DR=SOC SCI; BR=3

## RSM458H1 Branding Strategy (formerly MGT452H1) [24L]

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. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: RSM250H1/MGT252H1
Exclusion: MGT452H1
DR=SOC SCI; BR=3

## RSM461H1 Managerial Negotiations (formerly MGT461H1) [24L]

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. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: MGT262H1/RSM260H1
Exclusion: MGT461H1
DR=SOC SCI; BR=3

## RSM462H1 Managing People in the Context of Globalization (formerly offered as RSM410H Managing Human Resources in Context of

 Globalization) [24L]This course introduces students to the impact of globalization on managing people. Understanding how organizational behaviour and human resource management processes work in the international context is essential for business success. This course helps students to develop a better understanding of how effective people management can create a
competitive advantage in the international context. Enrolment is restricted to 3rd and 4th year Rotman Commerce students. Prerequisite: RSM260H1
Exclusion: RSM410H1
DR=SOC SCI; BR=3

## RSM463H1 The Socially Intelligent Manager (formerly RSM412H1) [24L]

One of the most critical skills in leadership is the ability to manage social relationships. The purpose of this course is to introduce you to the science of social intelligence so that you are knowledgeable and confident about how to handle interpersonal issues when you enter the business world. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: RSM260H1
DR=SOC SCI; BR=2
RSM464H1 Organization Theory and Design (formerly MGT363H1, RSM360H1) [24L]
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. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: MGT262H1/RSM260H1
Exclusion: MGT363H1; RSM360H1
DR=SOC SCI; BR=3

## RSM465H1 Managing People Through Incentives (formerly RSM410H1) [24L]

This course is designed to introduce you to the fundamental principles of incentives and motivation, which are essential

## Rotman Commerce

tools for managers. The course takes an interdisciplinary approach and you will be exposed to theories on these topics from a variety of different disciplines - behavioral decision-making, economics, organizational behavior, and psychology. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: RSM260H1
DR=SOC SCI; BR=2

## RSM470H1 Management Science (formerly MGT475H1) [24L]

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. Enrolment is restricted to 3rd and 4th year Rotman Commerce students.
Prerequisite: ECO220Y1/ECO227Y1/(STA250H1,STA255H1)/
(STA257H1,STA261H1)
Exclusion: MGT475H1
DR=SOC SCI; BR=5

## RSM480H1 Business in a Global Economy (formerly

 MGT480H1) [24L]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.
Prerequisite: ECO208Y1/ECO209Y1, MGT337Y1/ RSM333H1
Exclusion: MGT480H1
DR=SOC SCI; BR=3
RSM481H1 Outsourcing and the Organization of Firms (formerly MGT481H1) [24L]
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" organizational structure.
Prerequisite: ECO204Y1/ECO206Y1, ECO220Y1/ ECO227Y1/(STA250H1, STA255H1)/(STA257H1, STA261H1)
Exclusion: MGT481H1
DR=SOC SCI; BR=3
RSM482H1 Game Theory for Business Strategy (formerly MGT482H1 Market Strategies) [24L]
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.
Prerequisite: ECO204Y1/ECO206Y1
Exclusion: MGT482H1
DR=SOC SCI; BR=3

## RSM483H1 Real Estate Markets [24L]

This course uses economic methods to analyze real estate markets. Topics covered include the determinants of real estate values, the location decisions of households and
firms, land use, urban growth and agglomeration, behavioural real estate economics and real options.
Prerequisite: ECO204Y1/ECO206Y1, ECO220Y1/
ECO227Y1/(STA250H1, STA255H1)/(STA257H1,
STA261H1), RSM332H1
DR=SOC SCI; BR=3
RSM490H1 International Business (formerly MGT491H1) [24L]
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.
Prerequisite: MGT492H1/RSM392H1
Exclusion: MGT491H1
DR=SOC SCI; BR=3
RSM491H1 Globalization and Capital Markets: Political Economy and Investment Strategy (formerly offered as RSM413H Globalization and Capital Markets: Political Economy and Investment Strategy) [24L]
This course exposes students to the intersection of global political economy and investment strategies, with particular emphasis on current global economic trends. The last 15 years have seen a dramatic expansion in the geographic scope for private equity investments, and in the risk involved in such investments. RSM491H1 will teach students to think through the issues facing executives, investors and policy makers considering investments.
Prerequisite: RSM332H1
Exclusion: RSM413H1 Globalization and Capital Markets:
Political Economy and Investment Strategy
DR=SOC SCI; BR=3
RSM492H1 Cooperative Strategy (formerly offered as RSM419H Cooperative Strategy) [24L]
This course is intended to improve your ability to determine whether, how and with whom to execute cooperative strategies. The last 25 years have seen an explosion in strategic alliances; yet managers often report being disappointed with the results of their alliances. This course will teach students how to think through the issues facing managers considering or implementing cooperative ventures. Prerequisite: RSM392H1
Exclusion: RSM419H1 Cooperative Strategy
DR=SOC SCI; BR=3

## RSM493H1 Entrepreneurship (formerly MGT493H1) [24L]

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.
Prerequisite: MGT492H1/RSM392H1
Exclusion: MGT493H1
DR=SOC SCI; BR=3

## Rotman Commerce

## RSM494H1 Technology Strategy (formerly MGT494H1) [24L]

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.
Prerequisite: MGT492H1/RSM392H1
Exclusion: MGT494H1
DR=SOC SCI; BR=3
RSM499Y1 Integrated Management Challenge (formerly MGT499Y1) [48L/24T]
Students act as the senior officers of a fictitious public company in this experiential business simulation. Combining computer simulation with live interactions, student teams guide their company to success, report to boards of directors composed of outside business executives, negotiate collective agreements with real union negotiators, and much more. Enrolment is restricted to 4th year Rotman Commerce students.
Prerequisite: MGT337Y1/RSM333H1, one of: (MGT252H1/
RSM250H1)/(MGT262H1/RSM260H1)/(MGT374H1/
RSM370H1/RSM270H1)
Exclusion: MGT499H1, MGT499Y1
DR=SOC SCI; BR=3

## Facult

## Professor Emerita

A. Dooley, MA, Ph D

## Professors

M. G. McGowan, MA, Ph D
D. Pietropaolo, MA, Ph D, Commend. Rep. It.
G. Silano, LLB, MA, Ph D
D.A. Wilson, MA, Ph D

Associate Professors
J. Harris, MA, Ph D
R. Locklin, MTS, Ph D

## Assistant Professors

A. Andre, MA, PH D, LMS
Y. Fehige, MA, Ph D, Ph D

## Senior Lecturer

M. Nic Dhiarmada, BA, H Dip Ed

## Lecturers

M. O'Connor, Ph B, STB, STL. D Phil
J. Sunkenberg, BA, MA, Ph D

## St. Michael's Cornerstone

The Cornerstone Initiative is designed to give students registered in their first year of study at the University of Toronto a unique educational experience within three different learning frameworks. First year students may elect to take one Cornerstone course among their selection of five entry-level courses. These Cornerstone courses provide an enriched teaching environment which includes a large lecture experience for 100 or more students, combined with small seminar groups of 20 to 25 students. Each seminar is dedicated to how a specific issue, relevant to the course, can be approached by different scholarly streams - humanistic, social scientific, or the pure and applied sciences.
The third and most innovative learning element in the Cornerstone Initiative is its service learning component. The intention is to offer students the opportunity to step out of the classroom and engage with community partners in work that illuminates and deepens their understanding of the concepts, theories and ideas generated in the lectures and seminars. Cornerstone students, individually and in teams, will be assigned to a community partner where they will engage what they have learned in the classroom with what they experience in public life, where similar ideas are actualized and concretized.

The topics addressed in Cornstone speak to the heart of the mission of St. Michael's College, "to teach goodness, discipline, and knowledge." Courses will include explorations of communication, culture, and social justice.
Students make their application to the Principal's Office of St. Michael's College, from which they are entered into the Initiative.

## Courses: SMC188Y1, SMC189Y1

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) and is for those students preparing to become secondary school teachers of Religious Education in the Catholic School Boards in Ontario. CTEP offers the students the opportunity to complete the HBA/HBSc degree and the BEd. 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 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: D. Pietropaolo, 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--with the exception of the Concurrent Education: Religious Education program and the Book and Media Studies program.

## St. Michael's College

## Book and Media Studies Major (Arts program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.

Required course: 1.0 FCE from ENG110Y1/ENG140Y1/ HIS104Y1/HIS109Y1/JEF100Y1/FCS195H1/GER150H1 with a final mark of $67 \%$ or higher.
Consult Professor Mark G. McGowan, St. Michael's College
(6 full courses or their equivalent, including at least 2 FCEs at the $300+$ level, 0.5 FCE of which must be at the 400 -level)

1. SMC219Y1
2. SMC228H1; SMC229H1
3. 1.5 FCE SMC courses as designated by the program: SMC210H1/SMC212H1/SMC217H1/SMC291H1/ SMC300H1/SMC301H1/SMC304H1/SMC305H1/ SMC314H1/SMC315H1/SMC358H1/SMC361H1/ SMC364H1/SMC374H1/SMC397H1/SMC398H1/ SMC399Y1
4. 1.5 FCE from:

Second Year Offerings: ARC232H1/ENG232H1/ ENG234H1/ENG235H1/ENG287H1/FCS291H1/ FCS297H1/HIS241H1/HPS201H1/HPS202H1/ SLA203H1/SLA254H1/SMC210H1/SMC212H1/ SMC217H1/SMC291H1/UNI221H1/VIS206H1/ WGS271Y1
Third and Fourth Year Offerings:
ABS300Y1/ABS302H1/ANT323Y1/ENG322Y1/
FAH319H1/FRE308H1/FRE310H1/FRE324H1/
GER310H1/HIS302H1/HIS316H1/HIS374H1/INI301H1/ INI305H1/INI387H1/JAL328H1/MUS300H1/SMC300H1/ SMC301H1/SMC304H1/SMC305H1/SMC314H1/ SMC315H1/SMC358H1/SMC361H1/SMC364H1/ SMC374H1/SMC397H1/SMC398H1/SMC399Y1/ VIC345H1/EAS467H1/FAH424H1/HIS455H1/ HIS477H1/PSY427H1
5. 0.5 FCE from:

SMC406H1/SMC425H1/SMC430H1/SMC431H1/
SMC435H1/SMC464H1/SMC465H1
6. SMC385H1

## Book and Media Studies Minor (Arts Program)

This is a limited enrolment program. All students who request the program and obtain at least the specified mark(s) in the required course(s) will be eligible to enrol.

Required course: 1.0 FCE from ENG110Y1/ENG140Y1/ HIS104Y1/HIS109Y1/JEF100Y1/FCS195H1/GER150H1 with a final mark of $67 \%$ or higher.

Consult Professor Mark G. McGowan, St. Michael's College
(4 full courses or their equivalent, including at least one 300+ series course)

First year:

1. SMC219Y1
2. SMC228H1; SMC229H1
3. Two courses or their equivalent from the following: Second Year Offerings: ARC232H1/ENG232H1/ ENG234H1/ENG235H1/ENG287H1/FCS291H1/ FCS297H1/HIS241H1/HPS201H1/HPS202H1/ SLA203H1/SLA254H1/SMC210H1/SMC212H1/ SMC217H1/SMC291H1/UNI221H1/VIS206H1/ WGS271Y1

Third and Fourth Year Offerings:
ABS300Y1/ABS302H1/ANT323Y1/ENG322Y1/
FAH319H1/FRE308H1/FRE310H1/FRE324H1/ GER310H1/HIS302H1/HIS316H1/HIS374H1/INI301H1/ INI305H1/INI387H1/JAL328H1/MUS300H1/SMC300H1/
SMC301H1/SMC304H1/SMC305H1/SMC314H1/
SMC315H1/SMC358H1/SMC361H1/SMC364H1/
SMC374H1/SMC397H1/SMC398H1/SMC399Y1/
VIC345H1/EAS467H1/FAH424H1/HIS455H1/HIS477H1/ PSY427H1

## Celtic Studies Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor David Wilson, St. Michael's College.
( 10.5 full courses or their equivalent, including at least four $300+$ series courses, 1.0 of which must be at the 400 -level)

1. SMC240Y1
2. Two FCEs from one of the following language groups:
a) Gaelic (Irish and Scottish):SMC141Y1/SMC242Y1/

SMC251H1/SMC252H1/SMC441Y1
b) Brethonic (Welsh): SMC243Y1/SMC440Y1
3. Six FCEs from the list above and/or SMC250Y1/ SMC333H1/SMC334H1/SMC335Y1/SMC336H1/ SMC337H1/SMC338H1/SMC339H1/SMC340H1/ SMC342Y1/SMC343Y1/SMC344Y1/SMC346Y1/ SMC348Y1/SMC349H1/SMC350H1/SMC351H1/ SMC353Y1/SMC354H1/SMC355H1/SMC356H1/ SMC374H1/SMC395Y1/SMC396H1/SMC411H1/ SMC412H1/SMC413H1/SMC416H1/SMC442H1/ SMC443H1/SMC444H1/SMC457H1
4. SMC451Y1
5. 0.5 FCE from SMC $385 \mathrm{H} 1 / \mathrm{SMC} 413 \mathrm{H} 1 / \mathrm{SMC} 442 \mathrm{H} 1$ to meet the Quantitative Reasoning competency

## Celtic Studies Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.

Consult Professor David Wilson, St. Michael's College.
( 6.5 full courses or their equivalent, including at least two $300+$ series courses, 0.5 of which must be at the 400-level)

1. SMC240Y1
2. One FCE from the following language courses: SMC141Y1/SMC242Y1/SMC243Y1/SMC251H1/ SMC252H1/SMC440Y1/ SMC441Y1
3. Four FCE from the list above and/or SMC250Y1/ SMC333H1/SMC334H1/SMC335Y1/SMC336H1/ SMC337H1/SMC338H1/SMC339H1/SMC340H1/ SMC342Y1/SMC343Y1/SMC344Y1/SMC346Y1/ SMC348Y1/SMC349H1/SMC350H1/SMC351H1/ SMC353Y1/SMC354H1/SMC355H1/SMC356H1/ SMC374H1/SMC395Y1/SMC396H1/SMC411H1/ SMC412H1/SMC413H1/SMC416H1/SMC442H1/ SMC443H1/SMC444H1/SMC457H1
4. 0.5 FCE from SMC $385 \mathrm{H} 1 / \mathrm{SMC} 413 \mathrm{H} 1 / \mathrm{SMC} 442 \mathrm{H} 1$ to meet the Quantitative Reasoning competency

## St. Michael's College

## Celtic Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor David Wilson, St. Michael's College.
4 full courses or equivalent chosen from those listed for the Specialist program, including at least one 300+ series course.

## Christianity And Culture Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

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: HIS469H1/ITA311H1/ NMC202H1/NMC270H1/RLG228H1/RLG331H1/RLG338Y 1. 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 Program Co-ordinator, or on the St. Michael's College web site: http://stmikes.utoronto.ca/ christianity/courses
11 full courses or their equivalent; at least four 300+series courses, including at least one full course at the 400 level; a total of up to two full courses may be selected from the approved list of cross-listed courses.

SMC103Y1
2. SMC203Y1
3. 1.0 FCE from SMC200H1/SMC201H1/SMC205H1/ SMC208Y1/SMC215H1/SMC232H1/SMC233H1
0.5 FCE from SMC385H1/SMC233H1
5. Three of the following four options:
(a) Two FCEs from "Christianity and Society":SMC204H1/SMC205H1/SMC207H1/ SMC209H1/SMC215H1/SMC304H1/SMC308H1/ SMC309H1/SMC312H1/SMC313H1/SMC320H1/ SMC321H1/SMC362Y1/SMC366H1/SMC421H1/ SMC426H1/SMC456H1/SMC458H1/NMC202H1/ HIS469H1; relevant Independent Studies or Special Topic courses SMC390Y1/SMC391H1/SMC400Y1/ SMC401H1/SMC433Y1/SMC434H1/SMC457H1; or relevant cross-listed courses.
(b) Two FCEs from "Christianity and the Intellectual Tradition": SMC208Y1/SMC216Y1/SMC307Y1/ SMC310H1/SMC311H1/SMC322H1/SMC330Y1/ SMC417H1/SMC418H1/SMC419H1/SMC429H1/ SMC454H1/NMC270H1/RLG331H1; relevant Independent Studies or Special Topic courses SMC390Y1/SMC391H1/SMC400Y1/SMC401H1/ SMC433Y1/SMC434H1/SMC457H1; or relevant crosslisted courses.
c) Two FCEs from "Christianity, Arts and Letters": SMC200H1/SMC201H1/SMC206H1/SMC217H1/ SMC305H1/SMC363H1/SMC364H1/SMC422H1/ SMC423H1/SMC424H1/SMC425H1/SMC428H1/ SMC455H1/SMC464H1/ITA311H1; relevant Independent Studies or Special Topic courses SMC390Y1/ SMC391H1/SMC400Y1/SMC401H1/SMC433Y1/ SMC434H1/SMC457H1; or relevant cross-listed courses.
d) Two FCEs from "Christianity and Science": SMC231H1/SMC232H1/SMC233H1/SMC371H1/ SMC432H1/HPS326H1/RLG228H1/RLG338Y1; relevant Independent Studies or Special Topic courses SMC390Y1/SMC391H1/SMC400Y1/SMC401H1/ SMC433Y1/SMC434H1/SMC457H1; or relevant crosslisted courses.
6. 1.5 FCEs from Christianity and Culture or the list of approved cross-listed courses.

## Christianity And Culture Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

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: HIS469H1/ITA311H1/ NMC202H1/NMC270H1/RLG228H1/RLG331H1/RLG338Y1. 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 Program Co-ordinator, or on the St. Michael's College web site: http://stmikes.utoronto.ca/ christianity/courses
6 full courses or their equivalent including at least 2.0 FCEs at the $300+$ level, 0.5 of which must be at the 400 level

1. SMC103Y1/SMC203Y1
2. 2.0 FCEs from SMC200H1/SMC201H1/SMC203Y1/ SMC205H1/SMC208Y1/SMC215H1/SMC232H1/ SMC233H1
3. 2.5 FCE among additional Christianity and Culture courses, of which up to 1.0 FCE may be selected from the list of approved cross-listed courses.
4. 0.5 FCE from SMC385H1 or SMC233H1

## Christianity And Culture Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
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: HIS469H1/ITA311H1/ NMC202H1/NMC270H1/RLG228H1/RLG331H1/RLG338Y1. 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 Program Co-ordinator, or on the St. Michael's College web site: http://stmikes.utoronto.ca/ christianity/courses
(4 full courses or their equivalent: at least one $300+$ series course)

1. SMC103Y1/SMC203Y1
2. 1.0 FCE from SMC200H1/SMC201H1/SMC205H1/ SMC208Y1/SMC215H1/SMC232H1/SMC233H1
3. Two additional Christianity and Culture courses

## St. Michael's College

## Minor Program in Christianity and Education (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.

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)

SMC103Y1
2. SMC312H1
3. SMC 313 H 1
4. Two additional courses from Christianity and Culture: SMC200H1/SMC201H1/SMC203Y1/SMC204H1/ SMC205H1/SMC206H1/SMC207H1/SMC208Y1/ SMC209H1/SMC215H1/SMC216Y1/SMC217H1/ SMC231H1/SMC232H1/SMC233H1/SMC304H1/ SMC305H1/SMC307Y1/SMC308H1/SMC309H1/ SMC310H1/SMC311H1/SMC320H1/SMC321H1/ SMC322H1/SMC330Y1/SMC362Y1/SMC363H1/ SMC364H1/SMC366H1/SMC371H1/SMC417H1/ SMC418H1/SMC419H1/SMC421H1/SMC422H1/ SMC423H1/SMC424H1/SMC425H1/SMC426H1/ SMC428H1/SMC429H1/SMC432H1/SMC454H1/ SMC455H1/SMC456H1/SMC457H1/SMC458H1.

## Concurrent Teacher Education Program (CTEP)St. Michael's College

Program Coordinator: Dr. Michael O'Connor
CTEP is an integrated curriculum sponsored jointly by St. Michael's College in the Faculty of Arts \& Science and by the Ontario Institute for Studies in Education, leading to two degrees over a five-year program: the Honours Bachelor of Arts and the Bachelor of Education. (See CTEP details in the Degree Requirements section, and on the dedicated website).
The St. Michael's College CTEP program is designed for students preparing to become secondary school teachers of Religious Education in the Catholic School Boards in Ontario. Teacher candidates will be provided with teacher training in Catholic schools, usually in and around Toronto.
Admission to the St. Michael's College CTEP program is admission to the Major in Religious Education and to the set of courses leading to the BEd. This is a limited enrolment program that can only accommodate a specific number of students.

## Application and Eligibility

To apply to this program students must:

* have completed at least 4.0 FCEs;
* have a minimum CGPA of 2.00;
* complete the applicant profile.

Please note that having the minimum to apply does not guarantee acceptance into the program in any given year. All Arts \& Science students are eligible to apply regardless of college. The application process occurs each year as part of the normal POSt enrolment process in the Faculty of Arts \& Science.

## Requirements of Concurrent Teacher Education Program for BA/BSc/BEd Students

All students admitted to the St. Michael's College CTEP are required to enroll in the Religious Education Major. CTEP students may fulfill the remaining major or minor for the BA/BEd degree as they wish. Those intending to qualify to teach at the Intermediate/Senior level should be attentive to the need for a "second teachable" subject. It is not recommended for Concurrent Education students to enrol in specialist programs as they must leave sufficient space in their upper years to complete the concurrent BEd requirements.
NOTE: The academic status of students in CTEP may be reviewed at the end of each fall-winter session to determine progress to the next year.

## Christianity and Culture: Major Program in Religious Education (Arts Program)

The major in Religious Education (CTEP) is open only to students registered in the St. Michael's College Concurrent Education Program.

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
Program requirements: 8 full courses or their equivalent, at least 2.0 FCE at 300+ series, including at least 0.5 FCE at 400 level.

1. SMC103Y1
2. Two FCEs as follows: JSV200H1; SMC271H1; SMC272H1; SMC313H1
3. 0.5 FCEs from the following (internship options): SMC366H1 (formerly SMC218Y1)/SMC362Y1/ SMC471H1
4. 4.5 FCEs from Christianity and Culture courses (including RLG100Y1/RLG280Y1), with at least 1.5 FCE from the following: SMC216Y1/SMC307Y1/SMC308H1/ SMC310H1/SMC311H1/SMC330Y1/SMC363H1/ SMC426H1.

## Mediaeval Studies Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor Markus Stock, St. Michael's College
(12 full courses or their equivalent, including at least 4.0 FCEs at the 300+ level, 1.0 of which must be at the 400 level)

1. At least 0.5 FCE from the introductory courses: SMC175H1, SMC210H1 or SMC212H1.
2. At least 2.0 FCEs from the foundational courses, which provide further introduction into more specific aspects of Mediaeval Studies: Second year: SMC200H1/ SMC201H1/SMC216Y1; Upper years: SMC307Y1/ SMC323H1/SMC358H1/SMC359H1/SMC360H1/ SMC361H1.
3. At least 2.0 FCEs from the following Latin courses: First or second year: LAT101H1/LAT102H1. Second or Third year: LAT201H1/LAT202H1/SMC 222H1. Third or Fourth Year: SMC323H1.

# St. Michael's College 

4. Up to 6.0 FCEs from among the following elective courses, with at least 2.0 FCEs from courses with an SMC designator. Their groupings are for the sake of orientation for the students in order to be able to make informed choices about coherent specializations. At all levels (years 2-4) students can choose courses from all four groupings.
History Courses: Second year: SMC211H1/
SMC215H1/HIS208Y1/HIS220Y1/HIS251Y1/HPS201H1/
NMC270H1/NMC273Y1/NMC275H1. Upper years:
SMC337H1/SMC338H1/SMC344Y1/SMC357H1/SMC 402H1/SMC421H1/SMC422H1/CLA378H1/HIS32OH1/ HIS321H1/HIS322Y1/HIS323H1/HIS336H1/HIS 403Y1/ HIS $424 \mathrm{H} 1 / \mathrm{HIS} 426 \mathrm{H} 1 / \mathrm{HIS} 227 \mathrm{H} 1 / \mathrm{HIS} 428 \mathrm{H} 1 / \mathrm{HIS} 432 \mathrm{H} 1 /$ HIS434Y1/HIS438H1/HPS430H1/NMC 342H1/ NMC396Y1/NMC376H1/NMC 377Y1.
Thought: Second year: SMC205H1/PHL200Y1/ PHL205H1/ PHL206H1/RLG 241Y1. Upper years: SMC307Y1/SMC324H1/SMC350H1/SMC359H1/ SMC361H1/SMC 403H1/CLA336H1/MAT390H1/ PHL303H1/PHL304H1/PHL307H1/PHL308H1/ PHL309H1/PHL336H1/RLG 331Y1.
Literature: Second year: SMC222H1/SMC250Y1/ ENG240Y1; LAT101H1/LAT102H1/ LAT201H1/ LAT202H1. Upper years: SMC323H1/SMC343Y1/ SMC360H1/SMC436H1/ENG300Y1/ ENG311H1/ ENG330H1/ENG385H1/FRE318H1/FRE471H1/ GER429H1/ITA311H1/ITA312H1/ITA320H1/ ITA430H1/ NMC255Y1/NMC350H1/SLA330Y1/SPA425H1/ SPA450H1.
The Arts: Second year: FAH215H1/FAH216H1/ MUS208H1. Upper years: SMC344Y1/SMC358H1/ FAH316H1/FAH318H1/ FAH319H1/FAH325H1/ FAH326H1/FAH327H1/FAH328H1/FAH42OH1/ FAH421H1/FAH424H1/FAH425H1/ FAH426H1/ FAH492H1/NMC396Y1.
And from the intensive research courses with changing topics in the fourth year: SMC406H1, SMC407Y1, SMC435H1, SMC457H1.
Note: Students are expected to meet with the program coordinator for counselling in order to be given guidelines as how to select courses in order to build coherent specialization(s). Please note that not all courses are offered every year and that it is the responsibility of the student to plan ahead in order to make course selections that meet the program requirements.
5. SMC385H1
6. SMC490Y1 (Senior Essay in Mediaeval Studies).

## Foundational Courses:

SMC200H1 Christian Imagination I: Visual Arts
SMC201H1 Christian Imagination II: Literary Arts
SMC216Y1 Ritual and WorshipSMC222H1 Mediaeval Latin I
SMC307Y1 Scripture in the Christian Tradition
SMC323H1 Mediaeval Latin II
SMC358H1 The Mediaeval Book
SMC359H1 Mediaeval Theology
SMC360H1 Vernacular Literature of the Middle Ages
SMC361H1 Mediaeval Law
Approved Courses:
SMC175H1/SMC205H1/SMC211H1/SMC215H1/SMC250Y1/ SMC324H1/SMC337H1/SMC338H1/SMC343Y1/SMC344Y1/ SMC350H1/SMC357H1/SMC402H1/SMC403H1/SMC406H1/

SMC407Y1/SMC421H1/SMC422H1/SMC425H1/SMC435H1/ SMC436H1

In addition to the above Approved Courses, a number of courses from other departments are cross-listed and may be counted towards the specialist, major and minor programs. This list is available from the Program Co-ordinator, and on the St. Michael's College website.

## Mediaeval Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.

Consult Professor Markus Stock, St. Michael's College
(7 full courses or their equivalent, including at least 2.0 FCEs at the $300+$ level, 0.5 of which must be at the 400 level)

1. At least 0.5 FCE from the introductory courses: SMC175H1, SMC210H1 or SMC212H1.
2. At least 1.0 FCE from the foundational courses, which provide further introduction into more specific aspects of Mediaeval Studies: Second year: SMC200H1/ SMC201H1/SMC216Y1/SMC222H1. Upper years: SMC307Y1/SMC323H1/SMC358H1/SMC359H1/ SMC360H1/SMC361H1.
3. Up to 4.5 FCEs from among the following elective courses, with at least 1.5 FCEs from courses with an SMC designator. Their groupings are for the sake of orientation for the students in order to be able to make informed choices about coherent specializations. At all levels (years 2-4) students can choose courses from all four groupings.
History Courses: Second year: SMC211H1/ SMC215H1/HIS208Y1/HIS220Y1/HIS251Y1/HPS201H1/ NMC270H1/NMC273Y1/NMC275H1. Upper years: SMC337H1/SMC338H1/SMC344Y1/SMC357H1/SMC 402H1/SMC421H1/SMC422H1/CLA378H1/HIS32OH1/ HIS 321H1/HIS 322 Y1/HIS323H1/HIS 336H1/ HIS403Y1/ HIS 424H1/HIS426H1/HIS427H1/HIS428H1/HIS432H1/ HIS434Y1/HIS438H1/HPS430H1/ NMC342H1/ NMC396Y1/NMC376H1/NMC377Y1.
Thought: Second year: SMC205H1/PHL200Y1/ PHL205H1/PHL206H1/RLG241Y1. Upper years: SMC307Y1/SMC324H1/SMC350H1/SMC359H1/ SMC361H1/SMC403H1/CLA336H1/MAT390H1/ PHL303H1/PHL304H1/PHL307H1/PHL308H1/PHL 309H1/PHL336H1/RLG 331Y1.
Literature: Second year: SMC222H1/SMC250Y1/ ENG240Y1; LAT101H1/LAT102H1/LAT201H1/ LAT 202H1. Upper years: SMC323H1/SMC343Y1/ SMC360H1/ SMC436H1/ENG300Y1/ENG311H1/ ENG330H1/ENG385H1/FRE318H1/FRE471H1/ GER429H1/ITA311H1/ ITA312H1/ITA320H1/ITA430H1/ NMC255Y1/NMC350H1/SLA330Y1/SPA425H1/ SPA450H1.
The Arts: Second year: FAH215H1/FAH216H1/ MUS208H1. Upper years: SMC344Y1/SMC358H1/ FAH316H1/ FAH318H1/FAH319H1/FAH325H1/ FAH326H1/FAH327H1/FAH328H1/FAH420H1/ FAH 421 H1/FAH 424H1/FAH425H1/FAH426H1/FAH 492H1/NMC396Y1.
Note: Students are expected to meet with the program coordinator for counselling in order to be given guidelines as to how to select courses in order to build coherent specialization(s). Please note that not

## St. Michael's College

all courses are offered every year and that it is the responsibility of the student to plan ahead in order to make course selections that meet the program requirements.
4. SMC385H1
5. At least 0.5 FCE from among the following: SMC402H1/ SMC403H1/SMC406H1/SMC407Y1/ SMC421H1/ SMC422H1/SMC425H1/SMC435H1/SMC436H1/ SMC457H1/SMC490Y1

Foundational Courses:
SMC200H1 Christian Imagination I: Visual Arts
SMC201H1 Christian Imagination II: Literary Arts
SMC216Y1 Ritual and Worship
SMC222H1 Mediaeval Latin I
SMC307Y1 Scripture in the Christian Tradition
SMC323H1 Mediaeval Latin II
SMC358H1 The Mediaeval Book
SMC359H1 Mediaeval Theology
SMC360H1 Vernacular Literature of the Middle Ages
SMC361H1 Mediaeval Law
Approved SMC Courses:
SMC175H1/SMC205H1/SMC211H1/SMC215H1/SMC250Y1/
SMC324H1/SMC337H1/SMC338H1/SMC343Y1/SMC344Y1/
SMC350H1/SMC357H1/SMC402H1/SMC403H1/SMC406H1/
SMC407Y1/SMC421H1/SMC422H1/SMC425H1/SMC435H1/ SMC436H1/SMC457H1
In addition to the above Approved Courses, a number of courses from other departments are cross-listed and may be counted towards the specialist, major and minor programs. This list is available from the Program Co-ordinator, and on the St. Michael's College website.

## Mediaeval Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor Markus Stock, St. Michael's College
(4 full courses or their equivalent: at least one 300+ series course)

1. SMC 210 H 1 ; SMC 212 H 1
2. 1.0 FCE from the foundational courses listed below
3. 2.0 FCEs from the approved courses and foundational courses listed below.

## Foundational Courses:

SMC200H1 Christian Imagination I: Visual Arts
SMC201H1 Christian Imagination II: Literary Arts
SMC216Y1 Ritual and Worship
SMC222H1 Mediaeval Latin I
SMC307Y1 Scripture in the Christian Tradition
SMC323H1 Mediaeval Latin II
SMC358H1 The Mediaeval Book
SMC359H1 Mediaeval Theology
SMC360H1 Vernacular Literature of the Middle Ages
SMC361H1 Mediaeval Law

## Approved SMC Courses:

SMC175H1/SMC205H1/SMC211H1/SMC215H1/SMC250Y1/
SMC324H1/SMC337H1/SMC338H1/SMC343Y1/SMC344Y1/ SMC350H1/SMC357H1/SMC402H1/SMC403H1/SMC406H1/ SMC407Y1/SMC421H1/SMC422H1/SMC425H1/SMC435H1/ SMC436H1/SMC440Y1/SMC441Y1/SMC457H1 In addition to the above Approved Courses, a number of
courses from other departments are cross-listed and may be counted towards the specialist, major and minor programs. This list is available from the Program Co-ordinator, and on the St. Michael's College website.

## St. Michael's College Courses

Listed in this order:

* St. Michael's Cornerstone
* Book and Media Studies
* Celtic Studies
* Christianity \& Culture
* Mediaeval Studies
* Other


## St. Michael's Cornerstone Courses

SMC188Y1 Cornerstones in Social Justice [24L/24S]
A service learning course in which students would learn the theory, history, development and application of the principles of social justice from a variety of perspectives: historical, sociological, political, philosophical, theological, and psychological, among others. Small group learning and community placements integral to course.
Prerequisite: Admission to SMC One
Exclusion: Innis One, New One, Trinity One, Vic One, UC
One, Woodsworth ONE
DR=HUM; BR=2 + 3
SMC189Y1 Cornerstones in Communications Media [24L/24S]
A service learning course in which students explore the theory, history, development and contemporary significance of communications media. The course traces media revolutions as they affected oral culture, manuscripts and print, the book, radio and television broadcasting, telecommunications, computers and the internet, and social media.
Prerequisite: Admission to SMC One
Exclusion: Innis One, New One, Trinity One, Vic One, UC One, Woodsworth ONE
DR=HUM; BR=1 + 3

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Book and Media Studies Courses

SMC219Y1 Mass Media in Culture and Society [48L/24T]
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.
DR=HUM; BR=1 + 3

# St. Michael's College 

## SMC228H1 Elements of Material Bibliography and Print Culture (formerly SMC228Y1) [36L]

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
DR=HUM; BR=3
SMC229H1 Readers and Readerships (formerly SMC228Y1) [36L]
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
DR=HUM; BR=3
SMC291H1 Broadcast Media and Culture [24L/12T]
A survey of historical and contemporary developments in radio, television, and the internet, and their impact on culture. Lectures examine technological innovations, commercialization, nationalization of the airwaves, government regulation, censorship, ratings \& viewership, broadcasting and popular culture, propaganda, and the evolution of the radio-television personality. Examples from Canadian and international media.
Prerequisite: Priority to BMS Students
Recommended Preparation: SMC219Y1/SMC228H1/
SMC229H1
DR=HUM; BR=3
SMC300H1 Special Topics in Book and Media Studies I [24L]
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
DR=HUM; BR=None
SMC301H1 Special Topics in Book and Media Studies II [24L]
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
DR=HUM; BR=None

## SMC314H1 Media Revolutions [24L]

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
DR=HUM; BR=3

## SMC315H1 The Newspaper in Canadian Society [24L/9T]

Through lectures, tutorials and field trips, this course examines the origins and development of the Englishlanguage 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
DR=HUM; $B R=1$
SMC397H1 Religion, Media and Culture [24L]
An overview of how religious groups use print and broadcast media to advance their theological, political, social, and economic views. An encounter with Christian, Muslim, Jewish, and South Asian faith groups and their use of newspapers, magazines, radio, television, and the internet. Emphasis on North American religious media, with reference to broadcasting elsewhere.
Prerequisite: Priority to BMS Students
Recommended Preparation: SMC219Y1/SMC228H1/
SMC229H1
DR=HUM; BR=2
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
DR=HUM; BR=None

## 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: SMC219Y1; SMC228H1;SMC229H1; enrolment
in the Major program; approval of Program Director DR=HUM; BR=None
SMC430H1 Advanced Topics in Book and Media Studies I [24S]
A course/seminar on a topic to be determined annually.
Recommended Preparation: SMC219Y1; SMC228H1;
SMC229H1
DR=HUM; BR=None
SMC431H1 Advanced Topics in Book and Media Studies II [24S]
A course/seminar on a topic to be determined annually.
Recommended Preparation: SMC219Y1; SMC228H1; SMC229H1
DR=HUM; BR=None
SMC464H1 The Church and Social Media [24S]
An advanced seminar on the Catholic Church's use of and reflection on social media since Vatican II.
Prerequisite: SMC219Y1/SMC291H1
DR=HUM; BR=2
SMC465H1 McLuhan [24S]
An advanced seminar on McLuhan's theory of technology, perception, and social media.
Prerequisite: SMC219Y1
DR=HUM; BR=3

## St. Michael's College

## Celtic Studies Courses

SMC141Y1 Introduction to the Irish Language [48L/24T]
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.
DR=HUM; BR=1
SMC240Y1 Celtic Cultures Through the Ages [48L/24T]
The expression of Celtic cultures in literature, history, folklore and myth from 600 B.C. to the present, with particular attention to the continuing Celtic contribution to Western culture.
DR=HUM; BR=1 + 3

## SMC242Y1 An Introduction to Scottish Gaelic

 [48L/24T]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.
DR=HUM; BR=1

## SMC243Y1 Modern Welsh [48L/24T]

An introductory course intended to provide a basic speaking and reading knowledge of Modern Welsh. Open to students with no prior experience of Welsh.
DR=HUM; BR=1
SMC250Y1 Celtic Mythology (formerly SMC450Y1) [48L]
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
DR=HUM; BR=2
SMC251H1 Intermediate Irish Language I [24L/12T]
This course builds on SMC141Y1 Introduction to the Irish Language. It will provide further expansion of the four language skills: listening, speaking, reading and writing.
Prerequisite: SMC141Y1
Exclusion: SMC241Y1
DR=HUM; BR=1

SMC252H1 Intermediate Irish Language II [24L/12T]
This course is a continuation of SMC251H1 Intermediate Irish Language I. It will provide further expansion of language skills. We will examine literary texts, both prose and poetry.
Prerequisite: SMC251H1
Exclusion: SMC241Y1
DR=HUM; BR=1
SMC333H1 $\begin{aligned} & \text { Special Topics in Celtic Studies I (formerly } \\ & \text { SMC408H1/409H1) [24S] }\end{aligned}$
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, SMC409H1
DR=HUM; BR=None
SMC334H1 Special Topics in Celtic Studies II (formerly SMC408H1/409H1) [24S]
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, SMC409H1
DR=HUM; BR=None
SMC335Y1 Special Topics in Celtic Studies III (formerly SMC410Y1) [48S]
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
DR=HUM; BR=None
SMC336H1 Contemporary Irish Womens Writing [24L]
This course explores the ways in which contemporary Irish womens writing engages with and challenges processes of patriarchy across a range of genres. Focus on womens 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)

## DR=HUM; BR=1

SMC337H1 Early Celtic History 450-1000 [24L]
The history of the insular Celtic nation groups from the postRoman period to the end of the first millennium, the course will trace settlement history and social organization, the making of Celtic nations, the process of Christianization, the impact of the Vikings, and the rise of paramount kings. Exclusion: SMC345Y1 DR=HUM; BR=3

## SMC338H1 The Celtic Nations in the Later Middle Ages

 1000-1550 [24L]Later medieval development of Ireland, Scotland and Wales: development of kingship, trade and urban settlement, arrival and colonizing patterns of the Normans, role of English administration and aggression, resurgence of native elites, development of frontier zones, beginning of the more compete English conquest of Ireland and Wales.
Exclusion: SMC345Y1
DR=HUM; BR=3
SMC339H1 Modern Gaelic Literature 1600-1800 [24L]
A study of the Gaelic Literature of Ireland from 1600-1800 within its historical context. Texts of poetry, prose and historical writings will be studied. All texts will be studied in translation. No knowledge of Irish language is required.
Exclusion: SMC352Y1
DR=HUM; BR=1

# St. Michael's College 

## SMC340H1 Modern Gaelic Literature 1800 to Present

 [24L]A study of the Gaelic Literature of Ireland from 1800 to present within its historical context. Texts of poetry, prose, and drama will be studied. All texts will be studied in translation. No knowledge of Irish language is required. Exclusion: SMC352Y1
DR=HUM; BR=1
SMC342Y1 Literature of Three Nations: Ireland, Scotland and Wales [48L]
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.
DR=HUM; BR=1 + 3
SMC343Y1 Celtic Literature and Society 500-1400 [48L]
Medieval Celtic literatures in relation to the structure and development of the insular Celtic societies that produced them. Readings include: historical writings, mythic tales, saga cycles, voyage tales, and romantic narratives, heroic poetry, eulogistic, religious, lyric, and gnomic poetry. Texts studied in translation.
DR=HUM; BR=1 + 3

## SMC344Y1 Celtic Archaeology [48L]

The archaeology of the Celtic peoples, with special reference to settlement patterns and material culture in Great Britain and Ireland.
(offered every three years)
DR=SOC SCI; BR=1 + 3

## SMC346Y1 Celtic Folklore and Music [48L]

A journey through the world of storytelling, popular customs and beliefs, songs and music in Ireland, Scotland and Wales. DR=HUM; BR=1 +2

## SMC348Y1 Modern Irish History [48L]

This course explores ethno-religious conflict and Anglo-Irish relations between 1791 and 1998. 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.
DR=HUM; BR=2 + 3

## SMC349H1 Seamus Heaney and Irish Literary Tradition [24L]

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 career of a poet whose scope and audience are international.
Recommended Preparation: SMC342Y1, ENG140Y1
DR=HUM; BR=1

## SMC350H1 Celtic Spirituality [24L]

The religious culture of the early and mediaeval Celtic Church as manifested in the material and written record, and its significance for contemporary religious movements. Texts studied include the Patrician dossier, early monastic Rules and Liturgies, selected hagiographical, homiletic, devotional and lyric texts.
DR=HUM; BR=2

SMC351H1 The Blasket Island Writings [24L]
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.
DR=HUM; BR=1
SMC353Y1 Contemporary Irish Writing [48L]
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.
DR=HUM; BR=1

## SMC354H1 Early Celtic Cinema [36L]

An introduction to some early films of Ireland, Scotland and Wales (1930-1980), as they relate to representations of Celtic identity and the beginnings of national cinema.
Exclusion: SMC354Y1; SMC411H1F (2003-04)
DR=HUM; BR=1
SMC355H1 Contemporary Celtic Cinema [36L]
An exploration of contemporary films of Ireland, Scotland and Wales from 1980 to the present, as they relate to representations of Celtic identity and the formation of national cinema.
Exclusion: SMC354Y1; SMC411H1F (2003-04)
DR=HUM; BR=1
SMC356H1 The Continental Celts [24L]
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.
(offered every three years)
Recommended Preparation: SMC240Y1
DR=HUM; BR=3
SMC374H1 The Celtic Book [24L]
A study of the production of manuscripts, books and tracts that played a crucial role in the historical evolution of a national culture or cultures in the Celtic world.
DR=HUM; BR=1

## SMC395Y1 Independent Study in Celtic Studies

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 DR=HUM; BR=None

SMC396H1 Independent Study in Celtic Studies
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 DR=HUM; BR=None
SMC411H1 Advanced Topics in Celtic Studies I [24S] Various topics are taken up each year, the content of which depends on the instructor. Students should check the college web site for details.

## St. Michael's College

## Prerequisite: Permission of the instructor

 DR=HUM; BR=NoneSMC412H1 Advanced Topics in Celtic Studies II [24S]
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 DR=HUM; BR=None

SMC413H1 The Irish and Scots in Canada [24S]
This course explores the history of Irish and Scottish migration and settlement in Canada with a special emphasis on political, social, economic and religious themes.
Exclusion: SMC411H1 (93-94), 412H1 (94-95)
DR=HUM; BR=3

## SMC416H1 Irish Nationalism in Canada and the United States [24S]

A transnational and crossnational analysis of Irish Nationalism in the Atlantic World from the 1790s to the 1860s. Special attention is paid to the United Irishmen in the United States, the Young Ireland exiles of 1848, and the Fenian movement in North America
Prerequisite: Permission of the instructor
DR=HUM; BR=3

## SMC440Y1 Middle Welsh Language and Literature [48L]

An introduction to the Welsh language and literature from the 10th to the 14th centuries.
Prerequisite: Permission of instructor
DR=HUM; BR=1
SMC441Y1 Old and Middle Irish [48L]
An introduction to Old and Middle Irish language and literature from the 7th to the 11th century.
Prerequisite: Permission of instructor

## DR=HUM; BR=1

SMC442H1 The Irish Diaspora [24S]
An analysis of global Irish migration from the seventeenth to the twentieth centuries, examining patterns of acculturation and adaptation, transnational flows of people and ideas, and the relationship between the homeland and host communities. Topics include demographic, social, economic, political, religious and cultural aspects of the Irish diaspora.

## Recommended Preparation: SMC348Y1

DR=HUM; BR=3

## SMC443H1 Medieval and Early Modern Irish Textual Studies [12L/12S]

Textual analysis of Irish historical documents in the context of cultural transition between the medieval and modern period. Texts worked on include medieval annals, later chronicles and their 17th century English translations, from the perspective of language transference and change from manuscript to print dissemination.
Recommended Preparation: SMC338H1
DR=HUM; BR=1

## SMC444H1 The Great Irish Famine in an International Context [24S]

An examination of the Great Irish Famine, 1845-1851, in its economic, political, social, demographic and religious dimensions and issues of collective and created memory. By use of manuscript and routinely generated records students will explore mass migration from Ireland to Britain, the Americas, and the Antipodes.

Recommended Preparation: SMC348Y1/HIS263Y1 DR=HUM; BR=3

## SMC451Y1 Senior Essay in Celtic Studies

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 must be completed by the student before registration.
Prerequisite: Permission of instructor
DR=HUM; BR=None

## Christianity and Culture Courses

## SMC103Y1 Catholicism [48L/24T]

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.
DR=HUM; BR=2 + 3

## SMC200H1 Christian Imagination I: Visual Arts (formerly SMC200Y1) [36L/24T]

The purpose of this course is to introduce students to the depth and breadth of the imagination in the western Christian tradition, through an exploration of the visual arts.
Exclusion: SMC200Y1
DR=HUM; BR=1

## SMC201H1 Christian Imagination II: Literary Arts <br> (formerly Christianity \& Literature) [36L]

The purpose of this course is to introduce students to the depth and breadth of the imagination in the western Christian tradition, through an exploration of the literary arts.
Exclusion: SMC200Y1
DR=HUM; BR=1

## SMC203Y1 Christianity Encounters the Secular World

 [48L/24T]Issues raised by Christianitys encounter with secular culture, and solutions proposed by the tradition: involvement in political structures, social movements, ethnic communities, and changing world views.
DR=HUM; BR=3
SMC204H1 Christianity and Asia [24L/12T]
A study of key elements in the encounter of Christianity and Asia: e.g. the controversy over Chinese rites; Koreas conversion by lay philosophers; the development of Filipino folk Catholicism and its impact on politics; the influence of Indian thought on recent Western theologians.
DR=HUM
$B R=3$

## SMC205H1 Varieties of Christian Experience [24L/12T]

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. DR=HUM; BR=2

## SMC206H1 Christianity and Music [24L/12T]

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.

# St. Michael's College 

Recommended Preparation: SMC200H1/SMC201H1/ SMC203Y1
DR=HUM; BR=1
SMC207H1 Christianity in Latin America [24L/12T]
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
DR=HUM; BR=3
SMC208Y1 Major Christian Thinkers [48L/24T]
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.
DR=HUM; BR=2
SMC209H1 Christianity in Africa [24L/12T]
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 postcolonial period.
Recommended Preparation: SMC203Y1
DR=HUM; BR=3
SMC215H1 Varieties of Christian Community [24S]
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.

## DR=HUM; BR=3

SMC216Y1 Ritual and Worship [48L/24T]
An introduction to Christian ritual and worship, in crosscultural 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.
DR=HUM; BR=2 + 3

## SMC217H1 Literature and the Christian Child [24L/12T]

An exploration of connections between a childs moral development and literature in Christian traditions. We examine literary, historical and philosophical developments appropriate to the childs imagination. The course will include the study of poems, catechetical materials, novels and other texts written for children.
DR=HUM; BR=1

## SMC231H1 Thought Experiments in Theology and Science [24L]

A lecture course introducing theological and scientific thought experiments (e.g., Einstein chasing the beam of light). Do thought experiments enable us to gain knowledge about the world and God by imagining hypothetical scenarios? If so, why bother with real world experiments? And is the mind attuned to grasp God?
Exclusion: SMC231Y1
DR=HUM; BR=2

## SMC232H1 Models of Relating Christianity and Science

 [24L]This course examines different models of relating Christianity and Science. Beginning with the biblical view on the natural world and moving to the present, the lectures develop a wide range of approaches.
Exclusion: SMC230Y1
DR=HUM; BR=2

## SMC233H1 Christianity and Science: Disputed Questions [24L]

This course engages various controversial issues in the natural sciences of import to Christian faith. Examples include: Creation vs. Evolution, Free Will vs. Determinism, Naturalism vs. Revelation.
Prerequisite: One Full Course in the Natural Sciences
Exclusion: SMC230Y1
DR=HUM; BR=2
SMC304H1 Christianity, Law and Society [24L]
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
DR=HUM; BR=3
SMC305H1 Christianity and Popular Culture [36L]
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: SMC200H1/SMC201H1 DR=HUM; BR=1

SMC307Y1 Scripture in Christian Tradition [48L/24T]
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. DR=HUM; BR=2

## SMC308H1 Marriage and the Family in the Catholic Tradition (formerly Marriage and the Family

 in Canon Law) [24L]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/SMC304H1
DR=HUM; BR=3
SMC309H1 Christianity and Politics [24L/12T]
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 Catholicisms response to the political theories of the Enlightenment, the secularization of the state and social justice issues.
Recommended Preparation: SMC203Y1/HIS241H1
DR=HUM; BR=3

## St. Michael's College

## SMC310H1 The Catechism of the Catholic Church [24S]

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.
DR=HUM; BR=2

## SMC311H1 Why the Church [24S]

The Catholic Church claims to be the continuation of the event of Christ in history, the guarantor of the authenticity of each persons 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/SMC200H1/ SMC201H1, SMC205H1/SMC216Y1
DR=HUM; BR=2

## SMC312H1 Catholicism and Education [24S]

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.
DR=HUM; BR=2
SMC313H1 Catholic Education in Ontario [24L]
An historical appraisal of the evolution of Catholic schools, universities, and catechetical education in Ontario. Special emphasis is placed on the evolution of Ontarios separate school system.
DR=HUM; BR=3

## SMC320H1 The Catholic Church in Canada (formerly SMC420H1) [24L]

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: SMC420H1
DR=HUM; BR=3

## SMC321H1 The Catholic Church and Canadian Law [24S]

The Churchs self-understanding generates interesting problems in her relations with the civil societies in which she lives. These problems are often fruitful and leave marks in the legislation of each of these societies. This 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, we 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
DR=HUM; BR=3
SMC322H1 Christianity and Feminism [24S]
A study of the impact of modern and contemporary feminist movements in Christian theology and practice. Feminist critiques of Christianity; Christian critiques of feminism; significant Christian feminist thinkers; and womanist, mujerista and /or Christian feminisms from the global South.

Recommended Preparation: SMC103Y1 or
SMC203Y1;WGS160Y1
DR=HUM; BR=2

## SMC330Y1 Christ in Christian Tradition [48L/24T]

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.
DR=HUM; BR=2

## SMC362Y1 Intercordia [24P/24S]

Service learning course in social justice and international development. Seminars in the Winter term and international service with Intercordia Canada, a non-governmental organisation that arranges international placements for educational purposes, 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
DR=HUM; BR=3
SMC363H1 Music and Liturgy [24L]
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
DR=HUM; BR=1

## SMC364H1 The Christian Book [24L]

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: SMC200H1/SMC201H1/
SMC228H1/SMC229H1
DR=HUM; BR=1
SMC366H1 Interreligious Dialogue and Practice (formerly SMC218Y1) [48L]
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: Six full courses
Exclusion: SMC218Y1
Recommended Preparation: SMC103Y1; SMC203Y1;
RLG100Y1
DR=HUM; BR=2

## SMC371H1 Faith and Physics [24L]

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
DR=HUM; BR=2

## SMC390Y1 Independent Studies in Christianity and Culture

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 DR=HUM; BR=None

## SMC391H1 Independent Studies in Christianity and Culture [TBA] <br> Independent Studies in Christianity and Culture <br> Prerequisite: Written approval of Program Director DR=HUM; BR=None

SMC400H1 Advanced Topics in Christianity and Culture I [TBA]
Advanced Topics in Christianity and Culture I
Prerequisite: Two courses in Christianity and Culture DR=HUM; BR=None

SMC401H1 Advanced Topics in Christianity and Culture II [TBA]
Advanced Topics in Christianity and Culture II
Prerequisite: Two courses in Christianity and Culture DR=HUM; BR=None
SMC417H1 Methods in Biblical Studies OT [24L/12T] 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
DR=HUM; BR=2
SMC418H1 Methods in Biblical Studies NT [24L/12T] 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
DR=HUM; BR=2
SMC419H1 Religious Pluralism and the Church [24S] 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
DR=HUM; BR=2

SMC421H1 Jews and Judaism in Christian Traditions [24S]
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; permission of the instructor
Recommended Preparation: SMC200H1/SMC201H1
DR=HUM; BR=3

## SMC422H1 Sacred Space in the Christian Tradition [24S]

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: SMC200H1/SMC201H1
DR=HUM; BR=1
SMC423H1 Topics in the Theology of Culture I [24S]
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: postmodernity, home and homelessness, and mass popular culture.
Prerequisite: Completion of 10 full-course credits
Recommended Preparation: SMC200H1/SMC201H1/
SMC208Y1/SMC305H1/SMC330Y1/SMC426H1

## DR=HUM; BR=2

SMC424H1 Topics in the Theology of Culture II [24S]
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: postmodernity, home and homelessness, and mass popular culture.
Prerequisite: completion of 10 full-course credits
Recommended Preparation: SMC200H1/SMC201H1/
SMC208Y1/SMC305H1/SMC330Y1/SMC426H1

## DR=HUM; BR=2

SMC425H1 Uses of the Bible in the Middle Ages [24S] 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
DR=HUM; BR=1
SMC426H1 The Social Justice Seminar [24S]
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/SMC103Y1; completion of 10 fullcourse credits
Recommended Preparation: SMC309H1/RLG336H1
DR=HUM; BR=3

## St. Michael's College

## SMC428H1 The Spiritual in Modern Art [24L]

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. Michaels College Recommended Preparation: SMC200H1/SMC201H1 DR=HUM; BR=1
SMC429H1 Comparative Theology Seminar [24S]
An introduction to comparative theology and comparative theologies, with special attention to their close interrelation and emergence with comparative religion and religious studies in the modern period.
Prerequisite: permission of the instructor
DR=HUM; BR=2

## SMC432H1 Christianity and Science on Human Sexuality [24S]

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; SMC232H1/
SMC233H1
DR=HUM; BR=2
SMC433Y1 Independent Studies in Christianity and Culture [TBA]
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; Permission of Program Director
DR=HUM; BR=None
SMC434H1 Independent Studies in Christianity and Culture [TBA]
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; Permission of Program Director
DR=HUM; BR=None
SMC454H1 Topics in Eastern Christian Studies [24S]
An advanced course on the historical development, social and cultural forms and/or major theological writings of the various traditions of Eastern Christianity. Topics for close examination may include: Iconography; Byzantine \& Slavic Christianity; Modern Orthodox Thought.
Prerequisite: Completion of 10 full-course credits
Recommended Preparation: SMC203Y1, SMC208Y1,
NMC270H1, and/or RLG331H1
DR=HUM; BR=2

## SMC455H1 Art and Spirituality in Eastern Christian

 Traditions [24L/12T]An advanced introduction to the history of Eastern Christian icons, architecture and the iconoclastic controversy. Sample topics include: Byzantine, Slavic, Coptic, Ethiopian and modern icons; the relationship between iconography, art, aesthetics, liturgy and spirituality; and/or the writings of John of Damascus, Theodore Abu Qurrah, or other significant Eastern Christian thinkers.
Prerequisite: Completion of 10 full course credits; permission of department
Recommended Preparation: SMC203Y1, SMC208Y1,
NMC270H1 and/or RLG331H1
DR=HUM; BR=1
SMC456H1 Indian Christianity [24S]
An advanced study of the historical development, major theological writings and contemporary ethnographic studies of diverse Christian traditions in South Asia. Topics to be covered include the legacy of Thomas Christianity, HinduChristian dialogue, the Christian ashram movement, liturgical inculturation and religious hybridity.
Prerequisite: Completion of 10 full-course credits
Recommended Preparation: SMC203Y1, SMC204H1,
RLG203Y1 and/or RLG205Y1
DR=HUM; BR=2
SMC458H1 Historiographies of Religion [36S]
A seminar exploring the histories of the study of religion and the role of history in the study of religion.
Prerequisite: Completion of a minimum of 14.0 FCEs
DR=HUM; BR=1

## Christianity \& Culture: Major Program in Religious Education Courses

## JSV200H1 Communication and Conflict Resolution in Education [24L]

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, crosscultural understanding.
Prerequisite: Enrolment in Christianity and Culture CTEP
Major or Victoria College CTEP Education Minor DR=SCI; BR=3

SMC271H1 Equity and Diversity in Education [36L]
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
DR=SOC SCI; BR=3

## SMC272H1 Child and Adolescent Development in Education [36L] <br> 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
DR=SCI/SOC SCI; BR=2

## 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
DR=SOC SCI; BR=None

## Mediaeval Studies Courses

## SMC175H1 Mediaeval Civilization [24L/12T]

An interdisciplinary course to introduce students to the rich culture of the European mediaeval period (from 500 to 1500). Students will examine the Middle Ages by means of its art, literature, philosophy, liturgy, historiography, and music. A chronological overview will introduce students to the basic historical shape of the period.
DR=HUM; BR=2

## SMC210H1 The Early Mediaeval Tradition (Formerly SMC210Y1) [24L/12T]

An introduction to the thought and culture of early mediaeval Europe. Students are introduced to important monuments of early mediaeval History, Thought, Literature, and Art. They follow some of the common threads that run through these disciplines and explore chief expressions of early mediaeval life and thought.
Exclusion: SMC210Y1
Recommended Preparation: SMC175H1
DR=HUM; BR=1
SMC211H1 The Middle Ages and the Movies [24L/12T]
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.
DR=HUM; BR=1

## SMC212H1 The Later Mediaeval Tradition (formerly SMC210Y1) [24L/12T]

An introduction to the thought and culture of later mediaeval Europe. Students are introduced to important monuments of later medaeval History, Thought, Literature, and Art. They follow some of the common threads that run throught these disciplines abd explore chief expressions of later mediaeval life and thought.
Exclusion: SMC210Y1
Recommended Preparation: SMC175H1
DR=HUM; BR=3

## SMC222H1 Mediaeval Latin I (formerly LAT322H1/ SMC332H1) [48S]

This course studies a selection of mediaeval Latin prose and poetry. Emphasis is on the linguistic differences between mediaeval Latin and its classical antecedent, especially in
regard to vocabulary, grammar and orthography. A review of
Latin grammar is part of the course.
Prerequisite: LAT100Y1/LAT102H1
Exclusion: LAT322H1, SMC322H1
DR=HUM; BR=1

## SMC323H1 Mediaeval Latin II (formerly LAT323H1) [48S]

Through the close reading of fewer but longer texts than in SMC222H1, this course gives students a deepened acquaintance of the linguistic features of mediaeval Latin, as well as with its literature, and generic and stylistic conventions. A solid foundation in basic Latin morphology, syntax and vocabulary is assumed.
Prerequisite: LAT202H1/SMC222H1
DR=HUM; BR=1

## SMC324H1 The Study of the Bible in the Middle Ages [24L/12T]

This course explores mediaeval biblical commentary and the various approaches taken by the exegetes to uncover the secrets of the sacred page, for instance through the four senses of Scripture: history, allegory, tropology, and anagogy. Recommended Preparation: SMC210H1/SMC212H1 DR=HUM; BR=2

## SMC357H1 The Mediaeval Child [24L]

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: SMC210H1/SMC212H1/
HIS220Y1
DR=HUM; BR=3

## SMC358H1 The Mediaeval Book [24S]

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/LAT102H1; SMC210H1/SMC212H1 or a course in mediaeval history. DR=HUM; BR=1

## SMC359H1 Mediaeval Theology [24L]

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: SMC210H1/SMC212H1 DR=HUM; BR=2

## SMC360H1 Vernacular Literature of the Middle Ages (formerly SMC420H1) [24L]

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.
Exclusion: SMC420H1
Recommended Preparation: SMC210H1/SMC212H1

## St. Michael's College

## DR=HUM; BR=1

SMC361H1 Mediaeval Law (formerly SMC405H1) [24S]
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.
Exclusion: SMC405H1
Recommended Preparation: HIS220Y1/SMC210H1/
SMC212H1
DR=HUM; BR=2

## SMC402H1 Mediaeval Canon Law [24S]

The rise of the science of canon law is one of the great intellectual developments of the High Middle Ages. In this course, the aims and techniques of the canonical jurists will be explored by a close reading of their normative texts and glosses.
Recommended Preparation: HIS220Y1/SMC203Y1/
SMC210H1/SMC212H1
DR=HUM; BR=2
SMC403H1 The Mediaeval Church [24S]
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: SMC210H1/SMC212H1/
HIS220Y1
DR=HUM; BR=3
SMC406H1 Mediaeval Seminar II [12T/24S]
A fourth-year seminar on a topic to be determined annually.
Prerequisite: Permission of the instructor
Recommended Preparation: SMC210H1/SMC212H1 or other medieval courses
DR=HUM; BR=None

## SMC407Y1 Mediaeval Seminar I [24T/48S]

A fourth-year seminar on a topic to be determined annually. Prerequisite: Permission of the instructor
Recommended Preparation: SMC210H1/SMC212H1 or other mediaeval courses
DR=HUM; BR=None

## SMC435H1 Independent Studies in Mediaeval Studies [TBA]

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
DR=HUM; BR=None
SMC436H1 Advanced Mediaeval Latin Seminar [12S]
This seminar explores the intellectual milieu of the cathedral schools of the twelfth century and the debates of its famous and infamous protagonists: Abelard, for instance, and Bernard of Clairvaux, Heloise, Peter the Venerable, etc. Readings in the original Latin will be discussed and commented upon by students.
Prerequisite: SMC323H1
Recommended Preparation: SMC210H1/SMC212H1
DR=HUM; BR=1

SMC490Y1 Senior Essay in Mediaeval Studies [24S]
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. The project will be accompanied by a research seminar component
Prerequisite: Permission on instructor and program
coordinator
DR=HUM; BR=1 + 3

## Other St. Michael's College Courses

SMC299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## SMC380H1 St. Michael's College Independent Studies

 [TBA]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.
DR=TBA; BR=None

## SMC381Y1 St. Michael's College Independent Studies [TBA]

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.

## DR= TBA; BR=None

SMC385H1 Numbers and the Humanities [24L/24T]
An introduction to research methods in the Humanities focusing on quantification, the use of routinely generated records, forensic analysis, and data collection and analysis. Critique of these methods. The applications of quantitative analysis may vary from year to year.
Prerequisite: Students must be registered in major or specialist programs in SMC/SLA/FRE/GER/ITA.
DR=HUM; BR=None

## SMC457H1 Directed Research [24S]

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 hands-on training in research.
Prerequisite: Permission of Department
DR=HUM; BR=None

## SMC480H1 St. Michael's College Independent Studies

 [TBA]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.
DR=TBA; BR=None
SMC481Y1 St. Michael's College Independent Studies [TBA]
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.
DR=TBA; BR=None

## Slavic Languages and Literatures

## Faculty

Professors Emeriti
C.H. Bedford, MA, Ph D
G. Bisztray, MA, Ph D
R. Bogert, MA, 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
N.N. Shneidman, MPHE, MA, Dip REES, Ph D
R.D.B. Thomson, MA, D Phil

Professor and Chair of the Department
D. T. Orwin, MA, Ph D

Professor and Graduate Coordinator
L. Livak, MA, Ph D

Associate Professor and Undergraduate
Coordinator
T. Koznarsky, MA, Ph D

Professors
C.J. Barnes, MA, Ph D
C.E. Kramer, MA, Ph D

Associate Professors
V. Ambros, MA, Ph D
J. Schallert, Ph D
M. Tarnawsky, MA, Ph D
T. Trojanowska, MA, Ph D

Assistant Professors
K. Holland, MA, Ph D
D. Obradovic, MA, Ph D

## Senior 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, Bosnian, Croatian, Serbian, and Macedonian languages, literatures, culture, and film 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. Many of our literature, culture, and film courses are taught in English and do not require special linguistic preparation.
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 Coordinator: Associate Professor Taras Koznarsky, 121 St. Joseph Street, Room 417, taras. koznarsky@utoronto.ca, 416-926-1300, ext. 3236.

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 Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
( 6 FCEs or their equivalent, with at least 2 FCEs at the 300+ level, including 0.5 FCE at the 400 -level)

1. SLA257Y1

Prerequisite for SLA257Y1 is SLA107Y1 or equivalent knowledge. SLA107Y1, if taken, counts toward the program requirements.
2. SLA217H1, SLA 227 H 1
3. SLA247H1, SLA327H1, SLA337H1, SLA357H1
4. Additional courses satisfying program requirements: SLA109Y1, SLA200H1, SLA202H1, SLA209Y1, SLA214H1, SLA222H1, SLA223H1, SLA224H1, SLA255H1, SLA256H1, SLA301H1, SLA302H1, SLA330Y1, SLA380H1, SLA401H1. History and Social Science courses related to Croatian and Serbian studies may be taken in consultation with the Undergraduate Coordinator.
5. To insure exposure to quantitative skills, all Majors must take 0.5 FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students

## Slavic Languages and Literatures

may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.

## Croatian and Serbian Studies Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(4 FCEs or their equivalent, including at least 1 FCE at the 300+ -level)

1. One BCS language course.
2. SLA217H1 or SLA227H1
3. The remaining FCEs are to be chosen from the list of courses indicated in the Major program.

## Czech and Slovak Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
( 6 FCEs or their equivalent, with at least 2 FCEs at the 300+ - level, including 0.5 FCE at the 400-level)

1. SLA105Y1, SLA204Y1, SLA305H1
2. Remaining FCEs from: HIS251Y1, SLA103H1, SLA200H1, SLA201H1, SLA202H1, SLA203H1, SLA214H1, SLA215H1, SLA222H1, SLA223H1, SLA224H1, SLA225H1, SLA233H1, SLA254H1, SLA256H1, SLA301H1, SLA302H1, SLA325H1, SLA335H1, SLA380H1, SLA401H1, SLA404H1, SLA405H1, SLA424H1, SLA425Y1, SLA435H1, SLA465H1, SLA475H1, SLA495H1
3. To insure exposure to quantitative skills, all Majors must take 0.5 FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.
Czech and Slovak Studies Minor (Arts program)
Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(4 FCEs or their equivalent, including at least 1 FCE at the 300+ - level )
4. At least 0.5 FCE from: SLA105Y1, SLA204Y1, SLA305H1
5. Remaining FCEs from: HIS251Y1, SLA103H1,

SLA202H1, SLA214H1, SLA215H1, SLA222H1,
SLA223H1, SLA224H1, SLA225H1, SLA233H1,
SLA254H1, SLA256H1, SLA301H1, SLA305H1,
SLA325H1, SLA335H1, SLA404H1, SLA405H1, SLA424H1, SLA425Y1, SLA435H1, SLA465H1, SLA475H1, SLA495H1

Polish Language and Literature Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(6 FCEs or their equivalent. with at least 2 FCEs at the 300+ level, including 0.5 FCE at the 400-level)

1. A sequence of one, two or three FCEs from SLA106Y1, SLA206H1 and SLA207H1 (former SLA206Y1),
SLA306H1, SLA336H1, depending on the student's skill level
2. SLA216Y1
3. SLA346H1, SLA356H1
4. Remaining FCEs from: SLA201H1, SLA203H1, SLA214H1, SLA222H1, SLA223H1, SLA224H1, SLA226H1, SLA254H1, SLA256H1, SLA236H1, SLA301H1, SLA302H1, SLA318H1, SLA380H1, SLA406H1, SLA436H1, SLA476H1, SLA495H1
5. To insure exposure to quantitative skills, all Majors must take 0.5 FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.

## Polish Language and Literature Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(4 FCEs or their equivalent, including at least 1 FCE at the 300+ - level)

1. SLA106Y1 or combination of SLA206H1 and SLA207H1 (former SLA206Y1); or SLA306H1 and SLA336H1
2. SLA216Y1
3. Two FCEs from: SLA226H1, SLA346H1, SLA356H1, SLA406H1, SLA436H1, SLA476H1, SLA495H1

## Polish Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
( 7 FCEs or their equivalent, with at least 2 FCEs at the 300+ - level, including 0.5 FCE at the 400-level)

1. A sequence of two FCEs from one of the following groups, depending on the student's skill level: a) SLA106Y1, SLA206H1 and SLA207H1 (former SLA206Y1) b) SLA206H1 and SLA207H1 (former SLA206Y), SLA306H1, SLA336H1 c) SLA306H1, SLA336H1, SLA346H1,SLA356H1
2. SLA216Y1, HIS353Y1
3. Three FCEs, with at least one FCE from group B: Group A: Polish
SLA226H1, SLA346H1, SLA356H1, SLA406H1, SLA436H1, SLA476H1
Group B: History and General Slavic
HIS251Y1, HIS433H1, HIS461H1, SLA103H1, SLA201H1, SLA203H1, SLA214H1, SLA222H1, SLA223H1, SLA224H1, SLA236H1, SLA254H1, SLA256H1, SLA301H1, SLA302H1, SLA318H1, SLA380H1, SLA495H1
4. To insure exposure to quantitative skills, all Majors must take 0.5 FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.

## Slavic Languages and Literatures

## Polish Studies Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(4 FCEs or their equivalent, with at least one FCE at the 300+ - level)

1. A sequence of two of the following language courses, depending on the student's skill level: a. SLA106Y1, SLA206H1, SLA207H1 (former SLA206Y1) b. SLA206H1, SLA207H1 (former SLA206Y1), SLA306H1, SLA336H1 c. SLA306H1 or SLA336H1, SLA346H1, SLA356H1
2. SLA 216 Y 1
3. HIS353Y1

## Russian Language and Literature Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(10 FCEs or their equivalent, with at least 4 FCEs at the $300+-l e v e l$, including 1 FCE at the 400-level)

1. SLA100H1, SLA101H1
2. SLA220Y1, SLA240H1, SLA320Y1, SLA420Y1
3. The remaining FCEs are to be chosen from: SLA102H1, SLA103H1, SLA 200H1, SLA201H1, SLA202H1, SLA203H1, SLA210H1, SLA212H1, SLA222H1, SLA230H1, SLA233H1, SLA234H1, SLA236H1, SLA241H1, SLA242H1, SLA244H1, SLA250Y1, SLA252H1, SLA254H1, SLA255H1, SLA256H1, JSH300H1, SLA302H1, SLA303H1, SLA311H1, SLA312H1, SLA314H1, SLA315H1, SLA317H1, SLA318H1, SLA321Y1, SLA322H1, SLA330Y1, SLA331H1, SLA332H1, SLA339H1, SLA340H1, SLA343H1, SLA351H1, SLA367H1, SLA370H1, SLA380H1, SLA402H1, SLA403H1, SLA415H1, SLA420Y1, SLA423H1, SLA433H1, SLA440H1, SLA441H1, SLA449H1, SLA450H1, SLA451H1, SLA452Y1, SLA460H1, SLA463H1, SLA464H1, SLA495H1

## Russian Language and Literature Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
( 7 FCEs or their equivalent, with at least 2 FCEs at the $300+-l e v e l$, including 0.5 FCE at the 400-level)

1. SLA100H1, SLA101H1
2. SLA220Y1, SLA 240 H 1, SLA320Y1
3. The remaining FCEs are to be chosen from: SLA102H1, SLA103H1, SLA200H1, SLA201H1, SLA202H1, SLA203H1, SLA210H1, SLA212H1, SLA222H1, SLA230H1, SLA233H1, SLA234H1, SLA236H1, SLA241H1, SLA242H1, SLA244H1, SLA250Y1, SLA252H1, SLA254H1, SLA255H1, SLA256H1, JSH300H1, SLA302H1, SLA303H1, SLA311H1, SLA312H1, SLA314H1, SLA315H1, SLA317H1, SLA318H1, SLA321Y1, SLA322H1, SLA330Y1, SLA331H1, SLA332H1, SLA339H1, SLA340H1, SLA343H1, SLA351H1, SLA367H1, SLA370H1, SLA380H1, SLA402H1, SLA403H1, SLA415H1, SLA420Y1, SLA423H1, SLA433H1, SLA440H1,

## SLA441H1, SLA449H1, SLA450H1, SLA451H1, SLA452Y1, SLA460H1, SLA463H1, SLA464H1, SLA495H1

NOTE: Students with OAC Russian or equivalent will take the language sequence SLA 220Y1, 320Y1, 420Y1.
Please Note: To insure exposure to quantitative skills, all Specialists and Majors must take 0.5FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.

## Russian Language and Literature Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(4 FCEs or their equivalent, including at least 1FCE at the 300+-level)
2 FCEs in Russian language and 2 FCEs in Russian literature, chosen in consultation with the Undergraduate Coordinator.

## Russian Language Minor (Arts program):

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(4 FCEs or their equivalent, including at least 1 FCE at the 300+-level)
Four FCEs from: SLA100H1, SLA101H1, SLA210H1, SLA220Y1, SLA230H1, SLA255H1, SLA320Y1, SLA321H1, SLA322H1, SLA330Y1, SLA380H1, SLA420Y1, SLA452Y1

## Russian Literature in Translation Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(Four FCEs or their equivalent)

1. SLA240H1, SLA241H1, SLA339H1, SLA340H1
2. Two additional FCEs in Russian literature and/or culture.

Ukrainian Language and Literature Specialist (Arts program)
Enrolment in this program requires the completion of 4.0 courses.
Consult Department of Slavic Languages and Literatures.
( 10 FCEs or their equivalent, with at least 4 FCEs at the $300+-l e v e l$, including 1 FCE at the 400-level)

1. SLA108Y1
2. SLA208Y1, SLA218Y1, SLA308Y1, SLA438H1, SLA468H1
3. Five FCEs from: SLA102H1, SLA201H1, SLA203H1, SLA222H1, SLA228H1, SLA236H1, SLA238H1, SLA248H1, , SLA255H1, SLA256H1, SLA302H1, SLA318H1, SLA328H1, SLA330Y1, SLA338H1, SLA380H1, SLA408H1, SLA418H1, SLA419Y1, SLA428Y1, SLA429H1, SLA448H1, SLA458H1, SLA495H1. History and Social Science courses with

## Slavic Languages and Literatures

Ukrainian content may also be counted toward this program, with prior permission of the Undergraduate Coordinator.
Please note: To insure exposure to quantitative skills, all Specialists and Majors must take 0.5FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.

## Ukrainian Language and Literature Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
Consult Department of Slavic Languages and Literatures.
(6 FCEs or their equivalent, with at least 2 FCEs at the $300+-$ level, including 0.5 FCE at the 400 -level)

1. SLA108Y1
2. SLA208Y1, SLA218Y1
3. Three FCEs from: SLA102H1, SLA200H1, SLA201H1, SLA203H1, SLA214H1, SLA222H1, SLA223H1, SLA224H1, SLA228H1, SLA236H1, SLA238H1, SLA248H1, SLA254H1, SLA255H1, SLA256H1, SLA301H1, SLA302H1, SLA308Y1, SLA318H1, SLA328H1, SLA338H1, SLA380H1, SLA408H1, SLA418H1, SLA419Y1, SLA428Y1, SLA429H1, SLA438H1, SLA448H1, SLA458H1, SLA468H1, SLA495H1. History and Social Science courses with Ukrainian content may be taken toward the program, in consultation with the Undergraduate Coordinator. Please note: To insure exposure to quantitative skills, all Specialists and Majors must take 0.5FCE in the new breadth area 5 as part of satisfying their breadth course requirement. Students may choose any quantitative reasoning course among those specifically designated for this purpose in the Faculty of Arts and Science. This is in addition to any program requirements listed above.

## Ukrainian Language and Literature Minor (Arts program)

Enrolment in this program requires the completion of 4.0 courses. There are no specific first-year requirements.
(4 FCEs or their equivalent, at least 1FCE at the 300+-level)

1. SLA218Y1
2. Three FCEs in Ukrainian language, literature or culture. One FCE in Ukrainian history may be taken toward the program, in consultation with the Undergraduate Coordinator.

## 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 Bosnian, 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 Bosnian, Croatian, or Serbian is available to students who complete SLA257Y1 and an additional FCE in South Slavic literature or culture with readings and discussion in the target language with a grade of at least B-. 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 Czech is available to students who complete SLA204Y1, SLA305H1, and SLA435H1 or SLA455H1 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 SLA308Y1
Students should note that, as explained on page 26 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.

## Slavic Languages and Literatures

## Slavic Languages and Literatures

 CoursesCourses are listed in the following order:

* Interdisciplinary Courses
* Bosnian, Croatian, and Serbian
* Czech \& Slovak
* Macedonian
* Polish
* Russian
* Slavic Linguistics
* Ukrainian


## Note

The Department reserves the right to place students in the language course best suited to their linguistic preparation

## Interdisciplinary Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars are intended to stimulate 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. Details on page 33.
SLA102H1 Ukrainian and Russian Civilizations [24L] A survey of major 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 of St. Petersburg. Taught in English, all readings in English.
DR=HUM; BR=3

## SLA103H1 Golems and Robots on Stage and Screen [24L]

Exploring the ways artificial creatures are presented on stage and on screen, this course introduces students to major issues in the study of theatre, cinema, and popular culture. Focus on case studies from Central and Eastern Europe. Taught in English, all readings in English. DR=HUM; BR=1

## SLA200H1 Culture and Politics in Europe [24L]

Introduction to the issues of the interaction between cultural expression and political life, with a historical focus on Central and Eastern Europe. The mutually influential relationship between artistic activity and political dynamics in modern societies is examined through literature, visual arts, drama, music, and film. Taught in English, all materials in English. DR=HUM; BR=3

SLA201H1 Losing It [24L]
How does one cope with loss, be it a nose, a leg, a pet, a name, a lover, a battle, a fortune, or one's sanity? Through literary texts from Central and Eastern Europe, we explore the trauma and poetics of losing, and the mechanisms of coping, reliving, and compensating for the lost object. Taught in English, all readings in English.
DR=HUM; BR=1

## SLA202H1 Jewish Communities in Slavic Countries [24L]

Literature about the Jewish community in Slavic countries. How do these Jewish minorities perceive and identify themselves? How are they perceived by others? Taught in English, all readings in English.
DR=HUM; BR=3
SLA203H1 Faking It [24L]
The role of forgery in cultural, national, and personal identities. A scholar "discovering" an "ancient" manuscript, a noblewoman in disguise joining the army, an impostor conning a provincial town, a writer faking political loyalty. Literary texts from Central and Eastern Europe expose the porous boundaries between authenticity and lies, highlighting the artificiality and vulnerability of social and cultural conventions. Taught in English, all readings in English. DR=HUM; BR=1

SLA214H1 Great Books of Central Europe [24L] Stealth powerhouses: quirky, unexpected works that transformed the ways fiction is written and appreciated. Books that defy expectations, define modernity, and remap empires and peripheries. Provocations to European tradition: Kafka, Gombrowicz, Čapek, Schulz, Khvylovyi, Krleža, and others. Readings in English. DR=HUM; BR=1

SLA222H1 Roma (Gypsies) and Slavs [24S]
Both in popular culture and the headlines, Roma (Gypsies) are often depicted as either romantic or negative. Roma and Slavs have interacted for centuries and this course examines the history of that interaction with particular emphasis on linguistic and educational rights. Taught in English, all readings in English.
DR=HUM; BR=3
SLA223H1 Crossroads of Europe I: Heroes, Villains, and Jesters [24L]
Beginning with myth and legends of Medieval Central Europe and concluding with discourses of Enlightenment, we explore aspects of oral and written cultures, fine arts and architecture. The class examines myths, legends, and traditions of the region, which will help to illuminate similarities and divergences of several cultural trends. DR=HUM; BR=1

## SLA224H1 Crossroads of Europe II: Pragmatists, Visionaries, and Rebels [24L]

Romantic transgressions, realist projects, modernist aesthetics, and avant-garde experiments define the main cultural shifts in Central Europe in the19th and 20th centuries. We read them through literature, fine and performing arts, and popular culture.
DR=HUM; BR=1

## SLA233H1 Animated Film in Europe [24L]

Trends in the history of European animated film, focusing on Central and Eastern European cinematic traditions. Aesthetics of animated image and peculiarities of animation as an art form. Films are analyzed in their artistic, cultural and political contexts. Taught in English, English subtitles. DR=HUM; BR=1

## SLA236H1 Finding It [24L]

The course explores the paradoxes, frustrations, and tensions inherent in the yearning for the ideal and the striving for making dreams come true. Students engage in

## Slavic Languages and Literatures

the critical analysis of a broad range of cultural material, including mythology, the Bible, European literatures and performing arts, and social and political manifestoes. Taught in English, readings in English.
DR=HUM; BR=1
SLA254H1 Stone Books to Sky Books: The Book as Institution, Commerce and Art [24L]
Evolution of the book and printed media in Central and Eastern Europe: legends (and forgeries) of ancient letters, mediaeval illuminated manuscripts, forbidden and "supernatural" books, hand-written and painted books of modernist and avant-garde artists, books as a way of living and dying. Readings in English.
DR=HUM; BR=1

## SLA255H1 Slavic Languages: Unity and Diversity [24L]

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 neighbours. Language is viewed in connection with history, geography, mythology and religion, family and social structure, literature, and alphabets. Taught in English. Prerequisite: First-year course of any Slavic language
(cf. SLA101H1, SLA105Y1, SLA106Y1, SLA107Y1, SLA108Y1, SLA109Y1) or knowledge of a Slavic language

## DR=HUM;BR=2

SLA256H1 Firebirds and Other Wonders: The World of Slavic Folklore [24L]
An introduction to the comparative study of folk narratives -fairy-tales, legends, epics, from Russia, Central and Eastern Europe, and the Balkans. Topics include the structural and psychological analysis and interpretation of oral folk traditions; the cultural specificity of Slavic folklore; its adaptation and treatment in literature, music, and visual arts. Taught in English, all readings in English.
DR=HUM; BR=1

## SLA299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## SLA301H1 Cities of Central Europe [24L]

Urban cultures, cityscapes, and texts contrasted and connected: Vienna, Prague, Budapest, Cracow, Sarajevo, Odessa, and others. Transformations of physical urban environments and their representations in literature, architecture, and art. Nineteenth century burgeoning modernization to post-communist fragmentation and the recycling of spaces, memories, and lives. Readings in English.
Prerequisite: Completion of 4.0 FCEs
DR=HUM; BR=1
SLA302H1 The Imaginary Jew [36S]
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.
DR=HUM; BR=1

## SLA303H1 Literary Imagination and Jewish Identity in Modern Europe [24S]

An exploration of Central and East European authors writing in different languages but united by Jewish ancestry. We examine the responses of artists and intellectuals of Jewish extraction (Sholem Aleichem, Babel, Bialik, Heine, Kafka, Mandelshtam, Sforim, Zhabotinskii, etc.) to cultural secularization and modernity. Taught in English. Readings in English.
Recommended Preparation: SLA302H1
DR=HUM; BR=1
SLA318H1 City of Saints and Sinners: Kyiv through the Centuries [24L]
Captivating and elusive: the "new Jerusalem," Yehupets, a "Slavic Pompeii" and frontier city. This course examines Kyiv through works of literature, visual arts, architecture, and popular culture that reveal Ukrainian, Russian, Jewish, and Polish versions of the city. Gogol, Sholem Aleichem, Bulgakov, Vynnychenko, and many others. Taught in English, all readings in English.
DR=HUM; BR=1
SLA325H1 Magic Prague (formerly SLA445H1) [24L] Inspired by Angelo Ripellino's "Magic Prague," this class explores Prague as a palimpsest of different genres in works by Jan Neruda, Franz Kafka, R.M. Rilke, G. Meyrink, G. Apollinaire, B. Hrabal and others. Selected secondary texts illuminate questions of literary cityscapes, center and margins, multiculturalism and nationalism and magic. Readings in English and for the specialists in the original. Exclusion: SLA445H1
DR=HUM; BR=1

## SLA331H1 Experiments and Revolutions in Art and

 Literature [12L/12S]Painting, music, and literature in the late Russian Empire - early Soviet Union (from 1890s through 1930s). New revolutionary paths for the advancement of man and society through art: symbolism, neoprimitivism, futurism, constructivism, and socialist realism. Kandinsky, Bely, Zamyatin, Malevich, Stravinsky, Tatlin, and many others. Taught in English, all readings in English. DR=HUM; BR=1

SLA380H1 Shifting Borders, Fluid Identities, and the Politics of Language [24S]
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.
DR=HUM; BR=3
SLA395Y1 Readings in Slavic Literature [48S]
This course examines a special topic in Slavic Literature. The topic varies from year to year. Consult the department for more details.
DR=HUM; BR=1
SLA396H1 Readings in Slavic Studies [24S]
This course examines a special topic in Slavic Studies. The topic varies from year to year. Consult the department for more details.
DR=HUM; BR=None

## Slavic Languages and Literatures

SLA398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
SLA399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None
SLA401H1 Great Ideas in Essay Form [24L]
The essay: a prose form that observes, pursues and critiques ideas through exploratory techniques. Paradoxically characterized by a commitment to the personal and an orientation towards the public sphere, the essay challenges dogma, prejudice and conformity. Readings by Kiš, Milosz, Patočka, Benjamin, Lukács and Adorno (among others). Readings in English.
Prerequisite: Completion of a minimum of 8.0 FCEs DR=HUM; BR=1

SLA424H1 Theatre and Cinema in Extremis [12L/12P] 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.

## Exclusion: SLA424Y1

Recommended Preparation: Prior completion of a course in drama or cinema
DR=HUM; BR=1
SLA453H1 Women in East European Fiction [24S] 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.

## DR=HUM; BR=1

## SLA476H1 Twentieth Century Theatre and Performance: Modernism, Avant-Garde, Postmodernism [24S]

The course has two aims. Its first aim is to help students to familiarize themselves with some of the major developments in the European and North-American theatre of the twentieth century by studying the works of its main creators such as Meyerhold, Grotowski, Brook, Kantor, Wilson, Bausch, and Lepage. The second aim is to investigate a wide range of theories (psychoanalytic, post-colonial, feminist, gay and lesbian/queer, and many more) that are central to critical debates in the profession. We discuss, evaluate, and test these theories against plays and performances, while maintaining the interaction of theory and praxis as the central focus of our investigation. Readings in English.
Prerequisite: Permission of instructor
DR=HUM; $B R=1$
SLA477H1 Performance: Theory and Practice [24S] 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 selected performances, including live productions in Toronto theatres.
DR=HUM; BR=1

| SLA495H1 | Russian Formalism, Prague Structuralism <br> and Modern Art [24S] |
| :--- | :--- |

A study of the major issues of general aesthetics from the vantage points of Russian Formalism and Prague Structuralism. The course provides students with a theoretical grounding in textual and cultural analysis, introducing them to the history of modern literary and cultural criticism and aspects of artistic conventions and innovations. Taught in English, readings in English.
DR=HUM; BR=1
SLA498Y1 Independent Studies [TBA]
A scholarly project on an approved literary or linguistics topic supervised by one of the Department's instructors. Prerequisite: Permission of the Department DR=HUM; BR=None
SLA499H1 Independent Studies [TBA] A scholarly project on an approved literary or linguistics topic supervised by one of the Departments instructors. Prerequisite: Permission of the Department DR=HUM; BR=None

## Bosnian, Croatian and Serbian Courses

SLA107Y1 Elementary Bosnian, Croatian, and Serbian [96P]
Basic phonology, orthography, morphology and syntax of Bosnian, Croatian and Serbian. Development of the four basic language skills: reading, writing, listening, and speaking. Acquisition of essential vocabulary for practical conversation and for comprehension.
Exclusion: native speakers of BCS, SLA257Y1, SLA237Y1 DR=HUM; BR=1
SLA217H1 Cultural History of the South Slavs [24L]
The Balkans, described as a bridge between the East and the West, are a fascinating case study of Byzantine, Ottoman and Austro-Hungarian colonial legacy. This course presents the evolution of South Slavic cultural life under foreign rule. Topics of study include the Renaissance, Enlightenment, Romanticism, among others. Readings in English.
Exclusion: SLA217Y1, SLA227Y1
DR=HUM; BR=1

## SLA227H1 South Slavic Literature: National Revival and Beyond [24L]

A survey of national revival and consolidation in Serbia, Croatia, Slovenia and Bosnia through a chronological selection of literary texts (poems, plays, novels) from the eighteenth to the twentieth century. The course places South Slavic literary developments within the broader context of European intellectual history as well as Balkan cultural and political life. Taught in English, all readings in English. DR=HUM; BR=1
SLA247H1 Yugoslav Cinema [24L]
An overview of the Yugoslav cinematic tradition from the 1950s onwards. Topics include Yugoslav film-making in the context of the European New Wave; cinema d'auteur (Makavejev, Pavlović, Kusturica); art and politics in a communist state; the struggle of experimentalism and traditionalism. Taught in English. All films with subtitles.

## Slavic Languages and Literatures

Exclusion: SLA427H1
DR=HUM; BR=1
SLA257Y1 Intermediate Bosnian, Croatian, and Serbian [96P]
Systematic study of morphology and syntax. Intermediate composition and oral practice. Reading and translation of contemporary and more complex texts in BCS.
Prerequisite: SLA107Y1 or permission of instructor Exclusion: SLA307Y1, SLA316Y1
DR=HUM; BR=1
SLA327H1 The Balkan Short Story [24S]
Studies of short stories written since 1950. Focus on innovative writers and current trends. Readings in the original and English.
DR=HUM; BR=1

## SLA337H1 Advanced Bosnian, Croatian, and Serbian

 [48P]Morphology, syntax, composition and translation, oral practice. Extensive reading, translation and analysis of contemporary Bosnian, Croatian and Serbian texts representing diverse styles.
Prerequisite: SLA257H1 or permission of instructor DR=HUM; BR=1

## SLA357H1 Yugoslavia's Literary Émigrés and Exiles [24S]

This course explores the experience and definition of exile in the works of South Slavic authors; from Miloš Crnjanski's depiction of London to Danilo Kiš's Parisian affair, and Dubravka Ugrešić's weary travels in Berlin. We examine a variety of literary genres in light of exilic studies theory. Taught in English. Readings in English.

## DR=HUM; BR=1

## Czech and Slovak Courses

SLA105Y1 Elementary Czech [96P]
Grammar, composition, and conversation. Readings from Czech literature. Open only to students with little or no knowledge of the language.
DR=HUM; BR=1

## SLA204Y1 Intermediate Czech [96P]

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
DR=HUM; BR=1
SLA215H1 Czech and Slovak Cultures [24L]
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
DR=HUM; BR=3

## SLA225H1 The Czech and Slovak Cinema [24L]

Czech and Slovak cinema of the sixties, generally known as the Czechoslovak New Wave, represents the ways the cinematographers viewed the past, examined the present and escaped into the world of fantasy. In addition, we will examine several theoretical, historical and cultural aspects of national culture and international cinematography. DR=HUM; BR=1

## SLA305H1 Advanced Czech [48S]

Morphology, syntax, composition and translation, oral practice. Contemporary Czech texts representing diverse styles.
Prerequisite: SLA205Y1
DR=HUM; BR=1
SLA335H1 Lifting the Iron Curtain: Czech Culture between 1960 and 1989 [24L]
This class explores the subversive power of literary, cinematic, and theatrical experiments of the 1960s and confronts them with the development of Czech culture during the so-called normalization that lasted until 1989. Topics include literary texts, cinema, and fine arts at home and in exile. Taught in English, readings in English and in the original.
DR=HUM; BR=1
$\begin{array}{ll}\text { SLA404H1 } & \text { From The National Revival to Modernism: } \\ & \text { Czech Literature of the 19th Century [24S] }\end{array}$
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, Němcová, Neruda, Zeyer, Havliček Borovský. (Offered every three years). Readings in Czech and Slovak.
Prerequisite: SLA305H1 or permission of the instructor DR=HUM; BR=1
SLA405H1 On the Waves of the Avant-garde and Beyond: Czech Literature of the 20th Century (formerly SLA405Y1) [24S]
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 Čapek, F. Langer, V. Nezval, M. Kundera, V. Linhartová and others. (Offered every three years). Readings in Czech.
Prerequisite: SLA305H1 or permission of the instructor Exclusion: SLA405Y1
DR=HUM; BR=1

## SLA425Y1 History of the Czech Literary Language [48S]

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
DR=HUM; BR=3

## SLA435H1 Readings in Czech and Slovak [24P]

Texts of various genres representing several cultural epochs. Advanced students improve their reading skills.
Prerequisite: Permission of instructor
Exclusion: SLA435Y1
DR=HUM; BR=1

## SLA465H1 Czech Short Story [24S]

The course focuses on the topic of public places and private spaces in the works of 19th- and 20th-century Czech writers. A variety of texts by modern Czech authors are explored through the prism of contemporary narrative theory. Special attention to differences in styles and epochs.
$D R=H U M ; B R=1$

## Slavic Languages and Literatures

## SLA475H1 Modern Czech Drama [24S]

This course explores the role of theatre and drama in Czech society by focusing on the most important modern Czech plays as well as on the concepts of the modern Czech theatre as represented by directors such as Burian, Honzl, Krejča and Radok. We will discuss seminal theoretical studies and topics such as dialogue, dramatic text, and puppet theatre. Taught in English, readings in English. DR=HUM; BR=1

## SLA485H1 Laughter and Forgetting in Milan Kundera

 [24S]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 Kundera'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. DR=HUM; BR=1

## Macedonian Courses

SLA109Y1 Elementary Macedonian [96P]
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).
DR=HUM; BR=1
SLA209H1 Intermediate Macedonian [48P]
This course completes the basics of Macedonian grammar including the wide variety of past tenses, complex sentence structures, and word formation.
Prerequisite: SLA109Y1 or permission of instructor
Exclusion: SLA209Y1
DR=HUM; BR=1

## SLA213H1 Reading Macedonia: A Cultural Exploration [48P]

This course explores Macedonian culture as read through its literature, film, cuisine, music, folklore, architecture, and new media.
Prerequisite: SLA209H1 or permission of instructor
Exclusion: SLA209Y1
DR=HUM; BR=1

## Polish Courses

SLA106Y1 Elementary Polish [24L/72P]
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.

## DR=HUM; BR=1

## SLA206H1 Intermediate Polish I [12L/36P]

The goal of this course is to develop students' Polish language skills, such as speaking, listening, writing, and reading, using new methods of the second language acquisition at a lower intermediate level. Many elements of Polish culture are also examined in the context of language and communication through readings of original texts, which form the basis for class discussions. The course
uses authentic Polish materials (newspapers, short stories, poems, radio programs, movies, and songs).
Prerequisite: SLA106Y1 or permission of instructor
Exclusion: SLA206Y1
DR=HUM; BR=1
SLA207H1 Intermediate Polish II [12L/36P]
This course is a continuation of SLA206H1. Develops speaking, listening, writing, and reading Polish language skills. Many elements of Polish culture are examined through readings of original texts, listening to Polish programs and songs, watching films and TV programs, which form the basis for class discussions.
Prerequisite: SLA206H1 or permission of instructor
Exclusion: SLA206Y1
DR=HUM; $B R=1$

## SLA216Y1 The Dynamics of Polish Literature and Culture: A Survey [48L]

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)
DR=HUM; BR=1 + 3

## SLA226H1 Postwar Polish Cinema [24L]

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) DR=HUM; BR=1

## SLA306H1 Advanced Polish I [48P]

The course uses diverse and intensive speaking, listening, writing, and reading methods and materials. It introduces more complex elements of Polish culture through reading of original literary texts and texts of popular culture, as well as through analyzing other discourses. These materials form the basis for class discussions and home assignments. Students expand their Polish vocabulary (including phraseology) and learn about word and sentence structure. The course also focuses on improving writing skills.
Prerequisite: SLA206Y1 or SLA207H1 or permission of instructor
DR=HUM; BR=1

## SLA336H1 Advanced Polish II [48P]

Continuation of SLA 306H1. It uses a wide variety of methods and materials to polish and finesse the skills acquired in the previous courses or brought to class from other sources. It is an intensive writing course focused on improving writing skills.
Prerequisite: SLA306H1 or permission of instructor DR=HUM; BR=1

## SLA346H1 From Eastern Europe to European Union: Polish Postwar Culture [24S]

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

## Slavic Languages and Literatures

with prevailing myths about the West and the East. Readings in English (Polish for majors).
Recommended Preparation: SLA216Y1
DR=HUM; BR=1

## SLA356H1 What's New? Polish Culture Today [24S]

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 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
DR=HUM; BR=1

## SLA406H1 The Curtain Never Falls: Polish Drama and Theatre in Context (formerly SLA406Y1) [24S]

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
DR=HUM; BR=1

## SLA436H1 Rebels, Scoffers, and Jesters: Polish Culture from Different Perspectives [24S]

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
DR=HUM; BR=2

## Russian Courses

Russian language student placement policy

1. All students who have studied Russian outside the University of Toronto must take a language placement test prior to enrolling into a Russian language course. Contact the Department for test dates and times.
2. Native speakers of Russian are not allowed to enroll into any Russian language course, with the exception of SLA402/403 and linguistics courses (SLA330, SLA452). Native speakers may enroll into any Russian literature and culture course, and any Russian language and literature POSt (language requirement will be replaced with the equivalent number of literature and culture FCEs in consultation with the Undergraduate Coordinator).
3. Heritage speakers of Russian are allowed to enroll into a Russian language course only by special permission from the Russian language program coordinator, Prof. Julia Mikhailova (julia.mikhailova@utoronto.ca). Heritage speakers may enroll into any Russian literature and culture course, and any Russian language and literature POSt (if necessary, language requirement will be replaced with the equivalent number of literature and culture FCEs in consultation with the Undergraduate Coordinator).
4. Who are native and heritage speakers of Russian? For academic purposes, the Department considers a student to be a native speaker of Russian if s/he meets one of the following criteria:
a) The student left Russia at the age of 10 or later.
b) The student lived in a Russian-speaking country (any former Soviet republic) before the age of 10 and did elementary schooling in Russian.

For academic purposes, the Department considers a student to be a heritage speaker of Russian if $s / h e$ meets one of the following criteria:
a) The student left Russia before the age of 10 .
b) The student lived in a Russian-speaking country (any former Soviet republic) before the age of 10 but did elementary schooling in a language other than Russian.
c) The student was born and/or grew up outside of a Russian-speaking country but speaks some Russian at home.

It is the responsibility of individual students to furnish documentation proving their native- or heritage-speaker status. In the absence of such documentation, the Department reserves the right to deny enrolment into Russian language courses. Heritage and native speakers of Russian who enroll in a Russian language course and fail to identify themselves to the Department engage in cheating and will be treated in accordance with the university policy on academic misconduct.

## SLA100H1 Elementary Russian I [60P]

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 judgment of the Department, qualify for entry into SLA210H1 or SLA220Y1).
Exclusion: native speakers of Russian
DR=HUM; BR=1
SLA101H1 Elementary Russian II [60P]
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 judgment of the Department, qualify for entry into SLA210H1 or SLA220Y1).
Prerequisite: SLA100H1 or permission of instructor Exclusion: native speakers of Russian DR=HUM; BR=1
SLA210H1 Russian for Heritage Speakers [48P]
This course is designed for students with Russian background, students raised in homes where Russian is/ was spoken, who speak or merely understand basic Russian but are otherwise illiterate in Russian (cannot/have difficulty reading or writing). This course helps heritage learners of Russian develop/maintain writing and reading skills as well as develop cultural literacy. (Online course in 2011-2012). Prerequisite: Permission of instructor DR=HUM; BR=1

## SLA211H0 Russian in Action [48P]

Emphasis on expansion of vocabulary, developing conversational and listening skills, and intensive practice in real-life situations. Offered as part of Summer Program in Russia.

## Slavic Languages and Literatures

Prerequisite: SLA101H1 or SLA210H1
DR=HUM; BR=1
SLA220Y1 Intermediate Russian [120P]
Continuation of development of proficiency in speaking, reading, listening and writing. Review the basic and learning of new grammatical and syntactical structures, study of word formation and acquisition of active vocabulary. Reading of classical, contemporary, adapted, and non-adapted literary and mass-media texts. Culture and listening through animation.
Prerequisite: SLA101H1
Exclusion: native speakers of Russian, including SLA210H1
DR=HUM; $B R=1$

## SLA212H1 The Russian Novel [24L]

Introduction to the Russian novelistic tradition at the height of its creative power. We examine the Russian novel's universal appeal and influence, and its impact on modern art and thought. Authors may include (depending on instructor) Gogol, Turgenev, Dostoevsky, Tolstoy, Belyi, Nabokov, Pasternak, Solzhenitsyn. Taught and read in English. DR=HUM; BR=1
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.
DR=HUM; BR=None
SLA234H1 Russian and Soviet Cinema [12L/24P]
A survey of the Russian cinematic tradition from its beginnings through the first decade following the disintegration of the USSR. The course examines the avantgarde 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.
DR=HUM; BR=1

## SLA240H1 The Golden Age of Russian Literature: Romanticism [24L]

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. Taught in English, all readings in English.
DR=HUM; BR=1

## SLA241H1 The Golden Age of Russian Literature: Realism [24L]

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? Taught in English, all readings in English.
Recommended Preparation: SLA240H1
DR=HUM; $B R=1$

## SLA242H1 The Novel and the Family in the Nineteenth Century [24S]

The course examines the development of the nineteenthcentury European novel in terms of changing representations of the family, with the Russian literary tradition as a case study. Topics include the aristocratic family, illegitimacy, adultery, social and political conflict, and the family as locus of inherited madness, degeneracy, and criminality. All readings in English.
DR=HUM; BR=1

## SLA244H1 Studies in Film Genre: Russian and Soviet Approaches [12P/24S]

An examination of the understanding and practice of film genre in Russian and Soviet cinema. Various genres and generic hybrids - comedy, melodrama, action, war, horror, fantasy, etc. - are studied in the context of critical literature on the problem of film genre and against the backdrop of international cinematic traditions. Taught in English, all films subtitled in English.
Recommended Preparation: SLA234H1
DR=HUM; BR=1

## SLA250Y1 Russian Cultural Heritage [48L]

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.
DR=HUM; BR=1 + 3

## SLA252H1 Russian Short Fiction [24S]

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. All readings in English.
DR=HUM; BR=1

## JSH300H1 Literature and History in Russia [24L]

History and Literature were always interconnected in Russia. Writers not only sought to reflect the society around them, but were themselves often social critics and political figures. The course examines key texts in Russian literary tradition both as works of art and as primary sources for the historian. All readings in English.
Recommended Preparation: HIS250Y1 or SLA240H1/
SLA241H1
DR=HUM; BR=1 + 3
SLA311H1 Gogol [12L/12S]
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 through various theoretical approaches. Includes cinematic (Taras Bulba, Viy, Overcoat) and musical (Shostakovich's "Nose") re-creations of Gogol's works. Taught in English, all readings in English.
DR=HUM; BR=1
SLA312H1 Nabokov [24S]
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

# Slavic Languages and Literatures 

creative uses of exile to artistic, philosophical and ideological ends; the aesthetic and cultural implications of the writers' switch from Russian to English. Novels studied: Defense, Despair, The Gift, The Real Life of Sebastian Knight, Lolita, Pnin, Pale Fire. Taught in English, all readings in English. DR=HUM; BR=1

## SLA314H1 Dostoevsky [24L]

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. Taught in English, all readings in English.
DR=HUM; BR=1
SLA315H1 The Russian Novel: Case Studies [24S] 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. Taught in English, all readings in English.
DR=HUM; BR=1

## SLA317H1 Tolstoy [24S]

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. Taught in English, all readings in English.
DR=HUM; BR=1

## SLA320Y1 Advanced Russian [120P]

A survey of Russian culture and history of the 20th century through non-adapted readings and film. Development of advanced speaking, reading, listening and writing skills on a wide variety of topics. Work on grammar and vocabulary building. Subordinate and relative clauses, aspect, verbs of motion, participles and gerunds. Class is conducted primarily in Russian.
Prerequisite: SLA220Y1 or permission of instructor Exclusion: native speakers of Russian, including SLA210H1 DR=HUM; BR=1
SLA321H1 Conversational Russian [36P]
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.
Prerequisite: SLA220Y1 and permission of instructor Exclusion: Native speakers of Russian DR=HUM; BR=1

## SLA322H1 News from Russia [24P]

Language, life and the media in contemporary Russia.
The course will be based on reading Russian newspapers, listening to Russian media, and discussing contemporary events in Russia.
Prerequisite: SLA220Y1
Exclusion: Heritage and native speakers of Russian DR=HUM; BR=1

## SLA323H1 The Mysteries of Russian Revealed [12P/12S]

This course introduces Russian's sounds, structures, and alternations. Russian's tricky morphologic alternations and their historical causes are explored while students master the hidden encoding of forms through study of the writing system, root structures, and variation.

Prerequisite: SLA220Y1 or permission of instructor DR=HUM; BR=1

SLA332H1 Literature and Music in Russia [12L/12S]
This course, on the interaction between artistic genres, introduces a series of Russian and other literary works of the nineteenth and twentieth centuries that have inspired Russian musical masterpieces in the operatic, song, and symphonic repertoire. Texts are studied in English translation. Basic Russian and musical literacy useful, but not obligatory. DR=HUM; BR=1

## SLA339H1 The Twilight of an Empire: Russian Art and Thought in the European Fin de Siècle [12L/12S]

The course explores Russias 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 siecle sensibility in Russian and West European thought (Solovev, 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.
DR=HUM; BR=1

## SLA340H1 Narrative Revolution and Counterrevolution in 20th-Century Russian Prose [12L/12S]

The course examines experimental approaches to storytelling 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 (Babel, Zoshchenko, Olesha, Remizov, Kharms, Nabokov); the esthetics of Socialist Realism; the prose of poets (Tsvetaeva, Pasternak, Mandelshtam, Khodasevich); underground and emigre memoirs (Ginzburg, Berberova); genre crossovers: documentary novels, fictional criticism (Grossman, Abram Terts, Tsypkin). Taught in English, all readings in English. No prior knowledge of Russian language or culture is required.
DR=HUM; BR=1

## SLA343H1 Post-Stalinist Russian Literature, 1953-1991

 [12L/12S]A study of writers and major works (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 post-modern writing. Taught in English, all readings in English.
DR=HUM; BR=1
SLA351H1 Language Practice [TBA]
A practical course in Russian phonetics. Development of pronunciation skills. For students of all levels excluding native and heritage speakers.
DR=HUM; BR=1

## SLA367H1 Chekhov [24S]

Selected stories, plays; stylistic, structural, and thematic analysis, literary and historical context, influence in Russia and the West. Taught in English, all readings in English. DR=HUM; BR=1

## Slavic Languages and Literatures

## SLA370H1 Russian Romantic Poetry [36S]

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.
Corequisite: SLA320Y1
DR=HUM; BR=1

## SLA400H1 Mediaeval Rus' Writes [24S]

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
DR=HUM; BR=1
SLA402H1 Advanced Russian Language Skills I [36P]
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 DR=HUM; BR=1

## SLA403H1 Advanced Russian Language Skills II [36P]

This course follows on from SLA402, 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 DR=HUM; BR=1

## SLA415H1 Studies in Russian Literature of the 18th Century [36S]

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 DR=HUM; BR=1

## SLA420Y1 Studies in Russian Syntax and Stylistics [120P]

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 or permission of instructor Exclusion: native speakers of Russian, including SLA210H1 DR=HUM; BR=2

SLA423H1 War and Peace (formerly SLA323H1) [36S]
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.
Exclusion: SLA323H1

Recommended Preparation: SLA317H1
DR=HUM; BR=1
SLA433H1 Anna Karenina (formerly SLA324H1) [36S]
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.
Exclusion: SLA324H1
Recommended Preparation: SLA317H1
DR=HUM; BR=1

## SLA440H1 Introduction to Russian 19th Century Poetry (formerly SLA440Y1) [24S]

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 Pleade, Nekrasovs civic verse; philosophical verse by Tyutchev; Impressionist and Decadent poets. Readings in Russian. Prerequisite: SLA320Y1/SLA340H1
Exclusion: SLA440Y1
DR=HUM; BR=1
SLA441H1 Modern Russian Poetry [24S]
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 losif Brodsky. Readings in Russian.
Prerequisite: SLA320Y1 or SLA340H1
DR=HUM; BR=1

## SLA442H1 Russian Symbolism [24L]

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 DR=HUM; BR=1

## SLA449H1 Russian Thinkers [36S]

Social and political change, national and spiritual destiny in philosophical, journalistic and critical writings. From Slavophiles and Westernizers to revolutionary and apocalyptic thought. Reflections on Russia's position between Europe and Asia and on the place of Russia's East Asian neighbors in its history and culture. Taught in English, readings in English.
DR=HUM; BR=2
SLA450H1 Pushkin and His Age [24S]
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. DR=HUM; BR=1

SLA451H1 Russian Acmeist Poetry [24S]
This course examines the Acmeist phenomenon, studying writings by Kuzmin, Gorodetsky, Narbut and others, making

## Slavic Languages and Literatures

a special study of Akhmatova, Mandelstam, and Gumilev. Other topics include: critical reception of Acmeist writings, Acmeist poets' interaction with other contemporary writers, ideological and cultural aspects of the movement. All readings in Russian.
DR=HUM; BR=1
SLA460H1 Contemporary Russian Literature [24L]
Major writers and literary groupings of the past decade; the literary process in post-Soviet Russia. (Taught in Russian)
Prerequisite: Permission of the instructor DR=HUM; BR=1

## SLA463H1 Themes in Russian Realism [24L]

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. We will read contemporary works of criticism and thought from Russia and Europe that may have influenced it.
Prerequisite: The equivalent of one FCE in literature DR=HUM; BR=1

SLA464H1 Studies in the Russian Novel [24L]
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
DR=HUM; BR=1

## Slavic Linguistics Courses

SLA330Y1 Old Church Slavonic [48S]
Structure and history. Reading and linguistic study of Old Slavonic texts.
Prerequisite: Permission of instructor
DR=HUM; BR=1

## SLA452Y1 Structure of Russian [48S]

The phonology, morphology and syntax of contemporary standard Russian from a formal and semantic standpoint. Prerequisite: SLA320Y1
DR=HUM; BR=2

## Ukrainian Courses

Web site: www.chass.utoronto.ca/~tarn/courses/

## SLA108Y1 Elementary Ukrainian [96P]

Basic vocabulary, simple sentence patterns, essential morphology. Internet language laboratory drills. Intended for students with little or no knowledge of the language.
DR=HUM; BR=1
SLA208Y1 Intermediate Ukrainian [96P]
Study of morphology through grammar drills; oral practice; reading of texts from Ukrainian literature.
Prerequisite: Permission of instructor
DR=HUM; BR=1
SLA218Y1 Ukrainian Literature and Culture [24L/24S] A general survey of Ukrainian culture through an examination of selected literary works and their social, political, historical, philosophical, and aesthetic contexts. The course covers the period from Kyivan Rus to the present. Readings in English. (Offered in alternate years) DR=HUM; BR=1 + 3

## SLA228H1 20th Century Ukrainian Fiction in Translation [12L/12S]

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 DR=HUM; BR=1

## SLA238H1 Literature of the Ukrainian-Canadian Experience [24S]

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
DR=HUM; BR=1

## SLA248H1 Women and Women's Themes in Ukrainian Literature [24S]

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.
DR=HUM; BR=1

## SLA308Y1 Advanced Ukrainian [96P]

Review of morphology and study of syntax. Short compositions based on literary and critical texts. Voluntary language laboratory.
Prerequisite: Permission of instructor DR=HUM; BR=1

## SLA328H1 The Culture of Contemporary Ukraine [24S]

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. DR=HUM; BR=1

## SLA338H1 Ivan Franko [24S]

Ivan Franko is one of the most important and innovative figures in the history of Ukrainian literature. This seminar explores a selection of the belletristic writings by this fascinating and factious poet and novelist in the context of Ukrainian culture in Austria-Hungary. Taught in English. All readings are in English.
Recommended Preparation: Previous coursework in
Ukrainian literature, e.g. SLA218
DR=HUM; BR=1
SLA408H1 The Ukrainian Short Story [24S]
The development of the short story from KvitkaOsnovianenko to the present day. All readings in the original. (Offered every four years)
Prerequisite: Permission of instructor DR=HUM; BR=1

## Slavic Languages and Literatures

## SLA418H1 Ukrainian Drama [24S]

The development of Ukrainian drama from Kotliarevsky to the present day. All readings in the original. (Offered every four years)
Prerequisite: Permission of instructor
DR=HUM; BR=1
SLA419Y1 Ukrainian Poetry [48S]
A survey of Ukrainian poetry from Skovoroda to the present day. All readings in the original. (Offered every four years) Prerequisite: Permission of instructor
DR=HUM; BR=1
SLA428Y1 The Ukrainian Novel [48S]
Major works by Kulish, Nechui-Levytsky, Myrny, Franko, Kotsiubynsky, Kobylianska, Vynnychenko, lanovsky,
Pidmohylny, Honchar, Andrukhovych, and Zabuzhko.
Readings in Ukrainian. (Offered every four years)
Prerequisite: Permission of instructor
DR=HUM; BR=1

## SLA429H1 Shevchenko [24S]

A critical study of Taras Shevchenko. Life, works, and significance. Readings in Ukrainian.
Prerequisite: Permission of instructor
DR=HUM; BR=1
SLA438H1 Style and Structure of Ukrainian [36S]
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
DR=HUM; BR=2

## SLA448H1 Ukrainian Literature of the 17th and 18th Centuries [24S]

A survey of Ukrainian literature from the Renaissance to the National Revival: polemical literature, baroque poetry, school drama, religious and philosophical treatises, historywriting, 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
DR=HUM; BR=1
SLA458H1 Ukrainian for the 21st Century [36S]
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, SLA308Y1
DR=HUM; BR=1

## SLA468H1 Aspects of Literary Translation of Ukrainian [36P] <br> 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
$D R=H U M ; B R=2$

## Faculty

## Professors Emeriti

R.F. Badgley, MA, Ph D
M. Blute, Ph D (UTM)
Y.M. Bodemann, MA, Ph D
R. Breton, MA, Ph D, FRSC (SM)
D.F. Campbell, Ph D (UTM)
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E. Silva, Ph D (UTM)
J.H. Simpson, BD, Th M, Ph D (UTM)
M. Spencer, MA, Ph D (UTM)
I.M. Zeitlin, Ph D (T)

Professor and Chair of the Department B. Wheaton, MA, Ph D

Professor and Associate Chair
R.C.A. Andersen, MA, PhD

Associate Professor and Associate Chair
A.M. Sorenson, MA, Ph D

Professors
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R. Brym, MA, Ph D
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L. Tepperman, AM, Ph D (N)
B. Wellman, MA, Ph D

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D. Brownfield, MA, Ph D (UTM)
C. Cranford, MA, Ph D (UTM)
R. Dinovitzer, MA, Ph D (UTM)
A.I. Green, MA, Ph D
J. Hermer, Ph D (S)
P.C. Hsiung, MA, Ph D (S)
J. Johnston, MA, Ph D (UTM)
A.C. Korteweg, MA, Ph D (UTM)
P. Landolt, Ph D (S)
W.J. Magee, MS, Ph D
P. Maurutto, MA, Ph D (UTM)
A. Mullen, Ph D (S)
J. Taylor, PhD
S. Ungar, Ph D (S)
W.H. Vanderburg, MA Sc, Ph D, P Eng
J.W.P. Veugelers, MA, Ph D
W. Zhang, Ph D (UTM)

## Assistant Professors

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C. Childress, Ph D (S)
P. Goodman, MA, Ph D (UTM)
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V. Leschziner, Ph D
K. Liddle, MA, Ph D (S)
N. Magbouleh, Ph D (S)
A. Marin, Ph D
R. Salem, Ph D (S)
M. Schafer, MS, Ph D
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L. Schwartzman, BA, MA, Ph D (UTM)
D. Silver, BA, MA, Ph D (S)

## Adjunct Professors

J. Armstrong, Ph D
J. Baum, Ph D
R. Blickstead, MBA
L. Calzavara, Ph D
P. Erickson, Ph D
R. Glazier, MPh, MD
A. Greve, Dr. Oecon.
A. Hathaway, Ph D
D. Livingstone, Ph D
G. Moore, Ph D

## Senior Lecturer

B. Green, Ph D (UTM)

Sociology's key principle is that patterned social relationships create opportunities for, and place constraints on, human action. It is an idea whose influence is widespread. New research agendas in law, literature, economics, and other disciplines reflect the notion that beyond individual motives, goals, and emotions, patterned social relationships help to make us who we are. Our courses and faculty research examine how patterned social relationships shape and are shaped by gender roles and families; health; immigration and ethnic relations; labour markets, work and stratification as well as political sociology; crime, law and deviance; culture; urban sociology; and networks and community.
To test explanations regarding the influence of social relationships on various aspects of human behaviour, sociologists collect and analyze observational, survey, experimental, and historical data. Accordingly, the sociological perspective and the research skills learned by studying sociology prepare students for a wide variety of careers in industry, government, education, politics, health and journalism. Medical, legal, and environmental fields report an increasing need for sociologists. Municipal, provincial and federal governments hire in areas like

## Sociology

urban sociology, community relations, policy and planning. In private business, sociologists work in management consulting firms and polling organizations, as well as in labour relations and human resources.

A professional career in sociology requires training beyond the undergraduate level. However, the critical, analytical and research skills that sociology students learn open many employment opportunities. Over a third of Canadian undergraduates in sociology go on to be employed in business, finance and administrative occupations, and just under a third in government service, social science, and educational fields.

Undergraduate Director: Professor A. Sorenson, Room 394, 725 Spadina Ave., 416-978-4726, sorenson@chass.utoronto. ca

Undergraduate Administrator: Miss Donna Ragbir, Room 284, 725 Spadina Ave., 416-946-4064, sociology. undergraduate@utoronto.ca

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 Specialist (Arts program)

## (10 FCEs in Sociology)

The Sociology Specialist program is a limited enrolment program.
Students interested in the Specialist program normally apply and enter from the Major program, after having completed the Year 2 requirements of that program as below. [Students demonstrating exceptional interest and achievement in the Introductory course may enter at the end Year 1.]
Entry Requirements:
From the Major program:

1. A minimum average of $70 \%$ on two of the following 3

SOC courses: SOC200H1, SOC201H1 or SOC203H1

## 2. At least one additional FCE at the SOC200+ level

## From Year 1:

A minimum grade of $80 \%$ in SOC101Y1 or a minimum combined average grade of $80 \%$ in SOC102H1 +

## SOC103H1

Completion Requirements:
SOC101Y1 or both SOC102H1 and SOC103H1
SOC201H1, SOC203H1, and SOC376H1
SOC200H1, SOC202H1, SOC300H1 and SOC302H1
4. An additional 5.5 FCEs in Sociology including at least 3.0 FCEs at the $300+$-level, 1.0 of which must be at the 400-level, i.e., 2.5 SOC FCEs at the 200 or higher level; 2.0 SOC FCEs at the 300 or higher level; and 1.0 SOC FCE at the 400 level.

## Sociology Major (Arts Program)

## (7.0 FCEs in Sociology)

The Sociology Major program is a limited enrolment program.
Entry Requirements:

1. A minimum grade of $65 \%$ in SOC101Y1 or a minimum combined average grade of $65 \%$ in SOC102H1 + SOC103H1
2. 3 full courses (3.0 FCEs) towards a degree (can be from sociology or other departments).
Completion Requirements:
3. SOC101Y1or both SOC102H1 and SOC103H1
4. SOC201H1 or SOC203H1
5. SOC200H1 and SOC202H1
6. An additional 4.5 FCEs in Sociology, including at least 2.0 FCEs at the $300+$-level, 0.5 of which must be at the 400-level, i.e., 2.5 SOC FCEs at the 200 or higher level; 1.5 SOC FCEs at the 300 or higher level and 0.5 SOC FCE at the 400 level.

## Sociology Minor (Arts Program)

## (4.0 FCEs in Sociology)

The Sociology Minor program is a limited enrolment program.
Entry Requirements:

1. a minimum grade of $65 \%$ in SOC101Y1 or a minimum combined average grade of $65 \%$ in SOC102H1 and SOC103H1
2. 3 full courses (3.0 FCEs) towards a degree (can be from sociology or other departments)
Completion Requirements:
3. SOC101Y1 or both SOC102H1 and SOC103H1
4. Three additional $200+$ level SOC courses (3.0 FCEs), which includes at least 1 FCE SOC course at the 300+ level, i.e., 2.0 SOC FCEs at the 200 or higher level and 1.0 SOC FCE at the 300 or higher level.

## Sociology Courses

## Note 1:

Enrollment in SOC200H1, SOC201H1, SOC202H1, SOC203H1, SOC300H1, SOC302H1, SOC376H1, can be restricted as stated in the course descriptions below. Ineligible students can be removed at any time.

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.
SOC101Y1 Introduction to Sociology [48L/24T]
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.
Exclusion: SOC102H1 + SOC103H1
DR=SOC SCI; BR=2 + 3
SOC102H1 Introduction to Sociology Social Inequalities
What causes the emergence, persistence and decline of inequalities based on class, gender, race, ethnicity and country of residence? Variations in artistic, mathematical, athletic and other skills are strikingly evident; this course explores why they are associated with varying rewards, including income, power and prestige.
Exclusion: SOC101Y1
DR=SOC SCI; BR=3
SOC103H1 Introduction to Sociology Social Institutions and Processes [24L]
Operating through economic, educational, political, religious, familial and other institutions, society opens up some opportunities and closes off others, thus helping to make us what we are and influencing what we can become. This course explores how social institutions work and how they structure our lives.
Exclusion: SOC101Y1
DR=SOC SCI; BR=3

## Note

Obtaining $65 \%$ or more in SOC101Y1 or a combined average of $65 \%$ or more in SOC102H1 and SOC103H1 is required for entry into the sociology major and minor programs. Entry to the sociology specialist program at the end of the first year requires a minimum of $80 \%$ in SOC101Y1 or a minimum combined average of $80 \%$ in SOC102H1 and SOC103H1. Credit for higher-level SOC course will not waive these requirements.

## 200-Series Courses

## Note:

All upper-level SOC courses have prerequisites. Students without course prerequisites can be removed at any time.

## SOC200H1 Logic of Social Inquiry (formerly SOC200Y1) [24L/24T]

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. Enrolment priority is given to sociology majors and specialists.
Prerequisite: SOC101Y1 or SOC102H1 + SOC103H1
Exclusion: SOC200Y1, JBS229H1, POL242Y1, UNI200Y1,
UNI200H1, UNI250H1, WDW350Y1, GGR271H1,
WDW350H1
DR=SOC SCI; BR=3
SOC201H1 Classical Sociological Theory ICommunity \& Religion (formerly SOC203Y1) [24L]
Introduction to the paired concepts of community/alienation and sacred/secularization in the works of key classical
theorists such as Marx, Weber, Durkheim, Tocqueville and Simmel. Enrolment priority is given to sociology majors and specialists.
Prerequisite: SOC101Y1 or SOC102H1 + SOC103H1
Exclusion: SOC203Y1
DR=SOC SCI; BR=3
SOC202H1 Quantitative Analysis in Social Science Research (formerly SOC300Y1) [24L]
Introduction in quantitative social science research from descriptive statistics to hypothesis testing using various strategies for the analysis of bivariate relationships. Enrolment priority is given to sociology majors and specialists.
Prerequisite: SOC101Y1 or SOC102H1 + SOC103H1, and SOC200H1
Exclusion: SOC200Y1, SOC300Y1, ECO220Y1, GGR270H1, PSY201H1, STA220H1, STA248H1, POL242Y1,STA250H DR=SOC SCI; BR=3
SOC203H1 Classical Sociological Theory II - Inequality \& Authority (formerly SOC203Y1) [24L]
Introduction to the paired concepts of inequality/solidarity and authority/illegitimacy in the works of key classical theorists such as Marx, Weber, Durkheim, Tocqueville and Simmel. Enrolment priority is given to sociology majors and specialists.
Prerequisite: SOC101Y1 or SOC102H1 + SOC103H1
Exclusion: SOC203Y1
DR=SOC SCI; BR=3

## SOC205H1 Urban Sociology (formerly SOC205Y1)

 [24L]This course reviews theories of urban genesis and urban form; the interrelationship of urbanization, industrialization and modernization, issues in urban living (housing, transportation, urban-renewal, poverty, unemployment, etc.); urban social networks (ethnic and cultural heterogeneity, neighbourhood, community and other voluntary associations).
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC205Y1
DR=SOC SCI; BR=3

## SOC207H1 Sociology of Work \& Occupations (formerly

 SOC207Y1) [24L]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 or SOC102H1 or SOC103H1
Exclusion: SOC207Y1
DR=SOC SCI; BR=3

## SOC210H1 Ethnicity in Social Organization (formerly

 SOC210Y1) [24L]The course explores the concepts of race and ethnicity and major theories to understand race and ethnic relations. Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1 Exclusion: SOC210Y1
DR=SOC SCI; BR=3
SOC212H1 Sociology of Crime \& Deviance (formerly SOC212Y1) [24L]
This course provides an overview of the study of crime and deviance. We critically examine how scholars have

## Sociology

gone about studying crime and deviance (the methods they use and the statistics they employ) as well as the major sociological explanations for crime and deviance. We also consider the empirical evidence as it relates to the validity of these explanations and some of the policy fallout from different theoretical approaches.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1

## Exclusion: SOC212Y1

DR=SOC SCI; BR=3

## SOC213Y1 Law and Society [48L]

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 or SOC102H1 or SOC103H1 DR=SOC SCI; BR=3

## SOC214H1 Family Patterns (formerly SOC214Y1)

 [24L]This course examines diverse family patterns, to show the economic, political and cultural factors that influence families. A brief social history of family paves the way for an examination of the various family patterns common in Canada today. Special attention is paid to the gender relations at the heart of family.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1 Exclusion: SOC214Y1
DR=SOC SCI; BR=3

## SOC218H1 Asian Communities in Canada (formerly SOC218Y1) [24L]

The course will explore the structures and processes of Asian communities in Canada. Historical development of various Asian communities will be explored.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC342Y1/SOC394Y1, SOC218Y1
DR=SOC SCI; BR=3

## SOC220H1 Social Inequality in Canada (formerly SOC220Y1) [24L]

This course is concerned with the causes and consequences of economic inequality. More specifically, it explores how achieved and ascribed characteristics are related to social class and related economic outcomes. Although some of the material will be comparative and pertain to modern Democracies generally, emphasis will be on Canadian society.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC220Y1, SOC296H1 (20109)
DR=SOC SCI; BR=3

## SOC243H1 Sociology of Health and Illness (formerly 242Y1) [24L]

This course deals with the social causes of illness and disease, the sociology of illness experience, and the sociology of risks to health. The course deals only peripherally with issues related to formal health care provision, health care work, and the structure of health care systems
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1 Exclusion: SOC242Y1
DR=SOC SCI; BR=3

## SOC244H1 Sociology of Health Care (formerly SOC242Y1) [24L]

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. Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1 Exclusion: SOC242Y1
DR=SOC SCI; BR=3

## SOC246H1 Sociology of Aging (formerly SOC245Y1) [24L]

This course deals with population aging, cohort effects, intergenerational relations, historical variation in effects of social environment on aging, how health and family relationships vary with age, and social policies related to aging. The whole life course is considered, but the emphasis on adulthood and old age.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC245Y1
DR=SOC SCI; BR=3
SOC248H1 Sociology of the Mind [24L]
This course provides an overview of the literature that concerns the social factors that shape how individuals cognize themselves and the world around them. It focuses on the mental processes and phenomena that are socially shared, and the ways through which individuals come to form their thoughts, behaviour and emotions.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1 DR=SOC SCI; BR=3

## SOC250Y1 Sociology of Religion [48L]

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.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1 Exclusion: RLG210Y1
DR=SOC SCI; BR=3
SOC256H1 Lives and Societies (formerly SOC255Y1) [24L]
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. Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1 Exclusion: SOC255Y1
DR=SOC SCI; BR=3
SOC258H1 Teams, Bands \& Gangs: Introduction to Small Groups [24L]
Examines the common characteristics and processes of small groups, whether teams, bands, gangs, work-groups, families, or otherwise. Focuses on recruitment, socialization, leadership, ritual, informal control, boundary maintenance,
and relations with other groups. Relates the functioning of groups to cultures and communities in which they are situated.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SII199H1 (Fall 2012)
DR=SOC SCI; BR=3

## SOC260H1 Fundamentals of Political Sociology (formerly SOC260Y1) [24L]

An introduction to key topics in political sociology such as social movements, electoral alignments, parties as organizations, the welfare state, revolution, policymaking, state formation, nationalism and imperialism.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC260Y1, SOC297H1 (20111)
DR=SOC SCI; BR=3

## SOC265H1 Gender and Society (formerly SOC365Y1)

 [24L]This course first explores how sociologists conceptualize gender and study gender. Then, it explores the varied nature of gender relations, with a focus on the social organization of gender today.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC365Y1
DR=SOC SCI; BR=3

## SOC279H1 Contentious Politics [24L]

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.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1

## DR=SOC SCI; BR=3

## SOC281H1 Culture and Inequality [24L]

How location in socioeconomic, ethnic, gender, and generational groups shapes individual cultural repertories; how culture affects individual positions in stratification hierarchies; and the role of culture in group boundaries and struggles.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
DR=SOC SCI; BR=3
SOC282H1 Introduction to Social Problems (formerly SOC382Y1) [24L]
Examines a variety of widely discussed social problems, including poverty, crime, substance abuse, sexism, climate change and urban sprawl, using sociological theories to understand the causes of these problems. Will also examine the "social construction" of these social problems and factors that influence public attention and concern.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC382Y1
DR=SOC SCI; BR=3

## SOC293Y1 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 descriptions at Departmental website for details

Corequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Exclusion: varies according to particular course offering; consult descriptions at Departmental website for details
Recommended Preparation: varies according to particular course offering; consult descriptions at Departmental website for details

## DR=SOC SCI; BR=None

## SOC294Y1 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 descriptions at Departmental website for details
Corequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Exclusion: varies according to particular course offering; consult descriptions at Departmental website for details
Recommended Preparation: varies according to particular course offering; consult descriptions at Departmental website for details
DR=SOC SCI; BR=None

## 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.
Prerequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Corequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Exclusion: varies according to particular course offering; consult descriptions at Departmental website for details
Recommended Preparation: varies according to particular course offering; consult descriptions at Departmental website for details
DR=SOC SCI; BR=None

## SOC296H1 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 descriptions at Departmental website for details
Corequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Exclusion: varies according to particular course offering; consult descriptions at Departmental website for details
Recommended Preparation: varies according to particular course offering; consult descriptions at Departmental website for details
DR=SOC SCI; BR=None
SOC297H1 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.

## Sociology

Prerequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Corequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Exclusion: varies according to particular course offering; consult descriptions at Departmental website for details
Recommended Preparation: varies according to particular course offering; consult descriptions at Departmental website for details
DR=SOC SCI; BR=None
SOC298H1 Selected Topics in Sociological Research [TBA]
An opportunity to explore a sociological topic in depth. Courses relate to instructors 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 descriptions at Departmental website for details
Corequisite: varies according to particular course offering; consult descriptions at Departmental website for details
Exclusion: varies according to particular course offering; consult descriptions at Departmental website for details
Recommended Preparation: varies according to particular course offering; consult descriptions at Departmental website for details
DR=SOC SCI; BR=None

## SOC299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research
project. Details on page 33.
DR=SOC SCI; BR=None

## 300-Series Courses

## Note:

All upper-level SOC courses have prerequisites. Students without course prerequisites can be removed at any time.

SOC300H1 Applications of Quantitative Methods in the Social Sciences (formerly SOC300Y1) [24L/24T]
Provides students with the opportunity to develop an understanding of the logic of multivariate analysis by applying various strategies for the analysis of complex multivariate data. Enrolment priority is given to sociology specialists.
Prerequisite: SOC202H1 or equivalent and one SOC course at the 200+ level
Exclusion: SOC300Y1, ECO220Y1, PSY202H1, STA222H, STA250H1
DR=SOC SCI; BR=3
SOC301Y1 Theories of Inequality [48L]
Theories of social inequality, its historical evolution, and the determinants of continuity and change of patterns of social inequality.
Prerequisite: A 200+ level SOC course
DR=SOC SCI; BR=3

## SOC302H1 Qualitative Analysis in Social Science Research (formerly SOC204H1) [24L]

Introduction to the methods and issues of qualitative research the theories, methods for data collection and analysis, and the personal and ethical issues relating to qualitative research. Enrolment priority is given to sociology specialists and majors.

Prerequisite: SOC200H1 and one SOC course at the 200+ level
Exclusion: SOC204H1
DR=SOC SCI; BR=3

## SOC303H1 Family Demography [24L]

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: A 200+ level SOC course
Recommended Preparation: SOC214H1
DR=SOC SCI; BR=3

## SOC304H1 Status Attainment [24L]

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: A $200+$ level SOC course
DR=SOC SCI; BR=3
SOC305H1 Social Factors in Child Development [24L]
Shows how child and adolescent development is affected by family background, neighbourhood and community as well as by social policies implemented at different levels of government. This course reviews evidence from national longitudinal surveys carried out in Canada, the UK and the USA and emphasizes ethical issues in research involving children.
Prerequisite: A 200+ level SOC course
Recommended Preparation: SOC202H1; SOC220H1or SOC214H1
DR=SOC SCI; BR=3
soc306Y1 Sociology of Crime and Delinquency [48L]
Examines explanation, theory construction, measurement procedures, and techniques for data collection and analysis within the Sociology of crime and delinquency.
Prerequisite: A $200+$ level SOC course
Recommended Preparation: SOC212H1
DR=SOC SCI; BR=3

## SOC309Y1 HIV and AIDS: Social Policies and Programs [48L]

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: A 200+ level SOC course
DR=SOC SCI; BR=3
SOC310H1 Sociology of Juvenile Crime [24L]
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: A 200+ level SOC course
Recommended Preparation: SOC212H1
DR=SOC SCI; BR=3

## SOC312H1 Population and Society (formerly SOC312Y1) [24L]

Shows how population underlies fertility, mortality and migration, union formation, divorce, fertility, migration, child welfare, pensions and health. The course provides students with active learning experiences through research activities using publicly available data from nationally representative surveys as well as from past censuses in different countries. Prerequisite: A 200+ level SOC course
Exclusion: SOC312Y1
Recommended Preparation: SOC200H1
DR=SOC SCI; BR=3
SOC313H1 Social Control (formerly SOC212Y1) [24L] This course examines how society has gone about controlling specific types of deviants (e.g., gang members, sex and drug offenders) and acts of deviance (e.g., organized crime, the deviance of social control agents). In examining these individuals and acts, attention is also directed to why they are defined as deviant and sanctioned, and why some types of deviance are less likely to be detected and sanctioned than others. Finally, consideration is also given to a range of sanctions that have been used to control deviance and the empirical evidence on their effectiveness.
Prerequisite: SOC212H1
Exclusion: SOC212Y1
DR=SOC SCI; BR=3

## SOC314H1 Family Relations (formerly SOC214Y1) [24L]

This course explores the dynamics of structure and agency in the making of families. It does so by examining the social relations of sexuality, parenthood and other activities involved in making families. It examines normative patterns and the gender, class, and racial inequalities embedded in them as well as the diversity of family patterns.
Prerequisite: SOC214H1
Exclusion: SOC214Y1
DR=SOC SCI; BR=3
SOC315H1 Domestic Violence [24L]
This course will provide an overview of the different forms of domestic criminal violence, concentrating primarily on intimate partner violence and child abuse. We will focus on the methodological problems in assessing the nature and extent of these types of violence, the risk factors and correlates of both offending and victimization and the theoretical explanations that have been offered for these crimes. We also consider the social and legal responses to intimate partner violence and child abuse.
Prerequisite: SOC212H1
DR=SOC SCI; BR=3

## SOC317Y1 Industrial Sociology (formerly SOC316Y1)

 [48L]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: A $200+$ level SOC course
Exclusion: SOC316Y1
DR=SOC SCI; BR=3

## SOC325Y1 Society in the Labyrinth of Technology [48L]

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: SOC356Y1 if taken in 2006-07 and SOC393Y1 if taken in 2007-08
Recommended Preparation: 2 years of Sociology
DR=SOC SCI; BR=3

## SOC336H1 Immigration and Race Relations in Canada

 [24L]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: A 200+ level SOC course
DR=SOC SCI; BR=3

## SOC341Y1 The Jewish Community in Europe and North America [48L]

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.
DR=SOC SCI; BR=3
SOC355H1 Introduction to Social Network Analysis (formerly SOC355Y1) [24L]
This course covers the fundamentals of the social network perspective, including a short introduction to social network theory and a survey of major findings in social network research. We will study how patterns of relations between social actors develop and how they affect outcomes such as health, status attainment, and inequality. Students will write a proposal to conduct research from a social network perspective.
Prerequisite: A 200+ level SOC course
Exclusion: SOC355Y1
DR=SOC SCI; BR=3

## SOC356Y1 Technology and Society [48L]

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
Recommended Preparation: A methods course in Social
Science e.g., SOC200H1.
DR=SOC SCI; BR=3
SOC357H1 Lives in Canada (formerly SOC257H1) [24L]
The life course in Canada, in the twentieth century and today, with some comparisons to other first world countries.

## Sociology

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.
Prerequisite: SOC220H1 or SOC281H1
Exclusion: SOC257H1
DR=SOC SCI; BR=3

## SOC358H1 Cities and Social Pathology [24L]

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: SOC205H1 or SOC212H1
DR=SOC SCI; BR=3

## SOC362H1 The Quality of Social Life (formerly SOC263H1) [24L]

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: A 200+ level SOC course
Exclusion: SOC263H1
DR=SOC SCI; BR=3

## SOC363H1 Sociology of Mental Health and Mental Disorders [24L]

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, or a $200+$ level PSY course
Exclusion: SOC262Y1, SOC264H1
DR=SOC SCI; BR=3
SOC364H1 Urban Health [24L]
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.
Prerequisite: A 200+ level SOC course
Exclusion: SOC396H1 in 02-03 or 04-05
DR=SOC SCI; BR=3

## SOC365H1 Gender Relations (formerly SOC365Y1) [24L]

This course examines the dynamics of gender in daily life in sexuality and intimate relations, in parenting and families, and in paid work and workplace organizations, as well as in popular culture. It examines the social construction of gender in individuals and in social organizations, in order to understand gender inequality.
Prerequisite: SOC265H1
Exclusion: SOC365Y1
DR=SOC SCI; BR=3

SOC366H1 Sociology of Women and Work [24L]
Womens 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: A 200+ level SOC course
DR=SOC SCI; BR=3
SOC367H1 Race, Class, and Gender [24L]
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: A 200+ level SOC course
DR=SOC SCI; BR=3

## SOC371H1 Comparative Political Sociology (formerly

 SOC270H1) [24L]The study of comparative (historical and cross-national) variation in outcomes that are the subject of research by political sociologists.
Prerequisite: A 200+ level SOC course
Exclusion: SOC270H1
Recommended Preparation: SOC260H1
DR=SOC SCI; BR=3

## SOC376H1 Theories of Private and Public Life (formerly SOC389Y1) [24L]

A selective introduction to major thinkers (such as De Beauvoir and Habermas) and approaches in contemporary Sociology. Enrolment priority is given to sociology specialists. Prerequisite: SOC201H1 \& SOC203H1
Exclusion: SOC389Y1
DR=SOC SCI; BR=2

## SOC381Y1 Culture and Social Structure (formerly SOC393Y1) [48L]

Our society includes many varieties of cultural tastes and practices. How are these related to inequality? How do cultural repertoires shape peoples 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: A 200+ level SOC course
Exclusion: SOC393Y1
DR=SOC SCI; BR=3 + 1

## SOC382H1 Production and Consumption of Culture

 [24L]Social structure of formal and informal groups producing culture; careers in such cultural worlds; the effect of how culture is produced on the nature of culture; how culture is consumed and received; the prestige of different cultural forms and their changes over time.
Prerequisite: A 200+ level SOC course
Recommended Preparation: SOC281H1
DR=SOC SCI; BR=1

## SOC383H1 The Sociology of Women and International Migration [24L] <br> Examines the international migration of women in postindustrial economies with emphasis on Canada. Topics include: theories of female migration; the impacts of immigration policies; migration trends and entry status;

# Sociology 

integration issues pertaining to family, language knowledge, citizenship and economic status; labour market barriers and public policy consideration.
Prerequisite: A 200+ level SOC course
DR=SOC SCI; BR=3

## SOC384H1 Neighbourhoods \& Communities in Canada [24L]

Uses recent and historical data to demonstrate the changing social characteristics of local neighbourhoods and larger communities, as these have been affected by industrialization, immigration and other factors and as they affect the life chances of their residents. Provides students with active learning experiences through research activities using Census data.
Prerequisite: A 200+ level SOC course
Recommended Preparation: SOC202H1
DR=SOC SCI; BR=3
SOC388H1 Sociology of Everyday Life 2 [24L]
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
DR=SOC SCI; BR=3

## SOC390Y1 Independent Research [TBA]

Independent Research courses allow students to pursue a specific topic of interest. These courses are offered at the 300-level, as full or half courses. Students work independently with a professor in the Department who acts as research supervisor. There are no formal class meetings, lectures, or readings other than what is agreed to with the supervisor. Professors accept supervisory responsibility at their discretion. They are not required to serve as research supervisors. It is recommended that students approach a professor working in the same sub-discipline of sociology. Often students become interested in a topic through a SOC course and approach the instructor of that course for supervision; however, this is not required.
Prerequisite: Students must have completed 10.0 courses towards their degree, plus a SOC course at the 300+ level to be eligible for 300-level Independent Research. For further details, please visit our website at:http://know.soc. utoronto.ca/index.php?option=com_content\&task=view\&id =62\& Itemid=136

## DR=SOC SCI; BR=None

## SOC391H1 Independent Research [TBA]

Independent Research courses allow students to pursue a specific topic of interest. These courses are offered at the 300-level, as full or half courses. Students work independently with a professor in the Department who acts as research supervisor. There are no formal class meetings, lectures, or readings other than what is agreed to with the supervisor. Professors accept supervisory responsibility at their discretion. They are not required to serve as research supervisors. It is recommended that students approach a professor working in the same sub-discipline of sociology. Often students become interested in a topic through a SOC course and approach the instructor of that course for supervision; however, this is not required.
Prerequisite: Students must have completed 10.0 courses towards their degree, plus a SOC course at the 300+ level to be eligible for 300-level Independent Research. For
further details, please visit our website at:http://know.soc. utoronto.ca/index.php?option=com_content\&task=view\&id =62\& Itemid=136
DR=SOC SCI; BR=None

## SOC392H1 Independent Research [TBA]

Independent Research courses allow students to pursue a specific topic of interest. These courses are offered at the 300 -level, as full or half courses. Students work independently with a professor in the Department who acts as research supervisor. There are no formal class meetings, lectures, or readings other than what is agreed to with the supervisor. Professors accept supervisory responsibility at their discretion. They are not required to serve as research supervisors. It is recommended that students approach a professor working in the same sub-discipline of sociology.
Often students become interested in a topic through a SOC course and approach the instructor of that course for supervision; however, this is not required.
Prerequisite: Students must have completed 10.0 courses towards their degree, plus a SOC course at the 300+ level, to be eligible for 300-level Independent Research. For further details, please visit our website at:http://know. soc.utoronto.ca/index.php?option=com_content\&task=vie w\&id=62\&Itemid=136
DR=SOC SCI; BR=None
SOC393Y1 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: A SOC course at the 200+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=3

## 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: A SOC course at the 200+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=3

## SOC395H1 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: A SOC course at the 200+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=3

## SOC396H1 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: A SOC course at the 200+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=3

## SOC397H1 Selected Topics in Sociological Research [TBA]

An opportunity to explore a sociological topic in depth. Courses relate to instructors area of research, so topics vary from year to year. Consult the Departmental website for current course offerings.
Prerequisite: A SOC course at the 200+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=3
SOC398H0 Independent Experiential Study Project
An instructor-supervised group project in an off-campus setting. Details on page 33.
Prerequisite: Minimum of one SOC course at the $300+$ level DR=SOC SCI; BR=None
soc399Yo Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
Prerequisite: Minimum of one SOC course at the 300+ level DR=SOC SCI; BR=None

## 400-Level Courses

## Note

All upper-level SOC courses have prerequisites. Students without course prerequisites can be removed at any time.

## SOC410H1 Sexuality and Modernity [24L]

We will examine questions related to sexuality and the modern West, with a special focus on the social construction of sexual identity, practice, community and desire. To do so, we proceed self consciously with a critical analysis of the modern study of sexuality, and the ways in which sexual science, as a kind of social practice, has affected the construction and regulation of sexual orientation. We also consider how social structures such as capitalism and patriarchy, and social stratification-including race, class, and age-shape the sphere of sexuality and intimate life. Enrolment priority given to sociology specialists and majors. Prerequisite: A $300+$ level SOC course
DR=SOC SCI; BR=3

## SOC413H1 Sociology of Punishment [24L]

This course considers the history of penology, theories of penal development and current trends. Particular attention will be paid to cross-national variations in punishment and what these reveal about the relevance of particular theories and the importance of culture in understanding historical developments in punishment. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC200H1; SOC212H1 and a 300+ level SOC course
Exclusion: WDW340H1
Recommended Preparation: SOC313H1 or SOC315H1
DR=SOC SCI; BR=3

## SOC422H1 Political Sociology [24L]

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. Enrolment priority given to sociology specialists and majors.
Prerequisite: At least one course in SOC or POL SCl at the $300+$ level.
DR=SOC SCI; BR=3
SOC427H1 Families and Health (formerly SOC327Y1) [24L]
Examines the competing theoretical, policy and therapeutic responses to a variety of family health problems, including addictions, chronic physical illnesses, and mental illness, as well as the effects of illness on family life and family coping. The links between theory and practice provide the basis for discussion of knowledge transfer. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC200H and at least . 5 FCE at the SOC
$300+$ level (preferably selected from the Recommended
Preparation list for this course)
Exclusion: SOC327Y1)
Recommended Preparation: SOC214H1 or SOC243H1 or SOC246H1; SOC309Y1 or SOC314H1 or SOC363H1 or SOC364H1 or SOC478H1

## DR=SOC SCI; BR=3

SOC439H1 Immigration and Employment (formerly SOC339H1) [24L]
This course examines the labour market and employment situation of immigrants emphasizing recent Canadian experience in comparative context. Topics include immigrant human capital, declining immigrant earnings, immigrant skillunderutilization, impact of the knowledge economy, racial discrimination, labour market structure and unionization, immigrant entrepreneurship and experiences of the Canadian-born second generation. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC202H1 or SOC302H1 and at least .5 more
FCEs at the SOC 300+ level (preferably selected from the
Recommended Preparation list for this course)
Exclusion: SOC339H1
Recommended Preparation: SOC207H1 or SOC210H1 or SOC218H1; SOC317Y1 or SOC336H1 or SOC366H1 or SOC383H1

## DR=SOC SCI; BR=3

## SOC444H1 Contemporary Issues in Work and Labour Markets [24L]

This course examines current issues in the Sociology of Work and Labour Markets. Specific topics covered will vary, depending on the instructor of the course. All topics though will involve in-depth look at a contemporary concerns in the world of work. Students will be involved in either individual or group research projects involving the use of data.
Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC202H1 and at least .5 FCE at the SOC
$300+$ level (preferably selected from the Recommended
Preparation list for this course)

## Sociology

Recommended Preparation: SOC207H1 or SOC214H1; SOC304H1 or SOC317Y1 or SOC365H1 or SOC366H1 or SOC367H1
DR=SOC SCI; BR=3
SOC448H1 Sociology \& Emotions (formerly SOC348H1) [24L]
Sociological research has considered how emotions influence some processes (e.g. social cohesion). However, research has neglected the emotional aspects of many social processes. This course will review theory and research that links social processes to emotions. Students will consider how sociological perspectives on emotions may be extended to new topics. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC201H1 or SOC203H1 and at least . 5 FCEs at the SOC 300+ level (preferably selected from the Recommended Preparation list for this course)
Exclusion: SOC348H1
Recommended Preparation: SOC248H1; SOC313H1 or SOC355H1 or SOC362H1
DR=SOC SCI; BR=3

## SOC451H1 Analysis and Interpretation of Survey Data

 [24L]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. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC300H1 and an additional 300+ level SOC course
DR=SOC SCI; BR=3

## SOC452H1 Methods and Models of Demography

 [24L]Students learn to calculate life tables and total fertility rates, and apply these concepts in computer projections and simulations. Enrolment priority given to sociology specialists and majors.
Prerequisite: A 300+ level SOC course
DR=SOC SCI; BR=3

## SOC453H1 Studying Social Change Through the Census [24L]

This research seminar uses Census data, broadly conceived, in the study of changes in gender, work and family in North America from 1871 to the present. We focus on quantitative (census enumerations) historical data related to North
Atlantic Countries but will also explore what can be learned from contemporary newspaper stories, etc. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC202H1 and at least .5 FCEs at the SOC
$300+$ level (preferably selected from the Recommended
Preparation list for this course)
Recommended Preparation: SOC205H1 or SOC207H1 or
SOC214H1;SOC303H1 or SOC312H1 or SOC317Y1 or
SOC384H1
DR=SOC SCI; BR=3

## SOC455H1 Researching from a Social Network

 Perspective (formerly SOC355Y1) [24L]In this course, students who have completed SOC355H1 will go on to conduct research from a social network perspective. The course will cover methods for analyzing social network data and familiarize students with software created for
working with these data. Each student will complete an empirical research project. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC202H1, SOC355H1 and at least .5 more FCEs at the SOC 300+ level (preferably selected from the
Recommended Preparation list for this course)
Exclusion: SOC355Y1
Recommended Preparation: SOC281H1; SOC300H1 or SOC302H1 or SOC356Y1 or SOC357H1 or SOC381Y1 or SOC388H1
DR=SOC SCI; BR=3

## SOC465H1 Exploring the Complexities of Gender

 [24L]This course explores major questions about the nature of gender and gender inequality. The course requires a careful review of key theoretical and empirical work addressing one of these questions and the completion of a research project. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC365H1 and at least .5 more FCEs at the SOC 300+ level (preferably selected from the Recommended Preparation list for this course)
Recommended Preparation: SOC214H1 or SOC366H1 or SOC367H1
DR=SOC SCI; BR=3

## SOC477H1 Micro and Macro Theory (formerly SOC377H1) [24L]

A selective introduction to major thinkers (such as Fanon, Blau, Collins) and approaches in contemporary sociological theory. Topics include: the structure-agency debate; methodological individualism; anti-colonialism. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC201H1 and SOC203H1, SOC376H1 and at least .5 more FCEs at the SOC $300+$ level
Exclusion: SOC377H1
DR=SOC SCI; BR=2
SOC478H1 Social Context of Public Policy [24L]
This course explores how policy processes and frameworks need to be evaluated in light of the social context in which they are developed. Factors to be considered include the interplay between public values and expectations and public policy; the implications of cultural diversity and demographic change, and understandings of ethical principles of conduct in public organizations. A related goal is to help students learn how to use empirical research to answer highly contested issues in policy circles and in public life. These objectives are pursued by introducing students to major trends in inequality in Canada, assessing these trends within a comparative context, reflecting on their normative implications, and examining alternative policy responses to these developments. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC202H1 and at least .5 FCEs at the SOC 300+ level (preferably selected from the Recommended Preparation list for this course)
Recommended Preparation: SOC207H1 or SOC210H1 or SOC212H1 or SOC243H1 or SOC246H1 or SOC260H1 or SOC265H1 or SOC282H1; SOC301Y1 or SOC303H1 or SOC304H1 or SOC314H1 or SOC336H1 or SOC363H1 or SOC364H1 or SOC365H1 or SOC371H1 or SOC383H1
DR=SOC SCI; BR=3

## Sociology

## SOC479H1 Social Movements [24L]

This course focuses on current debates and research findings in the study of social movements. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC201H1 or SOC203H1; SOC260H1 and at least .5 FCEs at the SOC $300+$ level (preferably selected from the Recommended Preparation list for this course)
Recommended Preparation: SOC371H1 or SOC478H1
DR=SOC SCI; BR=3

## SOC481H1 Culture and Social Networks [24L]

Relationships between various forms of culture and the networks connecting both individual people and organizations creating culture. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC200H1 and at least . 5 FCEs at the SOC $300+$ level (preferably selected from the Recommended Preparation list for this course)
Recommended Preparation: SOC281H1 or SOC355H1 or SOC356Y1 or SOC381Y1 or SOC382H1

## DR=SOC SCI; BR=3

## SOC483Y1 Culture and Cognition [48L]

This course examines the social foundations of thinking and action, with focus on how individuals think and act through shared cognitive embedded in larger social structures. There is an overview of classical and contemporary theories that are instrumental for understanding how culture and cognition work, and a research component to put this understanding in practice. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC201H1 or SOC203H1 and a 300+ level SOC course

## DR=SOC SCI; BR=3

SOC484H1 Sociology of Immigrant Offspring [24L]
Nearly one-quarter of Canada's population are immigrant offspring, defined as those who immigrate as children or those who are Canadian born with foreign born parents. This course examines sociological perspectives, language and bilingualism, racial and ethnic identities, family structure and relationships, marriage, education and labour market experiences of immigrant offspring. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC200H1 and at least . 5 FCEs at the SOC $300+$ level (preferably selected from the Recommended Preparation list for this course)
Recommended Preparation: SOC210H1 or SOC214H1 or SOC218H1 or SOC220H1or SOC281H1; SOC303H1or SOC304H1 or SOC305H1 or SOC314H1 or SOC336H1or SOC383H1
DR=SOC SCI; BR=3

## SOC486H1 Advanced Topics in Urban Sociology (formerly SOC386Y1) [24L]

This course offers real world observation and abundant examples that speak to the strengths and limitations of particular theory, data, and methods for studying urban problems. Students undertake a supervised research project that involves identifying, observing and reflecting on real
phenomena in the urban environment. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC200H1, SOC205H1 and at least . 5 FCEs at the SOC $300+$ level (preferably selected from the Recommended Preparation list for this course)
Exclusion: SOC386Y1
Recommended Preparation: SOC210H1 or SOC218H1 or SOC282H1;SOC312H1 or SOC336H1 or SOC364H1 or SOC384H1
DR=SOC SCI; BR=3

## SOC487H1 Applications of Qualitative Analysis

 (formerly SOC387H1) [24L]This course gives students the opportunity to apply their understanding of the research process to the design and implementation of an original research project. Enrolment priority given to sociology specialists and majors.
Prerequisite: SOC302H1 and at least .5 more FCEs at the
SOC 300+ level
Exclusion: SOC387H1
DR=SOC SCI; BR=3

## SOC490Y1 Independent Research [TBA]

Independent Research courses allow students to pursue a specific topic of interest. These courses are offered at the 400 -level, as full or half courses. Students work independently with a professor in the Department who acts as research supervisor. There are no formal class meetings, lectures, or readings other than what is agreed to with the supervisor. Professors accept supervisory responsibility at their discretion. They are not required to serve as research supervisors. It is recommended that students approach a professor working in the same sub-discipline of sociology. Often students become interested in a topic through a SOC course and approach the instructor of that course for supervision; however, this is not required. Enrolment priority is given to sociology specialists and majors.
Prerequisite: Students must have completed 15.0 courses towards their degree, plus a SOC course at the 400+ level to be eligible for $400-$ level Independent Research. For further details, please visit our website at:http://know.soc. utoronto.ca/index.php?option=com_content\&task=view\&id =62\&|temid=136
DR=SOC SCI; BR=None

## SOC491H1 Independent Research [TBA]

Independent Research courses allow students to pursue a specific topic of interest. These courses are offered at the $400-\mathrm{level}$, as full or half courses. Students work independently with a professor in the Department who acts as research supervisor. There are no formal class meetings, lectures, or readings other than what is agreed to with the supervisor. Professors accept supervisory responsibility at their discretion. They are not required to serve as research supervisors. It is recommended that students approach a professor working in the same sub-discipline of sociology. Often students become interested in a topic through a SOC course and approach the instructor of that course for supervision; however, this is not required. Enrolment priority
is given to sociology specialists and majors.
Prerequisite: Students must have completed 15.0 courses towards their degree, plus a SOC course at the 400+ level to be eligible for 400-level Independent Research. For further details, please visit our website at:http://know.soc. utoronto.ca/index.php?option=com_content\&task=view\&id $=62 \&$ Itemid=136
DR=SOC SCI; BR=None

## SOC492H1 Independent Research [TBA]

Independent Research courses allow students to pursue a specific topic of interest. These courses are offered at the 400-level, as full or half courses. Students work independently with a professor in the Department who acts as research supervisor. There are no formal class meetings, lectures, or readings other than what is agreed to with the supervisor. Professors accept supervisory responsibility at their discretion. They are not required to serve as research supervisors. It is recommended that students approach a professor working in the same sub-discipline of sociology. Often students become interested in a topic through a SOC course and approach the instructor of that course for supervision; however, this is not required. Enrolment priority is given to sociology specialists and majors.
Prerequisite: Students must have completed 15.0 courses towards their degree, plus a SOC course at the 400+ level to be eligible for 400-level Independent Research. For further details, please visit our website at:http://know. soc.utoronto.ca/index.php?option=com_content\&task= view\&id=62\&Itemid=136 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.

## DR=SOC SCI; BR=None

## SOC493H1 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. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor
requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None

## SOC493Y1 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. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor
requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None

## SOC494H1 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. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None

## SOC494Y1 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. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor
requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None

## 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. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor
requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None

## SOC496H1 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. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None
SOC497H1 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. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None

## Sociology

## SOC498H1 Selected Topics in Sociological Research [TBA]

An opportunity to explore a sociological topic in depth.
Courses relate to instructors area of research, so topics
vary from year to year. Visit Department or consult the
Departmental website for current course offerings. Enrolment priority is given to sociology specialists and majors.
Prerequisite: A SOC course at the 300+ level, plus instructor requirements (varies according to particular course offering; consult description at Departmental website for exact Prerequisites)
DR=SOC SCI; BR=None

## Note

Graduate courses are available to 4th-year specialists with permission of the instructor and a minimum GPA of 3.3 for undergraduate program credit. Consult the Department for enrolment procedures.

The South Asian Studies program examines the history, culture, and politics of India, Pakistan, Bangladesh, Nepal, and Sri Lanka. Traditionally South Asia is presented as a living culture, a viable way of life for millions for over 3,000 years, and a source of inspiration to other parts of Asia for 2,000 years. Modern studies emphasize the history and development of South Asia's political, cultural and social institutions, the nature of the economy and the significance of class and ideology in the modern dynamics of continuity and change.

## South Asian Studies Programs

## South Asian Studies Minor (Arts Program)

Consult program administrator: 416-946-8832, ai.asianstudies@utoronto.ca
Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)
SAS114H1
2. CAS200Y1
3. SAS318H1 or CAS310H1
4. CAS320H1
5. One and a half FCE from the following:, SAS212Y1, SAS216H1, SAS318H1, SAS413H1, SAS414H1, ANT352Y1, CAS350H1, CAS360H1, CAS390H1, CAS420H1, CAS430H1, CAS440H1, CAS490H1, HIS282Y1, RLG205Y1, JPA410H1, JPA411H1

## South Asian Studies Courses

## SAS114H1 Introduction to South Asian Studies <br> (formerly NEW114Y1, SAS114Y1) [24L]

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 South Asia as a region. Some attention will be paid to the South
Asian Diaspora.
Exclusion: NEW114Y1, SAS114Y1
DR=HUM; BR=3

## SAS212Y1 Introduction to Hindi (formerly NEW212Y1)

 [96L]Intensive introduction to phonology, grammar, syntax of the modern Hindi language; emphasis on basic writing and reading.
Exclusion: NEW212Y1, SAS202Y1; enrolment subject to placement evaluation
DR=HUM; BR=1

## SAS216H1 South Asia: Perspectives on Politics and

 Society (formerly NEW216H1) [24L]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.
Exclusion: NEW216H1
DR=HUM; BR=3

SAS318H1 Colonialism and Tradition [24L]
This course analyzes the impact of colonialism in South Asia and the various ways in which tradition intersect with and reshape colonialism in postcolonial South Asia. The course will examine the role of religion, education, ethnicity, gender, and caste. Some attention will be paid to postcolonial and indigenous theory.
DR=HUM; BR=3
SAS413H1 Asia and Canada [24S]
This course is an interactive, participatory seminar. It will provide an opportunity to complement theoretical understanding about Asia acquired in other courses through hands-on research and experiential learning. The course will enable students to link studying Asia and Canada to career trajectories in the field of development and research.
Prerequisite: At least 8 FCEs
Exclusion: NEW413H1
Recommended Preparation: SAS114Y1
DR=TBA; BR=3
SAS414H1 Public culture and Media in Asia [24S]
This upper-level seminar will introduce students to the interdisciplinary study of popular culture and mass-mediated cultural forms in Asia. Through readings about popular protest, festivals, cinema, print, television, and music this course provides methodological tools to interpret the politics of representation and the formation of alternative modernities in the Asian continent and among the diaspora. The course will furthermore familiarize students with a range of theoretical lenses for conceptualizing the different meanings of the public from a modern Asian perspective.
Prerequisite: At least 8 FCEs
Exclusion: NEW414H1
Recommended Preparation: SAS114Y1
DR=SOC SCI; BR=1 + 3

## 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)
P.R. Len, 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)
M.J. Valds, MA, Ph D, FRSC, Miembro Correspondiente de la Academia Mexicana (U)
J.R. Webster, MA, Ph D, FRSC (SM)

## Professor and Chair

J. Blackmore, MA, Ph D (V)

## Professors

A.T. Pérez-Leroux, MA, Ph D (V)
R. Sarabia, MA, Ph D
R. Sternberg, MA, Ph D (SM)

## Associate Professors

L. Colantoni, MA, Ph D
R. Davidson, MA, Ph D
E. Jagoe, MA, Ph D
N.E. Rodríguez, Ph D
S.J. Rupp, MA, M Phil, Ph D (V)

## Assistant Professors

S. Antebi, MA, Ph D
M.C. Cuervo, MA, Ph D
Y. Iglesias, Ph D
S. Munjic, MA, Ph D

## Senior Lecturer

M. Ramirez, MA, Ph D

Spanish is the most widely-spoken language of the Americas, with 130 million speakers in North America alone and more than 400 million worldwide, with growing numbers in Canada. It is the fourth most widely-spoken language in the world, and it is the official language in 21 countries on three continents: Europe, Africa, and Latin America.
Spanish opens the door to a rich range of cultural expression in literature, film, art, and architecture, from the worldchanging contribution of Renaissance Spain, Cervantes, and the transatlantic diaspora, and the various film-makers, artists, and architects that continue to shape and change contemporary culture.
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 Manuel Ramirez (416-813-4082). E-mail: spanport.undergraduate@utoronto. ca

Enquiries: Victoria College, Room 208 (416-813-4080).
Email: spanport@chass.utoronto.ca
Web site: www.spanport.utoronto.ca

## Spanish Programs

Enrolment in the Spanish programs requires the completion of four degree courses; no minimum GPA required.

## Spanish Specialist (Arts program)

Consult Professor Manuel Ramirez, Department of Spanish and Portuguese.
Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent, including at least one 400 -series course)
First Year:
SPA100Y1/SPA220Y1; SPA219Y1 (for native/bilingual speakers of Spanish)
Second Year:
SPA220Y1/SPA320Y1; SPA420H1 (for speakers who have taken SPA219Y1 in first year)
Third and Fourth Years:

1. SPA320Y1, SPA420H1, SPA454H1
2. SPA450H1 or SPA452H1
3. one $300 / 400$-series half-course in Hispanic linguistics from the 300/400 series
4. One half-course in Spanish American literature from the 300/400-series
5. Plus additional SPA courses to make the equivalent of 10 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 (PRT100Y1/PRT110Y1).

## Spanish Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor Manuel Ramirez, Department of Spanish and Portuguese.
(7 full courses or their equivalent)
First Year:
SPA100Y1/SPA220Y1; SPA219Y1 (for native/bilingual speakers of Spanish)
Second Year:
SPA220Y1/SPA320Y1; SPA420H1 (for speakers who have taken SPA219Y1 in first year)
Third and Fourth Years:

1. SPA320Y1, SPA420H1
2. SPA450H1 or SPA452H1
3. SPA 454 H 1
4. One 300/400-series half-course in Hispanic linguistics, and one 300/400-series half-course in Spanish American literature.
5. Plus additional SPA courses 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 (PRT100Y1/PRT110Y1).

## Spanish Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
Consult Professor Manuel Ramirez, Department of Spanish and Portuguese.
(4 full courses or their equivalent)
SPA219Y1/SPA320Y1 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 SPA219Y1 and two additional half-courses in Spanish in the 300- or 400-series.
Students should note that, as explained on page 26 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.
To request the citation, bring your ROSI transcript to the
department, where you will be asked to fill out a Language Citation Request form.

## Spanish: see also European Studies, Latin American Studies

## Spanish Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## 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.
3. All courses taught in Spanish unless otherwise specified.

SPA100Y1 Spanish for Beginners [24L/48T]
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, SPA219Y1, SPA319Y1
DR=HUM; BR=1

## SPA219Y1 Spanish for Bilingual and Native Speakers [48L]

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, SPA220Y1, SPA320Y1, SPA319Y1
DR=HUM; BR=1

## SPA220Y1 Intermediate Spanish [48L/24T]

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.
Prerequisite: OAC/Grade 12 U Spanish/SPA100Y1
Exclusion: SPA219Y1, SPA319Y1
DR=HUM; BR=1

## SPA254H0 Mexican Culture [48L]

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/SPA219Y1 and Placement Examination for the Guadalajara Program DR=HUM; $B R=3$

## SPA258H1 Introduction to Hispanic Literary Studies

 [24L]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
Corequisite: SPA220Y1/SPA219Y1
DR=HUM; BR=1

## SPA259H1 Introduction to Hispanic Cultural Studies

 [24L]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: SPA100Y1
Corequisite: SPA220Y1/SPA219Y1
DR=HUM; BR=1

## SPA281Y0 Art and Politics in Contemporary Mexico

 [72L]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)
DR=HUM; BR=1 + 3

## SPA299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None

## 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/SPA219Y1 and Placement
Examination for the Guadalajara Program
DR=HUM; BR=1
SPA320Y1 Advanced Spanish [48L/24P]
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.
Prerequisite: SPA219Y1, SPA220Y1
Exclusion: SPA319Y1
DR=HUM; BR=1
SPA321H1 Spanish Phonetics and Pronunciation [24L]
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/SPA219Y1
DR=HUM; BR=2
SPA322H1 Introduction to Hispanic Linguistics [36L] 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: SPA220Y1/SPA219Y1
Recommended Preparation: SPA321H1
DR=HUM; BR=2

## SPA323H1 Business Spanish (formerly SPA323Y1) [24L]

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 Latin American Studies or European Studies. (Offered in alternate years)
Prerequisite: SPA220Y1/SPA219Y1
Exclusion: SPA323Y1
DR=HUM; BR=1
SPA324H1 Spanish Bilingualism [24L]
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/SPA219Y1
Recommended Preparation: SPA321H1
DR=HUM; BR=2

## SPA326H1 Latin American Varieties of Spanish

 Through the Media [36L]This course aims at exposing students to different varieties of Latin American Spanish. Lexical, morpho-syntactic and phonological variation will be discussed and theoretical descriptions will be illustrated by using samples from contemporary cinema and television.
Prerequisite: SPA220Y1/SPA219Y1
Recommended Preparation: SPA320Y1/SPA321Y1/
SPA322Y1
DR=HUM; BR=1
SPA327Y1 Catalan (formerly SPA325H1) [48L]
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. (Offered in alternate years)
Prerequisite: SPA220Y1/SPA219Y1 or any other 200 level Romance Language. Exclusion: SPA325Y1/SPA325H1 DR=HUM; BR=1
SPA341H1 Modernist Movements in Spain [24L] 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/SPA219Y1
Recommended Preparation: SPA258H1/SPA259H1
DR=HUM; BR=3

## SPA345H1 Spanish Cinema [24L]

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: SPA220Y1/SPA219Y1
Recommended Preparation: SPA258H1/SPA259H1
DR=HUM; BR=1

## SPA352H1 Writing and Culture in Early Modern Spain

 [24L]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: SPA220Y1/SPA219Y1
Recommended Preparation: SPA258H1/SPA259H1
DR=HUM; BR=1
SPA375H1 Latin American Cinema [36L/12T]
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). Course taught in English.
Recommended Preparation: INI115Y/INI212Y/SPA258H1/ SPA259H1
DR=HUM; BR=1
SPA381H1 Nation, Identity and Literary Modernism in Spanish-America [24L]
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/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1
SPA382H1 Spanish American Women in Art, Film, and Literature [24L]
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/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1
SPA384H1 Avant-Garde Movements in Spanish America [24L]
Study of representative works of major artistic and literary movements in 20th and 21st century Spanish America: avant-garde poetry, theatre of the absurd, surrealist art, neorealism, postmodernism. (Offered in alternate years) Prerequisite: SPA220Y1/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1

## SPA385H1 Literature and Social Change in Spanish

 America [24L]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/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1

## SPA386H1 Literary Landcapes of the Mexican Revolution [24L]

This course examines cultural production, including short stories, novels, films and paintings surrounding the socio-poltical transformations of the revolutionary period. Readings and discussion emphasize general concepts of the landscape, as a visual and spatial mode of interpreting relationships between human subjects, and between these subjects and the territory they occupy. (Offered in alternate years)
Prerequisite: SPA220Y/219Y
Recommended Preparation: SPA320Y/258H
DR=HUM; BR=1
SPA387H0 Contemporary Mexican Literature [50L]
Social change and literary innovation in Mexican literature since the 1950s; analysis of selections from Agustn, Juan Rulfo, Carlos Fuentes, Fernando del Paso, Octavio Paz, Laura Esquivel, and others. (Offered only in Guadalajara) Prerequisite: SPA220Y1/SPA219Y1 and Placement

Examination for the Guadalajara Program DR=HUM; BR=1
SPA398H0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.

## DR=HUM; BR=None

SPA399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=HUM; BR=None

## SPA420H1 Advanced Grammar [36L]

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 SPA220Y1. Prerequisite: SPA219Y1/SPA320Y1 DR=HUM; BR=1

## SPA421H1 The Structure of Spanish [24L]

Study of Spanish morphology and syntax: syntactic categories in Spanish, the structure and interpretation of simple and complex sentences. (Offered in alternate years)
Prerequisite: SPA219Y1/SPA420Y1, SPA321H1 or permission of department
Recommended Preparation: SPA322H1
DR=HUM; BR=2
SPA422H1 Sociolinguistics of Spanish [24L]
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)

## Spanish

Prerequisite: SPA321H1, SPA420H1 or permission of the department
Recommended Preparation: SPA322H1
DR=HUM; BR=2
SPA423H1 Spanish Phonology [24L]
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
DR=HUM; BR=2
SPA425H1 History of the Spanish Language [24L]
The evolution of Spanish. The dialectalization of HispanoLatin through inherent linguistic changes and influences from other languages and the development of Castilian into one of the worlds most important languages. (Offered in alternate years)
Prerequisite: SPA220Y1/SPA219Y1, SPA321H1; SPA421H1
strongly recommended
DR=HUM; BR=2
SPA435H1 Fictions of Contemporary Spain [24L]
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/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1
SPA438H1 Topics in Modern Spanish Literature [24S]
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/SPA219Y1
DR=HUM; BR=1
SPA439H1 Topics in Spanish Studies [24S]
A course on specific topics in Spanish studies, designed for advanced students. Course content and instructor are established on a yearly basis.
Prerequisite: SPA220Y1/SPA219Y1
DR=HUM; BR=1
SPA440H1 Topics in Spanish Culture [24S]
A course on specific topics in Spanish culture, designed for advanced students. Course content and instructor are established on a yearly basis.
Prerequisite: SPA220Y1/SPA219Y1
DR=HUM; BR=1

## SPA450H1 Studies in Medieval Iberian Literature [24L]

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/SPA219Y1
Recommended Preparation: SPA352H1
DR=HUM; BR=1

## SPA452H1 Theatre and Representation in Golden Age

 Spain [24L]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)
Prerequisite: SPA220Y1/SPA219Y1
Exclusion: SPA350Y1
Recommended Preparation: SPA320Y1, SPA352H1
DR=HUM; BR=1
SPA454H1 Cervantes and Golden Age Narrative [24L]
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.
Prerequisite: SPA320Y1/SPA219Y1
Exclusion: SPA350Y1
Recommended Preparation: SPA329Y1, SPA352H1 DR=HUM; BR=1
SPA467H1 Topics in Spanish-American Culture [24L] 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/SPA219Y1
DR=HUM; BR=1

## SPA468H1 Topics in Modern Spanish-American Literature [24S]

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/SPA219Y1
DR=HUM; BR=1

## SPA471H1 The Historical Novel in Spanish America [24L]

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/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1
SPA480H1 Theories of Culture in Latin America [24L]
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/SPA219Y1
Recommended Preparation: SPA258H1/SPA259H1
DR=HUM; BR=1

## SPA482H1 20th-Century Spanish American Narrative [24L]

Detailed study of the major movements in Spanish-American narrative, including magic realism, fantastic literature, womens writing, and testimonial literature, through analysis
of representative novels and short stories. (Offered in alternate years)
Prerequisite: SPA220Y1/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1

## SPA486H1 Contemporary Caribbean Literatures and Identities [24L]

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/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1
SPA487H1 The Culture of Revolution [24L]
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/SPA219Y1
Recommended Preparation: SPA258H1/SPA259H1
DR=HUM; BR=1
SPA488H1 Central America Postwar Narrative [24L]
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/SPA219Y1
Recommended Preparation: SPA258H1
DR=HUM; BR=1
SPA490H1 Independent Study [TBA]
Individual study with a member of staff on a topic of common interest including readings, discussion and written assignments.
Prerequisite: SPA219Y1/SPA320Y1 and written approval of the Undergraduate Coordinator
DR=HUM; BR=None

## SPA491H1 Independent Study [TBA]

Individual study with a member of staff on a topic of common interest including readings, discussion and written assignments.
Prerequisite: SPA219Y1/SPA320Y1 and written approval of the Undergraduate Coordinator
DR=HUM; BR=None

## 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
J. Stafford, M Sc, Ph D

Associate Professor and Associate Chair Graduate Studies
S. Jaimungal , BA Sc, M Sc, Ph D

Associate Professor and Associate Chair
(Undergraduate)

## D. Brenner M Sc, Ph D

## Professor and Associate Chair

## Undergraduate Studies

S. Broverman, M Sc, Ph D, ASA

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
K. Knight, M 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

## Associate Professors

D. Brenner M Sc, Ph D
A. Badescu, B Sc, M Sc, Ph D
L.J. Brunner, MA, Ph D (UTM)
R. Craiu, B Sc, Ph D
S. Jaimungal, B A Sc, M Sc, Ph D
F. Yao, B Sc, M Sc, Ph D

## Assistant Professors

B. Virg, Ph D (UTSC)
Z. Zhou, B Sc, Ph D
R. Salakhutdinov, B Sc, M Sc, Ph D

## Senior Lecturers

A. Gibbs, B Math, B Ed, M Sc, Ph D
A.M. Vukov, MA, ASA
A. Weir, B Sc, M Sc, Ph D (UTM)

## Lecturers

K. Butler, M Sc, Ph D (UTSC)
M. Moras, B Com, M Sc, Ph D (UTSC)
M. Samarakoon, 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 STA220H1, STA221H1, STA247H1, STA248H1, STA250H1, STA255H1, STA257H1, and STA261H1 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 offerings to be STA302H1, STA303H1, STA304H1, STA305H1 and STA429H1. Furthermore, the probability course STA347H1 will be of interest to those whose field of application includes stochastic models.

Enquiries: 100 St. George Street, Sidney Smith Hall, Room 6022 (416-978-5136)

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## Statistics Programs

## Statistics Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(11 full courses or their equivalent)
First Year:
CSC148H1/CSC260H1; MAT137Y1/MAT157Y1
Second Year:
MAT223H1/MAT240H1, MAT224H1/MAT247H1, MAT237Y1/ MAT257Y1; STA257H1, STA261H1
(MAT223H1/MAT240H1 recommended in 1st year) while CSC148H1/CSC260H1 might well be taken in 2nd year) Higher Years:

1. STA 302 H 1, STA303H1, STA347H1, STA355H1, STA410H1, STA442H1
2. 1.5 full year courses from: STA412H1, (STA414H1/ CSC411H1), STA422H1, STA437H1, STA452H1, STA453H1, CSC438H1, CSC447H1, CSC457H1
3. 1.5 full year courses from: ACT451H1, ACT452H1, ACT460H1; APM412H1; MAT327H1, MAT334H1/ MAT354H1, MAT337H1/MAT357H1, MAT301H1/ MAT347Y1;CSC207H1, CSC310H1, CSC336H1/ CSC350H1, CSC351H1; STA300 + level courses

## Statistics Major (Science Program)

Enrolment in this program requires the completion of 4.0 courses.
( 6.5 full courses or their equivalent, including at least one STA400-series course)
First Year:
CSC108H1/CSC148H1/CSC260H1 (may be taken in 2nd year); MAT133Y1 (70\%)/MAT135Y1/MAT137Y1/ MAT157Y1
Second Year:
MAT223H1/MAT240H1, MAT235Y1/MAT237Y1/MAT257Y1; (STA220H1, STA255H1)/(STA247H1, STA248H1)/ (STA257H1, STA261H1)(MAT223H1/MAT240H1 recommended in 1st year)
Higher Years:

1. STA302H1
2. 3 half $(\mathrm{H})$ course equivalents from all available STA300+ level courses (For example, a student interested in economics/commerce/finance might think to include STA304H1, STA347H1, STA457H1 in their programme, while someone engaged in a life science might entertain STA303H1, STA305H1, STA437H1. On the other hand, a student with an interest in pure math might choose to focus on applications of that subject matter to theoretical probability and statistics, selecting STA347H1, STA355H1 towards a major in statistics.)
3. 1 half $(H)$ course equivalent from the available STA400+ level courses (For those anticipating a future professional need to analyze large arrays of data STA410H1, STA414H1 are certainly very worthy of consideration.)

## Statistics Minor (Science Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent)
First Year:
MAT133Y1/MAT135Y1/MAT137Y1/MAT157H1
Second Year:
MAT223H1/MAT240H1; (STA220H1, STA255H1)/
(STA247H1, STA248H1)/(STA257H1, STA261H1)
(MAT223H1/MAT240H1 recommended in 1st year)
Higher Years:

1. STA302H1
2. 2 half $(\mathrm{H})$ course equivalents from all available STA300+ level courses

## Statistics and Mathematics Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
(11 full courses or their equivalent)
First Year:
MAT157Y1, MAT240H1
Second Year:
MAT247H1, MAT257Y1, MAT267H1; STA257H1; STA261H1
Third and Fourth Years:

1. MAT327H1, MAT354H1, MAT357H1; STA302H1, STA352Y1, STA347H1, STA447H1
2. At least three half-courses from STA303H1, STA305H1, STA410H1, STA414H1, STA422H1, STA437H1, STA438H1, STA442H1, STA450H1, STA457H1
3. At least one 300+ level f.c.e. from APM, CSC, MAT

Note
The Department recommends that PHY151H1, PHY152H1
be taken in first year, and that CSC108H1/CSC148H1/
CSC260H1 be taken during the program

## Applied Statistics Specialist (Science program)

Enrolment in this program requires the completion of 4.0 courses.
10.0 FCEs plus a concentration in another discipline requiring 2.0-3.5 FCEs

First year:

1. CSC108H1/CSC120H1/CSC148H1, (MAT135H1, MAT136H1)/MAT137Y1/MAT157Y1
2. Recommended: introductory course in area of concentration
Second year
3. MAT223H1/MAT240H1, MAT235Y1/MAT237Y1/ MAT257Y1, (STA220H1,STA255H1)/
(STA247H1,STA248H1)/(STA257H1,STA261H1) MAT223H1/MAT240H1 can be taken in first year.
Upper years:
4. STA302H1, STA303H1, STA304H1/STA305H1, STA355H1, STA410H1, STA437H1, STA442H1, STA490H1Y
5. 1.0 FCEs from STA 300-level offerings
6. 1.0 FCEs from the following list: MAT224H1/MAT247H1, MAT244H1/MAT267H1 APM236H1/APM346H1/APM462H1 CSC150H1/CSC148H1/CSC260H1/CSC207H1

Disciplinary Concentrations:
Health Studies: (2.5 FCE)
UNI209H1, UNI211H1, UNI373H1, HMB303H1, UNI330H1/UNI411H1/UNI464H1
Global Health: (3.0 FCE)
BIO120H1, BIO130H1, HMB203H1, HMB303H1, HMB323H1, HMB342H1/HMB433H1 (Recommended: HMB433H1)
Health and Disease: (3.0 FCE) BIO120H1, BIO130H1, HMB202H1, HMB302H1, HMB312H1, HMB422H1/HMB432H1
Genes Genetics and Biotechnology: (3.0 FCE)
BIO120H1, BIO130H1, HMB201H1, HMB301H1, HMB321H1, HMB311H1/HMB421H1/HMB441H1 (Recommended: HMB421H1)

## Statistics

Human Biology: (3.5 FCE)
BIO120H1, BIO130H1, PSY100H1, HMB220H1, HMB300H1, HMB310H1, HMB420H1/ HMB440H1 (Recommended: HMB420H1)
Social Psychology: (2.0 FCE) PSY100H1, PSY220H1, PSY322H1, PSY326H1/ PSY321H1/PSY424H1/PSY426H1/PSY405H1/ PSY406H1
Cognitive Psychology: (2.0 FCE)
PSY100H1, PSY270H1, PSY493H1, PSY342H1/ PSY405H1/PSY406H1
Sociolinguistics: (3 FCE)
LIN100Y1; 2 of LIN228H1, LIN229H1, LIN232H1 or LIN241H1; LIN351H1 and LIN456H1
Psycholinguistics: (3 FCE)
LIN100Y1; 2 of LIN228H1, LIN229H1, LIN232H1 or LIN241H1; 2 of JLP374, JLP315 or JLP471

## Statistics Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## STA201H1 Why Numbers Matter [36L]

This course teaches Humanities students the importance of quantitative reasoning to many different areas. It explores a variety of applications to such diverse subjects as economics, gambling, politics, poetry, graphics, music, medicine, demography, sports, secret codes, and more, using only basic high school level mathematics combined with logical thinking.
Prerequisite: Enrolment in a Major or Specialist in the Humanities.

## DR=SCI; BR=5

STA220H1 The Practice of Statistics I [36L/12T]
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. (Note:STA220H1 does not count as a distribution requirement course)
Prerequisite: Grade 12 Mathematics and one University course in the physical, social, or life sciences
Exclusion: ECO220Y1/ECO227Y1/GGR270H1/PSY201H1/
SOC300Y1/STA250H1/STA261H1/STA248H1/EEB225H1 DR=None; $B R=5$

## STA221H1 The Practice of Statistics II [36L/12T]

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 (Note: STA221H1 does not count as a distribution requirement course).
Prerequisite: STA220H1/PSY201H1/GGR270H1/EEB225H1

Exclusion: ECO220Y1/ECO227Y1/GGR270Y1 /PSY202H1/
SOC300Y1/STA261H1/STA248H1
DR=None; $\mathrm{BR}=5$

## STA247H1 Probability with Computer Applications [36L/12T]

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 (Note: STA247H1 does not count as a distribution requirement course).
Prerequisite: MAT135Y1/MAT137Y1/MAT157Y1; CSC108H1/ CSC148H1
Exclusion: ECO227Y1/STA257H1
DR=None; $\mathrm{BR}=5$

## STA248H1 Statistics for Computer Scientists

 [36L/12T]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 regression and the analysis of variance, and count data. Students learn to use a statistical computer package as part of the course (Note: STA248H1 does not count as a distribution requirement course).
Prerequisite: STA247H1/STA257H1; CSC108H1/CSC148H1
Exclusion: ECO220Y1/ECO227Y1/GGR270Y11/PSY201H1/
SOC300Y1/STA220H1/STA221H1/STA250H1/STA255H1/
STA261H1/EEB225H1
DR=None; BR=5

## STA255H1 Statistical Theory [36L/12T]

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 (Note: STA255H1 does not count as a distribution requirement course).
Prerequisite: STA220H1/STA250H1/STA220H1,MAT135Y1/ MAT137Y1/ MAT157Y1
Exclusion: ECO220Y1/ECO227Y1/STA257H1/STA261H1/ STA247H1/STA248H1
DR=None; BR=5
STA257H1 Probability and Statistics I [36L/12T]
This course, and its sequel, STA261H1, are mathematically quite challenging, the target audience includes anyone proceeding directly to a specialist degree in statistics, as well as anyone with serious and special interest in some other of the identifiably statistical-physical sciences. Topics, albeit very rigorously covered, are, nevertheless, very standard introductory ones: abstract probability and expectation, discrete and continuous random variables and vectors, with the special mathematics of distribution and density functions, all realized in the special examples of ordinary statistical
practice: the binomial, poisson and geometric group, and the gaussian (normal), gamma, chi-squared complex.
Prerequisite: MAT135Y1/MAT137Y1/MAT157Y1 (MAT137Y1/ MAT157Y1 is strongly recommended)
Corequisite: MAT235Y1/MAT237Y1/MAT257Y1 (MAT237Y1/ MAT257Y1 is strongly recommended), MAT223H1/ MAT240H1
Exclusion: ECO227Y1/STA247H1
DR=None; BR=5

## STA261H1 Probability and Statistics II [36L/12T]

A sequel to STA257H1, providing a rigorous introduction to the logical foundations of statistical inference and the practical methodology engendered. Topics include: statistical models, parameters, samples and estimates; the general concept of statistical confidence with applications to the discrete case and the construction of confidence intervals and more general regions in both the univariate and vectorvalued cases; hypothesis testing; the likelihood function and its applications; time permitting: the basics of data analysis, unbiasedness, sufficiency, linear models and regression (Note: STA261H1 does not count as a distribution requirement course).
Prerequisite: STA257H1
Corequisite: MAT235Y1/MAT237Y1/MAT257Y1, MAT223H1/ MAT240H1
Exclusion: ECO227Y1/STA248H1/STA255H1
DR=None; BR=5

## STA299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=SCI; BR=None

## STA302H1 Methods of Data Analysis I [36L]

Introduction to data analysis with a focus on regression. Initial Examination of data. Correlation. Simple and multiple regression models using least squares. Inference for regression parameters, confidence and prediction intervals. Diagnostics and remedial measures. Interactions and dummy variables. Variable selection. Least squares estimation and inference for non-linear regression.
Prerequisite: STA248H1/STA255H1/STA261H1/
ECO220Y1(70\%)/ ECO227Y1
Exclusion: ECO375H1
DR=SCI; BR=5
STA303H1 Methods of Data Analysis II [36L]
Analysis of variance for one-and two-way layouts, logistic regression, loglinear models, longitudinal data, introduction to time series.
Prerequisite: STA302H1
DR=SCI; BR=5

## STA304H1 Surveys, Sampling and Observational Data (formerly STA322H1) [36L]

Design of surveys, sources of bias, randomized response surveys. Techniques of sampling; stratification, clustering, unequal probability selection. Sampling inference, estimates of population mean and variances, ratio estimation.

Observational data; correlation vs. causation, missing data, sources of bias.
Prerequisite: ECO220Y1/ECO227Y1/GGR270H1/ PSY201H1/SOC300Y1/STA220H1/STA255H1/STA261H1/
STA248H1/EEB225H1
Exclusion: STA322H1
DR=SCI; BR=5

## STA305H1 Design and Analysis of Experiments (formerly STA332H1) [36L]

Experiments vs observational studies, experimental units. Designs with one source of variation. Complete randomized designs and randomized block designs. Factorial designs. Inferences for contrasts and means. Model assumptions. Crossed and nested treatment factors, random effects models. Analysis of variance and covariance. Sample size calculations.
Prerequisite: STA302H1ECO375H1
Exclusion: STA332H1, STA402H1
DR=SCI; BR=5
STA347H1 Probability [36L]
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/STA255H1/STA257H1/ECO227;
MAT223H1/MAT240H1; MAT235Y1/MAT237Y1/
MAT257Y1 (Note: STA257H1 and MAT237Y1/MAT257Y1;
(MAT223H1, MAT224H1)/MAT240H1 are very strongly recommended)
DR=SCI; BR=5
STA355H1 Theory of Statistical Practice [24L/12P] STA355H1 provides a unifying structure for the methods taught in other courses, and will enable students to read methodological research articles or articles with a large methodological component. Topics covered include statistical models and distributions; fundamentals of inference: estimation, hypothesis testing, and significance levels; likelihood functions and likelihood-based inference; prior distributions and Bayesian inference.
Prerequisite: (STA220H1,STA255H1)/
(STA247H1,STA248H1)/(STA257H1,STA261H1)
Recommended Preparation: CSC108H1/CSC120H1/
CSC148H1, MAT223H1/MAT240H1, MAT235Y1/
MAT237Y1/MAT257Y1
DR=SCI; BR=5
STA365H1 Applied Bayesian Statistics [36L] Bayesian inference has become an important applied technique and is especially valued to solve complex problems. This course first examines the basics of Bayesian inference. From there, this course looks at modern, computational methods and how to make inferences on complex data problems.
Prerequisite: STA302H1
DR=SCI; BR=5

## Statistics

## STA398H0 Independent Experiential Study Project

 An instructor-supervised group project in an off-campus setting. Details on page 33DR=SCI; BR=None
STA399Y0 Independent Experiential Study Project An instructor-supervised group project in an off-campus setting. Details on page 33.
DR=SCI; BR=None
STA410H1 Statistical Computation [36L]
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
DR=SCI; BR=5
STA412H1 Nonparametric methods of inference [36L]
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, STA352Y1
DR=SCI; BR=5

## STA414H1 Statistical Methods for Data Mining and Machine Learning [36L]

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 neighbour methods for unsupervised learning.
Prerequisite: CSC108H1, STA302H1/CSC411H1, STA303H1
(recommended)
DR=SCI; BR=5
STA422H1 Theory of Statistical Inference [36L]
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/STA452H1
DR=SCI; BR=5

## STA429H1 Advanced Statistics for the Life and Social Sciences [36L]

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.
Prerequisite: ECO220Y1/ECO227Y1/GGR270H1 /
PSY202H1/SOC300Y1/STA220H1/EEB225H1
Exclusion: All 300+ level STA courses except STA304H1 DR=SOC SCI/SCI; BR=5
STA437H1 Methods for multivariate data [24L/12P]
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: ECO375H1/STA302H1/STA352Y1
Recommended Preparation: APM233Y1/MAT223H1/
MAT240H1
DR=SCI; BR=5
STA438H1 Theoretical Multivariate Statistics [36L]
An introductory survey of current multivariate analysis, multivariate normal distributions, distribution of multiple and partial correlations, Wishart distributions, distribution of Hotellings T2, testing and estimation of regression parameters, classification and discrimination.
Prerequisite: MAT223H1/MAT240H1, MAT237Y1/MAT257Y1,
STA352Y1 (STA437H1 is strongly recommended) DR=SCI; BR=5

STA442H1 Methods of Applied Statistics [36L] Advanced topics in statistics and data analysis with emphasis on applications. Diagnostics and residuals in linear models, introduction to generalized linear models, graphical methods, additional topics such as random effects models, designed experiments, model selection, analysis of censored data, introduced as needed in the context of case studies. Prerequisite: ECO375H1/STA302H1; STA303H1/STA305H1 DR=SCI; BR=5

## STA447H1 Stochastic Processes (formerly STA348H1) [36L]

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).
Prerequisite: STA347H1
Exclusion: STA348H1
DR=SCI; BR=5

## STA450H1 Topics in Statistics [36L]

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.
DR=SCI; BR=5

## STA452H1 Mathematical Statistics I (formerly STA352Y1) [36L]

Statistical theory and its applications at an advanced mathematical level. Topics include probability and distribution theory as it specifically pertains to the statistical analysis of data. Linear models and the geometry of data, least squares and the connection to conditional expectation. The basic concept of inference and the likelihood function.
Prerequisite: MAT223H1/MAT240H1; MAT235Y1/MAT237Y1/
MAT257Y1; STA257H1, STA347H1/STA355H1. Note:
MAT237Y1/MAT257Y1; (MAT223H1, MAT224H1)/
MAT240H1 very strongly recommended.
Exclusion: STA352Y1
DR=SCI; BR=5

## Statistics

## STA453H1 Mathematical Statistics II (formerly STA352Y1) [36L]

Continuation of STA452H1: statistical theory and its applications at an advanced mathematical level. Topics include classical estimation, theory with methods based on the likelihood function and the likelihood statistics. Testing hypothesis and the evaluation of conference from both a bayesian and frequentist point of view.
Prerequisite: STA452H1
Exclusion: STA352Y1
DR=SCI; BR=5

## STA457H1 Time Series Analysis [36L]

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: ECO375H1/STA302H1; MAT235Y1/MAT237Y1/ MAT257Y1
DR=SCI; BR=5

## STA465H1 Theory and Methods for Complex Spatial Data [36L]

Data acquisition trends in the environmental, physical and health sciences are increasingly spatial in character and novel in the sense that modern sophisticated methods are required for analysis. This course will cover different types of random spatial processes and how to incorporate them into mixed effects models for Normal and non-Normal data. Students will be trained in a variety of advanced techniques for analyzing complex spatial data and, upon completion, will be able to undertake a variety of analyses on spatially dependent data, understand which methods are appropriate for various research questions, and interpret and convey results in the light of the original questions posed.
Prerequisite: STA302H1
DR=SCI; BR=5

## STA490H1 Statistical Consultation, Communication, and Collaboration [24L/24P]

Through case studies and collaboration with researchers in other disciplines, students develop skills in the collaborative practice of Statistics. Focus is on pragmatic solutions to practical issues including study design, dealing with common complications in data analysis, and ethical practice, with particular emphasis on written communication.
Prerequisite: STA303H1, one 400-level STA course, permission of instructor
DR=SCI; BR=5
STA496H1 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.
DR=SCI; BR=5
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.
DR=SCI; BR=5

STA498Y1 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.
DR=SCI; BR=5
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.
DR=SCI; BR=5

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 and Major Programs in Immunology are assembled from offerings by the Departments of Biochemistry, Immunology, Molecular Genetics and Microbiology. 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. Co-curricular 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 Major (Arts program)

In this program, students examine some of the difficult ethical questions facing modern society, particularly those concerning the law. For example, should assisted suicide be a crime? Should polygamy be legalized in Canada? Should the law permit the testing of in vitro embryos for genetic diseases? Should the law permit the sale or rental of violent video games to minors? The program includes optional courses in philosophy, religion, anthropology, classics, economics, geography, political science, sociology and criminology, and draws upon the resources of the University of Toronto's Centre for Ethics, located at Trinity College. Ethics, Society, and Law students acquire knowledge and skills that equip them to think in a well-informed and wellreasoned way about complex social issues with ethical and legal dimensions. The program prepares them for reflective and engaged citizenship in a democratic, pluralistic society and in a world of global interconnections.
The Ethics, Society, and Law Major is a Type 2 program. Enrolment is limited to students with an average of 73\% or higher in three FCEs selected from 100-level courses categorized as $\mathrm{BR}=2$ and/or $\mathrm{BR}=3$. Achieving the threshold mark does not necessarily guarantee admission to the program in any given year.

## Ethics. Society, and Law Major (Arts program)

(7 full courses or the equivalent)

1. First year: No specific courses must be taken in first year.
2. Second year: PHL271H1 is a required course that students are recommended to take in second year (their first year of registration in the program).
3. Third Year: TRN303H1.
4. Fourth Year: TRN412H1.
5. POL200Y1/PHL265H1/PHL275H1: to be taken in any year of registration in the program.
6. 4.5-5 FCEs (for a total of 7 ) from Groups A-D, including at least 1.0 from each of Groups A-C and at least 2.0 at the 300+ level.

## Group A (Ethics)

ETH201H1, ETH210H1, ETH220H1, ETH230H1, ETH350H1; PHL273H1, PHL275H1, PHL281H1, PHL295H1, PHL341H1, PHL 373H1, PHL375H1, PHL378H1, PHL380H1, PHL381H1, PHL382H1, PHL383H1, PHL384H1, PHL394H1, PHL407H1; POL330Y1; RLG221H1, RLG224Y1, RLG228H1

## Group B (Society)

ANT204H1; CSC300H1; ECO313H1, ECO332H1, ECO336Y1, ECO340H1; ENV221H1, ENV222H1, ENV347H1; GGR416H1; HIS332H1, HIS355H1; HPS324H1; JGE331H1; PHL265H1, PHL365H1; POL200Y1, POL214Y1, POL320Y1, POL405Y1, POL412Y1, POL432H1; PSY311H1, PSY321H1; SOC201H1, SOC203H1, SOC212H1, SOC301Y1, SOC306Y1, SOC313H1; WDW205H1, WDW210H1, WDW300H1, WDW335H1, WDW340H1, WDW380H1, WDW425H1; WGS373H1

## Group C (Law)

CLA 336H1; ECO320H1; ENV422H1; NMC484H1; PHL370H1; PHL484H1; POL332Y1, POL337Y1, POL340Y1। SMC304H1, SMC361H1; SOC213Y1; TRN304H1/ TRN304Y1, TRN305Y1/TRN305H1. TRN425Y1; WDW225H1, WDW365H1, WDW420H1; WGS365H1, WGS375H1

## Group D (Further Courses)

RLG309Y1; TRN200Y1, TRN300H1, TRN301Y1, TRN 302Y1, TRN400H1, TRN404Y1, TRN405Y1, TRN406H1/ TRN407Y1
N.B. (1) The above WDW courses are available only to students enrolled in the double major program Ethics, Society, and Law/Criminology. (2) Access to courses in the Ethics, Society, and Law program is not guaranteed; students must check Prerequisites.

## Immunology Studies:

Consult Prof. Alberto Martin (416-978-4230)
For more information please see the entry under Immunology.

## Trinity College

## Independent Studies

Consult Professor C. Kanaganayakam, room 312, 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) are responsible for the evaluation. The Coordinator will require regular progress reports throughout the year. Students must have a supervisor and second reader in order to get approval for their projects.
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 TRN300H1, TRN301Y1, TRN302Y1, or for one or more of TRN400H1, TRN404Y1, and405Y1, as appropriate. Those enrolling for a second time register in one or more of TRN400H1, TRN404Y1, and405Y1, as appropriate.

## International Relations Specialist (Arts program)

The study of international relations dates back to antiquity and remains one of the most vital disciplines in the academic community. Its purpose is to explore the enduring questions of the origins of war and the maintenance of peace, the nature and exercise of power within an international system, and the changing character of the participants in international decision-making.
Drawing on the strengths of faculty members in History, Economics, and Political Science, the International Relations

Specialist Program offers a structured and interdisciplinary education. The program provides students with knowledge of the historical and contemporary dimensions of the international system while introducing them to the methodologies employed in historical, political and economic analysis.
The International Relations Specialist is a Type 3 program. Enrolment is limited to students with an average grade of at least $75 \%$ in the required first-year courses: (1) ECO100Y1/ ECO105Y1; (2) HIS103Y1 or TRN150Y1/TRN150Y1 or two of VIC181H1, VIC183H1, VIC184H1, VIC185H1; (3) one introductory modern language course or MAT133Y1/ MAT137Y1. Achieving the threshold mark does not necessarily guarantee admission to the program in any given year. Students who do not achieve the first-year threshold mark may apply to the program office for admission in a subsequent year. Such applications will be assessed on a case-by-case basis. All students applying to the program must have a personal interview with a member of the program staff; a student who is unavailable for an interview must complete an application form.
(13 full courses or the equivalent)
Consult the Office of the International Relations Program, room 310N, Munk School of Global Affairs, 416-946-8950.

1. First year: ECO100Y1/ECO105Y1: students are strongly encouraged to take ECO100Y1; HIS103Y1 or TRN150Y1/TRN151Y1 (in Trinity One) or two of VIC181H1, VIC183H1, VIC184H1, VIC185H1 (in Vic One); one introductory modern language course or MAT133Y1/MAT137Y1.
2. Required 200+-level courses: POL 208Y1; ECO230Y1/ (ECO364H1 + ECO365H1), ECO342Y1; HIS311Y1, HIS344Y1; POL312Y1/POL326Y1/POL340Y1; TRN411Y1/TRN419Y.
3. Second year: POL208Y1. Students are advised to take at least two additional FCEs in the program in second year, including ECO230Y1 if they select this course rather than ECO364H1 + ECO365H1.
4. Third year: Recommended courses: HIS311Y1; POL312Y1/POL326Y1/POL340Y1; ECO364H1+ ECO365H1 if selected instead of ECO230Y1.
5. Third or fourth year: ECO342Y1; HIS344Y1.
6. Fourth year: TRN411Y1/TRN419Y1; 1.0 FCE from: ECO419H1, ECO429Y1, ECO457Y1, ECO459H1; HIS401H1, HIS405Y1, HIS436H1, HIS445H1, HIS451H1, HIS453H1, HIS455H1, HIS457H1, HIS458H1, HIS462H1, HIS471H1, HIS473Y1, HIS479H1, HIS488H1, HIS498H1; POL410H1, POL411H1, POL412Y1, POL413H1, POL414H1, POL415H1, POL417Y1, POL420Y1, POL440Y1, POL441H1, POL442H1, POL452Y1, POL456Y1, POL458H1, POL459Y1, POL466H1, POL469H1, POL470Y1, POL477H1, POL481Y1, POL486H1/Y1, POL487H1/Y1, POL495Y1, POL496H1; TRN421Y1
7. In second, third or fourth year 2.0 FCEs from: ANT452H1; ECO200Y1, ECO202Y1, ECO303Y1, ECO307H1, ECO324Y1; EUR200Y1; GGR439H1; HIS241H1, HIS242H1, HIS250Y1, HIS251Y1, HIS271Y1,HIS304H1, HIS327H1, HIS329H1, HIS334H1, HIS338H1, HIS343Y1, HIS347H1, HIS376H1, HIS377H1; JMC301Y1; LAS200Y1; NMC378H1;

## Trinity College

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POL101Y1, POL108Y1, POL201Y1, POL318H1,
POL323H1, POL324H1, POL335H1, POL341H1,
POL343Y1, POL370H1, POL376Y1
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## Note:

1. Access to courses in the International Relations Specialist is not guaranteed; students must check Prerequisites.
2. Not all of the courses in the International Relations Specialist are offered every year.
3. Students may change from the International Relations Major to the International Relations Specialist only if they meet current Specialist requirements and only if places are available.

## International Relations Major (Arts Program)

The study of international relations dates back to antiquity and remains one of the most vital disciplines in the academic community. Its purpose is to explore the enduring questions of the origins of war and the maintenance of peace, the nature and exercise of power within an international system, and the changing character of the participants in international decision-making.
Drawing on the strengths of faculty members in History, Economics, and Political Science, the International Relations Major Program offers a structured and interdisciplinary education. The program provides students with knowledge of the historical and contemporary dimensions of the international system while introducing them to the methodologies employed in historical, political and economic analysis.
The International Relations Major is a Type 3 program. Enrolment is limited to students with an average grade of at least 70\% in the required first-year courses: (1) ECO100Y1/ ECO105Y1; (2) HIS103Y1 or TRN150Y1/TRN150Y1 or two of VIC181H1, VIC183H1, VIC184H1, VIC185H1. Achieving the threshold mark does not necessarily guarantee admission to the program in any given year.

Students who do not achieve the first-year threshold mark may apply to the program office for admission in a subsequent year. Such applications will be assessed on a case-by-case basis.
All students applying to the program must have a personal interview with a member of the program staff; a student who is unavailable for an interview must complete an application form.
(7.5 full courses or the equivalent)

Consult the Office of the International Relations Program, room 310N, Munk School of Global Affairs, 416-946-8950.

1. First year: ECO100Y1/ECO105Y1; HIS103Y1 or TRN150Y1/TRN151Y1 (in Trinity One) or two of VIC181H1, VIC183H1, VIC184H1, VIC185H1 (in Vic One).
2. Required 200+-level courses: POL 208Y1; ECO230Y1/ ECO342Y1; HIS311Y1; HIS344Y1; POL312Y1/ POL326Y1/POL340Y1; TRN410H1
3. Second year: POL208Y1. ECO230Y1 is recommended to be taken in second year if selected instead of ECO342Y1.
4. Third year: Recommended courses: HIS311Y1; POL312Y1/POL326Y1/POL340Y1; ECO342Y1 if selected instead of ECO230Y1.
5. Third or fourth year: HIS344Y1.
6. Fourth year: TRN410H1.

## Note:

1. Access to courses in the International Relations Major is not guaranteed; students must check Prerequisites
2. Not all of the courses in the International Relations Major are offered every year.
International Relations/Peace and Conflict Studies Specialist
See Peace, Conflict and Justice Studies section.

## Irinity College Courses

Listed in this order:
Trinity One;
Ethics, Society, \& Law;
Independent Studies;
International Relations;

## Other

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## Trinity One Courses

Students participating in Vic One are excluded from Trinity One.

## TRN150Y1 National versus International [48S]

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.
Prerequisite: Admission to Trinity One
Corequisite: TRN151Y1 \& a first-year course in History or
Political Science or Economics or Sociology or a course with permission of the Coordinator.
Exclusion: Innis One, New One, St. Mike's One, Vic One, UC
One, Woodsworth ONE
DR=SOC SCI; BR=3

## TRN151Y1 Global Governance [48S]

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. Prerequisite: Admission to Trinity One

# Trinity College 

Corequisite: TRN150Y1 \& a first-year course in History or Political Science or Economics or Sociology or a course with permission of the Coordinator.
Exclusion: Innis One, New One, St. Mike's One, Vic One, UC One, Woodsworth ONE
DR=SOC SCI; BR=3

## TRN160Y1 Public Policy and the Public Good [48S]

What is public policy? Is there such a thing as the public good? What is the purpose of government in a liberal democratic society? How should policy makers respond when competing goods (e.g., freedom and security) conflict with each other? Ethical issues underlying a selection of contemporary public policy issues.
Prerequisite: Admission to Trinity One
Corequisite: A first-year course in History, Political Science, Philosophy, or Sociology; or a course taken with the permission of the Director.
Exclusion: Innis One, New One, SMC One, UC One, Vic One, Woodsworth ONE
DR=HUM; BR=2 + 3
TRN161Y1 Making Public Policy Work [48S]
How do we know what kinds of public policy will work and what will not? How do we assess the effectiveness of a policy? An historical examination of ways in which Canadian governments have addressed a range of policy problems.
Case studies of areas of federal and provincial activity today.
Prerequisite: Admission to Trinity One
Corequisite: A first-year course in History, Political Science, Philosophy, or Sociology; or a course taken with the permission of the Director.
Exclusion: Innis One, New One, SMC One, UC One, Vic One, Woodsworth ONE
DR=SOC SCI; BR=3
TRN170Y1 Ethics and the Creative Imagination [48S]
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.
Prerequisite: Admission to Trinity One
Corequisite: TRN171Y1 \& a first-year course in English or Philosophy or Political Science or a course with permission of the Coordinator.
Exclusion: Innis One, New One, St. Mike's One, Vic One, UC One, Woodsworth ONE
DR=HUM; BR=1 + 2

## TRN171Y1 Ethics and the Public Sphere [48S]

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. Prerequisite: Admission to Trinity One
Corequisite: TRN170Y1 \& a first-year course in English or Philosophy or Political Science or a course with permission of the Coordinator.
Exclusion: Innis One, New One, St. Mike's One, Vic One, UC One, Woodsworth ONE
DR=HUM; BR=2 + 3

## Ethics, Society and Law Courses

TRN303H1 Ethics and Society [24L]
An exploration of the ethical dimensions of selected contemporary social issues. Restricted to students in the major program Ethics, Society, and Law.
Prerequisite: PHL271H1
DR=HUM; BR=2
TRN304H1 Law and Social Issues [24L]
An exploration of the legal dimensions of selected contemporary social issues. Restricted to students in the major program Ethics, Society, and Law.
Prerequisite: PHL271H1
DR=SOC SCI; BR=3

## TRN304Y1 Law and Social Issues [48L]

An exploration of the legal dimensions of selected contemporary social issues. Restricted to students in the major program Ethics, Society, and Law.
Prerequisite: PHL271H1
DR=SOC SCI; BR=3

## TRN305H1 Basic Principles of Law [24L]

An exploration of some basic legal principles in public and private law. Areas of law that may be studied include contract, tort, criminal and administrative law. Restricted to students in the major program Ethics, Society, and Law. Prerequisite: A student must be in third or fourth year. Exclusion: TRN305Y1
DR=SOC SCI; BR=3

## TRN305Y1 Basic Principles of Law [48L]

The nature and justification 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. A selection of contract, tort, criminal and administrative law. Restricted to students in the major program Ethics, Society, and Law.
Prerequisite: A student must be in third or fourth year. Exclusion: TRN305H1
DR=SOC SCI; BR=3

## TRN406H1 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.
DR=HUM; BR=2

## TRN407Y1 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.
DR=HUM; BR=2

## Trinity College

## TRN412H1 Seminar in Ethics, Society, and Law (formerly TRN312H1) [TBA]

Seminar in Ethics, Society, and Law
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.
Exclusion: TRN312H1
Recommended Preparation: TRN305Y1/WDW220Y1/ equivalent background knowledge
DR=HUM; BR=2
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. DR=SOC SCI; BR=3

## Independent Studies Courses

## TRN299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=HUM; BR=None
TRN300H1 Trinity Independent Studies
Trinity Independent Studies
DR=HUM; BR=None
TRN301Y1 Trinity Independent Studies
Trinity Independent Studies
DR=HUM; BR=None
TRN302Y1 Trinity Independent Studies
Trinity Independent Studies
DR=HUM; BR=None
TRN400H1 Trinity Independent Studies
Trinity Independent Studies
DR=HUM; BR=None
TRN404Y1 Trinity Independent Studies
Trinity Independent Studies
DR=HUM; BR=None
TRN405Y1 Trinity Independent Studies
Trinity Independent Studies
DR=HUM; BR=None

## International Relations Courses

(See the International Relations Program Office for details)

## TRN409H1 Selected Topics in International Studies [TBA]

Selected Topics in International Studies
Prerequisite: Enrolment in the International Relations program or in a History or Political Science major or specialist program
Exclusion: TRN409Y1
DR=HUM; BR=3

## TRN409Y1 Selected Topics in International Studies [TBA]

Selected Topics in International Studies
Prerequisite: Enrolment in the International Relations program or in a History or Political Science major or specialist program
Exclusion: TRN409H1
DR=HUM; BR=3

TRN410H1 Selected Topics in International Studies [TBA]
Selected Topics in International Studies
Prerequisite: Enrolment in the International Relations major program.
Corequisite: None
Exclusion: TRN410Y1
DR=HUM; BR=3
TRN411Y1 Selected Topics in International Studies [TBA]
Selected Topics in International Studies
Prerequisite: Enrolment in the International Relations program or in a History major or specialist program, or permission of instructor
DR=HUM; BR=None

## TRN419Y1 Comparative American, British and Canadian Foreign Policy [48S]

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.
DR=HUM/SOC SCI; BR=3

## TRN421Y1 The Practice and Institutions of Diplomacy

 (formerly JHP420Y1) [48S]Evaluation of the nature of foreign policy negotiation and decision-making from the perspective of the practitioner. Prerequisite: ECO342Y1/HIS311Y1/POL312Y1
DR=HUM; BR=3

## Other Trinity College Courses

TRN190Y1 Critical Reading and Critical Writing [48S]
This course introduces students to a number of critical approaches and develops the students 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.
DR=HUM; BR=1

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TRN200Y1 Modes of Reasoning (formerly TRN200H1)
    [24L/24S]
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: PHL247H1/PHI247H1/TRN200H1
DR=HUM; BR=2
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## University College

## Faculty

## Professor

P. Kleber, MA, Ph D (Drama)

## Associate Professors

A. Ackerman, MA, Ph D (Drama)
A. Budde, MA, Ph D (Drama)
E. Gilbert, MA, Ph D (Canadian Studies)

## Assistant Professor

T. N. Cesare-Schotzko, MA, Ph D (Drama)

## Senior Lecturers

S. Bush (Drama)
K. Gass, BA (Drama)
J. Plotnick, MA, M Sc (Writing Workshop)
R. Salutin, MA (Canadian Studies)

## Lecturers

S. Lyons, BA (Drama)
S. Rayter, MA, Ph D (Sexual Diversity Studies) John Thompson (Drama)

University College offers a number of programs and courses outside the areas traditionally covered by departments. These include UC One and programs and courses in Canadian Studies, Drama, Health Studies, and Sexual Diversity Studies, in addition to 199Y1 Seminars, and introductory courses for non-specialists in mathematics. 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.

## UC One: Engaging Toronto

UC One is an exciting initiative that provides first-year students with a special university experience. Students choose from one of four courses, each of which is designed to engage with the city from a different perspective. Classroom learning is directly linked to real life experience.

UC One is a full-credit course, one of five courses typically taken by a first-year Faculty of Arts and Science student. Enrolment in each course is limited to 25 students. Students enrol in one of the following four full year courses:

UNI101Y1: Citizenship in the Canadian City
UNI102Y1: Performing the City
UNI103Y1: Gradients of Health in an Urban Mosaic UNI104Y1: Sex in the City

In UC One, you can choose a stream that complements your own interests.

Weekly lectures and seminars will be supplemented with prominent guest speakers, including political and business leaders, activists from non-governmental organizations, theatre directors, artists, and health practitioners. Students will have the opportunity to meet with the speakers and socialize with their fellow students after each guest lecture. Students will also participate in a range of field trips across the city.

UC One requires an application that is found on the UC One website at: www.uc.utoronto.ca/ucone. All first-year students in the Faculty of Arts and Science (St. George campus) are
eligible for admission. Admissions are based on two short essays. Students may apply to more than one UC One seminar by ranking their preferences. Those participating in other One programs are excluded from UC One.

The Canadian Studies Program (Specialist, Major, Minor)
offers opportunities to study contemporary Canada in an interdisciplinary manner and to explore cultural, social, economical and political developments in this complex and diverse country. Students are encouraged to consider additional courses in Aboriginal Studies in completing the requirements of the Program.

## 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 socio-cultural expression. The Major serves as a general introduction; the Specialist provides a more intense research focus with more methodological emphasis.

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. By examining sexual diversity across time and place, students will learn about the ways different cultures have separated the sexual from the nonsexual, the normal from the abnormal, and what the regulation of sexuality can tell us about how power operates along the lines of gender and race, for example. Students will gain an understanding of how and why certain sexual practices have come under scrutiny, and the significance of the various labels and identities that we have attached to them.

UNI and DRM courses are staffed by a combination of specific program staff members and members of various University departments, and are open to all students at the University. Further information on University College programs is available at www.uc.utoronto.ca.

Enquiries: Programs Office, University College, Room UC173 (416-978-8083)

## University College Programs

## Canadian Studies Specialist (Arts program)

Enrolment in this program requires the completion of 4 courses (4 FCEs).
(11 full courses or their equivalent in Canadian Studies approved courses including at least 4 FCEs at the 300+ level, 1 of which must be at the 400 level.)
First Year: No specific first-year requirements. (Students are advised to take introductory courses that will serve as Prerequisites for optional courses of interest to them later in the programme.)
. (UNI267H1, UNI268H1), HIS263Y1
2. (UNI367H1, UNI368H1)
3. UNI420Y1 or another fourth-year Canadian Studies course approved by the Program Director.

## University College

4. Students will take another 7 full course equivalents offered by the Canadian Studies program, or from the long list of courses approved by the Canadian Studies program (see: www.uc.utoronto.ca/canadianstudies/). Suitable courses not on the list may be considered in consultation with the Program Director.

## Canadian Studies Major (Arts program)

Enrolment into this program requires the completion of 4 courses (4 FCEs).
( 7 full courses or their equivalent in Canadian Studies approved courses with 2 FCEs at the $300+$ level, 0.5 of which must be at the 400 level)
First Year: No specific first-year requirements. (Students are advised to take introductory courses that will serve as Prerequisites for optional courses of interest to them later in the programme.)

1. (UNI267H1, UNI268H1), HIS263Y1
2. (UNI367H1, UNI368H1)
3. Students will take another 4 FCEs offered by the Canadian Studies program, or from the long list of courses approved by the Canadian Studies program (see: www.uc.utoronto.ca/canadianstudies/). Suitable courses not on the list may be considered in consultation with the Program Director.

## Canadian Studies Minor (Arts program)

Enrolment in this program requires the completion of 4 course (4 FCE)
(4 full courses or their equivalent, including at least one fullcourse equivalent at the $300+$ level)
First Year: No specific first-year requirements. (Students are advised to take introductory courses that will serve as Prerequisites for optional courses of interest to them later in the programme.)

1. UNI267H1/UNI 268 H 1
2. UNI367H1/UNI368H1
3. 1 FCE from the list: UNI101Y1; UNI201H1; UNI202H1; UNI205H1; UNI211H1; UNI22OY1; UNI221H1; UNI267H1; UNI268H1; UNI280H1; UNI305H1; UNI307H1; UNI320Y1; UNI325H1; UNI367H1; UNI368H1; UNI380H1; UNI42OY1; UNI425H1; UNI430Y1; JUG320H1; DRM268H1; SOC218H1
4. Students will take another 2 FCEs in courses offered by the Canadian Studies program, or the long list of courses approved by the Canadian Studies program (a full list of approved Canadian Studies courses can be found on the website at www.uc.utoronto.ca/ canadianstudies/).

## Health Studies Specialist (Arts program)

(11 full courses or their equivalent, including at least 1400 series course)
Enrolment in the Specialist Program is limited; selection is based on a personal statement, interview, and record of courses taken. To apply students must have completed at least four full credits or their equivalent. For further details on the application process please visit the Health Studies website at 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. These may include: ANT100Y1, POL101Y1/POL103Y1, PSY100H1, SOC101Y1. A course in biology or physiology is also recommended.
Second Year: UNI250H1, UNI209H1, UNI211H1, UNI237H1; 1 FCE in a statistics course: STA220H1/STA221H1/ PSY201H1/PSY202H1/SOC202H1/SOC302H1 or equivalent or by permission of Program Director.
Third Year: UNI310H1, UNI330H1, UNI350Y1, UNI373H1 plus ABS350Y1/HMB303H1
Fourth Year: UNI411Y1, UNI440H1, UNI450Y1, UNI464H1 and/or course(s) approved by Program Director.
Remaining credits may be supplemented/enhanced by choosing, for example, from the following courses, but not limited to:
ANT348H1, ANT349H1, ANT469H1, HMB203H1, HMB433H1, HMB443H1, HAJ453H1, POL201Y1, POL447Y1 or by permission of Program Director.

## Health Studies Major (Arts program)

Enrolment in the Major Program is limited; selection is based on a personal statement, interview, and record of courses taken. To apply students must have completed four full credits or their equivalent. For further details on the application process please visit the Health Studies website at www.uc.utoronto.ca/healthstudies/
(8 full courses or their equivalent)
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. These may include: ANT100Y1, POL101Y1/POL103Y1, PSY100H1, SOC101Y1. A course in biology or physiology is also recommended.
Second Year: UNI250H1, UNI209H1, UNI211H1, UNI237H1; 1 FCE in a statistics course: STA220H1/STA221H1/ PSY201H1/PSY202H1/SOC202H1/SOC302H1 or equivalent or by permission of Program Director.
Third Year: UNI310H1, UNI330H1, UNI373H1 plus ABS350Y1/HMB303H1
Fourth Year: UNI411Y1, UNI440H1, UNI464H1 and/or course(s) approved by Program Director
Remaining credits may be supplemented/enhanced by choosing, for example, from the following courses, but not limited to:
ANT348H1, ANT349H1, ANT469H1, HMB203H1, HMB433H1, HMB443H1, HAJ453H1, POL201Y1, POL447Y1 or by permission of Program Director.

## Sexual Diversity Studies Specialist (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Although Sexual Diversity Studies offers no first-year courses (though some students may come to SDS having taken UC104Y: Engaging Toronto: Sex in the City), and has no Prerequisites to take our second-year introductory courses, students may find it useful to take a broad range of courses in their first year from the Humanities and Social Sciences, such as first-year courses in Anthropology (ANT100Y), Art (FAH101H, FAH102H), Classics (CLA160H), Drama (DRM100Y), English ENG110Y, ENG140Y, ENG150Y),

## University College

Geography (GGR124H), History (HIS106Y, HIS109Y), Philosophy (PHL100Y), Sociology (SOC101Y, SOC102H, SOC103H), or Women's Studies (WGS160Y).
(10 full courses or their equivalent, including 4.0 FCEs at the $300+$ level, 1.0 of which must be at the 400 -level)
First year of the program:

1. UNI255H1, UNI256H1

Upper years:
2. UNI354H1, UNI355H1
3. At least two of: JPU315H1/ENG273Y1/UNI365H1/ WDW387H1 (UNI365H1 and WDW387H1 cannot be used together to fulfill this requirement, though students are free to take both courses)
4. At least one of UNI237H1/UNI345H1 (or another approved course on HIV/AIDS)
5. At least 4.0 additional $F C E s$ from Group $A$
6. UNI460H1
7. Any remaining course requirements may be drawn from Group A or B to a total of 10.0 FCEs

## Sexual Diversity Studies Major (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
Although Sexual Diversity Studies offers no first-year courses (though some students may come to SDS having taken UC104Y: Engaging Toronto: Sex in the City), and has no perquisites to take our second-year introductory courses, students may find it useful to take a broad range of courses in their first year from the Humanities and Social Sciences, such as first-year courses in Anthropology (ANT100Y), Art (FAH101H, FAH102H), Classics (CLA160H), Drama (DRM100Y), English ENG110Y, ENG140Y, ENG150Y), Geography (GGR124H), History (HIS106Y, HIS109Y), Philosophy (PHL100Y), Sociology (SOC101Y, SOC102H, SOC103H), or Women's Studies (WGS160Y).
( 6 full courses or their equivalent including at least 2.0 FCEs at the $300+$ level, 0.5 of which must be at the 400 -level)
First year of the program:

1. UNI255H1, UNI256H1

Upper years:
2. At least one of UNI354H1/UNI355H1
3. At least two of JPU315H1/ENG273Y1/UNI365H1/ WDW387H1 (UNI365H1 and WDW387H1 cannot be used together to fulfill this requirement, though students are free to take both courses)
4. At least one of UNI237H1/UNI345H1 (or another approved course on HIV/AIDS)
5. At least one of UNI455H1/UNI477H1/UNI458H1/ UNI459Y1/UNI460H1
6. Any remaining course requirements may be drawn from Group A or B to a total of 6.0 FCEs

## Sexual Diversity Studies Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
Although Sexual Diversity Studies offers no first-year courses (though some students may come to SDS having taken UC104Y: Engaging Toronto: Sex in the City), and has no perquisites to take our second-year introductory courses, students may find it useful to take a broad range of courses in their first year from the Humanities and Social Sciences,
such as first-year courses in Anthropology (ANT100Y), Art (FAH101H, FAH102H), Classics (CLA160H), Drama (DRM100Y), English ENG110Y, ENG140Y, ENG150Y), Geography (GGR124H), History (HIS106Y, HIS109Y), Philosophy (PHL100Y), Sociology (SOC101Y, SOC102H, SOC103H), or Women's Studies (WGS160Y).
(4 full courses or their equivalent)

1. At least one of: UNI255H1/UNI256H1
2. At least one of: UNI354H1/UNI355H1
3. At least one of: ENG273Y1/JPU315H1/UNI365H1/ WDW387H1
4. Remaining requirements from any combination of course from Group A and Group B to a total of 4.0 FCE

## Sexual Diversity Studies Course Groups

Group A:
ANT366H1, ANT441H1, ANT456H1, ANT462H1, ENG273Y1, ENG384Y1, GER338H1, GGR363H1, HIS205Y1, HIS348H1, HIS447H1, INI223H1, JAL355H1, JHN350H1, JPU315H1, NEW240Y1, NEW341H1, NEW449H1, PHL243H1, POL482H1, RLG225H1, SOC309Y1, SOC367H1, SOC410H1, UNI237H1, UNI325H1, UNI345H1, UNI354H1, UNI355H1, UNI365H1, UNI375H1, UNI377H1, UNI455H1, UNI458H1, UNI459Y1, UNI460H1, UNI470H1, UNI475H1, UNI477H1, VIC343Y1, VIS202H1, VIS208H1, WDW380H1,WDW387H1, WGS374H1, WGS375H1, WGS376H1, WGS430H1

## Group B:

ANT323Y1, ANT329H1, ANT343H1, ANT427H1, ANT460H1, ENG235H1, ENG250Y1, ENG254Y1, ENG342H1, ENG349H1, ENG355H1, ENG365H1, ENG368H1, ENG382Y1, FCS292H1, FCS395H1, FRE304H1, FRE326Y1, FRE344H1, GGR124Y1/GGR124H1, GGR327H1, HIS202H1, HIS345H1, HIS363H1, HIS375H1, HIS383H1, HIS431H1, INI323Y1, INI330Y1, INI385H1, JNV300H1, JPP343Y1, NEW241Y1, NEW303H1, NEW344Y1, NEW349H1, PHL271H1, PHL367H1, POL332Y1, POL344Y1, POL364H1, POL432H1, PSY323H1, RLG236H1, RLG237H1, RLG309Y1, RLG314H1, SOC214Y1, SOC365Y1, UNI220Y1, VIC260H1, VIC352Y1, VIS209H1, VIS217H1, VIS218H1, VIS302H1, VIS318H1, VIS319H1, WGS160Y1, WGS262H1, WGS271Y1, WGS336H1, WGS350H1, WGS365H1, WGS366H1, WGS367H1, WGS368H1, WGS369H1, WGS373H1
"A" courses have an explicit focus on sexuality and sexual diversity.
" B " courses have either some focus on sexuality or sexual diversity, or a related focus on gender and equity issues. The content of these courses may vary from year to year depending on the particular instructor.
Other courses, such as Special Topics courses in other Departments or Programs, may be approved by the Program Director on an individual basis. Students are responsible for checking co- and pre-requisites for courses from Group A and Group B.

## University College

## Asian Canadian Studies Minor (Arts program)

The Minor in Asian Canadian Studies provides students with an opportunity to better understand the historical, socio-cultural, economic, and political forces that shape our knowledge about people of Asian heritage in Canada, and in relationship to Asia and the diaspora. The category "Asian Canadian" is widely understood to refer to people in Canada of East Asian, South Asian, Southeast Asian, and West Asian ancestry.
The program is interdisciplinary. Courses foreground the intersections of race and ethnicity with other indices of difference, such as gender, class, migration, sexuality, language, and spirituality, in local, national, and global contexts. Students take two required half-year core courses in Canadian Studies; select from an array of courses on Asian Canadian Studies; and supplement their program with the large number of cross-listed program courses noted below. The Minor in Asian Canadian Studies is easily combined with more traditional disciplinary areas of study, such as Anthropology, Art, Economics, Geography, History, Political Science and Sociology, or with interdisciplinary studies in Contemporary Asian Studies, Diaspora and Transnational Studies, and East Asian Studies.

Students will be encouraged to take full advantage of the opportunities available through the Canadian Studies program, including an annual undergraduate student conference and a journal, ImagiNATIONs, produced by and for undergraduate students. The Canadian Studies Student Union is a focal point for social as well as academic pursuits, and is open to students pursuing a Minor in Asian Canadian Studies.
(4 full courses or their equivalent, including at least 1 FCE at the 300+ level).
Enrolment in this program requires the completion of 4 courses.

First Year: No specific first-year requirements. (Students are advised to take introductory courses that will serve as Prerequisites for optional courses of interest to them later in the programme.)

1. UNI267H1/UNI 268 H 1
2. UNI367H1/UNI368H1
3. Two FCEs from the following courses: CAS413H1; EAS315H1; ENG268H1; ENG368H1; SOC218H1; UNI205H1; UNI307H1; UNI395H1
4. One FCE from the following courses: Canadian Studies program courses: UNI101Y1; UNI201H1; UNI202H1; UNI205H1; UNI210H1; UNI218H1; UNI220Y1; UNI221H1; UNI267H1; UNI268HI; UNI280H1; UNI305H1; UNI307H1; UNI310H1; UNI320Y1; UNI325H1; UNI367H1; UNI368H1; UNI380H1; UNI420H1; UNI425H1; UNI430Y1; UNI435Y1; JUG320H1; DRM268H1; SOC218H1 and/or Other courses: ABS201Y1; ABS210Y1; ABS230H1; ABS231H1; ABS301Y1; ABS310Y1; ABS323Y1; ABS350Y1; ABS353Y1; ABS354H1; ABS360Y1; JFP450H1; ANT315H1; ANT315H1; ANT365H1; ANT412H1; DRM230Y1; ECO321Y1; ENG215H1; ENG252Y1; ENG254Y1; ENG277Y1; ENG350H1; ENG353Y1; ENG354Y1; ENG355H1; ENG357H1;

ENV320H1; ENV323H1; FAH248H1; FAH354H1; FAH376H1; FAH457H1; FAH458H1; FAH482H1;<br>FAH485H1; FAH486H1; FAH495H1; FAH495Y1; FIN320H1; FRE210H1; FRE314H1; FRE379H1;<br>FRE410H1; GGR124H1; GGR240H1; GGR246H1; GGR308H1; GGR321H1; GGR336H1; GGR339H1; GGR416H1; HIS263Y1; HIS307H1; HIS311Y1; HIS312H1; HIS313H1; HIS314H1; HIS360H1; HIS363H1; HIS365H1; HIS366H1; HIS369H1; HIS384H1; HIS405Y1; HIS410H1; HIS429H1; HIS430H1; HIS462H1; HIS464H1; HIS466H1; HIS469H1; HIS472H1; HUN335H1; INI337H1; INI308H1; INI385H1; INI387H1; INI437Y1; ITA233H1; ITA334H1; ITA493H1; JGI346H1; JGI454H1; JQR360H1; LIN201H1; LIN458H1; MUS306H1; NEW346H1; POL214Y1; POL224Y1; POL306H1; POL308H1;<br>POL312Y1; POL314Y1; POL315H1; POL316Y1;<br>POL318H1; POL334H1; POL336H1; POL337Y1;<br>POL341H1; POL356Y1; POL382H1; POL382Y1;<br>POL425Y1; POL439H1; POL474H1; PRT234H1;<br>PPG301H1; RLG307H1; RLG308H1; RLG426H1;<br>SAS413H1; SLA238H1; SMC291H1; SMC315H1;<br>SMC320H1; SMC321H1; SMC366H1; SMC413H1;<br>SMC416H1; SMC428H1; SOC218H1; SOC220H1;<br>SOC336H1; SOC383H1; TRN419Y1; UNI102Y1;<br>UNI103Y1; UNI104Y1; UNI211H1; UNI280H1;<br>UNI330H1; VIC119H1; VIC119Y1; VIC351H1; WDW225H1; WDW325H1; WDW340H1; WDW370H1; WGS380H1<br>A full list of approved Canadian Studies courses can be found on the website at www.uc.utoronto.ca/ canadianstudies/. Please note that not all courses are offered on a regular basis. Students are responsible for checking co- and Prerequisites for all courses. Courses that are in the current academic Calendar that include significant Canadian content may be considered, in consultation with the Canadian Studies Program Director. Consult the Canadian Studies Program Office, Room UC173, University College, 416-978-8083, E-mail: canadian.studies@utoronto. ca.

## University College Courses

Listed in this order:

UC One<br>Canadian Studies<br>Health Studies<br>Sexual Diversity Studies<br>Other University College Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## UC One: Engaging Toronto

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## University College

Classroom learning is directly linked to real life experience.
UC One is a full-credit course, one of five courses typically taken by a first-year Faculty of Arts and Science student. Enrolment in each course is limited to 25 students. Students enrol in one of the following four full year courses:

```
UNI101Y1: Citizenship in the Canadian City
UNI102Y1: Performing the City
UNI103Y1: Gradients of Health in an Urban Mosaic
UNI104Y1: Sex in the City
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In UC One, you can choose a stream that complements your own interests.

Weekly lectures and seminars will be supplemented with prominent guest speakers, including political and business leaders, activists from non-governmental organizations, theatre directors, artists, and health practitioners. Students will have the opportunity to meet with the speakers and socialize with their fellow students after each guest lecture. Students will also participate in a range of field trips across the city.
UC One requires an application that is found on the UC One website at: www.uc.utoronto.ca/ucone. All first-year students in the Faculty of Arts and Science (St. George campus) are eligible for admission. Admissions are based on two short essays. Students may apply to more than one UC One seminar by ranking their preferences. Those participating in other One programs are excluded from UC One.

UNI101Y1 Citizenship in the Canadian City [12P/54S] Who belongs? Who governs? Who decides? In this course you will examine the concepts of citizenship, public space, political membership, civic responsibility, and belonging. You will address topics such as Aboriginal sovereignty claims, urban multiculturalism, public housing, and greening the city. Prerequisite: Admission to UC One
Exclusion: Innis One, New One, St. Mike's One, Trinity One,
Vic One, Woodsworth ONE
DR=HUM/SOC SCI; BR=2 + 3

## UNI102Y1 Performing the City [12P/54S]

You will explore the connections between the performing arts, urban spaces, and cultural diversity. How does theatrical performance affect how people perceive the city? What are the alternatives to established theatres, and how does community activism inform performing arts in Toronto? Prerequisite: Admission to UC One
Exclusion: Innis One, New One, St. Mike's One, Trinity One,
Vic One, Woodsworth ONE
DR=HUM/SOC SCI; BR=1 + 3

## UNI103Y1 Gradients of Health in an Urban Mosaic [12P/54S]

In this course, you will examine how Toronto's varied communities access and use health care, and how they may encounter barriers in doing so. You will study how economic disparities, shifting demographics, and government policies affect health policy and the right to access resources.
Prerequisite: Admission to UC One
Exclusion: Innis One, New One, St. Mike's One, Trinity One,
Vic One, Woodsworth ONE
DR=HUM/SOC SCI; BR=2 + 3

UNI104Y1 Sex in the City [12P/54S]
You will learn about the sexual politics of the city and how cities and their neighbourhoods become sexualized and desexualized spaces. In Sex in the City, you will examine what "sex" means to Toronto's varied, multicultural communities by looking at urban space, cultural productions, law enforcement, safety and health resources and more. Prerequisite: Admission to UC One
Exclusion: Innis One, New One, St. Mike's One, Trinity One,
Vic One, Woodsworth ONE
DR=HUM/SOC SCI; BR=1 + 3

## Canadian Studies Courses

Offers opportunities to study contemporary Canada in an interdisciplinary manner and to explore cultural, social, economical and political developments in this complex and diverse country. Students are encouraged to consider additional courses in Aboriginal Studies in completing the requirements of the Program.

## UNI201H1 Aspects of Québec Society [24S]

Contemporary Québec from social, economic and political perspectives.
DR=SOC SCI; BR=3

## UNI202H1 Aspects of Québec Culture [24S]

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.
DR=HUM; BR=1
UNI205H1 Topics in Canadian Studies I [24L]
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 website at www.uc.utoronto.ca/canadianstudies.
DR=HUM/SOC SCI; BR=None

## SOC218H1 Asian Communities in Canada (formerly SOC218Y1) [24L]

The course will explore the structures and processes of Asian communities in Canada. Historical development of various Asian communities will be explored.
Prerequisite: SOC101Y1 or SOC102H1 or SOC103H1
Exclusion: SOC342Y1/SOC394Y1, SOC218Y1 DR=SOC SCI; BR=3
UNI218H1 Voices in Canadian Writing [24S]
A study of the variety of voices in Canadian fiction with a focus on contemporary writers. Issues such as marginalization, migration, diaspora and the formulation of the Canadian canon are discussed.
DR=HUM; BR=1

## UNI221H1 Culture and the Media in Canada [24L]

An exploration of the encounter between culture and mass communication in Canadian society. The course considers the role of major cultural institutions such as the CBC and the NFB, and their granting bodies. The emergence of new media and its relationship to mass media is also addressed. DR=SOC SCI; BR=1

UNI230H1 Asian Canadian History [24L]
The course examines the history of Asians in Canada from the mid-1800s to the present by analyzing their contributions

## University College

to the socio-cultural, economic, and political development of Canada. It explores how Asian Canadian history reconfigures prevailing understanding of race, migration, multiculturalism, and national identity through intersectional, comparative, and transnational frameworks.
DR=HUM; BR=2
UNI267H1 Canadian Nationalisms (formerly UNI220Y) [24L/12T]
A critical examination of contemporary forms of Canadian nationalism. This interdisciplinary course will interrogate national formations across theoretical works, policy documents, and cultural representations. Students will address the ways that nationalist discourses constitute difference, especially with respect to race, ethnicity, gender, and sexuality.
Exclusion: UNI220Y
DR=HUM; BR=1

## UNI268H1 Canada and Globalization (formerly UNI220Y) [24L/12T]

Students examine the impact of contemporary globalization on Canada, and for Canada's place in the world. The course is interdisciplinary in its approach and addresses globalization from a wide range of perspectives, including mobility, trade, urbanization, health, religion, environmental change, technology, communications, and the arts.

## Exclusion: UNI220Y

## DR=SOC SCI; BR=3

## UNI280H1 Canadian Jewish History [24L]

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.
DR=HUM/SOC SCI; BR=3

## UNI305H1 Topics in Canadian Studies II [24L]

In 2012-2013 this seminar will focus on The University in Canada. Contemporary issues and historical contexts will be addressed. Students will learn about the university as a significant Canadian institution, and will reflect on the ways that institutional structures have shaped their own learning and undergraduate experience.
DR=HUM/SOC SCI; BR=None

## UNI307H1 Asian Cultures in Canada (formerly UNI307Y1) [24L]

An exploration of the cultural histories and creative productions of a wide range of Asian communities in
Canada. Experts in specific areas - literature, dance, drama,
film - will be invited to present their work.
Exclusion: UNI307Y1 for UNI307H1; UNI307H1 for UNI307Y1
Recommended Preparation: UNI220Y1
DR=HUM; BR=1

## UNI307Y1 Asian Cultures in Canada [48L]

An exploration of the cultural histories and creative
productions of a wide range of Asian communities in
Canada.. Experts in specific areas literature, dance, drama,
filmwill be invited to present their work.
Exclusion: UNI307Y1 for UNI307H1; UNI307H1 for UNI307Y1
Recommended Preparation: UNI220Y1
DR=HUM; BR=1

JUG320H1 The Canadian Wilderness [24L]
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. DR=SOC SCI; BR=2
UNI325H1 Queerly Canadian [24L]
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 the instructor
Exclusion: UNI375H1 Special Topics: Queerly Canadian DR=HUM; BR=1

## UNI367H1 Canadian Pluralism (formerly UNI320Y)

 [24L]Students will examine the complexities of social and cultural interaction in the context of changing Canadian demographics. This course compares and contrasts policies regarding indigenous rights, migration, multiculturalism, and citizenship with contemporary cultural narratives in literature, painting and film.
Prerequisite: UNI267H1/UNI268H1/UNI220Y1
Exclusion: UNI320Y
DR=HUM; BR=1

## UNI368H1 Canada's Borders (formerly UNI320Y)

 [24L]The Canadian border is being reshaped by the increasing transnational movement of people, goods and ideas. Students will examine border issues relating to mobility, trade, and security from a wide range of interdisciplinary perspectives, from public policy to contemporary media, such as TV, films, and novels.
Prerequisite: UNI267H1/UNI268H1/UNI220Y1
Exclusion: UNI320Y
DR=SOC SCI; BR=3

## UNI380H1 Socio-Cultural Perspective of the Canadian Jewish Community [24L]

This course examines the relationship between prominent Canadians who happen to be Jews and those whose works are founded in Jewish identity; the diversity of the community on the basis of religion, language, class, ideology, etc.; contributions to the arts and scholarship; and the role and contribution of Jewish women.
DR=HUM/SOC SCI; BR=1

## UNI395H1 Independent Study in Asian Canadian Studies [TBA]

An opportunity to write an independent research paper in Asian Canadian Studies under direction of a faculty member. Students wishing to take this course must have their essay proposal and supervisor approved by the Canadian Studies program director. The application for enrolment should be made in the term preceding study.
Prerequisite: UNI267H1/UNI268H1
DR=None; BR=None

# University College 

## UNI420Y1 Senior Essay [48S]

Students select an appropriate research topic and, in consultation with the Program Director, make arrangements with a suitable supervisor. Preferably, research projects must be approved by the supervisor 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: Normally open only to Majors and Specialists in the Canadian Studies program or with permission of the
Program Director.
DR=None; BR=None
UNI430Y1 Senior Seminar: Special Topics in Canadian Studies [48S]
An upper level seminar. In 2012-2013 the focus of the seminar will be on Citizenship in Canada. Issues to be addressed include political community, rights and responsibilities, belonging, immigration, status, marginalization, and accessibility. Students will explore recent interdisciplinary debates on issues such as citizenship and the arts, and environmental and global citizenships. In addition, the course will offer students a unique opportunity for experiential learning in two ways: by incorporating academic service-learning into the curriculum, and by providing students with in-course leadership training.
Prerequisite: UNI320Y1 or permission of the Director of the
Canadian Studies program
DR=None; $B R=$ None
UNI425H1 Independent Research in Canadian Studies [TBA]
An opportunity to write a substantial research paper in Canadian Studies that integrates research methodologies and conceptual frameworks developed over the student's course of study. Students must have their topic and supervisor approved by the Canadian Studies program director.
Prerequisite: (UNI267H1, UNI268H1), (UNI367H1,
UNI368H1) / (UNI220Y, UNI32OY) or permission of the
Program Director
$D R=$ None; $B R=$ None

## Cognitive Science

The Cognitive Science program formerly administered by the University College has been redesigned under the auspices of the Faculty of Arts \& Science. Please refer to the Cognitive Science program: see Cognitive Science.

## Health Studies Courses

Students enrolled in the Health Studies program are given the first opportunity to enrol in these courses.

## UNI209H1 Introduction to Health: Determinants of Health \& Health Care [24L]

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 neglected and marginalized populations in Canada and globally.
DR=SOC SCI; BR=3

## UNI211H1 Health Policy in Canada (formerly UNI300Y1,

 300H1) [24L]This course introduces students to health policy in Canada. It examines the policy making process; policy making in the Canadian context, and specifically, the development of health policy in Canada. It explores current debates about health issues with a focus on the social determinants of health. Health is increasingly contentious with Canada's aging population, advancements in medical technology, and government fiscal restraints. It is a challenge to achieve the best health given the limited resources available, and to ensure that health care is fair, equal, accessible. The course will provide analytical tools for understanding health policy, offer an overview of current policy issues, and examine how to improve health policies.
Exclusion: SOC351Y1, SOC352H1, UNI300Y1, UNI300H1
DR=SOC SCI; BR=3
UNI237H1 Introduction to HIVIAIDS: Health, Sexuality and Gender [24L]
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/or Sexual Diversity Studies programs.
DR=SOC SCI; BR=3
UNI250H1 Introduction to Research Methods in Health Studies (formerly UNI200H1) [36L]
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: POL242Y1, SOC200H1, UNI200Y1/UNI200H1,

## WDW350Y1

## DR=SOC SCI; BR=None

PHS300H1 HIV Prevention Research [24L/24T]
This course engages students in in-depth learning about HIV research. In addition to learning about methods and issues from a variety of research disciplines as applied to HIV, students will be expected, with guidance, to design a study relevant to the content of the course.
Prerequisite: UNI200H1/UNI250H1/UNI237H1/SOC309Y1 or permission of instructor
Recommended Preparation: Introductory course in statistics
DR=SOC SCI/SCI; BR=3
UNI309H1 Special Topics in Health Studies [24L]
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.
DR=SOC SCI; BR=None
UNI310H1 $\begin{aligned} & \text { Emerging Issues in Health and Social Policy } \\ & \text { (formerly UNI300Y1) [24L] }\end{aligned}$
This course explores emerging issues in health and social
policies. Using the framework of social determinants of

## University College

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.
Prerequisite: UNI209H1, UNI211H1
Exclusion: UNI300Y1
DR=SOC SCI; BR=3
UNI330H1 Population Health (formerly UNI373H1) [24S]
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.
Prerequisite: STA221H1 or equivalent
Corequisite: UNI250H1
DR=SOC SCI; BR=3
UNI350Y1 Undergraduate Research Project I [48L]
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: UNI250H1, STA220H1 or equivalent DR=SOC SCI; BR=None
UNI373H1 Epidemiology (formerly UNI440H1) [24S]
This course is designed to introduce students to the principles and methods of epidemiology. 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 aggregrate data will be discussed.
Prerequisite: UNI209H1, STA221H1 or equivalent DR=SOC SCI; BR=3

## Students enrolled in the Health Studies program are given the first opportunity to enrol in these courses.

UNI409H1 Special Topics on Health Research [24S]
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.
DR=SOC SCI; BR=None
UNI411Y1 Health, Biology \& Determinants of Diseases in Neglected Populations [48L]
A critical examination of concentration of the burden of disease in marginalized communities. The prevalence, etiology, and biology of diseases; the socioeconomic, medical, and other factors that create vulnerable populations will be discussed. The challenges involved in changing the conditions that lead to unequal burden of diseases and conditions of marginalized populations will be analyzed.
Prerequisite: UNI209H1, HMB303H1
DR=SOC SCI; BR=3

## UNI440H1 Health \& Pharmaceuticals (formerly UNI330H1) [24L]

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: UNI373H1/HMB342H1/HMB323H1
Exclusion: UNI330H1
DR=SOC SCI; BR=3
UNI450Y1 Undergraduate Research Project II [48L] 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 UNI350Y1 and will further develop the skills addressed in that course. Student will prepare an undergraduate thesis by the end of this academic year.
Prerequisite: UNI250H1, STA220H1 or equivalent, UNI350Y1 DR=SOC SCI; BR=None
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 projects Principal Investigator and the Director of the Health Studies Program.
Prerequisite: UNI250H1, UNI210H1
DR=SOC SCI; BR=None
UNI464H1 The Nature of International Health [24L] Focusing on areas of particular relevance and on specific case studies, this course explores the historical, ideological, economic, political, and organizational factors that shape the theory and practice of international health (IH). Students will be encouraged to critically examine some of the central tensions embedded in this field including, among others: IH as benevolent giving vs. a practice informed by the principles of social justice; IH problems as challenges in need of costeffective technical solutions vs. complex issues requiring a comprehensive approach targeting the social determinants of health; and a traditional vision that divides the world into developed and developing countries, "here" and "there", and "us" and "them".
Prerequisite: UNI209H1, HMB303H1
DR=SOC SCI; BR=3

## 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 projects Principal Investigator and the Director of the Health Studies Program Prerequisite: UNI200H1, UNI210H1
DR=SOC SCI; BR=None

## University College

## Sexual Diversity Studies Courses <br> UNI237H1

See course description above.

## UNI255H1 History and Perspectives in Sexual Diversity [24L/12T] <br> 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? DR=HUM/SOC SCI; BR=3
## UNI256H1 Sexualities: Social, Organizational, and Legal Contexts [24L/12T]

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.
DR=SOC SCI; BR=3

## JPU315H1 Sexual Diversity Politics (formerly POL 315H) [24L]

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.
(Given by the Department of Political Science and the Sexual Diversity Studies Program at University College)
Prerequisite: UNI255H1/UNI256H1/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
Exclusion: POL315H1/POL315Y1
DR=SOC SCI; BR=3

## UNI325H1

For course description, see above.

## UNI345H1 Sex and the Epidemic: Social Work, HIV, and Human Sexuality [36L]

HIV has forever changed the way human beings understand sexuality. Through a social justice lens, this course examines the nature of community norms, laws, popular media, and the academy to explore how the epidemic has impacted the provision of social services in relation to the diversity of human sexuality.
Prerequisite: UNI255H1/UNI256H1
DR=SOC SCI; BR=3

## UNI354H1 Theories of Sexuality I: The Foundations [24L]

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/UNI256H1
DR=HUM/SOC SCI; BR=2

## UNI355H1 Theories of Sexuality II: Contemporary Perspectives [24L]

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/UNI256H1 or permission of the instructor
DR=HUM/SOC SCI; BR=2

## UNI365H1 Sexuality and Law [24L]

The course explores the legal regulation of sexuality. How does law understand, constitute and regulate sex, sexuality and sexual diversity? It will consider the role of different types of regulation, including criminal law, family law and constitutional law, and explore issues ranging from sex work and pornography to same sex marriage to transgender discrimination.
Prerequisite: POL315H1/UNI255H1/UNI256H1 or permission of the instructor
DR=HUM; BR=3

## UNI375H1 Special Topics in Sexual Diversity Studies

 [24L]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.
Prerequisite: UNI255H1/UNI256H1 or permission of the instructor
DR=HUM/SOC SCI; BR=None
UNI377H1 Lesbian Studies [24L]
This multidisciplinary course examines 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: UNI255H1/UNI256H1
DR=HUM/SOC SCI; BR=3

## UNI455H1 Special Topics in Sexual Diversity Studies [24S]

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.
Prerequisite: UNI255H1/UNI256H1
Recommended Preparation: POL315H1/UNI354H1/ UNI355H1
DR=HUM/SOC SCI; BR=None
UNI458H1 Research Essay in Sexual Diversity [24S]
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: UNI255H1, UNI256H1
DR=HUM; BR=None
UNI459Y1 Honours Essay in Sexual Diversity [48S]
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

## University College

and supervisor subject to the approval of the SDS Program Director.
Prerequisite: UNI255H, UNI256H
DR=HUM; BR=None

## UNI460H1 Advanced Research in Sexual Diversity Studies [24S]

A capstone for majors and specialists who will work closely with SDS faculty in developing their own research project while participating in this seminar and learning about key debates, methodologies, and ethical issues in conducting research in SDS. Students will learn to write proposals ethics reviews, grants and other relevant documents.
Prerequisite: UNI255H1/UNI256H1 and one 300-level SDS course
DR=SOC SCI; BR=3

## UNI470H1 Sexual Aesthetics/Sexual Representations [24S]

This course explores the history, culture, and aesthetics of sexual representations. Is there a difference between erotica and pornography? How do debates about artistic merit and censorship relate to larger issues of power, capitalism, and technology? How are sexual desires and identities increasingly shaped around those sexual representations? Prerequisite: UNI255H1/UNI256H1 and at least 1.0FCE in SDS at the 300-level
Exclusion: UN1475H1, Special Topics: Porn Studies
Recommended Preparation: UNI365H1/WDW387H1 DR=HUM; BR=1
UNI475H1 The New Queer Visibility [24S]
This interdisciplinary course critically examines the sociopolitical 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/UNI256H1 and UNI355H1 or permission of the instructor
DR=HUM/SOC SCI; BR=3

## UNI477H1 Transgender Studies [24S]

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: UNI255H1/UNI256H1
DR=HUM/SOC SCI; BR=3

## Other University College Courses

## JUM202H1 Mathematics as an Interdisciplinary Pursuit

 (formerly JUM102H1) [24L/12T]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). JUM202H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.
Exclusion: JUM102H1
DR=SCI; BR=5

## JUM203H1 Mathematics as a Recreation (formerly JUM103H1) [24L/12T

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)
JUM203H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.
Exclusion: JUM103H1

## DR=SCI; BR=5

## JUM204H1 Mathematics and Poetry [36L]

An interdisciplinary exploration of creativity and imagination as they arise in the study of mathematics and poetry.
(Offered every three years)
JUM204H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.
Exclusion: MEJ204H1
DR=SCI; BR=5

## JUM205H1 Mathematical Personalities (formerly JUM105H1) [24L/12T]

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)
JUM205H1 is particularly suited as a Science Distribution Requirement course for Humanities and Social Science students.
Exclusion: JUM105H1
DR=SCI; BR=5

## JUC299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33. Offered by the Centre for Comparative Literature in collaboration with University College.
DR=HUM; BR=None

## UNI299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
BR=None

## UNI393Y1 University College Independent Studies [TBA]

An opportunity to design an independent research course of study at the 300 level not otherwise available within the Faculty. Normally, students will have a minimum cGPA of 3.0 and have completed 10 FCEs. Permission of a faculty supervisor and approval by the Vice-Prinicipal are required. Those registered in a UC program should submit a written proposal and application form to the approval. UC students enrolled in non-UC programs can submit their application directly to the Vice-Prinicpal. Applications for Y and F courses are due by 1 June prior to the academic year; S courses to be submitted by 1 September. Application form is available at the University College Programs Office. Prerequisite: Permission of University College Vice-Principal DR=None; BR=None

UNI394H1 University College Independent Studies
[TBA]
An opportunity to design an independent research course of study at the 300 level not otherwise available within the Faculty. Normally, students will have a minimum cGPA of 3.0 and have completed 10 FCEs. Permission of a faculty supervisor and approval by the Vice-Prinicipal are required. Those registered in a UC program should submit a written proposal and application form to the approval. UC students enrolled in non-UC programs can submit their application directly to the Vice-Prinicpal. Applications for Y and F courses are due by 1 June prior to the academic year; $S$ courses to be submitted by 1 September. Application form is available at the University College Programs Office.
Prerequisite: Permission of University College Vice-Principal DR=None; BR=None

## UNI495Y1 University College Independent Studies [TBA]

An opportunity to design an independent research course of study at the 400 level not otherwise available within the Faculty. Normally, students will have a minimum cGPA of 3.0 and have completed 15 FCEs. Permission of a faculty supervisor and approval by the Vice-Prinicipal are required. Those registered in a UC program should submit a written proposal and application form to the approval. UC students enrolled in non-UC programs can submit their application directly to the Vice-Prinicpal. Applications for Y and F courses are due by 1 June prior to the academic year; S courses to be submitted by 1 September. Application form is available at the University College Programs Office. Prerequisite: Permission of University College Vice-Principal DR=None; $B R=$ None

## UNI496H1 University College Independent Studies [TBA]

An opportunity to design an independent research course of study at the 400 level not otherwise available within the Faculty. Normally, students will have a minimum cGPA of 3.0 and have completed 15 FCEs. Permission of a faculty supervisor and approval by the Vice-Prinicipal are required. Those registered in a UC program should submit a written proposal and application form to the approval. UC students enrolled in non-UC programs can submit their application directly to the Vice-Prinicpal. Applications for Y and F courses are due by 1 June prior to the academic year; S courses to be submitted by 1 September. Application form is available at the University College Programs Office. Prerequisite: Permission of University College Vice-Principal DR=None; BR=None

## Victoria College

## Faculty

## Professors Emeriti

A. Baines, MD, PhD (Vic One)
V. Falkenheim, PhD (Vic One, Pathways)
E. Kushner, PhD (Renaissance Studies)

## Professors

K.R. Bartlett, MA, Ph D (Renaissance Studies)
R. Comay, PhD (Literary Studies)
D.B. Cook, MA, PhD (Program Director)
P. Corey, MA, PhD (Vic One)
M. Danesi, MA, PhD FRSC (Semiotics)
K. Eisenbichler, MA, PhD, Commend. OMRI (V)
(Renaissance Studies)
P.W. Gooch, MA, PhD (Pathways)
I. Kalmar, MA, PhD (Vic One)
M. Nyquist, MA, PhD (Literary Studies)
N. Terpstra, MA, PhD (Renaissance Studies)

## Associate Professors

B. Baigrie, PhD (Vic One)
E. Cazdyn, PhD (Literary Studies)
J.W. Patrick, MA, PhD (Literary Studies)
L. Somigli, PhD (Literary Studies)

## Assistant Professors

S. Cook, EdD (Vic One)
A. Komaromi, MA, PhD (Literary Studies)

Senior Lecturers
C. Cunningham, PhD (Pathways)
J. Levine, MA, Ph D (Literary Studies)
M. Scarci, PhD (Renaissance Studies)
A. Urbancic, MA, PhD (Vic One)

## Special Lecturers

P. Harris (Vic One)
A. Moritz, MA, PhD (Vic One and Creative Writing) Visiting Professors
D. Gilmour, (Pelham Edgar Professor - Vic One)
D. Wright, BSc, MBA (Kenneth and Patricia Taylor Distinguished Professor of Foreign Affairs - Vic One)
Victoria College (Vic) is committed to providing students with a personal and inclusive University experience inside and outside the classroom. This is an environment where students and teachers are committed to building a community that welcomes diversity, embraces creativity and is energized by challenge.

At Vic, we nurture a close-knit learning community from the very beginning of your academic career. Whether it is through our Vic One program, Vic First Pathways or the 199Y courses offered by the Faculty of Arts and Science, every first-year Victoria College student is required to enroll in a seminar course. You will experience here the academic advantages of being a student of one of Canada's leading universities and the intimacy of a small liberal arts college.

## 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. Five streams with differing emphasis are available in this foundation year program, known as Vic One. They are named in honour of
five respected Canadian leaders, all Victoria College alumni. The Frye stream, named after former Victoria College professor and distinguished literary critic Northrop Frye, focuses on the humanities. The Norman Jewison stream, named after former Victoria University Chancellor and celebrated film director is oriented towards the imagination and the arts. The Pearson stream, named after former Canadian Prime Minister Lester Pearson is concerned with the social 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 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 sciences. The five streams feature seminars, lectures, small tutorials and informal conversation, and are enriched by weekly plenary sessions with guest professors, visiting artists, writers, ambassadors and other public figures.
Each Vic One stream comprises up to 3 FCEs of the five FCEs taken by most first year students. Two required courses in each stream are seminar courses given by faculty of Victoria College. They have a limited enrolment of 25 students in each class. The third co-requisite course is listed with each course description. Students who wish to discuss other options for their Vic One co-requisite course must contact the coordinator of their stream or the Vic One Liaison Officer vic.one@utoronto.ca for approval.

Vic One enrolment is limited to a total of 200 students over 5 streams of study. It requires an application that is found on the Vic One web site (www.vic.utoronto.ca/academics/ vicone). 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 (excluding Commerce and Computer Science). Admission decisions are made based on extra-curricular activities, a short original essay and the student's entering grades.

PLEASE NOTE: Vic One students are not eligible to enrol in Pathway Seminar courses, FLCs or 199Y first-year seminars.

## Vic Pathways: Studies for First Year

Vic Pathways is a Victoria College initiative that offers first-year Arts and Science students the opportunity to experience a small class environment. These small enrolment Vic-sponsored courses facilitate close contact with distinguished teaching faculty and fellow students, while providing an excellent gateway to, and foundation for, subsequent studies.

Vic Pathways also offers students a chance to share a common avenue of academic learning by adding extra value through a number of specially programmed out-of-class activities. Vic Pathways is open to all first-year students in the Faculty of Arts and Science.
PLEASE NOTE: Pathway Seminar courses are NOT open to students enrolled in the Vic One program or 199Y first-year seminars.

Enrolment in a first-year seminar course (199s and Pathways) is limited to 1.0 FCE. Students may take a combination of Pathway and 199 H seminars as long as enrolment does not exceed 1.0 FCE.

## Concurrent Teacher Education Program

(Joint BA/BSc/BEd) prepares students for a career in primary/junior teaching as well as encourages students to follow an Arts and Science program of study focused on the urban environment. The Program began in 2008 with entry in second year. Students in first year should consider the Ryerson Stream of Vic One as preparation. Enrolment in the Concurrent Teacher Education Program is limited to 30 students.

Concurrent Education offers students the opportunity to complete the BA/BSc degree and the BEd simultaneously. The program is offered in partnership with OISE. Complete description of the program may be found on www.utoronto. ca/ctep. Admission into the Program is by application starting in early April and ending mid-May.

## 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 Cultural Theory (Specialist and Major). Students may also enroll in the Minor program.
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.)

## Material Culture

The program engages students in the study of material culture (tangible things, broadly defined); supports research projects which originate with studies of artefacts; and fosters trans-disciplinary and inter-institutional dialogues amongst students, scholars, stewards and purveyors of material culture - within the university and at a range of cultural agencies. Students will work with curators and other professionals to analyze the social and cultural relevance of objects as part of understanding of a culture or society. For example, by examining various trends in fashion this may give an insight into how a culture expresses itself as well as how individuals gain their identity. The Minor is designed to complement programs in such disciplines as Asian Studies, Near and Middle Eastern Studies, Geography, History, Art, History of Science and Technology, Semiotics, Renaissance Studies and Anthropology. The Major or Specialist programs will form the base from which the study of material culture will draw to allow the student to work with objects that may form part of the curriculum of their subject concentrations.

## 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

(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.

## Victoria College Programs

## Concurrent Teacher Education Program (CTEP)

Program Coordinator: Professor Sheila Cook
CTEP is an integrated curriculum sponsored jointly by Victoria College in the Faculty of Arts \& Science and by the Ontario Institute for Studies in Education, leading to two degrees over a five-year program: the Honours Bachelor of Arts and the Bachelor of Education. (See CTEP details on p . 30). The Victoria College CTEP program is designed for students wishing to teach at the primary/junior level (K-6), particularly in urban schools. Teacher candidates will be provided with teacher training and knowledge of the urban environment. As part of their academic requirements students will complete various placements in Toronto schools.
Admission to the Victoria College CTEP program means admission to the Minor in Education and Society and to the set of courses leading to the BEd. This is a limited enrolment program that can only accommodate a specific number of students.

## Application and Eligibility

To apply to this program students must:
have completed at least 4.0 FCEs, including PSY100H1; have completed at least 0.5 FCE from the courses listed in \#2 below;
have a minimum CGPA of 2.50;
completed the applicant profile.
Please note that having the minimum to apply does not guarantee acceptance into the program in any given year. All Arts \& Science students are eligible to apply regardless of college. The application process occurs each year from early April to mid-May.

## Requirement of Concurrent Teacher Education Program for BA/BSc/BEd 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 BEd courses and associated requirements. CTEP students may fulfill the remaining major or minor for the BA/BEd degree as they wish. It is not recommended for Concurrent Education students to enrol in specialist programs as they must leave sufficient space in their upper years to complete the concurrent BEd requirements.

NOTE: The academic status of students in CTEP may be reviewed at the end of each fall-winter session to determine progress to the next year.

## Minor in Education and Society (CTEP) (Arts Program)

The minor in Education and Society is open only to students registered in the Victoria College Concurrent Teacher Education Program.
(4 full courses or their equivalent, including at least one 300+ series course)
PSY100H1
An additional half-year or full-year first year course selected from ANT100Y1, SOC101Y1, SOC102H1, SOC103H1 or GGR124H1. Vic One Ryerson students may satisfy this requirement with either VIC150Y1 or VIC151Y1.
VIC260H1 Equity and Diversity in Education;
VIC261H1 Child and Adolescent Development in Education;
JSV200H1 Communication and Conflict Resolution
VIC360H1 Concurrent Teacher Education Program Internship
One full credit 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 Vic Concurrent Education Coordinator.

## Literary Studies Programs

Program Coordinators: Professor E. Cazdyn and Professor R. Comay

Enrolment in the Literary Studies program is open to students upon completion of 4.0 courses.
The Literary Studies programs are based on a pair of ideas. The first is that many of the most important and interesting issues that engage our attention call for a multi-disciplinary approach. Second, that the kind of critical analysis demanded by the study of literary texts offers powerful tools for investigating cultural and social forms of the past and present. Central to the program is the comparative study of forms of representation-texts, media, institutions, and theories, in diverse cultures and historical periods. This requires thinking about what it means to compare and what it means to translate.

Both the Specialist and the Major programs have two streams: the Comparative Literature Stream and the Cultural Theory Stream. The Comparative Literature stream emphasizes literary analysis and the problem of comparison, and it involves intensive language training. The Cultural Theory stream emphasizes a critical approach to literary and non-literary forms. Students in this stream combine core courses with a selection of relevant courses in another discipline. The Minor program in Literary Studies offers students an introduction to the ideas and methodologies of the field.
One of the unique strengths of the LS Specialist and the Major programs is that students in both streams work in at least one foreign language of their choosing and design the elective component of their program from a wide range of humanities courses in close consultation with the program
coordinators. For example, a student in the Cultural Theory stream might choose to supplement the LS requirements with courses in cinema studies, history, or drama. This is what produces the unique combination of interdisciplinary breadth, conceptual focus, and independent initiative that distinguishes the program. Extensive counseling is for this reason an integral part of the programs.
Note: Since the new version of LS starting in 2011-12 is substantially different than the preceding program, students enrolled in the program prior to 2011-12 should be advised of the following equivalencies:

Old VIC201Y1 = new VIC202Y1
Old VIC210Y1 = new VIC203Y1
Old VIC311H1 = new VIC402H1
Old VIC300H/VIC301H1/VIC309H1/VIC310H1/ VIC411H1 = any 300-series course in the new program
Old VIC410Y1/VIC410H1 = any 400-level course in the new program except VIC402H1
Students enrolled as of 2011-12 must satisfy the new program requirements.

## Literary Studies Specialist in the Comparative Literature Stream (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(12.5 FCEs, including at least 4.0 at the 300 -level, 1.0 of which must be at the 400-level course)

First year in program: VIC202Y1
First or second year in program: VIC203Y1
Second or higher years in program
3.5 FCEs from VIC204H1, VIC302H1, VIC303H1, VIC304H1, VIC305H1, VIC306H1, VIC307H1, VIC401H1/VIC401Y1, VIC403H1, VIC490Y1, JNV300H1.
0.5 FCE from Breadth Category 5: The Physical and Mathematical Universes or other courses approved by the program coordinator to fulfil the Quantitative Reasoning requirement
VIC402H1
6.0 FCEs in languages or literatures drawn from other departments, approved by the program coordinator. At least 4.0 of these involve reading texts in a language other than English, including at least 2.0 at the 300+ level.

## Literary Studies Major in the Comparative Literature Stream (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(7.5 FCEs, including at least 2.0 at the 300 -level, 0.5 of which must be at the 400 -level course)
First year in program: VIC202Y1
First or second year in program: VIC203Y1
Second or higher years in program
2.5 FCEs from VIC204H1, VIC302H1, VIC303H1,

VIC304H1, VIC305H1, VIC306H1, VIC307H1,
VIC401H1/VIC401Y1, VIC403H1, VIC490Y1, JNV300H1.
0.5 FCE from Breadth Category 5: The Physical and Mathematical Universes or other courses approved by the program coordinator to fulfil the Quantitative Reasoning requirement
VIC402H1
2.0 FCEs in a language or literature drawn from other departments, approved by the program coordinator, where texts are read in a language other than English. At least 1.0 FCE must be at the $300+$ level.

## Literary Studies Specialist in the Cultural Theory Stream (Arts program)

Enrolment in this program requires the completion of 4.0 courses.
(12.5 FCEs, including at least 4.0 at the 300 -level, 1.0 of which must be at the 400-level course)
First year in program: VIC202Y1
First or second year in program: VIC203Y1
Second or higher years in program
3.5 FCEs from VIC204H1, VIC302H1, VIC303H1, VIC304H1, VIC305H1, VIC306H1, VIC307H1, VIC401H1/VIC401Y1, VIC403H1, VIC490Y1, JNV300H1.
0.5 FCE from Breadth Category 5: The Physical and Mathematical Universes or other courses approved by the program coordinator to fulfil the Quantitative Reasoning requirement

## VIC402H1

4.0 FCEs in another discipline approved by the program coordinator.
2.0 FCEs in a language other than English, approved by the program coordinator, including at least 1.0 at the 300+ level.

## Literary Studies Major in the Cultural Theory Stream (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(7.5 FCEs, including at least 2.0 at the 300 -level, 0.5 of which must be at the 400-level course)
First year in program: VIC202Y1
First or second year in program: VIC203Y1
Second or higher years in program
2.5 FCEs from VIC204H1, VIC302H1, VIC303H1, VIC304H1, VIC305H1, VIC306H1, VIC307H1, VIC401H1/VIC401Y1, VIC403H1, VIC490Y1, JNV300H1.
0.5 FCE from Breadth Category 5: The Physical and Mathematical Universes or other courses approved by the program coordinator to fulfil the Quantitative Reasoning requirement
VIC402H1
1.0 FCE in a language other than English at the 200+ level, approved by the program coordinator.
1.0 FCE in another discipline approved by the program coordinator.

## Literary Studies Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 FCEs or their equivalent, including at least 1.0 at the 300+ level)
VIC202Y1
3.0 FCEs from: VIC203Y1, VIC302H1, VIC303H1, VIC304H1, VIC305H1, VIC306H1, VIC307H1, VIC401H1/VIC401Y1, VIC402H1, VIC403H1, JNV300H1.

## Material Culture Minor (Arts program)

What does it mean to live in a "material world"? What might we learn from studying the things that surround us? In an increasingly consumer-oriented, globalized and digital age, how do objects express the longstanding beliefs and values of different societies? Material culture is the study of objects - clothing, household goods, machinery, built forms - that show signs of human influence. The program engages students in the study of material culture (tangible things, broadly defined); supports research projects which originate with studies of artefacts; and fosters trans-disciplinary and inter-institutional dialogues amongst students, scholars, stewards and purveyors of material culture - within the university and at a range of cultural agencies. We examine the meanings people invest in their things, across cultures and time periods, and consider processes of production and consumption, including moments of invention, exchange, use, re-use, divestment, disposal, and collection. Students will work with curators and other professionals to analyze the social and cultural relevance of objects as part of understanding of a culture or society. The Minor is designed to complement Major programs in such disciplines as Asian Studies, Near and Middle Eastern Studies, Geography, History, Art, History of Science and Technology, Semiotics, Renaissance Studies, and Anthropology.
This is a limited enrolment program by permission of the program coordinator, please contact vic.academics@ utoronto.ca
(4 full courses or their equivalent including at least 1 FCE at the 300+-level)
1.0 FCE from: ANT100Y1, FAH101H1, VIS120H1, a firstyear HIS, Vic One, or other relevant courses approved by the program coordinator.
VIC224Y1
1.5 FCE from the list of approved cognate courses or by permission of program coordinator with at least 0.5 FCE at the third- or fourth-year level
VIC444H1

## Cognate courses:

ANT200Y1, ANT204H1, ANT311Y1, ANT314H1, ANT315H1, ANT317H1, ANT322H1, ANT324H1, ANT346H1, ANT347Y1, ANT359H1, ARH305H1, ARH309H1, FAH101H1,
FAH206H1, FAH207H1, FAH215H1, FAH216H1, FAH230H1, FAH231H1, FAH246H1, FAH260H1, FAH262H1, FAH270H1, FAH272H1, FAH300H1, FAH303H1, FAH304H1, FAH304H1, FAH309H1, FAH310H1, FAH316H1, FAH318H1, FAH325H1, FAH327H1, FAH328H1, FAH330H1, FAH331H1, FAH331H1, FAH341H1, FAH348H1, FAH362H1, FAH364H1, FAH365H1,
FAH371H1, FAH372H1, FAH373H1, FAH374H1, FAH375H1, FAH376H1, FAH381H1, FAH463H1, FAH480H1, FAH481H1,

## Victoria College

FAH483H1, FAH484H1, FAH485H1, FAH486H1, EAS406Y1, EAS251H1, EAS272H1, EAS297H1, EAS272H1, EAS297H1, EAS318H1, EAS378H1, EAS411H1, EAS412H1, GGR107H1, GGR124H1, GGR216H1, JGI216H1, GGR220H1, GGR221H1, GGR240H1, GGR241H1, GGR246H1, GGR252H1,GGR254H1, GGR320H1, GGR329H1, GGR332H1, GGR333H1, GGR336H1, GGR339H1, GGR341H1, GGR342H1, GGR343H1, GGR352H1, GGR356H1, GGR360H1, GGR361H1, GGR363H1, GGR366H1, HIS302H1, HIS305H1, HIS315H1, HIS319H1, HIS363H1, HIS387H1, HIS316H1, HIS329H1, HIS374H1, HIS484H1, HPS201H1, HPS202H1, HPS201H1, HPS211H1, HPS307H1, HPS313H1, NMC260Y1, NMC360H1, NMC362Y1, NMC363H1, NMC364H1, NMC365Y1, VIC349H1, VIC348Y1

## Renaissance Studies Programs

Program Coordinator: Professor M. Scarci, Victoria College The Renaissance Studies Program lets you study one of the most critical periods in European and world history. Changes in art and literature, in social and political development, and in technology and science transformed European concepts of the individual, society, and the world.

Many aspects of our modern world had their origin in this period: our emphasis on the study of human affairs; our irrepressible interest in the exploration of the universe, in science, and in medicine; the institutions of church and state as we know them today. The Renaissance is also a period of unparalleled European contacts with non-European civilizations - from the powerful Islamic world of the Near East and North Africa to the great pre-Columbian civilizations of the Americas, from the uncharted forests of equatorial Africa to the exotic lands of the Indian subcontinent and the Far East, nothing seemed too distant or too inaccessible for the European mind or merchant.

It is an 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.

## Renaissance Studies Specialist (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent, including at least three $300+$ series courses and one 400-level course):

## VIC440Y1

3.0 FCEs from: VIC240Y1, VIC341H1, VIC342H1, VIC343Y1, VIC344H1, VIC345H1, VIC347H1, VIC348Y1, VIC349H1/Y1.
1.0 FCE in Literature from: ENG220Y1, ENG301H1, ENG302Y1, ENG303H1, ENG304Y1, ENG330H1, ENG331H1, ENG335H1, ENG336H1; FRE319H1, FRE320H1; ITA249H1, ITA312H1, ITA325H1, ITA332H1, 356H1/Y1, 357Y1, ITA370H1, ITA409H1, ITA420H1, ITA470H1, ITA494H1; PRT351H1; SPA352H1, SPA452H1, SPA454H1.
1.0 FCE in History or Economics from : ECO301Y1; HIS243H1, HIS309H1, HIS319H1, HIS357Y1, HIS362H1, HIS403H1, HIS438H1, HIS441H1, HIS443H1/HIS443Y1.
1.0 FCE in Art or Music from: FAH230H1, FAH330H1, FAH331H1, FAH333H1, FAH335H1, FAH339H1, FAH340H1, FAH341H1, FAH342H1, FAH344H1, FAH370H1, FAH371H1, FAH393Y1, FAH430H1, FAH432H1, FAH438H1, FAH439H1, FAH440H1, FAH493H1; MUS208H1.
One Research Course (a 299Y1, 399Y1, or Independent Studies course on a topic in Renaissance studies approved by Program Coordinator)
2.0 FCEs in a language relevant to Renaissance Studies (only one may be at the introductory level).

## Renaissance Studies Major (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(6 full courses or their equivalent, including at least two 300+ series courses)
VIC440Y1
2.0 FCEs from: VIC240Y1, VIC341H1, VIC342H1, VIC343Y1, VIC344H1, VIC345H1, VIC347H1/Y1, VIC348Y1, VIC349H1/Y1, VIC449H1/Y1.
1.0 FCE in Literature from: ENG220Y1, ENG301H1, ENG302Y1, ENG303H1, ENG304Y1, ENG330H1, ENG331H1, ENG335H1, ENG336H1; FRE319H1, FRE320H1; ITA249H1, ITA312H1, ITA325H1, ITA332H1, 356H1/Y1, 357Y1, ITA370H1, ITA409H1, ITA420H1, ITA470H1, ITA494H1; PRT351H1; SPA352H1, SPA452H1, SPA454H1
1.0 FCE in History or Economics from : ECO301Y1; HIS243H1, HIS309H1, HIS319H1, HIS357Y1, HIS362H1, 403H1, HIS438H1, HIS441H1, HIS443H1/ HIS443Y1.
1.0 FCE in Art or Music from: FAH230H1, FAH330H1, FAH331H1, FAH333H1, FAH335H1, FAH339H1, FAH340H1, FAH341H1, FAH342H1, FAH344H1, FAH370H1, FAH371H1, FAH393Y1, FAH430H1, FAH432H1, FAH438H1, FAH439H1, FAH440H1, FAH493H1; MUS208H1.

## Renaissance Studies Minor (Arts Program)

Enrolment in this program requires the completion of 4.0 courses.
(4 full courses or their equivalent, including at least one 300+ series course)

1. 2.0 FCEs from: VIC240Y1, VIC341H1, VIC342H1, VIC343Y1, VIC344H1, VIC345H1, VIC347H1/Y1, VIC348Y1, VIC349H1/Y1, VIC440Y1, VIC449H1/Y1
2. 2.0 FCEs in Literature, History or Economics, Art or Music, from:
Literature: ENG220Y1, ENG301H1, ENG302Y1, ENG303H1, ENG304Y1, ENG330H1, ENG331H1, ENG335H1, ENG336H1; FRE319H1, FRE320H1; ITA 249 H 1, ITA 312 H 1 , ITA325H1, ITA $332 \mathrm{H} 1,356 \mathrm{H} 1 /$ Y1, 357Y1, ITA370H1, ITA409H1, ITA420H1, ITA470H1, ITA494H1; PRT351H1; SPA352H1, SPA452H1, SPA454H1.
History or Economics: ECO301Y1; HIS243H1, HIS309H1, HIS319H1, HIS357Y1, HIS362H1, HIS403H1, HIS438H1, HIS441H1, HIS443H1/HIS443Y1 Art or Music: FAH230H1, FAH330H1, FAH331H1, FAH333H1, FAH335H1, FAH339H1, FAH340H1, FAH341H1, FAH342H1, FAH344H1, FAH370H1,

## Victoria College

FAH371H1, FAH393Y1, FAH430H1, FAH432H1, FAH438H1, FAH439H1, FAH440H1, FAH493H1; MUS208H1.

## Semiotics and Communication Theory Minor (Arts Program)

Program Director, Principal D. Cook, Victoria College.
Program Coordinator, Professor M. Danesi, Victoria College.
NOTE: This is a limited enrolment program that can only accommodate a limited number of students. Admission will be determined by a student's mark in ANT100Y1/LIN100Y1/ PHL100Y1/PHL102Y1/SOC101Y1/(SOC102H1+SOC103H1)/ one FCE in Vic One. A final mark of $73 \%$ will be required for admission. Achieving that mark does not necessarily guarantee admission to the program in any given year.
( 4 full courses or their equivalent, including at least one $300+$ series course)
1.0 FCE from: ANT100Y1, LIN100Y1, PHL100Y1, PHL102Y1, SOC101Y1, (SOC102H1+SOC103H1), one FCE in Vic One.
2.0 FCEs from: VIC220Y1, VIC223Y1, VIC224Y1, VIC320Y1 and VIC323Y1.
1.0 FCE from Groups A-E.

Note: JFV323H1 is a recommended Group E course.

## Group A: Anthropology

ANT204Y1, ANT253H1, ANT322H1, ANT323H1/ANT323Y, ANT328H1, ANT329Y1, ANT334Y1, ANT351H1, ANT356H1, ANT366Y1, ANT425H1, ANT426H1, ANT427H1, ANT450H1, ANT461H1; JAL253H1, JAL328H1, JAL355H1, JAL356H1

## Group B: Linguistics

LIN200H1, LIN229H1, LIN231H1, LIN232H1, LIN315H1, LIN341H1, LIN372H1, LIN415H1, LIN417H1, LIN480H1; JAL254H1, JAL328H1; JLP306H1, JLP315H1, JLP374H1

## Group C: Philosophy

PHL200H1, PHL201H1, PHL220H1, PHL235H1, PHL236Y1, PHL240H1, PHL243H1, PHL244H1, PHL245H1, PHL250H1, PHL255H1, PHL267H1, PHL285H1, PHL288H1, PHL304H1, PHL305H1, PHL306H1, PHL307H1, PHL310H1, PHL311H1, PHL312H1, PHL315H1, PHL316H1, PHL318H1, PHL320H1, PHL321H1, PHL322H1, PHL325H1, PHL326H1, PHL340H1, PHL342H1, PHL346H1, PHL351H1, PHL385H1; JUP250Y1

## Group D: Psychology

PSY210H1, PSY220H1, PSY260H1, PSY270H1, PSY280H1, PSY300H1, PSY301H1, PSY311H1, PSY312H1, PSY316H1, PSY320H1, PSY323H1, PSY325H1, PSY334H1, PSY362H1, PSY370H1, PSY371H1, PSY372H1; JLP315H1

## Group E: Other Related Area Courses

CLA202H1, CLA203H1, CLA204H1, CLA219H1, CLA305H1, DRM200Y1, DRM230Y1, DRM260H1, DRM262H1,
DRM264H1, DRM266H1, ENG290Y1, ENG366Y1,
FAH212H1, FAH214H1, FAH287H1, FAH288H1, FAH367H1, FAH378H1, FAH385H1, HIS316H1, HIS367H1, HIS374H1, HIS375H1, HIS419H1, HPS201H1, HPS202H1, HPS250H1, HPS323H1, HPS324H1, INI212Y1, INI214Y1, INI225Y1, INI301Y1, INI322H1, INI323Y1, INI327Y1, INI329Y1, INI330Y1, INI423H1, INI426H1, INI428H1, JFV323H1, JUM200Y1, MUS200H1, MUS211H1, MUS303H1,

NEW240Y1, NEW261Y1, NEW271Y1, NEW302Y1, NEW303H1, NEW360Y1, NEW368H1, NEW371H1, NEW372H1, POL213Y RLG200Y1, RLG210Y1, RLG211Y1, RLG230Y1, RLG232H1, RLG233H1, RLG237Y1, RLG301H1, RLG302H1, RLG304H1, RLG315H1, RLG380H1, SLA495H1, SMC210Y1, SMC402H1, SOC365Y1, SOC367H1, SOC381Y1, SOC388H1, UNI221H1, UNI250Y1, UNI255H1, UNI355H1, VIC210Y1, VIC211Y1, VIC300Y1, VIC310Y1, VIC322H1, VIC343Y1, VIC345Y1, VIC410Y1, VIC411Y1, VIS201H1, VIS202H1, VIS203H1, VIS204H1, VIS205H1, VIS206H1, VIS207H1, VIS208H1, VIS209H1, VIS212H1, VIS213H1, VIS307H1, VIS312H1, VIS313H1, VIS315H1, VIS316H1.

## Victoria College Courses

## Vic One

Vic One Liaison Officer, Victoria College, vic.one@utoronto. ca
Admission to the Vic One Program is open to first year students and by application only. Applications are accepted in the Spring prior to the commencement of the academic year, no exceptions will be made.
Each Vic One stream comprises up to 3 FCEs of the five FCEs taken by most first year students. Two required courses in each stream are seminar courses with a limited enrolment of 25 students in each class. The third co-requisite course is listed with the course description. Students who wish to discuss other options for their Vic One co-requisite course must contact the Vic One Liaison Officer vic.one@ utoronto.ca.
The following courses are available to students already admitted to Vic One:

## Egerton Ryerson Stream

VIC150Y1 School and Society (formerly INX199Y1, The University and Society)
This course will be about the social and historical role of the school. The course will examine schools and learning as social, political, intellectual, and economic phenomena.
Prerequisite: Admission to Vic One
Corequisite: VIC151Y1 and PSY100H1
Exclusion: 199 seminars, Vic Pathways, FLCS, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=SOC SCI; BR=3
VIC151Y1 Theories and Practices of Teaching This course focuses on connecting theories and practice of teaching with a view to having students develop their personal understanding of teaching. Students will be involved in a practicum.
Prerequisite: Admission to Vic One
Corequisite: VIC150Y1 and PSY100H1
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis
One, New One, St. Mike's One, Trinity One, UC One,
Woodsworth ONE
DR=HUM; BR=2

## 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, literature, architecture, and/or local urban artifacts
Prerequisite: Admission to Vic One
Corequisite: VIC163H1, VIC164H1, VIC165H1; 1 FCE in any 100-level ENG or FAH or PHL
Exclusion: 199 Seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE

## DR=HUM; BR=1

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.
Prerequisite: Admission to Vic One
Corequisite: VIC162H1, VIC164H1, VIC165H1 \& 1 FCE in any 100-level ENG or FAH or PHL
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=HUM; BR=1
VIC164H1 Ideas and Their Consequences: Literary and Artistic Realms of the Imagination
A study of the ideas and concerns of creative thinkers and their impact upon cultures. The course includes literary, scientific and/or religious intellectuals from the major traditions. Attention to modes of reasoning, cultural definition and expression. Emphasis on philosophical and artistic concepts.
Prerequisite: Admission to Vic One
Corequisite: VIC165H1, VIC162H1, VIC163H1 \& 1 FCE in any 100-level ENG or FAH or PHL
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE

## DR=HUM; BR=1

VIC165H1 Ideas and Their Consequences: Isolation and Communion in Modern Culture
A study of art, with a focus on poetry, as an essential mode of experience and knowledge, in the context of contemporary and modern society. Along with literary artists, the course includes writers on history and sociology and presents the interplay between artistic vision and socio-political situations. Prerequisite: Admission to Vic One
Corequisite: VIC162H1,VIC163H1, VIC164H1 \& 1 FCE in any 100-level ENG OR FAH OR PHL
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=HUM; BR=1

## Jewison Stream

## VIC190Y1 The Arts and Society

The artist, filmmaker, poet or dramatist has changed society and how we imagine our future. The course explores a number of paradigm cases of how the arts have interacted
with social problems. Both historical and current examples of the role of the imaginative arts will be explored.
Prerequisite: Admission to Vic One
Corequisite: VIC191Y1 and 1.0 FCE in any 100-level course in ARC or INI or DRM or VIS or MUS or ENG
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=HUM; BR=1

## VIC191Y1 Artistic Creation and Public Issues

This is a project course addressing social issues by creative activity such as writing a play, a novel, a short film or an art installation. Topics might be considered either in a group or individually. Mentors will aid student projects. An open presentation will conclude the course.
Prerequisite: Admission to Vic One
Corequisite: VIC190Y1 and 1.0 FCE in any 100-level course in ARC or INI or DRM or VIS or MUS or ENG
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE

## DR=HUM; BR=1

## Pearson Stream

VIC181H1 Events and the Public Sphere: World Affairs
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.
Prerequisite: Admission to Vic One
Corequisite: VIC183H1, VIC184H1, VIC185H1, and a firstyear course in HIS or POL
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=SOC SCI; BR=3
VIC183H1 Individuals and the Public Sphere: Shaping Memory
This course explores how public service and citizenship are developed. Topics may include the role of law and government, civil liberties, rights and responsibilities, and the role of protest. Emphasis on individuals and movements that have shaped modern memory.
Prerequisite: Admission to Vic One
Corequisite: VIC181H1, VIC184H1, VIC185H1 \& a first-year course in HIS or POL
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=SOC SCI; BR=3
VIC184H1 Individuals and the Public Sphere: History, Historiography and Making 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 social, philosophical, and cultural contexts. We will examine our evolving role in developing collective, cultural and counter memory.

Prerequisite: Admission to Vic One
Corequisite: VIC181H1, VIC183H1, VIC185H1 and a firstyear course in HIS or POL
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=SOC SCI; BR=3
VIC185H1 Events in the Public Sphere: Social Justice
This course uses events to discuss the nature of society including major revolutions, economic crises, and the impact of significant artistic, cultural and technological developments. Emphasis on our responsibilities towards social justice.
Prerequisite: Admission to Vic One
Corequisite: VIC181H1, VIC183H1, VIC184H1 and a firstyear course in HIS or POL
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=SOC SCI; BR=3

## Stowe-Gullen Stream

VIC170Y1 Introduction to Probability, Persuasion and the Rhetorics of Science
How rhetoric and statistical analysis are used to communicate scientific observations and theories to different audiences will be examined in lectures and seminars.
Uncertainty, belief, evidence, risk assessment, random error and bias will be discussed using examples drawn from literature, the arts and the physical, life and social sciences.
Students will prepare a research grant application on a scientific topic of their own choice.
Prerequisite: Admission to Vic One
Corequisite: VIC171Y1 \& 1.0 FCE selected from first-year course offerings in the sciences ( 0.5 FCE must be a BIO course).
Exclusion: 199 seminars, Vic Pathways, FLCs, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=HUM/SOC SCI; BR=2

## VIC171Y1 Methodology, Theory and Practice in the Natural Sciences

An examination of scientific theories and their logic in life and physical sciences. Experimental design, novel device production, data analysis and modeling will be discussed using examples drawn from primary source material in the natural sciences. Students will prepare a research paper on a topic designed in consultation with the instructor.
Prerequisite: Admission to Vic One
Corequisite: VIC170Y1 \& 1.0 FCE selected from first-year course offerings in the sciences ( 0.5 FCE must be a BIO course).
Exclusion: 199 seminars, Vic Pathways, FLCS, Innis One, New One, St. Mike's One, Trinity One, UC One, Woodsworth ONE
DR=HUM; BR=2

## Weekly Vic One Plenary sessions

PLEASE NOTE: Weekly Vic One Plenary sessions on Wednesday $4-6 \mathrm{pm}$ will be added to students schedules as a tutorial section associated with the following courses: VIC150Y1, VIC163H1, VIC165H1, VIC181H1, VIC184H1, VIC170Y1 and VIC190Y1.

## Vic Pathways: Studies for First Year

## First Year Seminars

The 199Y1, 199H1, Vic Pathways seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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.
Consult vic.academics@utoronto.ca for more information.

## VIC101H1 Conflict Theory and Practice (formerly VIC101Y1) [12P/24S]

This 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, 199Y seminars
DR=SOC SCI; BR=3

## VIC102H1 Ethics and the Public: Case Studies [12P/24S]

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.
Exclusion: VIC182H1, 199Y seminars
DR=HUM/SOC SCI; BR=3

## VIC102Y1 Ethics and the Public: Case Studies (formerly VIC182H1) [24P/48S]

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.
Exclusion: VIC182H1, 199 seminars
DR=HUM/SOC SCI; BR=3
VIC103H1 Ideas and Fine Thoughts [24S]
This course examines how political ideas are formed and developed through literature, art, plays, essays and philosophical works in the twentieth century.
Exclusion: 199Y seminars
DR=HUM/SOC SCI; BR=1

## VIC103Y1 Ideas and Fine Thoughts [48S]

This course examines how political ideas are formed and developed through literature, art, plays, essays and philosophical works in the twentieth century.
Exclusion: 199 seminars
DR=HUM/SOC SCI; BR=1
VIC104H1 Common Vices and Neglected Virtues: Intro to Ethics of Character [24P/24S]
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

## Victoria College

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?
Exclusion: 199Y seminars
DR=HUM; BR=2

## VIC105H1 Odysseys: The Search for Meaning [12P/24S]

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 journeymyths of our culture from classical, Hebrew, medieval and modern sources
Exclusion: 199Y seminars
DR=HUM; BR=1
VIC106H1 Psychology and Society [24S]
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.
Exclusion: 199Y seminars
DR=HUM/SOC SCI; BR=2
VIC107H1 Evolution, Genetics, and Behaviour [24S]
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.
Exclusion: 199Y seminars
DR=HUM/SOC SCI; BR=2

## VIC108H1 Belonging, Imagination and the Uses of History in the Shaping of National Identity [24S]

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.
Exclusion: 199Y seminars
DR=HUM/SOC SCI; BR=3

## VIC108Y1 Belonging, Imagination and the Uses of History in the Shaping of National Identity [48S]

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.
Exclusion: 199 seminars
DR=HUM/SOC SCI; BR=3

VIC109H1 Innovators and Their Ideas [24S]
A study of the ideas and concerns of innovators who questioned traditional views and values. The course includes creative thinkers who challenged basic concepts on politics,
literature, religion, and society.
Exclusion: 199Y seminars
DR=HUM; BR=2

## VIC109Y1 Innovators and Their Ideas [48S

A study of the ideas and concerns of innovators who questioned traditional views and values. The course includes creative thinkers who challenged basic concepts on politics, literature, religion, and society.
Exclusion: 199 seminars
DR=HUM; BR=2

## VIC112Y1 Puzzles, Discovery and the Human Imagination [24P/48S]

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.
Exclusion: 199 seminars
DR=HUM/SOC SCI; BR=2
VIC113H1 Encountering Distant Climes: The Literature of Travel and Exploration [24S]
This course will study accounts of world travelers and explorers from the Middle Ages to the present, including representative examples drawn from the Age of Exploration, the Grand Tour, scientific and map-making expeditions, and the contemporary genre of travel writing. Particular attention will be given to the trans-cultural nature of travel, and the interactive aspects of the gulf between the observer and those observed. Students will analyze the diverse motivational factors behind excursions and expeditions, and apply a critique to written accounts in light of such factors as self-discovery, knowledge and imagination, Euro-centrism, orientalism, cultural relativism, colonialism/imperialism, race, gender, and eco-tourism.
Exclusion: 199Y seminars
DR=HUM; BR=1
VIC114H1 Renaissance in Popular Culture [12P/24S]
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.
Exclusion: 199Y seminars
DR=HUM; BR=1
VIC114Y1 Renaissance in Popular Culture [24P/48S]
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.
Exclusion: 199 seminars
DR=HUM; BR=1
VIC115H1 Imagined Power: Literature and Film [12P/24S]
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.
Exclusion: 199Y seminars
DR=HUM/SOC SCI; BR=1

## VIC115Y1 Imagined Power: Literature and Film [24P/48S]

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.
Exclusion: 199 seminars
DR=HUM/SOC SCI; BR=1

## VIC117H1 Understanding the Performing Arts: Interpretation and Expression [24S]

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.
Exclusion: 199Y seminars
DR=HUM; BR=1

## VIC118H1 The Rebel in History, Literature and Popular Culture [24S]

This course will examine the phenomenon of individuals and communities who rebel against the general social norms upheld by the majority in societies throughout history. These societal conventions can include generally-accepted moral and religious tenets, as well as the formal legal or political powers employed by those with the levers of social control. The rebels motives can range from the purely criminal, as with many notorious outlaws, to struggles for social justice, in the case of rebellious slaves or proponents of civil disobedience. Students will develop a theoretical framework which they can apply to the lives and motivations of a diverse representation of social rebels and outsiders, among them: pirates and mutineers, bandits and members of street/biker gangs, anarchists, disaffected intellectuals and religious leaders, punks and goths. Besides examining the sociological and philosophical aspects of rebellion, the course will consider the rebel as a prominent element in popular culture.
Exclusion: 199Y seminars
DR=HUM; BR=3

## VIC119H1 Ancient Narratives in Modern Contexts [24S]

This course provides an introduction to modern forms of ancient narratives, exploring the ways in which selected ancient literary sources and myths have been adapted to modern Canadian literature. Ancient narratives or 'old stories' are often reused, reinterpreted or reconstructed in modern narratives and given new relevance in a contemporary context. Students will encounter sources and contexts of ancient narratives.
Exclusion: 199Y seminars
DR=HUM; BR=1

VIC119Y1 Ancient Narratives in Modern Contexts [48S]
This course provides an introduction to modern forms of ancient narratives, exploring the ways in which selected ancient literary sources and myths have been adapted to modern Canadian literature. Ancient narratives or old stories are often reused, reinterpreted or reconstructed in modern narratives and given new relevance in a contemporary context. Students will encounter sources and contexts of ancient narratives.
Exclusion: 199 seminars
DR=HUM; BR=1

## VIC130H1 Movies, Madness and the Modern Condition [24S]

Through films like American Beauty (Sam Mendes, 1990) and Unforgiven (Clint Eastwood, 1992), through literature like Arthur Rimbauds A Season in Hell or Raymond Carvers short stories, this course is going to take a look at human beings in the extremes of experience: revenge, desire and an appetite for self-destruction.
Exclusion: 199Y seminars
DR=HUM; BR=1
VIC131H1 Germany in the Cold War [24S]
Covers the evolution of Germany from a defeated dictatorship in 1945 to a re-unified republic in 1990. Examines major events of the Cold War, from the Marshall Plan to the Berlin Wall; also includes aspects of popular culture in both East and West Germany.
Exclusion: 199Y seminars
DR=HUM/SOC SCI; BR=3

## VIC132H1 The USA in the Cold War [24S]

Covers major events from America's emergence as a superpower in 1945 to the end of the Cold War in 1991, including: commitment to Europe through NATO and the Marshall Plan; Civil Rights; Vietnam. Also explores popular culture of the time: the suburbs; the baby boom; the 1960s; Watergate, etc
Exclusion: 199 seminars
DR=HUM/SOC SCI; BR=3

## VIC133H1 Diplomacy and International Crisis

Management: 1989 to Today [24S]
This course covers issues in diplomacy and international crisis management from the fall of the Berlin Wall to the present day. The course examines the real world of political decision making. Both Canadian and American policy will be analyzed. Issues to be covered include the collapse of the Soviet Union, military intervention in humanitarian crises, the conflicts in Afghanistan and Iraq, and the impact of globalization.
Exclusion: 199 seminars
DR=HUM/SOC SCI; BR=3
VIC134H1 Globalization [24S]
This interdisciplinary course explores the contemporary character of globalization. The world is shrinking as money, goods, people, ideas, weapons, and information flow across national boundaries. Some commentators assert that a more tightly interconnected world can exacerbate financial disruptions, worsen the gap between rich and poor nations, undermine democracy, imperil national cultures, harm the environment, and give unconstrained freedom to predatory corporations. Others proclaim that globalization - understood as capitalism and free markets - fosters economic growth,
encourages creative collaboration, inspires technological breakthroughs, and enhances human prospects for a better life, in rich and poor countries alike, in unprecedented ways. Our task is to evaluate the evidence and draw our own conclusions.
Exclusion: 199 seminars
DR=SOC SCI; BR=3

## VIC135H1 The Death of Meaning

In The Origin of Species Darwin concluded there was no evidence to suggest that life was designed by a higher power. A corollary of this is that our lives lack any necessary purpose or meaning. Our reading will be directed to the question of what it means to lack 'Meaning'.
DR=HUM; BR=2

## VIC141Y1 Discovery and Revolution

This course examines the emergence of a global modern world in relation to the upheavals of the Renaissance (1350-1700) and its discoveries and innovations in social organization, politics, science, travel, art and architecture, literature and philosophy, religion and music.
Exclusion: 199 seminars
DR=HUM; BR=2
VIC241Y1 Renaissance Icons and Afterlives
Focusing on famous works like Michelangelo's David, Shakespeare's Hamlet, Cervantes' Don Quixote, and Monteverdi's Orfeo, this course explores some of the greatest masterpieces of the European Renaissance and their afterlives, cross-cultural adaptations, and appropriations in later and modern popular culture.
Corequisite: VIC141Y1
DR=HUM; BR=1 + 2

## Concurrent Teacher Education Program (CTEP) Courses

VIC260H1 Equity and Diversity in Education [24L] 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 courses field experience entails observation of and participation in equity and diversity efforts in a culturally-rooted school and/ or community organization.
Exclusion: SMC271H1
DR=SOC SCI; BR=3

## VIC261H1 Child and Adolescent Development in Education [24L]

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 various age groups. This may be satisfied by participation in Vic Reach or in another organization with the approval of the Vic Concurrent Education Coordinator.
Exclusion: SMC272H1
DR=SOC SCI/SCI; BR=2

## JSV200H1 Communication and Conflict Resolution in Education [24L]

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, crosscultural understanding.
Prerequisite: Enrolment in Christianity and Culture CTEP
Major or Victoria College CTEP Education Minor DR=SCI; BR=3

VIC360H1 CTEP Internship [TBA]
Students are required to complete an internship in an educational environment. This may be satisfied by participation in Vic Reach or in another organization with the approval of the Vic Concurrent Education Coordinator. Written assessment of the internship will be required. DR=SOC SCI; BR=3

VIC361H0 A Study of Chinese Literature and Culture This course will compare selected works of Chinese and Canadian authors with a view to the presentation of such writing in an educational setting.
Prerequisite: VIC150Y1, VIC151Y1, VIC260H1, VIC261H1 DR=HUM; BR=1
Literary Studies Courses

## VIC202Y1 Forms of Representation

This course explores representation as a cultural and political problem. Representation is both a means of depicting or constructing reality and a means of constituting individual and collective subjectivities. We will consider literary and other modes of representation in their historical contexts.
Exclusion: VIC201Y1
DR=HUM; BR=2

## VIC203Y1 Empire and Globalization

An introduction to the history and ideologies of empire (east and west,old and new), with special attention to the establishment and transformation of the modern nation and its cultural forms. Our comparative approach will examine how cultural forms are established, interpreted, and reinvented at local, national, transnational and global levels.
Exclusion: VIC210Y1
DR=HUM; BR=2 + 3

## VIC204H1 Canons And Canonicity

This course will consider the problem of canons in a variety of contexts : the aesthetic (including the literary, visual arts and music), but also the religious, the political, the philosophical and other discursive forms. Special focus will be on the problem of the relations across these boundaries. DR=HUM; BR=2

## VIC302H1 Pasts and Futures

An introduction to representations of history, in which we will consider concepts that turn on the problem of time such as tradition, periodization, genealogy, memory, crisis, revolution, eschatology, and utopia.
Prerequisite: VIC201Y1 or VIC202Y1 or permission of the instructor.
DR=HUM; BR=1

## VIC303H1 Memory and Trauma

This course will explore the problem of memory in relation to both collective and individual trauma. What pressure does trauma place on language, and agency, and how does it
figure in commemoration, narrative, monumentalization, and other modes of representing the past?
Prerequisite: VIC202Y1 or permission of instructor.
Exclusion: VIC309H1 as taken in 2011-2012, VIC310Y1
DR=HUM; BR=2

## VIC304H1 Praxis and Performance

This course will explore what it means to "act" in cultural, political, religious, and psychological realms. We focus on the historically shifting relations between theory and practice, between artifice and agency, and between theatricality and spectatorship.
Prerequisite: VIC202Y1 or permission of instructor. DR=HUM; BR=1

## VIC305H1 Institutions and Power

This course will consider some of the ideologies and practices of various institutions at work in the production and transmission of cultural objects and social power. These may include the family, museum, hospital, prison, university, library, and theatre, as well as fields such as publishing and religion.
Prerequisite: VIC202Y1 or permission of instructor. DR=HUM; BR=1

## VIC306H1 Culture and Media

This course will consider relations between various cultural media - such as film literature, photography, visual art, architecture - with specific attention to the historical demands and possibilities posed by technological change. Prerequisite: VIC202Y1 or permission of instructor. DR=HUM; BR=1
VIC307H1 Periodization and Cultural History
This course explores the phenomenon of historical periodization in its various modes, including as a stylistic concept, a set of discursive norms for cataloguing and grouping cultural forms, and a means of organizing and contesting historical narratives.
Prerequisite: VIC202Y1 or permission of instructor DR=HUM; BR=2

VIC401H1 Seminar in Comparative Literature [24S]
This course offers senior students in Literary Studies the opportunity to take part in a graduate seminar in Comparative Literature. Topics change annually. DR=HUM; BR=1
VIC401Y1 Seminar in Comparative Literature [48S] This course offers senior students in Literary Studies the opportunity to take part in a graduate seminar in Comparative Literature. Topics change annually. DR=HUM; BR=1 + 2

## VIC402H1 Translation and Comparativity

This course will consider questions of adaptation, appropriation, imitation, hybridity and incommensurability across languages, geographical regions, epochs, media, and academic disciplines. Course topics may include the role of translation in the historical projects of nation-building and empire.
Prerequisite: VIC202Y1 and one of: VIC302H1, VIC303H1, VIC304H1, VIC305H1, VIC306H1, VIC307H1; or permission of instructor.
$D R=H U M ; B R=2$

VIC403H1 Advanced Topics in Literary Studies
Content varies depending on instructor. In-depth
examination of selected issues.
Prerequisite: VIC202Y1 and one of: VIC302H1, VIC303H1, VIC304H1, VIC305H1, VIC306H1, VIC307H1; or permission of instructor.
DR=HUM; BR=None

## JNV300H1 Gender, History and Literature [24L]

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
DR=HUM; BR=1

## Material Culture Courses

VIC224H1 Introduction to Material Culture [12P/24S]
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.
Prerequisite: Completion of 4.0 FCEs
Exclusion: VIC111H1/VIC111Y1
DR=HUM/SOC SCI; BR=2
VIC224Y1 Introduction to Material Culture [24P/48S]
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.
Prerequisite: Completion of 4.0 FCEs
Exclusion: VIC111H1/VIC111Y1
DR=HUM/SOC SCI; BR=2
VIC444H1 Themes in Material Culture [12P/24S]
This fourth year seminar, required for students pursuing a minor in material culture will have opportunities to explore themes in material culture studies, museum exhibitions and collections as well as processes of object analysis in greater depth and at an advanced level. Specific topics and research projects will vary according to the interests and specialties of course instructors and students.
Prerequisite: VIC224Y1 and one additional FCE in Material Culture
DR=HUM/SOC SCI; BR=1

## Renaissance Studies Courses

## VIC240Y1 The Civilization of Renaissance Europe

 [48L]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

## Victoria College

Venice, Papal Rome and despotic Milan are compared with the northern dynastic monarchies of France and England. DR=HUM; BR=1 + 3

## VIC341H1 The Self and Society: Women, Men and Children [24S]

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.
DR=HUM; BR=2

## VIC342H1 Women and Writing in the Renaissance [24S]

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.
DR=HUM; BR=1
VIC343Y1 Sex and Gender (formerly VIC343H1) [48S]
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
DR=HUM; BR=2 + 3
VIC344H1 Renaissance Narrative (formerly VIC242H1) [24S]
Focuses on analysis of short stories and longer prose works including, in English translation: Boccaccios 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
DR=HUM; BR=1
VIC345H1 Media and Communications in the Early Modern Era [24S]
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.
DR=HUM; BR=1
VIC347H1 Studies in Renaissance Performance (formerly VIC347Y1) [24L]
Studies in the development of new forms in music, drama and dance in the Renaissance. The course will consist of seminars and lectures, and may incorporate live performances taking place in Toronto in addition to recordings.
Exclusion: VIC347Y1
Recommended Preparation: VIC240Y1, or another course in
Renaissance Studies.
$D R=H U M ; B R=1$

VIC348Y1 The Renaissance in the Cities [48L]
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: VIC240Y1, or another course in
Renaissance Studies.
DR=HUM; BR=1 + 3
VIC349H1 Special Topics in the Renaissance [24L/12P]
Studies in an aspect of the Renaissance based around lectures, seminars, and readings. See annual course listing for the years theme.
Recommended Preparation: VIC240Y1, or another course in Renaissance Studies.
DR=HUM; BR=None
VIC349Y1 Special Topics in the Renaissance
[48L/24P]
Studies in an aspect of the Renaissance based around lectures, seminars, and readings. See annual course listing for the years theme.
Recommended Preparation: VIC240Y1, or another course in Renaissance Studies.
DR=HUM; BR=None
VIC440Y1 Florence and the Renaissance [48L]
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: VIC240Y1 or permission of the instructor DR=HUM; BR=1 + 3

VIC449H1 Advanced Seminar in the Renaissance [12P/24S]
An in-depth study in an aspect of the Renaissance based around lectures, seminars, and readings. Content in any given year depends on the instructor. See annual course listing for the years theme.
Recommended Preparation: VIC240Y1, or another course in Renaissance Studies.
DR=HUM; BR=None

## VIC449Y1 Advanced Seminar in the Renaissance [24P/48S]

An in-depth study in an aspect of the Renaissance based around lectures, seminars, and readings. Content in any given year depends on the instructor. See annual course listing for the years theme.
Recommended Preparation: VIC240Y1, or another course in Renaissance Studies.
DR=HUM; BR=None

## Semiotics Courses

VIC220Y1 Post-Structuralism/Post-Modernism [48L/24T]
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: ANT100Y1, LIN100Y1,
PHL100Y1, PHL102Y1, SOC101Y.
DR=SOC SCI; BR=1 + 2

VIC223Y1 Signs, Meanings, and Culture [48L/24P]
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, LIN100Y1,
PHL100Y1, PHL102Y1, SOC101Y1.
Exclusion: VIC120Y1
DR=SOC SCI; BR=2
VIC320Y1 Semiotics of Visual Art [48L/24T]
Theories and models of applied semiotics: analysis of sign systems as articulated in various forms of artistic and cultural production.
Prerequisite: VIC120Y1/VIC223Y1, VIC220Y1
DR=SOC SCI; BR=1 + 3

## VIC322H1 Topics in Semiotics [24S]

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: VIC120Y1/VIC223Y1, VIC220Y1.
DR=SOC SCI; BR=1
VIC323Y1 Theories of the Sign (formerly VIC420Y1) [48L/24T]
Theories of signification studied with a focus on major works in the semiotics of modern and contemporary culture.
Prerequisite: ANT323Y1, VIC120Y1/VIC223Y1,
VIC220Y1/221Y1/VIC320Y1.
Exclusion: VIC420Y1
DR=SOC SCI; BR=1
JFV323H1 Semiotics and Literature I [24S]
The study of readings from major French literary semioticians are combined with the practical application of theory to the analysis of selected literary texts. This course is taught in
English. (Not offered in 2012-13).
Prerequisite: At least 5 course credits in any subject.
Recommended Preparation: FRE240H1, FRE241H1/
FRE240Y1/VIC120Y1
DR=HUM; BR=1

## Other Victoria College Courses

VIC259H1 Special Topics Seminar [24S]
A second year course. Topics vary from year to year
depending on the instructor.
Prerequisite: Students must have completed a minimum of 5 FCEs.
DR=HUM/SOC SCI/SCI; BR=None
VIC259Y1 Special Topics Seminar [48S]
A second year course. Topics vary from year to year depending on the instructor.
Prerequisite: Students must have completed a minimum of 5 FCEs.
DR=HUM/SOC SCI/SCI; BR=None
VIC271H1 Reading the Wild [24S]
The environmental crisis has generated a profound re-examination of our relationship with the natural world. The seminar will survey oral and written literature, classic poetry and philosophy from across the world.
Prerequisite: Completion of Vic One
DR=HUM; BR=1

## VIC272H1 Identity in India [24S]

This seminar analyses various aspects of identity in the world's largest and most diverse democracy, including caste, class, language, religion, and gender within the context of the country's federal political structure.
Prerequisite: Completion of Vic One
DR=SOC SCI; BR=3

## VIC273H1 The Body: An Exercise [24S]

This course will sketch the vital rôle or the drama of the human body, aspects of its performance, comedy, tragedy and death, through selected parts of history, in life and as reflected in "art."
Prerequisite: Completion of Vic One
DR=HUM; BR=1

## VIC299Y1 Research Opportunity Program

Credit course for supervised participation in faculty research project. Details on page 33.
DR=None; $B R=$ None

## VIC350Y1 Creative Writing [48S]

A workshop course (with a literature component) in writing fiction and poetry. Designed for those with a serious ambition to be writers as evinced in work they are already doing. Does not offer instruction for beginning writers. Presupposes perfect and sophisticated written language skills. The Literature component emphasizes multicultural dimensions of contemporary writing in English. For application procedures see the Victoria College web site. Applications due by May 15th.
Prerequisite: Second-year standing and permission of the instructor. Preference given to fourth- and third-year students.
DR=HUM; BR=1
VIC351H1 Learning Communities and Higher Education in Canada [24S]
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.
DR=SOC SCI; BR=3

## VIC352Y1 Love, Sex and Death in Short Fiction [48S]

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 writers' presentation, the role of dialogue, the economy of narrative, 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.
DR=HUM; BR=1
VIC359H1 Special Topics Seminar [24S]
An upper level course. Topics vary from year to year depending on the instructor.

## Victoria College

Prerequisite: Students must have completed a minimum of 10 FCEs.
DR=HUM/SOC SCI/SCI; BR=None
VIC359Y1 Special Topics Seminar [48S]
An upper level course. Topics vary from year to year depending on the instructor.
Prerequisite: Students must have completed a minimum of 10 FCEs.
DR=HUM/SOC SCI/SCI; BR=None
VIC390Y1 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 contact vic.academics@utoronto.ca.
Prerequisite: A minimum CGPA of 3.0 and have completed
10 FCEs and permission of College Program Director.
DR=None; BR=None
VIC391H1 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 Councils Academic Advisory Committee at least one month prior to the start of the relevant term. Students should contact vic.academics@utoronto.ca.
Prerequisite: A minimum CGPA of 3.0 and have completed
10 FCEs and permission of College Program Director.
DR=None; $B R=$ None
VIC397H1 International Study [TBA]
Course content, travel destination, etc., will depend on the instructor. Topics will vary from year to year.
Prerequisite: Students must have completed a minimum of 10 FCEs.
DR=SOC SCI; BR=None
VIC490Y1 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 Councils Academic Advisory Committee at least one month prior to the start of the relevant term. Students should contact vic.academics@utoronto.
Prerequisite: A minimum CGPA of 3.0 and have completed
15 FCEs and permission of College Program Director. DR=None; $B R=$ None

## 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 Councils Academic Advisory Committee at least one month prior to the start of the relevant term. Students should contact vic.academics@utoronto.ca.
Prerequisite: A minimum CGPA of 3.0 and have a completed 15 FCEs and permission of College Program Director. DR=None; $B R=$ None

## Women and Gender Studies

## Eaculty

## Professors

M. J. Alexander, BSW, MA, PhD
K.P. Morgan, BA, MA, MEd, Ph D
M. Nyquist, BA, MA, PhD
K. Rittich, Mus Bac, LLM, SJD
L. Yoneyama, BA, MA, PhD

## Associate Professors

B. McElhinny, BA, Ph D
M. Murphy, BA, PhD
A. Tambe, BA, MA, PhD
J. Taylor, BA, MA, PhD
A. Trotz, BA, MPhil, PhD

## Assistant Professors

D. Georgis, BA, MA, PhD
M. Lo, BA, MA, MSc, PhD

## Senior Lecturer

J. Larkin, BA, MEd, PhD

For the past 40 years, we have trained students to think deeply about how gender and sexuality operate at the individual, interpersonal, institutional and global levels. Drawing from a range of disciplines such as history and literature, sociology and law, we enable students to answer urgent and complex questions, such as how militarization can constrict men's aspirations for their lives, why there are income disparities between women and men, how sexual expression is scripted and can be re-scripted, and even what Lady Gaga could have in common with Shakespeare. In addition to training students to traverse the stanzas of a poem and a government report with equal care and skill in their quests, we also focus attention on matters of scale: when to aggregate and when to parse significant distinctions, how to think comparatively across space and time.

The Women and Gender Studies Institute at the University of Toronto is distinctive for its transnational approach, critically addressing how national borders and nationalist discourses frame the constructions of gender and sexuality. We study the effects of migration, diaspora and wars on experiences of home and heritage, family, desire and selfhood. We provide students the conceptual tools to connect processes of imperialism and globalization with emergent economies and forms of labor and consumption. Finally, we encourage students to reflect on the varied histories of feminism when framing their own activism in the present.

Our graduates go on to do innovative work in the public service, creative, and corporate sectors, becoming everything from documentary film-makers to grassroots activists to policy analysts in economic development agencies. All of them draw on the critical lens they develop in this program becoming part of a rich community of graduates who maintain their connections with one another, and who come back to the classroom where they once were students to share their experiences

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 Specialist Program

 (Arts Program)Enrolment in this program requires the completion of 4.0 courses.
(10 full courses or their equivalent, including at least five full 300+ series courses and at least one WGS course at the 400-level)

1. WGS160Y1 (normally taken in first year)
2. WGS260H1
3. WGS360H1
4. WGS460Y1 and one additional full-course equivalent at the 400+ level
5. Four additional full-course equivalents from the core group below
6. Two additional full-course equivalents from Group A or B

Women and Gender Studies Major Program (Arts Program)
Enrolment in this program requires the completion of 4.0 courses.
(7 full courses or their equivalent, including at least three full 300+ series courses and at least one half WGS course at the 400-level)

1. WGS160Y1 (normally taken in first year)
2. WGS260H1
3. WGS360H1
4. Three additional full-course equivalents from the core group below
5. Two additional full-course equivalents from group A or B

Women and Gender Studies Minor Program (Arts Program)
Enrolment in this program requires the completion of 4.0 courses, including at least one full WGS 300+ series course.

1. WGS160Y1 or one of WGS271Y/WGS272Y1/ WGS273Y1 (WGS160Y normally taken in first year).
2. Three additional full-course equivalents from the core group or group A; OR 3.5 additional full-course equivalents (with WGS271H1 or WGS272H1) from the core group or group A.

## Women and Gender Studies Course Groups

Core Group:
WGS160Y1, WGS260H1, WGS271Y1, WGS273Y1, WGS330H1 to WGS339H1,WGS350H1, WGS360H1 WGS362H1, WGS363H1, WGS365H1, WGS366H1, WGS367H1, WGS369Y1, WGS370H1, WGS372H1, WGS373H1, WGS374H1, WGS375H1, WGS376H1, WGS380H1, WGS385H1, WGS386H1, WGS425H1, WGS426H1, WGS430H1, WGS434H1, WGS435H1, WGS445H1, WGS451H1, WGS460Y1, WGS461Y1, WGS462H1, WGS463H1, WGS465H1, WGS470Y1

## Women and Gender Studies

## Group A: (Primary Focus on Women and Gender Studies)

ANT343H1, ANT456H, ANT460H1; CLA219H1, CLA319H1; EAS303H1, EAS452H1, EAS453H1, EAS462H1; ENG307H1, ENG355H1; FAH425H1; FRE304H1; GER421H11; GGR320H1, GGR327H1; HIS202H1, HIS245Y1, HIS297Y1, HIS306H1, HIS348H1, HIS354H1, HIS363H1, HIS383H1, HIS395H1, HIS406H1, HIS418H1, HIS431H1, HIS442H1, HIS446H1, HIS448H1, HIS474H1, HIS481H1, HIS483H1; ITA455H1; JAL355H1; JPP343H1; NEW240Y1, NEW241Y1, NEW325H1, NEW341H1, NEW344Y1, NEW449H1; NMC284H1, NMC484H1; PHL243H1, PHL367H1; POL315H1, POL344H1, POL351Y1, POL432H1, POL450H1, POL480H1; PSY323H1; RLG251H1, RLG236H1, RLG237H1, RLG313H1, RLG314H1, RLG315H1, RLG416H1; SLA248H1, SLA453H1; SOC314H1, SOC365Y1, SOC366H1, SOC367H1, SOC383H1,
SOC465H1; SPA382H1; UNI237H1; UNI377H1; VIC341H1, VIC342H1, VIC343Y1; VIS209H1

Group B: (Minor Focus on Women and Gender Studies) ANT329Y1, ANT427H1; ENG270Y1, ENG273Y1, ENG323H1, ENG370H1, ENG384Y1; FAS246H1; FCS390H1, FCS395H1; GER250H1; GGR328H1, GGR362H1, GGR363H1, GGR457H1; HIS459H1; INI327Y1; ITA493H1; JPR364Y1, JPR461H1; NEW302Y1, NEW424Y1; PHE311H1, PHE403H1; PHL268H1, PHL281H1, PHL373H1, PHL380H1, PHL384H1; PRT351H1; SOC207Y1, SOC214H1, SOC215H1, SOC220Y1, SOC281H1, SOC309Y1, SOC375Y1, SOC410H1; SPA380H1; UNI211H1, UNI310H1; UNI220Y1, UNI355H1; UNI255H1, UNI256H1, UNI354H1, UNI355H1, UNI365H1, UNI475H1, UNI477H1; VIS310H1

## Women and Gender Studies Courses

## First Year Seminars

The 199Y1 and 199H1 seminars are designed to provide the opportunity to work closely with an instructor in a class of no more than twenty-four students. These interactive seminars 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. Details on page 33.

## 100-Series Courses

During the first round of enrolment, WGS160Y1 is subject to certain enrolment restrictions. Please refer to the Faculty of Arts \& Science Registration Handbook \& Timetable.

WGS160Y1 Introduction to Women and Gender Studies [48L/24T]
An integrated and historical approach to social relations of gender, race, class, sexuality and disability, particularly as they relate to womens lives and struggles across different locales, including Canada.
DR=HUM; BR=1

## 200-Series Courses

During the first round of enrolment, 200-level courses, with the exception of WGS273Y1, are subject to certain enrolment restrictions. Please refer to the Faculty of Arts \& Science Registration Handbook \& Timetable.

## WGS260H1 Texts, Theories, Histories (formerly WGS262H1/WGS262Y1) [24L/12T]

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.
Exclusion: WGS262H1/WGS262Y1
Recommended Preparation: WGS160Y1
DR=HUM; BR=3

## wGS271Y1 Gender, Race and Class in Contemporary

 Popular Culture [48L]A critical examination of institutions, representations and practices associated with contemporary popular culture, mass-produced, local and alternative.
DR=HUM; BR=1

## WGS273Y1 Gender \& Environmental (In)Justice

 [48L/24T]Using a transnational, feminist framework, this course examines material and conceptual interrelations between gendered human and non-human nature, ecological crises, political economies and environmental movements in a variety of geographical, historical and cultural contexts. Does environmental justice include social justice, or are they in conflict? What might environmental justice and activism involve?
DR=HUM/SOC SCI; BR=1 + 3

## 300-Series Courses

During the first round of enrolment, 300-Series Courses are subject to certain enrolment restrictions. Please refer to the Faculty of Arts \& Science Registration Handbook \& Timetable.
Note: Courses numbered WGS330H1 - WGS339H1 are reserved for Special Topics in Women and Gender Studies. Topics vary from year to year.

## WGS330H1 Special Topic in Women and Gender Studies: Caribbean Women Writers [24L]

 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 regions literary output, as well as to consider the implications of the environments within which these writers function.Recommended Preparation: WGS160Y1
DR=HUM; BR=1

## WGS334H1 Special Topic in Women and Gender Studies

An upper level seminar. Subjects of study vary from year to year. Topic for 2011-2012: Life Writing. A theoretical and literary study of the practice of life writing. Students will learn about narrative styles and their potential for a feminist imaginary. The course will include works of oral history, creative biography and autobiography, personal memoir and poetry.
Recommended Preparation: WGS160Y1
DR=HUM; BR=None

## WGS335H1 Special Topic in Women and Gender

 StudiesAn upper level seminar. Subjects of study vary from year to year.

## Women and Gender Studies

Recommended Preparation: WGS160Y1
DR=HUM; BR=None
WGS336H1 Selected Topics in Cultural Studies [24L] An upper level course. Topics vary from year to year. Topic for 2011-2012: Gender and Sexuality in World Literature. This course explores gender and sexuality within literary texts as they move in transnational circuits of translation and publication. Reading, situating, and discussing fiction and prose, the class will consider the different ways gender, sexuality, affect, race, labor, violence, and nation are narrated, theorized, and entangled.
Recommended Preparation: WGS160Y1
DR=HUM; BR=None

## WGS350H1 Masculinity and the Human in an Age of Terror [24L]

This course contextualizes racialized masculinities and violence within postcolonial and anti-imperial discussions on contemporary discourses of terror. Working with concepts in gender and queer studies, this course draws on cultural production to offer a complex reading of masculinities and what it means to be human in conflict zones.
Recommended Preparation: WGS262H1/WGS262Y1 DR=HUM; BR=1

## WGS360H1 Making Knowledge as if the World Mattered [24L/12T]

Teaches skills in feminist approaches to making knowledge. Introduces feminist practices for doing research and navigating the politics of production and exchange. Develops skills for conveying knowledge to the wider world, such as through research papers, reports, performance, new media, art.
Prerequisite: WGS160Y1
DR=HUM/SOC SCI; BR=1

## WGS362H1 Selected Topics in Gender and History [24S]

An upper level seminar. Subjects of study vary from year to year.
Recommended Preparation: WGS160Y1
DR=HUM; BR=None

## WGS363H1 Selected Topics in Gender and Theory [24S]

An upper level seminar. Subjects of study vary from year to year.
Recommended Preparation: WGS160Y1
DR=HUM; BR=None
WGS365H1 Gender Issues in the Law [24L]
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: WGS160Y1
DR=HUM; BR=3
WGS366H1 Gender and Disability [24L]
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.

Recommended Preparation: WGS160Y1; WGS367H1 DR=HUM; BR=3

## WGS367H1 The Politics of Gender and Health [24L/12T]

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 Womens Health Movements. Topics may include fertility, sexuality, poverty, violence, labour, ageing, (dis)ability, and health care provision.
Recommended Preparation: WGS160Y1
DR=HUM; BR=3

## WGS369H1 Studies in Post-Colonialism (formerly NEW369H1) [24L]

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. Exclusion: NEW369H1
Recommended Preparation: WGS160Y1 DR=HUM; BR=1

WGS370H1 Utopian Visions, Activist Realities [24L] Drawing on diversely situated case-studies, this course focuses on the ideals that inform struggles for social justice, and the mechanisms activists have employed to produce the change. Foci include the gendered implications of movement participation, local and transnational coalition, alternative community formation, and encounters with the state and inter/supra/transnational organizations.
Recommended Preparation: WGS160Y1
DR=HUM; BR=3

## WGS372H1 Women and Psychologyl Psychoanalysis [24L]

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; womens mental health issues; feminist approaches to psychoanalysis.
Recommended Preparation: WGS160Y1
DR=HUM; BR=2

## WGS373H1 Gender and Violence [24L]

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. Recommended Preparation: WGS160Y1; WGS350H1 DR=HUM; BR=3
WGS374H1 Feminist Studies in Sexuality [24L]
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.
Recommended Preparation: WGS160Y1; WGS271Y1 DR=HUM; BR=2

WGS375H1 Colonialism, Sexuality and the Law [24L] Examines the challenge indigenous knowledges posed to colonialism by analyzing Spanish and British legal codes.

## Women and Gender Studies

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.
Recommended Preparation: WGS160Y1
DR=HUM; BR=3

## WGS376H1 Queer Cultures (formerly WGS272H1/ WGS272Y1) [24L]

Examines the history of queer and the cultures that have been imagined from it. Understood in terms of what does not conform to sexual normatives, queer does not just define social identitites but references a range of emergent culural expressions.
Exclusion: WGS272H1/WGS272Y1
Recommended Preparation: WGS160Y1
DR=HUM; BR=1

## WGS380H1 Aboriginal, Black and Immigrant Women in the Land of Dollars [24L]

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.
Recommended Preparation: WGS160Y1
DR=HUM; BR=3

## WGS385H1 Gender and Neoliberalism [24L]

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.
Recommended Preparation: WGS160Y1
DR=HUM; BR=3

## WGS386H1 Gender and Critical Political Economy

 [24L]Offers a critical analysis of political economy, its historical and contemporary contentions and the ruptures that open the space for alternative theorizing beyond orthodox and heterodox thinking, by inserting gender and intersecting issues of power, authority and economic valorization across multiple and changing spheres: domestic, market and state. Recommended Preparation: WGS160Y1; WGS273Y1 DR=HUM; BR=3

## 400-Series Courses

During the first round of ROSI enrolment, 400-Series courses are reserved for Specialists and Majors in Women and Gender Studies. Enrolment restrictions vary from course to course and pre-requisites will be enforced during the first round of enrolment. During the second round of enrolment, students must enroll at the department and fill out the appropriate 400-level ballot form. Please note that students cannot enrol in WGS470Y1 via ROSI and therefore must ballot at the department. Ballot forms are available from the Women and Gender Studies Program Office, Room 2036, Wilson Hall, New College, 40 Willcocks St, or on-line at www. utoronto.ca/wgsi/undergraduate/400levelballots.html. Forms must be signed and approved by both the course instructor
and the Undergraduate Coordinator for the Women and Gender Studies Program. Please note that students in their first or second year of study (with 8.5 credits or less) are not permitted to enroll in 400-level courses.

## WGS425H1 Gender and Development Discourses (formerly WGS425Y1) [24S]

Provides a critical feminist analysis of development theories and paradigms and an overview of related theoretical and conceptual debates on the concept of development itself, its gender implications, competing discourses, and related practices within national, regional and global contexts, and from a post-colonial feminist/gender perspective.
Prerequisite: WGS160Y1, one fullf course at the 300+ level
in WGS, and one half course in WGS
Exclusion: WGS425Y1
DR=SOC SCI; BR=3

## WGS426H1 Gender and Globalization: Transnational

 PerspectivesCritically examines current interdisciplinary scholarship on globalization, its intersections with gender, power structures, and feminized economies. Related socio-spatial reconfigurations, 'glocal' convergences, and tensions are explored, with emphasis on feminist counter-narratives and theorizing of globalization, theoretical debates on the meanings and impacts of globalization, and possibilities of resistance, agency, and change.
Prerequisite: WGS160Y1, one full course at THE 300+ level
in WGS, and one half course in WGS.
Exclusion: WGS463H1, fall session 2009
DR=HUM; BR=3

## WGS430H1 Queer Diasporas [26S]

This course is an overview of the growing field of Queer Diasporas. It considers how queer people inhabit transnational spaces. It also examines how diaspora, as an analytical framework that challenges meanings of un/ belonging, might be queered. Alongside theoretical works on queer diasporas, this course draws on cultural/aesthetic texts to think through its major themes.
Prerequisite: WGS160Y1, one full course at THE 300+ level in WGS, and one half course in the field of Sexuality
Studies (WGS or other).

## DR=HUM; BR=3

WGS434H1 Advanced Topics in Women and Gender Studies [24S]
An upper level seminar. Topics vary from year to year depending on instructor. Topic for 2011-2012: Gender and Transnationalism in the Black Diaspora. This course introduce students to feminist discussions of material and cultural processes underpinning the transnational production and circulation of blackness. Among the topics that will be explored are migratory circuits, the cultural politics of memory, sexuality and the boundaries of diaspora, carceral regimes and the forging of transnational political communities.
Prerequisite: WGS160Y1, one full course at THE 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=None
WGS435H1 Advanced Topics in Women and Gender Studies [24S]
An upper level seminar. Topics vary from year to year depending on instructor.

## Women and Gender Studies

Prerequisite: WGS160Y1, one full course at THE 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=None

## WGS445H1 Migrations of the Sacred [24S]

Considers the gendered impact of migration on womens indigenous spiritual practices, taking globalization as a political economic starting point. Focuses on the lives of women whose experiences emblematize displacement and examines how womens agency interrupts and transforms normative meanings of tradition and modernity.
Prerequisite: WGS160Y1, one full course at the 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=2

## 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.

## DR=HUM; BR=None

WGS460Y1 Honours Seminar [24S]
Supervised undergraduate thesis project undertaken in the final year of study. Students attend a bi-weekly seminar to discuss research strategies, analytics, methods and findings. A required course for Specialist students.
Prerequisite: WGS160Y1, one full course at the 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=None
WGS461Y1 Advanced Topics in Women and Gender Studies [48S]
An upper level seminar. Topics vary from year to year depending on the instructor.
Prerequisite: WGS160Y1, one full course at the 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=None
WGS462H1 Advanced Topics in Gender and History [24S]
An upper-level seminar. Topics vary from year to year depending on instructor.
Prerequisite: WGS160Y1, one full course at the 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=None

## WGS463H1 Advanced Topics in Gender Theory [24S]

Senior students may pursue more advanced study in feminist theory. Topics vary from year to year depending on instructor. Prerequisite: WGS160Y1, one full course at the 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=None

## WGS465H1 Special Topics in Gender and the Law [24S]

Senior students may pursue advanced study in gender and law. Topics vary from year to year.
Prerequisite: WGS160Y1, WGS365H1, one half course at the 300+ level in WGS, and one half course in WGS DR=HUM; BR=3

## WGS470Y1 Community Engagement [48S]

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: WGS160Y1, one full course at the 300+ level in WGS, and one half course in WGS.
DR=HUM; BR=3

## Woodsworth College

## Faculty

## Professor Emeritus

A.N. Doob, AB, Ph D, FRSC

Professors
R. Gartner, MS, Ph D
F.J. Reid, MSc, Ph D
M. Valverde, MA, Ph D, FRSC

## Associate Professors

R. Gomez, MIR, Ph D
R. Levi, LLM, SJD
S. Wortley, MA, Ph D

Assistant Professors
S. Bucerius, BA, MA, Ph D
M. Light, AB, MA, JD, Ph D
W. Watson, BSc, Ph D

## Senior Lecturers

W.B. MacDonald, BA, MA
T. Moritz, MA, Ph D
L. Riznek, MA, Ph D
J.B. Rose, BA, MA
T.P. Socknat, MA, Ph D

## Special Lecturer

Teresa Kramarz (Woodsworth ONE), MA, MSC

## Adjunct Professor

B. Davies, MA, LLB

Woodsworth College offers the following undergraduate courses and programs: Woodsworth ONE, First-Year Seminars, Criminology, Employment Relations and the Summer Abroad Program. Woodsworth College is also the home of two major access programs: The Millie Rotman Shime Academic Bridging Program and the Seneca-Woodsworth Facilitated Transfer Program. Additional information about these programs is listed in the "Woodsworth College Programs" section ahead.

Woodsworth College offers two Post-degree Certificate programs in Teaching English to Speakers of Other Languages and Human Resources Management. These programs are designed for students who already hold an undergraduate degree and who are interested in pursuing additional studies for professional or academic reasons.

The teaching in Higher Education program (THE500) is designed to support Ph.D. students and Post-Doctoral Fellows from all divisions at the University of Toronto in their professional preparation for academic careers. For additional information please visit the academic programs page on the Woodsworth College website.
Enquiries: www.wdw.utoronto.ca

## Woodsworth College Programs

Listed in this order:
Woodsworth ONE
First-Year Seminars
Summer Abroad Programs
Millie Rotman Shime Academic Bridging Program
Seneca-Woodsworth Facilitated Transfer Program
Criminology
Employment Relations
Followed by Woodsworth College Courses

## Woodsworth ONE

Woodsworth ONE offers students a unique, fully integrated first-year experience that provides an intellectually challenging introduction to university-level studies and builds students' sense of community within Woodsworth College and the University of Toronto as a whole. It is designed not to stand alone, but to complement and connect all the other first year courses students are taking, enhancing success in the entire first year and beyond by promoting the development of strong critical thinking, information literacy, oral and written communication skills, and awareness of both the distinctive nature of particular academic disciplines and the practices and values common to all academic work.
Students take two interdisciplinary half-credit seminars, one in each term, built around annual themes or topics that are explored using a variety of perspectives, theories, and methods. Seminars are capped at 25 students to maximize opportunities for participation and to promote close contact with both the instructor and fellow students. Regularly timetabled hours for co-curricular activities play a crucial role, supplementing the seminars with a wide range of special activities including student leadership events, guest lectures, field trips and other forms of experiential learning, academic skills support, and community-building time.
To support students in choosing their other courses, building coherent timetables, and eventually selecting appropriate programs and areas of study for second year, Woodsworth ONE features special academic advising both at the time of enrolment and throughout first year. As much as possible, students are placed in Woodsworth ONE sections with students taking other first year courses in common, and they are also placed in the same tutorial sections in those other courses; in this way, Woodsworth ONE connects and integrates all of the first year experience.
All first year students in the Faculty of Arts and Science are eligible for admission to Woodsworth ONE. In keeping with Woodworth College's tradition of open access, there is no incoming grade requirement. However, applicants must submit a brief statement explaining their interest in Woodsworth ONE, and if accepted must schedule a meeting with a Woodsworth College Academic Advisor. Students participating in any other College One are excluded from Woodsworth ONE.
Enquiries: one.wdw@utoronto.ca or www.wdw.utoronto.ca

## First-Year Seminars

The 199Y1 and199H1 seminars are designed to provide entering first-year students with the opportunity to work closely with an instructor in a class of no more than twentyfour 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. For course information please visit the "First-Year Seminars" link on the Faculty of Arts and Science's website: www.artsci.utoronto.ca/current/ undergraduate

## Summer Abroad Programs

Prepare yourself for a future in the global village by participating in a Summer Abroad program and complete a University of Toronto course overseas in four to six weeks. These programs are designed to enrich students' academic lives by providing an exciting and educational international experience. Your learning will not be limited to the classroom; you will observe and experience many of the things you study, including the language, history, culture, art, religion, business, and politics of the host country.
Please check the 2012 Summer course list on page 615. The 2013 program list will be available in January 2013. Enquiries: 416.978.8713 or www.summerabroad.utoronto.ca

## Millie Rotman Shime Academic Bridging Program

Academic Bridging is designed for individuals who have been away from formal education for some time and do not meet the University's established requirements for direct entry admission; each course is intended to bridge the gap between a student's prior education and the requirements of first year university courses in Humanities and Social Sciences. Students who successfully complete the Academic Bridging Program are admitted to the Faculty of Arts and Science, at the University of Toronto, with one full credit towards their degree. For more information on courses please check the "Academic Bridging Section" listed alphabetically in this calendar.
Enquiries: 416.978.7487 or www.wdw.utoronto.ca

## Seneca-Woodsworth Facilitated Transfer Program

The Seneca-Woodsworth Facilitated Transfer Program provides students with a potential pathway from the Liberal Arts diploma program at the Newnham Campus of Seneca College to the Faculty of Arts and Science at the St. George campus of the University of Toronto. To be eligible to transfer, students must complete the 2-year Liberal Arts diploma with a minimum 3.0 GPA, receive a recommendation from Seneca College to transfer, and have completed at least one half course in the Faculty of Arts and Science with a minimum $60 \%$. The Seneca-Woodsworth Facilitated Transfer Program is designed for students to transfer into programs in the social sciences and humanities, and work towards Bachelor of Arts degrees at the University of Toronto.
Enquiries: 416.978.5880 or www.wdw.utoronto.ca/seneca Seneca: Denise Wales 416.491.5050 ext. 2587 or denise. wales@senecac.on.ca

## Criminology

Criminology incorporates theory, research methods, and knowledge from a wide range of other disciplines such as history, political science, philosophy, sociology, psychology, law and economics. The program provides students with a sound foundation for the understanding of crime and the administration of justice in Canada and abroad, and, more generally, the processes of social order and disorder. Most students combine their studies in Criminology with programs in Political Science, Psychology or Sociology. People with backgrounds in Criminology are found working in Correctional Services, Law Enforcement, Courts and other settings. A career in the Criminology field requires additional education and experience beyond the undergraduate level. A comprehensive career information page is available on the Criminology website.
Electives (non-WDW courses): Some electives may be available only to students who have completed specified Prerequisites or who are enrolled in a suject POSt sponsored by the department offering the course. Not all courses are offered every year. For detailed information please check the enrolment controls and timetable on the Arts and Science website. Prerequisites, corequisites and exclusions are published in the Calendar.
WDW Courses: Not all courses are offered every year. Please check the Faculty of Arts and Science's timetable for the list of current course offerings. Enrolment in WDW courses is restricted to students in the Criminology subject POSt. Students without course Prerequisites will be removed at any time they are discovered.
Program Requirements: Students follow the program requirements for the year in which they were admitted to the major or specialist program. Program brochures for previous years are available on the website.
Enquiries: 416.978.5783, crim@utoronto.ca
Website: www.wdw.utoronto.ca

## Criminology Major (Arts program)

## Program Admission

The following will apply to students seeking admission to the Criminology major in 2012.
Requests for admission will be considered in the first subject POSt request period only. This is a limited enrolment program that can accommodate only a limited number of students. Eligibility will be based on a student's mark in the required courses listed below. The precise mark thresholds outlined below are an estimate of what will be required in the 2012 subject POSt admission cycle. Achieving the minimum mark thresholds does not guarantee admission to the Criminology major in any given year.
Applying after first year: 2 FCEs at the 100-level from ECO/ HIS/PHL/POL/PSY/SOC. Any course combination from this list is acceptable. Admission will be determined by a student's marks in these 2 FCEs. It is expected that a minimum combined average of $70 \%$ in these 2 FCEs will be required for admission in 2012.
Applying after second year: 2 FCEs at the 200+ level from HIS/POL/SOC. Any course combination from this list is acceptable. Admission will be determined by a student's mark in these 2 FCEs. It is expected that a minimum

## Woodsworth College

combined average of $75 \%$ in these 2 FCEs will be required for admission in 2012.

## NOTICE: 2013 Program Admission

Students interested in applying for admission to the Criminology major in 2013 should check for up-to-date admission information on the Criminology website.

## Program Requirements

The following requirements will apply to students admitted to the program in 2012.

8 FCEs, including the two FCEs specified above, and at least 2 WDW300+level Criminology FCEs, 0.5 of which must be at the 400-level. A course taken on a CR/NCR basis may not be used to satisfy program requirements.
First or Second Year: 2 FCEs: ECO/HIS/PHL/POL/PSY/ SOC
Higher Years:

1. Upon admission to the major: All of WDW205H1, WDW210H1, WDW225H1
2. At least 2 FCEs ( 0.5 must be a 400 -level course) from: WDW300H1/WDW325H1/WDW335H1/WDW340H1/ WDW343H1/WDW365H1/WDW370H1/WDW380H1/ WDW383H1/WDW385H1/WDW387H1/WDW390H1/ WDW391H1/WDW392H1/WDW393H1/WDW394H1/ WDW395H1/WDW395Y1/WDW396H1/WDW397Y1/ WDW415H1/WDW420H1/WDW425H1/WDW427H1/ WDW428H1/WDW429H1/WDW431H1/WDW445H1/ WDW480H1/WDW490H1/WDW491H1
3. At least 0.5 from: POL242Y1/POL419Y1/PSY201H1/ PSY202H1/SOC200H1/SOC202H1/WDW350H1
4. At least 2 FCEs from the list below or additional courses from \#2 and \#3 above: ANT444Y1/ANT463H1/ HIS411H1/PHL271H1/PHL370H1/PSY220H1/ PSY240H1/PSY328H1/SOC205H1/SOC212H1/ SOC306Y1/SOC313H1/SOC315H1/SOC413H1/ TRN412H1/WDW215H1/WDW389Y0

## Criminology Specialist (Arts program)

## Program Admission

This is a limited enrolment program that can accommodate only a limited number of students. Requests for admission will be considered in the first subject POSt request period only. Admission to the specialist program is possible only after second year: to be eligible for the specialist, students must already be enrolled in the Major program and have completed at least 8.0 credits. Eligibility will be based on a student's mark in the required courses listed below. The precise mark thresholds outlined below are an estimate of what will be required in the 2012 subject POSt admission cycle. Achieving the minimum mark thresholds does not guarantee admission to the Criminology specialist in any given year.
Applying after second year: minimum 8 FCEs and a combined average of at least $80 \%$ in WDW205H1, WDW210H1, WDW225H1.
Applying after third year: minimum 12 FCEs and a combined average of $80 \%$ in 2.0 WDW300H-level Criminology FCEs and 1 FCE from WDW205H1/WDW210H1/WDW225H1.
NOTICE: 2013 Program Admission
Students interested in applying for admission to the

Criminology specialist in 2013 should check for up-to-date admission information on the Criminology website.

## Program Requirements

The following requirements apply to students admitted to the Criminology specialist program in 2012. A course taken on a CR/NCR basis may not be used to satisfy program requirements.
11 FCEs including at least 4 FCEs at the 300+ level, including 1.0 FCE at the 400-level.

At least 7 FCEs must be WDW Criminology courses. A course taken on a CR/NCR basis may not be used to satisfy program requirements.

1. 2 FCEs from ECO/HIS/PHL/POL/PSY/SOC
2. All of (4.0 FCEs): WDW205H1, WDW210H1, WDW225H1, WDW300H1, WDW325H1, WDW335H1, WDW340H1, WDW350H1
3. At least 2 FCEs from: WDW343H1/WDW365H1/ WDW370H1/WDW380H1/WDW383H1/WDW385H1/ WDW387H1/WDW390H1/WDW391H1/WDW392H1/ WDW393H1/WDW394H1/WDW395H1/WDW395Y1/ WDW396H1/WDW397Y1/WDW450H1
4. At least 1 FCE from: WDW415H1/WDW420H1/ WDW425H1/WDW427H1/WDW428H1/WDW429H1/ WDW431H1/WDW445H1/WDW480H1/WDW490H1/ WDW491H1
5. At least 2 FCEs from the list below or additional courses from \#3 and \#4 above: ANT444Y1/ANT463H1/ HIS411H1/PHL271H1/PHL370H1/POL242Y1/POL419Y1/ PSY201H1/PSY202H1/PSY220H1/PSY240H1/ PSY328H1/SOC205H1/SOC212H1/SOC306Y1/ SOC313H1/SOC315H1/SOC413H1/TRN412H1/ WDW215H1/WDW389Y0

## Employment Relations

The overarching goal of the undergraduate program in Employment Relations is to offer an interdisciplinary learning opportunity in which to study the employment relationship in a Canadian and global context from the perspectives of economics, history, law, management, political science and sociology. The program provides students with a theoretical background and knowledge of current developments in the labour field that will serve as a basis for careers in employment relations and human resources, such as a Human Resources Generalist, Recruitment Specialist, Employment Equity Officer, Training and Development Consultant, Corporate Trainer, and Labour Relations Specialist.
Students are advised to make use of the Career Centre's resources and activities in order to investigate career options in Employment Relations. In addition, students are encouraged to explore the services offered by the Human Resources Professionals Association (HRPA) which is Canada's HR thought leader and the largest HR association in the country. In Ontario, HRPA regulates the HR profession and issues the Certified Human Resources Professional (CHRP) designation, the national standard for excellence in human resources management. For more information please visit www.hrpa.ca. All of the course work requirements needed for CHRP are offered in the Employment Relations program.

Electives (non-WDW courses): Some electives may be available only to students who have completed specified Prerequisites or who are enrolled in a subject POSt sponsored by the department offering the course. Not all courses are offered every year. For detailed information please check the enrolment controls and timetable on the Arts and Science website. Prerequisites, corequisites and exclusions are published in the Calendar.
WDW Courses: Not all courses are offered every year. Please check the Faculty of Arts and Science's timetable for the list of current course offerings. Almost all WDW courses have Prerequisites. WDW Employment Relations courses, with the exception of WDW240H1, are available only to students in the Employment Relations program. Students without course Prerequisites will be removed at any time they are discovered.
Program Requirements: Students follow the program requirements for the year in which they were admitted to the major or specialist program. Program brochures for previous years are available on the website.
Enquiries: 416.978.5783, er@utoronto.ca
Website: www.wdw.utoronto.ca

## Employment Relations Major (Arts program)

## Program Admission

The following will apply to students seeking admission to the Employment Relations major in 2012.
Requests for admission will be considered in the first subject POSt request period only. This is a limited enrolment program that can only accommodate a limited number of students. Eligibility will be based on a student's mark in the required courses listed below. The precise mark thresholds outlined below are an estimate of what will be required in the 2012 subject POSt admission cycle. Achieving the minimum mark thresholds does not guarantee admission to the Employment Relations major in any given year.
Applying after first year: Admission will be determined by a student's mark in ECO100Y1 (or ECO105Y1) and SOC101Y1 (or 1 FCE from: SOC102H1/SOC103H1/ PSY100H1). It is expected that a combined average of $65 \%$ will be required for admission in 2012.
Applying after second year: Admission will be determined by a student's mark in ECO100Y1 (or ECO105Y1) and 1 FCE SOC200+ level course. It is expected that a combined average of $70 \%$ will be required for admission in 2012.

## NOTICE: 2013 Program Admission

Students interested in applying for admission to the Employment Relations major in 2013 should check for up-todate admission information on the Employment Relations website.

## Program Requirements

The following will apply to students admitted to the Employment Relations major in 2012.
7 FCEs including at least 2.0 FCEs at the $300+$ level, 0.5 of which must be at the 400-level.
A course taken on a CR/NCR basis may not be used to satisfy program requirements.

First Year: ECO100Y1 (or ECO105Y1) and SOC101Y (or 1 FCE from: SOC102H1/SOC103H1/PSY100H1)
Higher Years:

1. All of: WDW240H1, WDW244H1, WDW260H1, WDW430Y1 (2.5 FCEs)
2. At least 0.5 from: WDW346H1/WDW347H1/ WDW348H1/WDW367H1/WDW372H1/WDW378H1/ WDW379H1
3. At least 2.0 FCE from the list below or additional courses from \#3 above: ECO220Y1/ECO239Y1/GGR221H1/ HIS313H1/INI300H1/JGI216H1/MGT201H1/PSY201H1/ PSY202H1/RSM222H1/RSM361H1/RSM392H1/ RSM464H/RSM461H1/SOC200H1/SOC202H1/ SOC207H1/SOC317Y1/SOC366H1/SOC367H1/ SOC439H1/WDW332Y0/WDW344H1/WDW345H1/ WDW349H1/WDW395H1/WDW395Y1/WDW396H1/ WDW397Y1/WDW432Y0/WDW444H1/WDW446H1/ WDW447H1/WDW493H1/WDW494H1

## Employment Relations Specialist (Arts program)

## Program Admission

The following will apply to students seeking admission to the Employment Relations specialist in 2012.
Requests for admission in 2012 will be considered in the first subject POSt request period only. This is a limited enrolment program that can only accommodate a limited number of students. Eligibility will be based on a student's mark in the required courses listed below. The precise mark thresholds outlined below are an estimate of what will be required in the 2012 subject POSt admission cycle. Achieving the minimum mark thresholds does not guarantee admission to the Employment Relations specialist in any given year.
Applying after first year: ECO100Y1(67\%)/ECO105Y1(80\%) and SOC101Y1(70\%)/1.0 FCE (70\% average) from SOC102H1/SOC103H1/ PSY100H1.
Applying after second year: ECO100Y1(67\%)/ ECO105Y1 (80\%) and 1.0 FCE (73\% average) SOC200+ level course.

## NOTICE: 2013 Program Admission

Students interested in applying for admission to the Employment Relations specialist in 2013 should check for up-to-date admission information on the Employment Relations website.

## Program Requirements

The following requirements will apply to students admitted to the Specialist in 2012.
10 FCEs including at least 4.0 FCEs at the $300+$ level of which 1.0 FCE must be a WDW course and 1.0 FCE must be a 400 -level course. A course taken on a CR/NCR basis may not be used to satisfy program requirements.
First year: ECO100Y1/ECO105Y1 and SOC101Y1 (or 1 FCE from: SOC102H1/SOC103H1/PSY100H1)
Higher years:

1. All of: WDW240H1, WDW244H1, WDW260H1, WDW379H1, WDW430Y1
2. ECO239Y1/ECO339Y1
3. 1.0 FCE from: ECO321Y1/HIS263Y1/POL214Y1
4. 1.0 FCE from: ECO220Y1/PSY201H1, PSY202H1/ SOC200H1, SOC2O2H1

## Woodsworth College

5. At least 1.5 FCEs from: GGR221H1/HIS313H1/ INI300H1/JGI216H1/MGT201H1/RSM222H1/RSM360H1/ RSM361H//RSM392H1/RSM461H1/RSM464H1/ SOC207H1/SOC317Y1/SOC366H1/SOC367H1/ SOC439H1/WDW332Y0/WDW344H1/WDW345H1/ WDW346H1/WDW347H1/WDW348H1/WDW349H1/ WDW367H1/WDW372H1/WDW378H1/WDW395H1/ WDW395Y1/WDW396H1/WDW397Y1/WDW432Y0/ WDW493H1/WDW494H1
6. 0.5 FCE from: WDW444H1/WDW446H1/WDW447H1

## Woodsworth College Courses

Listed in this order:

Woodsworth ONE<br>Criminology<br>Employment Relations<br>Independent Study \& Research Participation Summer Abroad

## Woodsworth ONE

WDW151H1 Order and Disorder I: Issues and Perspectives [16T/24S]
Societies require law and order, but at what point does order become oppression? How do we balance our need for freedom and society's need for order? This interdisciplinary seminar allows students to explore these and related questions through selected readings introducing theories from sociology, political science, philosophy, and history.
Prerequisite: Admission to Woodsworth ONE
Exclusion: Innis One, New One, St. Mike's One, Trinity One,
UC One, Vic One
DR=SOC SCI; BR=3
$\begin{array}{ll}\text { WDW152H1 } & \begin{array}{l}\text { Order and Disorder II: Problems and } \\ \text { Solutions [16T/24S] }\end{array}\end{array}$ Solutions [16T/24S]
Building on the questions and theoretical perspectives discussed in WDW151H1, this interdisciplinary seminar introduces students to some of the methods used by scholars and researchers in sociology, political science, philosophy, and history to develop, test, and debate possible solutions to the problems of social order and disorder.
Prerequisite: WDW151H1 or permission from the
Woodsworth ONE Program Coordinator; admission to Woodsworth ONE
Exclusion: Innis One, New One, St. Mike's One, Trinity One,
UC One, Vic One
DR=SOC SCI; BR=3

## Criminology Courses

WDW205H1 Introduction to Criminology (formerly WDW200Y1) [24L/12T]
An introduction to the study of crime and criminal behaviour. The concept of crime, the process of law formation, and the academic domain of criminology. Theories of crime causation, methodologies used by criminologists, and the complex relationship between crime, the media and modern politics.
Prerequisite: Open to students in the Criminology program Corequisite: WDW225H1
Exclusion: WDW200Y1
DR=SOC SCI; BR=3

## WDW210H1 Criminal Justice (formerly WDW200Y1) [24L/12T]

An introduction to the Canadian criminal justice system. The institutions established by government to respond to crime and control it; how they operate, and the larger function they serve; including the role of the police, the trial process, courts and juries, sentencing, imprisonment and community corrections.
Prerequisite: WDW205H1, WDW225H1
Exclusion: WDW200Y1
DR=SOC SCI; BR=3

## WDW215H1 Introduction to Socio-legal Studies

 [24L/12T]The course covers several major issues that will help prepare students for advanced courses in the criminology major: the meaning of law, the production of laws and legal institutions, law in action, comparative legal traditions, and the methodology of socio-legal studies.
Prerequisite: Open to students in the Criminology program DR=SOC SCI; BR=3

## WDW225H1 Criminal Law (formerly WDW220Y1) [24L/6T]

The main principles and themes of Canadian criminal law; legal definitions of crime, requirements of a criminal act (actus reus), criminal intention (mens rea), causation and defences. The origins, goals and functioning of criminal law, and limits on the power of the state to criminalize behaviour. Prerequisite: WDW205H1
Corequisite: WDW205H1
Exclusion: WDW220Y1
DR=SOC SCI; BR=3

## WDW300H1 Theories of Criminal Justice [36L]

A survey of the evolution of normative theories of criminal justice, which examines how major theorists from the Enlightenment to the contemporary period have understood the normative justification for criminal prohibition and punishment. Although the course focuses on western political philosophy and social science, there will also be some attention to theories of criminal justice in selected nonwestern traditions.
Prerequisite: (WDW205H1, WDW210H1/WDW200Y1), (WDW225H1/WDW220Y1)
DR=SOC SCI; BR=3

## WDW325H1 Criminal Procedure (formerly WDW220Y1)

 [24L/4T]The main principles and themes of Canadian criminal procedure, and the role of state officials and institutions in investigating and prosecuting crime. Doctrinal and statutory frameworks governing the administration and enforcement of criminal law in Canada, and the role of constitutional rights in the criminal process.
Prerequisite: (WDW205H1, WDW225H1)/WDW200Y1
Exclusion: WDW220Y1
DR=SOC SCI; BR=3

# Woodsworth College 

## WDW335H1 Policing [36L]

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: (WDW205H1, WDW210H1/WDW200Y1),
(WDW225H1/WDW220Y1)
DR=SOC SCI; BR=3
WDW340H1 Punishment: Theory and Practice [36L]
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: (WDW205H1, WDW210H1/WDW200Y1),
(WDW225H1/WDW220Y1)

## DR=SOC SCI; BR=3

WDW343H1 Comparative Criminal Justice [36L]
Criminal justice issues outside Canada, based on a variety of international and historical studies. The evolution of criminal justice systems in Western Europe, including the English adversarial and continental European inquisitorial approaches. A comparison of policing, criminal procedure, forms of punishment, and crime rates in the contemporary world.
Prerequisite: (WDW205H1, WDW210H1/WDW200Y1), (WDW225H1/WDW220Y1)
Exclusion: WDW393H1 in 2008-09
DR=SOC SCI; BR=3

## WDW350H1 Understanding Criminological Research

 [36L]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.
Prerequisite: (WDW205H1/WDW200Y1), (WDW225H1/ WDW220Y1)
Exclusion: SOC200H1, SOC200Y1Y, WDW350Y1
DR=SOC SCI; BR=3

## WDW365H1 Crime and Mind [36L]

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: (WDW205H1/WDW200Y1), (WDW225H1/ WDW220Y1)
DR=SOC SCI; BR=3

## WDW370H1 Youth Justice [36L]

The course will examine what is known about offending by youths and the various purposes that have been attributed to youth justice systems. The course will focus, in large part, however, on the nature of the laws and youth justice systems that have been designed in Canada and elsewhere to respond to offending by youths.

Prerequisite: (WDW205H1, WDW210H1/WDW200Y1), (WDW225H1, WDW220Y1)
Exclusion: WDW375H1
DR=SOC SCI; BR=3
WDW380H1 Crime, Gender and Sex [36L]
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: (WDW205H1, WDW210H1/WDW200Y1), (WDW225H1/ WDW220Y1)/(SOC212H1 and enrolment specialist or major Sociology subject POSt in the Faculty of Arts and Science)
DR=SOC SCI; BR=3
WDW383H1 Immigration and Crime [36L]
The connection between immigration and crime, the effect of immigration on crime rates, discrimination against immigrants, the representation of immigrants in crime statistics, public perception of risk and security, and criminal justice policy changes which affect immigration. We consider research conducted in Canada, the United States, Germany and the Netherlands.
Prerequisite: (WDW205H1, WDW210H1/WDW200Y1), (WDW225H1/WDW220Y1)
Exclusion: WDW390H1 in 2008
DR=SOC SCI; BR=3
WDW385H1 Representing Crime and Authority [36L]
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: (WDW205H1, WDW210H1/WDW200Y1),
(WDW225H1/WDW220Y1)
DR=SOC SCI; BR=3
WDW387H1 Legal Regulation of Morality [36L]
Moral regulation through criminal law, and the role of legal texts and procedures in promoting certain values while marginalizing others. The decriminalization of homosexuality and abortion, the censorship of pornography, the key role of administrative law mechanisms, and the transformation from direct to indirect forms of regulation.
Prerequisite: (UNI255H1/UNI256H1)/(WDW205H1/
WDW200Y1, WDW225H1/WDW220Y1)
Exclusion: WDW391H1 in 2002
DR=SOC SCI; BR=3

## WDW390H1 Topics in Criminology [36L]

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.
Consult the Program Office website or Criminology brochure for current course offerings.
Prerequisite: (WDW205H1, WDW210H1/WDW200Y), (WDW225H1/WDW22OY1). Additional Prerequisites depending on topic; consult program brochure.
DR=SOC SCI; BR=3

## Woodsworth College

WDW391H1 Topics in Criminology [36L]
Same as WDW390H1
DR=SOC SCI; BR=3
WDW392H1 Topics in Criminology [36L]
Same as WDW390H1
DR=SOC SCI; BR=3
WDW393H1 Topics in Criminology [36L]
Same as WDW390H1
DR=SOC SCI; BR=3
WDW394H1 Topics in Criminology [36L]
Same as WDW390H1
DR=SOC SCI; BR=3
WDW389Y0 Topics in Criminology Abroad [TBA]
Topics in Criminology offered in an international setting. The content may vary from year to year. For more information visit www.summerabroad.utoronto.ca.
DR=SOC SCI; BR=3
WDW415H1 Crime and Politics [24S]
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. For more information consult Program brochure.
Prerequisite: Minimum 75\% average in 4 WDW Criminology
FCEs and a CGPA of at least 3.0.
DR=SOC SCI; BR=3
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: 13 FCEs including WDW205H1, WDW210H1,
WDW225H1 and 2 WDW3**H1 level Criminology courses DR=SOC SCI; BR=3

## WDW425H1 The Prosecution Process (formerly WDW320H1) [36L]

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: (WDW205H1, WDW210H1/WDW200Y1),
(WDW225H1, WDW325H1/WDW220Y1)
Exclusion: WDW320H1
DR=SOC SCI; BR=3
WDW427H1 Organized Crime and Corruption [24L]
An advanced seminar exploring the history and characteristics of organized crime and corruption.
Prerequisite: 13 FCEs including WDW205H1, WDW210H1,
WDW225H1 and 2 WDW3**H1 level Criminology courses DR=SOC SCI; BR=3

WDW428H1 Neighbourhoods and Crime [24L]
An advanced seminar exploring the connection between neighbourhoods and the perpetuation of poverty, social marginalization, segregation and crime.
Prerequisite: WDW205H1, WDW210H1, WDW225H1 and 2
WDW3**H1-level Criminology courses
DR=SOC SCI; BR=3
WDW429H1 Youth Culture, Racialization and Crime in the Global Context [24L]
An advanced seminar exploring youth culture and its possible connection to criminality from an international perspective.
Prerequisite: 13 FCEs including 2 WDW3** H 1 level
Criminology courses
DR=SOC SCI; BR=3
WDW431H1 Mental Disorders, Morality and Legal Controls [24L]
A critical exploration of contemporary debates in criminology, and legal and moral philosophy concerning the diagnostic and criminal justice labeling of mental disorders such as psychopathy and paedophilia, and their representation in popular culture.
Prerequisite: 13 FCEs including 2 WDW3** H 1 level Criminology courses
DR=SOC SCI; BR=2
WDW445H1 International Criminal Law [24S]
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: 13 FCEs including 2 WDW3** H 1 level Criminology courses
Exclusion: WDW425H1 International Criminal Law taken in 2008-2009
DR=SOC SCI; BR=3
WDW450H1 Criminology Research Project [TBA]
An individual research project under the direction of a Criminology faculty member. Approval of the Undergraduate Coordinator is required. For more information visit the Program Office website (www.wdw.utoronto.ca). Prerequisite: Minimum 75\% average in 4 WDW Criminology FCEs and a CGPA of at least 3.0.
DR=SOC SCI; BR=3
WDW480H1 Interpersonal Violence [24S]
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; laws violence; and how violence is justified and denied.
Prerequisite: 13 FCEs including 2 WDW3** H 1 level Criminology courses
Exclusion: WDW400H1 in 2004-2006
DR=SOC SCI; BR=3

# Woodsworth College 

WDW490H1 Advanced Topics in Criminology [24L]
Topics vary from year to year. The objective of the course is to explore emerging issues in Criminology, and their social,
legal, ethical and political implications. Consult the Program Office website or Criminology brochure for current course offerings.
Prerequisite: 13 FCEs including 2 WDW3** H 1 level
Criminology courses
DR=SOC SCI; BR=3
WDW491H1 Advanced Topics in Criminology [24L]
Same as WDW490H1
DR=SOC SCI; BR=3

## Employment Relations Courses

WDW240H1 Introduction to Employment Relations [36L]
An introduction to the study of the world of work and employment, the history and development of employment relations, its central theories and concepts; the behaviours, outcomes, practices and institutions that emerge from or affect the employment relationship; contemporary issues and comparative employment relations systems.
DR=SOC SCI; BR=3
WDW244H1 Labour Relations [36L]
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.
Prerequisite: 4.0 FCEs and a CGPA of at least 2.3
Exclusion: ECO244Y1, WDW244Y1
DR=SOC SCI; BR=3
WDW260H1 Organizational Behaviour [36L]
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, decisionmaking, conflict and group processes. Not recommended for students in Commerce programs.
Prerequisite: 4.0 FCEs and a CGPA of at least 2.3
Exclusion: MGT262H1, RSM260H1
DR=SOC SCI; BR=3

## WDW332Y0 Topics in Employment Relations Abroad

 [TBA]Topics in Employment Relations offered in an international setting. The content may vary from year to year. For more information visit www.summerabroad.utoronto.ca.
DR=SOC SCI; BR=3
WDW344H1 Topics in Employment Relations [36L]
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.
Prerequisite: WDW244H1, WDW260H1. Depending on particular course offering additional Prerequisites may be required; consult the Program Office website for exact information.
DR=SOC SCI; BR=3
WDW345H1 Topics in Employment Relations [36L]
Same as WDW344H1.
DR=SOC SCI; BR=3

WDW346H1 Human Resource Planning [36L]
An understanding is developed of how essential elements of the human resource planning process support organizational goals and strategies. Topics such as environmental influences, job analysis, forecasting human resource needs and ascertaining supply, succession planning, downsizing and restructuring, mergers and acquisitions, outsourcing, and strategic international issues are examined.
DR=SOC SCI; BR=3
WDW347H1 Training and Development [36L]
The role of training and development initiatives in organizations. Students acquire the knowledge and skills to conduct a training needs assessment, identify training objectives, explore strategies to increase the transfer of training, design and deliver a training activity using various training methodologies, and evaluate its effectiveness.
Prerequisite: WDW260H1
DR=SOC SCI; BR=3
WDW348H1 Recruitment and Selection [36L]
The principles, legal issues, and emerging trends affecting the recruitment process and selection of staff in organizations. Development of recruitment strategies, assessment of applications for employment, interviewing candidates, and the role of testing and measurement of competencies in making hiring decisions.
DR=SOC SCI; BR=3
WDW349H1 Topics in Employment Relations [36L] Same as WDW344H1.
DR=SOC SCI; BR=3
WDW367H1 Compensation [36L]
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 DR=SOC SCI; BR=3

## WDW372H1 Negotiations [36L]

Resolving conflicts constructively is a challenge faced by all organizations and most individuals. This course will cover fundamentals of the negotiation process and conflict resolution. This course will apply multiple cases and simulations providing students with several opportunities to build their skills.
Prerequisite: WDW244H1, WDW260H1

## DR=SOC SCI; BR=3

WDW378H1 Employment Health [36L]
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: WDW244H1, WDW260H1 DR=SOC SCI; BR=3

WDW379H1 Employment Relations Research and Human Resource Analytics [36L]
An introduction to fundamental quantitative and qualitative research methods to enable students to critically evaluate and conduct research in the labour field. The class will explore data-driven, analytical approaches to managing

## Woodsworth College

human resources using basic metrics, analysis, and interpretation of information that link human resource initiatives to various indicators of organizational performance.
Prerequisite: WDW244H1, WDW260H1
DR=SOC SCI; BR=3

## WDW430Y1 Employment Law [48L]

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: 13 FCEs including WDW244H1 and WDW260H1
DR=SOC SCI; BR=3
WDW432Y0 Advanced Topics in Employment Relations/ Labour Relations Abroad [TBA]
Advanced topics in Employment Relations offered in an international setting. The content may vary from year to year. Prerequisite: 13 FCEs including WDW244H1, WDW260H1, 1.0 WDW300 FCE in Employment Relations/permission from Professional \& International Programs Office DR=SOC SCI; BR=3

WDW444H1 Seminar in Employment Relations [24S]
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: WDW244H1, WDW260H1, 1.0 WDW3** level FCE in Employment Relations
DR=SOC SCI; BR=3

## WDW446H1 Working as an Internal Organizational Consultant [24L]

This course examines the various elements of the consulting process and the interpersonal skills required to build trust, influence others, contract with clients, and establish and maintain strong working relationships.
Prerequisite: WDW244H1, WDW260H1, 1.0 WDW3** level FCE in Employment Relations
DR=SOC SCI; BR=3
WDW447H1 Contemporary Challenges Facing Today's Organizations [24L]
An advanced seminar exploring significant developments in organizations, and the challenges and opportunities facing professionals in the employment relations field. Emphasis is placed on developing problem solving and critical thinking skills and examining theories and concepts of employment relations.
Prerequisite: WDW244H1, WDW260H1, 1.0 WDW300-level FCE in Employment Relations
DR=SOC SCI; BR=3
WDW493H1 Advanced Topics: Employment Relations [24L]
Advanced topics vary from year to year, but the objective of the course is to explore theories, concepts and emerging issues in Employment Relations and their impact on internal and external environments.

Prerequisite: 13 FCEs including WDW244H1, WDW260H1, 1.0 WDW300-level FCE in Employment Relations DR=SOC SCI; BR=3

## WDW494H1 Advanced Topics: Employment Relations

 [24L]Same as WDW493H1
DR=SOC SCI; BR=3
Independent Study \& Research Participation Courses Enrolment in the following WDW courses is limited to students in the Criminology and Employment Relations programs. Students must have completed introductory courses in the area in which they wish to conduct further study. Open only when a full-time faculty member is willing and available to supervise. Students must find an appropriate supervisor and obtain the approval of the Undergraduate Coordinator before enrolling. Obtain details and an application form from the Program Office website (www. wdw.utoronto.ca). The deadline to submit the completed application form to the Undergraduate Coordinator is one week before the start of term.

WDW395Y1 Independent Study [TBA]
Independent study under the direction of a Criminology faculty member. Open only when a faculty member is willing and available to supervise. Students must find an appropriate supervisor and obtain permission from the Undergraduate Coordinator.
Prerequisite: Approval of the Undergraduate Coordinator is required.
DR=SOC SCI; BR=3
WDW395H1 Independent Study [TBA]
Independent study under the direction of a Criminology faculty member. Open only when a faculty member is willing and available to supervise. Students must find an appropriate supervisor and obtain permission from the Undergraduate Coordinator.
Prerequisite: Approval of the Undergraduate Coordinator is required.
DR=SOC SCI; BR=3
WDW396H1 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. Open only to third and fourth year students enrolled in a Criminology or Employment Relations program.
Prerequisite: 9 FCEs. A CGPA of at least 3.0 is recommended. Approval of the Undergraduate Coordinator is required.

## DR=SOC SCI; BR=3

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. Open only to third and fourth year students enrolled in a Criminology or Employment Relations program.
Prerequisite: 9 FCEs. A CGPA of at least 3.0 is recommended. Approval of the Undergraduate Coordinator is required.
DR=SOC SCI; BR=3

## Woodsworth College

## Summer Abroad Courses

Below please find the list of courses offered in Summer 2012. Courses vary from year to year. The 2013 program list will be available in January 2013 (www.summerabroad. utoronto.ca).

## Central Europe

- HIS389Y Topics in History
- POL366Y "Kidnapped Europe's" Return? Politics, Security \& Culture in Central Europe since 1989


## Ecuador

- ENV395Y Ecology and Conservation in the Amazon, Galapagos and Andes


## England

- ARC331Y Studies in International Architecture British

Architecture: Utopian Models \& Contemporary Currents

- ENG220Y Shakespeare
- HIS357Y A Social History of Renaissance Europe
- WDW389Y Topics in Criminology


## France

- FCS369Y The Culture of Touraine
- FSL***Y French language courses - various levels


## China

- EAS395Y Selected Topics in East Asian Studies (Hong Kong)
- HIS385Y History of Hong Kong
- HMB396Y International Research Project in Human Biology (Science Abroad: China, Science Abroad: Taiwan)
- INI390Y Contemporary Chinese Cinemas (Hong Kong)
- POL376Y Transforming Global Politics: Comparative and Chinese Perspectives (Shanghai)
- RLG290Y Special Topics: Religion in Hong Kong
- RSM295Y Special Topics: International Management (Hong Kong)


## Germany

- GGR300Y The City as Problem or Promise: Berlin a Case Study
- POL300Y Topics in Comparative Politics


## Hungary

- CHM396Y Research Topic Abroad (Science Abroad)


## India

- APS310H Defining Energy Futures in India and Canada
- CTA396Y Research Topic Abroad (Science Abroad)

Italy

- ENG210Y The Novel
- FAH394Y Studies Abroad in Modern and Contemporary Art and Architecture
- ITA102Y Practical Italian
- ITA358/359Y Modern Italian Culture
- POL321Y National Building: Italy in Comparative Perspective
- RSM395Y Special Topics: International Marketing
- VIC348Y The Renaissance City


## Japan

- EAS ${ }^{* * *}$ Y Japanese language courses at various levels

Jordan

- NMC261Y Field Archeology


## Kenya

- PCS361Y Special Topics in Peace and Conflict Studies: Conflict and Community in Africa


## Southeast Europe

- POL368Y Return to Europe: Bringing Southeast Europe into the European Union
Switzerland
- PHY396Y Research Topic Abroad (Science Abroad)

United Arab Emirates

- RSM395Y Special Topics: International Management and Accounting
Other Woodsworth Courses
WDW299Y1 Research Opportunity Program
Credit course for supervised participation in faculty research project.
DR=SOC SCI; BR=None


## Writing in Arts \& Science

The ability to think critically and to write well-organized, clear, grammatical prose is important to your work in Arts and Science courses. It will also improve your chances if you apply to graduate or professional schools and will give you an advantage in the workplace. To help you develop your writing skills, Arts and Science provides a range of instructional resources.

NOTE: For courses in creative writing, see entries under "English" (ENG), "Innis College" (INI), University (UC), and "Victoria" (VIC) in this Calendar.

## Courses

Departments and programs integrate writing instruction into many of their courses, and some offer courses that concentrate on communication in their disciplines. Check the course listings by department.

In any course, your instructors and teaching assistants will provide guidelines for written assignments. They will often offer instruction in class and give you the opportunity to ask questions before assignments are due. You may ask them to discuss work that has been graded and returned to you.
In addition, the university offers several 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 offers a minor program called Writing and Rhetoric. 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), JEI206H1 (Writing English Essays), INI300H1 (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. Consult with your college registrar about taking courses at UTM, and see the UTM calendar for more detail about courses offered.

## English Language Learning Opportunities

The new English Language Learning initiative (ELL) offers undergraduates in Arts and Science a variety of ways to develop skills and confidence in both oral and written communication. For its intensive non-credit summer course, see the entry for ELLO10H1 under "New College" in this calendar. During term, programming includes free drop-in workshops using a variety of interesting activities to improve speaking confidence, and also an online component for practising reading and critical thinking.

## 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 group and individual instruction.
The Writing Plus workshops are short intensive group sessions that demonstrate the expectations for university writing. They cover all stages of writing university papers, from understanding the assignment to revising the final draft, and they give targeted advice for handling your reading load and the challenges of studying for tests and exams. Special sessions focus on writing admissions statements for graduate programs. See the News section of www.writing. utoronto.ca for dates and locations.

In individual consultations, trained writing instructors help you improve your ability to plan, write, and revise, using your assignments from any subject as examples. Instructors are familiar with writing conventions in the whole range of Arts and Science courses, and some 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. All the college writing centres now use an online booking system that requires your UTORid for login. The two departmental writing centres serve students taking courses in those departments; you can make appointments by phone. More information is available in the Writing Centres section of www.writing.utoronto.ca. Here is a list of Arts and Science writing centres.

French Department Writing Labs: ask your professor or inquire at 416-926-2302

Innis College Writing Centre, Room 322
New College Writing Centre, Wilson Hall, Rooms 2045 and 2047

Philosophy Department Writing Clinic, Jackman Humanities Building, Room 403, 416-978-3314

St. Michael's College Writing Centre, Kelly Library, Rooms 230 and 231

Trinity College Writing Centre, Larkin Building, Room 302

University College Writing Centre, Laidlaw Library, Rooms 214 and 218

Victoria College Writing Centre, Northrop Frye Hall, Rooms 103A and 103B

Woodsworth College Academic Writing Centre, Room 214

## Self-Help Material

Campus libraries stock many reference guides for academic writing, some of them online. You will find both general handbooks on style and referencing, and guides on writing in specific disciplines. You can also consult the Advice section of the website Writing at the University of Toronto at www.writing.utoronto.ca. It contains short files addressing common issues in academic writing along with links to other useful online and print resources.

## About the University, the Faculty and the Colleges

About the University, the Faculty and the Colleges
Brief History of the University \& the Faculty ..... 618
Officers of the University ..... 618
Governing Council of the University ..... 618
Officers of the Faculty ..... 618
Governing Structure of the Faculty ..... 619
The Colleges ..... 620
Innis College ..... 620
New College ..... 620
St. Michael's College ..... 620
Trinity College ..... 621
University College ..... 622
Victoria College ..... 622
Woodsworth College ..... 623

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. Cobourg, Ontario. It became Victoria College in 1841. 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.

1853 University College established, assuming responsibility for all teaching in Arts in the University; the University became an examining and degreegranting 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."
Degree of Bachelor of Science established.

New College established
Innis College established.
Scarborough College established.
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.
John P. Robarts Research Library opened. Woodsworth College established. 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/AssetFactory. aspx?did=3894.

## 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

Dean and Professor of Geography \& Planning, Goldring Chair in Canadian Studies

Meric Gertler
Vice-Dean, Research and Graduate Programs:
Robert Baker
Vice-Dean, Faculty and Academic Life
Stephen Rupp
Vice-Dean, Teaching and Learning
Suzanne Stevenson

## Special Advisor to the Dean

Sandy Welsh
Associate Dean, Undergraduate Academic Programs and Director, 199/299 and FLC Programs

Anne-Marie Brousseau
Associate Dean, Interdisciplinary and International Affairs
Ito Peng

# About the University, the Faculty and the Colleges 

Chief Administrative Officer
Kim McLean
Assistant Dean and Director, Office of Infrastructure
Planning
TBA
Assistant Dean and Executive Director of Advancement
Nadina Jamison
Assistant Dean and Director, Office of the Dean
Helen Lasthiotakis
Assistant Dean, Faculty Registrar and Faculty Secretary
Glenn Loney
Assistant Dean and Director of Communications
Kim Luke
Assistant Dean and Director of Human Resources
Carol Robb
Governing Structure of the Faculty
The Arts and Science Council
The Arts and Science Council is the governing body in theFaculty of Arts and Science. The Council is composedof elected members from the Faculty's undergraduateand graduate students, teaching staff, administrative andtechnical staff, and normally meets eight times per year. Itapproves 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.

# About the University, the Faculty and the Colleges 

## 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, Hon BA
Associate Registrar—Administrative: T. MacKay, MA
Associate Registrar-Recruitment and Transition: R. Woolfrey, MA
Dean of Students and Residence: T. Worgan, M Ed
Chief Administrative Officer: B. Coates, BCom, CA
Innis College offers its 1,950 students high academic standards, a dedicated faculty and staff, and a vibrant undergraduate community within the University of Toronto. Innis is home to the Cinema Studies Institute and contributes two interdisciplinary programs to the Faculty of Arts \& Science, listed under "Innis College" in the Calendar: Urban Studies and Writing and Rhetoric. The College academic services provided by the library and the writing centre 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, its programs, and the Cinema Studies Institute 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: Y. Roberge, 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: TBA
Director of Residence and Student Life: S. Wilmot, BSc

Director, Business Services: R. Vander Kraats, MASc, MBA, P Eng
Director, Writing Centre: D. Knott, MA, MTS
Senior Development Officer: C. Richards, BA, MEd
Alumni Development Officer: B.A. Registe, MEd
Librarian: J. Newman, BA, MISt
Academic Director, International Foundation Program: Bruce Russell, M.Ed., B.A. (Hons), B. Mus.

New College, established in 1962, is open to students of all Faculties and Schools in the University. Approximately 4,700 of its students are in the Faculty of Arts and Science, and 300 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 crossappointed staff; and also through interdisciplinary programs in African Studies, Buddhism, Psychology \& Mental Health, Caribbean Studies and Equity Studies. 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 800 students and welcome applicants from the Toronto area as well as from out- of-town. Further information about residence may be obtained from the Office of Residence and Student Life, 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: His Eminence Thomas Cardinal Collins, Archbishop of Toronto, SSL, STD, DD
President \& Vice-Chancellor: A. Anderson, CSJ, REGN, BA, MHA, MA, DMin (Regis College/UT)
Principal and Program Director: D. Pietropaolo, MA, Ph D (SM), Commend. Rep. It.
Registrar: D. Chevrier, BA
Associate Registrar (Admissions \& Recruitment): A. McGee, BA, M Ed
Associate Registrar (Administrative): M. Memari, BA
Assistant Registrar (Academic): G. George, BA

# About the University, the Faculty and the Colleges 

Assistant Registrar (Academic): M. Taylor, 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

CTEP Co-Ordinator: M. O'Connor, Ph B, STB, STL. D Phil
SMC One: Cornerstone Co-Ordinator: J. Sunkenberg, BA, MA, Ph D

Bursar: G. Kossivas, HBA, CA
Interim Director of Library and Archives: D. Pietropaolo, MA, Ph D (SM), Commend. Rep. It.

## 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 4500 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, 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. SMC One: St. Michael's Cornerstone begins September 2012. Cornerstone is designed to give students registered in their first year of study at the University of Toronto a unique educational experience within three different learning frameworks. Topics addressed in Cornerstone speak to the heart of the mission of St. Michael's College: "to teach goodness, discipline, and knowledge."

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: The Hon. William C. Graham, BA, LLB, Doctorat de l'Universite de Paris
Provost and Vice-Chancellor: A. Orchard, BA, Ph D
Vice-Provost and Dean of Arts: TBA
Assistant Provost, Academic: B. Ferguson, MA, Ph D
Registrar: N. De Melo, BA
Dean of Students: J. Steels, BSc., PhD
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 1,800 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, and a Math Aid Centre. 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 nearly $25 \%$ of the College students live in residence. Both residences, at St. Hilda's and around the Trinity Quadrangle, house women and men, on separate floors. 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

# About the University, the Faculty and the Colleges 

faculty members are housed in the north building of the Munk School of Global Affairs. The Buttery provides eating, lounge, and study space that is ideal for group discussions and computer use, as well as offices for commuting 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: Donald C. Ainslie, BSc, MA, Ph D
Vice-Principal: J. W. Marshall, BA, MA, Ph D
Registrar: S. Cornack, BA
Associate Registrar: L. Nauman, BA, M Ed
Associate Registrar: M. Nicholson, BA, MSW, M Ed
Assistant Registrar: J. Rodriguez
Dean of Students: N. Robinson, MA, Ph D
Chief Administrative Officer: C. Yvonne MacNeil
Director of Advancement: Naomi Hood, CFRE
Librarian: M. Fulford, BA, MLS
Writing Centre 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 courses in four interdisciplinary programs including Canadian Studies, Drama, Health 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 coeducational 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 416 978-2530; uc.residences@ utoronto.ca. 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 and a Writing Centre. Other amenities include the University College Library, which comprises a circulating collection supporting UC programs and a spacious reading room; the UTAC (University of Toronto Art Centre) Lounge which is available for student use; 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: W.M. Cecil, BA, LLD
President Emeritus: G.S. French, CD, MA, Ph D
President and Vice-Chancellor: P.W. Gooch, MA, Ph D
Principal and Program Director: D.B. Cook, MA, Ph D
Associate Director, Office of the Principal: TBA
Registrar: S.C. McDonald, BA
Associate Registrar: E. Melo, BA
Associate Registrar, Student Awards, Ceremonies and Office Management: A. Prediger
Assistant Registrar: V. Ferrier, BA
Assistant Registrar: A. Kot, BA, M I St
Director, Alumni Affiars and University Advancement: D. Scott, BA
Bursar: R. DeSouza, BA
Dean of Students: K. Castle, 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, offers 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 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: www.vicu.utoronto.ca

## About the University, the Faculty and the Colleges

## Woodsworth College

Principal: J.R. Desloges, MSc, Ph D

Vice-Principal: L. White, MA, Ph D
Registrar: C. Shook, MA, CTESL
Associate Registrar: J.N. Guyatt, BA, M Ed
Associate Registrar: A.M. Blackett, BA
Associate Registrar: W. Wong--Nicholson, BSc
Dean of Students: L. Nassim, BA
Director, Academic Writing Centre: W. B. MacDonald, BA, MA

Director (Academic), Millie Rotman Shime Academic Bridging Program: T. Socknat, MA, Ph D

Director, Professional \& International Programs: Y. Ali, BA, MSc
Executive Director: Advancement, Alumni \& Communications: B. Track, BA, CFRE
Chief Administrative Officer: M. Choi, B Com, CA, M Ed
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 6000 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; Summer Abroad Programs in locations, including Australia, Central Europe, China, Ecuador, England, France, Germany, Italy, Japan, Jordan, Kenya, and Southeastern Europe; firstyear programs: Woodsworth ONE and First-Year Seminars; access programs: the Millie Rotman Shime Academic Bridging Program and the Seneca-Woodsworth Facilitated Transfer Program; and post-degree 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, access to a learning strategist, and the Math Aid Centre.

The joint Woodsworth/Rotman Computer Lab has thirty work stations with web access, word editing software and printing facilities. The Computer Lab is available to students enrolled at Woodsworth College and in the Rotman Commerce Program, and is open extended hours. For further details, please check www.wdw.utoronto.ca.
In co-operation with the Rotman Commerce Program, the renovated Kruger Hall Commons is a multi-use student
space that can accommodate many activities ranging from social interaction, individual and group studying, and events. The new hall is a vibrant and dynamic space and provides a sense of belonging and community for all Woodsworth students.

Our residence at the corner of Bloor Street West and St. George Street accommodates 371 students in airconditioned 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 front desk service, high-speed internet access, common areas and laundry facilities. In addition, a Residence Life Program of social and educational activities are offered. 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.

## Rules \& Regulations

Important Notice ..... 625
Registration ..... 625
Taking Courses Outside the Faculty ..... 625
Cancelling Courses or Registration ..... 626
Fees ..... 626
Course Marks ..... 627
Faculty Final Examinations ..... 628
Credit/No Credit ..... 629
Late Withdrawal (LWD) ..... 629
"Extra" Courses: 100-series, Repeating and Excluded Courses ..... 630
Grading Regulations ..... 631
Grade Point Average ..... 632
Academic Standing ..... 632
Grades Review Procedure ..... 632
Appeals \& Petitions ..... 632
Reassessment of Marks ..... 635
Student Records ..... 635
Transcripts ..... 636
University of Toronto Regulations and Policies ..... 636

UNIVERSITY OF TORONTO FACULTY of ARTS \& SCIENCE

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, observance of exceeded courses, etc., for completion of Program details, for proper observance of degree requirements, 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.

Students should also note the Important Notices section at the beginning of this Calendar.

## Registration

Details of the procedures by which students of the Faculty of Arts and Science register -- 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.

## 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 \& 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 \& Science (except courses that are required for an Arts \& Science program). 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 \& Science program and cannot be met by courses offered within the Faculty of Arts \& 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 be 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 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 (PostAdmission) 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:
Centre for International Experience's Student Exchange
Program
Cumberland House, Room 204
Telephone: (416) 946-3138
student.exchange@utoronto.ca
www.cie.utoronto.ca
Note that students participating in an exchange through the Centre for International Experience will have their credits assessed for transfer upon return. You are eligible to participate in up to three terms of exchange. You can arrange your exchange semesters in multiple ways you may do a full year and additional semester or three consecutive summers or three separate semesters in up to three locations! The maximum amount of transfer credits you may earn through exchange is 7.5 (provided you don't have more than 2.5 transfer credits already on admission or on Letter of Permission). In order to be considered for full transfer credits, you must complete the equivalent "full course load" at the host institution. Note that this term does not refer to the minimum full time load at an institution. To find out what constitutes a full course load at your host

## Rules \& Regulations

university, please refer to the the CIE webpage (www.cie. utoronto.ca) for that host institution. Studying at another institution does bring a degree of academic risk. Although the Faculty of Arts \& Science cannot guarantee that the courses you choose will receive full credit, we will do our best to ensure you receive a fair assessment. If you have provided detailed outlines and received transfer credit recommendations from the relevant Departmental contact for transfer credit prior to your departure, then the risk is negligible.

## Summer Abroad Program

3rd Floor, Woodsworth College, 119 St. George St.
416-978-8713
summer.abroad@utoronto.ca
www.summerabroad.utoronto.ca
All Summer Abroad courses and grades show on students' transcripts as regular $U$ of $T$ credits and are calculated into their CGPA. 1

## 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). Students still enrolled in a course after the final date to cancel the course will receive a grade for that course (unless Late Withdrawal is requested: see below for details). 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.

## 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 or the Bursar of Trinity College.

## Fees and Payment

Payment is made at a financial institution - consult the instructions in the Registration Handbook \& Timetable for further details.

## Payment Deadlines

Deadlines are available from the Student Accounts Office or from the Trinity College Bursar's Office (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, St. Michael's, 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 Trinity College 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
Admissions and Awards web site
or the College Registrars' offices and web sites.

## Sanctions on Account of Outstanding Obligations

The following are recognized University obligations:

- tuition fees
- academic and other incidental fees
- residence fees and other residence charges
- library fines
- Bookstore accounts
- loans made by colleges, faculties or the University
- Health Service accounts
- unreturned or damaged instruments, materials and equipment
- 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 \& Science students who have outstanding recognized University obligations:

1. Statements of results or official transcripts of record, or both, will not be issued.
2. The University will not provide oral confirmations or written certification of degree status to external enquirers.
3. Indebted graduands will be allowed to walk on stage and have their names appear on the convocation program.
4. Registration will be refused to a continuing or returning student..
5. Official letters (e.g., degree eligibility, confirmation of graduation, QECO) will not be issued.
6. Education verifications will not be issued.
7. 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 A and B, available on the Governing Council web site at www.governingcouncil.utoronto.ca/policies.htm (however grade scales may be seen below in this Calendar).

## Marking Schemes

As early as possible in each course, and no later than the last date to enrol in the course, the instructor shall make available to the class, and shall file with the division/faculty or department, the methods by which student performance shall be evaluated. This should include whether the methods of evaluation will be essays, tests, class participation, seminar presentations, examinations, or other requirements; the relative weight of these methods in relation to the overall grade; and the timing of each major evaluation.
No essay, test, examination etc. in the marking scheme may be assigned a weight of more than $80 \%$ of the grade. This limit does not apply when accommodations are made for assessments missed for legitimate, documented reasons.

After the methods of evaluation have been made known, the instructor may not change them or their relative weight without the consent of a simple majority of students attending the class, provided the vote is announced no later than in the previous class. Any changes must be reported to the division or the department. The only exception to this is in the case of the declaration of a disruption. [Please see the University's Policy on Academic Continuity.]

In the event that this policy has not been followed, a student may petition to have the course removed from the record, provided such a petition is filed by the last day of classes.

## 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. This includes "take-home tests" and assignments where the topics or questions are both assigned and due with the last two weeks of classes.

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:
Students who miss a term test for reasons beyond their control may, within one week of the missed test, submit to the instructor or department/program a request for special consideration explaining the reason for missing the test, and attaching appropriate documentation, such as a medical certificate.

If a request with documentation cannot be submitted within one week, the department may consider a request to extend the time limit.

A student whose explanation is accepted by the department will be entitled to one of the following considerations:

## Rules \& Regulations

a) Where practicable, the student may be offered the opportunity to do a make-up test.
b) Where a make-up test is not practicable or the student's circumstances do not permit a make-up test, the instructor may allocate the percentage weight of the test to any combination of the remaining term work and/or final exam in the course.
c) If the student misses the remaining term work for acceptable reasons, the full percentage weight of the missed work may be allocated to the final exam. Exception: the weight of a final exam in a 100 -series course may not be increased beyond $80 \%$ as an initial accommodation for a legitimate absence. However, if the student misses the make-up opportunity or subsequent test that was to be re-weighted, then the weight of the final exam may be increased beyond $80 \%$.
d) In courses where the mid-term test is the only marked work in the course other than the final examination, an initial make-up opportunity normally must be given.
No student is automatically entitled to a second makeup test opportunity. The department will determine what accommodation is appropriate for a student who misses a make-up test for legitimate reasons.

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.

## Faculty Final Examinations

A Faculty final examination counting for between onethird and two-thirds of the final mark must be held in each 100-series course, unless exemption has been granted by the Faculty of Arts \& Science. Courses in the 200-series will normally have a final examination. In 200-, 300- and 400-series courses, the Departments will decide whether or not an examination is appropriate. The ratio of term work to examination mark will be the same for all sections of multisection 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 sub-session. 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 resulting from personal commitments.

Students who are unable to write their examinations due to illness, etc., should contact their College Registrar (see "Petitions Regarding Examinations", below).

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 report the conflict to the Office of the Faculty Registrar by the deadline shown on the examination schedule. 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.

Students who cannot write a final examination at the scheduled time because of a religious obligation should report this conflict to the Office of the Faculty Registrar as soon as the conflict is known, and no later than the deadline shown on the examination schedule.

## 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 and other valuables 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: phones, laptop computers, calculators, MP3 players (such as an iPod), Personal Digital Assistants, pagers, electronic dictionaries, or any electronic recording device. If calculators are authorized for use in an examination, only models those specified on the exam sheet shall be permitted.
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. Students who arrive later than fifteen minutes after the commencement of the examination should go immediately to the Office of the Faculty Registrar (day exams only).
11. Candidates shall remain seated at their desks during the final ten minutes of each examination.
12. 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.
13. 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, e.g. at an Outside Centre, 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 nonrefundable 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. These fees do not apply for accommodations resulting from conflicts with religious obligations or from arrangements made through Accessibility Services.

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 Outside 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

Degree students in the Faculty of Arts \& Science may select up to 2.0 full-course equivalents of their degree credits offered by the Faculty of Arts \& Science on the St. George campus to be assessed on a Credit/ No Credit basis. Students must choose this mode of assessment no later than the last date to cancel the relevant course. Once the deadline has passed, students may not under any circumstances reverse this decision. Students may opt in on the Faculty Registrar's web site at http://www.artsci.utoronto. ca/current/undergraduate/crncr.

To achieve a status of CR (Credit), a student must achieve a final mark of at least $50 \%$. 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, Breadth 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.

A course taken on a CR/NCR basis may not be used to satisfy program requirements.
Students taking a course on a CR/NCR basis will not be identified individually to the instructor teaching that course.

This option is not available to Arts \& Science non-degree students or to students from other faculties/divisions of the University of Toronto.

This option is not available for courses offered by other campuses or divisions taken by Arts \& Science degree students.

The CR/NCR option cannot be used for a course in which the student has committed an academic offence. If a student has specified the CR/NCR option in a course in which he or she commits an academic offence, the CR/NCR option will be revoked and the percentage grade will stand as the course grade.

## Late Withdrawal - LWD

The Faculty of Arts \& Science has approved a mechanism to assist students, in conjunction with their college registrars, to remedy situations, particularly in their early years at university, where personal or other circumstances mean they are irretrievably behind in a course.

Students pursuing a degree in the Faculty of Arts \& Science may request to withdraw without petition from a total of no more than 3.0 FCEs in the 20.0 FCEs required for their degree, provided such a request is made by the last day of classes in the relevant term.

Students will make such requests to their college registrar, who has the authority to approve such requests if the circumstances warrant approval of an exception to the normal Drop deadlines.

Withdrawals approved under this procedure will be noted on the academic record by the course status LWD (Late Withdrawal). This course status will have no effect on the GPA or other elements of the academic record.

Students who have fallen behind with assignments or are not at all prepared to write exams in one or more of courses will be expected to make use of this remedy, and should contact their college registrar's office immediately.

Students seeking to avail themselves of this remedy will be expected to work with their college registrarial advisor to analyze what led to their predicament, to discuss what steps they can take to prevent it from happening again, and to learn from their experiences.

Future petitions for Withdrawal, Deferred Exams, or Extensions for Term Work will be considered in light of the fact that the student has previously been granted such an opportunity.

Note that the option for Late Withdrawal cannot be used for a course in which the student has committed an academic offence or if an allegation of academic misconduct is under investigation.

## "Extra" Courses: 100-series, Repeating and Excluded Courses

"Extra" courses are ones that do not count for degree credit. Such courses appear on a student's permanent academic record with the final course mark, and are noted as "XTR", but do not count as accumulated degree credits and are not included in calculating a student's Grade Point Average. However, Extra courses may count in other respects, such as to satisfy program requirements or breadth/distribution

## Rules \& Regulations

## requirements.

Each course with a passing mark or CR counts for credit towards a degree unless:
the course is a 100 -series course and the maximum of SIX 100-series courses (6.0 FCEs) allowable for degree credit has already been completed (see 1. below), or
the course repeats work previously taken, either the same course taken over again (see 2. below) or the course lists as an exclusion another that has already been completed (see 3. Below)

## 100-series Limit and Chronological Principle

Students may complete a maximum of 6.0 100-series FCEs towards their degree. Additional 100-series courses taken beyond 6.0 will be designated "extra" and will not count for degree credit. Courses are credited towards a degree chronologically. For example, if a student has already passed 6.0100 -series courses and then enrols in and passes further 100-series courses, the more recent courses are designated "Extra". An exception to this rule is when a student who has completed 5.5 100-series courses enrols in and passes a full course at the 100-level in a subsequent session. In this case, providing it does not result in a retroactive change in academic status, the most recently passed half-course may be designated as "Extra".

## Repeating Passed Courses

Students (both degree and non-degree) may not repeat any course in which they have already obtained credit (i.e., a mark of $50 \%$ or higher or CR ) with two exceptions:
i) When students need to achieve a minimum mark in a course for entry to a limited-enrolment program or for meeting a prerequisite to take another course in their program, they may repeat such a course once. The repeated course will be designated "Extra": it will appear on the academic record but it will not be included in GPA calculations or in the degree credit count.
ii) Students may repeat up to 1.0 FCE in which they have already obtained credit for reasons other than to meet a minimum mark for entry to a limited-enrolment program or for course prerequisite purposes. The repeated course will be designated "Extra": it will appear on the academic record but it will not be included in GPA calculations or in the degree credit count. Students may not use this one-time-only allowance to subsequently repeat a passed course again after having repeated the same course for reasons noted in i) above. i.e. they may repeat a specific passed course only once.
Students requesting to repeat a course 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.

## Exclusions

Students may not enroll in a course that lists as an exclusion a course they are currently taking or a course they have already passed. If they enrol in such a course, they may be removed at any time during the enrolment period or during the session. If discovered after the session is over, such a course will be designated "Extra": it will appear
on the academic record but it will not be included in GPA calculations or in the degree credit count.

## Grading Regulations

Grading Scale

| Percentage | Letter <br> Grade | Grade <br> Point <br> Value * | Grade <br> Definition |
| :--- | :--- | :--- | :--- |


| $90-100$ | A+ | 4.0 |
| :--- | :--- | :--- | :--- |
| $85-89$ | A | 4.0 |
| $80-84$ | A- | Excellent $\longrightarrow$ | g 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.


| $77-79$ | B+ | 3.3 |
| :--- | :--- | :--- |
| $73-76$ | B | 3.0 |
| $70-72$ | B- | 2.7 |

Good $\longrightarrow$| Evidence of grasp of subject matter, some evidence |
| :---: |
| of critical capacity and analytic ability; reasonable |
| understanding of relevant issues; evidence of |
| familiarity with literature. |

| $57-59$ | D+ | 1.3 |
| :--- | :--- | :--- |
| $53-56$ | D | 1.0 |
| $50-52$ | D- | 0.7 |
|  |  |  |
| $0-49$ | F | 0.0 |

Marginal $\longrightarrow$\begin{tabular}{c}
Some evidence of familiarity with subject matter and <br>

| some evidence that critical and analytic skills have |
| :--- |
| been developed. | <br>

Inadequate $\longrightarrow$| Little evidence of even superficial understanding of |
| :--- |
| subject matter; weakness in critical and analytic skills; |
| with limited or irrelevant use of literature. |

\end{tabular}

* 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; see p. 615
EXT or XTR or $X$
Extra Course not for degree credit; course has no effect on status or grade point average.

## NGA

No Grade Available
GWR
Grade withheld pending Review
IPR
(Course) In Progress

## LWD

Late withdrawal without academic penalty
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.

## Rules \& Regulations

## 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.

Four 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 FallWinter Sessions;
3. The Cumulative GPA takes into account all courses not marked "extra" in the Faculty
4. The Concurrent Teacher Education Program (CTEP) GPA takes into account all B.Ed. courses. This GPA is only used for CTEP students.
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 Fall/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.
Note: Students who have not achieved final standing* in 4.0 credits will have a status of "Not Assessed".

## 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.

## Probation; Suspension; Refused Further Registration

The following regulations apply to students who have achieved final standing* in at least four courses 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.

* "Achieved final standing" applies to courses 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. This includes CR/NCR, but does not include courses with LWD or WDR.

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 \& 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 consequences or 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 first with the instructor. It is recommended that such discussions should be documented in writing where appropriate. The successive stages of appeal after the course instructor must be documented in writing. These stages are: the Undergraduate Coordinator or Associate Chair; the Chair of the Department or the College Program Director; then the Office of the Dean, Faculty of Arts \& Science. An appeal must have been reviewed at the departmental level before referral to the Dean's Office; appeals to the Dean's Office 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 demonstrate 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 advice on all such matters from the office of their College Registrar.
Petitions must 1) state the student's request; 2) provide 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 a valid UofT email address to which a petition decision may be sent. Nonreceipt of a decision due to incorrect 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

UTM/UTSC courses: Within 72 hours of a missed examination, students must file a petition with their St. George Campus college registrar, with the required supporting documentation.

## Withdrawal (see also Late Withdrawal above)

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. Acceptable forms of documentation include:

University of Toronto Medical Certificate (http:// healthservice.utoronto.ca/main.htm)
Student Health or Disability-Related Certificate (from UofT Health Services)
College Registrar's Letter (appropriate in certain circumstances)
Accessibility Services Letter

## Medical Documentation:

The forms of medical documentation noted above 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. 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 later report of illness made by the student to a physician.

## Petitions Regarding Courses in Other Divisions-

 see above.
## Petitions Regarding Term Work (see also Term Work)

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 must be approved by petition. Such 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.

## Rules \& Regulations

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 have been in contact with their instructor before the initial deadline and subsequently, and to continue their course work while they await a decision. They should not wait for the petition decision before completing the work.

## Petitions Regarding Examinations (see also Examinations)

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 as students are expected to make themselves available during the published Examination Period to write final examinations.

In response to a petition for a deferred examination, a student may be granted the opportunity to write a special examination at a subsequent examination period or the examination in the next offering of the course, at the discretion of the Faculty. Satisfactory documentation must be provided to corroborate illness (see above). Students with chronic illnesses must provide medical documentation for the specific date on which the illness was acute, or a letter from Accessibility Services for those registered for such a disability. Accessibility Services for those registered for such a disability (indicating they were seen at the time of flare up).

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 <br> Examination | Deferred Examination |
| :--- | :--- |
| April | June examination period, if course is <br> offered in Summer Session May to June <br> August examination period for all others |
| June | August examination period, if course <br> offered in Summer Session May/July - <br> August <br> December examination period, if course <br> offered in Fall Session <br> August examination periods for all others |
| August | December examination period |
| December | April examination period, if course offered <br> 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:

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 any further courses until the outstanding course work has been completed and final cumulative and sessional GPAs and status for the session have been assessed.

A second deferral of an examinations is generally not permitted. In the unusual instance where a second deferral is granted, the student may not enrol in further courses until the course has been completed In such instances, a grade of " 0 " for the examination is included in the calculation of the course grade and the "SDF" notation will be replaced by the resulting grade pending the second deferred examination. Students are charged a further fee for each subsequent deferred examination.

Students who are not feeling well at the time of an examination must decide whether they are too ill to write. If unsure, they should seek medical advice. Students who become ill during an examination and cannot complete the examination, they should notify the Presiding Officer of the reasons for their leaving before they leave the exam hall. If students decide to write an examination which does not go well, they may not petition for a rewrite. Arguments after the fact 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 poor performance on an examination.

## Rules \& Regulations

Students who choose to write an examination against medical advice 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 judgments about their fitness to attend examinations, but also must accept the outcome of their choices.

## Appeals Against Petition Decisions

Appeals against petition decisions progress as follows:
First petition to the Committee on Standing by appropriate deadline submitted through College Registrar (see Deadlines to File Petitions);

Appeal to the Committee on Standing within ninety days of the first decision; second petition submitted through the College Registrar;

Appeal to the Faculty Academic Appeals Board within ninety days of the second decision; written request for a hearing submitted through the College Registrar;
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 Ms Nancy Smart.

## Reassessment of Marks

## Requesting a Recheck or Reread

If a student believes en error has been made in the calculation of marks or in the marking of a Faculty final examination, there are two procedures which can be followed to request a review of marks.

## 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 requesting a photocopy or viewing of the final examination. The student must fill out a "Request for Recheck of Course Mark" form and submit it to the Office of the Faculty Registrar within six months of the final examination (see list of deadlines below). Whenever possible, the student should 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 fee for this procedure. If the mark is changed as a result of this review, the $\$ 13.00$ exam photocopy fee (if paid) will be refunded.

## Reread of Faculty 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 or request a supervised viewing of the exam. The student must then fill out a "Request for Reread of Final Examination" form and submit it to the Office of the Faculty Registrar within six months of the final examination (see list of deadlines below). 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 a photocopy of the final examination. If the mark is changed as a result of this review, both the photocopy fee (if paid) and the reread fee will be refunded. It should be noted that when a course is failed, the examination must be reread before the mark is reported.

NOTE: A recheck or reread may result in a raised mark, a lowered mark, or no change.

For some examinations, particularly those with multiplechoice questions and/or designed to be read mechanically, there may be an answer key that is essential to the understanding of the marking of the examination. In such cases, an answer key should be included with your photocopy. If it is not, you may contact the relevant department to see if one is available.

Forms are available at the Office of the Faculty Registrar, or on the web at www.artsci.utoronto.ca/current/undergraduate/ exams

## Deadlines for requesting a recheck or a reread:

February examinations - the following August 31
April examinations - the following October 31
June examinations - the following January 15
August examinations - the following February 28/29
December examinations - the following June 30

## Student Records

The University's Policy on Access to Student Academic Records can be found on the Governing Council web site at http://www.governingcouncil.utoronto.ca/policies.

## 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-MailAddress

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 UTmail+ account is mandatory; see "University Policy on Official Correspondence with Students" at: http://www.governingcouncil.utoronto.ca/policies.htm.

## 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,

## Rules \& Regulations

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

The Faculty of Arts \& Science does not mail 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 possible after they are received and approved in the Office of the Faculty Registrar. Note that academic status is only assessed in May (for the Fall/Winter session) 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).

Marks are posted and a sessional GPA is calculated at the end of each session. An annual GPA is calculated only at the end of the Winter session and includes only the results earned in the Fall and Winter sessions. Academic standing is assessed at the end of the Fall/Winter session and at the end of the Summer session.

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 consolidated transcripts, including a student's total academic record at the University. However, graduate students (who were previously enrolled at the University of Toronto as an undergraduate, may request that only the graduate portion of their record be sent out . Students may request 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 PST, 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.

## Course descriptions

Copies of course descriptions are issued at the student's request. The cost is $\$ 5.00 /$ session (with an unlimited number of courses within each session). Requests listing all courses/ sessions needed may 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
Each request should also include the student's surname and given names (or previous surname, if applicable), student ID, address of where to mail the course descriptions, daytime/ cell phone number and email address.

## University of Toronto 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 which 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: http://www. governingcouncil.utoronto.ca/policies.htm

Those which are of particular importance to students are:
Code of Behaviour on Academic Matters
Code of Student Conduct
Policy on Assessment and Grading Practices (updated in 2012)
Policy on Official Correspondence with Students Policy on Access to Student Academic Records Policy on Academic Transcripts (updated in 2012) Policy on Academic Continuity (updated in 2012)

More information about students' rights and responsibilities can be found at http://life.utoronto.ca/get-help/rightsresponsibilities.htm.
A
Aboriginal Studies ..... 34
Academic \& Personal Counselling: The Colleges ..... 14
Academic Bridging Program ..... 39
Academic Standing ..... 632
Academic Success Centre ..... 15
Academic Support ..... 15
Accessibility Services to Students ..... 15
Accounting (B.Com) ..... 500
Actuarial Science ..... 40
Admission ..... 10
Admission .....  9
Admission to Other Faculties/Programs ..... 12
African Studies ..... 395
Akkadian ..... 381
AI \& Malke Green Program in Yiddish ..... 264
American Studies ..... 43
Anatomy ..... 46
Ancient Egyptian ..... 381
Ancient Greek ..... 118
Animal Physiology ..... 102
Anthropology ..... 47
Anthropology (Biological) ..... 47
Anthropology (Society, Culture \& Languagel) ..... 47
Appeals \& Petitions ..... 632
Applied Mathematics ..... 357
Applied Statistics ..... 564
Arabic ..... 381
Aramaic/Syriac ..... 381
Archaeology ..... 60
Architectural Studies ..... 63
Architectural Studies (Design) ..... 63
Architectural Studies (History, Theory, Criticism) ..... 63
Art (Art History \& Visual Studies) ..... 67
Arts \& Science Programs and Courses ..... 32
Arts \& Science Students' Union ..... 18
Arts and Science Students' Union ..... 18
Asian Geographies (Joint NUS) ..... 240
Asian Literatures and Cultures (Joint NUS) ..... 192
Asia-Pacific Studies (Dr. David Chu Program) ..... 84
Assoc. of Part-Time Undergraduate Students ..... 19
Association of Part-Time Undergraduate Students ..... 19
Astronomy \& Astrophysics ..... 88
Astronomy \& Physics ..... 88
Awards. ..... 19
B
Bachelor of Arts, Honours (Degree requirements) ..... 22
Bachelor of Commerce (Degree requirements) ..... 24
Bachelor of Science, Honours (Degree requirements) ..... 22
Biochemistry ..... 92
Biodiversity \& Conservation ..... 168
Bioethics ..... 424
Biogeography ..... 240
Bioinformatics \& Computational Biology ..... 92
Biological Chemistry ..... 109
Biological Physics ..... 435
Biology ..... 98
Book \& Media Studies ..... 511
Breadth Requirement ..... 23
Brief History of the University \& the Faculty ..... 618
Buddhism, Psychology \& Mental Health ..... 395
Buddhist Studies ..... 484
Business German ..... 264
C
Calendar Limitations .....  2
Canadian Institute for Theoretical Astrophysics ..... 101
Canadian Studies ..... 575
Cancelling Courses or Registration. ..... 626
Cancelling Registration ..... 626
Careers .....  .15
Caribbean Studies ..... 395
Cell \& Molecular Biology ..... 102
Cell \& Systems Biology ..... 102
Celtic Studies ..... 511
Centre for International Experience ..... 17
Changes in Courses ..... 2
Changes in Programs of Study .....  2
Changes in Regulations \& Policies .....  2
Chemical Physics ..... 109
Chemistry ..... 109
Chinese ..... 154
Choosing Courses ..... 28
Christianity \& Culture ..... 511
Christianity \& Culture: Christianity \& Education ..... 511
Christianity \& Culture: Religious Education ..... 511
Cinema Studies ..... 313
Classical Civilization ..... 118
Classics ..... 118
Code of Behaviour On Academic Matters ..... 636
Code of Student Conduct ..... 636
Codes Used in the Course Descriptions ..... 28
Codes Used in the Course Descriptions ..... 29
Codes Used in the Program of Study Listings ..... 28
Cognitive Science ..... 126
Cognitive Science (Arts). ..... 126
Cognitive Science (Science) ..... 126
Community Safety ..... 16
Community Service ..... 16
Comparative Literature ..... 128
Computer Science ..... 129
Concurrent Teacher Education Program ..... 25
Conduct, Code of Student ..... 636
Contemporary Asian Studies ..... 84
Copyright in Instructional Settings .....  2
Co-requisites ..... 29
Course Load ..... 28
Course Marks ..... 627
Courses of Other Campuses ..... 625
Courses of Other Divisions ..... 625
Courses of Other Universities ..... 625
Courses Outside the Faculty ..... 625
Credit/No Credit ..... 629
Criminology ..... 606
Croatian ..... 528
Croatian \& Serbian Studies ..... 528
Czech ..... 528
Czech \& Slovak Studies ..... 528
D
Dates ..... 7
Dates (2012 Fall Session) .....  7
Dates (2012 Summer Session) .....  .7
Dates (2013 Winter Session) ..... 7
Dean's List ..... 19
Degree Courses and Extra Courses ..... 630
Degree Requirements ..... 20
Degree Requirements: BCom H.B.A., H.B.Sc ..... 20
Degree Requirements: Quick Reference Chart ..... 21
Fees for International Students ..... 626
Developmental Biology ..... 109
Diaspora \& Transnational Studies ..... 143
Discipline ..... 636
Discontinued Degrees and Upgrading ..... 22
Distinction/High Distinction ..... 19
Distribution Requirement ..... 24
Diversity \& Equity ..... 15
Drama ..... 148
E
East Asian Studies ..... 154
Ecology \& Evolutionary Biology ..... 168
Economics ..... 180
Economics \& Mathematics ..... 180
Education and Society ..... 586
Egyptian (Ancient) ..... 381
Elections to Faculty Committees ..... 619
Email Address ..... 635
Employment Relations ..... 606
English ..... 192
English Facility Requirement ..... 10
Environment \& Behaviour. ..... 204
Environment \& Energy ..... 204
Environment \& Health ..... 204
Environment \& Science ..... 204
Environment \& Toxicology ..... 204
Environment, Centre for ..... 204
Environmental Anthropology ..... 204
Environmental Biology. ..... 168
Environmental Biology (Joint NUS) ..... 168
Environmental Chemistry ..... 204
Environmental Economics ..... 204
Environmental Ethics ..... 204
Environmental Geography. ..... 204
Environmental Geosciences ..... 204
Environmental Studies ..... 204
Equity Studies ..... 395
Estonian ..... 528
Estonian. ..... 217
Estonian Studies ..... 528
Ethics, Centre for ..... 218
Ethics, Society \& Law ..... 570
European Studies ..... 219
European Union Studies ..... 219
Evolutionary Biology ..... 168
Examinations (Faculty Finals) ..... 628
Excluded Courses ..... 630
Exclusion ..... 29
Extra Courses ..... 630
Extra Courses: 100-series, Repeating and ..... 630
Extra Courses: 100-series, Repeating and Excluded Courses ..... 630
F
Faculty Final Examinations ..... 628
Faculty of Arts \& Science Language Citation ..... 26
Faculty of Arts \& Science Language Citation Program ..... 26
Faculty Registrar ..... 15
Faculty Scholarships ..... 19
Faith \& Spirituality ..... 16
Family Life ..... 16
Fee Payment ..... 626
Fees. ..... 626
Final Examinations ..... 628
Finance \& Economics (BCom) ..... 500
Financial Economics ..... 180
Fine Art (History of Art) ..... 67
Finnish. ..... 221
Finnish Studies ..... 221
First-Year Learning Communities ..... 19
First-Year Seminars Program ..... 33
Forest Biomaterials ..... 224
Forest Conservation ..... 224
Forest Conservation Science ..... 224
French ..... 229
French As a Second Language ..... 229
French Language \& Linguistics ..... 229
French Language \& Literature ..... 229
French Language Learning ..... 229
French Studies ..... 229
Full/Part-Time Status. ..... 29
G
Gaelic ..... 511
General Degree Requirements ..... 22
General Requirements ..... 22
Genome Biology ..... 98
Geographic Information Systems ..... 240
Geography ..... 240
Geology ..... 258
Geophysics ..... 258
Geoscience ..... 258
German ..... 264
German \& Italian ..... 370
German \& Russian ..... 370
German \& Spanish ..... 370
German Studies ..... 264
Governing Council of the University ..... 618
Governing Structure of the Faculty ..... 619
Grade Point Average ..... 632
Grades Review Procedure ..... 632
Grading Practices, Policy on ..... 636
Grading Regulations ..... 631
Greek. ..... 118
Guide to Programs \& Courses ..... 27
H
Health \& Wellness ..... 16
Health Studies (B.A.). ..... 575
Hebrew ..... 381, 484
Hindi ..... 557
Historical \& Cultural Geography ..... 240
History ..... 270
History \& Philosophy of Science \& Technology ..... 291
History of the University \& the Faculty ..... 618
Honours Bachelor of Arts ..... 22
Honours Bachelor of Arts/Honours Bachelor of Science Degree Requirements ..... 22
Honours Bachelor of Science ..... 22
Housing ..... 16
How to Read a Course Description. ..... 31
Human Biology ..... 296
Human Biology: Genes, Genetics \& Biotechnology ..... 296
Human Biology: Global Health ..... 296
Human Biology: Health \& Disease ..... 296
Human Biology: Health Care Ethics ..... 296
Human Biology: Neuroscience ..... 296
Human Geography ..... 240
Human Resources (see Employment Relations) ..... 606
Hungarian ..... 308 .....
Hungarian Studies
L
Immunology ..... 310
Important Notice .....  2
Important Notices .....  2
In Good Standing ..... 632
Innis College ..... 313, 620
Innis One ..... 313
International Course Modules ..... 18
International Relations ..... 570
International Relations/Peace \& Conflict Studies ..... 409
Irish Language ..... 511
Iroquoian Language ..... 34
Islamic Studies ..... 484
Italian ..... 326
Italian \& Portuguese ..... 370
Italian \& Russian ..... 370
Italian \& Spanish ..... 370
Italian Culture \& Communication Studies ..... 326
Italian Second Language Learning ..... 326
Italian Studies ..... 326
$J$
Jack McClelland Writer-in-Residence ..... 19
Japanese ..... 154
Jewish Studies ..... 334
Joint Courses Listing ..... 339
K
Key to Course Descriptions ..... 28
Kinesiology \& Physical Education ..... 341
Korean ..... 154
L
Laboratory Medicine \& Pathobiology ..... 342
Language Citation Program .....  26
Late Withdrawal (LWD) ..... 629
Latin. ..... 118
Latin American Studies ..... 345
Letters of Permission. ..... 625
Life Sciences ..... 348
Life \& Environmental Physics ..... 435
Linguistics ..... 349
Literary Studies ..... 586
M
Macedonian ..... 528
Management (BCom) ..... 500
Marking Schemes ..... 627
Marks and Grades ..... 627
Materials Science ..... 354
Mathematical Applications in Economics \& Finance ..... 357
Mathematics ..... 357
Mathematics \& Its Applications ..... 357
Mathematics \& Its Applications (Computer Science) ..... 357
Mathematics \& Its Applications (Design Your Own) ..... 357
Mathematics \& Its Applications (Physical Science) ..... 357
Mathematics \& Its Applications (Teaching) ..... 357
Mathematics \& Its Applications Probability/Statistics)....... 357
Mathematics \& Philosophy ..... 357
Mathematics \& Physics ..... 357
Mediaeval Studies ..... 511
Millie Rotman Shime Academic Bridging Program ..... 39
Minimum Admission Requirements ..... 10
Modern Languages \& Literatures ..... 370
Molecular Genetics \& Microbiology ..... 371
Music ..... 375
Music History \& Culture ..... 375
Music with Ensemble Option ..... 375
N
Nanoscience (NUS) ..... 109
National University of Singapore ..... 380
Near \& Middle Eastern Civilizations ..... 381
Neuroscience ..... 296
New College ..... 395, 620
New One ..... 395
Number of Courses Taken: Course Load. ..... 28
Nutritional Science ..... 406
Nutritional Sciences ..... 406
0
Office of the Faculty Registrar. ..... 15
Officers of the Faculty ..... 618
Officers of the University ..... 618
Official Correspondence with Students, Policy on ..... 636
Ojibwa Language ..... 34
Other Admission Categories. .....  .10
Outstanding Obligations ..... 626
Outstanding Obligations, Sanctions On Account of ..... 626
P
Paradigms \& Archetypes ..... 395
Pathobiology ..... 342
Peace \& Conflict Studies ..... 409
Peace, Conflict and Justice Studies ..... 409
Persian ..... 381
Petitions ..... 632
Pharmaceutical Chemistry ..... 412
Pharmacology ..... 415
Pharmacology \& Toxicology ..... 415
Philosophy ..... 424
Philosophy of Science ..... 291
Physical \& Environmental Geography ..... 240
Physics ..... 435
Physics (General) ..... 435
Physiology ..... 444
Planetary Science ..... 449
Polish ..... 528
Polish \& German ..... 370
Polish \& Russian ..... 370
Polish Language \& Literature ..... 370
Polish Studies ..... 528
Political Science ..... 450
Portuguese ..... 467
Portuguese \& Spanish ..... 370
Prerequisites ..... 29
Probation ..... 632
Professional Experience Year ..... 18
Program Requirements ..... 23
Programs (Requirements) ..... 23
Psychology ..... 470
Psychology (Research Specialist) ..... 470

| Public Health Sciences............................................... 481 | T |
| :---: | :---: |
| Public Policy ............................................................ 483 | Table of Contents ......................................................... 5 |
| Q | Taking Courses Outside the Faculty ............................. 625 |
| Quck Reference Chart (Degree Requirements)................. 21 | T-Card................................................................................... 635 |
| R | Term Work .............................................................. 627 |
| Reassessment of Marks............................................. 635 | The Breadth Requirement............................................ 23 |
| Recommended preparation................................................. 29 | The Colleges .......................................................... 620 |
| Refused Further Registration ....................................... 632 | The Distribution Requirement...................................... 24 |
| Registration ............................................................. 625 | Tibetan.................................................................. 484 |
| Religion................................................................... 484 | Toxicology.............................................................. 415 |
| Religion: Christian Origins.......................................... 484 | Transcripts............................................................. 636 |
| Renaissance Studies................................................ 586 | Transfer Credit........................................................ 625 |
| Repeating Courses................................................... 630 | Trinity College...................................................570, 621 |
| Requirements of Programs .......................................... 23 | Trinity One |
| Re-registration ........................................................... 12 |  |
| Re-Registration in the Faculty...................................... 12 | $\underline{U}$ |
| Research Excursions ................................................... 33 | Ukrainian \& German 370 |
| Research Opportunity Program...................................... 33 |  |
| Rights \& Responsibilities............................................. 16 | University College ......................................................................... 575 |
| Rotman Commerce ..................................................... 500 | University College One......................................................... 575 |
| Rules and Regulations ................................................ 624 | University Grading Practices Policy ........................................ 636 |
| Rules For the Conduct of Examinations ........................ 628 | University of Toronto Regulations and Policies ................... 636 |
| Russian Language ...................................................... 528 | University of Toronto, History ...................................... 618 |
| S | University of Toronto,Governing Council........................ 618 |
| Sanctions On Account of Outstanding Obligations ........... 626 | Urban Studies............................................................ 313 |
| Sanskrit.................................................................. 154 | V |
| Scholarships .............................................................. 19 |  |
| Scots Gaelic ................................................................. 511 | Victoria College ............................................................................................................ 682 |
| Semiotics \& Communication Theory ............................. 586 |  |
| Serbian ................................................................... 528 |  |
| Services and Programs for Students ............................. 15 | W |
| Sessional Dates ............................................................ 7 |  |
| Sexual Diversity Studies............................................ 575 |  |
| Slavic Languages ...................................................... 528 |  |
| Slavic Languages \& Literatures ................................... 528 | Woodsworth College .......................................................606, 623 |
| Slavic Languages \& Literatures ................................... 528 | Woodsworth ONE.................................................................. 606 |
| Sociology.............................................................. 543 | Writer-in-Residence, Jack McClelland ................................. 19 |
| South Asian Studies ..................................................... 557 | Writing \& Rhetoric ....................................................... 313 |
| Spanish..................................................................... 558 | Writing in Arts \& Science .............................................................. 61. |
| St. Michael's College..............................................511, 620 | Writing Labs and Centres...................................................... 616 |
| St. Michael's Cornerstone .......................................... 511 | Writhg Labs and Centres............................................ 616 |
| Statement of Results ................................................. 635 | $Y$ |
| Statistics .................................................................. 564 | Year of Study ............................................................. 29 |
| Statistics \& Mathematics .............................................. 564 | Yiddish, Al \& Malke Green Program in................................. 264 |


[^0]:    FAH486H1 Case Studies at the Royal Ontario Museum [24S]
    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.

[^1]:    1. EAS103H1 and EAS105H1
